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By

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ABSTRACT

VIOLENCE IN STORIES ABOUT SCENES OF AFFILIATION AND ACHIEVEMENT: NEW EVIDENCE AGAINST POLLAK AND GILLIGAN'S REPORT

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Pollak and Gilligan (1982) reported that men more frequently wrote stories containing violence to pictorial stimuli featuring intimacy while women more frequently wrote stories containing violence to pictures depicting achievement. These differences were attributed to distinct sex-differences in modes of self-definition and interpersonal posture. In a subsequent study featuring methodological advances, Benton, Hernandez, Schmidt, Schmitz, Stone, and Weiner (1983) were unable to replicate Pollak and Gilligan's findings.

In an effort to clarify these divergent findings, the current work further explored the presence of violence in similar stories but employing an original set of pictorial stimuli balanced for both intensity level and for the featured picture characters' sex.

Participants appeared to be a representitive sample of undergraduates based on their scores on Spence and Helmreich's (1978)

Personal Attributes Questionnaire (PAQ) and Wiggins' (1979) Interpersonal Adjective Scales. Responses to the present stimuli also failed to support Pollak and Gilligan's findings but were closer to Benton et al.'s report. Both men and women wrote significantly more stories containing violence to scenes of Intimate Affiliation, as compared to scenes of Moderate Affiliation and to scenes of Achievement, at both Intense and Moderate levels. The role of the featured picture characters' sex could not be fully ascertained due to a flawed pictorial stimulus. The order in which stimuli were presented significantly influenced the number of scored violent responses given by participants. PAQ gender identity did not relate to stories scored as containing violence in response to Intimate Opposite-Sex Affiliation or Intense Opposite-Sex Achievement pictures for either men or women.

Although Pollak and Gilligan succeeded in drawing research attention to some important issues concerning gender, the failure of successive and more methodologically advanced studies to confirm their provocative findings raises some serious questions about the latter's validity. Definitive answers to questions raised by Pollak and Gilligan must be based on more sophisticated studies which explore order and intensity of stimuli.

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My friendship with David began when I entered graduate school and will remain important to me for the rest of my life. The feelings, thoughts, and experiences we have shared have strongly influenced my development.

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INTRODUCTION

Personality theorists have long recognized that the self develops through interaction with others. In her work on moral development Gilligan (1982) has explored "self in relation to others." She reported two distinct modes of interacting which are broadly related to gender and development across the life span. Her research has indicated that generally men develop an identity which is based on objective reciprocity in relationships (objective/separate self) and women primarily form a definition of self based on connection with others and an orientation of care (the connected self). Supporting this theory Pollak and Gilligan (1982) found that men tended to report more aggressive behavior in picture stimuli displaying scenes of intimacy while women tended to report aggressive behavior in pictures depicting achievement situations. The validity of this finding has been the subject of controversy due to the limited range of pictorial stimuli utilized. It remains unclear whether women responded to general achievement cues or cues of competition and whether men respond differently to varying levels of intimacy.

Attempting to further distinguish the different modes of self-definition and interpersonal orientations Gilligan has delineated, this study will focus on clarifying the findings of Pollak and Gilligan (1982) by

using a different set of pictorial stimuli. These stimuli will consider both the level of intensity and the sex of characters in scenes of affiliation and achievement. The pictures used will be similar to those composing the Thematic Apperception Test (Murray, 1943) but have been specifically designed for this study. The Personal Attributes Questionnaire (PAQ: Spence & Helmreich, 1978) will also be administered to clarify the linkages between Gilligan's modes of self-definition and gender identity.

Gilligan's Work

Gilligan's (1977) exploration of moral development led her to conclude that classical developmental theories, most notably Kohlberg's theory of moral development, inadequately represented the experiences of women (1977) by neglecting the relational or interpersonal component of self-definition in the developmental process. She has primarily based her conclusions on three studies which have employed interviews. In doing so she has assumed, "that the way people talk about their lives is of significance, that the language they use and the connections they make reveal the world that they see and in which they act" (Gilligan, 1982). In her milestone work, *In a Different Voice*, Gilligan (1982) identified three primary studies she conducted as the *college student study*, the *abortion*

decision study, and the *rights and responsibilities study*.

The *college student study* examined "view of self," thoughts about morality, personal moral conflict, and choices made about conflicts. The *abortion decision study* explored the relationships between experienced conflict, morality, and development in women considering abortion. The *rights and responsibilities study* further considered identity, morality, and moral conflict by systematically comparing responses of men and women to real and hypothetical moral dilemmas. While Gilligan has focused on the relationship between self-definition and the moral decision making process, the postures which she has illuminated appear to be modes of interpersonal interaction instead of individual perspectives experienced in isolation. The existence of these gender linked and divergent interpersonal postures have challenged the theories of Erikson and Kohlberg. They can be further understood through the work of Chodorow (1978) and more recently have been expanded upon by Lyons (1983).

Related Theoretical and Empirical Work

Erikson (1950) postulated eight stages of psychosocial development which included: trust versus mistrust, autonomy versus shame and doubt, initiative versus guilt, industry versus inferiority, identity versus

identity confusion, intimacy versus isolation, generativity versus self-absorption, and integrity versus despair and disgust.

In the trust versus mistrust period occurring during infancy the task to be mastered involves experiencing relationships and individuating within these relationships. Autonomy versus shame and doubt is marked by a growing separateness evolving in the walking child. This move towards greater autonomy continues during the initiative versus guilt stage but is challenged as the child enters the Oedipal period, or middle childhood years, by the realization that to join the world of adults, they must join them and learn to do what they do. This transition signifies the crisis encountered in the industry versus inferiority phase. Gilligan (1982) commented:

> But about whom is Erikson talking? . . . it turns out to be the male child. For the female, Erikson (1968) says, the sequence is a bit different. While for men, identity precedes intimacy and generativity in the optimal cycle of human separation and attachment, for women these tasks seem instead to be fused. Intimacy goes along with identity, as the female comes to know herself as she is known, through her relationships with others.

> Yet despite Erikson's observation of sex differences, his chart of life-cycle stages remains unchanged: identity continues to precede intimacy as male experience continues to define his life-cycle conception. (p. 12).

In addition to limiting development to the male life cycle, Erikson's conceptualization allows little preparation for the first adult phase of development, intimacy versus isolation. According to Erikson, the sole precursor to this stage occurs during infancy with trust versus mistrust. The remainder of their development revolves around separation. Attachment almost appears to be "a developmental impediment" (Gilligan, 1982, p. 13).

In a similar vein, Freud (1925) earlier noted that because women were unable to obtain Oedipal resolution they developed superego's that were never "so inexorable, so impersonal, so independent, of its emotional origins as we require it to be in men" . . . and that . . . "for women the level of what is ethically normal is different from what it is in men" (1925, pp. 257-258). He concluded that the judgements of women were influenced by their feelings and that by comparison they were less just.

Nancy Chodorow (1978) brought a feminine perspective to the understanding of human development. She pointed out that because women

are the primary providers of child care, particularly through age five, life begins for both males and females with a primary identification to mother. Consequently, separation is experienced differently by the genders. "A boy gives up his mother in order to avoid punishment, but identifies with his father because he can then gain the benefits of being the one who gives punishment, of being masculine and superior" (Chodorow, 1978, p. 113). While according to psychoanalytic theory, "penis envy--the feminine form of the castration complex--leads a girl to turn to her father exclusively, and thenceforth to see her mother only as a sexual rival, . . . the girl abandons the mother as a love object with far more embitterment and finality than the boy" (Freud, 1925, p. 253). Chodorow posited that due to the similarity of mother and daughter it is more difficult for a girl to have a sense of individuation and in ways she is an extension of her mother. In other words girls, "retain a sense of self which has preoedipal" (Chodorow, 1978, p.115) characteristics. This means that girls continue to experience themselves as involved in merging, attachment characterized by primary identification, and fusion of identification and object. Boys, having been cut off from the preoedipal relationship loose their sense of empathy in an effort to cement ego boundaries. Consequently, their personalities revolve around autonomy and separation.

> Girls emerge from this period with a basis for "empathy" built into their primary definition of self in a way that boys do not. Girls emerge with a stronger basis for experiencing another's needs and feelings as one's own. Furthermore, girls do not define themselves in terms of the denial of preoedipal relational modes to the same extent as do boys. Therefore, regression to these modes tends not to feel as much a basic threat to their ego. (Chodorow, 1978, p.167).

In her observations of 181 fifth-grade children Lever (1976) observed that boys more often played out of doors, in age-heterogeneous groups, competitively, and that their games lasted longer than those of girls. Interestingly, boys quarrelled constantly but no game was interrupted for more than seven minutes while arguments among girls tended to terminate games. Based on his own observations Piaget (1932) asserted that legality was less well developed in girls.

Piaget studied childhood moral development from preschool to middle childhood but left off at adolescence. Picking up where Piaget stopped Kohlberg (1958, 1981) specifically examined adolescent moral development. Kohlberg's (1958, 1981) theory of moral development was

based on a study of eighty-four boys aged 10 to 16 who were followed for twenty years at three year intervals. He described six stages of moral development progressing from an egocentric understanding of fairness based on individual needs (stages one and two), an understanding of equity marked by conformity to societal norms (stages three and four), and finally an understanding of fairness which considered equality and reciprocity (stages five and six). He noted that stage one development carries a perceived vulnerability to powerful figures into adolescence and individuals in this stage focus on staying out of trouble. In stage two the orientation continued to be needs based but the omnipotence of powerful others fades in importance. Stage three is embodied by a stereotypical emphasis on goodness and the importance of the needs of others and in stage four this sentiment is extended to society at large and contains concern for social preservation. In postconventional morality, or stages five and six, equality and reciprocity are central and eventually respect for the individual becomes paramount. Kohlberg's initial findings were primarily based on responses to the hypothetical dilemma of a male character named Heinz. In this dilemma Heinz must decide whether or not to steal a drug in order to save his wife's life.

While Kohlberg generally defended these stages of development, a

phenomenon observed in college students known as moral relativism challenged this theory. Morally relative judgements were represented in the notion that objective moral judgement was impossible and that, therefore, people should do what they feel or believe is right. On the surface this appeared to be a regression back to stage two development but looked at differently this was not necessarily true. Gilligan noted that it was women and relativists who generally defied the boundaries of Kohlberg's coding schema. It appeared that the contextual situation was salient for these individuals.

When Gilligan began examining the moral development of girls and woman she found that the thought processes that went into their moral decisions were qualitatively different from those of boys and men. She initially noted these differences in her studies of college students (Gilligan & Murphy, 1979) and women considering abortion (Gilligan & Belenky, 1980).

In the *college student* study 25 undergraduates were randomly selected from a group of sophomores who had enrolled in a course on moral and political choice. They were interviewed about personal moral conflicts and life choices as seniors and five years later. Gilligan believed that some of the struggles involved in moral decision making for

women were reflected in the experiences of Clair (pseudonym) who had enrolled in the course on moral choice and eventually went on to become a physician. In the course of the study Clair described her own transformation, from a person absorbed in pleasing others and frightened of her own assertiveness, to a self-assured woman who identified the importance of caring for others around her. Reflecting upon Clair's development and the experiences of other women Gilligan asserted that:

> The conflict between self and other thus constitutes the central moral problem for women, posing a dilemma whose resolution requires a reconciliation between femininity and adulthood. In the absence of such a reconciliation, the moral problem cannot be resolved. The "good woman" masks assertion in evasion, denying responsibility by claiming only to meet the needs of others, while the "bad women" forgoes or renounces the commitments that bind her in self-deception and betrayal. It is precisely this dilemma--the conflict between compassion and autonomy, between virtue and power--which the feminine voice struggles to resolve in its effort to reclaim the self and to solve the moral problem in such a way that no one is hurt.

(Gilligan, 1982, p. 70-71).

When Clair considered the Heinz dilemma as a senior she focused on the "failure of response." She believed that Heinz should have done whatever necessary to save his wife's life, but further, that the pharmacist also had a responsibility to life and an obligation to make an exception in the case of Heinz's wife. In this instance Clair associated morality with connection and care.

This relationship reflects the conflict between care of others and self-care. This conflict readily surfaces when a woman is required to decide whether or not to have an abortion. In a study of this conflict 29 women ranging in age from fifteen to thirty-three, and coming from divergent ethnic and socioeconomic classifications were referred to the investigators by pregnancy counseling services and abortion clinics, and were interviewed in their first trimester. These women participated in the study for a variety of reasons. Several used the interviews to clarify their thoughts and feelings, some were encouraged to participate by their counselors, and others were willing to offer their time to research. Some of the women had failed to use contraception, had denied the possibility of becoming pregnant, used the pregnancy to cement or test relationships, or had reconsidered after deciding to have a child. Of these women, four gave

birth, two miscarried, twenty-one chose abortion, and two were undecided and could not be reached for follow-up.

Describing herself and the process she used to make decisions, another participant in this study, illustrated the tenuous balance of self and other care.

> "It is taking a life. Even though it is not formed, it is the potential, and to me it is still taking a life. But I have to think of mine, my son's, and my husband's. And at first I thought it was for selfish reasons, but it is not. I believe that, too, some of it is selfish. I don't want another one right now; I am not ready for it." (Gilligan, 1982, p. 83)

While examining such womens' responses, Gilligan (1982) noted a sequence in the development of morality and care. The first phase of this sequence was characterized by care for self in order to survive. This was followed by the perception of being selfish. The initial feeling of responsibility grew into a mentality which sought to insure care for others. The inequality of this arrangement stimulated "a reconsideration of relationships in an effort to sort out the confusion between self-sacrifice and care inherent in the conventions of feminine goodness" (Gilligan, 1982, p. 74). Through her interveiws with women Gilligan

observed that ultimately, care became freely chosen and self-care was perceived as equally important. The phases she described have been summarized as: (a) care of self is necessary because others will not care, (b) care of others has priority over care of self, and (c) care of self is chosen freely since care for all, including self, is important (Pearson, Kamptner, Cornwell, Barnes, Strommen, & Donelson, 1985).

Throughout Gilligan's work women described themselves in terms of connection with other people. Helping and giving were central to their self-perceptions. Self-evaluation was dependent upon their ability to maintain relationships and care for people. Reports of achievement were largely absent from women's self-descriptions and many of them spoke of the conflict they experienced between achievement and care. Because their descriptions spoke of an identity formed by a mode of being-in-relation-to-others, Lyons (1983) has characterized womens' self-definition as the "connected" self.

Men used adjectives that conveyed separateness to describe themselves as opposed to describing their way of being with others. They often described themselves as intelligent, competitive, rational, creative, intense, or sensitive. Their identities appeared more distinct and their standard of self-assessment seemed more based on achievement. Their

attachments to others are ancillary to their sense of identity. Their voices describe an identity based on a mode of being-in-relation-to-others-as a "objective/separate" self (Lyons, 1983).

In an effort to view these perspectives across the life span Gilligan conducted the *rights and responsibilities study* which further considered identity, morality, and moral conflict through hypothetical moral dilemmas (Gilligan, Langdale, Lyons, & Murphy, 1974). This was done systematically by including men and women matched for age, intelligence, education, occupation, and social class at nine points across the life span beginning with 6 and ending with 60. Within this group there were two men and two women from the ages: 8, 12, 15, 19, 22, 27, 36, 46, and 60+. Although this sample size was small Gilligan noted that this was characteristic of theory-building research in the area of moral development. The milestone work of Piaget was based on a sample of 20 boys and Kohlberg's initial sample consisted of 58 males.

The data collected by Gilligan contained of responses to a five part interview that was conducted in an open-ended manner. The interview included the following inquiries.

1. Looking back over the past year/five years what stands out for you?

2. The Heinz dilemma (one of Kohlberg's hypothetical moral dilemmas).

3. A real life dilemma generated by the individual in response to a question about a personal experience of moral conflict and choice

4. How would you describe yourself? Is the way you describe yourself now different from the way you described yourself in the past? If you see change how would you account for that?

5. What does morality mean to you? What makes something a moral problem for you? What does responsibility mean to you? When responsibility to self and others conflict, how should one choose?

The coding schema for written responses was created by Lyons (1981) and distinguished the definitions of "self as connected in relation to others and as separate/objective in relation to others" (Gilligan, unpublished manuscript). The four general constructs coded were: construction of the problem, resolution of the problem, evaluation of the resolution, and the responses to the "describe yourself" question. This coding schema appears in Appendix A.

The data reflected that modes of self-definition were clearly gender related but not limited to gender. In response to real-life moral decisions 75% (12) of the women, but only 14% (2) of the men chose an orientation of

responsiveness, while 79% (11) of the men chose an orientation of rights and responsibility but only 25% (4) women responded in the rights and responsibility mode. Furthermore, 37% (6) of the women never expressed any consideration of rights and 36% (6) of the men never employed the responsiveness mode.

A comparison of predominant orientations and modes of self-definition demonstrated that females who defined themselves as "connected" more frequently utilized a responsive mode when confronted with real life moral conflicts, whereas men who considered themselves as "separated/objective" called upon considerations of rights and responsibility in real-life moral dilemmas.

Only a single notable difference was found when comparing data from different age groups. Adult women constructed problems or moral dilemmas concerning "rights" at a frequency that did not occur for females of other ages. In spite of this, they continued to use the responsive mode of morality for the resolution of these dilemmas but "care of self" interestingly dropped out of consideration for women over twenty-seven in this sample. Men more consistently selected a "rights" mode across the life span. Their use of "responsiveness" peaked during adolescence, when it nearly equaled their choice of the "rights" mode.

This empirical data conflicts with Gilligan's (1982) later theoretical inferences based on all of the interview information. She concluded that postures characterized by "rights" and "responsiveness" or connection versus separation developed over time through maturation and that this maturation consisted of a transcendence through infantile, adolescent, and adult needs (Gilligan, 1982). Primarily based on the experiences of women, she suggested that while connected and separate self identities were broadly associated with gender, maturation fostered their integration and that adults used both postures. She believed that for women the absolute of care changed as the importance of personal integrity became more salient and that for men the absolute of truth and reciprocity shifted due to experiences which demonstrated differences between personal perceptions and the perceptions of others. She used the experience of "Alex" to exemplify these changes. After earlier participating in the *college student study*, Alex became an attorney and the change in his perspective was evident in his comments about a relationship which, to his surprise, ended had painfully.

> People have real emotional needs to be attached to something, and equality doesn't give you attachment. Equality fractures society and places on every person

the burden of standing on his own two feet (Gilligan, 1982, p. 167).

Aggressive Imagery in Thematic Apperception Test Stories

Pollak and Gilligan (1982) became interested in comparing sex differences in violent imagery using pictorial stimuli (similar to the Thematic Apperception Test-TAT) when they observed unexpected violence in men's stories written about what appeared to be a peaceful scene of a man and a woman "sitting on a bench by a river next to a low bridge." They initially believed the violence perceived in this scene by men might parallel Horner's (1968) finding that women wrote more violent stories to sentence stems featuring achievement situations. They were interested in clarifying whether differences in aggressive fantasies reflected systematic perceptual differences. They did this by gathering stories in response to four pictures similar to classic Thematic Apperception Test cards.

Their curiosity about gender differences in interpersonal orientations was stimulated by previous literature. It had been shown that men are generally more aggressive than women (Terman & Tyler, 1954). This was not only true for Americans but held up cross culturally (Whiting & Pope, 1973). Maccoby and Jacklin (1974) found that women tended to express their aggression in disguised ways, while men were generally more direct,

but primarily turned their aggression towards each other. May (1980), interpreting fantasies of men and women, hypothesized that women inhibited aggression and men failed to perceive relationships.

Directly related to the work of Pollak and Gilligan, Bramante (1970) reported that men responded with disaster filled stories when shown a romantic film. Aside from Pollak and Gilligan's study, Bramante's investigation has been one of the few considerations of the relationship between aggression and affiliation. Pollak and Gilligan wanted to explore whether men and women associated different amounts of aggression or violence with affiliation.

Like Maccoby and Jacklin (1974), Pollak and Gilligan (1982) distinguished aggression from violence in that aggression is the intent of one person to hurt another, while violence surpasses mere intent. Violence was defined as the infliction of "homicide, suicide, death by accident, rape or forcible violation, physical assault, kidnapping, or fatal disease." The authors used pictures depicting work settings and human closeness to represent achievement and affiliative situations.

Eighty-eight men and 50 women enrolled in a course on Human Motivation at Harvard participated in their study. Students were asked to write a brief and imaginative story for each picture and a series of

questions served as guidelines (Appendix F). Two of the pictures selected for this study depicted achievement and two displayed affiliation. The first achievement picture featured a man sitting alone at a desk in a high rise apartment building. A photograph of his wife and children sat on the desk, and there was a large window in front of him. The second consisted of two women dressed in white laboratory coats. The woman in the background watched while the woman in the foreground handled the test tubes. The first affiliation picture was of a man and a woman sitting next to each other on a bench. There was a river in front of them, a low bridge to the side, and university buildings appeared in the background. The second affiliation scene showed a male and a female trapeze artist. A man was shown hanging upside down from his knees on a trapeze bar while a woman on another bar grasped his wrists in midair.

These stories were scored for the presence or absence of violence. Violence appearing in affiliative or achievement situations was distinguished and noted. Figurative violence ("Jeff was sick to death of the performance") was not included in violent scores. Lastly, a content analysis was made in which violence arising from situations described as affiliative or achievement was scored regardless of scene category.

Of the men in this sample, 51% (45) wrote violent stories versus only

22% (11) of the women. A quarter of the men (22) wrote violent stories to scenes of affiliation and 6% (6.8) wrote violent stories to scenes of achievement, and 17% (19.3) constructed violent stories to both affiliation and achievement scenes. No mention of violence occurred in the stories of 48.9% (43) of the male participants. Conversely, 6% (3) of the women wrote violent stories to scenes of affiliation, 16% (8) perceived violence in pictures depicting achievement, and none wrote stories with violence in both scenes. The vast majority of women (78% or 39 of 50) wrote stories with no violence.

The content analysis was aimed at determining which situations men and women perceived as dangerous. Three categories of content were described: violence associated with situations of affiliation, violence associated with situations of achievement, and violence associated with neither affiliation nor affiliation but taking place by accident or due to natural causes. The results for the men showed that 26.1% (23) described violence and danger in affiliative situations, 1.1% (1) described danger in achievement situations, 3.4% (3) described danger in both situations, 20.5 (18) perceived danger in neither, and 48.9% (43) reported no danger. Women never described danger in situations of affiliation, 12% (6) described danger in achievement situations, none described danger in both

scenes, 10% (5) wrote about violence associated with neither situation, and 78% (39) reported no violence.

Computed separately for men and women, statistical analyses found that a significantly greater number of men perceived danger or violence in stories of affiliation. Pollak and Gilligan noted that men appeared to associate danger with entrapment or rejection and women related danger to isolation. Accordingly, the trapeze picture, the only picture with physical contact, elicited the most violence from men and the man sitting at his desk, the only person alone, received the most violent stories from women. Another provocative observation made by the authors was that 22% of the women versus 6% of the men built the presence of a safety net into the stories about the trapeze artists. Additionally, 40% of the men clearly specified the absence of a net in contrast to only 6% of the women who excluded this safeguard.

The students who participated in this work appeared to perceive danger in different situations. Men generally associated danger with situations of interpersonal connection while women perceived danger in situations of achievement which reflected competition and isolation. In his analysis of male and female fantasies May (1980) distinguished what he called the male posture of "pride" and the female stance of "caring." In

measuring female development against the male posture he insinuated that the absence of aggression in woman was unusual or inadequate. This is similar to Freud's (1931) idea that "the essence of femininity lies in the repression of aggression" (Pollak and Gilligan, 1982, p. 165). The results of this study challenged the work of May by suggesting that woman do not perceive relationships as dangerous and consequently they are not experienced as aggressive. Pollak and Gilligan suggested that women may stay in relationships which are harmful to them, not because they are masochistic, but because it may take them longer to experience and realize the danger in interpersonal relationships. It is possible that women perceive relationships as safe because they prevent isolation, thereby affirming self-identity, and men generally feel more comfortable in competitive situations with clearly defined boundaries and rules where their self-perceptions are not challenged.

The recent work of Helgeson and Sharpsteen (1987) supported the findings of Pollak and Gilligan. They asked undergraduate men (50) and women (61) to write stories elicited by the picture of the acrobats used by Pollak and Gilligan. They directed the attention of participants to achievement and affiliation by placing the following sentences beneath the pictures.

a. Achievement

These people have worked hard for many years to reach their present level of achievement. They strive to improve their skills with each performance.

b. Affiliation

These people have had a close relationship for many years. They have shared many activities and experiences, which have created an intimate bond between them.

The authors reported that there was an interaction between respondents' sex and instructions ($F = 4.99$, $p < .05$). Men wrote more stories containing violence to the scene with an affiliative caption (women $M = .07$, men $M = .27$) and women wrote more stories that mentioned violence to the scene with an achievement caption (women $M = .31$, men $M = .03$).

Fear of Success

The study of fear of success in women has begun to explore how women experience achievement and how achievement interacts with self-perception. In her study of achievement motivation and performance in competitive and non-competitive situations Horner (1968) found that women who performed higher in non-competitive situations, when

compared to competitive situations, were more likely to write stories characterized by high fear of success imagery. Women who performed higher in competitive situations were more likely to write stories characterized by low fear of success imagery. She also found that the achievement motivation of women was lower in mixed-sex competitive situations compared to same-sex competitive situations and non-competitive situations.

Some of the fear of success imagery women reported in response to achievement situations was striking, if not bizarre. Responses were written about situations typified by a story about "Anne," a medical student at the top of her class. In one account Anne was beaten and maimed for life by her envious classmates. Ninety women and eighty-eight men participated in this study and 65% of the women versus 8% of the men reported imagery connoting fear of success. The women who displayed fear of success and performed better in non-competitive situations appeared to associate success with social isolation and loss of femininity. Supporting this finding Peplau (1976) found that women with traditional sex-role attitudes and fear of success were particularly apt to associate competition with aggression.

Horner's findings and the fear of success construct have received

marked theoretical attention and empirical reconsideration. Organizing about half of the Fear of Success (FOS) literature existing at the time, Tresemer (1976) pooled the findings of 100 studies assessing FOS. He narrowed that group of studies by analyzing only samples which included males and females from the same subpopulation. Cumulatively, he considered 56 samples from 42 studies which represented close to 6,000 men and women. He found that women told only a slightly greater number of FOS stories but that there was "tremendous variability between studies." Tresemer noted that the content of male and female stories was strikingly different, and suggested that in the absence of a single scoring method, male and female data may have been scored differently for FOS. Male stories were consistently more bizarre, cynical, hostile, pessimistic, and included more jokes, death, and violence. Females wrote more stories which contained social rejection, affiliative loss, and loss of femininity. He concluded that such thematic differences might reflect the differing psychodynamic significance of FOS for men and women.

Tresemer's metanalysis also found that FOS has declined since about 1969 and this decline has paralleled increases in female attendance to medical schools. It has frequently been hypothesized that women with greater ability would experience more FOS because success was within

their grasp. This relationship was not evident in the present studies in which ability included experimental performance tasks, SAT scores, GPA's, IQ scores, career goals, etc. Many studies have sought to link gender-role identity or identification with stereotypically traditional roles with FOS. Gender-role identity has been measured by career choice, employment of mother, college major and so on. Together, studies considering gender-identity did not find a significant relationship between this dimension and FOS. Measures of anxiety have also not been related to FOS. Higher FOS scores have been related to high external locus of control scores. While Horner's study has not been replicated in it's entirety, the information synthesized by Tresemer does call the FOS construct into question and illustrates the lack of clarity which surrounds it.

Olsen and Willemsen (1978) illustrated that when the "deviance" aspect or isolation of Anne in her class was removed, the negative outcomes of success lessened. They observed this by varying the classic story about Anne finding herself at the top of her medical school class after first term finals. In one of the descriptions all of her classmates were men and in the other description half were men and half are women. They gathered information from descriptions with both a female (Anne) and a male (John) protagonist. They assessed negative feelings on the part

of the achiever (Anne or John), negative reactions of others, other negative outcomes, positive feelings of the achiever, positive reactions from others, and other negative outcomes.

Males and females did not differ in their mention of negative feelings and sex of respondent did not interact with sex of the protagonist. Females reported more negative reactions from others when Anne was in an all male class and positive feelings were mentioned less frequently for females in the all male class than for males or females in the mixed-sex class.

Studying women's performance in mixed-sex situations LaNoue and Curtis (1985) found that following a mixed-sex "led to fail situation" women, when compared to men, had lower expectations or their performance, they performed worse, they rewarded themselves less, and they attributed their failure to lack of ability significantly more. These differences were not evident in same-sex tasks nor when tasks were performed alone. Women's negative attributions in mixed-sex situations were altered when given instructions which encouraged effort and success.

Paludi and Fankell-Hauser (1986) examined FOS using interviews. When women were asked if they had been in situations, and had feared

success, 91% of their sample (ranging in age from late teens to 80) replied "no." A striking percentage of women (96%) did report that they wondered if their achievements were worth the effort and many of them struggled with the issue of costs and benefits. Most frequently they cited relationships and children as being important considerations (Paludi & Fankell-Hauser, 1986). These authors suggested that the FOS concept be abandon in favor of an achievement versus cost model.

While the existence of FOS as a measurable personality construct remains unclear it appears that men and women generally perceive achievement differently. This difference can effect performance, and there may be costs attached to achievement for women just as there may be costs for men in the interpersonal realm.

Challenges to the Work of Pollak and Gilligan

Pollak and Gilligan conducted a study which is one of the few empirical examinations of Gilligan's theories of development, and has been criticized on several accounts. Some of the most salient questions have come from Benton, Hernandez, Schmidt, Schmitz, Stone, and Weiner (1983). Their major challenges concern the classification of TAT cards into motivational categories, failure to control for sex of persons depicted in TAT pictures, the limited scoring schema, and what they perceived of as

unusual instructions.

Benton et al. argued that one of the pictures intended to depict achievement contained features of affiliation and that one of the pictures meant to depict affiliation included elements of achievement. Specifically, in the stimulus depicting the man at his desk, they noted the man appeared to be looking at a family photograph, and they asserted that the scene with the acrobatics could be considered a professional or an achievement situation. To determine whether the pictures represented their intended themes, the authors asked students to rate each picture for its portrayal of affiliation or achievement. Additionally, the pictures were scored for affiliation and achievement imagery with a standard TAT schema (Atkinson, 1958). The results showed that the two pictures did not appear to display their intended themes. Although the scene of the man at his desk was primarily rated as an achievement picture, it elicited more affiliation imagery as scored with "standard TAT scoring" procedures. The picture of the trapeze artists was seen as depicting achievement and it elicited more achievement imagery.

To make up for these difficulties Benton et al. added two cards which they believed to portray affiliation and achievement less ambiguously. These displayed a man and a woman on a hillside and two men in suits

exchanging documents and were rated as depicting their intended themes.

Using these two new pictures, and the cards used by Pollak and Gilligan, Benton et al. found that while men perceived more violence in general, there was no significant difference in the violence scores of men and women written in response to scenes of affiliation and achievement.

They further contended that the scoring criteria used by Pollak and Gilligan was stringent and restrictive because mild physical violence and nonfatal accidents were not considered. To clarify the impact of scoring criteria a more liberal scoring schema that utilized nonlethal harm was applied in addition to the original scoring system. They found that differences in the scoring systems did not significantly effect results.

The authors also believed that Pollak and Gilligan's instructions to write an "interesting and imaginative" story may have pulled for an unusually high number of violent stories. They gave one half of the sample the instructions used by Pollak and Gilligan and one half more "neutral" instructions but found no significant differences between the two sets of instructions.

The Current Study

Although Benton et al. failed to reproduce the findings of Pollak and Gilligan, they concluded that "a more exhaustive examination of dramatic

and intuitively resonant findings that might have social implications" was warranted. While their work raised important challenges and questions concerning Pollak and Gilligan's study and Gilligan's theoretical observations, further research appears necessary to clarify these provocative and contrasting findings.

Pollak and Gilligan's study used the trapeze scene and the man and woman on a bench to represent affiliation. Benton et al. added a scene depicting a man and woman on a hillside. Achievement was represented by three women in a lab and a man at a desk by Pollak and Gilligan and Benton et al. added two men in suits exchanging documents to this set. The work of Pollak and Gilligan was explorative and it is understandable they might not have foreseen the shortcomings of their stimuli. Although the focus of the Benton et al. study was not solely on the type of stimuli used, they gave no clear explanation about what guided their choice of the additional pictures, except that they believed, and later found, that the cards displaying the trapeze artists and the man at his desk were perceived as both affiliation and achievement scenes. The cards they chose did elicit imagery and ratings which were consistent with the themes they intended to portray but these stimuli still appear to be limited.

While the previous studies were well intentioned, the visual stimuli

used in these studies was not fully balanced for level of intensity or sex of picture character. It has been suggested that women have the most difficulty with achievement in mixed sex competitive situations (LaNoue & Curtis,1985; Horner, 1968) and that men may relate danger to affiliation, following separation from a female primary care giver early in life (Chodorow, 1974), and because it leads to what is perceived as entrapment (Pollak & Gilligan, 1982). Based on these findings and premises it seems important to consider issues of intensity level and sex of depicted character.

Differences in self-definition and interpersonal posture as discussed by Gilligan and as reflected in stories written to projectives has primarily been linked to sex differences. It also seemed worthwhile to explore their relationship to gender identity. The Personal Attributes Questionnaire (PAQ: Spence & Helmreich, 1978) appears to be one of the more useful and valid measures of sex-role orientation and style.

Relationship to the Personal Attributes Questionnaire

Although considerable work remains to be done in the area of gender identity measurement, the PAQ (Appendix D) has received somewhat more empirical support as a measure of gender identity than several other instruments including the Bem Sex Role Inventory (BSRI: Bem, 1974). Both

the BSRI and PAQ were based on the assumption that men and women internalize sex-role behaviors based on what is defined by their families and peers as socially desirable. Each instrument contains general scales of masculinity and femininity, and identifies the position of androgyny, in which masculine and feminine qualities are thought to be accessible parts of an individual's behavior. The BSRI contains a separate scale which measures an individual's tendency to endorse socially desirable traits as self-descriptive, whereas, the PAQ does not measure the tendency to endorse socially desirable traits because the items were selected to be equally desirable, although some items were assumed to be more desirable for one sex or the other. The social desirability of test items was determined by independent judges for the BSRI and persons were asked to characterize "ideal" individuals of both sexes on the PAQ. The PAQ contains a scale (Masculinity-Femininity) composed of items that have been perceived as more desirable for one sex.

An additional difference between these measures is that the PAQ consists of bipolar scales of Masculinity (M), Femininity (F), and Masculinity-Femininity (M-F), whereas the BSRI contains the unipolar subscales Masculinity, Femininity, and Social Desirability. While each measure identifies masculine, feminine, androgynous, and undifferentiated

gender positions using a median split scoring method, their construction and content differ slightly. Spence and Helmreich (1978) have credited these differences with the minimal correlations between BSRI and PAQ scores.

Some of the strongest criticisms of the BSRI which led to the selecting the PAQ as a measure of gender identity, have been the numerous multiple factors that have appeared in the BSRI, the apparent negativity of several femininity scale adjectives, and BSRI's relatively weaker predictive validity. The Masculinity subscale alone has yielded the following factors in different studies: assertiveness, interpersonal sensitivity, and maturity (Pedhazur & Tetenbaum, 1979) and dominance, incisiveness, insensitivity, and independence (Pearson, 1980). This multiplicity of BSRI factors challenges the alleged unidimensionality of its Masculinity and Femininity scales. Although items on the BSRI were selected based on their desirability for one sex or the other and Bem (1974) claimed that all items are "relatively desirable" for either sex, the Masculinity subscale appears to contain more socially desirable traits than the Femininity subscale (Gross, Batlis, Small, & Erdwins, 1979; Pedhasur & Tetenbaum, 1979; Puglisi, 1980). Items shy, gullible, and childlike of the BSRI's Femininity scale have been consistently judged as

undesirable.

The BSRI also appears to be less sensitive to gender schema theory than the PAQ (Hungerford & Sowbolew-Shubin, 1987). Bem (1981) proposed that gender orientation was in part determined by a readiness to "encode and to organize information--including information about the self--in terms of the cultural definitions of maleness and femaleness that constitute the society's gender schema" (Bem, 1981, p. 363). Testing this premise Hungerford and Sowbolew-Shubin (1987) examined response latencies when persons were asked to determine whether masculine and feminine phrases (controlled for social desirability, sex-linked content, and length) were like "me" or "not me." As predicted, individuals classified as masculine or feminine by the PAQ and the BSRI identified same-sex typed phrases as self-descriptive faster than did those classified as either androgynous or undifferentiated. Persons classified as androgynous by the PAQ responded faster to masculine phrases than did feminine individuals. A similar pattern held when PAQ "androgynous" persons were compared to persons classified as masculine in reference to feminine phrases. Supporting the PAQ's stronger linkage to gender schema, the response times of persons judged as androgynous by the BSRI did not differ significantly.

If Gilligan's observations about differences in the interpersonal orientations of men and women were accurate, it was reasonable to expect that the reflection of these differences culled by projective measures would be significantly related to PAQ scores. Consequently, PAQ masculinity scores would be expected to correlate significantly and positively with high ratings of violence in scenes of affiliation, while PAQ femininity scores would be expected to correlate significantly and positively with high ratings of violence in scenes of achievement. The strength of these correlations would be expected to vary depending upon the nature and intensity of achievement and affiliative stimuli.

Additionally, the Interpersonal Adjective Scale (IAS) developed by Wiggins (1979) will be used assess the degree of sample distortion due to self-selection. Participants' scores will be compared with the scores of similar samples to assure that this group of individuals falls within an average range of behavior.

HYPOTHESES

Hypotheses for Men

1. Men will write significantly more stories containing violence in response to all pictorial stimuli as compared to the number of stories written by women.

2. Men will write significantly more stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation as compared to scenes of Moderate Opposite-Sex Affiliation (M2 versus M1).

3. Men will write significantly more stories containing violence in response to scenes of Moderate Opposite-Sex Affiliation as compared to scenes of Moderate Same-Sex Affiliation (M1 versus M5).

4. Men will write significantly more stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation as compared to scenes of Intense Opposite-Sex Achievement (M2 versus M4).

5. Men who write stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation will have significantly higher PAQ Masculinity scores than men who do not write stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation (M2 and PAQ M scores).

Hypotheses for Women

1. Women will write significantly more stories containing violence in response to scenes of Intense Opposite-Sex Achievement as compared to scenes of Moderate Opposite-Sex Achievement (F3 versus F4).

2. Women will write significantly more stories containing violence in response to scenes of Moderate Opposite-Sex Achievement as compared

to scenes of Moderate Same-Sex Achievement (F3 versus F6).

3. Women will write significantly more stories containing violence in response to scenes of Intense Opposite-Sex Achievement as compared to scenes of Intimate Opposite-Sex Affiliation (F4 versus F2).

4. Women who write stories containing violence in response to scenes of Intense Opposite-Sex Achievement will have significantly higher PAQ Femininity scores than women who do not write stories containing violence in response to scenes of Intense Opposite-Sex Achievement (M4 and PAQ F scores).

METHOD

Participants

Two hundred and seventy-one men and women participated in this study. One hundred men and one hundred women composed the main body of participants from which data were collected. All were undergraduates enrolled in introductory psychology courses at Michigan State University during the fall quarter of 1987. The remaining 71 participants (38 women and 33 men), enrolled in an introductory psychology course in the spring quarter of 1987, rated the pictorial stimuli for affiliative and achievement content.

All volunteers were recruited from the psychology department's

research participation pool which allows students to receive credits toward higher course grades by participating in psychological research. The pool is primarily composed of students enrolled in introductory courses. Some instructors require research participation and others give credit toward course grades for time spent participating in research. Most introductory course instructors require that students obtain four points of course work by serving as a research participant. Each half hour of participation is worth one point. Students choose the experiments they would like to participate in and attend them when they are scheduled.

Measures

Pictorial Stimuli

The pictures or scenes used in this study were devised by the author and were fashioned after those in the Thematic Apperception Test (Murray, 1943). The TAT was originally designed by Morgan and Murray in 1935 and may be scored and used in the assessment of personality. TAT responses have been shown to reveal primitive motivations (Combs, 1947) and perceptions elicited from its pictures have been associated with behavior (Mussen & Naylor, 1954; Purcell, 1956). The projective power of the TAT seemed clear in Karon's (1981) study of patients who had received electric shock treatment following suicide attempts. While those patients

generally showed little memory of what precipitated such attempts, the events that led to their actions appeared evident in their TAT protocols.

Karon also pointed out that while the TAT is rich in information that might have clinical applications, the establishment of a simple scoring system for data elicited by the pictures may have minimal clinical value because most of the complex and unique information about individual personality might not be scorable. Contrarily, the TAT appears to be a useful empirical tool because targeted stimuli can be selected and used to assess specific aspects of personality if reliable scoring systems can be developed (Karon, 1981).

For the current study, the author created eight pictures shown in Appendix B which attempted to portray affiliation and achievement stimuli in situations balanced for gender and level of intensity. While the TAT stimuli were drawn by artists, the present pictures are photographs.

Four of the pictures (two affiliation - intended to portray moderate and intimate levels; and two achievement - intended to portray moderate and intimate levels) were used to explore how men and women perceived situations containing both sexes. Featuring a male and female, these pictures were shown to all participants. Four other pictures (two male - intended to portray moderate affiliation and achievement and two female -

intended to portray moderate affiliation and achievement) were used to explore participants' impressions of same-sex interactions and were shown to either men or women.

To enhance the likelihood that these pictures would be perceived as affiliation or achievement situations, sentences stems were placed beneath each illustration. Verbal leads have been successfully used to gather projective material by Winterbottom (1958), Lowell (McClelland, et al., 1953), French (1955), and Atkinson and Litwin (1960). The following list describes stimuli shown to participants.

Pictures Shown to Males and Females

M1 & F1. A man and a woman talking (Moderate Opposite-Sex Affiliation).

Michael and Carla have known each other for about two years.

M2 & F2. A man and women embracing (Intimate Opposite-Sex Affiliation).

Elizabeth and Nathan have been close for two years.

M3 & F3. A man and a woman seated at a table working together on a project (Moderate Opposite-Sex Achievement).

Eve and Mark are department store managers in their

company.

M4 & F4. A man and a woman seated at a table working together on a project (Intense Opposite-Sex Achievement).

Stuart and Alexandra are high ranking executives in their firm.

Male Pictures

M5. Two men talking (Moderate Same-Sex Affiliation).

Phillip and Brian have been friends for two years.

M6. Two men seated across from one another apparently working together (Moderate Same-Sex Achievement).

Peter and David are physicians. They are discussing a new cancer drug.

Female Pictures

F5. Two women talking (Moderate Same-Sex Affiliation).

Caroline and Theresa have been friends for two years.

F6. Two women seated across from one another apparently working together (Moderate Same-Sex Achievement).

Julia and Sharon are physicians. They are discussing a new cancer drug.

These pictures were designed to illustrate affiliation and

achievement between and among sexes at moderate and strong levels of intensity. Both affiliation and achievement scenes depict associations between individuals of the same and opposite-sexes. They also intended to feature two levels of intensity in affiliation (moderate and intimate) and achievement scenes (moderate and intense). While Moderate Same-Sex Achievement and Intimate Opposite-Sex Affiliation were compared; Intimate Same-Sex Affiliation was not used in comparisons because homosexuality was not targeted as an issue in this study.

To help insure that the pictures pulled for their intended themes, each was rated independently by a group of undergraduates for their depiction of affiliation and achievement. Coinciding with Benton et al.'s study, affiliation was defined as a concern with "the establishment and maintenance of interpersonal relationships" (Atkinson, 1958, p. 205) and achievement was described as concern with "success and good performance" (Atkinson, 1958, p. 181). Ratings were made on a 7-point scale anchored by "does not portray" and "certainly portrays" affiliation or achievement (Appendix C).

The stories were scored for violence employing the straightforward system used by Pollak and Gilligan (1982) in which violence was scored wholly on presence or absence. Violence included: death, suicide,

homicide, assault, rape, or fatal disease. In the analyses performed by Pollak and Gilligan, high intercoder reliability was apparently achieved. The authors reported 100% agreement on the overall presence of violence, 93% agreement on the presence of violence in situations of affiliation and achievement, and 84% agreement on the content analysis.

Pictures were presented in five sequences to allow for an assessment of order effects. The sequences varied in their presentation of theme and intensity (Table 1). Sequence I presented same-sex pictures first and began with an affiliation picture. Sequence II also presented same-sex pictures first but began with an the achievement picture. Sequences III and IV began with the more intense opposite-sex pictures but alternated the presentation of the affiliative and achievement pictures. Affiliation, achievement, and level of intensity were alternated in Sequence V.

Personal Attributes Questionnaire (PAQ)

Spence and Helmreich originally derived the PAQ (1978) from a study by Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968) in which students identified characteristics which differentiated men and women. They asked students to rate over 130 items as typical of adult men versus adult women, male college students versus female college students, and as

Table 1

Sequential Presentation of Pictorial Stimuli

Sequence 1

Moderate Same-Sex Affiliation

Moderate Same-Sex Achievement

Moderate Opposite-Sex Affiliation

Moderate Opposite-Sex Achievement

Intense Opposite-Sex Affiliation

Intimate Opposite-Sex Achievement

Sequence 2

Moderate Same-Sex Achievement

Moderate Same-Sex Affiliation

Moderate Opposite-Sex Achievement

Modarate Opposite-Sex Affiliation

Intense Opposite-Sex Achievement

Intimate Opposite-Sex Affiliation

Sequence 3

Intimate Opposite-Sex Affiliation

Intense Opposite-Sex Achievement

Moderate Opposite-Sex Affiliation

Moderate Opposite-Sex Achievement

Moderate Same-Sex Affiliation

Moderate Same-Sex Achievement

Sequence 4

Intense Opposite-Sex Achievement

Intimate Opposite-Sex Affiliation

Moderate Opposite-Sex Achievement

Moderate Opposite-Sex Affiliation

Moderate Same-Sex Achievement

Moderate Same-Sex Affiliation

Sequence 5

Moderate Opposite-Sex Affiliation

Intense Opposite-Sex Achievement

Intimate Opposite-Sex Affiliation

Moderate Same-Sex Affiliation

Moderate Same-Sex Achievement

Moderate Same-Sex Affiliation

typical of the ideal individual of either sex for both college students and adults. Ideal ratings were more closely linked with either extreme masculinity or femininity, leading the researchers to conclude that PAQ items represented socially desirable attributes.

The PAQ consists of three scales labeled Masculinity (M), Femininity (F), and Masculinity-Femininity (M-F). The M and F scales include items considered equally socially desirable for each sex, but are more often associated with one sex (e.g., independence). The M-F scale contains items whose social desirability varies between men and women (e.g., aggressiveness was judged as desirable for men and nonaggressive desirable for women). The authors noted that their M scale generally reflected instrumental, agentic characteristics and the F scale generally referred to expressive, communal attributes, while the M-F contains elements of both postures. The PAQ scales were empirically supported by correlations in which each item was more highly correlated with the scale to which it belonged than either of the two other scales.

The original form of the PAQ was a 55 item semantic differential with five possible responses ranging from "Not at all . . . (e.g., aggressive)" to "Very . . . (e.g., aggressive)." This initial version was subsequently shortened to a 24-item inventory (see Appendix D) based on

correlational data. This briefer versions' M, F, and M-F scales of the short version correlated .93, .93, and .91 with their longer counterparts. Items on the PAQ are scored from 0 to 4. The scores on individual items of each scale are summed to obtain scale scores. The possible scores for each scale range from 0 to 32.

Using the median-split method (Spence & Helmreich, 1978) individuals' are categorized as Masculine, Feminine, Androgynous, or Undifferentiated depending upon the position of their responses above or below the medians on the M and F scales. M-F scale scores are also determined by median splits. Due to the loss of information involved in categorization, the median split method was only be used for descriptive purposes in the present study and raw scores were be used in statistical analyses.

Interpersonal Adjective Scales

After reviewing much of the theoretical and empirical literature on interpersonal behavior, Wiggins (1979) constructed a taxonomy of trait descriptive terms which appears to reflect the predominant features of interpersonal behavior. He introduced eight scales labeled Ambitious--Dominant, Gregarious--Extraverted, Warm--Agreeable, Unassuming--Ingenuous, Lazy--Submissive, Aloof--Introverted,

Cold--Quarrelsome, and Arrogant--Calculating. The intercorrelations of these bipolar scales formed a circumplex undergirded by the primary dimensions of dominance and warmth. These two dimensions have repeatedly been recognized as the principal dimensions of interpersonal behavior (Hurley, 1980; Kiesler, 1983; LaForge & Suczek, 1955; Wiggins, 1982).

The items composing the eight interpersonal scales introduced by Wiggins are shown in Appendix E. Each scale contains 16 items, adding to 128 total items. Participants were asked to assess how accurately each item described them on an 8-point Likert scale ranging from "extremely inaccurate" to "extremely accurate." Scores were derived by summing the responses for each item in each scale, resulting in scores ranging from 16 to 128.

Circumplex models of interpersonal behavior have been viewed as "reflections of the cognitive ordering of interpersonal behavior by observers, rather than an objective ordering of these behaviors by actors in the real world" (Gifford & O'Conner, 1987, p. 1019) (Shweder & D'Andrade, 1979; Conte & Plutchik, 1981). Wiggins' scales have been shown to possess predictive validity (Gifford & O'Connor, 1987) and adequate internal consistency (Wiggins, 1979).

Moving beyond the quantification of *reported acts* as behavioral criteria with which to compare interpersonal measures, Gifford (1982) related personal space or preferred interpersonal distance (IPD) to Wiggins' Interpersonal Adjective Scales. In this study participants specified the amount of IPD they were most comfortable within 18 vignettes. As expected, the strongest positive correlations occurred between IPD preference and Cold--Quarrelsome (.50) and the strongest negative correlation occurred between IPD preference and Extraverted--Gregarious (-.35). Thus, Cold--Quarrelsome accounted for from 25% to 50% (Ozer, 1985) of the variances associated with personal space preferences.

Extending this self-report finding, Gifford and O'Conner (1987) correlated acts initiated and gestures made during group conversations with responses on the IAS. While few of the correlations were strong, behaviors and questionnaire responses were generally related in the expected directions.

In addition to their apparent validity, Wiggins' interpersonal scales appear to be a particularly appropriate measure to use in the assessment of this study's participants because they measure interpersonal posture.

Procedure

To assure that pictorial stimuli presented affiliative or achievement situations, the pictures were separately rated by 38 undergraduate women and 33 undergraduate men. The women received the series of female pictures and the men received the series intended for males.

The primary group of participants for this study was obtained from the Michigan State University research participant pool. The title used to inform participants about the study was "Gender Differences in Personality." This title appeared on the participant sign-up sheets for the purpose of data collection. Both a female and a male monitor were present at each of several data collections to minimize experimenter effects. They both looked like they were in their mid-twenties and dressed casually but neatly.

In same-sex groups ranging from 10 to 25, data were separately collected from men and women. Each was given a questionnaire packet containing: instructions (Appendix F), an informed consent sheet, the six pictorial stimuli, paper on which to write these responses, the PAQ, and the IAS. They were asked to write these stories before completing the PAQ and IAS. After receiving these questionnaire packets, they were also given a verbal explanation of the procedures and the instructions were

reviewed.

The pictures were given with an adaptation of the Atkinson (1958) group administration format which appears in Appendix F. The instructions were altered only slightly to fit the current study. The most significant change is due to the fact that these pictures were presented in Xeroxed form instead of with a slide projector. Using procedures similar to those of Pollak and Gilligan, students were asked to write brief, imaginative, dramatic, and interesting stories for each picture. The PAQ and the IAS were given with standard instructions.

Following the collection of data each participant received a written debriefing sheet (Appendix G).

RESULTS

Interpersonal Adjectives Scales (IAS)

The IAS (Wiggins, 1979) was used to determine whether this sample represented similar undergraduate populations on the two principal dimensions personality generally denoted as Dominance and Warmth. The means and standard deviations on these scales and six less central dimensions of personality appear in Table 2. Scores of the individuals in this study appear with data collected by Wiggins from 523 research

Table 2

Interpersonal Adjective Scales and Scores

	Means				Standard Deviations			
	Females		Males		Females		Males	
	LAB[1]	JSW[2]	LAB	JSW	LAB	JSW	LAB	JSW
Ambitious/ Dominant	5.32	5.72	5.35	5.87	.92	1.01	.87	.95
Arrogant/ Calculating	3.59	3.60	4.19	4.30	1.12	1.07	1.07	1.02
Cold/ Quarrelsome	2.29	2.48	2.82	2.95	.91	.80	1.01	.89
Aloof/ Introverted	3.11	3.87	3.59	4.28	.97	1.17	1.11	1.19
Lazy/ Submissive	3.44	4.13	3.42	3.95	1.04	1.01	1.05	.94
Unassuming/ Ingenuous	4.56	5.14	4.08	4.64	.98	1.00	.89	.93
Warm/ Agreeable	6.39	7.08	6.00	6.64	.90	.76	.95	.80
Gregarious/ Extraverted	6.10	6.54	5.70	6.17	.87	.96	.88	.96
Grand Means	4.22	4.82	4.39	4.85	.96	.97	.98	.96

[1] LAB (present) sample, n's = 90 women and 90 men

[2] Wiggins, n's = 328 women and 195 men. See note in text (p. 54) concerning the atypical method that Wiggins used to score all scales in this sample.

participants in four separate studies (Wiggins, 1979). The mean scores for females in the current study and Wiggins' sample correlated .98 ($p < .001$) and the mean scores for the males in the current study and Wiggins' sample correlated .99 ($p < .001$). The scores of this studies participants averaged .46 points lower than those of Wiggins' sample. This difference is due to the use of different scoring systems by Wiggins and by the current author. While Wiggins' scale normally has an eight-point range, he used a nine-point scale in the sample cited. The fifth position was used as a score for items which had been skipped or not marked boldly enough on a computer sheet. The nine-point scale shifts scores between 5 and 8 up one point. The present work used the eight-point scale which accounts for the difference in scores.

Picture Orientation Ratings

The ratings for the affiliative and achievement qualities contained in the pictures were obtained from the Card Rating Form shown in Appendix C. Mean ratings of each picture's pull for affiliativeness and achievement were compared with two tailed t-tests. The results appear in Table 3 and indicated that all pictures were significantly more likely to elicit the intended themes ($p < .01$).

Table 3

Rated Affiliation and Achievement Pulls of Pictorial Stimuli (n = 71)

Stimuli	Affiliation		Achievement				
	Mean	SD	Mean	SD	t-value	df	2-tail probability
Moderate Opposite-Sex Affiliation	3.96	1.44	2.55	1.44	6.01	70	.01
Intense Opposite-Sex Achievement	3.55	1.65	5.66	1.51	-8.21	70	.01
Intimate Opposite-Sex Affiliation	6.54	1.00	4.41	2.12	7.88	70	.01
Moderate Opposite-Sex Achievement	3.66	1.45	4.78	1.53	-5.00	70	.01
Moderate Same-Sex Achievement	3.80	1.74	5.54	1.47	-7.89	70	.01
Moderate Same-Sex Affiliation	6.10	.93	3.89	1.93	8.58	70	.01

Several of the pictures were perceived as depicting situations of affiliation and achievement which placed them at intended levels of intensity. Intimate Opposite-Sex Affiliation was rated as containing significantly more affiliation than either Moderate Opposite-Sex Affiliation (t = 14.58, $p < .0001$) or Moderate Same-Sex Affiliation (t = 3.18, $p < .05$). Moderate Same-Sex Affiliation was seen as significantly more affiliative than Moderate Opposite-Sex Affiliation (t = 12.55, $p < .0001$) (Table 4). This was likely due to the caption accompanying the Moderate Same-Sex Affiliation picture which read, "Phillip and Brian/ Caroline and Theresa have been friends for two years." Although the picture parallels the Moderate Opposite-Sex Affiliation picture, the caption replicates the one accompanying the Intimate Opposite-Sex Affiliation picture because it mentions "two years" instead of the intended two weeks. This error illustrates the impact written material can have on projective stimuli. The impact of this oversight is discussed in the Analysis of Variance section which reviews individual hypotheses.

The Intense Opposite-Sex Achievement picture was rated as depicting significantly more achievement than the Moderate Opposite-Sex Achievement picture (t = 4.5, $p < .01$) but not more than the Moderate Same-Sex Achievement picture. The Moderate Same-Sex Achievement

Table 4

Rated Intensity Levels of Affiliation and Achievement Pictorial Stimuli*

Comparison	Mean	t-value	df	2-tail probability
Intimate Opposite-Sex Affiliation x Moderate Opposite-Sex Affiliation	2.56	14.58	70	.0001
Intimate Opposite-Sex Affiliation x Moderate Same-Sex Affiliation	.44	3.18	70	.002
Moderate Opposite-Sex Affiliation x Moderate Same-Sex Affiliation	2.14	12.55	70	.0001
Intense Opposite-Sex Achievement x Moderate Opposite-Sex Achievement	.89	4.50	70	.0001
Intense Opposite-Sex Achievement x Moderate Same-Sex Achievement	.13	.63	70	.53
Moderate Opposite-Sex Achievement x Moderate Same-Sex Achievement	-.76	-3.69	70	.0004

*n = 71

picture was also given a higher achievement content rating than the Moderate Opposite-Sex Achievement picture (t = -3.69, p < .05).

The significance levels of these t-tests were adjusted because the number of tests performed exceeded the treatment variable degrees of freedom present (df = 5). Six pictures were assessed and 12 t-tests were performed. The adjustments were made based on the calculations of Sidak (1967). The actual adjusted levels of significance were taken from a table produced by Games (1977).

The Moderate Same-Sex Achievement picture pulled more strongly for violence than intended, apparently due to the presence of physicians in the picture and the accompanying caption, "Peter and David/Julia and Sharon are physicians. They are discussing a new cancer drug." The mention of cancer drew a large number of responses related to death and fatal illness. Consequently, stories written in response to this picture were not included in the current analysis.

This exclusion only interfered with female Hypothesis 2 directed at gender differences in achievement situations. This hypothesis contrasted Moderate Same-Sex Achievement with Moderate Opposite-Sex Achievement. It was predicted that women would write more stories containing violence to scenes of Moderate Opposite-Sex Achievement.

Table 5 shows that women wrote only four stories in response to pictures of Moderate Opposite-Sex Achievement which were scored as containing violence. This frequency, makes it unlikely that stories written by women in response to Moderate Opposite-Sex Achievement would contain significantly more scores for violence than those written about scenes of Moderate Same-Sex Achievement.

The Moderate Opposite-Sex Achievement picture's sequential placement apparently also influenced the frequency of the mention of violence in subsequent pictures. This will be discussed in a review of order effects produced by the pictures.

Interrater Reliability

Two-hundred participants (100 females and 100 males) each contributed sets of six stories to the current study. Twenty sets of stories (10 male and 10 female) were randomly selected and used to train raters. The raters were two undergraduate students (a male and a female) who were blind to this studies hypotheses. They received Independent Study (PSY 490) course credits for their assistance with this project.

They were trained to rate stories for the presence or absence of violence according to Pollak and Gilligan's scoring schema. The guidelines

Table 5

Frequency of Stories Containing the Mention of Violence (all n's = 90)

	Moderate Same-Sex Affiliation	Moderate Opposite-Sex Affiliation	Moderate Opposite-Sex Achievement	Intimate Opposite-Sex Affiliation	Intense Opposite-Sex Achievement	Total Violence
Females						
Total Violence	8	6	4	16	2	36
Males						
Total Violence	12	5	6	16	5	44
Total	20	11	10	32	7	80

they used to rate these stories are in Appendix H. Violence included the mention of homicide, suicide, death by accident, rape or forcible violation, physical assault, kidnapping, or fatal disease. If violence as defined by the scoring schema was mentioned once or more, stories were given a violence rating of 1.

After an initial rating of the training set of 20 stories, it was also decided to include the mention of abortion as violence because it can be considered a human death and is thought by some to be a homicidal act. Although this addition deviates from Pollak and Gilligan's scoring system, there were only five mentions of abortion, leaving data sets generally comparable. Interestingly, four mentions of abortion appeared in stories written by men. Three of these were written in response to Intimate Opposite-Sex Affiliation scenes.

Similar to the methodology of Pollak and Gilligan, each story which obtained a violence rating was also rated for it's content. Content ratings assessed whether stories scored for mentions of violence were generally situations involving affiliation or achievement. In addition to the content classifications of affiliation and achievement, the options of both affiliative and achievement, and neither affiliative nor achievement, were available to raters. An example of a story containing elements of both

affiliation and achievement might be one that described a husband and wife working together in the same business. Stories containing neither affiliation nor achievement might have been written about only one of the picture characters or might have had little to do with the content of pictures.

The initial rater training session included a general orientation to the study, an explanation of scoring procedures, and a discussion of some possible rating dilemmas. Following this training, the set of 20 randomly selected stories were rated for violence and content by each of the raters. Both raters agreed on the presence of violence in 83% (5 out of 6) of these stories. Of these five stories that received violence ratings from both raters, 60% (3) were given the same content ratings.

A second phase of training included a review of ratings that had been given by each rater and a discussion of rating discrepancies. Agreement was reached on several stories which had been difficult to score. It was during this discussion that it was decided that abortion would be given a score for violence.

After this retraining raters scored the stories of the larger group of 180 (90 male and 90 female) participants for the mention of violence and story content. After each rater had scored 90 stories, raters were asked

to rescore the original group of 20 training stories to see if agreement on their content ratings had changed. In the second rating of the set of 20 stories, raters agreed on the presence of violence in 7 of the 8 stories scored for violence. They agreed on the content ratings of the six stories which they had both rated as violent.

Although the raters obtained high interrater reliability for the small group of 20 stories, this agreement declined in the larger set of stories. Of the 900 total stories written by participants (5 each, excluding stories written in response to Moderate Same-Sex Achievement), raters cumulatively reported 88 mentions of violence. They agreed about the presence of violence in 63% (55) of these stories, 95% (52) of which they also gave the same content rating.

The low interrater agreement on the large set of stories appeared to be due to difficulties in rating assaultive situations, confusion about the scoring of abortion, and general rater disagreement. There were several instances when the occurrence of death was overlooked or unclear when terms such as "late" ("late husband") or "loss" ("the loss of a friend") were used to describe people. In some stories it was not clear whether alcoholism could be considered a fatal disease and vague phrases like "serious accidents" had to be scored in the context of the entire story.

Comparatively minor assaults were sometime difficult for raters to agree upon. In one story, a character vomited on another and it was not clear whether this act was an intentional assault. Ultimately,this story did not receive a score for violence. On several occasions one rater gave a violence score to the mention of abortion only when it was carried through. The decision had previously been to score the mention of abortion as violent in accordance with mentions of other forms of violence. Death of animals or violence directed at animals was also counted as violent in this system. One normally very conscientious rater, seemed to miss several blatant mentions of violence in the larger set of data. These oversights may be related to preoccupations with the death of her brother which occurred midway through the coding process.

In determining the final scores for violence and content, stories with discrepant ratings were appraised by a third rater (Rater C) who was also blind to the study's hypotheses and the story writer's sex. The use of a third rater to resolve rating discrepancies was also used by Pollak and Gilligan. Rater C was a 24 year-old male graduate of Michigan State University working in the local area. After being trained to use Pollak and Gilligan's scoring system for violence, he rated the set of 20 stories which had been used to train the other raters. After their second training,

the first two raters (Rater A and Rater B) had agreed on 7 out of 8 mentions of violence and on 6 of the content ratings for these 7 stories. The third rater agreed with Rater A on all violence scores and with and Rater B on all but one story. There was also agreement between Raters A and C on 7 content scores and between Raters B and C on 6 content scores.

After demonstrating reasonable interrater agreement with the two original raters, Rater C was asked to score the 33 stories which had received discrepant scores of violence by the first two raters. Rater C's data were used to force a consensus between raters. Consensus was reached for all of the violence scores and all of the content scores except for one given a "neither" content rating by Rater A, no rating for violence by Rater B, and an achievement content score by Rater C. This content rating was excluded from subsequent analyses.

Violence Scores in Pictorial Stimuli

Based on the initial ratings of Raters A and B and those later added by Rater C, the total number of stories containing violence for each stimulus condition appears in Table 5. Men collectively wrote 44 stories which mentioned violence at least once and women wrote 36 stories which contained violence. Responses to the Intense Opposite-Sex Affiliation

stimulus constituted 40% (32 of 80) of all stories containing violence.

In addition to these data, Table 6 presents the percentages of men and women who wrote stories containing violence in response to either affiliation pictures or achievement pictures, or to both affiliation and achievement pictures. The affiliation and achievement categories in this table are composed of separately pooled ratings of responses to the affiliation and achievement pictures.

The frequency of scored violence for all participants appears in Appendix I. Ten of 30 and six of 24 women wrote more than one story scored as containing violence. Three men and two women wrote more than two stories scored to contain violence.

In Table 6, the current data are also compared to the findings of Pollak and Gilligan and those of Benton et al. This comparison includes both 4 and 5 picture sets. The four picture set excludes the Moderate Same-Sex Affiliation picture, making it more comparable to the data of the other authors. The inclusion of the Moderate Same-Sex Affiliation picture increased the potential number of violent ratings in the affiliation category because it is not balanced by an achievement picture.

Table 6

Percentage of Participants Who Wrote Stories Containing Violence Elicited by Achievement and Affiliation: A Comparison of Three Studies

Males

Authors	Sex	Affiliation	Achievement	Both	Total Violence	No Violence
Pollak & Gilligan	M=88	25%	6.8%	19.3%	51%	49%
Benton, et al.	M=90	20%	7%		45%	55%
Brooks Four Pictures	M=90	18.8%	5.6%	5.6%	22.2%	77.8%
Brooks Five Pictures	M=90	22.2%	5.6%	7.8%	35.5%	64.4%

Females

Authors	Sex	Affiliation	Achievement	Both	Total Violence	No Violence
Pollak & Gilligan	F=50	6%	16%	0%	22%	78%
Benton et al.	F=114	12%	5%		24%	76%
Brooks Four Pictures	F=90	17.8%	2.2%	3.3%	23.3%	76.6%
Brooks Five Pictures	F=90	21.1%	2.2%	3.3%	26.7%	73.3%

Pollak and Gilligan reported that 25% of their men, as compared to 6% of their women, wrote stories containing violence to pictures of affiliation. In contrast, 6.8% of the men and 16% of the women wrote stories containing violence to scenes of achievement. While no women wrote stories containing violence to scenes of both affiliation and achievement, 19.3% of the men wrote such stories. Altogether, 51% of Pollak and Gilligan's men and 22% of their women wrote at least one story scored as containing violence.

Of the present study men, 22.2% responded to the four picture series with at least one story containing violence, as did 23.3% of the women. The percentage of men who wrote stories containing violence in the present study is much smaller (22.2% vs 45%) than that of Pollak and Gilligans' investigation. Another notable difference between these two studies is that 15.5% of the present women as compared to 6% of Pollak and Gilligans' women wrote stories containing violence in response to scenes of affiliation. Additionally, only 2.2% of the women wrote stories containing violence in response to achievement stimuli, in comparison to Pollak and Gilligans' 16%.

The present findings more closely approximated those of Benton et al. who found that 20% of the men and 12% of the women wrote stories scored

as containing violence to affiliation stimuli and that 7% of the men and 5% of the women wrote stories containing violence to achievement stimuli. These figures must be confirmed through correspondence with Benton et al. because they do not coincide with the total violence scores reported by these authors. Benton et al. stated that, "Concerning the amount of violence imagery, 45% of the male and 24% of the female respondents expressed hostility to at least one of the TAT cards" (p. 1170). The percentages of violence reported for men (20% and 7%) and women (12% and 5%) in affiliative and achievement situations do not add to the total frequencies for mentions of violence. Perhaps Benton et al. did not equate violence with hostility.

Appendix J gives a detailed breakdown of the types of violence in the present responses scored as violent. Some responses included more than one type of violence, accounting for the differences in total mentions of violence in this table and the frequency of stories scored as containing violence in Table 5. Death by accident was the most frequently occurring type of violence in stories written by both men and women. Fatal illness and homicide were the second and third most frequently mentioned types of violence.

Content Analysis

In addition to the independent content ratings (by 71 undergraduates) of affiliative and achievement pictures, a content analysis was made of all stories scored for violence. The purpose of this analysis was to examine whether the content of stories differed from the intended theme of the stimuli. In other words, were respondents writing stories about affiliation to scenes of affiliation?

Each story scored for violence received, a content rating of affiliation, achievement, both, or neither. This differed from Pollak and Gilligan's content analysis in one significant respect. Pollak and Gilligan rated the specific context in which violence occurred as either affiliative, achievement, both, or neither; whereas, the current study rated the stories which contained violence as affiliative, achievement, both, or neither. This was an unintended departure from Pollak and Gilligans' methodology. Helgeson and Sharpsteen (1987) also performed a content analysis that was similar to that of the present study. Pollak and Gilligans' limited description of their content analysis may have contributed to these deviations.

Pollak and Gilligan's content analysis results did not differ significantly from their findings analyzed "by situations" (Table 6).

Although the current content analysis was not fully comparable to their's, it has provided information about whether tne content of violent stories differed from the intended theme of the stimuli.

The results of the content analysis, given in Table 7, show the content ratings of pictures in each category. Based on the three rater consensus, 91% of the stories scored as containing violence were in categories congruent with their stimulus type (affiliation vs. achievement). This means that stories scores scored for violence in response to pictures of affiliation usually focused on relationships, while responses to pictures of achievement which contained violence, generally centered around issues of competition and accomplishment. Because story content linked so strongly to category of stimuli, a separate analysis based on story content seemed profitless.

Analysis of Variance

A repeated measures ANOVA was performed on the violence scores agreed upon by raters (80 ratings of violence, Table 5) for men and women across pictorial stimuli. There was a main effect for mention of violence across pictures ($F = 8.6$, $p < .0001$), but no main effect for respondent's sex ($F = .56$, $p < .46$) (Table 8). The main effect for the mention of violence

Table 7

Content Analysis of Stories Scored as Containing Violence (all n's = 90)

Content	Moderate Same-Sex Affiliation	Moderate Opposite-Sex Affiliation	Moderate Opposite-Sex Achievement	Intimate Opposite-Sex Affiliation	Intense Opposite-Sex Achievement	Totals
Females						
Affiliation	8	6	1	16	0	29
Achievement	0	0	3	0	2	5
Both	0	0	0	0	0	0
Neither	0	0	0	0	0	0
Total Violence	8	6	4	16	2	36
No Violence	82	84	86	74	88	414
Males						
Affiliation	11	5	1	16	1	34
Achievement	0	0	4	0	1	5
Both	0	0	0	0	3	3
Neither	1	0	0	0	0	1
Total Violence	12	5	5*	16	5	43
No Violence	78	85	84	74	85	407

*1 content rating excluded due to rating disagreement

Table 8

Analysis of Variance

Sex x Pictorial Stimuli

Source	Df	SS	MS	F	P
Order (A)	1	.071	.071	.555	.457
Pictorial Stimuli (B)	4	2.03	.575	8.6	.0001
(AB)	4	.096	.024	.357	.839
Subjects within Groups	178	22.82	.128		
B x sujects within Groups	712	46.60	.067		

was probably largely due to the greater number of stories scored as containing violence by both men and women in response to the Intimate Opposite-Sex Affiliation picture. There was no interaction between sex and the mention of violence ($F = .36$, $p < .84$).

T-tests were used to assess individual hypotheses and results are given in Table 9.

Hypotheses for Men

1. To all pictorial stimuli, men will write significantly more stories scored to contain violence than will women. Rejecting this hypothesis, men did not write significantly more stories scored as containing violence than did women ($F = .56$, $p < .46$).

2. Men will write significantly more stories scored to contain violence in response to scenes of Intimate Opposite-Sex Affiliation as compared to scenes of Moderate Opposite-Sex Affiliation (M2 versus M1). As expected, the stories men wrote in response to scenes of Intimate Opposite-Sex Affiliation were more frequently scored as containing violence than those stories written about scenes of Moderate Opposite-Sex Affiliation ($t = 2.60$, $p < .01$).

3. Men will write significantly more stories scored to contain violence in response to scenes of Moderate Opposite-Sex Affiliation as

Table 9

Comparisons of Individual Hypotheses

Comparison	Sex	Mean	t-value	Df	2-tail probability
Intimate Opposite-Sex Affiliation x Moderate Opposite-Sex Affiliation	M	.12	2.60	89	.012
Moderate Opposite-Sex Affiliation x Moderate Same-Sex Affiliation	M	-.08	-1.97	89	.052
Intimate Opposite Sex Affiliation x Intense Opposite-Sex Achievement	M	.12	2.96	89	.004
Intimate Opposite Sex Affiliation x Intense Opposite-Sex Achievement	F	-.16	-3.75	89	.0003
Intense Opposite-Sex Achievement x Moderate Opposite-Sex Achievement	F	-.022	-1.00	89	.32

n = 90 males & 90 females

compared to scenes of Moderate Same-Sex Affiliation (M1 versus M5). Rejecting this hypothesis, men wrote significantly more stories containing violence in response to the scene of Moderate Same-Sex Affiliation than to the picture of Moderate Opposite-Sex Affiliation (t = -1.97, $p < .05$). This may in part be due to the more intimate caption accompanying the Moderate Same-Sex Affiliation picture ("Phillip and Brian/ Caroline and Theresa have been friends for two years"). When comparing Moderate Same-Sex Affiliation and Intimate Opposite-Sex Affiliation responses which shared similar captions, the discrepancy between scores was slight (12 vs. 16), implicating the importance of situational intensity versus sex of story character.

4. Men will write significantly more stories scored to contain violence in response to the scene of Intimate Opposite-Sex Affiliation as compared to the scene of Intense Opposite-Sex Achievement (M2 versus M4). This hypothesis was sustained (t = 2.96, $p < .01$).

Hypotheses for Women

1. Women will write significantly more stories scored to contain violence in response to scenes of Intense Opposite-Sex Achievement as compared to scenes of Moderate Opposite-Sex Achievement (F3 versus F4). This hypothesis was rejected (t = 1.0, $p < .32$).

2. Women will write significantly more stories scored to contain violence in response to scenes of Moderate Opposite-Sex Achievement as compared to scenes of Moderate Same-Sex Achievement (F3 versus F6).

Although this comparison was not performed because of the earlier noted problems with the Moderate Same-Sex Achievement, it seems unlikely that this hypothesis would have been supported due to the very low number of violent responses in this category (4 stories of 90).

3. Women will write significantly more stories scored to contain violence in response to scenes of Intense Opposite-Sex Achievement as compared to scenes of Intimate Opposite-Sex Affiliation (F4 versus F2). Sharply rejecting this hypothesis, women wrote significantly more stories scored as containing violence in response to scenes of Intimate Affiliation with the Opposite-Sex ($t = -3.75$, $p < .0003$).

It was not necessary to adjust the levels of significance for these t-tests because the number of comparisons performed (5) was less than the number of treatment (or pictorial stimuli) levels.

Order Effects

The pictures used in this study to gain information about self-definition and interpersonal posture were administered in the five different orders noted Table 1. Violence scores derived from these

different sequences are shown in Table 10. A repeated measures ANOVA contrasting pictorial stimuli and order of pictorial stimuli was performed (Table 11). There was no main effect for order (F = 1.70, p < .15) but there was a main effect for the number of violent responses across pictorial stimuli (F = 8.80, p < .0001). There was also an interaction between picture order and violence across pictorial stimuli (F = 1.87, p < .02).

Although data collected from the Moderate Same-Sex Achievement picture was excluded from the present analyses, it appears that the early viewing of this card may have had a significant impact on the number stories written by men which contained violence. Of the male stories which were scored as containing violence, 45% (20) were evoked by the sequence of stories in which the Moderate Same-Sex Achievement (Sequence II) picture appeared first. Sequence I, featuring Moderate Same-Sex Affiliation first, generated 22.7% (10) of the males' stories scored as containing violence.

The largest number of stories containing violence and written by women occurred in the sequence which presented the Intimate Opposite-Sex Affiliation picture at the beginning (Sequence III). Eleven or 32.4% of the female stories with violence appeared in this group. The sequence of pictures that pulled the second largest number of stories

Table 10

Frequency of Stories Containing Violence in Five Picture Sequences

Picture Orders	Moderate Same-Sex Affiliation	Moderate Opposite-Sex Affiliation	Moderate Opposite-Sex Achievement	Intimate Opposite-Sex Affiliation	Intense Opposite-Sex Achievement	Totals
Males						
Sequence 1	5	2	2	1	0	10
Sequence 2	5	1	3	7	4	21
Sequence 3	0	2	1	2	1	6
Sequence 4	0	0	0	2	0	2
Sequence 5	2	0	0	4	0	6
Sum	12	5	6	16	5	44
Females						
Sequence 1	2	2	1	3	0	8
Sequence 2	0	0	1	2	1	4
Sequence 3	3	2	2	4	0	11
Sequence 4	1	2	0	1	1	5
Sequence 5	2	0	0	6	0	8
Sum	8	6	4	16	2	36

n=90 males & 90 females

Table 11

Analysis of Variance

Order x Pictorial Stimuli

Source	Df	SS	MS	F	P
Order (A)	4	.86	.21	1.7	.15
Pictorial Stimuli (B)	4	2.3	.58	8.8	.0001
(AB)	16	1.96	.12	1.87	.02
Subjects within Groups	175	22.03	.13		
B x sujects within Groups	700	45.74	.07		

scored as containing violence from women was the set which began with Moderate Same-Sex Achievement (Sequence 5, 8 stories or 23.5%).

Relationship of Violence Scores to the PAQ

The Androgynous, Feminine, Masculine, and Undifferentiated categorizations are based on the median-split method of scoring. This method uses the rounded-off average of male and female median scores as an intercategory cutoff. The median scores for females on the Masculinity and Femininity Scales were 21 and 25. The males parallel medians were 22.5 and 23. Thus, the averaged median would be 22 ([21 + 22.5] / 2) for Masculinity and 24 ([25 + 23] / 2) for Femininity. Very similar medians of 21 on Masculinity and 23 on Femininity were reported from data based on 715 college students by Spence & Helmreich (1978).

Of the 90 females in this study, 16 (18%) described themselves as Androgynous, 38 (42%) as Feminine, 18 (20%) as Masculine, and 18 (20%) as Undifferentiated. Twenty-three (25.5%) of the males rated themselves as Androgynous, 17 or 18.8% as Feminine, 26 or 28.8% as Masculine, and 24 or 26.6% as Undifferentiated.

Female Hypothesis 4 and Male Hypothesis 5

4. Women who write stories stored as containing violence in response to scenes of Intense Opposite-Sex Achievement will have

significantly higher PAQ Femininity scores than women who do not write stories scored as containing violence in response to scenes of Intense Opposite-Sex Achievement (M2 and PAQ F scores). This hypothesis was rejected because the mean PAQ Femininity score of women who wrote stories containing violence to scenes of Intense Opposite-Sex Achievement ($\underline{M}$ = 26) did not differ significantly from those of the other women ($\underline{M}$ = 24.40). Although not statistically, this difference was in the expected direction.

5. Men who write stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation will have significantly higher PAQ Masculinity scores than men who do not write stories scored as containing violence in response to scenes of Intimate Opposite-Sex Affiliation (M2 and PAQ M scores). As with women, men who wrote stories scored as containing violence to scenes of Intimate Opposite-Sex Affiliation ($\underline{M}$ = 22.25) did not differ significantly on PAQ Masculinity from the other men ($\underline{M}$ = 22.19).

DISCUSSION

This study attempted to clarify the debate between Pollak and Gilligan, and Benton et al., regarding differences in the mention of violence, in the written responses of men and women to scenes of

achievement and affiliation. In addition to being contradictory, the findings of these previous authors appeared limited due to their use of stimuli unbalanced for the sex of depicted characters and inattentive to the intensity level of the situations presented. The present work addressed these issues by constructing equivalent sets of pictorial stimuli which presented achievement and affiliation themes using same- and opposite-sex pictorial characters at both moderate and high levels of intensity.

It was hoped that stories written in response to the projective materials created for this study would yield further insights into how men and women experience affiliation and achievement situations. Although the roles of men and women in our society are rapidly changing and merging in some important respects, numerous theoretical and empirical works (Horner, 1968; Chodorow, 1974; Gilligan, 1977; Eccles, 1987) continue to indicate that men and women perceive and respond differently to interactions featuring intimacy, competition, and success. These differences have been attributed to issues ranging from self-definition to variations in personality originating in separation from a female primary care-giver.

In *The Reproduction of Mothering*, Chodorow provided a penetrating

look at how men and women develop different personality structures in response to separation from a female primary care-giver. She believes that in their effort and ability to separate clearly and distinctly from an opposite-sex care provider, males develop more autonomous personalities and move away from some of the affiliative bonds associated with preoedipal relationships. In addition to an evolutionary path which has propelled men away from the role of nurturer and into the role of provider, Chodorow posits that the separation process encourages the formation of clearer ego boundaries in men than in women and causes men to deemphasize the importance of relationships.

Paralleling men's historic exclusion from care-giving processes, women have been excluded from socially recognized professions and denied the opportunity to acquire resources. The struggle faced by women in adapting to achievement environments were illustrated in Horner's (1968) doctoral dissertation. She alleged that some women experience what she referred to as, "fear of success" in competitive situations. In her study the anxiety surrounding accomplishment appeared to weaken women's motivation to compete against men. Some of the experiences women have in achievement situations may arise because women tend to place a higher priority on relationships than do men. Success is often accomplished

through assertive striving wherein one person gains competitive victory over another. Women have typically been discouraged from competitive and aggressive behavior because these behaviors can be perceived as threatening to the needs of others (Bernardez, 1983) which conflicts with the maternal expectations placed on women. Consequently, it may be especially anxiety-provoking for women to seek success in competitive occupations.

Gilligans' book, *In a Different Voice*, has resonated with the perceptions of many women. She illustrated that men and women seem to define themselves and their purposes differently and consequently make moral decisions based upon different sets of priorities. Interviewing men and women about how they made personal moral decisions, Gilligan observed that men appeared more concerned with rights and responsibility and that women seemed to place a greater emphasis on the maintenance of relationships and care of others.

Gilligan linked her observations about these divergent perspectives with the findings she shared with Pollak on the mention of violence in affiliative and achievement scenes. These authors believed that men more frequently wrote stories containing violence in response to scenes of affiliation and women more frequently wrote stories containing violence

in response to scenes of achievement due to their differing self-definitions and resulting sets of priorities.

The present findings did not support the empirical work of Pollak and Gilligan. The frequency at which men and women wrote stories containing violence did not differ across the present pictorial stimuli. They separately wrote similar numbers of stories scored as containing violence in response to both affiliative and achievement stimuli and the scenes featuring affiliation elicited more stories containing violence from both men and women. These findings are based on both the number of men and women who wrote stories containing violence in response to affiliative and achievement situations (Table 6) and also on the number of stories scored as containing violence for each category of pictorial stimuli (Table 5).

The findings of this study are more similar to those of Benton et al., who were unable to reproduce the results of Pollak and Gilligan in either a replication or in an extension which used two additional pictures. Benton et al. reported that men and women more frequently wrote stories containing violence (20% and 12%) to scenes of affiliation than to scenes of achievement (7% and 5%). In the present study, using the set of two opposite-sex affiliation (intimate and moderate) pictures and two

opposite-sex achievement pictures (intense and moderate), 18.8% of the men and 17.8% of the women wrote at least one story scored to contain violence to a scene of affiliation (Table 6), but only 5.6% of the men and 2.2% of the women wrote at least one story which was scored as containing violence in response to scenes featuring achievement (Table 6). These findings seem likely to be generally representative of other undergraduate populations based on the nearly identical IAS and PAQ scores of this study's participants and other undergraduate populations.

Helgeson and Sharpsteen (1987) recently conducted a study in which they used only the Acrobatic picture to elicit stories from 50 men and 61 women. This picture was accompanied by either an affiliative or an achievement caption to focus the respondent's attention. Although their findings supported Pollak and Gilligan's, this may have been due to the smaller number of subjects in each experimental condition (25) and to this picture's implicit potential for violence. Additionally, some subjects continued to perceive this picture as an achievement scene even when the affiliative caption was presented. There was no significant difference in the number of stories classified as affiliative (49.1%) or achievement (42.1%) which had been written in response to the affiliative stimuli.

All stimuli created for the present work were independently judged

as depicting either the intended themes of achievement or affiliation. Potentially more reflective of real-life affiliation and achievement situations than previous sets of pictorial stimuli, both the Intimate Opposite-Sex Affiliation and Intense Opposite-Sex Achievement pictures were also judged to contain a higher intensity of their intended content category than their moderate counterparts. This allowed for the assessment of perceptions at two different levels of affiliation and achievement.

The assessment of differences due to sex of featured characters was complicated because the Moderate Same-Sex Achievement stimuli pulled for violent imagery through its caption's mention of cancer, and the caption of the Moderate Same-Sex Affiliation stimuli pulled for intimacy, reading "two years" instead of "two weeks." It is noteworthy that the Moderate Same-Sex Achievement scene also received the highest ratings for contained achievement imagery. This is probably due to the presence of physicians in the picture.

The men who participated in this study responded differently to high levels of affiliation and achievement stimuli and to intimate and moderate levels of affiliation. They produced more stories containing violence in Intimate Affiliation as opposed to Intense Achievement situations (t =

2.96, $p < .01$) and they more frequently wrote stories containing violence in response to scenes of Intimate Opposite-Sex Affiliation as compared to Moderate Opposite-Sex Affiliation ($t = 2.60$, $p < .01$). The differences expected to emerge from sex of story character in affiliative situations were not found. Men wrote more stories scored as containing violence in response to scenes of Moderate Same-Sex Affiliation than to Moderate Opposite-Sex Affiliation ($t = -1.97$, $p < .05$). It is not clear whether this is due to the presence of same-sex intimacy or the higher level intimacy elicited by the Moderate Same-Sex Affiliation stimuli and it's "two year" relationship caption.

Women also wrote more stories scored as containing violence in response to scenes of intimate affiliation as compared to scenes of intense achievement and to scenes of intimate affiliation as compared to scenes of moderate affiliation stimuli. Although the comparison of opposite-sex and same-sex picture characters in achievement situations containing women were not performed, it would have been unlikely for the Moderate Opposite-Sex Achievement picture to have stimulated a significantly greater number of stories containing violence in any comparison due to its infrequent evocation of responses scored for violence.

The mention of violence in stories seemed strongly influenced by the order of picture presentation. Men wrote more stories containing violence in the sequence which first featured Moderate Same-Sex Achievement, followed by Moderate Same-Sex Affiliation (45.5%). The sequence which received the second greatest number of violent stories by men began with Moderate Same-Sex Affiliation and presented Moderate Same-Sex Achievement second (23.5%). As discussed previously, the early presentation of the Moderate Same-Sex Achievement picture containing the "cancer" reference, may have set the tone for other violent stories. The Moderate Same-Sex Affiliation picture may have caused men to increase their violent responses in defense against homosexual feelings.

Women wrote more stories containing violence in the sequence which featured the Intimate Opposite-Sex Affiliation picture first and the Intense Opposite-Sex Achievement picture second (12.2%). While men responded most strongly to same-sex pictures, level of intensity elicited the most violence from women.

Although interrater reliability on the large set of 180 stories was markedly lower than on the training sample of 20 stories, a third rater was used to achieve consensus ratings between these discrepant ratings. The third rater obtained a high level of agreement with the first two

raters on the initial set of 20 training stories. This raters' scoring ability likely benefited from the author's greater knowledge of scoring difficulties during training.

In addition to the lack of a clear relationship between sex and the mention violence, no linkage was found between participants' gender identity and their mentions of violence. Men who wrote stories containing violence in response to Intimate Opposite-Sex Affiliation did not have significantly higher mean PAQ Masculinity scores than other men. Similarly, the mean PAQ Femininity scores for women who had written stories containing violence in response to scenes of Intense Opposite-Sex Achievement did not differ from those women who had not written violent stories in this category. These results are in agreement with similar findings by Helgeson and Sharpsteen (1987) who also reported a lack of a relationship between respondents' gender identities and their scores for violence based on written to affiliative and achievement situations. Violent responses may be more related to broader cross-sex personality variables than to gender-linked traits.

In another recent study which examined Gilligan's theories of moral reasoning, PAQ scores failed to relate to the moral decision making process. Friedman, Robinson, and Friedman (1987) asked undergraduates to

score moral decisions for the presence of 12 criteria. These criteria were composed of elements containing both Kohlberg's and Gilligan's systems moral reasoning. The authors found no link between sex and approaches to moral judgement. Participants' PAQ scores also failed to yield a relationship between moral reasoning of gender identity. A group of individuals who had made moral decisions based on care was evident in the correlation between items based on Gilligan's theory, but this group was composed of roughly equal proportions of males and females. The lack of a relationship between PAQ scores and moral reasoning strategies may be due to the PAQ's insensitivity to the aspects of gender emphasized by Gilligan.

If sex differences are associated with self-definitions, interpersonal orientations, and moral reasoning, the mention of violence in response to scenes of affiliation and achievement may not be the most accurate method of observing these differences. In response to this present set of stimuli's generally more realistic and balanced (for interaction intensity level and featured character's sex) structure, both men's and women's responses to scenes of Intimate Opposite-Sex interaction were scored as containing significantly more violence. The Moderate Same-Sex Affiliation picture, featuring a caption similar to the Intimate

Opposite-Sex picture, received the second greatest number of violent stories from both men and women. At two levels of intensity, both men and women appear to be perceiving intimate affiliation as more dangerous than achievement.

This may be because the need for intimacy is more primitive and more pervasive than the need for achievement (Maslow, 1970). Harlow's (1959) work with monkeys has shown that the need for nurturance overrides even the need for food in the face of deprivation. McKinney (1986) has found that young monkeys display neurological and physiological changes within 24 hours of separation from their mothers. Their heart rates and body temperatures dropped during sleep and their behaviors looked similar to depressive human responses. Intimacy is important to human development throughout life and strongly effects the intellectual and personal development of young children (Skeels, 1966). In the current study the presence of intimate affiliative stimuli elicited more violence than other stimuli. Perhaps the presence of intimacy evokes concern about it's stability and inherently harbors danger and risk. If this is so, the salience of affiliation and it's accompanying danger transcended sex and gender differences in the present study. While men and women may generally define themselves differently according to Gilligan's theory,

both seemed more apt to associate intimate affiliation with violence.

This general salience of affiliation must be viewed in light of the population which participated in this study. The findings may be specific to the age of the research participants who were largely college sophomores (19 year-olds). The negotiation of intimacy may be more pressing at this age than issues of achievement that may surface more clearly in a student's senior year or after graduation. Attendance at a university tends to lengthen the Oedipal period and delay adulthood.

Beyond the need to replicate these findings because of the limited degree of interrater agreement, additional issues raised by the present results call for further exploration. A thorough examination of the levels of intensity with which each stimuli is perceived seems required. It would seem desirable to distinguish between, low, moderate, and high levels of stimulus intensityperhaps while separately considering the perceptions of men and women. More widely varying the age of participants also seems desirable to obtain a broader perspective on related developmental periods.

The effect of picture presentation sequence on results strongly suggests that variables like intensity level and featured characters' sex play a major role in the amount of violence present in responses to

pictorial stimuli. A more rigorous examination of order effects in future studies of this nature is recommended. While optimally three levels of stimuli with multiple character sex configurations might be examined, this study has shown that Intense Same-Sex Affiliation stimuli need to be compared to Moderate Same-Sex Affiliation stimuli for response differences and differences due to order of presentation. An exploration of the impact of physical contact in pictorial stimuli might also be informative. The rating of Moderate Same-Sex Affiliation as more affiliative than Moderate Opposite-Sex Affiliation, in light of it's more intimate "two-year" relationship caption, and the rating of the Moderate Same-Sex Achievement scene as the most achievement oriented picture, indicate that much more attention needs to be given to how pictorial stimuli are perceived prior to their use.

This present work shows that intimate affiliation stimuli elicited a greater number of violent responses from both men and women than did either moderately affiliative stimuli or any level of achievement stimuli. The frequency of scored violence in responses was strongly influenced by the order in which stimuli were viewed. Although it is clear that gender differences exist, the extent and nuances of these variations were not reflected in the current data and appear to require further innovative

empirical examination. The violence aroused by intimate affiliation stimuli for both men and women raises new questions about how both sexes experience intimacy.

Appendix A

MORALITY AS CARE AND MORALITY AS JUSTICE: A SCHEME FOR CODING CONSIDERATIONS OF RESPONSE AND CONSIDERATIONS OF RIGHTS

A. The Construction of the Problem

Considerations of Response (Care)

1. General effects to others (unelaborated);
2. Maintenance or restoration of relationships; or response to another considering interdependence;
3. Welfare/well-being of another or the avoidance of conflict; or, the alleviation of another's burden/hurt/suffering (physical or psychological);
4. Considers the "situation vs./over the principle";
5. Considers care of self; care of self vs. care of others.

Considerations of Rights (Justice)

1. General effects to the self (unelaborated including "trouble" "how decide");
2. Obligations, duty or commitments;
3. Standards, rules or principles for self or society; or, considers fairness, that is, how one would like to be treated if in other's place;
4. Considers the "principle vs./over the situation";
5. Considers that others have their own contexts;

B. The Resolution of the Problem/Conflict

Considerations of Response (Care)

1. General effects to others (unelaborated);
2. Maintenance or restoration of relationships; or response to another considering interdependence;
3. Welfare/well-being of another or the avoidance of conflict; or, the alleviation of another's burden/hurt/suffering (physical or psychological);
4. Considers the "situation vs. the principle";
5. Considers care of self; care of self vs./care of others;

Considerations of Rights (Justice)

1. General effects to the self (unelaborated including "trouble" "decision");
2. Obligations, duty or commitments;
3. Standards, rules or principles for self or society; or, considers fairness, that is, how one would like to be treated if in other's place;
4. Considers the "principle vs./over the situation";
5. Considers that others have their own contexts.

C. The Evaluation of the Resolution

Considerations of Response (Care)

1. What happened/how worked out;
2. Whether relationships maintained/restored;

Considerations of Rights (Justice)

1. How decided/thought about/justified;
2. Whether values/standards/principles maintained.

A SCHEME FOR CODING RESPONSES TO THE "DESCRIBE YOURSELF" QUESTION

1. General and Factual
   1. General factual
   2. Physical characteristics
   3. Identifying activities
   4. Identifying possessions
   5. Social status

2. Abilities and Agency
   1. General ability
   2. Agency
   3. Physical abilities
   4. Intellectual abilities

3. Psychological
   1. Interests (likes/dislikes)
   2. Traits/dispositions
   3. Beliefs, values
   4. Pre-occupations

4. Relational Component
   A. Connected in relation to others:
      1. Have relationships: (relationships are there)
      2. Abilities in relationships: (make, sustain; to care, to do things for others)
      3. Traits/dispositions in relationships: (help others)
      4. Concern: for the good of another in their terms
      5. Pre-occupations: with doing good for another; with how to do good
   B. Separate/objective in relation to others
      1. Have relationships: (relationships part of obligations/ commitments; instrumental)
      2. Abilities in relationships: (skill in interacting with others)
      3. Traits/dispositions in relationships: (act in reciprocity; live up to duty/obligation; commitment; fairness)
      4. Concern: for others in light of principles, values, beliefs or general good of society)
      5. Pre-occupations: with doing good for society; with whether to do good for others)

Summary statements
Self-evaluating Commentary
1. In self's terms
2. In self in relation to others
   a. Connected self
   b. Separate self

Appendix B

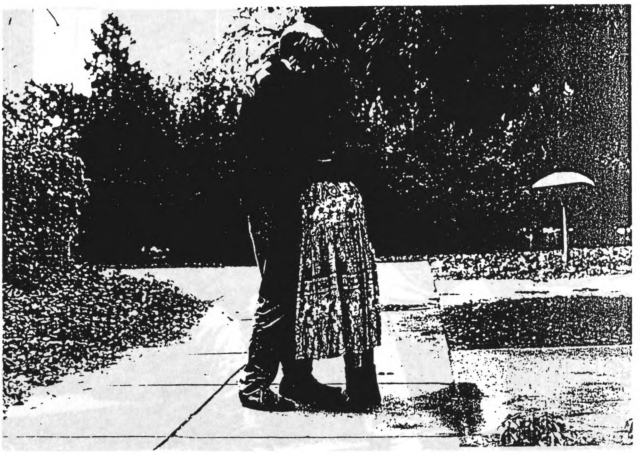
Intense Opposite-Sex Achievement

Stuart and Alexandra are high ranking executives in their firm.

Moderate Opposite-Sex Achievement

Eve and Mark are department managers in their company.

Intimate Opposite-Sex Affiliation



Elizabeth and Nathan have been close for two years.

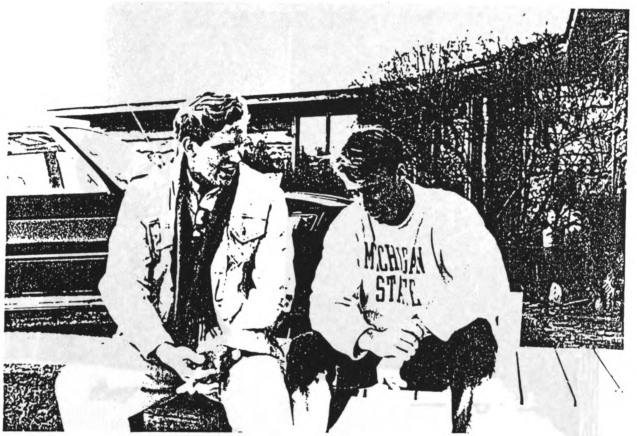
Moderate Opposite-Sex Affiliation

Michael and Carla have known each other for about two weeks.

Moderate Same-Sex Achievement

Peter and David are physicians. They are discussing a new cancer drug.

Moderate Same-Sex Affiliation



Philip and Brian have been friends for two years.

Moderate Same-Sex Achievement

Julia and Sharon are physicians. They are discussing a new cancer drug.

Moderate Same-Sex Affiliation

Caroline and Theresa have been friends for two years.

Appendix C

Female _____ Male _____

On the pages that follow you will find six pictures. Use the scale below to rate each picture for the amount of affiliation (defined below) and the amount of achievement (defined below) displayed. Please read the definitions and scale before completing your ratings.

Affiliation: The establishment and maintenance of interpersonal relationships.

Achievement: The attainment and interest in success and good performance.

1	2	3	4	5	6	7
does not portray	portrays a little bit	somewhat portrays	moderately portrays	portrays quite a bit	portrays a great deal	certainly portrays

I. a. Affiliation _____
b. Achievement _____

II. a. Affiliation _____
b. Achievement _____

III. a. Affiliation _____
b. Achievement _____

IV. a. Affiliation _____
b. Achievement _____

V. a. Affiliation _____
b. Achievement _____

VI. a. Affiliation _____
b. Achievement _____

Appendix D

Instructions:

The items below inquire about what kind of a person you think you are. Each item consists of a pair of characteristics, with the letters A-E in between. For example:

Not at all artistic A....B....C....D....E Very artistic

Each pair describes contradictory characteristics--that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose A. If you think you are pretty good, you might choose D. If you are only medium, you might choose C, and so forth.

1. Not at all aggressive A....B....C....D....E Very aggressive

2. Not at all independent A....B....C....D....E Very independent

3. Not at all emotional A....B....C....D....E Very emotional

4. Very submissive A....B....C....D....E Very dominant

5. Not at all excitable in a major crisis A....B....C....D....E Very excitable in a major crisis

6. Very passive A....B....C....D....E Very active

7. Not at all able to devote self completely to others A....B....C....D....E Able to devote self completely to others

8. Very rough A....B....C....D....E Very gentle

9. Not at all helpful to others A....B....C....D....E Very helpful to others

10. Not at all competitive A....B....C....D....E Very competitive

11. Very home oriented A....B....C....D....E Very wordly

12.	Not at all kind	A....B....C....D....E	Very kind
13.	Indifferent to others' approval	A....B....C....D....E	Highly needful of others' approval
14.	Feelings not easily hurt	A....B....C....D....E	Feelings easily hurt
15.	Not at all aware of feelings of others	A....B....C....D....E	Very aware of feelings of others
16.	Can make decisions easily	A....B....C....D....E	Has difficulty making decisions
17.	Gives up very easily	A....B....C....D....E	Never gives up easily
18.	Never cries	A....B....C....D....E	Cries very easily
19.	Not at all self-confident	A....B....C....D....E	Very self-confident
20.	Feels very inferior	A....B....C....D....E	Feels very superior
21.	Not at all understanding of others	A....B....C....D....E	Very understanding of others
22.	Very cold in relations with others	A....B....C....D....E	Very warm in relations with others
23.	Very little need for security	A....B....C....D....E	Very strong need for security
24.	Goes to pieces under pressure	A....B....C....D....E	Stands up well under pressure

Appendix E

NAME_____

____Male ____Female

DIRECTIONS - SECTION A

On the two pages that follow, you will find a list of words that are used to describe people's personal characteristics. For each word in the list, indicate how accurately the word describes you. The accuracy with which a word describes you is to be judged on the following scale:

1	2	3	4	5	6	7	8
Extremely inaccurate	Very inaccurate	Quite inaccurate	Slightly inaccurate	Slightly accurate	Quite accurate	Very accurate	Extremely accurate

Consider the world BOLD. How accurately does that word describe you as a person? If you think that this word is a quite accurate description of you, write the number "6" to the left of the item:

__6__ BOLD

If you think that this word is a slightly inaccurate description of you, write the number "4" next to it, if it is very inaccurate, write the number "2", etc.

If you are uncertain of the meaning of a word, raise your hand and we will define it for you.

1 2 3 4 5
DO NOT WRITE IN THESE SPACES

FORM A

1 Extremely inaccurate	2 Very inaccurate	3 Quite inaccurate	4 Slightly inaccurate	5 Slightly accurate	6 Quite accurate	7 Very accurate	8 Extremely accurate

___(006) BASHFUL
___(007) UNBUSINESSLIKE
___(008) UNCIVIL
___(009) UNCALCULATING
___(010) BOASTFUL
___(011) UNVAIN
___(012) KIND
___(013) NONEGOTISTICAL
___(014) UNGRACIOUS
___(015) SELF-DISCIPLINED
___(016) FORCEFUL
___(017) UNDECEPTIVE
___(018) CONCEITED
___(019) COOPERATIVE
___(020) IMPERSONAL.
___(021) SHY
___(022) UNSELFCONSCIOUS
___(023) UNSLY
___(024) PLEASANT
___(025) CONCEITLESS
___(026) COMPANIONABLE
___(027) DISTANT
___(028) UNAUTHORITATIVE
___(029) IMPRACTICAL
___(030) SYMPATHETIC
___(031) GOOD-NATURED
___(032) SILENT
___(033) ANTI-SOCIAL
___(034) DOMINEERING
___(035) PERSISTENT
___(036) CUNNING
___(037) FIRM
___(038) UNAGGRESSIVE
___(039) EMOTIONAL
___(040) SWELL-HEADED
___(041) UNCORDIAL
___(042) WELL-MANNERED
___(043) UNCRAFTY
___(044) UNINDUSTRIOUS
___(045) DISRESPECTFUL
___(046) WILY
___(047) DISORGANIZED
___(048) GENIAL
___(049) CORDIAL
___(050) UNBOLD
___(051) ACCOMMODATING
___(052) COLD-HEARTED
___(053) CRAFTY
___(054) SELF-ASSURED
___(055) SELF-CONFIDENT
___(056) TIMID
___(057) STABLE
___(058) RUTHLESS
___(059) INDUSTRIOUS
___(060) UNCHEERY
___(061) CALCULATING
___(062) TENDER-HEARTED
___(063) UNDEMONSTRATIVE
___(064) SLY
___(065) CHEERFUL
___(066) UNSMILING
___(067) WARMTHLESS
___(068) BIG-HEADED
___(069) UNPRODUCTIVE
___(070) UNTHOROUGH
___(071) ENTHUSIASTIC
___(072) ILL-MANNERED
___(073) UNREVEALING
___(074) UNWILY

Please go on to Form B

___ ___ ___ ___ ___

1 2 3 4 5

DO NOT WRITE IN THESE SPACES

FORM B

1	2	3	4	5	6	7	8
Extremely inaccurate	Very inaccurate	Quite inaccurate	Slightly inaccurate	Slightly accurate	Quite accurate	Very accurate	Extremely accurate

___(006) DELIBERATIVE
___(007) CRUEL
___(008) APPRECIATIVE
___(009) FLAUNTY
___(010) FORCELESS
___(011) OVERFORWARD
___(012) UNDEVIOUS
___(013) UNCUNNING
___(014) VIVACIOUS
___(015) EXPLOITATIVE
___(016) UNCOOPERATIVE
___(017) PERKY
___(018) CHARITABLE
___(019) ASSERTIVE
___(020) UNARGUMENTATIVE
___(021) UNWILD
___(022) NEIGHBOURLY
___(023) UNSYMPATHETIC
___(024) UNSOCIABLE
___(025) SELF-DOUBTING
___(026) APPROACHABLE
___(027) STEADY
___(028) BOASTLESS
___(029) GUILELESS
___(030) FORGIVING
___(031) UNSHY
___(032) IMPOLITE
___(033) COURTEOUS
___(034) UNNEIGHBOURLY
___(035) EXTROVERTED
___(036) HARD-HEARTED
___(037) CONGENIAL
___(038) UNDEMANDING
___(039) JOVIAL
___(040) DISSOCIAL
___(041) UNSPARKLING
___(042) OVERCUNNING
___(043) PERSEVERING
___(044) PRETENSELESS
___(045) DISCOURTEOUS
___(046) TENDER
___(047) ORGANIZED
___(048) FRIENDLY
___(049) COCKY
___(050) IRON-HEARTED
___(051) TRICKY
___(052) INCONSISTENT
___(053) GENTLE-HEARTED
___(054) INTROVERTED
___(055) RESPECTFUL
___(056) BOISTEROUS
___(057) INWARD
___(058) SOFT-HEARTED
___(059) LAZY
___(060) DOMINANT
___(061) OUTGOING
___(062) SELF-EFFACING
___(063) UNCHARITABLE
___(064) MEEK

Appendix F

Atkinson Group Administration*

Please fill out the information blank on the top of your answer sheet [name and student number]. This is a test of your creative imagination. Eight pictures are included in the first part of your questionnaire packet. The page preceding your answer sheets is a series of questions which can be used to guide your stories. Notice that you have eight answer sheets which correspond to the eight pictures which you have been given.

Obviously there are no right answers, so you may feel free to make up any kind of a story you choose for each picture. The more vivid and dramatic the better. I would suggest writing as fast but as legibly as you can in order to make your story about the picture as vivid, detailed, and imaginative as you can. Remember this is a test of creative imagination. Do not merely describe the picture. Anyone can do that. Make up a creative story about each picture.

What is happening? Who are the people? What has led up tothis situation? What has happened in the past? What is being thought? What is wanted? By whom?

*Modified for the current study.

Appendix G

Experimenter: Loren Brooks, M.A.

Title: Gender Differences in Interpersonal Orientation

Study Explanation

Personality theorists have long recognized that the self develops through interaction with others. In her work on moral development Gilligan (1982) has explored "self in relation to others". She has observed two distinct modes of interacting which are broadly related to gender and development across the life span. Her research has indicated that men generally develop an identity which is based on objective reciprocity in relationships (objective/separate self) and women primarily form a definition of self based on connection with others and an orientation of care (the connected self). Strongly supporting this theory Pollak and Gilligan (1982) found that men tended to report more aggressive behavior in picture stimuli displaying scenes of intimacy while women tended to report aggressive behavior in pictures depicting achievement situations. The validity of this study has been the subject of controversy due to the limited range of pictorial stimuli utilized. It remains unclear whether women responded to general achievement cues or cues of competition and

whether men respond differently to varying levels of intimacy.

Attempting to further distinguish the different modes of self-definition and interpersonal orientations Gilligan delineated, this study will focuses on clarifying the findings of Pollak and Gilligan (1982) by using new pictorial stimuli. The pictures you wrote stories about were designed specifically to assess achievement and affiliation at different levels for both men and women. These pictures are similar to the projective test developed by Murray (1943) called the Thematic Apperception Test. You also filled out The Personal Attributes Questionnaire (PAQ: Spence & Helmreich, 1978) which is a measure of gender identity. It is expected that women who report more violence in scenes of achievement will have higher femininity scores and men who have report more violence in scenes of affiliation will have higher masculinity scores.

Lastly, you filled out a standard measure of personality. This was included to insure that this subject sample falls into the average range of behavior.

Appendix H

Guidelines for Rating Stories

Violence Score

Give a score of one if: DEATH, HOMICIDE, SUICIDE, RAPE, PHYSICAL ASSAULT, OR FATAL DISEASE are mentioned.

Fatal Diseases include diseases that are deadly, not non-fatal illness like: blindness, impotence or sterility.

Pregnancy does not receive a score for violence.
Abortion-The mention of abortion is given a score for violence.

Death or violence in association with an animal can be given a score for violence.

Content Analysis

Affiliation as a source of danger

Violence was described as occurring in the context of situations of affiliation

Achievement as a source of danger

Violence was described as occurring in the context of situations of achievement

Both Affiliation and Achievement as a source of danger

Violence was described as occurring in the context of situations of both affiliation and achievment

Neither Affiliation nor Achievement

Violence was described as occurring in the context of neither affiliation nor achievment

Appendix Ia

Scored Responses of Female Paricipants

	Moderate Same-Sex Affiliation	Moderate Opposite-Sex Affilation	Moderate Opposite-Sex Achievement	Intimate Opposite-Sex Affiliation	Intense Opposite-Sex Achievement	
1	0	0	0	0	0	
2	0	1	0	1	0	*
3	0	0	0	0	0	
4	0	0	0	0	0	
5	1	0	0	0	0	
6	0	0	0	0	0	
7	0	0	0	0	0	
8	0	0	0	1	0	
9	0	0	0	0	0	
10	0	0	0	0	0	
11	0	0	0	0	0	
12	0	0	1	0	0	
13	0	1	0	0	0	
14	0	0	0	1	0	
15	0	0	0	0	0	
16	0	0	0	0	0	
17	0	0	0	0	0	
18	1	0	0	0	0	
19	0	0	0	0	0	
20	0	0	0	0	0	
21	0	0	0	0	0	
22	0	0	0	0	0	
23	0	0	0	0	0	
24	0	0	0	0	0	
25	0	0	0	1	0	
26	0	0	0	0	0	
27	0	0	0	0	0	
28	0	0	0	0	0	
29	0	0	1	0	1	*
30	0	0	0	0	0	
31	0	0	0	0	0	
32	0	0	1	0	0	
33	0	0	0	1	0	
34	0	0	0	0	0	
35	0	0	0	0	0	
36	0	0	0	0	0	
37	0	0	0	0	0	
38	0	0	0	0	0	
39	0	1	1	0	0	*
40	1	0	0	1	0	*
41	0	0	0	0	0	
42	1	1	1	1	0	*
43	1	0	0	0	0	
44	0	0	0	1	0	
45	0	0	0	0	0	
46	0	0	0	0	0	
47	0	0	0	0	0	
48	0	0	0	0	0	
49	0	0	0	0	0	
50	0	0	0	0	0	
51	0	0	0	0	0	
52	0	0	0	0	0	
53	0	0	0	0	0	
54	0	0	0	1	0	
55	1	1	0	1	1	*
56	0	0	0	0	0	
57	0	0	0	0	0	
58	0	0	0	0	0	
59	0	0	0	0	0	
60	0	0	0	0	0	
61	0	0	0	0	0	
62	0	0	0	0	0	
63	0	0	0	0	0	
64	0	1	0	0	0	
65	0	0	0	0	0	
66	0	0	0	0	0	
67	0	0	0	0	0	
68	0	0	0	0	0	
69	0	0	0	0	0	
70	0	0	0	0	0	
71	0	0	0	0	0	
72	0	0	0	0	0	
73	0	0	0	0	0	
74	0	0	0	0	0	
75	0	0	0	0	0	
76	1	0	0	0	0	
77	0	0	0	0	0	
78	0	0	0	0	0	
79	0	0	0	0	0	
80	0	0	0	0	0	
81	0	0	0	1	0	
82	0	0	0	0	0	
83	1	0	0	1	0	*
84	0	0	0	1	0	
85	0	0	0	1	0	
86	0	0	0	0	0	
87	0	0	0	0	0	
88	0	0	0	0	0	
89	0	0	0	1	0	
90	0	0	0	1	0	

*Participants who wrote more than one story scored as containing violence.

Appendix Ib

Scored Responses of Male Participants

	Moderate Same-Sex Affiliation	Moderate Opposite-Sex Affilation	Moderate Opposite-Sex Achievement	Intimate Opposite-Sex Affiliation	Intense Opposite-Sex Achievement	
1	0	0	0	0	0	
2	0	1	1	0	0	*
3	1	0	0	0	0	
4	1	0	0	0	0	
5	0	0	0	0	0	
6	1	0	0	0	0	
7	0	0	0	1	0	
8	0	0	0	0	0	
9	0	0	0	0	0	
10	0	0	0	0	0	
11	0	0	0	0	0	
12	0	0	0	0	0	
13	0	0	0	0	0	
14	0	0	0	0	0	
15	1	1	0	0	0	*
16	1	0	0	0	0	
17	0	0	0	0	0	
18	0	0	1	0	0	
19	0	0	0	0	0	
20	0	0	0	1	1	*
21	0	0	0	0	0	
22	0	0	0	0	0	
23	1	1	0	1	1	*
24	0	0	0	1	1	*
25	1	0	1	1	0	*
26	1	0	0	1	0	*
27	1	0	1	0	1	*
28	0	0	0	0	0	
29	0	0	0	1	0	
30	0	0	0	0	0	
31	0	0	0	1	0	
32	0	0	0	0	0	
33	0	0	0	0	0	
34	0	0	0	0	0	
35	0	0	0	0	0	
36	1	0	1	0	0	*
37	0	1	0	0	0	
38	0	0	0	0	0	
39	0	0	0	0	0	
40	0	0	0	0	0	
41	0	0	0	0	0	
42	0	0	0	0	0	
43	0	0	0	0	0	
44	0	0	0	0	0	
45	0	0	0	0	0	
46	0	0	0	1	0	
47	0	0	0	0	0	
48	0	0	1	0	0	
49	0	0	0	1	0	
50	0	0	0	0	0	
51	0	0	0	0	0	
52	0	1	0	0	0	
53	0	0	0	0	1	
54	0	0	0	0	0	
55	0	0	0	0	0	
56	0	0	0	0	0	
57	0	0	0	0	0	
58	0	0	0	0	0	
59	0	0	0	1	0	
60	0	0	0	0	0	
61	0	0	0	0	0	
62	0	0	0	1	0	
63	0	0	0	0	0	
64	0	0	0	0	0	
65	0	0	0	0	0	
66	0	0	0	0	0	
67	0	0	0	0	0	
68	0	0	0	0	0	
69	0	0	0	0	0	
70	0	0	0	0	0	
71	0	0	0	0	0	
72	0	0	0	0	0	
73	0	0	0	0	0	
74	0	0	0	0	0	
75	1	0	0	1	0	*
76	0	0	0	0	0	
77	0	0	0	1	0	
78	0	0	0	0	0	
79	0	0	0	0	0	
80	0	0	0	0	0	
81	0	0	0	0	0	
82	0	0	0	0	0	
83	0	0	0	0	0	
84	0	0	0	0	0	
85	0	0	0	1	0	
86	0	0	0	0	0	
87	1	0	0	0	0	
88	0	0	0	0	0	
89	0	0	0	1	0	
90	0	0	0	0	0	

*Participants who wrote more than one story scored as containing violence.

Appendix J

Types of Violence in Scored Violent Responses

Stimuli	Sex	Death	Illness	Suicide	Assault	Abortion	Homocide	Rape	Kidnapping	Total
Moderate Same-Sex Affiliation	M	3	6	1	1	1	1	0	1	14
	F	3	3	1	0	0	1	0	0	8
Moderate Opposite-Sex Affiliation	M	2	1	0	1	0	1	2	0	7
	F	1	2	0	1	1	1	0	0	6
Moderate Opposite-Sex Achievement	M	1	1	0	0	0	4	0	0	6
	F	0	0	1	0	0	2	0	0	3
Intimate Opposite-Sex Affiliation	M	10	3	1	0	3	0	0	0	17
	F	10	4	1	1	0	0	0	0	16
Intense Opposite-Sex Achievement	M	0	1	1	0	0	3	0	0	5
	F	0	0	0	1	0	1	0	0	2
Total	M	16	12	3	2	4	9	2	1	49
	F	14	9	3	3	1	5	0	0	35

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