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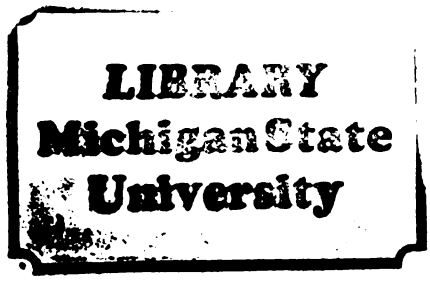

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PRELUDE TO A CONVERGENT AND DISCRIMINANT VALIDITY STUDY OF THE TEST OF ENGAGEMENT STYLE: THE CONSTRUCTION AND DESCRIPTION OF THE ENGAGEMENT STYLE SCALE

By

Mary Ann Reinhart

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ABSTRACT

PRELUDE TO A CONVERGENT AND DISCRIMINANT VALIDITY STUDY
OF THE TEST OF ENGAGEMENT STYLE:
THE CONSTRUCTION AND DESCRIPTION OF THE ENGAGEMENT STYLE SCALE

By

Mary Ann Reinhart

The Engagement Style Scale (ESS), composed of fifteen positively-valued traits, was constructed and examined as the first step in a convergent-discriminant validity study of the Test of Engagement Style and its underlying construct, engagement style (ES). ESS scores and subscale agency, communion and patience scores were examined, and results indicated the usefulness of inclusion of communion and patience scores in studies involving ES. The ESS was found to be internally reliable and successfully discriminated ES groups. Communion was perceived as an active, concerned, "decentered" style of engagement and was distinguished from agency, also an active ES, patience, a passive ES, and interaction, an active and passive ES. Males' and females' ratings of the ESS traits for self-descriptiveness and importance of the traits to their self-schemas were examined for sex differences and sex-role implications, as were the respondents' ratings of the agency and communion traits of Block's (1973) ideal sex-role adjectives.

To

Michael and Stephen

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I also would like to express my gratitude to Gwen DeGraff and Suzy Pavick for their careful typing and thoughtful help in organizing this work.

To Dave and Kelly, thank you for your love and faith; both of you are strongly a part of this accomplishment.

This work is dedicated to Michael and Stephen whose development has paralleled the development of this work. I only regret that this work is not as beautiful as they.

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CHAPTER I

INTRODUCTION

Given that most people are engaged with their environments, it is of interest to know if people perceive themselves interacting with their environments according to certain predictable patterns of behavior. McKinney (1980, 1981) has been interested in individuals' perceptions of their styles of engagement and has attempted to measure these perceptions using a semi-projective technique, the Test of Engagement Style. The purpose of the series of studies reported in this paper was to create and examine a second measure of engagement style to be used in a subsequent convergent and discriminant validity study of the Test of Engagement Style. Several issues of empirical and theoretical relevance to the engagement style construct also were discussed and examined using the new measure.

The process of establishing the validity of a psychological measure is a relatively lengthy procedure, involving different researchers using various theoretical structures over the course of a number of studies (Carmines & Zeller, 1979). McKinney (1978a, 1978b, 1978c, 1980, 1981) has recently designed and examined a measure of a personality construct that he refers to as "engagement style": "The manner in which an individual experiences his or her interaction with the environment" (1981, p. 359). While the split-half and test-retest reliability of the measure, the Test of Engagement Style (TES), have been established (1978c, 1980), only a limited number of validation

studies have been completed (Soetermoe & McKinney, 1982; McKinney, 1981, 1980; Moore & McKinney, 1979; McKinney & Moore, 1978). The present study is the first step in an attempt at an independent validation of the TES and also is an examination of the structure and possible sex-role implications of its underlying construct, engagement style.

Campbell and Fiske (1959) suggested one approach to establishing the validity of a psychological measure. By this process, known as the "multitrait-multimethod" procedure, one attempts to establish the validity of a measure of a psychological construct by showing convergence of the results of at least two divergent methods of measuring the construct and discrimination of the measure of the construct from measures of others that might be considered theoretically similar. The multitrait-multimethod procedure (Campbell & Fiske, 1959) is designed to be "primarily concerned with the adequacy of tests as measures of a construct rather than with the adequacy of a construct..." (p. 100), and the series of studies of which this paper is the first will be concerned primarily with validation of the Test of Engagement Style and only secondarily with validation of its underlying construct, engagement style.

The design of the present series of studies was based on the multitrait-multimethod procedure, and the investigation reported in this paper was conducted as the first step in a convergent-discriminant validity study of the Test of Engagement Style. That is, the goals of the present investigation are the construction and description of an alternate measure of engagement style to be used in a subsequent, convergent-discriminant validity study of the TES and the examination

of the structure and possible sex-role implications of engagement style, as measured by the new Engagement Style Scale.

Definition of Engagement Style

Engagement style (ES) is defined (McKinney, 1978a, 1978b, 1980, 1981) as a perceptual variable that characterizes how a person is engaged with the environment. The person may perceive that she or he predominantly acts upon the environment (agent), is acted upon by the environment (patient), or is engaged with the environment with a balance of the two extreme forms of ES (communion). By definition, an agent perceives that he or she is primarily a "doer," i.e., someone who acts on the environment, someone who is rarely "done to." The patient is seen as the opposite of the agent on the continuous dimension of ES, i.e., a reactor, someone who is primarily "done to" and rarely acts upon the environment. The person who conceives that she or he can be either actor or reactor, as the situation is perceived to require, is conceptualized to be in the midpoint of the ES bipolar dimension. This ES position is communion.

Bakan (1966), had previously used the terms "agency" and "communion" to describe essential modes of being of Western man, with agency describing alienation and isolation and communion, openness and union. Agency is believed by Bakan to express itself in self-assertion, self-expansion, the urge toward mastery, and in the repression of thought, feeling and impulse; communion is expressed in cooperation, being at one with the other organisms, and the lack and/or removal of repression. Since separation is the essence of the definition of agency, it is necessarily devoid of communion. The author states that agency leads to total aloneness and must therefore be tempered with communion for

the well-being of society and its individual members. That is, agency, the existence of the organism as an individual, and communion, the participation of the individual in some larger organism of which it is a part, are both necessary for the health of the individual and its milieu.

The concepts of agency and communion as defined by ES are similar to Bakan's but are not identical (McKinney, 1978c, 1980). While Bakan clearly sees his agent as an actor, he conceives agency to be a necessarily negative attribute in humankind; ES places no value of this kind on agency. The ability to act in an agentic manner can certainly be construed as a positive attribute if the individual is to pursue goals and meaningful projects--projects which, if successfully completed, may increase the self-esteem of the individual and promote the advancement of society. The agent, according to the notion of ES, may express action by thinking and awareness of feelings; the agent in Bakan's theory represses both thinking and feeling.

Rather than seeing communion (later labelled "interaction" by McKinney, 1981) as union or openness, McKinney (1980) has defined communion to be the perception that engagement of the environment may take the form of agency or patience. In other words, the perceiver is both agent and patient; the situation, as perceived by the individual, signals which ES is most adaptive. As McKinney (1981) has explained, a person who visits the orthodontist for the purpose of using braces to rearrange the teeth will probably accomplish the goal most expediently if able to be patient (when being treated by the doctor or nurse) and agent (when keeping appointments or brushing the teeth after each

ingestion of food). McKinney's communion may be construed as the union of agency and patience, but not openness and union per se.

McKinney (1980) also has distinguished ES from de Charms' (1968) theory of perceived personal causation borrowed from Heider (1958). The theory of personal causation states that persons are motivated either by perceived internal or perceived external causes of behavior. The behavior is the person's own action. Perceived origin of the causation of the behavior is the crux of Heider's and de Charms' theories. De Charms' (1968) distinction between internal and external "locus of causality" is "basically a motivational one" (p. 46). He goes on to make a clear distinction between extrinsic motives (incentives based on specific goals) and intrinsic motives (centered in a capacity for satisfaction). As Deci (1975) quotes from de Charms, "Whenever a person experiences himself to be the locus of causality for his own behavior (to be an Origin), he will consider himself to be intrinsically motivated. Conversely, when a person perceives the locus of causality for his behavior to be external to himself (that he is a Pawn), he will consider himself to be extrinsically motivated" (p. 57). To exemplify, a young instructor may be conducting experimental studies either because she finds the research intrinsically fascinating and to pursue it fills her with a sense of competence and self-determination or because she realizes that she needs sound publications to be hired in a tenured-faculty position. In the first instance, the instructor is acting like an "origin" (studying because she wants to do so and finds it pleasing); and in the second instance, she is acting like a "pawn," i.e., doing as academia prescribes to get the rewards of that institution.

While it certainly may be difficult to conceive of a patient's being "acted upon" because of intrinsic motivation, it is not difficult to imagine an agent "acting upon" the environment when the actor perceives that the causes of the behavior is external. Returning to the young instructor who believes that she must "publish or perish," it is conceivable to imagine her perfecting experimental paradigms, rewriting rejected drafts, and asking leading theorists in her field to examine her work--all because she wants a tenured-faculty position. The person in this example could readily perceive herself as being simultaneously agent and pawn (notice that this does not imply communion--she is clearly "acting on" her environment). If the researcher feels that she is not acting as if she has a free choice, she is a pawn by de Charms' definition (1968, p. 337). Yet she may still perceive that she is an actor, that she is engaging in experimental study wholeheartedly and uses all of her knowledge and ability to do a good job, i.e., she is acting on her environment.

Locus of control (Rotter, 1966; Lefcourt, 1976) is a generalized expectancy that the reinforcements of one's behavior, either positive or negative, are the result of one's actions (internal) or the result of luck, chance, or fate (external). ES is not concerned with the reinforcement of one's behavior, but with the perception of whether one's behavior constitutes acting or being acted upon, regardless of the expected reinforcements. McKinney (1980) has found no relationship ($N = 51$, $\underline{r} = .01$) between the two constructs. ES may be construed as locus of perceived behavior, distinct from locus of control and locus of causality (McKinney, 1980).

Measurement of Engagement Style

The TES (McKinney, 1978c), a semi-projective measure of engagement style, consists of 24 critical pictures of either a boy (Billy), used with a male respondent, or a girl (Sally), used with a female subject, involved in ordinary activities with a friend of the same age. Half of the critical pictures involve a same sex peer; the other half involve an opposite sex peer. The measure also includes six filler cards, to which all respondents generally give agent replies, and two practice cards. During the administration of the test, the experimenter directs the subject to "Tell me what's happening in each picture"; the subject's response is then always scored to indicate perception of either "doing," "being done to," or both "doing" and "being done to." The respondent's reply is scored agent if the primary character is the subject of an active verb, a verb expressing desire, wish, or thought, or is simply described. If the primary character is the object of another's action, the object of the sentence, the object of a preposition, the object of a verb suggesting desire, wish, or thought, the subject of a passive verb, or is having something done to him or her, the respondent's reply is scored as patient. The response is scored communicant (agent and patient) if the primary character is both a subject and an object of a sentence or is doing and being done to. All agent scores, including half of the communion scores, are summed for the subject's total points.

Respondents are tested individually, and the testing normally takes approximately fifteen minutes. Inter-scorer agreement is readily reached at 92% or above; McKinney (1980) reports inter-scorer agreement of 97%. The author has also recorded split-half reliability coefficients of .81 to .91 in a study involving 300 elementary and

high school students and an internal consistency reliability of .73 in a study of 30 female college students. The TES is practical to administer and reliable.

Validation

Family size. McKinney (1980), in a study involving 51 male college students, predicted and found a significant difference in the variances of the agent scores of those students who were from large families (five or more children) and those who were from small (four or fewer children) families. Children from larger families have more extreme scores on the TES, i.e., are either agent or patient, than children from smaller families who tend to be in the region of communion. Birth order was not a factor in degree of agency.

Age changes. Three hundred children in grades 2, 7, and 12 were examined using the TES. A predicted decrease in agency ($p < .001$) was found from the second to the seventh grade. As McKinney (1980) noted, this decrease coincides with a marked increase in peer conformity (Costanzo & Shaw, 1966).

Rosenberg (1979) also examined components of personality disturbances that cluster in the change from 11 years to 12 years, the age at which most children are likely to be in the seventh grade. He found significant increases in low self-esteem, depression, instability of the self-image, and general self-consciousness in both boys and girls at this age. These personality changes seem to reflect some sense of helplessness and lack of inner direction and intuitively seem to be related to the increase in perceived patience in children in the seventh grade. Any possible relationships between these variables have yet to be examined, however.

Family setting and maternal employment. Fifty male and female students in the twelfth grade took the TES and answered questions concerning their mother's and father's employment statuses (McKinney, 1980). Miller and Swanson's (1959) definition of family setting was used by McKinney in his classification of social integration setting, which was based on paternal employment. Bureaucratic setting describes the family setting if the head of the family is employed by others; the head of the entrepreneurial family setting is self-employed. Mother's employment was determined to be in or outside the home and part or full-time.

Paternal occupation was found to be a predictor of twelfth grade males' agency scores and maternal occupation was a predictor of twelfth grade females' agency scores. Males reared in an entrepreneurial setting were significantly more agent ($p < .03$) than those reared in a bureaucratic setting, and females whose mothers worked outside the home had significantly higher agency scores than those twelfth grade women whose mothers did not work ($p < .05$).

Sex differences. Following Bakan's notions of agency and communion, J.H. Block (1973) examined a sex-role-orientation conception of agency and communion. Examining respondents' "ideal-self" ratings on a variety of sex-role related trait adjectives, Block hypothesized a male role based on Bakan's conceptualization of agency and a female role consistent with his concept of communion. Moore and McKinney (1979), hypothesizing the existence of similarities between the Bakan, Block, and McKinney conceptualizations of agency and communion (although not explicitly stating what those similarities might be), examined some aspects of the psychology of sex roles as they relate

to ES. Note that no direct comparison of Block's sex-role conceptualization of Bakan's duality and the notion of ES was discussed or examined. This issue will be returned to later in this paper.

Although no differences between males' and females' overall agency scores were found, i.e., males and females perceive themselves as equally agent, when a distinction was made between social and nonsocial replies and these responses were examined, a sex difference was discovered (McKinney & Moore, 1978c). A reply is scored nonsocial when Billy's or Sally's peer in the picture is not mentioned in the respondent's statement. In a social reply, the critical character and the peer are mentioned in the respondent's explanation of what is happening in the picture. In a study involving 29 male and 29 female college students, the females were found to give significantly more nonsocial agent responses than did the males ($p < .01$). There was no difference between the sexes in number of nonsocial perceptions given; only the degree of agency involved with those responses was different for males and females.

McKinney and Moore (1978) have also found that females' responses were significantly more agent when the peer in the picture was female than when the peer was male ($t = 7.00$; $p < .001$). Following the implications in the data, the authors (Moore and McKinney, 1979) examined 30 males and 30 females using the TES and the Bem Sex Role Inventory (BSRI) (Bem, 1974). The BSRI was completed by respondents twice: (a) subjects first described themselves on the BSRI; and (b) subjects described the ideal of their sex as they believed it was held by the opposite sex, e.g., a woman described "man's ideal woman." ES was unrelated to masculinity, femininity, and androgyny (determined

by the subtractive method) as tapped the BSRI. No relationship was found between replies on the TES and the BSRI, $r < .15$.

The difference between the androgyny scores (masculine minus feminine items) from the two scorings on the BSRI was then computed for both males and females. A negative difference indicates that the respondent sees her or himself as less sex stereotyped than the opposite sex's ideal. This difference was then correlated with agency scores given in response to the cards where the peer is of the opposite sex. Males' scores were uncorrelated ($r = .10$). Females' scores were correlated significantly ($r = .46$; $p < .005$). The authors interpreted these findings to mean that females who believe that men prefer them to be more sex-typed than they actually are tend to be less agent in the presence of males than they are in the presence of females. Thus, females seem to be conforming to their perceived expectations of the opposite sex.

ES seems to be a meaningful personality variable that can be reliably measured and has been shown to be distinct from the notions of locus of control and sex-role orientation as measured by the BSRI (Bem, 1974). It has also been shown that ES is related to family size, parental work for males and maternal work for females, some age changes, and females' perceptions of man's ideal woman. The notion of ES as measured by the TES clearly warrants further investigation.

Some Theoretical and Empirical Issues Involving Engagement Style

As previously noted ES is considered to be ordered along a bipolar continuum with one end anchored by patience, the midpoint defined by communion and the opposite end signifying agency. Osgood,

Suci and Tannenbaum (1957) have proposed that all semantic space is bipolar. They further believe meaning can be defined using three dimensions of semantic space which represent the three major factors of evaluation, potency and activity. Each of these three major dimensions is proposed to intersect with the others at a common, neutral midpoint where neutrality of meaning exists. While ES is not measured by subjects responding to a semantic differential or a series of such scales, the experimenter, after summing the subject's responses, places the respondent along a bipolar dimension. Green and Goldfried (1965) proposed that the assumption of the bipolarity of semantic space was based not in empirical findings, but in what Eddington (1939, as reported by Green and Goldfried, 1965) called "selective subjectivism." Green and Goldfried's correlational and factor analytic results failed to yield support for the bipolar semantic model hypothesized by Osgood, Suci and Tannenbaum (1957). While ES does not directly involve the issue of the semantic differential, ES is assumed to be a bipolar dimension and portions of Green and Goldfried's arguments may be relevant to the study of ES. There are two issues that Green and Goldfried raise that may be worthwhile to examine: (a) the tacit assumption of reciprocally antogonistic opposities, and (b) the ambiguity of the midpoint of the continuum. It will soon be clear that these two issues are not entirely independent.

Dependency of Agency, Communion, Patience

When a subject responds to the TES, the response is scored as agent, patient or communion. It is assumed on the one hand that if a person is agent, that person is not also patient. (This assumption

rests on the nature of the dependence of opposite ends of a continuum and is what Green and Goldfried mean by reciprocally antagonistic opposites.) Yet this notion is in some ways contradicted in the TES by the very fact that some replies are scored as projecting acting and being acted upon into the same situation. This implies that the possibility exists that the subject is projecting both agency (acting) and patience (being acted upon) into the same behavioral situation, i.e., one TES card. However illogical it may seem, it is possible that the subject is not projecting less agency and more patience into one situation, but is projecting equal amounts of agency (acting) and patience (being acted upon) into the one situation. If a subject replies that "Billy is climbing the hill, and his friend is helping him," he may be projecting that Billy is agent ("climbing") and is also patient ("his friend is helping him"). It is not clear that he is projecting that Billy is less agent than if he had replied only that "Billy is climbing the tree." It is possible that he is projecting that Billy is both agent and patient in the tree climbing situation, not less agent and more patient, simply both agent and patient. The implication of this possibility is that agency and patience might be independent dimensions. That is, the subject might project that one may be engaged with the environment according to each style in the same situation, and the perception of engagement according to one style does not imply the perception of less engagement with the other style.

McKinney (1978c, 1980, 1981) and Moore and McKinney (1979) have noted that ES is similar in some respects to Bakan's (1966) concepts of agency and communion. McKinney (1980) states that "Bakan's concepts

are similar to two styles of engagement, for which we have used the same words (agency and communion)...the idea of engagement is based empirically on a testable measure, while, to our knowledge, the agency-communion distinction has not been measured directly. In a sense, the current engagement measure used here validates that distinction as well" (p. 194). In view of this stated similarity of ES and the agency-communion distinction, it seems appropriate to note that Bakan conceptualizes agency and communion as independent dimensions.

> The villain is unmitigated agency. The moral imperative is to try to mitigate agency with communion. The moral imperative to which I subscribe was magnificantly expressed by Hillel many years ago: "If I am not for myself, who will be for me? But if I am only for myself, what am I?" The first part speaks of agency; the second, of communion; both together, for the integration of the two (p. 14).

By implication, i.e., calling for the mitigation of agency with communion and urging the integration of these two modalities of existence, Bakan orders his conceptualizations of agency and communion on independent dimensions. According to Bakan, more agency need not imply less communion. The two are not reciprocally dependent. McKinney's agency and communion may be similar to Bakan's concepts with respect to dimensionality. This possibility needs to be explored.

Green and Goldfried (1965) have noted that the respondent replying to a semantic differential scale is forced to make a choice between the ends of the scale. The experimenter is never completely sure that the subject has willingly chosen between the two. They illustrate this point using the bipolar dimension of "unpleasant-pleasant." A subject given this semantic differential is asked to describe him or herself somewhere along the dimension. Of course, the form of the measure

clearly implies that more "pleasant" has to indicate less "unpleasant." In reality the subject may feel that in that instance she or he is "pleasant" and "unpleasant," i.e., not more pleasant and less unpleasant. The reported data (Green and Goldfried, 1965) support the possibility that feelings of pleasantness vary independently of feelings of unpleasantness--a finding contradictory to the logical perception that if one is an unpleasant person then one cannot also be a pleasant person. These findings seem to support the notion that the respondent's connotation of a word or pair of words may not reflect the actual denotation of the word or pair of words. Similarly, this possibility may also exist for ES. Respondents may project agency (acting) and patience (being acted upon) simultaneously, and more of one does not imply less of the other.

The respondent to the TES does have a choice of reply in that he or she may project agency, patience, or both simultaneously. However, this choice is essentially ignored when the experimenter tallies only the agent scores, including of course half of the communion scores. The notions of patience and communion become dependent on the agency scores, i.e., more agency implies less communion and less patience, just as in a bipolar semantic differential scale. The possibility that subjects respond to the TES as if ES were a personality construct composed of three independent dimensions cannot be examined with the present scoring system of the TES.

Ambiguity in the Midpoint of ES

Green and Goldfried (1965) also address the issue of possible confounding of meaning in the midpoint of a semantic differential. If

a subject is given a semantic differential, e.g., active-passive, on which he or she feels "neutral" is the most accurate response, the choice on a 7-point scale will most likely be 4. If the same scale is given to other subjects who perceive that they can be both extremes, active or passive, depending on the situation and perhaps mood, attitude, etc., they too will most likely choose the 4 category. Other persons given the same scale may feel that the active-passive dimension is not relevant to their own self-schema (Markus, 1977), i.e., is not relevant to the cognitive notions that they use when processing information concerning themselves. It seems likely that these respondents would also choose the 4 position as most representative of themselves on the dimension. If these arguments are sound, the meaning of the midpoint of a semantic differential is equivocal.

McKinney, who originally labelled the midrange of the ES continuum as "communion" (e.g., McKinney, 1980) and has recently renamed this style "interaction" (McKinney, 1981), defines this engagement style as reflecting the scores of respondents who perceive that they can act either agent or patient as the situation is perceived to require. Keeping the pertinent arguments of Green and Goldfried in mind, it is at least possible that this theoretical notion of the ES midpoint might not actually hold for all subjects whose scores fall in this range. Some subjects may perceive that they engage their environment, not in either a strongly agent or a strongly patient style, but in a style that could be construed as a moderation of both of these styles. If ES is perceived as a bipolar dimension, this style could easily be conceived to lie halfway between agency and patience. If ES is perceived as a construct having three independent dimensions, this

third ES need not be agency, patience or the summed effect of being both. Instead it could be a new style of engagement resulting from the interaction of the engagement styles of agency and patience.

According to the current scoring of the TES, some subjects project agency into some situations and patience into others. These responses are assumed to reflect the subject's perception of self as both agent and patient, depending on the behavioral situation. I propose that these subjects exemplify the current definition of communion and further, would want to choose both agency and patience on a semantic differential scale. Other respondents project agency and patience into the same situation. I further propose that these respondents would want to choose neither agency nor patience on a semantic differential scale and project an engagement style which cannot be explained within the original theoretical outline of engagement style. This newly hypothesized engagement style will be elaborated further and empirically examined in this paper.

Interaction and communion. Because ES is scored as a continuum, subjects' responses which are recorded as both agent and patient (communion) are empirically lost for purposes of investigation. Essentially, the agent scores of the communion ratings are combined with "pure" agent scores and summed to form the respondent's degree of agency. The person who gives 12 agent replies and 12 patient replies on the 24 critical cards will receive the same rating on agency as the person who gives 24 agent-and-patient replies to the critical cards. It seems to be the first respondent that McKinney (1980, 1981) may be describing when he speaks of communion, people who are agent or patient, i.e., persons who perceive their engagement with the environment as

agent or patient as the situation is perceived to require. These are the subjects referred to earlier when discussing the respondents who perceived themselves as responding to the two extremes of ES.

The subject who predominantly responds to a single card in the more complex form, i.e., simultaneous agent and patient, may reasonably be thought of as the person choosing the "neutral" position on a semantic differential. That is to say, this subject may be engaging the environment, not as either agent or patient, but as half way between these two extremes--lying in the "neutral" or midpoint of the continuum of ES. Because McKinney defines the midpoint of the continuum of ES as communion, this ES also logically may be referred to as communion.

The word "interact" is defined in Webster's New World Dictionary (Friend & Guralnik, 1954) as "to act on each other." This definition seems to cogently describe the "communion" that was first described, i.e., to act or to react as the situation suggests. The "interactor" could be said to act on the environment or the environment could act on him or her. These processes of act and react probably take place sequentially as distinguished from simultaneously. However fast the person may change from actor to reactor (as perhaps in a dyadic conversation when the subject first acts on the other and then is acted upon by the other), the process is still sequential. The person described earlier who was getting braces is called an "interactor" by this definition.

"Communion" is described by Webster's New World Dictionary (Friend & Guralnik, 1954) as "a sharing; possession in common; participation." This definition seems to most aptly define the second

"communion," the response in which an agent and a patient reply are given to the same TES card. Following the American Heritage Dictionary (Davies, 1976), I will refer to this respondent as a "communicant," or "one who communicates." This notion of communion is closer to Bakan's concept of the term than is the theoretical concept of interaction. This person engages the environment seeking, not to act on it or to be acted upon by it, but to participate in it--become or respond as if she or he were a part of it. The goal is probably unity with the environment, not to conform to it or make it conform to self. Bakan states that communion is "the participation of the individual in some larger organism of which it is a part" (1966, p. 15). This seems very similar to the definition that I have given of the communicant. Referring to the earlier example of the person involved in a dyadic conversation, the communicant would not act and react as the interactor, but would simultaneously hold his or her own ideas, feelings, etc., and the other's ideas, feelings, etc. While speaking, the communicant would simultaneously hold the perception of the other as an active party in the conversation, looking for response, emotion, and anticipating the other's notions and perceptions while actively engaging in the communication. The communicant perceives that both parties (self and other) are participants and partners in the interchange--participation and sharing are the communicant's processes of ES.

Feffer and Suchotliff (1966) and Feffer (1967) elaborated the process of effective social interaction and examined their hypotheses concerning what attributes facilitate effective social interaction by having their subjects respond to a projective role-taking measure and participate in a game of password. Their notion of the personal

attributes that facilitate social interaction is based on the Piagetian concept of decentration and seems similar to the engagement style of communion that has been outlined above.

As Feffer and Suchotliff (1966) note, Piaget (1950) discussed the cognitive notion of "decentering" as a central theory in his cognitive-developmental framework. In speaking of perception and thought, Piaget discusses the conservation of liquids and the distinctions between "centered" and "decentered" perception. The preoperational or early childhood subject (approximately 2-6 years) will concentrate on one aspect of a situation at any given time, often causing distortions in the child's perception of the environment. If water is poured from a short squat container that the child can see through into a clear container that is tall and narrow, the preoperational child will respond that there is now more water in the second container than there was in the first. The child will maintain this perception even when reminded that she or he watched as the water in question was poured from the first container to the second. Piaget (1950) explains this phenomenon in terms of the concept "centration." The young child is only capable of perceiving a single feature of the perceptual field at any given instant; this child's perception is "centered" on one aspect of the environment. In contrast, the older child perceives that the water is higher in the second beaker and the quantity of water is not changed simply because its outward form is different. This child is able to consider many aspects of the environment and their inter-relationships at any given time, i.e., perceives his or her world in a "decentered" mode.

Feffer and Suchotliff (1966) have attempted to incorporate this nonsocial paradigm into the processes of interpersonal behavior.

> The dovetailing of responses involved in effective social interaction requires that each participating individual modify his intended behavior in the light of his anticipation of the other's reaction to this behavior. In order to accurately anticipate this reaction, one must be able to view his intended behavior from the perspective of the other. Modifying one's behavior in the light of this anticipation further requires that one must also view the intended action from his own perspective at the same time. The cognitive organization of the individual capable of effective social interaction can, accordingly, be interpreted as one in which different viewpoints are considered simultaneously in relation to each other such that the distortion engendered by a given perspective or centering is equilibrated or corrected by another perspective. In contrast, the individuals who are only able to focus sequentially upon their behavior from a single viewpoint at a time should have difficulty in appropriately modifying their responses in such a situation (pp. 415-416).

The authors examined this theoretical position by first giving college-aged subjects a projective role-taking task used to measure ability to consider different perspectives simultaneously in behavioral situations. The 36 subjects were then paired into 18 dyads for the purpose of playing the word game, "Password." Dyads who scored higher on the role-taking task--were able to simultaneously consider multiple viewpoints--communicated words more quickly and with fewer clues than did those scoring lower on the role-taking task. Shared associations, verbal intelligence, and verbal fluency were controlled in the study.

The authors concluded with the observation that, "Psychological organization of the individual is the basic unit of analysis in social interaction" (p. 421). The psychological organization of importance in this study is of course ES. The relevance of Feffer's notions for the concepts of interaction and communion seem clear. The interactor is defined as sequentially agent and patient, the communicant considers

different viewpoints simultaneously, i.e., the communicant engages the environment in a decentered mode and seems to be Feffer and Suchotliff's decentered social interactor.

As we have seen, Feffer (1967, 1970) and Feffer and Suchotliff (1966) tied decentration--the central component of the ability to conserve--to interpersonal behavior and measured decentration in social interactions through a verbal communication design, i.e., the ability to successfully compete in a game of Password. Further, these authors hypothesized that simultaneous decentration in social interaction could best be measured by the ability to take another person's social perspective, i.e., role-taking ability.

Selman and Byrne (1974) derived four levels of role-taking ability based on the work of Feffer (1967, 1970); (0) Egocentric role-taking, (1) Subjective role-taking, (2) Self-reflective role-taking, and (3) Mutual role-taking. Egocentric role-taking is characterized by the individual's inability to differentiate his or her own point of view from another's point of view. Subjective role-taking is distinguished by the ability to take another's viewpoint. However, the person at this level of role-taking cannot put him or herself into the place of others to judge their actions while simultaneously considering his or her own viewpoint. This person also does not yet understand that his or her view of the other is influenced by the other's view of him or her. Level 2 is distinguished by the ability to reflect on the self as seen from the other's point of view and to recognize that the other can also put him or herself into the self's place. However, these two perspectives are viewed sequentially at this level. It is only in Level 3 that the person can take the role of a third party, i.e., is

able to consider both participants as simultaneous and mutual subject and object. The distinction between Levels 2 and 3 seems to be the same distinction that has been made between the engagement styles of interaction and communion. Successful completion of Selman and Byrne's first three stages seems necessary if a person is to adapt an interaction ES, i.e., be agent or patient as is perceived to be advisable. What distinguishes communion from interaction is the implementation of Selman and Byrne's Level 3: The ability (and perhaps motivation) to consider each party's point of view simultaneously and mutually seems necessary before communion is the perceived mode of engagement, and also seems to be what is actually utilized when the communicant makes an agent statement and a patient statement in one sentence in a reply to a single projective card.

The essential distinction between the concepts of interaction and communion may be stated another way. This distinction rests on the difference between an additive effect and a multiplicative effect of the union of the two engagement styles of agency and patience. According to the preceding arguments, interaction is seen as the additive effect of being agent and patient. The person who projects agency and patience into different situations can be described and his or her behavior predicted according to the basic theoretical notions behind these two engagement styles. This is not true for the communicant. The communicant cannot be described, nor his or her behavior predicted, from the theoretical notions of agency and patience. Because the communicant projects agency and patience simultaneously, a third ES is projected. The simultaneous projection of two styles

implies an interaction of the two, i.e., a multiplicative effect. It is that interaction of agency and patience that I have labelled communion and which will be examined in the new Engagement Style Scale.

Relevance of ES for individual respondents. Given that most people are engaged with their environments, the possibility still may exist that not all of those individuals use the personality construct of ES when defining their idea of "self." Considering this possibility the experimenter is left with the difficulty of distinguishing those subjects who define themselves via ES from those who may not.

The usefulness of a personality dimension for any given subject has long been an issue in psychology. The history of personality psychology in particular shows an abiding concern with attempts to make laboratory concensus of traits converge with the traits by which individuals actually order their own and other's behaviors and perceived traits. This inherent interest can be seen in the search for consistency in "moral character" in children by Hartshorne and May (1928, 1929), the call for ideographic investigation of personality traits by Gordon Allport (1937), the impassioned plea for an organismic approach to the study of self-consistency by Lecky (1945, 1969), followed by George Kelly's psychology of personal constructs (1955). The more current discussions of consistency in personality traits, which seem exactly to involve the relevance of a trait as a useful dimension to the subject, is lead by Mischel (e.g., 1969) and Bem and Allen (1974).

The difficulties experienced by Hartshorne and May and others (cf., Bem & Allen, 1974) in predicting behavior consistently representative of personality traits has led theorists to emphasize how a

person organizes his or her psychological world. Allport (1937), in defending the trait notion, called for studying an individual's conceptions of his or her world, i.e., the psychologist must know how the subject interprets the trait and whether the trait is applicable to the person. This is also the notion behind Kelly's (1955) theory of personal constructs, viz., each person is an amateur scientist with his or her own dynamic theory of personality that is used to construe the environment. Bem and Allen (1974) are in agreement with Mischel (1969) that only an ideographic approach can make traits predictable across situations. However, Bem and Allen go even further and make the case that, not only must psychologists attend to situational variables, but personality psychologists must also attend seriously to persons.

Markus (1977) seems to have done exactly what Allport, Kelly, and Bem and Allen have suggested--considered the person. Markus, as Kelly, bases her notion of a self-schema on the theory that the individual is an "active, constructive information processor" (p. 64). The investigator continues,

> It is proposed here that attempts to organize, summarize or explain one's own behavior in a particular domain will result in the formation of cognitive structures about the self or what might be called self-schemata. Self-schemata are cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experience. (p. 64)

A considerable body of evidence gathered by Markus seems to validate this information-processing approach to personality trait consistency and meaningfulness. In Markus' series of studies, subjects were classified along a personality trait dimension according to

pretests on a number of self-descriptive tasks. Categorization was defined by response to a trait checklist, to two of three appropriate semantic differential trait scales, and the degree of importance of each of the latter traits to the subject's own self-description. "Aschematics" were those respondents who rated themselves in the mid-range of two critical semantic differential scales, fell in the lower half of the distribution on the importance scale, and did not check the critical traits on the checklist. As predicted, Markus found that subjects with self-schemata (schematics), but not aschematics, responded faster with choice of "Me" or "Not me" to appropriate trait words, wrote more behavioral descriptions consistent with chosen trait adjectives, and resisted counter-schematic information about their behavior. The construct appears to be reliable, valid, and appropriate for distinguishing those subjects for whom ES is a relevant personality dimension from those for whom it is not, i.e., those who have an ES self-schema from aschematics on ES.

In summary, it seems possible that, if ES is perceived by respondents as a bipolar continuum, the midpoint of the dimension may be perceived differently by different respondents. The relevance of ES as a personality construct for respondents, as well as the distinction between "interaction" and "communion," will be examined in the present study using the newly formed Engagement Style Scale.

Conceptual Distinctions Between McKinney, Bakan and Block's Notions of Agency and Communion

As has been noted, McKinney (1980) has stated that the ES notions of agency and communion are similar to Bakan's agency and communion.

> Engagement is defined not only by its extremes, agency and patience, but also by its midrange, namely, communion. In this last distinction lies the kernel of the similarity of engagement to another dimension, namely Bakan's (1966) notion of agency vs. communion. Bakan's concepts are similar to two styles of engagement, for which we have used the same words (agency and communion). We perceive agency and communion as one end and the midpoint of the dimension we are calling 'engagement style.' The other end of that dimension is patience. (p. 194)

McKinney's agent was differentiated from Bakan's concept earlier in this paper (see p. 3). Also in this paper, I have suggested that the "communion" of McKinney's original ES theory be renamed "interaction," and the newly defined ES conceptualization, the simultaneous union of "doing" and "being done to," be called "communion." Interaction as an ES was differentiated from Bakan's concept of communion (see p. 3) as was the ES of communion (see p. 16).

J.H. Block (1973) has hypothesized a sex-role conceptualization based on the agency-communion notion of Bakan (1966). However, this sex-role concept has yet to be directly discussed or empirically examined from an ES perspective. Block defines sex role as "the constellation of qualities an individual understands to characterize males and females in his culture" (p. 512), i.e., "a synthesis of biological and cultural forces as they are mediated by cognitive and ego functions" (p. 513). She sought to find the defining "constellation of qualities" by asking males and females in six countries to describe the "kind of person I would most like to be."

The resulting masculine and feminine "ideal" traits were then given to four psychologists who independently organized the trait adjectives into three categories: a) those clearly expressing agency, b) those clearly expressing communion, and c) the traits neutral or irrelevant with respect to Bakan's concepts of agency and communion. These

judgments were based on definitions of the concepts taken from Bakan (1966) by Block. Block states that agreement between the judges was high, although no details of the level of agreement were given. Nineteen words remained unclassified and a "few" words judged to be agentic or communal did not differentiate between males and females. Adjectives describing the masculine ideal included 12 agentic adjectives and no communal traits. Of those traits describing the feminine ideal, eight were judged to be communal and two agentic (vital, active). Block summarized the results of the study by stating that masculine-feminine ideals were impressively stable across the six industrialized countries where she obtained her results and are distinguished by their differential emphasis on agency and communion.

Moore and McKinney (1979) found no relationship between masculinity and femininity, as measured by the BSRI, and agency, as measured by the TES ($\underline{r} < .15$). Yet, they claimed a conceptual relationship between ES and Bakan's (1966) agency-communion notion, as did Block (1973) when examining ideal masculine and feminine sex-roles in contemporary, industrialized nations. Although no correlations between ES and masculinity and femininity as measured by the BSRI have been found, given these hypothesized conceptual relationships to Bakan's notions, it is possible that similarities would exist between a constellation of traits describing the engagement styles of agency and communion and Block's constellation of sex-role related traits.

It is also interesting that Block (1973), when discussing Maccoby's (1966) analyses of sex differences in cognitive functioning, also noted similarities between her agent-communion sex-role concept and the active-passive dimension. McKinney (1981) too has discussed the

active-passive dimension, noting a relationship between this dimension and ES. Presumably Block sees a masculine-agent-active dimension and a feminine-communion-passive dimension; McKinney sees a sex-role independent, agent/active-patient/passive bipolar, continuous dimension, with the midpoint defined by communion, the ES that I have labelled "interaction." The ES that I have labelled "communion," the simultaneous union of agency and patience, I have posited to be sex-role independent and yet to resemble Bakan's concept of communion. These hypothesized similarities between Bakan's agency-communion dimension, Block's agency-communion sex-role concept, the active-passive dimension, and McKinney's agency-communion-patience dimension also warrant investigation.

CHAPTER II

PURPOSE

The measurement issues of reliability and validity have been distinguished by Campbell and Fiske (1959) as follows: "Reliability is the agreement between two efforts to measure the same trait through maximally similar methods; validity is represented in the agreement between two attempts to measure the same trait through maximally different methods" (p. 83). McKinney (1980) has shown the TES to be internally reliable and also reliable in the test-retest situation; this of course satisfies the empirical need for reliability, the agreement between "maximally similar methods."

Validation of an instrument, or more correctly, validation of "an interpretation of data arising from a specific procedure" (Cronbach, 1971), may take the form of convergent or discriminant validation. Convergent validation is accomplished by confirmation of the measure using independent measurement procedures, i.e., "maximally different methods." Discriminant validation occurs when the measure is shown to be essentially uncorrelated with other tests from which it was intended to differ. Discriminant validation can be used to justify the uniqueness of the trait, and, like the convergent validation, the appropriateness of the interpretation of the measure and establishment of construct validity (Carmines & Zeller, 1979).

Experimental methods chosen in a convergent validation study must be shown to be highly independent to minimize irrelevant method variance

that might invalidate the obtained scores (Campbell & Fiske, 1959). Campbell and Fiske (1959) quote Cronbach that "The assumption is generally made. . .that what the test measures is determined by the content of the items. Yet the final score. . .is a composite of effects resulting from the content of the item and effects resulting from the form of the item used" (p. 85).

Hotch (1979) has examined ES with a "maximally different method," a series of open-ended statements where subjects' responses were independently coded with high reliability on a five-point scale of ES. However, Hotch was not interested in validation of the measure and her subjects were not administered the TES, thus making comparisons of the two methods impossible and the need for an alternate measure of ES, appropriate for use in a convergent validation study, apparent.

McKinney has successfully validated the TES and its theoretical foundation, the concept of engagement style, in studies of predicted age changes and family setting (1980) and in studies discriminating the TES from the BSRI (Moore & McKinney, 1979) and locus of control (McKinney, 1981). However, as Carmines and Zeller (1979) discuss, construct validation requires "a pattern of consistent findings involving different researchers using different theoretical structures across a number of different studies" (p. 24).

An attempt will be made in the present series of studies to add to the history of validation studies using the TES and its underlying construct, engagement style. The primary focus of the study reported here was on the construction of an alternate measure of ES to be used in a subsequent convergent-discriminant validity study of the TES. The

secondary focus of the present study was an examination of the theoretical issues relating to the engagement style construct that have been raised in this paper.

The Construction of a Measure of Engagement Style

The goal of the first phase of the study was to construct a reliable measure of the three engagement styles (agent, communicant, patient) that would successfully discriminate between them. It was decided at the outset that the test should be readily administered and could be used to obtain a behavioral measure of ES, one aspect of validation not yet obtained by McKinney. The ultimate purpose of the measure is to function as an alternate instrument of ES measurement in the convergent validation of McKinney's TES.

Further considerations in choosing the alternate test of ES were based on the theoretical issues raised in this paper: (a) dependence of agency, communion, and patience; (b) if ES is perceived by respondents as a bipolar dimension, the ambiguity of the midpoint of ES, i.e., interaction vs. communion and the relevance of the dimension for all respondents; and (c) the differentiation of the Bakan/Block concepts of agency and communion from McKinney's ES notions. The measure that was chosen had to be able to be used to address these issues as well as to meet the criteria stated above. The self-schema design of Markus (1977, 1981) was chosen as best satisfying these needs.

It may be recalled that, according to Markus' experimental design, subjects were first categorized as schematic or aschematic depending on their responses to semantic differential scales of the relevant dimension and to a Likert-type scale measuring the degree of importance

the dimension held for them. Schematics rated themselves at the extreme ends (points 1-4 or points 8-11 on an 11-point scale) on at least two out of three of the pertinent semantic differential scales and rated these dimensions as important (fell in the upper half of the distribution on the importance scale). Schematics also checked critical traits on an adjective list. Aschematics rated themselves in the middle range (points 5-7) on at least two of the three scales, fell in the lower part of the distribution on the importance scale, and did not check the critical traits on the checklist.

Markus predicted and found that individuals who possess an articulated self-schema on a given dimension of behavior (schematics) exhibited consistency in response and response time when presented with choice of trait descriptiveness. Schematics also displayed the discrimination necessary for efficient processing of self-information and the prediction of future behavior along this dimension. Aschematics did not exhibit these efficient cognitive processing mechanisms on the dimension. Markus also dealt with the issue of social desirability by selecting an equal number of positively, neutrally, and negatively rated trait adjectives in the response-time experiment.

It was decided that the design of the present series of studies would be based on Markus' process of categorization of subject by response to paper-and-pencil self-ratings and subsequent measurement of the subject's responses to trait adjectives in an individual experimental situation where reaction time could be measured. The responses and reaction times could then be examined for convergence with the subjects' TES scores in the convergent validation study of ES. It also seemed that her design could be used to examine the issue of relevance of ES

for each of the subjects, i.e., if ES is a relevant dimension for subjects, their response times to critical stimuli should be relatively short and consistent (Markus, 1977, 1981). These reaction times can then easily be compared to their responses to the TES. It also seemed that appropriate inferential and descriptive statistical techniques could be utilized to examine the issues of the dimensionality of ES (including the concepts of interaction and communion) and the discrimination of McKinney's concepts of agency, communion, and patience from the Bakan/Block concepts of agency and communion.

While the details of the construction of the new measure of ES are provided in the next chapter, presentation here of a brief overview of the process will be helpful. Markus used the dimension of independence-dependence, a very popular trait in empirical personality psychology, and therefore had no difficulty using established measures, already rated for valence, in her series of studies. The construct of ES and its measurement are relatively new in the field of personality study and multiple measures are not available. Consequently, the present study was primarily focused on the collection and description of these basic stimuli. The first step in the construction of the measure focused on the writing of three paragraphs, each a description of one of the engagement styles, to be used to elicit trait adjectives descriptive of agency, communion, or patience from male and female college students. In accord with Markus' method of controlling for social desirability in subject responses, these adjectives were rated also for valence. As a result 15 trait adjectives, all positive in valence, were obtained. In the final stage of this study, the 15 adjectives were used in Likert-type self-rating measures of

self-descriptiveness and importance of the traits to the respondent's self-description. Five adjectives were highly descriptive of an agent, five strongly described a communicant, and five were rated as highly descriptive of a patient. None of the 15 adjectives was descriptive of more than one ES.

Examination of the Newly Constructed Measure of Engagement Style

The purpose of the final aspect of the present study was to examine the properties and structure of the new measure of ES and to compare these to the properties and structure of the Bakan/Block concepts of agency and communion, as measured by Block's trait adjectives.

Because the ultimate use of the new measure of ES is validation of the TES as a measure of ES, it is necessary that the new measure is reliable and discriminates between agents, patients and communicants. It was proposed that the internal consistency of the new scale would be measured by coefficient alpha, and the multivariate analysis of discriminant function analysis could be used to examine the items' ability to differentiate the ES groups while at the same time examining the issue of the dimensionality of ES. It was proposed that the selected traits would discriminate the three ES groups accurately and also would form two functions, indicating that the respondents perceive ES as ordered on independent dimensions. It also was proposed that the dimensionality of ES could be examined further using a correlation matrix of the average item means of the three subscales of the new measure. If the subjects view the three ESs as independent dimensions, as expected, the agent, communion, and patient subscales will be uncorrelated. If the respondents view ES as a bipolar continuum, agency

and patience will be strongly and negatively correlated and communion moderately and positively correlated with each.

Due to the fact that the ultimate use of the new measure of ES will involve respondents describing their own self-schemas on the measure, it was necessary also to examine the reliability and discriminability of the measure using respondents' self-descriptive data. It was predicted that discriminant function analysis would support the discriminability of the traits on the self-descriptive data as on the data describing the "ideal" ES styles depicted in the three paragraphs. It was also expected that a correlation matrix of average item means and the discriminant function analysis would support the prediction of the independence of the ESs, as in the data collected on the "ideal" styles.

As discussed in Chapter IV, discriminant function analysis is used to examine the groupings of the respondents according to their replies to the measure. Factor analysis is used to examine the stimuli, in this case the ES traits, as they are grouped according to the respondents' replies to the measure. Accordingly, factor analysis was employed to examine the resulting clustering of the traits for the perceived, underlying structure of the traits and the meanings of that structure to the respondents. It was expected that this analysis would support the prediction of independence of the three styles, i.e., separate subscales would form separate factors and no traits would load negatively on any of the factors.

It was also expected that the traits loading on the factors would support the conceptualizations of the three ESs as outlined in this paper, including the prediction that communion will be viewed as the

active, constructive, "decentered" style of engagement that I have defined as communion. While it is predicted that the third engagement style will be characterized as communion as I have defined it in this paper, it is also expected that some respondents will describe themselves as both agent and patient, due to the nature of the independence of the three engagement styles and the nature of the ES of interaction. Given the prediction that some respondents will be interacters, it is also predicted that an interaction factor will be formed from the respondents' data, i.e., agent and patient traits will load positively on one factor. It is expected that this factor will account for less of the total and common variance in the data than the agent, communicant, and patient factors.

Block's agent-communion sex-role traits were also examined for their underlying structure and the meanings of that structure for the respondents through the use of factor analysis. These factors were then examined for possible relationships with ES factors.

Pedhazur and Tetenbaum (1979) have recently shown that when self-descriptive ratings on the BSRI are factor analyzed, four factors similar in structure for males and females are produced: a) an Assertiveness factor, b) an Interpersonal-Sensitivity factor, c) a Self-Sufficiency factor, and d) a bipolar, Sex-Role factor (based on the traits "feminine" and "masculine"). Based on an examination of Block's 22 traits, it was predicted that factor analysis of her agency and communion traits would form factors similar to the first three of Pedhazur and Tetenbaum's. More specifically, it was predicted that the traits of assertive, active, and competitive would form an "assertiveness factor," the traits of sympathetic, sensitive, helpful and considerate would form an

"interpersonal-sensitivity factor," and the traits of independent, responsible, rational, and self-controlled would form a "self-sufficiency factor." It was further predicted that when data obtained from ratings on the ES traits describing agency, communion, and patience were added to data from ratings on Block's traits, factor analysis of the newly-formed scale would produce factors similar to those obtained with only Block's traits. It was predicted that agent traits would load on the Assertiveness factor and the Self-Sufficiency factor, and the communion traits would load on the Interpersonal-Sensitivity factor. Although Block strongly tied her female sex role to Bakan's communion, she also associated her female role with Maccoby's "feminine-passive" orientation (Block, 1973, p. 518). However, it was predicted that Block's constellation of communion traits would not be viewed as passive, but as active qualities. Consequently, it was predicted that only ES patient traits would form a "passive" factor.

As already implied, the results of the factor analyses of the ES and Block traits were also examined for the dimensionality of agency, communion, and patient concepts as reflected in the measures, i.e., to determine whether the subscales are unidimensional or multidimensional in nature. It was predicted that Block's agent and communion traits would be multidimensional in nature and the ES traits of agency, communion, and patience would be unidimensional in nature.

While it was expected that the ES traits describing agency and communion would have structure and meaning similar to many of Block's traits, it also was expected that differences between the two scales would be evident. It was predicted, following previous findings, that within- and between-sex differences would be found when examining

respondents' self-descriptions on the Block traits and no such differences would be found when examining respondents' self-descriptions on the ES traits, reflecting the sex-role implication of Block's constellation of traits and the lack of that implication of ES.

A correlation matrix of average item means of the subscales of the ES and Block traits was constructed and examined as a further means of examining the relationships between the two concepts. It was expected that the two agency scales would be strongly and positively correlated, and the Block communion subscale would be moderately correlated with the ES communion subscale and weakly correlated with the ES patient subscale. It was also expected that the ES communion subscale would be moderately correlated with the Block agency subscale, reflecting the active, constructive nature of the concept.

Because it was predicted that communion would be described as active and constructive, and in keeping with the current male sex role, (e.g., Bem, 1974, 1977, 1981), it was predicted that the ES dimensions of agency and communion would be more relevant to the males' self-descriptions than would the dimension of patience, and the functions and factors generated by the self-descriptive data obtained from males would be dominated by these two dimensions, i.e., those factors and functions accounting for the greatest proportion of the total and common variance in the data would be agent and communal in nature.

In keeping with the current female sex role (e.g., Bem, 1974, 1977, 1981), it was further predicted that the ES dimensions of communion and patience would be more relevant to the females' self-descriptions than would the dimension of agency, and the functions and factors generated by the

self-descriptive data obtained from females would be dominated by these two dimensions.

It was also expected that the factors formed from males' and females' data on the importance of the traits to their self-descriptions would differ from those formed from the self-descriptive data, conforming to recent pressures for persons' sex roles to become more androgynous (e.g., Bem, 1974, 1977). In other words, it was predicted that males' and females' self-descriptive data would produce a Factor 1 and a Function 1 that were in keeping with typical sex-role orientations. Conversely it was predicted that, when asked to rate adjectives for how important they are to their own self-descriptions, male and female data would produce a Factor 1 and a Function 1 that were in keeping with typical cross-sex-role orientations. Accordingly it was predicted that the males' factor and discriminant function analyses of their "importance" data would produce "communion" factors that would dominate the other factors. Conversely, analyses of females' "importance" data were expected to produce "agent" dominating factors. Keeping in mind the population from which the sample was drawn, i.e., college students, it was predicted that patient factors would be least important to males and females. Thus, self-descriptive data would produce strong factors formed by sex-role expected traits. Importance of trait data would produce strong factors formed by other-sex expected traits.

Because of the possible sex-role implications of agency and communion, it also was proposed that the composition of the functions and factors formed from the self-descriptive and self-importance data of the males and females should be separately examined for the meanings of agency, communion, and patience to the respondents.

Following the previous predictions, it was expected that the meanings of the three ESs would not be sex specific, yet would not be sex-independent either. That is to say, males and females would be equally agent, communal, and patient, but the specific organization of the traits within the factors and functions formed from the data would vary between the males and females. For example, given current sex roles (e.g., Gilligan, 1982), it was expected that males' agency factors would express more privatism and more competition than the females', and females' communion factors would express more interpersonal care and cooperation than the males' communion factors.

Accordingly, it was expected that agency and communion would be relevant dimensions for males and females, but would not be sex specific and yet would not be totally sex-independent. It also was expected that Block's agency-communion traits would be related to the agency-communion traits of ES, but would not be measuring the same construct as the ES traits. It was further predicted that McKinney's ES concept would prove a useful tool for clarifying past confusion over the communion-passive concept. McKinney, by separating patience from communion, allows individuals to separate the notions of communion and passivity in their self-descriptions, and it was expected that respondents would do exactly that. That is to say, it was predicted that the respondents would perceive communion as an active engagement style, would distinguish it from the active style of agency, and would perceive both as distinct from patience, the passive style of engagement.

CHAPTER III

METHOD

Respondents

Male and female volunteers were solicited from introductory psychology classes at Michigan State University and participated in the present study as one means of obtaining extra class credit. A total of 419 male and 411 female students completed questionnaires in different phases of the study. No respondent participated in more than one aspect of the current study.

Construction of an Alternate Measure of Engagement Style

Behavioral Descriptions of an Agent, a Communicant, and a Patient

The first step in the construction of the new measure of engagement style consisted of the writing of three paragraphs, each one descriptive of a different style, that would be used to elicit trait adjectives descriptive of one of the ESs. It was decided that the description of each of the styles should include a general description of a person exemplifying that ES and a behavioral description of the person. It was further decided that the behavioral situation should be the same for each engagement style, allowing for control of the situational context in which the subject would place the character in the description. An ordinary conversation with "others" was decided on as familiar for all respondents and an appropriate forum for distinguishing the three styles. Because the trait adjectives to be obtained in the

study would be used to elicit ratings of the self, it was decided that male respondents would receive paragraphs with male actors and females would receive paragraphs with female actors. Of course, it was necessary that the paragraphs exhibited face validity to psychologists familiar with the engagement-style construct. It was decided that unanimous agreement among three psychologists, other than the author would fulfill this criterion. The paragraph that follows describes an agent, according to McKinney's construct of engagement style (McKinney, 1980, 1981), and was selected according to the stated criteria to be used in this study.

> This person's name is Bob (Sue).
> Bob acts on his world. When acting he scarcely considers his environment. He takes his own goals and needs into account, but rarely allows his environment (including other persons) to be a major factor in his actions. Bob is a doer; he rarely allows other persons or his larger environment to have an effect on him. In conversations, Bob usually makes certain that his ideas and feelings are clearly made known to everyone--he might not be concerned about hearing the others' views.

The following paragraph was used to elicit data about a communicant.

> This person's name is Mark (Gwen).
> Mark interacts with his world. The world affects him and he has an effect on his world. He considers his physical environment and others around him as well as his own internal states as he goes through his daily routines. He considers his own goals and needs and also those of others in social situations. Mark would try very hard to make his views and feelings known in a conversation while also considering the views and feelings of others involved. He would be most satisfied if a mutual understanding could be achieved.

The following paragraph was used in the study and describes a patient.

> This person's name is Bill (Kate).
> Bill is primarily someone who reacts to his environment which may include his internal states and other persons in his world. He is responsive to his world rather than someone who acts upon it. He is not a doer--he reacts to internal and external stimuli. His environment--including other people--has a

profound influence on his life. In a conversation Bill would agree with the views and feelings expressed by others. He would not want to impose his own views or feelings on the others and might not offer them for consideration.

Collection of Respondents' Adjectives and Descriptiveness and Valence Ratings

Study 1. The first study was designed with two goals in mind: (a) to have respondents supply trait adjectives, according to perceived valence (positive, neutral, or negative), that describe the engagement styles; and (b) to obtain the same respondents' ratings of valence and degree of descriptiveness of ES of adjectives chosen by the experimenter.

Fifty-nine males and 61 females received mimeographed booklets describing each of the engagement styles. After reading the first of the ES descriptions, the respondents wrote in 3 positive, 3 neutral, and 3 negative adjectives that they thought described the type of person in the description. The respondents then rated half (15) of the adjectives chosen by the experimenter for that ES for degree of descriptiveness and valence. The same process was used for the remaining two ESs. All ratings were on 11-point scales.

A total of 10 positive, 10 neutral, and 10 negative adjectives were evaluated by the respondents for each ES. In other words, approximately half of the males and half of the females rated 15 adjectives for each ES, the other half of the respondents rated the other 15 adjectives. All subjects rated the three ESs and order of presentation of ES was counterbalanced.

The experimenter then examined adjectives supplied by the respondents, and if one-tenth of the subjects supplied the word and it was descriptive of only one of the ESs across all subjects, it was selected

to be included in the second questionnaire eliciting respondents' ratings. The subject-supplied adjectives that were chosen (total = 12) replaced experimenter adjectives that received low descriptiveness ratings or were found to be descriptive of more than one ES. Thirteen other experimenter-supplied adjectives were found to be unsatisfactory either because they described more than one ES, were rated for valence in conflicting or unexpected ways, or were not rated as highly descriptive of the ES. These 13 adjectives were replaced with new experimenter-supplied adjectives that were chosen after examination of subject-supplied words and ratings of the original experimenter-supplied adjectives. A total of 25 substitutions and 22 valence changes were made in the list of 90 adjectives before it was rated by a second group of respondents for descriptiveness or valence. Table 1 shows the list of adjectives used in Study 1, including those subsequently dropped from the list or having changed valences. All adjectives chosen for Study 1 and Study 2 were judged as moderate or high usage words in the Word Frequency Book (Carroll, Davies, & Richman, 1971).

Study 2. Examination of respondent-supplied adjectives in Study 1 indicated that valence ratings could be contaminated by the context of the engagement style, e.g., "active" received positive valence placements in the context of the agent and neutral valence placements in the context of the communicant. Consequently, it was decided that ratings of valence would be independent of ratings of descriptiveness in Study 2. Examination of respondent-supplied adjectives in Study 1 also indicated that it would be advisable to have subjects rate all 90 adjectives for descriptiveness of each of the engagement styles so that redundancy of descriptiveness could be determined. Adjectives that discriminated

Table 1

Trait Adjectives Used to Elicit Respondents' Ratings in Study 1

Engagement Style:	Agent	Communicant	Patient
Positive	Able	*Understanding	Humble
	*Strong	Perceptive	Accommodating
	*Self-reliant	#Open-minded	#Soft
	*Active	*Responsive	Agreeable
	Self-confident	Reasonable	Helpful
	*Resourceful	Observant	Appreciative
	*Productive	*Conscientious	*Pliable
	#Strong-minded	Sensitive	#Obedient
	Vigorous	#Thorough	Amiable
	Self-sufficient	Attentive	Forgiving
Neutral	Definite	#Aware	Other-oriented
	#Original	*Conventional	#Dependent
	#Initiating	*Fair	Self-conscious
	Righteous	Systematic	#Undecided
	Persistent	#Flexible	#Follower
	Daring	#Self-controlled	Conformist
	*Self-concerned	Cautious	Shy
	Bold	*Tolerant	Impressionable
	*Assertive	*Thoughtful	#Obliging
	Forceful	*Adaptable	Passive
Negative	Smug	#Introspective	Purposeless
	Uncongenial	#Talkative	Weak
	Egotistical	#Idealistic	#Submissive
	Unaccommodating	Evasive	Lifeless
	Unobliging	#Finicky	Gullible
	Pompous	*Fussy	*Helpless
	#Opinionated	*Inhibited	*Anxious
	#Overconfident	*Humorless	*Dull
	Thoughtless	*Overcompromising	*Unappealing
	#Dominating	*Fastidious	Cowardly

*Adjectives eliminated from the list after Study 1.
#Adjectives placed in a different valence category after Study 1.

among the three styles could only be determined if descriptive ratings were obtained on all of the three styles and that design was chosen for Study 2.

Thirty males and 30 females rated the new list of 90 adjectives (see Table 2) for valence on 11-point scales. In a separate phase of the study, 53 males and 53 females rated the 90 adjectives for degree of descriptiveness of one engagement style: 17 males and 18 females rated the adjectives for the agent description, 18 males and 18 females rated the adjectives for the communion description, and 18 males and 17 females rated the same adjectives for the patient description. As in Study 1, respondents used 11-point rating scales; males rated adjectives for descriptiveness of a male actor, and females rated adjectives for descriptiveness of a female actor.

As a result of the data obtained in Study 2, 15 positively-rated adjectives were chosen as the basic stimuli for the proposed convergent validity study of ES. Five adjectives describe the agent, five describe the communicant, and five describe the patient. None of the adjectives describes more than one of the engagement styles.

Collection of Subjects' Self-Ratings

Study 3. During the final phase of the study, 277 males and 267 females responded to questionnaires eliciting their ratings of the degree of descriptiveness and importance of ES and agency and communion trait adjectives to their own self-schemas. The two types of self-ratings were collected independently of each other and each questionnaire utilized an 11-point rating scale. The directions for the descriptiveness rating scale were worded as follows.

Table 2

Trait Adjectives Used to Elicit Respondents' Ratings in Study 2

Engagement Style:	Agent	Communicant	Patient
Positive	Self-sufficient	*Caring	Agreeable
	Vigorous	*Concerned	Appreciative
	*Independent	Reasonable	Helpful
	*Outgoing	#Flexible	Forgiving
	*Doer	#Self-controlled	Amiable
	*Leader	Perceptive	Humble
	Self-confident	Attentive	Accommodating
	#Initiating	Observant	#Obliging
	#Original	#Aware	*Easygoing
	Able	Sensitive	*Serving
Neutral	Forceful	Cautious	*Quiet
	#Dominating	#Talkative	Passive
	Bold	#Idealistic	Self-conscious
	#Strong-minded	Systematic	Shy
	#Opinionated	#Introspective	Conformist
	#Overconfident	#Thorough	#Obedient
	Daring	*Logical	#Soft
	Righteous	*Rational	#Submissive
	Persistent	#Finicky	Other-oriented
	Definite	#Open-minded	Impressionable
Negative	*Inconsiderate	*Interfacing	*Lazy
	Egotistical	*Boring	*Follower
	Unobliging	*Boastful	#Dependent
	Pompous	Evasive	*Overcompromising
	Smug	*Fake	Purposeless
	Thoughtless	*Pushy	#Undecided
	Unaccommodating	*Uninteresting	Lifeless
	Uncongenial	*Tedious	Gullible
	*Self-centered	*Prying	Cowardly
	*Conceited	*Busybody	Weak

*Adjectives newly selected for Study 2.
#Adjectives placed in a difference valence category as a result of Study 2.

> Think about yourself. Think about what kind of a person you are. What words might be used to describe your personality?
>
> Read each of the following adjectives and decide how much each adjective describes you as you see yourself. Be as truthful as possible. If the adjective describes you very much, circle 8, 9, 10, or 11. If it sort of describes you, circle 5, 6, or 7. If it doesn't describe you at all, give it a 1, 2, 3, or 4. Try to use all the numbers and think about each adjective independently of the others. Do not look back to see how you have responded to previous adjectives or questionnaires. Put down your first thought.

The directions for the questionnaire eliciting the respondents' ratings of the degree of importance of the traits to their self-description were phrased as follows.

> Think about how you might describe yourself to another person who does not know you. You want to give this other person the most accurate description possible. Be as truthful as you can.
>
> Read each of the following adjectives and decide how important each is to your own self-description. If it is very important to your self-description, circle 8, 9, 10, or 11. If it is sort of important to your own self-description, give it a 5, 6, or 7. If it is not important at all to your own self-description, give it a 1, 2, 3, or 4. Try to use all the numbers and think about each adjective independently of the others. Do not look back to see how you have responded to previous adjectives or previous questionnaires. Put down your first thought.

Both scales consisted of 77 randomly-ordered trait adjectives: 15 adjectives describing ES, 22 adjectives describing Block's agency and communion (two of these overlapped with the ES adjectives), 15 positively-rated adjectives that describe the creative personality, 6 adjectives that have been found to be strongly endorsed by college-aged respondents (Anderson, 1976), 6 adjectives that have been found to be strongly rejected by college-aged respondents (Anderson, 1976), and 15 fillers. The 42 adjectives that exclude those describing ES or Block's agency or communion were included in the scales as distractors and to obtain

data to be used in the convergent-discriminant validity study of ES. Those 42 adjectives will be discussed in a later paper describing that study and will not be considered further in the present paper.

The 15 adjectives describing ES were those selected through Studies 1 and 2. Recall that the trait adjectives chosen for descriptiveness of each of the three ESs were selected on the basis of results collected separately from males and females. The findings did permit the selection of the same five positively-valenced adjectives to describe a male and a female communicant. However, it was not possible to do so for a male and female agent and patient, i.e., it was possible to select only four positively-valenced adjectives describing both a male and female agent and four positively-valenced adjectives describing both a male and a female patient. In the case of these two ESs, the fifth trait adjectives selected are not the same for males and females. The ES adjectives used to elicit self-ratings in Study 3 are presented in Table 3.

After self-descriptive and self-importance ratings were obtained from the respondents, the subjects were categorized on engagement style according to the following scheme. A respondent was said to have selected a style of engagement, i.e., have a self-schema of that ES, if the following criteria were met: (a) the respondent rated three of the five critical trait words descriptive of the ES between 8 and 11 points on self-description, and (b) the respondent rated the same three words between 8 and 11 points on self-importance to his or her own self-description. Aschematics were defined as scoring 1 to 4 points on self-descriptiveness and self-importance on three of the five critical traits for the style under consideration. The respondents

Table 3

Trait Adjectives Describing Three Engagement Styles for Men and Women

Engagement Style	Males	Females
Agent	Doer	Doer
	Definite	Definite
	Daring	Daring
	Persistent	Persistent
	Vigorous	Initiating
Communicant	Perceptive	Perceptive
	Logical	Logical
	Attentive	Attentive
	Helpful	Helpful
	Concerned	Concerned
Patient	Agreeable	Agreeable
	Obliging	Obliging
	Humble	Humble
	Cautious	Cautious
	Accommodating	Sensitive

were classified, using the above scheme, as agents, communicants, patients, agent-communicants, agent-patients, communicant-patients, agent-patient-communicants, aschematics, or remained unclassified.

The 22 adjectives included in the self-rating measure which reflected Block's (1973) concepts of agency and communion are listed in Table 4; they were chosen as follows. Block asked respondents in six, industrialized countries to describe their "ideal self." The resulting list of trait adjectives was then examined for those traits that differentiated the sexes, and 41 traits that described the ideal person of one sex were found to differentiate a person of that sex from an individual of the other sex. Hypothesizing, according to Bakan's theory (1966), that male traits would be primarily agent in nature and female

traits primarily communal in nature, she asked four psychologists to categorize the 41 masculine and feminine traits according to the agency-communion concept.

Table 4

Trait Adjectives Describing Agency and Communion as Defined by Block

Agency	Communion
Practical	Loving
Shrewd	Affectionate
Assertive	Generous
Dominating	*Sensitive
Competitive	Artistic
Critical	#Helpful
Rational	Considerate
Reasonable	Sympathetic
Ambitious	
Self-centered	
Independent	
Adventurous	
Vital	
Active	

*Also descriptive of a female patient, according to the ES construct.
#Also descriptive of a male and a female communicant, according to the ES construct.

Procedure

The rationale, purpose, and design of the current study were submitted to the Michigan State University Committee for Research Involving Human Subjects (UCRIHS) for approval before any recruiting or research was begun. Data were collected over the course of four consecutive university terms, and respondents were seen in the early, middle, and late portions of each of the four terms.

All research was conducted with small groups of students in ordinary classroom settings, and informed consent was obtained from all respondents before any surveys were distributed. Responses of all individual respondents were confidential and anonymous and were not filed with the signed permission forms also obtained from them. Respondents were always free to ask questions concerning the directions on the questionnaires and were told not to respond to an adjective if they did not know its meaning. When judging the meanings of each of the trait adjectives, respondents were told to think of the definition of the word that they typically used when thinking of their own descriptions and those of others they knew. After completion of the questionnaires, all of the respondents' questions were answered, and all those participating in the study were told how to contact the experimenter to obtain the results of the study.

CHAPTER IV

ANALYSIS

Construction of the Engagement Style Scale

Study 1

The first step in the analysis of the scale-formation data was the tallying of the mean valence and descriptiveness ratings of the experimenter-supplied adjectives and the examination of the frequencies and valence of the subject-supplied adjectives. As average ratings were compiled, occurrences of missing data were recorded with the understanding that this tally would be used as an indicator of vocabulary comprehension. The experimenter and three assistants also attempted to form a composite picture of each of the engagement styles from the ratings and subject-supplied traits as they were analyzed. These subjective pictures of the three engagement styles as presented by the subjects' responses then formed a foundation for the decisions that were made concerning which traits were retained or newly selected for Study 2.

When encountered, adjectives descriptive of two engagement styles were dropped. (No adjectives were found to be descriptive of more than two styles.) Adjectives receiving different valence placements for different engagement styles also were eliminated from further consideration, as were adjectives receiving different valence placements for males and females. Any items that were not rated by more than three

respondents also were excluded on the basis of vocabulary difficulty. Other trait words were eliminated from the list, not because they were not descriptive of one ES, but because other trait words were selected that had higher ratings of descriptiveness or were supplied by a sufficient number of respondents to warrant inclusion in Study 2. Choices of new experimenter-supplied words were based on the conceptualizations of the three engagement styles as expressed in this paper and on the pictures of the three styles that emerged from the traits found to be highly descriptive of the ESs in Study 1. All newly chosen words were representative of these notions and were unanimously agreed upon by the four raters.

Study 2

Item means and standard deviations were computed for valence and descriptiveness ratings of the 90 trait adjectives as the first step in the analysis of Study 2 data. An examination of these data yielded three subscales: (a) an agent subscale, (b) a communicant subscale, and (c) a patient subscale. Average item means and standard deviations were then computed for valence and descriptiveness ratings for each of the subscales and were examined for equality. Because the agent and patient subscales are different for the sexes, all subscale comparisons were made within-sex.

High mean ratings of descriptiveness (7.5 or above), high mean ratings (7.5 or above) of only one engagement style, equal mean valence ratings across the three ESs and equal descriptiveness and valence ratings for males and females were the criteria employed during construction of the subscales. The average item means of the

descriptiveness ratings of the subscales were examined for equality by means of Student's *t*-test, as were the valence ratings.

All items being considered for inclusion in the subscales were entered into a correlation matrix. The resulting inter-item correlations were examined for the following feature. Items in each subscale were to be positively correlated with each other, though not so highly that it was likely that the two were conveying the same information.

Then, for each potential subscale and the entire ES scale, coefficient alpha was calculated as a measure of the internal consistency. In addition, item-total correlations were computed to further examine the internal structure of the scale and each of the subscales.

A correlation matrix was also constructed for the potential subscales of the Engagement Style Scale (ESS). According to the issues put forth in this paper, if respondents viewed the three engagement styles as independent, the subscales should be uncorrelated. If respondents viewed engagement styles as a bipolar continuum anchored by agency and patience, agency and patience should be strongly and negatively correlated and communion moderately and positively correlated with each of the other two styles.

In view of the intent to differentiate between the three engagement styles and to examine the structure of the ESS as reflected in the responses of the raters, discriminant function analysis was selected as the final analysis of the data collected in Study 2. Because respondents had rated all trait words for descriptiveness of one of the three

engagement styles, it was possible to examine the relative contributions of each of the adjectives toward the discrimination of the three styles or groups (Klecka, 1980).

A multiple discriminant function is based on a linear combination of variables, so that in a sense, a discriminant function is a factor--a special type of factor that serves to discriminate among a priori groups of respondents (Nunnally, 1978). In evaluating the merits of multiple discriminant function (MDF) analysis, Nunnally (1978) states, "Both conceptually and mathematically the MDF constitutes a powerful tool which has not been employed nearly as much as it should have been in the behavioral sciences" (p. 464). The MDF is an appropriate tool for examining the relative contributions of multiple variables toward the differentiation of group membership, just as factor analysis is an appropriate tool for examining the relative contributions of multiple variables toward the clusters or factors of the variables (Nunnally, 1978).

In discriminant function analysis a canonical discriminant function is derived as a linear combination of the discriminating variables according to the following conditions: a) the group means of the function are as different as possible, b) any functions derived after the first are formed to maximize the differences between the group means under the added condition that the values on the second function are not correlated with values on the first function, c) the maximum number of functions formed is equal to one minus the number of groups, and d) if the group's position relative to the other groups does not define a new dimension, a new function is not formed. It is possible that due to sampling and measurement error the group's dimension can

appear as a new function. Tests of significance, usually Wilk's lambda which is a measure of residual discrimination interpreted through the inferential statistic, Chi-squared, can then be employed to gauge an estimate of the importance of the function. Wilk's lambda is an inverse measure of the discriminating power in the original variables that remains after the previous functions are removed. The larger lambda is, the less discriminating power remaining.

The standardized canonical coefficients and canonical correlation of the functions are also measures of the importance of the derived function. The relative contributions of the variables to the function can be examined via their standardized canonical coefficients, standardized measures of the relative contributions of the variables in determining the discriminant score on the canonical discriminant function for a case in one of the groups. The canonical correlation of the function summarizes the degree of relatedness between the groups and the discriminant function, and its square can be interpreted as a measure of the proportion of variation in the discriminant function explained by the groups (Klecka, 1980). Large standardized canonical coefficients and canonical correlations represent increasing degrees of association with the absolute value of 1.0 being the maximum. If the groups are not very different on the variables being examined, then all of the correlations will be low. Alternately, the more the variables discriminate between the groups as reflected in the functions, the higher the correlations will be (Klecka, 1980).

The functions, their relatedness with the groups, the statistical significance of their contributions, and the standardized canonical

coefficients of the contributing variables were examined in accord with the predictions made earlier in this paper. If the engagement styles are perceived as occupying positions on a bipolar continuum, only one function is necessary to define the dimension. If the engagement styles are independent, two statistically important functions with high measures of association with the groups are needed to define the dimensional space. If the styles are dependent, the relevant variables will contribute to the same function with variables defining opposite ends of the continuum having opposite signs on equally strong standardized canonical coefficients. Of course this will not be the case if the engagement styles as described in the stimuli are perceived as independent dimensions.

According to predictions previously made according to sex role interpretations, if the ESs are viewed as independent, the males' functions should consist of a primary function predominantly agentic in nature, and secondly, a function predominantly communicant in interpretation. Following the same logic, the females' strongest function should be defined by communion traits and their second function by patient traits.

When variables are entered into discriminant function analysis, the researcher has choices as to the criteria used for selection of variables for inclusion in the analysis (Klecka, 1975). The variables may be entered into the analysis concurrently and the discriminant functions created directly from the entire set of independent variables, regardless of the discriminating power of each of these variables. Alternately, the independent variables can be entered according to a stepwise selection method based on the discriminating power of the

variables. The present research utilized the stepwise selection method, using the criterion of Rao's V, a generalized distance measure which selects variables that contribute the largest increases in V when added to the previous variables. Essentially this selection procedure gives the greatest possible separation of the groups that is inherent in the data (Klecka, 1975).

Examination of the Engagement Style Scale

Study 3

Description of the engagement style scale. In view of the intent to examine the nature and structure of the concept of engagement style as measured by the ESS in the context of self-ratings, respondents in Study 3 rated the trait adjectives in the ESS for degree of self-descriptiveness and self-importance to their own self-schemas. All analyses of Study 3 data were carried out on both of these sets of information. Because separate agent and patient subscales are used for males and females, all descriptive analyses of this study were conducted separately for the sexes.

As a means to enhanced understanding of the properties of the ESS and the underlying construct of engagement style, the data of Study 3 were first submitted to the same analyses as the descriptiveness ratings collected in Study 2 in response to the experimenter-derived paragraphs depicting the "ideal" agent, patient, or communicant: (a) Average item means and standard deviations were computed for the ESS and the subscales, (b) A correlation matrix was obtained for the ESS and inter-item correlations were examined, (c) The coefficient alpha was calculated for the ESS and for each of the subscales, as were the item-total

correlations for each of the measures, and (d) Discriminant function analysis was employed to determine the functions and their properties that differentiated between the categories of ES.

The last analysis varied from the discriminant function analysis of the previous study in that all possible combinations of ES categories were included as groups. The male and female respondents were placed into one of seven possible ES categories or were left uncategorized, according to the criteria outlined in Chapter II. Agents (A), communicants (C), patients (P), agent-patients (AP), agent-communicants (AC), communicant-patients (CP), and agent-communicant-patients (ACP) were then entered as the groups that were to be discriminated.

If engagement style as measured by the ESS is perceived by respondents as having three independent dimensions, all possible combinations of the basic three styles are of theoretical interest, and therefore all groups were entered into the discriminant analysis. It is to be expected however that the discriminating power of the functions was lessened as a result of the fact that each of the "pure" styles is also part of three "combination" styles. Of course, the Chi-square, canonical coefficients, and canonical correlation of the function were examined to determine the merits of the derived functions. All issues of interest concerning Study 2 were relevant for Study 3 and were examined as such.

The relationship of the groups to each other were also examined in a correlation matrix of the agent, communicant, and patient subscales. Again, these analyses were carried out for males and females; but it was decided that the relationships of self-descriptive data to self-importance data were of theoretical interest; hence both sets of information

were included in the matrices. The engagement style concept of interaction (as labelled in this paper and measured by the ESS) is of special interest in this regard. More specifically, it is of interest to know if respondents who perceive themselves as relatively high on agency also perceive the benefits to be gained by "balancing" their personality with an increase in patience, as outlined in McKinney's (1980, 1981) concept of interaction. The same question is of course also of interest for those who perceive themselves high on patience. In other words, do college students perceive the possible values of the agent-patient style of engagement? The other possibility is that the respondents who are high on agency or patience value being high in that ES, and those traits are the ones they rated as most important to their own self-descriptions. These arguments can also be applied to those who perceive themselves high in communion. In general, the question is, "Do respondents tend to view as important the ES traits which they see as highly descriptive of themselves or do they rate the ES traits that they see lacking in their own self-schemas as important?" It is also of interest to know if the answer to the previous question varies as a function of the ES on which the respondent rates him or herself as high. It was possible to examine all of these issues using the correlation matrix of the subscales.

The correlation matrices of the self-descriptive subscales were also examined for the respondents' perceptions of the dimensionality of ES. Again, if ES is perceived as a bipolar continuum, more agency implies less patience and the two subscales will be negatively and strongly correlated. If ES is perceived as three independent styles as

measured in the ESS, this relationship need not exist and the subscales will be uncorrelated.

As a further means of examining the structure of ES as measured by the ESS, the ESS and each of the subscales were submitted to factor analysis. Like discriminant function analysis, factor analysis is concerned with a rectangular data matrix, with variables appearing on the columns of the matrix and persons appearing on the rows. The major purpose of discriminant function analysis is to examine the discriminations between the persons as they are clustered on the variables of interest. The major purpose of factor analysis is to examine relations between the columns to test for or discover clusters of variables. Just as discriminant function analysis is concerned mainly with clusters of people, factor analysis is concerned with clusters of variables that measure the same thing and measure something different from what is measured by other clusters (Nunnally, 1978).

A principal components factor analysis with iteration was used in extraction of the factors and varimax, orthogonal rotation was employed. The "scree-test" was used as the criterion of the minimum contribution by a factor to be evaluated as substantively significant. The rule instructs the experimenter to construct and examine a graph of the eigenvalues, and stop factoring at the point where the eigenvalues begin to level off forming a straight line with an almost horizontal slope (Kim & Mueller, 1978).

As with discriminant function analysis, various statistical measures can indicate the importance of the contribution made by a factor. The total amount of variance accounted for by a factor, the

proportion of the total variance accounted for by a given factor, and the proportion of common variance accounted for by a given factor can all be determined from an examination of the initial-factor matrix (Kim, 1975). The total amount of variance accounted for by a factor is calculated by adding the square of the loadings in the factor column and is reflected in its respective eigenvalue. The proportion of total variance accounted for is calculated by dividing the eigenvalue by the total number of variables loading on the factors. (This is due to the fact that the variance of each variable is one because the variables are normalized, and, thus, the total variance in the data equals the number of variables in the set.) The proportion of common variance accounted for by a given factor is derived by dividing the eigenvalue of the factor of interest by the sum of eigenvalues of all the factors.

The factor loadings in the matrix of the terminal solution of orthogonally rotated factors represent correlation coefficients between the variables and the factor, and the loadings in a given row represent regression coefficients of the factors to describe a given variable (Kim, 1975). The sum of the squares of the regression coefficients for a given variable is the proportion of variance in the variable accounted for by all the common factors; that is, it is the communality of the variable.

These statistical measures computed from the initial-factor matrices and the terminal-factor matrices were examined to determine the nature of the derived factors and the relationship of the variables to them. All explorations of the derived factors were based on the issues and predictions already discussed in this paper.

Examination of sex-role implications for engagement style. Sex-role implications for ES stem from Block's (1973) findings regarding sex-role dimensions based on Bakan's (1966) agency and communion. These implications were examined as the final aspect of the analysis of Study 3.

As the first step in this analysis, male and female engagement style categorization was examined with the Chi-square statistic for between-sex differences.

Secondly, average-item means of the subscales were compared for differences both within- and between-sex using Student's *t*-test. Because multiple use of Student's *t* inflates the desired alpha level, a maximum alpha level of .01 was used in the tests of significance. According to Moore and McKinney's (1979) finding of no difference of overall agency scores between the sexes, one would predict no difference between the sexes in average-item scores of the entire ESS. However, based on McKinney's (1980) notion of similarity of ES and Bakan's agency and communion concept, one would predict higher agency scores for males than females and higher communion and perhaps patient scores for the females than for the males. One would also predict that the males' agency score would be the highest male subscale score and the females' average-item communion score would be higher than their average-item agency and patient scores.

The next step in the examination of sex-role implications for ES consisted of the calculation of the average-item means and standard deviations of the 22 adjectives of the Block sex-role scale. Coefficient alpha was also computed for the total scale and the agency and communion subscales, as were an inter-item correlation matrix for the scale and

item-total correlations for the total scale and two subscales. The average item means of the subscales were then examined for between- and within-sex differences using Student's t-test and .01 alpha level.

The scale formed from the entire list of Block's agent-communion traits was then submitted to separate, orthogonal factor analyses for the males and the females, and descriptiveness data were analyzed separately from the importance data for both samples. Proportions of common and total variance, communalities, and correlations between the items and the factors were examined in an attempt to determine the structure and some of the properties of the 22 traits and similarities and differences with the Engagement Style Scale.

Possible relationships between the ESS and the Block scale also were more directly examined. A correlation matrix of ESS subscales and the agency and communion subscales of Block's scale was computed and analyzed for degree of similarity of the subscales based on the degrees of relationships of the measures. In examination of these data, it must be remembered that the ESS subscale, communion, will have an artificially high simple correlation with the communion subscale of the Block scale because the subscales share one item in common. This is true for both males and females. It also most be remembered that the female ESS subscale, patience, shares one item with the Block communion subscale, and thus the simple correlation of these two subscales will also be spuriously high. In order to examine the contributions of the shared items, partial correlations were computed for the two pairs of subscales. In both cases the effects of the shared item were statistically removed from the relationship and the correlation computed on the remaining association between the subscales. Both the simple and

the partial correlations were examined when the relationships between the ESS and the Block scale were studied.

As a further measure of the degree and type of relationship between ES and Block's sex-role concept, the ESS and the Block scale were combined, factor analyzed and examined. Next, the factors formed from the combined scales were compared to the factors obtained separately from the ESS and the 22 agency-communion traits of Block, as a further means of differentiating the two concepts. Inter-item relationships also were examined to explore possible associations between the specific traits of the ESS and the agency-communion traits of Block.

CHAPTER V

RESULTS

Selection of Items for the Engagement Style Scale

Study 1

The subject-supplied traits and the respondents' descriptiveness ratings of the experimenter-supplied adjectives presented a clear picture of the three engagement styles. Table 5 lists the 10 traits receiving the highest descriptiveness ratings for each of the styles and the five most frequently supplied adjectives for each of them. In each case the 15 adjectives are representative of the entire sample of trait ratings for that ES. An examination of these 45 traits gives a pattern of three distinct styles of engagement with the environment that is consistent with the theoretical picture of ES presented in this paper and yet, also had clear evaluative overtones for the respondents.

The agent is active, independent, strong, and basically admired by the college student respondents. (The mean valence rating of the 10 most descriptive agent adjectives is 7.59.) The communicant was the most admired of the three ES ($\bar{X}$ = 9.40) and is pictured as considerate, reasonable, perceptive, and responsive. The patient was perceived by the respondents as passive and agreeable, considerate, and yet, uninteresting. The mean valence rating of the 10 most descriptive patient traits also indicates that this ES is not admired by the respondents, $\bar{X}$ = 4.67.

Table 5

Traits Descriptive of Three Engagement Styles

Engagement Style	Trait	Mean Descriptiveness Rating	Mean Valence Rating	Frequence of Mention	Valence Category
Agent					
	Dominating	10.25	5.36		
	Strong-minded	10.26	8.10		
	Self-confident	10.22	9.33		
	Forceful	10.06	5.61		
	Self-reliant	9.99	9.26		
	Self-concerned	9.84	4.64		
	Active	9.82	9.70		
	Opinionated	9.81	6.23		
	Assertive	9.74	7.98		
	Self-sufficient	9.57	9.67		
	Inconsiderate			32	Negative
	Independent			23	Positive
	Assertive			18	Positive
	Doer			17	Positive
	Active			16	Positive
Communicant					
	Understanding	9.78	10.04		
	Reasonable	9.68	9.61		
	Thoughtful	9.60	9.90		
	Flexible	9.34	8.83		
	Self-controlled	9.28	9.37		
	Perceptive	9.16	9.32		
	Aware	8.96	9.10		
	Attentive	8.90	9.65		
	Observant	8.84	9.32		
	Responsive	8.80	8.83		
	Considerate			56	Positive
	Understanding			22	Positive
	Thoughtful			10	Positive
	Caring			7	Positive
	Concerned			6	Positive
Patient					
	Agreeable	10.25	8.43		
	Follower	10.16	3.75		
	Overcompromising	9.52	3.27		
	Obedient	9.24	6.77		
	Passive	9.22	4.46		
	Dull	9.15	2.31		
	Obliging	8.92	7.13		
	Shy	8.84	4.89		
	Conformist	8.66	5.66		
	Self-conscious	8.54	4.97		
	Considerate			39	Positive
	Shy			27	Neutral
	Easygoing			26	Positive
	Quiet			19	Neutral
	Agreeable			17	Positive

As clear as these portraits are, they presented serious problems for the construction of the ESS as was originally intended. That is, it seemed that it would be difficult, if not impossible, to obtain an equal number of highly descriptive traits for the three ES that also were equally distributed across positive, negative, and neutral valence ratings. An examination of all adjectives with a descriptive rating of 7.5 or above showed a mean valence rating of 6.89 for agent traits, 8.81 for communicant traits, and 5.63 for patient traits.

It also was clear that adjectives could receive different valence placements if describing different engagement styles, e.g., "active" was positive when describing the agent and neutral when describing the communicant, and "understanding" was positive when describing the patient and neutral when describing the communicant. It also seemed that sex of the stimulus character influenced valence placement, e.g., "understanding" was neutral when describing a woman and positive when describing a man, and "follower" was neutral when describing a woman and negative when describing a man.

An inspection of subject-supplied adjectives also clearly indicated that traits descriptive of communion could be descriptive of agency or patience. Three traits were encountered that were descriptive of the agent and the communicant: active, self-sufficient, and self-concerned. Five traits were descriptive of both the patient and the communicant: considerate, understanding, thoughtful, easygoing, and dull.

As detailed in Chapter III, it was decided that a different method of data collection would be used in Study 2 as an attempt to deal with these issues raised in Study 1. In Study 2, one sample of

respondents rated all traits for one ES, and a second sample rated all adjectives for valence independently of any reference to ES.

Study 2

Descriptive statistics. The pictures of the three ESs represented by the descriptiveness and valence ratings of Study 2 validated those found as a result of Study 1. As Table 6 indicates the agent is strong, dominating, independent, able, self-sufficient, and self-centered, but the males do not agree with the females that the agent is unobliging and inconsiderate.

It is interesting that eight of the traits that are rated 7.5 or above as descriptive of the agent also are so rated for the communicant: self-confident, strong-minded, opinionated, leader, self-sufficient, outgoing, doer, and able. Certainly the communicant is pictured by the respondents as active, strong, and constructive. An examination of all traits with a 7.5 or above descriptiveness rating for the communicant also indicates that this ES shares two traits with the patient engagement style. As Table 7 shows, the patient and the communicant are open-minded and observant. Thirteen traits describe only the communicant and five of the thirteen center on cognitive attributes: rational, logical, perceptive, reasonable, and aware. Three of the thirteen traits focus on interaction with the environment: attentive, concerned, and helpful. The total picture presented of the communicant is an active, reasoned thinker who is heedful and solicitous. The males also see this ES as idealistic, but do not agree with the females that the communicant can be described as definite, initiating, independent, and appreciative.

Table 6

Descriptiveness and Valence Ratings of Agent Traits

Trait	Descriptiveness Ratings			Valence Ratings		
	Males	Females	Total	Males	Females	Total
Egotistical	9.59	8.94	9.26	2.60	2.80	2.70
Definite[a, b]	8.47	9.67	9.09	7.40	7.47	7.45
Over-confident	8.53	9.39	8.97	4.52	3.67	4.14
Self-confident[a]	9.59	9.72	9.66	8.66	9.40	9.03
Initiating[a, b]	7.65	8.28	7.97	8.14	8.23	8.19
Vigorous[b]	8.47	7.72	8.09	8.50	8.23	8.37
Unobliging	7.12	8.24	7.68	3.07	3.00	3.03
Strong-minded[a]	9.29	10.28	9.80	8.60	7.80	8.20
Opinionated[a]	9.65	10.00	9.83	6.13	6.43	6.28
Daring[b]	8.06	9.22	8.66	8.00	8.17	8.07
Conceited	8.71	7.83	8.26	2.30	2.17	2.30
Independent[a]	10.00	10.28	10.14	9.00	9.53	9.27
Leader[a]	8.77	9.33	9.06	9.23	8.77	9.00
Pushy	8.71	8.28	8.49	3.13	2.67	2.90
Inconsiderate	7.41	8.33	7.89	1.73	1.57	1.65
Bold	9.00	9.50	9.26	7.47	6.87	7.16
Boastful	8.41	7.94	8.17	3.60	2.77	3.20
Self-sufficient[a]	9.24	9.00	9.11	8.73	9.27	9.00
Outgoing[a]	8.12	8.44	8.29	8.80	9.37	9.08
Persistent[b]	9.18	8.61	8.89	7.67	7.40	7.53
Dominating	10.12	10.11	10.12	4.60	4.30	4.40
Doer[a, b]	9.88	10.72	10.32	8.89	9.33	9.12
Able[a]	8.69	9.06	8.88	9.46	9.40	9.43
Talkative	7.81	9.00	8.44	5.77	7.10	6.43
Self-centered	9.13	9.61	9.38	3.35	3.10	3.20
Unaccommodating	7.71	7.45	7.57	3.55	2.90	3.22
Forceful	9.12	9.56	9.34	5.63	5.37	5.50

Note. All traits with a total descriptiveness rating of 7.5 or above on the agent scale are included.

[a]Trait also has a total descriptiveness rating of 7.5 or above for the communicant.

[b]Trait was included in the final five-item agent subscale.

Table 7

Descriptiveness and Valence Ratings of Communion Traits

Trait	Descriptiveness Ratings			Valence Ratings		
	Males	Females	Total	Males	Females	Total
Definite[a]	7.17	7.83	7.50	7.40	7.47	7.45
Self-confident[a]	8.71	9.00	8.86	8.66	9.40	9.03
Initiating[a]	7.33	7.67	7.50	8.14	8.23	8.19
Strong-minded[a]	7.94	8.67	8.31	8.60	7.80	8.20
Opinionated[a]	8.00	7.94	7.97	6.13	6.43	6.28
Independent[a]	7.44	9.17	8.31	9.00	9.53	9.27
Leader[a]	8.00	7.89	7.94	9.23	8.77	9.00
Self-sufficient[a]	7.72	8.89	8.31	8.73	9.27	9.00
Outgoing[a]	8.89	8.61	8.75	8.80	9.37	9.08
Doer[a]	7.78	7.72	7.75	9.23	8.77	9.00
Able[a]	8.61	8.83	8.72	9.46	9.40	9.43
Idealistic	8.11	7.22	7.67	7.24	7.57	7.40
Rational	7.78	9.11	8.44	8.80	9.60	9.20
Attentive[c]	8.28	9.39	8.83	8.67	9.40	9.00
Self-controlled	8.06	8.17	8.11	9.47	9.27	9.36
Caring	7.94	8.44	8.19	9.86	10.12	10.02
Observant[b]	8.44	8.44	8.44	8.24	8.90	8.58
Thorough	7.83	8.11	7.97	8.23	9.00	8.90
Aware	8.78	8.89	8.83	9.00	9.10	9.05
Concerned[c]	8.33	8.39	8.36	8.80	9.17	9.00
Logical[c]	8.22	8.44	8.33	9.47	9.37	9.40
Helpful[c]	7.45	8.17	7.81	9.59	9.53	9.56
Perceptive[c]	8.50	8.39	8.44	9.33	9.50	9.42
Appreciative	7.44	8.00	7.72	9.47	9.50	9.48
Reasonable	8.61	8.00	8.31	9.07	9.40	9.23
Open-minded[b]	8.89	8.72	8.81	9.57	9.70	9.65

Note. All traits with a total descriptiveness rating of 7.5 or above on the communicant scale are included.

[a]Trait also has a total descriptiveness rating of 7.5 or above for the agent.

[b]Trait also has a total descriptiveness rating of 7.5 or above for the patient.

[c]Trait was included in the final five-item communion subscale.

As indicated in Table 8, the patient is perceived as a follower who is agreeable, flexible, sensitive, cautious, and other-oriented. This is a style wherein observation of the environment is used as a tool to react in what seems to be the most accommodating manner. Males see the patient as impressionable and obliging, and females see the patient as self-conscious. It is also interesting to note that the respondents found the agent and the patient moderately uninteresting ($\bar{X}$ = 6.17, $\bar{X}$ = 6.54, respectively) and the communicant, who description is more complex, was not perceived as uninteresting ($\bar{X}$ = 2.97).

From the pool of 90 traits, the fifteen-item Engagement Style Scale was constructed as described in previous chapters and above, i.e., five positively-valenced items describe each of the three engagement styles. (See Tables 6, 7, and 8.) Due to issues already discussed it was not possible to select identical ES subscales for males and females, nor was it possible to select subscales with equal valence ratings and, only in the case of females, equal descriptiveness ratings. Males' average ratings of descriptiveness were equal across all subscales; however, the males' average valence rating for communion traits, 9.17, was significantly higher than the average ratings for agency, 8.07, and patience, 7.73 ($\underline{t}(26) = 4.96$, $\underline{p} < .001$; $\underline{t}(27) = 7.30$, $\underline{p} < .001$, respectively).

As with the males, females' average valence rating for communion traits, 9.40, was significantly higher than the average rating for agency, 8.12, and patience, 7.84 ($\underline{t}(29) = 8.94$, $\underline{p} < .001$; $\underline{t}(28) = 9.06$, $\underline{p} < .001$, respectively). Average valence ratings for agency and patience were not significantly different for males and females. Females' communion ($\bar{X}$ = 8.56) and patience ($\bar{X}$ = 8.28) average

Table 8

Descriptiveness and Valence Ratings of Patient Traits

Trait	Descriptiveness Ratings			Valence Ratings		
	Males	Females	Total	Males	Females	Total
Other-oriented	8.50	9.12	8.80	7.23	6.86	7.05
Impressionable	7.83	7.29	7.57	5.40	6.10	5.75
Flexible	8.50	8.12	8.31	8.60	8.73	8.70
Self-conscious	7.39	8.59	7.97	6.00	5.43	5.70
Open-minded[a]	7.61	7.59	7.60	9.57	9.70	9.65
Observant[a]	8.11	7.88	8.00	8.24	8.90	8.58
Obedient	7.67	8.88	8.26	6.50	6.20	6.30
Obliging[b]	8.39	7.00	7.71	7.27	7.43	7.35
Sensitive	8.28	7.94	8.11	8.40	9.10	8.77
Serving	7.89	7.88	7.89	7.47	6.20	6.80
Agreeable[b]	9.33	10.12	9.71	7.33	8.70	8.20
Quiet	7.78	8.12	7.94	6.27	5.83	6.05
Undecided	7.83	8.53	8.17	4.67	5.07	4.77
Cautious[b]	8.17	8.53	8.34	7.76	7.17	7.46
Shy	7.94	7.65	7.80	4.97	5.20	5.10
Humble[b]	9.06	7.82	8.46	7.97	6.86	7.40
Follower	9.17	10.18	9.66	4.47	4.10	4.28
Overcompromising	7.94	7.88	7.91	4.13	4.23	4.19
Accommodating[b]	8.94	8.41	8.69	8.10	7.80	7.95

Note. All traits with a total descriptiveness of 7.5 or above on the patient scale are included.

[a]Trait also has a total descriptiveness rating of 7.5 or above for the communicant.

[b]Trait was included in the final five-item patient subscale.

descriptiveness ratings were equal, but the agency average descriptiveness rating ($\bar{X}$ = 9.30) was significantly higher than the communion rating ($t(34) = 2.15$, $p = .04$) and the patience rating ($t(33) = 3.23$, $p = .003$). These differences must be remembered when evaluating the results of Study 3, yet it also must be noted that all subscale average valence ratings are high (above 7.5), as are all subscale average descriptiveness ratings.

Relationships within the engagement style subscales. The internal consistencies of the five-item female subscales, as measured by coefficient alpha, were very high (Nunnally, 1978): (a) female agency (FA), .92; (b) female communion (FC), .80; and (c) female patience (FP), .87. The reliability of the female ESS (FESS), however, was low, $\alpha = .47$. The males' pattern of internal consistency findings was similar to the females': (a) male agency (MA), .91; (b) male communion (MC), .70; (c) male patience (MP), .89; and (d) male ESS (MESS), .32. The low alpha for the FC and the MC is a direct result of the few items in the subscale and the complexity of the perceived nature of the communicant. Inter-item correlations for the agency and patience subscales range from a low of .47 to a high of .81, yet the inter-item correlations in the communion subscales range from a low of -.01 (MC: attentive-logical) to a high of .68 (FC: concerned-helpful).

The low internal consistencies of the total scales can be explained most easily by an examination of the inter-subscale correlations that are presented in Table 9. Neither communion subscale is correlated with its corresponding agency subscale and both patient subscales are strongly and negatively correlated with the associated agency subscale, supporting the notion that ES is perceived as a bipolar continuum

Table 9

ESS Inter-subscale Correlation Matrices for Males and Females

	Males				Females		
	MA	MC	MP		FA	FC	FP
MA	1.00			FA	1.00		
MC	-.09	1.00		FC	-.11	1.00	
MP	-.79	.41	1.00	FP	-.73	.48	1.00

anchored by agency and patience. Only the patient and communion subscales of each of the ESS are positively correlated and those correlations are moderate.

Discriminant function analysis. The ability to successfully differentiate between the three ESs was the final attribute of the male and female ESS to be examined in Study 1. From an examination of Table 10, it is clear that the 15 variables of the male ESS and the 15 variables of the female ESS discriminate between the groups very efficiently. More specifically, Wilk's lambda before Function 1 is derived is very small in both cases and the group centroids or geometrical centers show a strong amount of spread for both the males and females.

It is worth noticing the differences between males and females in the relative strength of the second function. Function 2 of the male ESS is statistically significant, but accounts for only 7.8% of the common variance of the groups that is explained by the two functions.

Table 10

Discriminant Analysis of Trait Descriptiveness for a Male Agent, Communicant, and Patient and a Female Agent, Communicant and Patient

Males

Groups	Function	R_c^2	Relative Percent of Variance	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	Centroids 2
MA								3.60	.84
	1	.92	92.2	.043	129.1[a]	22			
MC							94.2	.96	1.38
	2	.48	7.8	.518	27.0[b]	10			
MP								-4.00	-.40

Females

Groups	Function	R_c^2	Relative Percent of Variance	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	Centroids 2
FA								-3.43	-.93
	1	.88	76.6	.037	131.8[a]	18			
FC							96.2	.22	2.01
	2	.69	23.4	.309	47.1[a]	8			
FP								3.00	-1.14

Note. R_c^2 = squared canonical correlation, ns = 52(MA, MC, MP) and 53 (FA, FC, FP).

[a] $p < .001$.

[b] $p = .003$.

Function 2 of the female ESS explains 23.4% of the common variance of the groups explained by the functions, and 69% of the variance in this function is explained by the groups. The $\underline{R}^2_c$ of Function 2 of the male ESS is only .48. The increase in the relative merits of the second function for the women also accounts for the slight increase in the percent of cases which were correctly classified. This is a direct result of the greater spread between groups on Function 2 of the female ESS.

By examining the standardized canonical coefficients of the variables on each of the functions we can get a picture of the relative contributions of the variables to each of the functions and can also define the meanings of the functions (Klecka, 1975). Function 1 for the males is an Agent function defined by persistent, doer, accommodating, and agreeable which have coefficients of .75, .73, -.58, and -.56, respectively. The male ESS Function 2 is defined by concerned, .63, and helpful, .58, and is obviously a Communion function.

The females' functions are not as clear-cut as the males'. Function 1 of the female ESS is defined by attentive, definite, and cautious which have coefficients of .52, -.46, and .40. The first trait is a communicant, the second is agent, and the third is patient. However, the centroid locations of this function tell us that it is differentiating agency and patience and therefore is a Patient function. Function 2, by its centroid locations and contributing variables, is a Communion function. Three variables define the factor: attentive, .83; logical, .57; and humble, -.41.

In summary, the fifteen items chosen for the female and male ESSs met the pre-established requirements for the selection of scale items

reasonably well: (a) all average subscale valence ratings are strongly positive, (b) all subscales have high average descriptiveness ratings, (c) the internal consistency of each subscale is high and (d) the female and male ESS discriminate very well between the ES categories.

As a final check on the attributes of the female and male ESSs, the scales were given to a new sample of students who were asked to rate the traits, not for descriptiveness of the ideal agent, communicant, or patient, but for degree of descriptiveness of him or herself and secondly, for degree of the trait's importance to the respondent's own self-description. The results of this final study are reported in the following section.

Examination of the Properties of the Engagement Style Scale

Study 3

Relationships within the female ESS and the male ESS. Examination of the inter-item correlation matrices of the female ESS and the male ESS, the internal consistencies, and correlation matrices of the subscales of the engagement style scales indicate different perceptions of the ES traits is applied to self than if applied to "ideal" engagement styles. Inter-item correlations within subscales are generally lower for the self-rating information than the ratings of the "ideal" ESs, and inter-item correlations across subscales remain about the same level as the comparable data from Study 2; however, negative correlations all but totally disappear. As Table 11 indicates, the overall effect is a lowering of subscale alphas to modest levels and a rising of total scale internal consistencies to acceptable levels (Nunnally, 1978). It is also interesting that, with the exception of the agent

Table 11

Internal Reliabilities of the Male ESS and the Female ESS Rated for Self-Descriptiveness and Self-Importance

	Self-Descriptiveness		Self-Importance	
	Alpha	N	Alpha	N
Males				
MA	.72	259	.71	251
MC	.67	264	.71	251
MP	.61	264	.64	251
MESS	.76	255	.83	251
Females				
FA	.69	203	.67	197
FC	.61	203	.70	197
FP	.50	239	.58	230
FESS	.73	208	.82	199

subscales, the subscales of the importance ratings were more internally consistent than those of descriptiveness ratings.

As discussed in the previous chapter, the inter-subscale correlation matrices of the male and female data are of interest concerning two theoretical issues. The first issue centers on the perceived dimensionality of ES and the second focuses on the importance of ES traits relative to the traits on which the respondent rates him or herself as high. Inter-subscale correlations for the male and female data are presented in Table 12. The inter-subscale relationships are given within-sex for all subscales, i.e., male descriptiveness subscales, male importance subscales, females descriptiveness subscales and female importance subscales.

As implied in the discussion of the inter-item correlations, the negative relationships between subscales that were present in the Study 2 data have not been retained in Study 3. Agency and patience are not associated when respondents are rating the traits for self-descriptiveness, but they are somewhat positively correlated ($\underline{r}$ = .38, $\underline{r}$ = .45) when respondents are rating the items of the subscales for importance of their self-descriptions. Communion is moderately correlated with both agency and patience in the descriptiveness data and the importance data, with the importance data showing stronger associations than the descriptiveness data.

With one exception the strongest correlations between the ESS subscales of the descriptiveness data and the importance data occur between the same engagement styles. That is, there is strong tendency to rate what is important to one's sense of self as one rates what is descriptive of one's sense of self. The one exception to this pattern is the .63

Table 12

ESS Inter-subscale Correlation Matrices of Trait Descriptiveness and Importance for Males and Females

	Males					
	MAD	MCD	MPD	MAI	MCI	MPI
MAD	1.00					
MCD	.47	1.00				
MPD	.07	.45	1.00			
MAI	.66	.37	.06	1.00		
MCI	.34	.67	.34	.52	1.00	
MPI	.18	.45	.61	.38	.60	1.00
	Females					
	FAD	FCD	FPD	FAI	FCI	FPI
FAD	1.00					
FCD	.51	1.00				
FPD	.08	.37	1.00			
FAI	.56	.37	.10	1.00		
FCI	.35	.56	.35	.63	1.00	
FPI	.16	.28	.55	.45	.54	1.00

Note. All available data were used. Original male N = 270; original female N = 267.

correlation between the females' agent and communion subscales of the importance ratings. However, this relationship is not substantially stronger than the .55 and .56 correlations between the descriptiveness and importance ratings of the patient and agent subscales, respectively. There is no trend showing that respondents who are relatively strongly described by an engagement style find traits of any other style as important to their self-descriptions as the traits which they perceive describe themselves. In other words the respondents said that how they perceive themselves describes the personality traits that they feel are most important for themselves, while traits not descriptive of themselves were not important for themselves. This is particularly true for self-rated agents and patient traits and self-rated patients and agent traits. That is, there is no association between rating oneself relatively high on agency and rating patient traits as important to one's self-schema. The same is true for those who rate themselves relatively high on patient traits and the importance of agent traits. The data do show moderate relationships between rating oneself as a communicant and rating agent and patient traits as important to one's self-schema.

Engagement style classification. Before the discriminant analyses could be calculated it was necessary to classify each respondent according to his or her engagement style. This was done on the basis of the respondent's ratings on the descriptiveness scale and the importance scale, according to the details presented earlier in this paper. No respondent's data satisfied the aschematic classification requirements, and the category was therefore not included in any analysis.

An examination of the results of the males' and females' classifications, presented in Table 13, yields a pattern of classification that is almost identical for the two sexes ($\underline{\chi}^2(6) = 1.578$, n.s.). Clearly, a respondent's ES classification is not related to his or her gender. It is also notable that the agent and patient ES cells are the most empty with the exception of those that also include the communicant traits, e.g., only 3.9% of the respondents describe themselves as interactors, but 25.7% describe themselves as agent, patient, and communicant. Slightly over thirty percent (31.2%) describe themselves as agent and communicant and only 13.3% describe themselves as agents. Only 3.4% of the respondents describe themselves as patient, but 22.2% describe themselves as patient and communicant. Following this same pattern, the cell with the most cases, approximately 50% of the respondents or one quarter of the 200% represented in Table 13, is the communion category.

Discriminant function analysis. An examination of the results of the discriminant function analyses, which are presented in Tables 14 and 15, immediately indicates that the discriminant functions of the seven ES categories are much less efficient than the functions of the three "ideal" categories of Study 2. Of course this is attributable to the fact that four of the seven categories are combinations of engagement styles. Given this condition, the three functions that are significant and important in each of the analyses are modestly effective in separating and classifying the groups. In each of the analyses the three significant functions account for at least 82% of the common variance shared by the groups that is explained by the functions,

Table 13

Frequencies of Respondent Engagement Style Classification

Males[a]						
Agent	Communicant	Patient	Agent Communicant	Agent Patient	Patient Communicant	Agent Patient Communicant
19 (7.9%)	59 (24.5%)	3 (1.2%)	36 (14.9%)	4 (1.7%)	26 (10.8%)	33 (13.7%)
Females[b]						
Agent	Communicant	Patient	Agent Communicant	Agent Patient	Patient Communicant	Agent Patient Communicant
10 (5.4%)	46 (25%)	4 (2.2%)	30 (16.3%)	4 (2.2%)	21 (11.4%)	22 (12%)

Note. Percents in parentheses indicate percent of total number of respondents of indicated sex in classification. Percents total 100 for males and females.

[a]Number of males unclassified = 61 (25.3%). N = 241.

[b]Number of females unclassified = 47 (25.5%). N = 184.

Table 14

Discriminant Analysis of Trait Descriptiveness and Importance for Males in Seven Engagement Style Classifications

Self-Descriptive Data

Groups	Functions	R_c^2	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	2	3
MAD	1	.41	.213	252.0[a]	78		.01	-1.22	-1.13
MCD	2	.38	.362	165.9[a]	60	63.3	-.81	-.07	.41
MPD	3	.26	.585	87.4[a]	44		-1.77	.55	-1.64
MACD							.58	-.76	.47
MAPD							-.15	.13	-1.39
MCPD							-.47	1.22	-.22
MACPD							1.29	.73	-.08

Self-Importance Data

Groups	Functions	R_c^2	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	2	3
MAI	1	.53	.170	291.7[a]	84		.80	-.34	1.42
MCI	2	.44	.364	166.2[2]	65	64.4	-.97	-.70	-.17
MPI	3	.27	.650	70.8[b]	48		-.42	.28	-.05
MACI							1.38	-.67	-.41
MAPI							.53	.81	1.58
MCPI							-1.24	1.08	.16
MACPI							.76	1.34	-.42

Note. R_c^2 = squared canonical correlation.
[a] $p < .001$.
[b] $p < .02$.

Table 15

Discriminant Analysis of Trait Descriptiveness and Importance for Females in Seven Engagement Style Classifications

Self-Descriptive Data

Groups	Functions	R_c^2	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	2	3
FAD							-.17	-1.60	1.54
	1	.52	.099	209.7[a]	84				
FCD							.19	-.48	-.67
	2	.49	.207	142.7[a]	65	65.7			
FPD							-3.70	-1.84	-.25
	3	.40	.400	82.9[a]	48				
FACD							1.36	.13	.29
FAPD							-1.92	-.15	2.06
FCPD							-1.62	.80	-.60
FACPD							-.08	1.58	.50

Self-Importance Data

Groups	Functions	R_c^2	Wilk's Lambda	χ^2	df	Percent Correct Classification	Centroids 1	2	3
MAI							-.06	1.34	1.56
	1	.50	.149	178.3[a]	72				
FCI							1.02	-.36	-.03
	2	.38	.300	112.4[a]	55	56.2			
FPI							-.77	-.75	1.11
	3	.27	.490	66.7[b]	40				
FACI							-.14	1.04	-.68
FAPI							-1.67	-.99	.55
FCPI							-.48	-.93	.10
FACPI							-1.71	-.30	-.20

Note. R_c^2 = squared canonical correlation.

[a] $p \leq .001$.

[b] $p = .005$.

and the low initial lambdas indicate that the variables contain a large amount of discriminating power.

The males' descriptive data were discriminating primarily by an Agent function. The function is defined by daring, persistent, and vigorous which have standardized coefficients of .55, .34, and .33, respectively. It is interesting to note that the group centroids indicate that agent, agent-communicant and agent-communicant-patient have positive locations in the geometric space defined by the Function 1 and the other four ES have negative locations on the function. It is also worth noting that the patient ES is located at the farthermost position in the negative direction of any of the ESs.

Function 2 of the males' descriptive data is a Patient function defined by agreeable, .43; obliging, .41; and humble, .30; and agent is located on this function as the farthermost ES in the negative direction. Finally, Communion defined Function 3 of this data set with attentive, .62 and logical, .57, contributing the most to the function, and the patient ES is located at the farthermost negative position on this function.

Males' importance data were discriminated by three functions almost identical to those discriminating the descriptive data. The only differences in the sets of functions consisted of the addition of helpful to the Communion function and the fact that the communion traits defining the third function were negative in sign for the importance data. An interesting difference also exists in the centroid locations for the Agency function. Both patient and communicant are located opposite to agent, and communicant-patient is the farthermost ES in the negative direction on this function.

The female data yielded discriminant functions that were neither as clearcut nor as consistent as the males'. Function 1 of the women's descriptive data is a Not-Patient function. In these data the females set agent and communicant in opposition to the patient ES, and not being patient defines Function 1. The traits that contribute most strongly to it are obliging, -.75, humble, -.67, persistent, .46, and logical, .45. The centroid locations also help to shed light on the meaning of the function: The patience ES is the farthermost in the negative direction of the function and agent-communicant is the farthermost in the positive direction. It is also interesting that communicant is located farther in a positive direction than agent. Certainly the women do not see communicant and patient, as presently measured, as similar ESs. Function 2 of these data is a Communicant function defined by concerned, .48, and logical, .43. Function 3 is an Agent function defined by daring, .55, and initiating, .50.

Function 1 of the females' importance data is defined by one agent trait, daring, and one patient trait, obliging. Both traits have relatively strong and negative coefficients, -.58 and -.53, respectively, and all groups, with the one exception of communicant, have negative centroid locations. It therefore seems that the women are defining this function as a Not-Agent-Patient or Communicant function. It seems that when rating traits for importance to their self-schemas, college women set communion in opposition to all other ESs. That is, when thinking about what is important to their self-schemas, the females' most powerful indication is that all other engagement styles exist as foils to communion.

Function 2 of the females' importance data is defined by humble, -.63, initiating, .48, and daring, .46, and is a clear Agent function. Function 3, the weakest of the females' functions, also is a Not-Communion function and seems to set communicant as a foil to all other ESs. It is defined by logical, -.61, and perceptive, -.54, and no other traits contribute importantly to the function.

Factor analyses. As the final means of examining the basic properties of the MESS and the FESS, orthogonal factor analyses were calculated separately for the descriptiveness and importance data. The results of the males' data will be discussed first and are presented in Table 16. Each set of the males' data forms two factors which account for a moderate amount of the total variance present in the variables (32.0% and 33.8%). Factor 1 of the self-descriptive data is an Agent factor with four of the five agent traits loading on the factor. Definite is the only agent trait to not contribute to it. Factor 2 is composed of two communion traits and three patient traits: helpful, concerned, agreeable, obliging, and accommodating. All express concern with others and the factor can logically be named Interpersonal Concern.

Factor 1 of the self-importance data is an interesting combination of two agent traits, two communion traits, and one patient trait. Definite, persistent, perceptive, logical, and cautious load strongly on this factor that accounts for 70.9% of the common factor variance. Persistent and definite are traits that could easily describe Bakan's (1966) agent who is interested in self-expansion and mastery. However, if this were the case it would have to be an agent tempered with insight, thinking and prudence. Definite and persistent tempered with insight, thinking and prudence seem to be ideal traits for those who

Table 16

ESS Trait Descriptiveness and Importance for Males, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data		
	Factor 1	Factor 2		Factor 1	Factor 2	
Eigenvalue	3.269	1.444		4.062	.997	
% of Common Variance Accounted For	62.3	27.3		70.9	17.4	
% of Total Variance Accounted For	22	10		27.1	6.7	
Doer	(.35) .58		(.36)			
Definite	(.42)		(.42)	.52		
Vigorous	(.45) .62		(.38)			
Daring	(.30) .54		(.34)			
Persistent	(.46) .56		(.43)	.51		
Perceptive	(.35)		(.37)	.50		
Logical	(.30)		(.43)	.60		
Attentive	(.30)		(.27)			
Helpful	(.39)	.48	(.46)		.51	
Concerned	(.34)	.50	(.40)		.46	
Agreeable	(.39)	.57	(.29)		.45	
Obliging	(.33)	.56	(.53)		.67	
Humble	(.17)		(.20)			
Cautious	(.32)		(.25)	.47		
Accommodating	(.47)	.61	(.60)		.74	

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 270.

would advance in learning, i.e., university students. This function is therefore labelled Scholarly Competence. Factor 2 of the importance data is identical to Factor 2 of the descriptive data, and is labelled Interpersonal Concern.

Each of the subscales of the male ESS was also factor analyzed and each formed one factor consisting of the entire subscale. The eigenvalues ranged from a low 1.399 (patient subscale of the descriptive data) which accounted for 28.0% of the total variance in the variables to a maximum of 1.765 (agent subscale of the descriptive data) which accounted for 35.3% of the total variance in the variables.

The female data, consistent with the males', yielded two factors from each set of data. As can be seen in Table 17, Factor 1 of the females' descriptiveness data is an Agent factor with all female agent traits except definite loading on it. Factor 2 of the females' descriptiveness data also is comparable to the males' data. It is an Interpersonal Concern factor with sensitive replacing accommodating and helpful loading more strongly on the females' factor than on the males' (.71 and .48, respectively).

Factor 1 of the females' self-importance data accounts for 68.1% of the factor variance and is composed of three variables, one agent and two communicant in nature. This factor describes a person who is insightfully and actively helpful. This sounds very much like the definition of ES communion given earlier in Chapter II where communion was described as active and constructively thoughtful. The factor is therefore labelled Active Communion. The Interpersonal Concern factor comprised of helpful, concerned, agreeable and obliging is Factor 2 of the females' importance data.

Table 17

ESS Trait Descriptiveness and Importance for Females, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data		
	Factor 1	Factor 2		Factor 1	Factor 2	
Eigenvalue	3.027	1.459		3.978	.865	
% of Common Variance Accounted For	51.7	24.9		68.1	14.8	
% of Total Variance Accounted For	20.2	9.7		26.1	6.7	
Doer	(.67) .77			(.57) .63		
Definite	(.47)			(.43)		
Initiating	(.55) .64			(.36)		
Daring	(.35) .57			(.20)		
Persistent	(.36) .49			(.40)		
Perceptive	(.30)			(.34) .45		
Logical	(.31)			(.45)		
Attentive	(.38)			(.41)		
Helpful	(.58)	.71		(.67) .50	.65	
Concerned	(.40)	.53		(.38)	.46	
Agreeable	(.27)	.50		(.52)	.67	
Obliging	(.25)	.48		(.33)	.47	
Humble	(.13)			(.22)		
Cautious	(.41)			(.30)		
Sensitive	(.43)	.48		(.27)		

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 267.

The subscales of the female ESS were also separately submitted to orthogonal factor analysis as a measure of the unitary nature of each of the constructs. All subscales formed single factors composed of all items with one exception, the patient subscale of the descriptiveness data formed a minor second factor singularly defined by the trait cautious. This factor's eigenvalue is .441 and accounts for 8.8% of the total variance in the variables. Factor 1 of the patient subscale has an eigenvalue of 1.033 and accounts for 20.7% of the total variance in the five variables. Of the remaining factors formed of the unitary subscales, that with the lowest eigenvalue, 1.344, belongs to the communion subscale of the descriptiveness data and accounts for 26.9% of the total variance in the variables. The subscale with the largest eigenvalue, 1.900, is associated with the agent subscale of the descriptiveness data and accounts for 38.0% of the total variance in the variables.

The last properties of the Engagement Style Scale that were examined centered around issues already discussed concerning sex-role implications for engagement style. Because of the similarities of some of the theoretical issues surrounding the Bakan and Block concepts of agency and communion and ES, sex differences in engagement style and possible relationships between ES and Block's (1973) agency-communion sex-role concept were directly examined as the last aspect of Study 3.

Sex-Role Implications of Engagement Style

Sex Differences in Engagement Style

Males' and females' ES classifications, correlational data, discriminant function analyses and factor analyses of the ESS have been

reported but not yet summarized from the perspective of sex differences. Before reporting inferential statistics which directly examine the ESS for differences based on sex of the respondent, it is appropriate to briefly summarize the already presented data from the perspective of sex differences.

An examination of the males' and females' internal consistencies and inter-subscale correlations reveal no important differences. The respondents' discriminant functions, however, do show interesting comparisons between the sexes. Males' Function 1 for both sets of data are formed from agency traits, but females' Function 1 of the descriptive data is formed by patient traits with negative coefficients and Function 1 of the importance data is formed by patient and agent traits, both with negative coefficients.

The males' and females' strongest factors resulting from the factor analyses of the descriptive data are Agency factors and the respondents' second factors are composed of communion and patient traits with the theme of Interpersonal Concern. Factor 2 of the males' and females' importance data are the same Interpersonal Concern factor. The only sex difference in the factor analysis data centers on Factor 1 of the importance data. The males' Factor 1 is a combination of agent, communicant and patient traits and has been labelled Scholarly Competence. The females' Factor 1 is an Active Communion factor composed of doer, perceptive, and helpful.

The first inferential statistic calculated to directly examine between-sex differences in engagement style was a Chi-square computed on the results of the males' and females' ES classifications which was

reported previously and indicated no difference between the sexes in ES classification.

As a further means of examining sex differences, average item means and standard deviations were computed for the male ESS, the female ESS and their subscales. The subscale means were compared within- and between-sex, and scale means were compared across sex using the *t* statistic. Comparisons were made for the descriptive data and the importance data.

As Table 18 indicates, males rate themselves significantly more communicant than agent or patient and more agent than patient. (A negative value of *t* indicates that females scored higher than males in the relevant between-sex comparison.) Females rate themselves significantly more communicant than agent or patient and more patient than the males. Males feel that communion is more important to their self-schemas than agency or patience and agency is more important than patience. Females feel that communion is more important to their own descriptions than agency or patience and they value communion traits more than males do. There were no differences in males' and females' self-descriptive and importance ESS ratings.

Properties of Block's Agent-Communion Sex-Role Concept as Measured by 22 Traits

Although the function of this paper is to examine the construction and properties of a measure of engagement style, it is appropriate to inspect the properties of Block's agency and communion traits before examining any implied relationship between ES and the Bakan/Block concept.

It is true that Block compiled the traits as a means of exemplifying and supporting her sex-role concept and at no time did she suggest that her list of traits be used as a measure of agency, communion or the

Table 18

Within- and Between-Sex Comparisons of Engagement Style Self-Ratings

Self-Descriptive Data

	Male			Female			
Variable	Average Item Mean	Standard Deviation	n	Average Item Mean	Standard Deviation	n	t
ESS	7.82	.86	255	7.92	.89	208	-1.23
Agency	7.72	1.34	259	7.58	1.42	225	1.06
Communion	8.44	1.02	266	8.57	1.08	260	-1.41
Patience	7.27	1.18	266	7.55	1.13	239	-2.69*

Self-Importance Data

	Male			Female			
Variable	Average Item Mean	Standard Deviation	n	Average Item Mean	Standard Deviation	n	t
ESS	7.62	1.10	251	7.78	1.19	199	-1.45
Agency	7.43	1.52	254	7.46	1.51	244	- .23
Communion	8.34	1.19	264	8.67	1.31	260	-3.08*
Patience	7.10	1.37	266	7.31	1.43	230	-1.65

Note. All within-sex, within-data set, subscale comparisons are significantly different at the .001 level with the exception that females' self-descriptive agency and patience average means are equal, as are the females' self-importance ratings on the same subscales.
*$p < .01$.

agency-communion sex-role concept. However, she does state that four psychologists agreed that the 22 traits met the requirements set forth by Bakan (1966) for agentic and communal properties, and her results confirmed that the 22 traits differentiated men and women on their stated, ideal sex-role values. It therefore seems reasonable to assume that the traits can be used to measure a sex-role conceptualization of agency-communication. Before comparing the Bakan/Block sex-role conceptualization and ES, the 22 traits were examined to determine if the male and female respondents of the present study also could be differentiated by the traits and whether the subscales of the agent and communion traits represent unitary or multidimensional concepts.

As the initial steps in examining the Block traits, the coefficient alpha was computed on the entire scale (A-C) and the agent (A) and communicant (C) subscales for the males and females, average item means and standard deviations were computed on the scale and the subscales for males and females, and within- and between-sex differences were examined. The results of these calculations are given in Table 19.

As measured by the coefficient alpha, the males' A-C scale and the A and C subscales have higher internal consistencies than do the females' comparable measures for both descriptive and importance ratings. The agent subscale consistently has the lowest alpha within a data set, but all of the males' measures approach acceptable levels of internal consistency (Nunnally, 1978). Only the females' measures of importance approach these levels.

Also as indicated in Table 19, males and females value communion traits more than agent traits, but females value them more than do the males and rate themselves significantly higher on them than do the males.

Table 19

Internal Consistencies and Within- and Between-Sex Comparisons of 22 Agency-Communion Traits

Self-Descriptive Data

	Male				Female				
Variable	α	Average Item Mean	Standard Deviation	n	α	Average Item Mean	Standard Deviation	n	t
Block A-C Scale	.79	7.92	.82	258	.71	7.81	.77	204	1.39
Block A Subscale	.74	7.69	.93	259	.69	7.36	.97	205	3.60**
Block C Subscale	.76	8.32	1.15	265	.72	8.59	1.07	259	-2.75*

Self-Importance Data

	Male				Female				
Variable	α	Average Item Mean	Standard Deviation	n	α	Average Item Mean	Standard Deviation	n	t
Block A-C Scale	.84	7.69	1.00	255	.79	7.75	.96	217	- .63
Block A Subscale	.80	7.34	1.12	256	.75	7.16	1.13	218	1.74
Block C Subscale	.83	8.31	1.28	264	.76	8.82	1.21	260	-4.71**

Note. All within-sex, within-data set, subscale comparisons are significant at the .001 level.
*$p < .01$.
**$p < .001$.

Yet, both males and females describe themselves as more communal than agentic. Interestingly, the males in this sample, as in Block's samples, rate themselves higher in agency than do the females although males and females equally value agentic traits.

The last analyses conducted for the purpose of examining the properties of Block's traits involved orthogonal factor analyses of her entire list of traits and individual factoring of the agentic traits and the communal traits. All factor analyses were conducted separately for the males and the females. The results of the factoring of the entire list of traits will be presented here, but the results of the separate factor analyses of the agentic and communal traits are listed in Appendix A and will be noted only briefly in this section.

The results of the factoring of the males' descriptiveness and importance data are listed in Tables 20 and 21, respectively. Three factors accounting for 36.2 and 39.8 percent of total variance in the 22 traits are formed by the descriptive and importance data, respectively. Three variables load on the males' most salient descriptive factor: loving, affectionate and vital. Two of these traits involve warm feelings for another and the third involves the attributes invigorating, essential, and virile (Woolf, 1981). The factor has been labelled Vital Love and may refer to the men's self-schema of themselves as affectionate, vigorous lovers.

Factor 2 is an active, competitive factor, defined by active, competitive, assertive and dominating, and has been called Competitive/Assertive. Factor 3 is an interesting combination of three traits: practical, helpful and considerate. The trait helpful is notable here by not being associated with sympathetic, affectionate or sensitive,

Table 20

Agent-Communal Trait Descriptiveness for Males, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3
Eigenvalue		4.536	2.042	1.379
% of Common Variance Accounted For		43.8	19.7	13.3
% of Total Variance Accounted For		20.6	9.3	6.3
Practical	(.35)			.55
Shrewd	(.32)			
Assertive	(.49)		.50	
Dominating	(.55)		.49	
Competitive	(.41)		.62	
Critical	(.33)			
Rational	(.48)			
Reasonable	(.76)			
Ambitious	(.44)			
Self-centered	(.19)			
Independent	(.53)			
Adventurous	(.30)			
Vital	(.41)	.51		
Active	(.56)		.73	
Loving	(.81)	.77		
Affectionate	(.65)	.74		
Sympathetic	(.70)			
Generous	(.38)			
Sensitive	(.44)			
Artistic	(.07)			
Helpful	(.58)			.53
Considerate	(.62)			.49

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported.
N = 270.

Table 21

Agent-Communal Trait Importance for Males,
Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3
Eigenvalue		5.364	2.177	1.206
% of Common Variance Accounted For		52.7	21.4	11.8
% of Total Variance Accounted For		24.4	9.9	5.5
Practical	(.42)		.57	
Shrewd	(.24)			
Assertive	(.56)			
Dominating	(.54)			
Competitive	(.42)			.58
Critical	(.36)			
Rational	(.48)		.63	
Reasonable	(.46)		.60	
Ambitious	(.44)			
Self-centered	(.22)			
Independent	(.26)			
Adventurous	(.25)			
Vital	(.59)			
Active	(.71)			.82
Loving	(.72)	.80		
Affectionate	(.65)	.74		
Sympathetic	(.55)	.70		
Generous	(.41)			
Sensitive	(.59)	.76		
Artistic	(.13)			
Helpful	(.56)	.52	.50	
Considerate	(.65)	.57	.49	

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported.
N = 270.

traits which might logically be associated with it. In this factor, the trait helpful also is not associated with generous, but it is related to considerate, and practical has the highest loading on the factor. It therefore has been labelled Pragmatic Helpfulness, helpfulness that is considerate but primarily based in usefulness or practicality.

The primary factor of the men's importance data involves loving as did Factor 1 of the descriptive data. However, this love seems to be of a different type than the men were describing in the first set. Vital does not load on this factor but sympathetic and sensitive do load on it, as do helpful and concerned. This importance factor is called Sensitive Love. Factor 2 is similar to the Pragmatic Helpfulness factor of the descriptive data, but has added to it the traits rational and reasonable. These additions do not change the inherent meaning of the factor, and the factor will therefore also be called Pragmatic Helpfulness. Factor 3 is defined by active and competitive and is labelled Competitive.

As Table 22 indicates the females' Factor 1 of the descriptive data is primarily defined by competitive, ambitious and assertive and has been called Competitive/Ambitious. It is interesting that this factor also is defined by the trait independent. This is the only loading of the trait in the factoring of Block's 22 traits, and its loading is relatively low. It seems that, for the respondents, being independent is conceptually disassociated from being rational, adventurous, or self-centered, for example--traits that logically could group with independent. It is also interesting that the females

Table 22

Agent-Communal Trait Descriptiveness for Females, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3
Eigenvalue		3.652	2.674	1.361
% of Common Variance Accounted For		37.7	27.6	14.1
% of Total Variance Accounted For		16.6	12.2	6.2
Practical	(.33)		.56	
Shrewd	(.23)			
Assertive	(.48)	.47		
Dominating	(.42)	.46		
Competitive	(.45)	.65		
Critical	(.19)			
Rational	(.47)		.68	
Reasonable	(.53)		.56	
Ambitious	(.52)	.68		
Self-centered	(.42)			
Independent	(.33)	.46		
Adventurous	(.38)			
Vital	(.37)			
Active	(.49)			
Loving	(.80)			.81
Affectionate	(.70)			.80
Sympathetic	(.59)			
Generous	(.37)			
Sensitive	(.49)			
Artistic	(.16)			
Helpful	(.38)			
Considerate	(.59)			

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported.
N = 267.

feel that one is independent if one is competitive and ambitious. The males do not make this association.

Factor 2 has three variables load on it, practical, rational, and reasonable, and it has been labelled Rational. Factor 3 is defined only by loving and affection and has been called Loving.

The females' importance data has been summarized in Table 23, and interestingly, factors into three orthogonal factors different from the groupings of the descriptive data. Sympathetic loads the most strongly on Factor 1, and six other traits involving love or care for others also contribute to it. This factor is similar to Factor 1 of the males importance data and has been given the same label, Sensitive Love. The most interesting item on the females' Sensitive Love factor is the trait reasonable. Females imply by this relationship that being reasonable is associated with being sympathetic, sensitive and loving. The males do not make this association.

Factor 2 is defined by rational, practical, reasonable, assertive, and ambitious and has been labelled Rational/Ambitious. Factor 3 is an interesting mixture of three traits. Active, adventurous, and artistic contribute to the factor, and it has been called Artistic Adventure. This is the only instance in which the trait artistic loads on a factor, and it loads here with two agentic traits, active and adventurous. A review of the communalities of artistic in all factor analyses supports the implication present in Factor 3 that artistic is not closely related with the other communal traits in Block's list.

Block's agentic and communal traits were also factor analyzed as separate subscales as a further means of delineating the properties

Table 23

Agent-Communal Trait Importance for Females,
Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3
Eigenvalue		4.934	2.207	1.284
% of Common Variance Accounted For		47.0	21.0	12.2
% of Total Variance Accounted For		22.4	9.4	5.8
Practical	(.47)		.63	
Shrewd	(.22)			
Assertive	(.69)		.46	
Dominating	(.50)			
Competitive	(.32)			
Critical	(.42)			
Rational	(.65)		.74	
Reasonable	(.54)	.49	.49	
Ambitious	(.48)		.55	
Self-centered	(.40)			
Independent	(.22)			
Adventurous	(.36)			.55
Vital	(.44)			
Active	(.53)			.63
Loving	(.89)	.48		
Affectionate	(.65)	.53		
Sympathetic	(.64)	.77		
Generous	(.38)	.50		
Sensitive	(.47)	.63		
Artistic	(.22)			.45
Helpful	(.54)	.65		
Considerate	(.51)	.67		

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported.
N = 267.

inherent in them. The results of these analyses are listed in Appendices A-1 to A-4. Few differences from the factors already discussed will be found in these results. The most fundamental change found in the separate factoring of the agentic and communal traits involves the finer factoring of Block's communal traits. More specifically, the traits of loving and affectionate form their own factor and leave helpful, considerate, sympathetic, and generous to define a second factor. This second factor is very similar to the ESS factor of Interpersonal Concern, and could easily be so named.

One other factor formed from the separate analyses of the agentic and communal traits differs from a similar factor already discussed. The females' agentic factor defined by the trait adventure obviously does not include the variable artistic when the communal traits are not included in the analysis. Active is the only other trait to load with adventurous on the women's factor. Other changes in the factors resulting from the separate analyses are slight and do not change the basic characters of the factors discussed here in detail.

Summary of the results of self-ratings on Block's 22 agent-communal traits. Block's traits formed a self-rating scale with reasonably good internal consistency when utilized by the respondents with the exception of the females' ratings of self-descriptiveness of Block's 14 agentic traits and the females' ratings of the entire list of 22 traits.

Both males and females felt they were more communal than agentic and valued communal traits more than agentic traits. However, males rated themselves as more agentic than the females did. Females rated themselves as more communal than the males and valued communal traits more than the males did.

The males' data formed six factors; the descriptive data yielded three of these--Vital Love, Competitive/Assertive and Pragmatic Helpfulness--and the importance data also formed three factors--Sensitive Love, Pragmatic Helpfulness and Competitive.

The females' data yielded six factors; the descriptive data accounted for three of these--Competitive/Ambitious, Rational and Loving--and the importance data also accounted for three factors--Sensitive Love, Rational/Ambitious and Artistic Adventure.

Relationships Between the ESS and Block's 22 Agent-Communion Traits

As the first step in examining the associations between Block's traits and the traits of the ESS, correlations between the scales and the subscales were computed on the males' and females' descriptive and importance data. These correlations are reported in the matrices in Table 24. It is important to note that the communion subscale of the ESS and the communion traits of Block share the trait helpful. The patient trait, sensitive, of the females' ESS also overlaps with the Block's list of communion traits. As detailed in Chapter IV, partial correlations were computed for these subscales controlling for the effects of the matched traits. The partial correlations and simple correlations are listed in Table 24 where appropriate.

Utilizing partial correlations where needed, certain patterns in the inter-scale and inter-subscale associations are worth noting: (a) ESS agency scores correlate strongly with Block agency scores (range = .72 to .78); (b) ESS communion scores correlate more strongly with Block's agency scores (range = .56 to .60) than they do with the communion scores of the Block scale (range = .19 to .30); and (c) ESS

Table 24

Correlations of Engagement Style and Block's Agency-Communion Sex-Role Traits Rated for Self-Descriptiveness and Self-Importance by Males and Females

Males

Self-Descriptive Data					Self-Importance Data				
	A	C	P	ESS		A	C	P	ESS
Block A Subscale	.75	.57	.12	.65	Block A Subscale	.72	.59	.41	.71
Block C Subscale	.32	.28[a] (.60)	.47	.35[a] (.60)	Block C Subscale	.41	.30[a] (.63)	.59	.42[a] (.65)
Block A-C Scale	.71	.54[a] (.72)	.33	.66[a] (.78)	Block A-C Scale	.71	.55[a] (.72)	.57	.72[a] (.81)

Females

Self-Descriptive Data					Self-Importance Data				
	A	C	P	ESS		A	C	P	ESS
Block A Subscale	.78	.58	.10	.65	Block A Subscale	.73	.60	.42	.71
Block C Subscale	.19	.19[a] (.49)	.40[a] (.64)	.30[a] (.53)	Block C Subscale	.42	.28[a] (63)	.44[a] (.36)	.32[a] (.68)
Block A-C Scale	.74	.54[a] (.67)	.30[a] (.40)	.74[a] (.81)	Block A-C Scale	.73	.60[a] (.72)	.46[a] (.60)	.73[a] (.83)

Note. All available data were used. Original male N = 270; original female N = 267. Correlations .19 and above are significant at the .001 level.

[a]Correlation reported as a partial correlation with relationship of matching items removed. Simple correlation is listed in parentheses directly below the partial correlation.

patient scores correlate moderately with Block's communion scores (range = .40 to .59) and more strongly than do the ESS communion scores.

Because the correlations between the scales formed by the engagement style traits and the Block agency-communion traits were strong, implying many traits were measuring similar concepts, it was decided to join the scales and compute orthogonal factor analyses on the newly created scale in an attempt to examine the inter-relationships of the items. Again, male and female data and ratings of descriptiveness and importance were analyzed independently.

As might be expected given the redundancy of some of the factors both within and between the ESS and Block's total list of traits, most of the factors formed from the data of the combined scales closely resemble factors already discussed. The factors formed from the males' descriptiveness data, presented in Table 25 are each similar to factors already discussed. The four factors have been labelled as follows: Factor 1-Assertive Doer, Factor 2-Interpersonal Concern, Factor 3-Rational, and Factor 4-Loving. The one interesting difference between these factors and similar ones previously discussed in detail centers on the ESS agent traits and the assertive, ambitious, competitive traits. The factor formed by the combined data is defined by assertive, ambitious, doer, definite, vigorous, persistent, dominating, and active, omitting the trait, competitive, and joining the ESS agent traits with the Block assertive traits. The other three factors formed by these data are essentially the same factors previously discussed.

As reported in Table 26, the first three factors formed by the males' importance ratings of the combined sclaes have been labelled

Table 25

ESS and Agent-Communal Trait Descriptiveness for Males, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue		7.365	3.255	1.912	1.105
% of Common Variance Accounted For		42.0	18.6	10.9	6.3
% of Total Variance Accounted For		20.5	9.0	5.3	3.1
Doer	(.41)	.58			
Definite	(.47)	.53			
Vigorous	(.51)	.56			
Daring	(.52)				
Persistent	(.56)	.67			
Perceptive	(.49)			.45	
Logical	(.52)			.66	
Attentive	(.37)				
Helpful	(.57)		.56		
Concerned	(.46)		.60		
Agreeable	(.43)				
Obliging	(.49)				
Humble	(.17)				
Cautious	(.40)				
Accommodating	(.51)				
Practical	(.41)			.45	
Shrewd	(.56)				
Assertive	(.54)	.65			
Dominating	(.52)	.62			
Competitive	(.57)				
Critical	(.26)			.75	
Rational	(.62)			.49	
Reasonable	(.57)				
Ambitious	(.62)	.72			
Self-centered	(.22)				
Independent	(.38)				
Adventurous	(.52)				
Vital	(.50)				
Active	(.54)	.55			
Loving	(.87)				.79
Affectionate	(.64)				.70
Sympathetic	(.68)		.77		
Generous	(.41)		.50		
Sensitive	(.44)		.45		
Artistic	(.15)				
Considerate	(.46)		.63		

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported.
N = 270.

Table 26

ESS and Agent-Communal Trait Importance for Males, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue		8.919	2.888	1.838	1.189
% of Common Variance Accounted For		48.4	15.7	10.0	6.5
% of Total Variance Accounted For		24.8	8.0	5.1	3.3
Doer	(.41)		.53		
Definite	(.55)		.63		
Vigorous	(.40)				
Daring	(.62)				
Persistent	(.55)		.63		
Perceptive	(.56)				
Logical	(.54)			.63	
Attentive	(.33)				
Helpful	(.57)	.49			
Concerned	(.50)				
Agreeable	(.34)				
Obliging	(.45)				
Humble	(.35)				.55
Cautious	(.55)				
Accommodating	(.59)				.61
Practical	(.57)			.61	
Shrewd	(.23)				
Assertive	(.59)		.67		
Dominating	(.54)				
Competitive	(.58)				
Critical	(.47)				
Rational	(.57)			.65	
Reasonable	(.57)			.59	
Ambitious	(.57)		.66		
Self-centered	(.28)				
Independent	(.29)				
Adventurous	(.57)				
Vital	(.66)		.57		.46
Active	(.62)				
Loving	(.79)	.82			
Affectionate	(.73)	.76			
Sympathetic	(.59)	.67			
Generous	(.45)				.48
Sensitive	(.58)	.75			
Artistic	(.18)				
Considerate	(.68)				

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 270.

Sensitive Love, Assertive Doer and Rational, respectively, and are essentially the same factors as those with like names that have been previously detailed. Factor 4 is an interesting combination of traits that has not been formed in earlier analyses. Four traits load on the factor: humble, accommodating, generous and vital. Two of these are patient traits from the ESS, one is a Block communion trait and the other is a Block agent trait. All traits have positive correlations with this factor, and the trait, vital, also has positive correlations with the factor, Assertive Doer. The traits seem to imply that the person described by this factor is generous, accommodating and humble and also is an active, invigorating, essential doer. The factor therefore has been labelled Agent-Patient.

The factors formed from the females' descriptiveness and importance data also closely resemble factors previously detailed. The results of the factor analyses are reported in Tables 27 and 28 and describe four descriptive factors and three importance factors. The descriptive factors have been called Competitive Doer, Rational, Sensitive Love and Interpersonal Concern. Competitive Doer is very similar to the males' descriptiveness factor of Assertive Doer with the exception that the females' trait competitive also loads strongly on the factor. One other interesting difference between this factor and the males' comparable factor is that the females' factor contains only four items and eight of the males' traits load on Assertive Doer.

The females' importance data form three factors: Interpersonal Concern, Rational and Assertive Doer. Factors 1 and 2 are very similar to factors with the same labels previously detailed. Assertive Doer is defined by doer, initiating, assertive and independent. The trait

Table 27

ESS and Agent-Communal Trait Descriptiveness for Females, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3	Factor 4
Eigenvalue		6.343	3.946	1.841	1.385
% of Common Variance Accounted For		36.8	22.9	10.7	8.0
% of Total Variance Accounted For		18.1	11.3	5.3	4.0
Doer	(.65)	.67			
Definite	(.45)		.53		
Initiating	(.57)				
Daring	(.61)				
Persistent	(.52)	.62			
Perceptive	(.37)				
Logical	(.42)		.60		
Attentive	(.39)				
Helpful	(.49)				.46
Concerned	(.47)				
Agreeable	(.39)				
Obliging	(.55)				.72
Humble	(.27)				
Cautious	(.51)				
Sensitive	(.58)				
Practical	(.43)		.59		
Shrewd	(.22)				
Assertive	(.57)	.50			
Dominating	(.53)				
Competitive	(.43)	.63			
Critical	(.22)				
Rational	(.50)		.65		
Reasonable	(.50)		.47		
Ambitious	(.58)				
Self-centered	(.41)				
Independent	(.32)				
Adventurous	(.60)				
Vital	(.46)				
Active	(.42)				
Loving	(.83)			.89	
Affectionate	(.65)			.79	
Sympathetic	(.57)			.52	
Generous	(.47)				
Artistic	(.33)				
Considerate	(.64)				

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of that variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 267.

Table 28

ESS and Agent-Communal Trait Importance for Females, Orthogonal Factor Solution

		Factor 1	Factor 2	Factor 3
Eigenvalue		8.556	2.854	1.482
% of Common Variance Accounted For		48.0	16.0	8.3
% of Total Variance Accounted For		24.5	8.2	4.2
Doer	(.54)			.52
Definite	(.43)			
Initiating	(.50)			.59
Daring	(.53)			
Persistent	(.47)			
Perceptive	(.45)			
Logical	(.57)		.67	
Attentive	(.47)			
Helpful	(.64)	.71		
Concerned	(.44)	.58		
Agreeable	(.43)			
Obliging	(.65)			
Humble	(.18)			
Cautious	(.38)		.46	
Sensitive	(.42)	.48		
Practical	(.58)			
Shrewd	(.22)			
Assertive	(.71)			.54
Dominating	(.45)			
Competitive	(.37)			
Critical	(.46)			
Rational	(.61)			
Reasonable	(.57)	.48	.49	
Ambitious	(.62)			
Self-centered	(.41)			
Independent	(.30)			.48
Adventurous	(.61)			
Vital	(.46)			
Active	(.49)			
Loving	(.87)			
Affectionate	(.69)			
Sympathetic	(.65)	.66		
Generous	(.44)	.57		
Artistic	(.22)			
Considerate	(.56)	.70		

Note. The communality of each variable is given in parentheses. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 267.

competitive is notable by its absence and the trait independent by its presence. It seems that when rating traits for importance to their self-schemas, females do not associate being competitive with assertiveness but do feel that being assertive and initiating is associated with independence. The women also made the assertive-independent association on Factor 1 of the descriptiveness data of the Block traits whereon competitive also loaded. The males never associated independence with assertiveness, doing or competing.

In summary, the ESS agent traits seem to be strongly related to the Block agent traits of assertive, dominating, ambitious, competitive and active, and the females also associated independence with these traits. The ESS communion traits seem to be composed of two distinct concepts. One of these is the interpersonal concern concept and is related to three ESS patient traits and a number of Block communion traits. The other concept has been labelled Rational and is associated with the Block agent traits of rational, practical and reasonable. Reasonable is also associated with the women's Interpersonal Concern factor.

The patient trait humble loads only on the male factor, Agent-Patient and generally has low communalities, i.e., all are less than .40. Sensitive, accommodating and obliging are associated with the Interpersonal Concern factor. The patient trait, agreeable, also contributed to the Interpersonal Concern factor of the ESS factors, but did not load on the comparable factor of the combined scales. Cautious seems to be interpreted as the notion of prudence and loads with items of the Rational factor. (It may also be recalled that cautious contributed to the male ESS factor, Scholarly Competence.)

These associations reported from the factor analyses are supported by the simple and partial correlations of the two scales and their subscales. The agent subscales are strongly correlated, the patient subscale moderately correlates with the Block communion subscale, and the ESS communion subscale correlates with Block's communion subscale and more strongly with the Block agent subscale.

CHAPTER VI

DISCUSSION

Several notable findings emerged from the construction of the new measure of ES and the examinations of respondents' ratings on the scale. One of the most interesting of these findings was the emergence of clear portraits of the three engagement styles based on the rating of more than ninety trait adjectives for descriptiveness of each of the ESs. It also was apparent that the constructs of agency, communion and patience could be reliably measured using a Likert-type scale and that the scale could be used to differentiate the three ESs. However, the natures of the subscales and the structure of the scales varied significantly depending on the subject of the rating, i.e., an "ideal" style of engagement or the respondents' own self-schema. Inspection of ES sex differences tended to support previous findings, but examination of the multivariate analyses revealed implications of ES for male and female sex roles that are consistent with some current interpretations of those roles (Gilligan, 1982). Analyses of the females' self-schema data of Block's (1973) 22 agent/communion traits supported sex-role predictions; however, the males' data only partially supported sex-role predictions. Factor analyses of the Block data displayed similarities to factors previously found in the BSRI (Pedhazur & Tetenbaum, 1979). Similarities and differences between the Engagement Style Scale and Block's list of traits clarified past confusions about the relationship between the two constructs upon which the measures were based. In

this chapter, the nature of these findings, some possible interpretations, and directions for future research are considered.

The Nature of Agency, Communion and Patience

Unambiguous portraits of agency, communion and patience emerged from the subject-supplied descriptive traits and the respondents' descriptive ratings of more than ninety experimenter-supplied trait adjectives. The respondents' evaluations of the three ESs, implied through the averaged valence ratings of the traits which were highly descriptive of the styles, also were consistent and unambiguous and intuitively seemed to reflect the nature of the population from which the sample was drawn.

Communion and Interaction

McKinney (1980, 1981) describes the agent as an actor, a doer or one who acts on the environment and the patient as a reactor or one who is done to. Renaming the third engagement style and adopting the terminology as outlined in this paper, he (1981) defines interaction as a composite of agency and patience, i.e., a person who acts and reacts, one who does and is done to, one who acts and is acted upon. However, the exact nature of this "composite" is never specified. That is, whether this "composite" is additive or multiplicative in nature is never stated, although the implication is that interaction is, as I have defined it and McKinney (1980) previously defined communion, an additive effect, merely the sum of perceived agency and patience.

The picture of ES emerging from the present study supports McKinney's (1981) interpretations of the agent and the patient. The agent was perceived by the respondents as active, assertive, dominating

and independent; and the patient as passive, agreeable, conformist and a follower. However, it is in the nature of the third ES that the original formulation falls short. If the third ES was perceived as merely an additive composite of agency and patience, it should be described as active and passive, for example, or assertive and agreeable, i.e., a sum of the agent and patient styles with no new effect resulting from the composite of the two. Yet, the picture of the third ES emerging from the ratings of Study 1 and Study 2 supports the notion of a multiplicative or interaction effect caused by a person's being both actor and reactor, by a person affecting the world and being affected by it. Certainly the communicant was perceived by the respondents to share some traits with the agent and the patient: both agent and communicant are active, outgoing, able doers, and the patient and the communicant are understanding, considerate, easygoing and open-minded. However, only the communicant is caring, helpful, thorough, rational, logical, reasonable and perceptive. These traits, descriptive of only the communicant, are exactly the traits that reflect the "decentered" style of engagement that I have defined and labelled "communion." Certainly the third ES was perceived by respondents, not as interaction, but as communion, an ES that is active, able, constructive and caring, i.e., a multiplicative effect of being an agent and patient, as detailed earlier in this paper. In the following section of this chapter, I will re-examine these findings from the perspective of the question of the perceived structure of ES, but for now, I would like to examine the respondents' evaluations of the three ESs and the results of the discriminant function analyses for additional implications about the perceived nature of agency, communion and patience.

Evaluation of Agency, Communion and Patience

The average valence ratings of the communicant were clearly the most positive, the agent was the second most attractive style and the patient was least popular of the three styles. Although the final average valence ratings were all positive, i.e., all above 7.5 on an 11-point scale, it is also true that the communicant rating was higher than the other ratings. It seems perfectly reasonable that college students would most admire an ES wherein the person was active, able, assertive, understanding, caring, thorough, rational and perceptive. It makes no adaptive sense for a college student to admire passivity; and the agent had negative qualities making him or her unattractive, e.g., forceful, dominating, self-centered and egostistical.

The classification of the respondents of Study 3 resulted in the filling of all ES categories, except aschematics. This finding implies relevance of the ES construct for the respondents. However, the agent and patient classifications had the fewest members, and the patient cells had even fewer members than the agent cells.

Intuitively, it seems that university students need the qualities of the communicant and some of those of the agent, but surely do not need those of the patient, unless they are tempered with agent and/or communicant qualities. Certainly, the predominant ES of university students might be communion.

However, the high proportion of communicants may be explained best, not as a true representation of the population, but as an effect of social desirability. That is, although the traits are positive in nature, the communicant traits are rated more positively than the other ES trait adjectives, hence more students may have described themselves

in this engagement style, not because they truly belong there, but because the traits are more socially desirable. There is no way to sort this confounding in the present phase of this study, but the issue will be examined in the final, convergent-discriminant validity study. The issue of the classification of the respondents will also be discussed further in the next section of this chapter, in the context of the perceived structure of ES.

Discrimination of Agency, Communion and Patience

The results of the discriminant function analyses of Study 2 and Study 3 strongly indicate that agency, communion and patience can be measured using a Likert-type scale so that a person describing him or herself as having a specific ES can be discriminated from someone described as having a different ES. Of course this also implied that agency, communion, and patience are perceived as distinct ways of engaging the environment, and that persons can be differentiated reasonably accurately on the basis of group membership defined by replies to the Engagement Style Scale. Fifteen of the seventeen ESS traits contributed to the group discriminations, indicating the unique contributions of the fifteen traits. Only perceptive, a communicant trait, and sensitive, a female patient trait, did not contribute to differentiation of the ES groups.

Evidence on the Perceived Structure of Engagement Style

Two findings already discussed in this chapter, the descriptions of agency, communion and patience and the ES classifications of the respondents, and four findings not yet discussed, the functions and factors formed from the ESS data, the ESS subscale correlations, and

the internal reliabilities of the ESS and its subscales, will be discussed here from the perspectives of two theoretical issues: (a) the perceived structure of ES, i.e., the dependency of the engagement styles, and (b) the dimensionality of the engagement styles of agency, communion, and patience.

Dependence of Agency, Communion and Patience

As discussed, the description of communion includes traits that describe the agent, traits that describe only the communicant, and traits that describe the patient. These findings can easily be taken as support for the construct of ES as originally defined, with, of course, the exception of the definition of the third ES, the ES midway between agency and patience. These findings imply that ES is a continuum, anchored by agency and patience, with the midpoint defined by the construct of communion.

The results of the ES classification of the respondents, however, imply that the engagement styles are independent. By definition, those respondents who were classified as belonging to any of the four styles that are combinations of at least two ESs rated themselves high on at least two of the three styles of engagement. This perception contradicts the notion of ES ordered as a bipolar continuum where, for example, more patience implies less agency and it would be impossible for a person to be rated highly agent and highly patient.

There are two possible explanations for the contradiction inherent in these two sets of data. One explanation centers around the possibility of respondents giving socially desirable replies that might or might not reflect their true self-schema. As discussed previously, this issue will be examined in the convergent-discriminant validity study.

The other possible explanation centers around the fact that the traits describing the three ESs were obtained from the respondents' ratings of the "ideal" ES, and the classifications of the respondents' ESs were based on the respondents' self-ratings. Other analyses also showed marked differences depending on the subject of the respondents' ratings. An examination of the ES subscale correlation matrices reveals marked differences between the subscale correlations based on the ratings of the "ideal" ES and those based on the respondents' ratings of self-descriptiveness. These differences are reflected also in the factors formed from the factor analyses and the internal reliabilities of the subscales and scales, but all discriminant function analyses tended to support the notion of independent ES.

With the exception of the discriminant function analyses, the data obtained as a result of the respondents' ratings of the ideal or pure ES depicted in the experimenter-supplied descriptions supported the original ES formulation that ES is ordered on a bipolar continuum. The correlation matrices of the ESS subscales show strong, negative correlations between agency and patience, and communion is unrelated to agency and moderately and positively related to patience. These relationships also are reflected in the high internal consistencies of each of the subscales and the low internal consistencies of the total scales.

In contrast, the discriminant function data and the data obtained as a result of the respondents' self-ratings refute the concept of a bipolar ES dimension. An examination of the group centroids resulting from the discriminant functions formed from the data of Study 2 clearly places agency in opposition to patience, and communion is either centered

between the two opposing ESs or placed on a separate function from the seemingly bipolar styles. However, by the very fact that two significant functions were formed, the notion of one continuous, dependent dimension is refuted. Although no more functions than one less than the number of groups may be formed, the maximum number of groups possible will not be formed and account for a significant amount of group variance unless the nature of the data warrants that this is the situation (Klecka, 1980). The implication in the results of the discriminant function analyses was that agency and patience are opposites and communion is orthogonal to them. However, by the nature of the analysis no more than two functions may be formed. An examination of the discriminant function analyses of the multiple group data from Study 3 indicated that, where posssible, all engagement styles formed independent functions; for example, the males' self-descriptive data formed an Agency function, a Patient function and Communicant function. The results of Study 3 also indicated that, if all males' and females' functions formed from the self-descriptive and self-importance data were considered, all possible antagonisms of the engagement styles were present in the significant functions, i.e., A vs. P, A vs. C, P vs. C, AC vs. P, AP vs. C, and CP vs. A, again refuting the idea that the respondents perceived the engagement style as ordered on a bipolar continuum.

The inter-subscale correlations of the respondents' self-schema ratings reflected either no relationships between styles or positive relationships that were moderate in strength: patience and agency were unrelated; communion and agency, communion and patience were moderately and positively related. Again these relationships were

reflected in the internal consistencies of the subscales and scales. In contrast to the internal consistencies of the pure ES data, the scales of the self-descriptive data had good internal consistencies, and the subscales border this acceptable level.

The results of the factor analyses of the self-descriptive data were somewhat difficult to interpret for the respondents' perceptions of the structure of ES because only two factors clearly reflected a single ES, both Agent factors. However, no traits, including patient traits, loaded negatively on these factors or any of the other factors, reflecting the fact that there were no inter-item and inter-subscale negative (bipolar) relationships in these data, again refuting the notion of perceived dependent engagement styles.

When discussing ES as an experimental variable, McKinney (1981) emphasized the point that one cannot prove that an organism is active or reactive, that these are assumptions that are made in philosophy or science in the service of operational frameworks. However, he goes on to say that ES is not only a philosophical issue, but, in the tradition of George Kelly's (1955) theory of personality, is also a personal construct. McKinney continues, stating that it is this personal construct in which he has an interest: "That is, individuals have their own beliefs about their own agency and patience, and it is those perceptions or beliefs that I have studied. These are, I contend, amenable to psychological inquiry" (1981, p. 367).

It appears that there are two ES structures, one is the structure of the abstract, psychological construct of engagement style and the other is the structure of the construct of ES as it is experienced by

respondents and organized into a personal, operational framework, a self-schema or personal construct.

Agency and patience are opposites by definition, one ES does, the other is done to. Yet, perhaps all of us see ourselves as doers and as done to, we act on and are acted upon. A great effort in cognitive social psychology has repeatedly shown that persons find contradiction and dissonance uncomfortable and go to great lengths to reduce it in their own lives (e.g., Aronson, 1978). I propose that the respondents did see contradiction in their self-schemas and attempted to reduce the dissonance by denying the contradiction, however illogical that denial may seem. As Aronson states, "Dissonance theory does not rest upon the assumption that man is a rational animal; rather, it suggests that man is a rationalizing animal--that he attempts to appear rational, both to others and to himself" (1978, p. 183).

Perhaps the nature of the denial of the contradiction can be best understood by again considering the differences between the denotative meaning of a word and the connotative meaning of the word. Green and Goldfried's (1965) respondents stated that one could be pleasant and unpleasant at the same time, obviously reflecting a connotative meaning and denying the denotative meaning of the words. I propose that my respondents, like those of Green and Goldfried, denied the denotative meaning of the words, and ordered agency, communion, and patience on independent dimensions when describing themselves. I also propose that my respondents did not see contradictions in the "ideal" or "pure" ES as described in the measure of Study 1 and Study 2, and therefore felt no need to deny the denotative meanings of the trait adjectives.

McKinney (1981) has stated that ES is an experiential variable, i.e., it is the person's experience of ES that is of interest to psychologists. The respondents in this study experienced ES as independent dimensions, describing themselves as agent and communicant, agent and patient, or agent, communicant, and patient, denying the opposition of agency and patience. In the past, respondents have not been given the opportunity to describe themselves in this manner. I propose that, if we are to study our respondents' perceptions about engagement style, we would do well to attend to their perceptions of the nature of the structure and meaning of ES, even if their perceptions seem illogical and contradictory.

Dimensionality of Agency, Communion and Patience

It was predicted that the ESs of agency, communion and patience would be unitary constructs, implying that each subscale would have high internal consistency and the discriminant function and factor analyses would form agent, communicant and patient functions and factors.

Supporting this prediction, the internal consistencies of the agent and patient subscales were high when used to rate the experimenter-supplied ES descriptions; and the internal consistency of the communion scale, while lower, still was acceptable given the few items in the subscale (Nunnally, 1978).

All coefficient alphas were lower when the subscales were used for self-schema ratings, although the internal reliabilities of the entire ESS were higher and achieved acceptable levels. Interestingly, in these data it was not the communicant subscale that had the lowest internal

reliability. In the self-descriptive and self-importance data, the patient subscales were the least consistent and the females' reliabilities were lower than the males' on every subscale.

Again, the ESS seemed to behave differently depending on the subject of the rating. However, the agent subscale had the highest internal consistency in every data collection, and it also was depicted as a unitary concept in the factor analyses most consistently, forming the strongest factor in the self-descriptive data of the males and females. Communion traits, with the addition of one agent trait, formed the female, Active Communion factor, which can be considered essentially a communion factor. The patient traits never formed a unitary factor, reflecting the fact that it had the lowest internal consistency of the subscales in this data set. However, three of the five traits consistently joined with two communion traits to form the Interpersonal Concern factor, a factor appearing in each factor analysis of the ESS data. In summary, the results of the factor analyses of the ESS seem to support the notion of a unitary agent subscale and partially support the unitary nature of the communion subscale and refute the notion of a unitary patient subscale.

The discriminant functions tended to support the unitary nature of the three ESs, forming two functions from the ratings of the "ideal" ESs of Study 2. The group centroids of Function 1 clearly placed agency and patience at opposite poles of the function's geometric dimensions, and Function 2 placed communion orthogonal to agency and patience. The coefficients of the variables of the male functions, like the relative positions of the groups, supported the differentiation of the groups on the basis of agency, patience and communion as unitary constructs.

Function 1 of the female data, however, did not. The results of the analysis indicated that the function is defined by a communicant trait, a patient trait, and an agent trait with a negative sign, although the centroids place agency opposite to patience, and communion is centered between them, implying the interpretation of the communion trait as a patient trait. Function 2 of the females' data is, however, a clear Communion function. The males' data of Study 3 yielded almost identical functions for the descriptive and importance data, an Agency function, a Patience function, and a communion function. As previously discussed, the females' data were less clear but seemed to center around the ESs of patience and communion, although agency was more important to the females than descriptive of them. In all, the functions tended to focus on the three ESs as constructs and generally supported the notion of unitary constructs.

Overall, the data discussed to this point are equivocal on the evidence for the dimensionality of the three ESs, but it may be remembered that each subscale was also submitted to separate factor analysis. The data indicating a unitary construct are strongest for the agent subscale, and this finding was supported by the fact that factor analysis of the five-item subscale yielded one factor for the male data and the female data, each containing all traits and accounting for 35% (MA) or 38% (FA) of the total variance in the variables. The unitary nature of the communion subscale also received some support from the data reviewed above and is further supported by the results of the factor analyses of the male and female subscales which yielded one factor each that included all variables and accounted for 30% (MC) or 27% (FC) of the total variance in the variables. The patient subscale has received the least

support on the issue, and the results of the factor analyses of these subscales were the most equivocal of any of the factor analyses of the subscales. The factor analysis of the female patient subscale yielded two factors, with four traits loading on Factor 1 and the trait cautious forming Factor 2; but the male patient factor yielded only one factor, which included the five traits of the subscale. The two factors of the female data accounted for 29.5% of the total variance and the male data accounted for 28% of the total variance in data. All of the factor analyses conducted on the individual subscales that have been discussed this far were calculated on the self-descriptive data. The self-importance data of the subscales were also submitted to separate factor analyses; and the results of these calculations were consistent with the findings of the self-descriptive data with one notable exception, the females' patient factor also formed only one factor with all traits loading on that factor.

In summary, the results of the analyses of the ESS ratings of the "ideal" ESs support the notion of unitary engagement styles. The results of the analyses of the ESS ratings of the respondents' self-schemas also tend to support the notion of unitary engagement styles, but the data are not totally consistent, and the patient subscale seems to elicit the most equivocal results on the issue.

Sex Differences and Sex-Role Implications of Engagement Style

Previous research conducted on the nature of sex differences in engagement style has indicated no difference in males' and females' TES scores (McKinney & Moore, 1978; Moore & McKinney, 1979), although differences between the sexes were noticed in the nature of the engagement

or interaction. The results of the engagement style categorizations of males and females in Study 3 were notable for almost identical patterns of classifications that emerged. No differences in proportions of men and women in the resulting classifications were evident, supporting the previous findings of no difference in males' and females' ES scores.

The results of the Study 3 data also indicated no difference in overall ESS scores, but sex differences in subscale scoring were found. While no differences in ESS scoring were found between the males and females in the self-descriptive and the self-importance data, the females rated themselves more patient than the males and found communion traits more important to their self-schemas than did the males. These findings are, of course, consistent with current perceptions of sex roles. Passivity has long been associated with the stereotypic female role (e.g., Maccoby, 1966; Block, 1973), and it is very possible that the women perceived themselves as more passive than did the men, for whom passivity is antithetical to the stereotypic role of instrumentality and assertiveness (e.g., Block, 1973).

However, it is interesting that the women also rated communion traits as more important to their self-schemas than did the males. Taken together these two findings are entirely consistent with a new view of the development of women and men that has been posited by Carol Gilligan (1977, 1982). Simply put, Gilligan hypothesizes that women develop in a psychological framework of union with others and care and concern for them, and it is these issues that are of greatest importance to them. She also posits that men develop in a framework of separation from others, autonomy and independence, and the issues of concern to

them focus on privatism and individual rights and needs. The Interpersonal Concern Factor of the ESS data is composed of three patient traits and two communion traits and was present in every factoring of the females' ESS data, whether the ESS data were entered as the sole information or were entered in combinations with the ratings of Block's traits. It is possible that, validating Gilligan's theory and ideographic data, the females rated themselves, not more passive than the males, but more sensitive to the needs of others and therefore more obliging to others' needs, i.e., more concerned about others.

As indicated in the previous discussion, the results of the multivariate analyses can be studied profitably from the perspective of sex-role implications, and that discussion will be taken up next. The females' data yielded three distinct factors: the Agency factor, the Interpersonal Concern factor and that Active Communion factor. The males' data yielded the Agency factor, the Interpersonal Concern factor and the Scholarly Competence factor. The only sex difference in the results of the factoring of the ESS data centered in the factor accounting for the greatest variance in the importance data. The males' Factor 1 of the importance data was the impersonal and individualistic Scholarly Competence factor, containing the traits definite, persistent, perceptive, logical, and cautious. The females' Factor 1 of the importance data was the interpersonal, Active Communion factor containing the traits helpful, perceptive, and doer. This difference in the importance of traits to the respondents' self-schemas focused on the interpersonal vs. impersonal distinction and differentiated the men and women on the issue of care for others, supporting the previous interpretation of subscale sex differences and tending to validate Gilligan's (1982) theory.

However interesting these findings are, they did not support the predictions made in this paper concerning sex differences in the factor analyses. That is, it had been predicted that factors formed from the self-descriptive data would be in keeping with stereotypic sex-role predictions and factors formed from the self-importance data would follow typical, other-sex predictions. Neither of these predictions was met. Both sets of factors for the males consisted of a typically male factor (Agent factor) and a typically female factor (Interpersonal Concern factor). The women's descriptive data consisted of a "male" (Agent) and "female" (Interpersonal Concern) factor; and the women's importance data conformed to ideals of the female role (Active Communion and Interpersonal Concern), as posited by Gilligan (1982). As was indicated in Pedhazur and Tetenbaum's (1979) data, both males and females describe themselves as assertive or agentic and as sensitive and concerned about others. These ESS factors may have sex-role implications, but certainly they are not sex-role specific.

The same predictions made concerning the factor analyses were made about the discriminant functions, also with relatively little success. As previously discussed, the functions of the Study 3 data are somewhat difficult to interpret, but it appears that the males' descriptive data yielded an Agent function, a Patient function, and a Communicant function. (These interpretations are based primarily on the standardized coefficients of the variables contributing to the functions.) There were almost no differences between these functions and the functions formed from the males' importance data. These data conformed to sex-role predictions with the exception that the second function of the descriptive data is a Patient function and, given the active nature of communion, one would

predict that communion would be more typically salient to the males' self-descriptions than would be patience.

The females' discriminant functions also conformed to sex-role predictions, placing a strong emphasis on the patience and communion in the nature of the functions of the descriptive data and the importance data. There is one notable exception to this pattern, however. The second strongest function formed from the importance data is a clear Agent function, which does support the prediction that other-sexed expectations are important to college-aged women.

In summary, the examination of the subscales of the ESS allowed more subtle investigations of the data than the comparisons of total scale data, and revealed two sex differences conforming to a new theory of development recently posited and examined by Gilligan (1982). Differences resulting from factor analyses and discriminant function analyses also conformed to Gilligan's theory of men's and women's development, validating her theory that concern and care for others are the primary issues around which women organize their own development and individual rights and needs are the central, psychological issues around which men organize their development.

The results of the factor analyses and the discriminant function analyses also clearly indicated that agency, communion and patience are relevant dimensions for males and females--a finding supported by results of the ES classifications, yielding no respondents in the aschematic category. The multivariate analyses also indicated that agency, communion and patience are not sex specific and are not totally sex independent. The agent, communicant and patient engagement styles might share some aspects of a conceptual framework with Block's agency

and communion, but it is clear that engagement style encompasses a more global personality structure than does a gender based construct.

The Structure and Nature of Block's Agency and Communion Traits

Before attempting to further differentiate the ES construct from the Bakan/Block agency-communion construct, it will be useful to discuss the findings of the examinations of the structure and nature of the 22 Block traits. Three analyses were calculated on the males' and females' self-schema ratings of Block's agent-communion adjectives: (a) The internal consistencies of the entire list of traits and the subscales of agent traits and communal traits were calculated, (b) Self-ratings were examined for differences within- and between-sex, and (c) The male and female data were submitted in separate, orthogonal factor analyses.

The internal consistencies of the list of traits were remarkedly high given the fact that Block never intended for the list to be used in a Likert scale, although the males' coefficient alpha levels were reliably higher than the females' comparable levels. Similar to the ESS data, the internal consistencies of the traits also were higher when the respondents rated the adjectives for importance to their self-schemas than when the respondents rated the traits for the self-descriptive properties. The internal consistencies ranged from a low of .69 (females' self-descriptive, agent subscale) to a high .84 (males' self-importance, agent-communal scale); and the average reliability was .75, an acceptable range for the initial examination of a scale (Nunnally, 1978). It is reasonable that the respondents' lists of valued traits were more reliable than the lists of traits that were

descriptive of their attitudes and behaviors. Persons might know very well what personality characteristics they admire; of course, that does not mean that they embody those characteristics consistently in their daily lives, indicating the possibility that the respondents were not as influenced by social desirability as the classification data implied.

Within- and between-sex comparisons of the respondents' self-descriptive ratings conformed to Block's sex-role predictions with three exceptions: (a) Males rated the communion traits as more descriptive of themselves than agent traits, (b) Males rated the communion traits as more important to their self-schemas than the agent traits, and (c) There was no difference in the males' and females' average importance ratings of the agent traits. Males rated themselves more agentic than did the females, females rated themselves more communal than did the males, and females said that the communal traits were more important to their self-schemas than did the males. In all, females completely conformed to sex-role predictions and the males did not, stating that communal traits were more important to their self-schemas than agentic traits and rating themselves more communal than agentic.

It seems there might be three interpretations of the partially unexpected results of the male data. The first of these again centers on the issue of social desirability. An examination of Block's traits (see Table 4) indicates only one communal trait that could be construed as undesirable for a male, i.e., artistic; but there are a number of agent traits that are undesirable, i.e., shrewd, dominating, critical and self-centered. Certainly, few males would rate themselves highly

on the last four traits, and perhaps even fewer would state that they were important to their self-schemas.

The second possible interpretation is that males have heard the plea of the contemporary women's movement to be more communal in attitude and behavior and have conformed to that plea. Moore and Nuttall (1981), for example, using the BSRI, found that males perceived themselves to be more feminine and less masculine than females perceive them to be; and the males also perceived that females wanted them to be more feminine than they were, indicating that the males have heard the plea for more androgynous behaviors and attitudes.

The third interpretation rests on the possibility that agency no longer defines the typical male sex role and is simply an extension of the possibility that college males are indeed less agentic in 1982 than they were in 1973. Certainly, Pedhazur and Tetenbaum's (1979) data and the ESS data of this study support the notion that assertiveness and interpersonal concern and agency, communion and patience are descriptive of males and females, although not to the same degree and perhaps not with the same meaning; and these same personality constructs also are valued by males and females, although, again, perhaps not to the same degree and not with the same meaning.

The factor analyses of the males' and females' self-descriptive ratings of Block's traits clearly support the previous interpretation, with both sets of data factoring into agentic and communal composites consistent with the factors derived from the ESS and the BSRI (Pedhazur & Tetenbaum, 1979), although different in specific content. Males' descriptive data factored into three important factors: (a) Vital Love, (b) Competitive/Assertive, and (c) Pragmatic Helpfulness. Their

self-importance data factored into Sensitive Love, Pragmatic Helpfulness, and Competitive factors. The only important difference in the two sets of data seems to be the change from Vital Love (descriptive) to Sensitive Love (importance), implying again that the men value communal traits. It is also interesting that the primary factor of each set of data centers around the issue of love, supporting the within-sex differences found on the male data that males rate themselves more communal than agentic and value communal traits more than agentic traits.

The females' self-descriptive data also formed three factors: (a) Competitive/Ambitious, (b) Rational, and (c) Loving. The importance data yielded three factors also: (a) Sensitive Love, (b) Rational/Ambitious, and (c) Artistic Adventure. One of the most interesting findings is that the factors derived from the men's and women's data were about equally agentic and communal, although the data were collected using a measure of sex roles. This finding essentially validates the factor analyses of the BSRI (Pedhazur & Tetenbaum, 1979), and suggests that psychologists may need to rethink the concept of a unitary masculine role and a unitary feminine role, as has been suggested elsewhere, e.g., Spence and Helmreich (1981).

Following this same pattern, it is also interesting to note that the factors formed from the Block traits did not tend to conform to the predictions based on sex-role expectations that were made earlier in this paper concerning the nature of the factors. The one quality that did seem to differentiate the men and women and would be sex-role expected centered around two male descriptive factors, vital Love and Pragmatic Helpfulness, which are interesting combinations of agentic and communal traits. Each factor combines one agentic trait and two communal traits,

implying the adaptation of communal qualities in an agentic manner, a quality that also was inherent in the male Scholarly Competence factor of the ESS importance data and one factor formed from the combined ESS and Block importance data which was called Agent-Patient because of the emphasis on the agentic adaptation of patient-like qualities. The only female factor of this nature was the Active Communion factor which added doer to helpful and perceptive and was formed from the ESS importance data. In all, few differences found in the men's and women's factors would have been predicted on the basis of stereotypic sex roles. Agent and communal properties were salient for males and females, both when describing themselves and when reporting valued traits. It seems that agent and communal qualities are alive and well in the lives of men and women, although not entirely in predicted ways.

Differentiation of Engagement Style and the Bakan/Block Agency-Communion Concept

Before discussing the results of the correlation matrices of the ESS and Block data and the results of the factor analyses of the combined data sets, it will be helpful to review the results of the examinations of within- and between-sex differences in the context of differentiating engagement style and the Bakan (1966) constructs of agency and communion, as reflected in Block's (1973) sex-role related agency and communion traits.

The ESS data revealed that females were more patient than males and valued communicant traits more than males; both males and females were more communicant than agent and valued communicant traits more than agent traits; and males were more agent than patient. The results of the data analyses of the Block traits revealed that males were more

agent than females; females were more communal than males; communal traits were more important to females than males; and both males and females were more communal than agent and valued communal traits more than agent traits. While sex differences are to be found in the subscales of the ESS, the Block traits measured a greater number of sex differences than did the ESS, i.e., males and females were equally agent and communicant when measured by the ESS, contrary to the differences found with the Block traits.

As predicted, the agency subscales of the two scales were strongly correlated, and the ESS communion subscale was moderately correlated with Block's agency traits and weakly correlated with her communion traits. Contrary to prediction, the ESS patient subscale correlated moderately with the communion subscale of Block's adjectives, indicating that the respondents perceived Block's communal traits as relatively passive in nature. In all, Block's prediction of a masculine, active, agent vs. feminine, communal, passive role distinction seems to have been partially upheld. It is clear that the agent dimension and the communal dimension are not perceived as a bipolar, continuous dimension, by the same arguments used earlier when discussing McKinney's ES construct, and certainly the communal traits are not completely passive in nature, e.g., helpful and considerate, yet the components of her construct have been upheld in general by the results of this study.

Although the ESS agent traits were not sex specific, they were strongly related to Block's agent traits, and the ESS communicant traits were perceived as active and somewhat communal (Bakan, 1966) in nature. The patient traits were also perceived as partly communal in nature, yet certainly were not perceived as active, e.g., it may be remembered

that the female discriminant functions of Study 3 placed patience and communion at opposite ends of a significantly differentiating function. In summary, the ESS scale measures agency with no sex distinction, measures communion as an active, partially communal dimension, measures patience as a passive, partly communal dimension, and clearly differentiates the three ESs. Instead of conceptualizing agency and communion as sex roles, McKinney (1980, 1981) seems to have produced a more encompassing theory, i.e., engagement style, which extends the ideas of agency and communion and clarifies the construct of communion by adding the concept of patience, with which it had been confused in the past.

Conforming to prediction, the factor analyses of the combined ESS and Block agency-communion data did not differ greatly from the results of the factor analyses of the Block data, and tended to support the interpretations stated above. The one exception to this finding was the result that the Interpersonal Concern factor, which had been formed only from the ESS data, appeared in the combined data analyses of the males' descriptive data and females' descriptive and importance data, showing the relative importance of this factor, especially for the females.

The males' self-descriptive and self-importance combined data each factored into four important clusters: Assertive Doer, Interpersonal Concern, Rational, Loving, Sensitive Love, Assertive/Ambitious, Rational, and Agent-Patient, respectively. With the exception of Interpersonal Concern and Agent-Patient, the factors are essentially the same factors with similar names that were derived from the males' Block data. The Agent-Patient factor is a combined ES and Block factor, newly formed in these data from two patient traits and two Block traits, one agent and

one communal. Again, this seems to be a male construction of activating patient traits, which may be a sex-role congruent means of personalizing valued passive qualities.

The females' self-descriptive data also factored into four clusters and their importance data into three: Competitive Doer, Rational, Sensitive Love, Interpersonal Concern, Rational, and Assertive Doer, respectively. All of these factors are similar to others already discussed with similar names.

Some interesting differences between the factors of the males' and females' data are also worth noting in that they too support the interpretations of other data already discussed in this paper and the developmental theory of Gilligan (1982). There is one especially interesting difference between the factors formed from the males' and females' descriptive data: A "love" factor was formed from each set of data, but the males' is simply the Loving factor and the females' is the Sensitive Love factor, which associates care and concern for others with love and affection toward them. The other striking difference (other than the Agent-Patient male factor already mentioned) again centers on the factor accounting for the most variance in the males' and females' importance data. The factor formed from the male data is the Sensitive Love factor and the comparable female factor is Interpersonal Concern, which again emphasizes the importance and centrality of concern and care for others in the organization of women and supports previous interpretations of the data and the developmental theory of Gilligan (1982). However, the formation of the Sensitive Love factor and the Interpersonal Concern factor again reiterate that, like the women, agent and communal qualities are important to the men and are descriptive of them.

Gilligan (1982) has also posited that, because women organize their lives around the issues of care and concern, many problems faced by them in the course of their development focus around issues that potentially separate them from others. Based on this theorizing, it seemed that the trait independent might be of special importance to women. The current female role has increasingly called for the feminine role to be replaced with the androgynous role, a part of which are the attitudes and behaviors of independence (e.g., Bem, 1974). However, independence, by its nature, implies less reliance on others, i.e., disengagement from others, and according to Gilligan, this is the primary area of stress for women. The trait, independent, did not load on any male factor, however, it loaded twice on the females' factors, each in a similar context. The first occurrence was the strongest factor of the descriptive data of the Block traits where independent was associated with assertive, competitive, dominating and ambitious. In the importance data of the combined scales, independent is associated with doer, initiating and assertive. These associations, which were organizing only for the women, are essentially the point made by Gilligan. If one chooses the more agent role of assertive, competitive, dominating, ambitious, doer, and initiating, one also necessarily chooses independent, a correlation salient to the women in this sample, indicating the importance of it in their psychological organization and validating Gilligan's point.

In all, the factor analyses of the combined data clearly indicate that agency and communion are relevant structures for males and females. It also seems to indicate that the more interesting issue for psychologists is not the study of these constructs of specific sex roles, but the investigation of how men and women organize these constructs in

their self-schemas through the course of development and how they guide behavior at various developmental stages. According to these data, Bakan's (1966) plea for the mitigation of agency with communion has been heard and appreciated by both men and women.

Summary

The Engagement Style Scale (ESS), composed of fifteen positively valued traits, was constructed and examined as the first step in a convergent-discriminant validity study of the Test of Engagement Style (McKinney, 1978c) and its underlying construct, engagement style (ES) (McKinney, 1978a, 1978b, 1980, 1981). ESS scores and subscale agency, communion and patience scores were examined, indicating the usefulness of the inclusion of the examination of communion and patience scores in studies involving ES. The ESS was found to be reliable and successfully discriminated ES groups, and no respondents were found to be aschematic on the dimension.

Examinations of respondents' ratings of the scale for self-descriptiveness and importance of the traits to their own self-schemas revealed that communion was perceived as an active, constructive, "decentered" style of engaging one's environment and was distinguished from agency, also an active ES, patience, a passive style of engagement, and interaction, a style of engagement that is alternately active (agent) and passive (patient). Multivariate analyses of the data revealed that communion and patience were relatively more central psychological constructs for the females and agency and interaction were relatively more central to the males' psychological self-schemas, validating Gilligan's (1982) theory of development. However, ES

classifications of the respondents, overall ESS scores and multivariate analyses clearly showed that agency, communion and patience were relevant engagement styles for both males and females.

Also at issue concerning the ES concept was the structural organization of the construct, i.e., its dimensionality. Analyses of ratings and experimenter-supplied descriptions of the three ESs strongly indicated that ES was perceived as a bipolar, continuous dimension with agency and patience anchoring the ends of the dimension and communion defining its central position. However, respondents' self-descriptive and self-importance ratings clearly indicated that, when rating less "pure" ESs, i.e., their own self-schemas, respondents organized the three engagement styles as independent dimensions. In light of these findings and the fact that ES is a perceptual variable (McKinney, 1980, 1981), the recommendation was made that psychologists would do well to examine the ES construct from their respondents' perspectives, however illogical and contradictory their perceptions may seem.

Because McKinney (1981) has stated that ES is, "in some aspects... identical to Bakan's agency-communion distinction" (p. 365), and Block (1973) hypothesized that agency and communion define the masculine and feminine ideal sex roles, Block's (1973) agency-communion sex-role traits were examined and compared to McKinney's ES construct as measured in the ESS. Neither agency nor communion were found to be unitary constructs, and factor analyses of the Block traits revealed factors similar in nature to some found in the BSRI (Pedhazur & Tetenbaum, 1979), indicating again that current measures of sex role concepts may not appropriately measure unidimensional sex-roles (e.g., Spence & Helmreich, 1981).

Males and females were differentiated in a sex-role predicted manner on the Block traits, but factor analyses revealed that agency and communion were relevant dimensions for males and females, although not to the same degree nor in the same manner for the men and women. Examination of these factors also supported Gilligan's (1982) theory of development.

The ESS agency subscale and the Block agency traits were strongly correlated, ESS communion correlated moderately with Block's agency traits and weakly with her communion traits, and patience correlated moderately with Block's communion traits.

The results of all the data analyses of the study converged to indicate that ES is a personality dimension wherein no respondents rated themselves as aschematic, agency is measured with no sex distinction, communion is an active, partially communal (Bakan, 1966) dimension, and patience is a passive, partly communal dimension. Rather than conceptualizing agency and communion as sex roles, McKinney (1980, 1981) seems to have produced a more encompassing theory, i.e., engagement style, which extends the ideas of agency and communion and clarifies the construction of communion by adding the concept of patience, with which it had been confused in the past.

APPENDIX

APPENDIX A

FACTOR ANALYSES OF BLOCK'S AGENT AND COMMUNAL TRAITS

Table A-1

Agent Trait Descriptiveness and Importance for Males, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data		
	Factor 1	Factor 2		Factor 1	Factor 2	
Eigenvalue	2.976	1.214		3.565	1.139	
% of Common Variance Accounted For	56.9	23.2		66.1	21.1	
% of Total Variance Accounted For	21.3	8.7		25.5	8.1	
Practical	(.28)	.51	(.38)		.57	
Shrewd	(.14)		(.20)			
Assertive	(.47)	.46	(.51)	.58		
Dominating	(.55)	.49	(.58)	.46		
Competitive	(.38)	.61	(.39)	.57		
Critical	(.30)		(.37)			
Rational	(.61)	.74	(.66)		.81	
Reasonable	(.38)	.55	(.27)		.49	
Ambitious	(.41)	.46	(.46)	.60		
Self-Centered	(.18)		(.21)			
Independent	(.26)		(.25)			
Adventurous	(.37)		(.20)			
Vital	(.34)		(.36)			
Active	(.57)	.72	(.56)	.74		

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 270.

Table A-2

Agent Trait Descriptiveness and Importance for Females, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data	
	Factor 1	Factor 2		Factor 1	Factor 2
Eigenvalue	2.811	1.311		3.410	1.272
% of Common Variance Accounted For	53.1	24.8		56.5	21.1
% of Total Variance Accounted For	20.1	9.4		24.4	9.1
Practical (.32)		.56	(.44)	.59	
Shrewd (.18)			(.12)		
Assertive (.35)	.48		(.70)		
Dominating (.41)			(.51)		
Competitive (.45)	.65		(.27)		
Critical (.21)			(.42)		
Rational (.48)		.68	(.78)	.84	
Reasonable (.59)		.58	(.47)	.54	
Ambitious (.51)	.66		(.42)		
Self-centered (.37)			(.34)		
Independent (.29)			(.19)		
Adventurous (.30)			(.29)		.52
Vital (.31)			(.46)		
Active (.55)			(.62)		.77

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 267.

Table A-3

Communion Trait Descriptiveness and Importance for Males, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data	
	Factor 1	Factor 2		Factor 1	Factor 2
Eigenvalue	3.083	.623		3.538	.651
% of Common Variance Accounted For	83.2	16.8		84.5	15.5
% of Total Variance Accounted For	38.5	7.8		44.2	8.1
Loving (.83)		.84	(.77)	.82	
Affectionate (.71)		.82	(.73)	.82	
Sympathetic (.41)	.56		(.52)	.49	
Generous (.35)	.54		(.41)		.61
Sensitive (.33)			(.50)	.61	
Artistic (.03)			(.03)		
Helpful (.46)	.63		(.66)		.78
Considerate (.59)	.75		(.58)		.68

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 270.

Table A-4

Communion Trait Descriptiveness and Importance for Females, Orthogonal Factor Solution

	Self-Descriptive Data			Self-Importance Data	
	Factor 1	Factor 2		Factor 1	Factor 2
Eigenvalue	2.864	.713		3.242	.696
% of Common Variance Accounted For	73.3	18.2		82.3	17.7
% of Total Variance Accounted For	35.8	8.9		40.5	8.7
Loving (.81)	.85		(.75)	.85	
Affectionate (.73)	.84		(.73)	.84	
Sympathetic (.57)		.48	(.61)	.52	.58
Generous (.33)		.57	(.38)		.59
Sensitive (.47)			(.36)		
Artistic (.02)			(.03)		
Helpful (.32)		.51	(.52)		.64
Considerate (.67)		.76	(.55)		.69

Note. The communality of each variable is given in parentheses for each set of data. The loading of a variable on a factor is presented next to the communality of the variable and under the appropriate factor. Only loadings of .45 or better are reported. N = 267.

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