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THE IMPACT OF GENDER-ROLE IDENTITY, CONFORMITY AND CHOICE ON WOMEN'S SELF-ESTEEM, LIFESTYLE SATISFACTION AND CONFLICT

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ABSTRACT

This study examined the costs and benefits that traditional versus non-traditional women incur as they choose whether or not to conform to gender stereotypic norms. The effects of gender-role identity and choice pertaining to gender stereotypic behaviour upon women's self-esteem, satisfaction with their choices/lifestyle and upon conflict were examined. It was predicted that traditional-conforming women would have relatively higher lifestyle satisfaction but relatively lower self-esteem. In contrast, non-traditional-non-conforming women were hypothesized to have higher self-esteem but lower lifestyle satisfaction. Given the hypothesized trade-off in costs and benefits for both groups of women, it was predicted that no significant difference in anxiety/conflict would be experienced. Five hundred and forty-one female college students were screened on the B.S.R.I. and A.W.S. to ascertain gender-role traits and attitudes. Those (160) scoring in the "feminine"/traditional or "masculine"/non-traditional categories on both tests were requested to engage in either a highly stereotypic gender appropriate or gender inappropriate activity. Eighty subjects were free to select their preferred activity while the remaining 80 were randomly assigned to engage in a given task. Their self-esteem, lifestyle satisfaction and anxiety/conflict were then assessed on situational as well as trait measures. Debriefing was conducted as soon as subjects completed these measures. The data were analyzed by ANOVAs, a priori contrasts and post hoc Scheffé tests. The results supported the hypotheses that traditionally oriented women and traditional-conformists scored significantly lower on

self-esteem than non-traditional women or non-traditional-non-conformists. However, traditional women also scored significantly lower on lifestyle satisfaction than non-traditional women and experienced significantly higher levels of anxiety/conflict. No trade-off in costs and benefits for women occurred. The hypothesized impact of choice and conformity/non-conformity to gender stereotypic norms was not supported. Interpretation of these findings may have been confounded by the limited effectiveness of the particular tasks as criteria of conformity/non-conformity to gender-role specific behaviour. The major results were interpreted in terms of the differential (i.e., higher) social value attributed to "masculine"/non-traditional versus "feminine"/traditional traits and behaviours. Furthermore, the intrinsic rewards which accrue to women who lead their lives according to their own preferences and beliefs, regardless of possible social costs, was considered. Additional analyses of socio-cultural data shed light on the unexpected demographic profiles of traditional women (i.e., younger, single, childless, studying in male-dominated fields) versus non-traditional women (i.e., older, wives and mothers in traditionally female-dominated disciplines). These analyses suggested the need for new conceptualizations and more subtle/complex measures of gender-roles in future research.

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CHAPTER 1

THEORETICAL RATIONALE

The Questions

What are the consequences of women's conformity or non-conformity to gender-role norms on their self-esteem and life satisfaction? What are the costs and benefits of choosing to adhere to or flout traditional sex-role expectations in terms of women's satisfaction with themselves and their lifestyles? How much conflict is experienced by traditional and non-traditional women as they choose whether or not to conform to stereotypically "feminine" norms with their attendant consequences? This study attempts to investigate and respond to these questions.

This thesis will examine two hypothesized main effects. Specifically, the effect of gender-role identity upon self-esteem will be examined. Second, the effect of conformity or non-conformity to gender-role norms (i.e., performing gender stereotypic behaviour versus non-traditional behaviour) upon women's satisfaction with their choices (i.e., their lifestyles) will be discussed. Possible two-way interactions of these variables upon the dependent variables of self-esteem, satisfaction and conflict will also be addressed. Finally, three-way interactions with the addition of a third dependent variable, choice versus a no-choice condition, upon self-esteem and satisfaction will be considered. Conformity, for the purposes of this

study is defined as gender stereotypic behaviour within the choice condition only.

First Main Effects Hypothesis - Impact of Gender-Role Identity on Self-Esteem

How does gender-role identity, (independent variable, traditional versus non-traditional) affect women's self-esteem, (dependent variable)? One would hypothesize that traditionally oriented women would have relatively low self-esteem as compared with non-traditional women. Some of the evidence for this prediction is found in the literature on gender-role socialization. Our culture regards boys differently from girls, rears them along different lines and values and thus, men and women come to regard and evaluate themselves differently (Bardwick, 1971; Basoff & Glass, 1982; Bem, 1974; Greenglass, 1982; Maccoby & Jacklin, 1974; Rosenkrantz, Vogel, Bee, Broverman & Broverman, 1968; Spence & Helmreich, 1978). Specifically, this research suggests that our society's differential expectations or standards for male and female gender-role related conduct have bearing on the development of one's identity (Carlson, 1965; Connell & Johnson, 1970; Erickson, 1977; Laws, 1979; Orlofsky, 1977; Zuckerman & Sayre, 1982). Sex-role socialization in childhood and adolescence affects not only the content (i.e., attitudes, behaviours and feelings) of one's identity but also the process of identity development. This process seems to differ in boys versus girls (Bardwick, 1971; Block, 1973; Brown, 1982; Carlson, 1965; Donelson, 1977; Maccoby & Jacklin, 1974).

Boys seems to receive more socialization pressure in childhood, focusing on achievement; for girls, maximal pressure is exerted during and after adolescence, emphasizing social skills and interpersonal relations (Schaffer, 1980; Weitz, 1977; Williams, 1977). As preadolescents, both boys and girls are preoccupied with the developmental tasks of autonomy, initiative and industry - goals which are individualistically oriented (Block, 1973; Carlson, 1965; Erickson, 1963). Thus, these goals involving mastery of the environment become central to the boys' developing self-concept. However, with adolescent identity formation, as adult sex-role requirements become imminent, the focus shifts for girls (Schaffer, 1980). In two longitudinal studies, Block (1973) and Carlson (1965) arrived at similar conclusions: Boys were socialized towards "agentic" qualities such as achievement, competition, activity, autonomy and independence while girls were taught to be "communally" oriented. Sensitivity, passivity, conformity, relatedness and support were emphasized. In more recent research, the role of self-efficacy versus passivity is implicated in the differential development of the self-concept in males versus females (Adams & Sherer, 1985). While boys are trained to engage in behaviour which has effective impact on the environment and a "can-do attitude", girls, in contrast, are socialized in, "Perceiving themselves as having little or no control over their environment, i.e., learned helplessness training" (Elpern & Karp, 1984, p. 988).

Gender-role pressure on girls is intensified during this period but becomes increasingly restrictive, focusing on affiliation, sexual identity, submissiveness and desirability to male peers (Block, 1973;

Connell & Johnson, 1970; Donelson, 1977; Katz, 1979; Weitz, 1977). Brown (1982) found that female adolescents are subject to peer pressure that differs both quantitatively and qualitatively from that experienced by males. Females are subject to a pattern of pressures which:

> Reinforce a rather traditional portrait of women as more attentive to interpersonal relationships and more susceptible than males to influence by other people (Brown, 1982, p. 131).

The conviction that one ought to be socially oriented as one becomes a woman has implications for the traditional woman's development of self-concept and self-esteem (Bardwick, 1980; Baruch & Barnett, 1979; Barnett & Baruch, 1980; Connell & Johnson, 1970; Zanna & Pack, 1975). By virtue of this belief, women neglect the personal resources with which to define their identities (Bardwick, Douvan, Horner & Guttmann, 1970; Baruch & Barnett, 1979). They become dependent upon others to provide and maintain esteem income (Basow, 1980; Chesler, 1972; Muff, 1982b; Weissman & Klerman, 1979). To the extent that they derive their self-esteem "communally", they become more subject to social influence. In contrast, in that autonomy and other "agentic" qualities originate within, adolescent males increase their input into the definition of their identities. To the extent that their self-mastery develops, they can structure who or what they become, drawing from their own resources and are less dependent on external sources of self-esteem than are females. Given that females draw their self-esteem more from the positive evaluations of others,

rather than independently, on the basis of their own accomplishments, their grasp on self-esteem is more tenuous than that of males (Bardwick, et al., 1970; Baruch, Barnett & Rivers, 1983; Weitz, 1977).

To the extent that individuals accept and internalize sex-role standards, (particularly in women), there is evidence that not only identity but also self-esteem are affected (Athanassiades, 1977; Connell & Johnson, 1970; Del Rey & Sheppard, 1981; Deutsch & Gilbert, 1976; Erdwins, Small & Gross, 1980; Gauthier & Kjervik, 1982; Hjelle & Butterfield, 1974; Logan & Kaschak, 1980; O'Connor, Mann & Bardwick, 1978; Orlofsky, 1977; Spence & Helmreich, 1978; Spence, Helmreich & Stapp, 1975). Research has verified the differential status assigned to masculine versus feminine sex roles with their associated characteristics. For instance, in both daily interaction and according to clinical standards (Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1970) "masculine" characteristics are viewed as the norm for healthy adult functioning. Traits that are typically attributed to men (e.g., active, independent, assertive) are more likely to be regarded as "favorable" (McKee & Sherriffs, 1957), "socially desirable" (Rosenkrantz, et al., 1968) or "positively valued" (Erdwins, Small & Gross, 1980; Puglisi & Jackson, 1980; Sherriffs & Jarrett, 1963) than those attributed to women (e.g., talkative, tactful, aware of feelings of others). In an extensive review of the literature, Wylie (1979) concludes that members of both sexes evaluate a larger number of stereotypically masculine traits significantly more positively than stereotypically feminine traits. This kind of judgment is applied with respect to both social value and mental health (Wylie, 1979, p. 295).

Feather (1985) states that an individual's level of self-esteem is a function of his/her society's values. In our society, "These values relate more to the instrumental, masculine characteristics than to the expressive, feminine characteristics" (Feather, 1985, p. 498).

The result of this differential evaluation of stereotypically masculine and feminine characteristics is manifest in various self-esteem ratings. Whether in males or females, those individuals possessing masculine traits enjoy higher self-esteem (Antill & Cunningham, 1979; Bem, 1977; Deutsch & Gilbert, 1976; Doherty & Schmidt, 1978; Hoffman & Fidell, 1979; Kelly & Worell, 1977; O'Connor et al., 1978; Spence & Helmreich, 1978; Spence et al., 1975; Stericker & Johnson, 1977). Even within androgynous individuals, it appears to be the "masculine" component of the gender-role identity which contributes primarily to high self-esteem with "femininity" apparently negligible or insignificantly related to self-esteem (Adams & Sherer, 1982, 1985; Antill & Cunningham, 1979; Erdwins, Small & Gross, 1980; Jones, Chernovetz & Hansson, 1978; Kelly & Worrell, 1977; Long, 1986; Silvern & Ryan, 1979; Whitley, 1983). As suggested by Basoff and Glass, "It may well be that our society is partial to its masculine members, men and women who are assertive, forceful, competent, and independent, and that consequently these individuals value themselves" (1986, p. 110). Thus, (whether or not they are aware of it), women may be forfeiting their self-esteem by adhering to traditional feminine sex roles (Baruch & Barnett, 1979; Jones, Chernovetz & Hansson, 1978).

To summarize, research indicates that stereotypically masculine characteristics/gender-roles are evaluated more positively by both men

and women than are the corresponding stereotypic feminine roles. These values are influential in the development of the young woman's identity and self-esteem. Those who internalize these roles and accompanying values would appear to have lower self-esteem than either their male counterparts or those women who hold non-traditional identities.

Thus, it is hypothesized in this study that traditionally oriented women would have lower self-esteem as compared with non-traditional women.

Alternative Prediction

An alternate prediction regarding the impact of gender-role identity on women's self-esteem is suggested by the literature on gender schema theory (Bem, 1981a; Markus, 1980; Markus, Crane, Bernstein & Siladi, 1982; Noseworthy & Lott, 1984). This theory proposes that individuals process gender-related information in terms of those schema (e.g., values, attitudes, stereotypes) most relevant for their own gender. In tests of memory, sex-typed individuals have been shown to organize their cognitions in gender-related clusters (Bem, 1981a; Markus et al., 1982; Noseworthy & Lott, 1984). Schichman and Cooper (1984) have found that masculine sex-typed individuals were more likely to value instrumental aspects of life while feminine sex-typed subjects chose socioemotional elements as more important. A self-schema for gender would explain the organizing of one's self-concept in keeping with those norms or expectancies appropriate to his/her gender group. Women who hold such a self-schema would be

expected to understand and evaluate themselves based on those values socially pertinent to women. Gender schema theory suggests that cognitive variables may mediate between gender-role identity and self-esteem. Thus, sex-typed (i.e., traditional) women would be expected to have high self-esteem in that their criteria for self-assesment are encompassed in the traditional gender-role. gender-role. Similarly, non-traditional women would evaluate themselves in terms of the criteria of non-traditional values.

By extrapolation, this leads to the tentative, alternative hypothesis that there should be no significant difference between traditional and non-traditional women on the dimension of self-esteem. While this proposition is theoretically viable, the research in the gender schema area thus far has studied memory with no direct examination of self-esteem. The preponderant research evidence with respect to sex-role identity and self-esteem at this time remains that cited in the earlier literature, suggesting that higher self-esteem will be found among non-traditional women.

Second Main Effects Hypothesis - Impact of Conformity on Satisfaction

The second hypothesis tests the effect of conformity or non-conformity (given a free choice condition) to gender-stereotypic norms, (independent variable) upon women's satisfaction with their choices, i.e., their lifestyles, (dependent variable). The values implicit in traditional gender-roles lead to certain social judgments and corresponding sanctions. Given the strong pressures experienced by

females from adolescence onwards to conform to gender appropriate behaviour, one would expect fairly strong costs and benefits to apply to their conduct.

The social consequences for those females who choose to defy these conventions are largely negative (Baruch & Barnett, 1979; Chesler, 1972; Horner, 1972; Weitzman, 1975). As Athanassiades (1977) has suggested, those women who choose to follow non-traditional behaviour patterns are likely to meet with resentment, disapproval, suspicions, etc., from traditional females and males.

Lipman-Blumen (1972) has found that non-traditional women had experienced more loneliness than their more traditional peers in adolescence. As early as the fifth grade, girls believe they will be viewed as unfeminine and therefore teased and ostracized for non-traditional behaviour (e.g., success in science). The proportion of women who anticipate this outcome increases throughout adolescence (Baruch & Barnett, 1979). By the time they complete high school, one third of female students will have "played dumb" while half have been "embarrassed" by their intelligence (Sherman, 1982; Sherman, 1983). From grade seven onwards, girls begin to express negative attitudes towards mathematics (Aiken, 1976). Those female high school students who were enrolled in pre-university math streams expressed ambivalence and anxiety at visible success in math courses; they anticipated and/or experienced verbal harassment, hostility, social pressure and uneasiness with boys causing them to be less responsive in math classes (Sherman, 1982).

Eme (1979) indicates that girls are more likely to begin showing emotional disorders during and after adolescence, just when they are exposed to the most intense pressure to conform to sex-role standards. Achievement-oriented women are regarded askance as deviant (Chesler, 1972; Clance & Imes, 1978; Rosenow, 1982). Pines and Solomon, 1978, (cited in Basow, 1980) found that college students evaluated a competent, intelligent wife and mother as less competent when she chose to remain at home; on the other hand, when she chose a career outside the home they regarded her as less feminine and less likeable than if she had been a full-time homemaker. These attributions produce a "no-win" situation for women confronting such a choice. Deutsch and Gilbert (1976) state that the average female college student might prefer to behave less traditionally but believes that, "She is more desirable to men if she is extremely feminine" (p. 377). Women not only misrepresent their attitudes as more traditional than they actually are (von Baeyer, Sherk & Zanna, 1981) but also deliberately downplay their intellectual abilities in order to attract desirable men (Donelson & Gullahorn, 1977; Freeman, 1971; Zanna & Pack, 1975). This is consistent with the research on Horner's 1972 "fear of success" which suggests that women are motivated to avoid the repercussions of success (as opposed to success per se) particularly in non-traditional areas (Condry & Dyer, 1976; Darley, 1979). High-achieving women often distort their self-concepts, regarding themselves as imposters - "intellectual phonies" - in order to "Allay some of [their] fears about the negative consequences of being a successful woman in our society" (Clance & Imes, 1978). Coutts (1987) found that traditional women

performed more poorly than non-traditional women in a competitive situation, and expressed more self-presentation concerns regarding successful performance in a mixed sex group. Furthermore, traditional women anticipate the social costs of being regarded (particularly by men) as "unfeminine" as so adverse that they will choose to restrict their behaviour (Bardwick, 1971; Coutts, 1987) and forfeit financial rewards in order to avoid such attributions and their accompanying sanctions (Bem & Lenney, 1976). This focus on femininity/desirability in the eyes of eligible men follows from the belief acquired during the adolescent socialization process, that a woman's status derives from her relationships with men (Basow, 1980; Weitz, 1977).

Thus one would predict that women who choose to conform to gender-role norms would be rewarded with positive social attributions and their attendant consequences, and would anticipate such rewards accordingly, e.g., being seen as likeable, feminine and a potentially desirable partner to/for men. In contrast, women would anticipate that their own nonconformity to gender appropriate behaviour would result in peer ostracism and male rejection, accompanied by devalued social status. Therefore, women who conform to traditional behavioural patterns should be more satisfied with the outcome of their choices (i.e., approval from others) than those who choose to defy convention.

Women who conform to gender stereotypic behaviour are expected to score higher on satisfaction than women who are non-conforming to such norms.

Interaction Hypothesis - Impact of Gender-Role Identity and Conformity on Self-Esteem, Satisfaction and Conflict

These issues become even more intriguing and complex when examining the 2 x 2 interaction of gender-role identity and conformity versus non-conformity to gender-role norms upon the dependent variables of self-esteem and satisfaction. In addition, the impact upon a third dependent variable, conflict surrounding one's choices (and implicitly, their consequences) will be examined. Specifically, women who have traditional gender-role identities and conform to gender-role norms will be compared to those who hold non-traditional gender-role identities and do not conform to gender appropriate standards on the dependent measures. (Women in cell 1 will be compared to those in cell 4 as illustrated in Figure 1).

	Choice Condition	
	Gender Stereotypic Behaviour	
Gender Identity	Conformity (Stuffing Pillows)	Non-Conformity (Assembling Weight-Behcn)
Traditional	1	2
Non-Traditional	3	4

FIGURE 1

DESIGN - GENDER ROLE IDENTITY AND GENDER STEREOTYPIC BEHAVIOUR GROUPS (SUBGROUPS 1-4)

The literature (e.g., Athanassiades, 1977; Bem & Lenney, 1976, Lipman-Blumen, 1972; Vaughter, 1983) would support the notion that women's gender-role identities be consistent with related behavioural

choices (thereby avoiding cognitive dissonance). There is little evidence that the bulk of traditional women are non-conformists nor that the majority of non-traditional women conform to gender-role norms.

What are the consequences for the traditional conformist woman versus the non-traditional non-conformist in terms of self-esteem and lifestyle satisfaction? Based on the argument cited above, one would arrive at the paradoxical prediction that the costs and benefits for those two categories of women would be reciprocal. Traditional-conformist women would be expected to have relatively low self-esteem but relatively high lifestyle satisfaction. Non-traditional-non-conformists would be expected to have relatively higher self-esteem but be relatively more dissatisfied with their lifestyles.

The intertwining of these issues has been investigated within the gender-role socialization and clinical literature. Athanassiades has found that only those women who regard themselves more positively than they regard the "typical" woman can afford to defy tradition. He states, (1977, p. 197):

> Women whose self-concept is higher than the female stereotype are less likely to conform to the prescriptions of the stereotype than women whose self-concept is lower than the stereotype.

Baruch (1976) has found that women who score higher on self-esteem are more likely to choose non-traditional careers such as in medicine and science; low self-esteem women more often pursue teaching, nursing and secretarial positions. Erickson (1977), who approaches the same issue

from the perspective of personality theory and research (rather than from social psychology) indicates that as ego integration and maturity increase, women become more egalitarian in their attitudes towards gender-roles and rights. Orlofsky (1977) suggests that this level of personal integration may be difficult for traditional women to attain precisely because of the nature of their prescribed role; it is hard to imagine challenging conventional norms and developing an internal set of values when one's role orientation involves passivity and dependence (DeFronzo & Boudreau, 1979; Dowling, 1981; Elpern & Karp, 1984).

Studies by Hjelle and Butterfield (1974) and Logan and Kaschak (1980) confirm that feminists have more positive self-concepts than non-feminists. Feminist theorists and therapists such as Chesler (1972), Chodorow (1974) and Shainess (1970) indicate that as women transcend the home and gain access to valued social roles such as economic provider, their sense of self-worth is liable to increase and expand. This prediction that career-oriented and non-traditional women are better adjusted and/or less likely to suffer from depression has been substantiated from college through mid-life by Bart (1972), Bernard (1972), Birnbaum (1975), Deutsch and Gilbert (1976), Elpern and Karp (1984), Feather (1985), Lee and Scheurer (1983), Silvern and Ryan (1979), Tinsley, Sullivan-Guest and McGuire (1984) and Whitley (1984).

Thus, women may be in the precarious position of choosing to gain external, social rewards for conforming to gender-role norms while suffering intra-psychically for this choice. The epitome of this position is discussed in the nursing literature. The world of nursing can be seen as a microcosm and logical extension of traditional women's

roles (Gervaize & Howard, 1984; Muff, 1982a). Women have been known to select this profession because of its congruence with gender appropriate norms. It may be a means to pursue a career without incurring social disapproval (Rosenow, 1982). Girls learn early that nurses are idealized as the paragons of feminine virtue, e.g., gentle, compassionate, selfless, nurturing, submissive and are admired accordingly (Gauthier & Kjervik, 1982; Muff, 1982a, 1982b; Rosenow, 1982). Despite the positive social sanctions related to the fulfillment of this role, nurses' high levels of psychosomatic symptoms, unhappiness and burnout can be traced to the characteristics of this role (Gervaize & Howard, 1984; Muff, 1982a). The knowledge that one may gain feelings of self-worth by helping others may be ennobling at first, but if it is one's primary source of esteem income, it may ultimately engender feelings of powerlessness and victimization, as it is contingent on the goodwill and the actual bestowal of others.

The price of this common constellation in women of strong adherence to the traditional gender-role (in identity plus lifestyle) and the accompanying low self-esteem is not to be overlooked; it includes such psychological difficulties as psychosomatic symptoms (Bardwick, 1972a, 1972c) and depression (Bart, 1972). Indeed epidemiological studies as well as clinical literature abound suggesting the relationship between the traditional female position and the significantly higher levels of helplessness, depression and/or anxiety found in women over men (Adams & Sherer, 1985; Albin, 1976; Baucom & Danker-Brown, 1979; Bernard, 1972; Chesler, 1972; Gall, 1969; Gove, 1979; Gove & Tudor, 1973; Sears, 1970; Shainess, 1970; Spence,

Helmreich & Holahan, 1979; Taylor & Hall, 1982; Weissman et al., 1979; Whitley, 1984).

Given that women have been taught to derive their self-esteem via their relationships with men (rather than through their own achievements), it is not surprising that many traditional women have sought to bolster their self-concepts vicariously, through the accomplishments of significant men in their lives (Lipman-Blumen & Leavitt, 1976). Throughout women's lives, families and other socializing agents encourage them to marry succesful men and thereby attain social status. Notwithstanding the apparent benefits, this approach has its intra-psychic costs as well (Veroff & Feld, 1970). Macke (1979) indicates that the self-esteem of the traditional, full-time homemaker was significantly lower than that of married professional women. But curiously, they also found that wives of moderately successful men had higher self-esteem than the wives of extremely successful men. The relative position of wives in the former situation may have been closer to that of their spouses (i.e., more similar or egalitarian) than the position of the wives in the latter marriages. Apparently, the two most critical contributors to self-esteem, i.e., competence and significance (Coopersmith, 1967) were not readily accessible to these wives.

In summary, one would hypothesize a tradeoff - an inverse relationship between self-esteem and satisfaction (due to social approval and rewards) with one's life choices depending on one's gender-role identity and corresponding behaviour. Non-traditional-non-conforming women would be expected to reap some of the same rewards

that men do for autonomy, achievement, etc. However, one would expect them to pay for nonconformity with negative social sanctions related to their life choices. Therefore, one would predict relatively high self-esteem but relatively low satisfaction with one's lifestyle. The reverse pattern would be predicted for traditional-conformist women, as depicted in Figure 2.

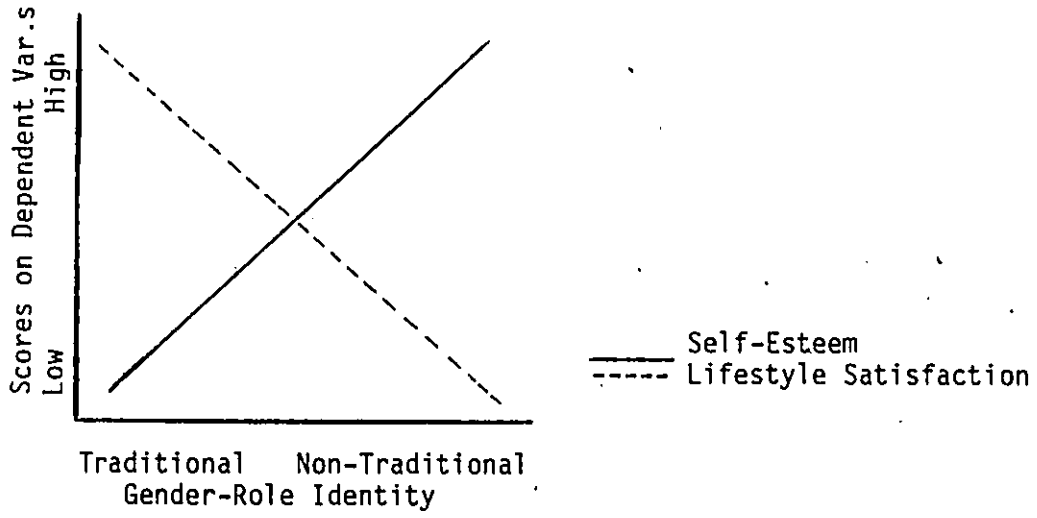

FIGURE 2

PREDICTED RELATIONSHIP BETWEEN SELF-ESTEEM AND LIFESTYLE SATISFACTION

Such women exhibit relatively few characteristics of maximal value in our society and one would expect this to diminish their self-esteem (and thereby involve other intra-psychic costs). But their choice is met with approval and other social rewards which presumably increase their lifestyle satisfaction.

Many researchers have referred to and/or attempted to measure lifestyle satisfaction although few have defined it explicitly. For the purposes of this study, lifestyle satisfaction is conceptualized as

the subjective quality of life and the extent to which an individual lives according to his/her own preferences or values (Super & Nevill, 1982). Evaluating one's lifestyle satisfaction entails an implicit judgment of the degree of conjunction or disjunction of one's actual life with one's ideal life (Campbell, 1980). It involves feelings of enjoyment, contentment and freedom from disillusionment in various key areas of one's life (Gough, 1956b; Manis, 1980).

Women who hold a traditional gender identity and who (given the choice) conform to gender stereotypic behaviour, are hypothesized to have lower-self-esteem than non-traditional-non-conforming women.

This study further hypothesizes that traditionally oriented women who (given the choice) conform to gender-role behaviour, should have higher satisfaction with their choices/lifestyle than non-traditional-non-conforming women.

The final second level interaction effect to be examined involves the conflict (third dependent variable) surrounding one's choices and their implicit consequences. How much conflict is experienced by traditional-conformist women versus non-traditional-non-conformists as they make choices involving gender-role behaviour (e.g., their lifestyles)? Given the aforementioned trade-off in costs and benefits anticipated/associated with either position, one would predict that women experience similar degrees of conflict regardless of which choices they select.

In reviewing the literature on gender-role norms, mental health and self-esteem, Lasky (1982, p. 55) concludes, "Women in our society are in an impossible position. To be appropriately female, one must be

unhealthy. What is one to do?" Deutsch and Gilbert (1976) describe the situation produced by the awareness of gender-role stereotypes, their accompanying evaluations and sanctions for defying them as ripe for conflict. Athanassiades (1977) stresses the element of choice and its consequences. His research indicates that women are aware of the female stereotype and that most choose to conform to it publicly (regardless of internal inclinations) in order to avoid the negative social consequences of non-traditional conduct. Stake and Orlofsky (1981) note that even women who are aware of possessing highly valued agentic qualities hesitate to demonstrate them in the presence of husbands and boyfriends in that men may disapprove of non-traditional behaviours in women. Apparently one must choose between positive self-esteem versus positive social attributions and rewards for adherence to traditional gender-roles. A woman may find it more difficult to attain both concurrently (M.I.T., 1983).

This paradigm may be represented by the traditional view, now in transition, that one can be an adequate wife and mother or a "career woman" but it is difficult to be effective at both roles simultaneously (Rosenow, 1982; Stake, 1979). Darley (1979) and Schaffer (1980) focus on the double-bind confronting mothers who work outside the home. Such women cannot take pride in positive evaluations on successful job performance in that it is seen as detracting from devotion to their children. Regardless of whether she prefers to choose the traditional or non-traditional gender-role (or perhaps whichever she considers less aversive) one would expect her to feel resentment and strain (i.e., post-decisional conflict would be hypothesized.

Indications of the presence and effects of role strain in women appear in the literature (Baruch, Barnett & Rivers, 1983; Hall & Gordon, 1973; Holahan & Gilbert, 1979; Maracek & Ballou, 1981; Schaffer, 1980; Shaevitz, 1984; St. John-Parsons, 1981). Bird (1979) points out that rates of psychological impairment have changed from those of the 1950s and 1960s. By the late 1970s, the level of difficulties among women in their thirties had increased and had become more severe than among all other age groups. This may suggest (Basow, 1980) that for this population of women, the sustained exposure to the role strain created by the feminist movement during the late 1960s (at the time of their entry into adulthood) has begun to take its toll.

In conclusion, given the dilemma inherent in choosing between traditional and non-traditional behaviours/lifestyles with their concomitant costs and benefits, one would predict no significant differences in conflict experiences reported by groups of traditional-conforming women and non-traditional-non-conforming women.

Three-Way Interaction - Impact of Gender-Role Identity, Conformity and Choice on Self-Esteem, Lifestyle Satisfaction and Conflict

It should be apparent that it is not the participation in one role or another per se that results in the consequences discussed above; rather, it is the social meaning and value attached to choosing a particular identity and choosing a particular prototypic behavioural pattern that is of importance (Dowling, 1981). It is the social significance and self-attributions incurred via adopting or rejecting gender appropriate behaviour that is hypothesized to affect women's

self-esteem (Ickes & Layden, 1976), satisfaction with choices and level of conflict. The freedom to choose and concomitant experience of responsibility for one's conduct is central in determining the extent to which one is affected by a given set of actions. As such, when the element of choice is removed from this paradigm, one would expect the consequences for the individual to decrease and become minimal, regardless of her behaviour (Harvey, 1976; Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1971). When one has not chosen freely, one cannot be held responsible for one's behaviour and should not incur the psychological consequences engendered by the act of choosing (Harvey & Weary, 1981; Worchel & Andreoli, 1976). Behaviour in such a situation is quite different - differences in self-esteem and satisfaction should be minimal.

In order to examine this hypothesis concerning the significance of choice in affecting women's self-esteem and satisfaction, a third independent variable, choice, will be introduced. One would predict that traditional-conformists who <u>choose</u> to engage in role appropriate behaviour are more likely to be affected on the dependent variables than would traditional-conformists who are <u>randomly assigned</u> to engage in such an activity. (Women in cell 1 will be compared with those in cell 5 as illustrated in Figure 2).

Choice/ No Choice	Gender Identity: Traditional Gender Role Behaviour: Conformity	Traditional Gender Role Behaviour: Non-Conformity	Non-Traditional Gender Role Behaviour: Conformity	Non-Traditional Gender Role Behaviour: Non-Conformity
Choice	1	2	3	4
No Choice	5	6	7	8

Three-way Hypotheses

1 < 5 on self-esteem
1 > 5 on satisfaction
4 > 8 on self-esteem
4 < 8 on satisfaction
1 - 4 > 5 - 8 on self-esteem
1 - 4 > 5 - 8 on satisfaction

FIGURE 3

DESIGN - GENDER-ROLE IDENTITY, GENDER STEREOTYPIC BEHAVIOUR AND CHOICE/NO CHOICE GROUPS - (CELLS 1-8)

They would score lower on self-esteem and higher on satisfaction than the no-choice group; those in the latter group would be less inclined to self-attribute responsibility for engaging in a task that was thrust upon them. (For those randomly assigned to engage in a given activity, there would, of course be no conflict involving choice.) Non-traditional-non-conformists who choose to engage in a non-traditional activity (cell 4)would be expected to score higher on self-esteem and lower on satisfaction than would similar women (cell 8), randomly assigned to engage in such an activity. (Attributions of personal responsibility for one's atypical conduct is likely to heighten the emotional consequences of such behaviour, Storms & McCaul, 1976.) Finally one would hypothesize that the difference on

the two relevant dependent measures between traditional-conformists and non-traditional-non-conformists, where both are free to choose their behaviour, would be greater than the difference between traditional-conformists and non-traditional-non-conformists who are randomly assigned to the same activities (i.e., 1-4 > 5-8 on self-esteem and satisfaction. Conflict is not applicable).

On the basis of the previously cited literature, the research hypotheses enumerated on the following page were formulated.

LIST OF THE RESEARCH HYPOTHESES

1. Traditionally oriented women will have lower self-esteem than non-traditional women.

2. Women who engage in gender stereotypic behaviour will score higher on satisfaction than those who are non-conforming to such norms.

3. Traditional-conforming women will have lower self-esteem than non-traditional-non-conforming women.

4. Traditional-conforming women will have higher levels of satisfaction than non-traditional-non-conforming women.

5. There will be no significant differences between traditional-conformning women and non-traditional-non-conforming women on conflict.

6. Traditional-conforming women in a choice condition will have lower self-esteem than traditional-conforming women in a no-choice condition.

7. Traditional-conforming women in a choice condition will have higher satisfaction than traditional-conforming women in a no-choice condition.

8. Non-traditional-non-conforming women in a choice condition will have higher self-esteem than non-traditional-non-conforming women in a no-choice condition.

9. Non-traditional-non-conforming women in a choice condition will have lower satisfaction than non-traditional-non-conforming women in a no-choice condition.

10. The difference between traditional-conformists and non-traditional-non-conformists, where both are in a choice condition, will be greater than the difference between traditional-conformists and non-traditional-non-conformists in a no-choice condition, on self-esteem.

11. The difference between traditional-conformists and non-traditional-non-conformists, where both are in a choice condition, will be greater than the difference between traditional-conformists and non-traditional-non-conformists in a no-choice condition, on satisfaction.

CHAPTER 2

METHOD

Subjects

In order to determine how sex-role related choices differentially affect traditional versus non-traditional women, it was necessary to select subjects who could be operationally classified as either traditional or non-traditional women. The sample was composed of 80 women in each category, for a total for 160 subjects selected from an initial pool of 541 subjects. In order to examine the significance of choice in affecting women's self-esteem and lifestyle satisfaction, half the women (80) were free to choose between a stereotypically "feminine" versus "masculine" activity; the other half (80) were randomly assigned to a given activity (see Appendix J, Tables J.1-J.3). Therefore, there were eight cells of subjects (see below, Results, Table 3, for a complete breakdown of subjects).

Female, anglophone students were approached in large classes at the University of Ottawa in 1985. Subjects were grouped together by faculty as follows: Faculty 1, social sciences/humanities (n = 14) consisted of students culled from classes in psychology or religious studies. Faculty 2, sciences and engineering (n = 42) was made up of students from a wide range of the above disciplines, e.g., biochemistry, mechanical engineering. Faculty 3 (n = 57) consisted of women in education or the basic nursing programme. Faculty 4 (n = 11) was made up of women in an advanced nursing programme, designed for women who already have an R.N. degree and have worked in the paid labour force but wish to return to university to attain a B.Sc. degree.

Faculty 5 (n = 36) was made up of women in law, medicine or graduate studies. Wherever possible, an attempt was made to approach classes in the later years of a given programme in order to maximize the likelihood of selecting subjects who had made a commitment to a given career. The participant pool was 68% single, 88% childless and ranged in age from 17-43 ($\bar{x}$ = 24.08, SD = 5.29). A complete breakdown by faculty as well as by the other demographic characteristics is presented in Appendix K, i.e., marital status, parenthood (presence or absence of children) and age group (above or below the mean).

The students were invited to volunteer (no remuneration) for the research project and were told that the study concerns women's values and choices. Those who were interested in participating were instructed to complete two questionnaires and told that some of them would be contacted shortly thereafter for a further hour of involvement at their convenience. The women responded to the Bem Sex Role Inventory (B.S.R.I., Bem, 1975) followed by the Attitudes towards Women Scale short form (A.W.S., Spence, Helmreich and Stapp, 1973). The above test order had been chosen because it had been judged that less differential transfer in responding to the two questionnaires would occur if the B.S.R.I. was completed before the A.W.S. (It was anticipated that subjects might be inclined to alter their responses on the B.S.R.I. if they had already read the more pointed attitudinal questions of the A.W.S.) Those who scored as either "Feminine"/ Traditional on both tests or "Masculine"/Non-Traditional on both tests were selected for participation in the next phase of the research, in the laboratory, in 1986.

Instruments

The B.S.R.I. and the A.W.S. short-form were employed to identify those subjects from the initial pool who were classified as either highly traditional/"feminine" or non-traditional/"masculine" in terms of sex-role attitudes (A.W.S.) and traits (B.S.R.I.). The B.S.R.I. was developed in 1974 by Sandra L. Bem (see Appendix A). It has been used more extensively than any other sex-role instrument to measure masculinity, femininity and androgyny as indicated by the subjects' endorsement of sixty personality traits as self-descriptive. The subject is required to respond to each of the items on a 7-point scale ranging from 1, "Never or almost never true", to 7, "Always or almost always true" of herself (Bem, 1974, p. 158). Test-retest reliability of the B.S.R.I. is r = .90 for both Masculinity and Femininity (p. 160). The internal consistency of the test ranges from .75 to .88. It is considered, "the measure of choice for studies exploring stereotypic sex-role behaviour" (Wilson and Cook, 1984, p. 835). In addition, the scale is moderately correlated with the Masculinity-Femininity scale of the California Psychological Inventory (p. 160). Although there has been some debate as to the validity and scoring of the androgyny scale on the B.S.R.I., (Spence, Helmreich and Stapp, 1975; Pedhazur and Tetenbaum, 1979), there seems to be little criticism of the separate masculinity and femininity scales. (Curiously, both Spence et al., and Pedhazur and Tetenbaum indicate that traits of masculinity and femininity on the B.S.R.I. are correlated positively and negatively respectively with social desirability/self-esteem, though less so than the P.A.Q., Spence & Helmreich, 1978, 1979. Whether this result is characteristic of the relationship between sex-role and social self-

concept as argued by Taylor & Hall, 1982 and by Whitley, 1983, or is an artifact of the B.S.R.I. has yet to be fully clarified.) The extensive usage of this instrument in this type of investigation nonetheless serves as a precedent for its continued use in this endeavour (Vaughter, 1983).

The A.W.S. was developed by Spence and Helmreich in 1972 followed by the A.W.S. short form by Spence, Helmreich and Stapp, 1973, (see Appendix B). The 55-item original version is highly correlated (.91) with the 15-item counterpart and is more convenient with respect to time required for test administration (Spence & Helmreich, 1978). The internal consistency of the test is .89. The A.W.S. measures subjects' beliefs regarding appropriate roles for women in society (i.e., traditional versus feminist attitudes) and is the most frequently used instrument for this purpose. Each item consists of a declarative, prescriptive statement concerning the roles of women followed by four response alternatives: Agree Strongly, Agree Mildly, Disagree Mildly and Disagree Strongly. Each item is scored from 1 to 4; scores are summed with high total scores indicating liberal attitudes and low scores indicating conservative values.

Subjects who scored as "feminine" on the B.S.R.I. and as holding traditional sex-role values on the A.W.S. or those who scored as "masculine" and as holding non-traditional sex-role values were invited to participate in the next stage of this project, to be described below. The B.S.R.I. was scored using a relatively conservative approach, the median split method advocated by both Bem (1981c) and the critics of her previous difference score method, e.g., Spence, Helmreich, and Stapp (1975). It is currently the most popular scoring

procedure with the B.S.R.I. This method entails classifying subjects based on a median split of their scores on the Femininity (F) and Masculinity (M) scales. Some have questioned the suitability of even this scoring method, arguing that errors in classification may occur, particularly with small sample sizes and when classifying subjects into the four categories of Masculine, Feminine, Androgynous and Undifferentiated. Given the relatively large sample size in this study (n = 541) and the interest in only the masculine and feminine categories, the median split technique seemed highly appropriate. The medians found in this study on Femininity, 5.0 ($\bar{x}$ = 4.95) and on Masculinity, 4.9 ($\bar{x}$ = 4.84) almost parallel those suggested by Bem (1981c, p. 7) for research purposes (i.e., 4.9 and 4.95 respectively). Thus, women who scored above 5.0 on the F scale and below 4.9 on the M scale were classified as "feminine"; those who scored below 5.0 on the F scale and above 4.9 on the M scale were classified as "masculine". Those who scored either above the medians on both scales (androgynous) or below the medians on both scales (undifferentiated) were rejected. Furthermore, those whose F-minus-M scores fell within 5 "t" scores from either median were rejected, thereby minimizing/eliminating the number of potentially androgynous subjects from the study.

Similarly, a median split was utilized to classify subjects as holding traditional versus non-traditional sex-role attitudes on the A.W.S. Those scoring above the median of 38 were classified as traditional while those scoring below the median were classified as non-traditional. The mean of 37.26 (SD = 6.02) was considerably higher than that found by Spence and Helmreich (1978) of 29.59 (SD = 9.58). This was consistent with recent literature which suggests that scores on this measure have continued to increase since the development of the

A.W.S. short form in 1973 (cf., Atkinson & Huston, 1984; Helmreich, Spence & Gibson, 1982; Stake, 1979). As Jacobson and Insko (1984, p. 390) have stated:

> Societal trends and changes over the last decade have made some of the scale's content areas more generally acceptable. As a result, within a population of college women, there are relatively few with low scores.

In order to be accepted within the final sample, subjects had to score within the corresponding ranges on both tests. Presumably, subjects who met these criteria on both tests were appropriately categorized as either highly "feminine"/traditional or "masculine"/non-traditional. (This appears to have been verified in highly significant t-tests, see Results, Table 1.) The combination of these two tests in the selection process was intended to ensure that the final subject pool was chosen based on both sex role values and traits (Williams & Best, 1982). Actual behaviour was observed in the laboratory.

After participation in forced-choice, sex-role specific activities in the lab, (described below), self-esteem, satisfaction and conflict were assessed. The three measures employed were intended to assess these variables in light of both characterological (i.e., trait) and situational (i.e., state/behavioural) factors created in the laboratory. This study attempted to evaluate how self-esteem, satisfaction and conflict were affected by conformity or non-conformity to traditional sex-role attitudes, characteristics and behaviour. Forcing women to choose participation in either a traditional or non-traditional activity, (just as women confront similar choices in the real, external world), presumably brings their values and traits into play. Actual participation in such an activity was intended to make the consequences (i.e., upon self-esteem, satisfaction and conflict) more immediate,

if not salient, given freedom to choose the preferred activity.

As such, measures that could assess both characterological and situational self-esteem, satisfaction and conflict were required. The instruments had to be sensitive to these dependent variables in general as well as to how the subjects were affected specifically by their most recent choice (in the laboratory). While various measures were available for assessing characterological self-esteem, satisfaction and conflict, none was suited to the particular needs of this research. Therefore, three existing measures were adapted, with questions deleted and/or added, in order to render them more sensitive to immediate effects.

The instrument employed for the measurement of self-esteem was comprised of the complete Self-Regard (Sr) scale of the Personal Orientation Inventory (P.O.I., Shostrom, 1974). The Sr scale of the P.O.I. consists of 16 forced-choice items. Each item contains two opposite declarations about oneself, related to self-esteem. The subject was instructed to select the one in each pair that was most true to herself. Shostrom states that this scale, "Measures affirmation of self because of worth or strength" (1974, p. 5). A high score indicates positive self-evaluation while low scores suggest poor self-esteem. The P.O.I. was structured around the concept of the self-actualizing person and is designed to reflect value orientations (Shostrom, 1974, p. 23). Such an approach seemed particularly suited to a study that endeavours to examine how one's social, sex-role values, traits and behavioural choices influence self-esteem (as well as satisfaction and conflict). Three items were added to the Sr scale for the purpose of this project, two of which focus on the consequences of the subjects' choices (in general and in the laboratory) upon self-

esteem. Subjects were required to respond on a scale of 1 to 7 (see Appendix C).

The second of the dependent variables, satisfaction, refers to the subjects' overall satisfaction with their lives/lifestyles as well as with the results of their choice of activities in the laboratory. The instrument intended to measure satisfaction contained 27 items (see Appendix D). Eleven of these items were selected from the 44 items (25%) comprising the Sense of Well-Being (Wb) scale on the California Psychological Inventory (C.P.I., Gough, 1956a). The items included were chosen as they appeared to address the desired elements without alienating the respondents; many other items were excluded because their wording implied possible somatization or psychopathology and were therefore deemed inappropriate for testing with a "normal" sample. The 11 selected items were statements which the subjects marked as true or false. The 16 additional items were largely adapted for this study from Campbell (1980) and Manis (1980). These focus on the subjects' degrees of satisfaction/dissatisfaction with their choices (in life generally, as well as in the laboratory). That is, these questions examined whether the subjects' choices resulted in satisfaction or dissatisfaction. These were Likert-type items on a scale of 1 to 7. Both the self-esteem and lifestyle satisfaction scales reflect value orientations and implicit judgments of actual versus ideal self or lifestyle respectively.

The conflict experienced when subjects were forced to choose between traditional versus non-traditional behaviours was measured mainly indirectly (see Appendix E). The anxiety that is produced when one is confronted with such mutually exclusive choices was measured by

the State-Trait Anxiety Inventory (S.T.A.I., Spielberger, Gorsuch & Lushene, 1970). The S.T.A.I. consists of two 20-item series of self-statements, each followed by four response alternatives: Not At All, Somewhat, Moderately So and Very Much So. While for the first 20 items the subject was instructed to respond based on her immediate feelings, for the latter items she responded in general. Items were scored from 1 to 4. Thus both situational and trait anxiety were assessed. (The questions pertaining to situational conflict were not administered to subjects in the no-choice condition; in that they were not free to choose their activities, it would have been erroneous to question their degree of conflict surrounding a non-existent choice.) Furthermore, two additional questions were designed to measure directly the extent of the conflict associated with making choices (in general and in the laboratory). The latter two items were intended to address the degree of conflict produced by the confrontation of mutually-exclusive choices. Subjects were required to indicate their responses on a scale of 1 to 7.

Procedure

As stated above, subjects were selected on the basis of their scores on the B.S.R.I. and A.W.S. which was completed during the initial contact in class. Those who were invited to participate in the second phase of the research, were requested to come to the Social Psychology Laboratory at the University of Ottawa. Their identifying code numbers and scores on the A.W.S. and B.S.R.I. had been kept separate from the list of their names and telephone numbers. Thus, when individuals entered the laboratory, the experimenter was blind as to their gender-role identities (i.e., which women were traditional

and which were non-traditional). Pairs of subjects combined at random, were present for each testing session. The presence of a second subject as well as a highly visible videotape camera (allegedly "on" but actually without film) served to make the experience more socially salient. In addition, subjects were told that their choice of activity and/or participation in a given task would be viewed by the thesis supervisor; his name and nearby presence were mentioned. The sense that one's conduct was under observation was intended to intensify feelings of salience that might result from choosing to conform or not conform to norms of traditional/"feminine" behaviour out in the real world. Upon entering the laboratory, each subject was asked to sit on either side of a partition and to sign a consent form agreeing to participation in a study of women's values and choices (see Appendix I). Half were presented with the written instructions for the choice of activities and told to indicate their preferences in the selected box (see Appendix F). The other half were randomly assigned to a given activity. The two possible tasks involved one highly "feminine"/ traditional activity and a second highly "masculine"/non-traditional activity. The former activity entailed stuffing and sewing together pillows in the shape of and featuring pictures of such Disney characters as Cinderella, Mickey Mouse, Minnie Mouse and Donald Duck. In contrast, the second activity consisted of assembling a weight-bench, (i.e., a piece of gymnasium equipment used for lifting weights, doing "bench-presses", etc.). A preliminary survey of 85 students enrolled in Introduction to Psychology confirmed the expected norm: Seventy-six percent of both males and females indicated that the

"average" woman would choose to stuff the pillows (see Appendix G). It was anticipated that the women in the laboratory would be aware of the prevailing norms as they made their choices, and would be affected by them in choosing either conformity (i.e., stuffing pillows) or non-conformity (i.e., assembling weight-benches). No rationale was given to the subjects for engaging in these tasks until the subsequent debriefings, at which time they indicated that they had discerned the sex-role stereotypic nature of the tasks from the outset. The subjects who had been pre-selected as highly "feminine"/ traditional were expected to stuff the pillows. It had been expected that the "masculine"/non-traditional subjects would be more likely to decide to assemble the gym equipment. This had, in fact, been verified during the development of the gender-stereotypic tasks when pre-testing indicated that 5 out of the 6 non-traditional pilot subjects selected the weight-benches. The materials required for both tasks (i.e., the kits plus needles and thread, screwdriver and wrench) were readily available, visible and were packaged in a manner that reinforced the stereotypic nature of the tasks. Subjects were told that both tasks could be completed within one hour and that assistance would be provided if necessary. Upon making their selections, the two subjects would work separately on either side of the partition.

This procedure was intended to reproduce, in the laboratory, the kind of forced choice that women must confront every day. Women often face choices that are perceived as mutually exclusive. They decide whether or not to conform to sex-role norms based on attitudes, personal characteristics and anticipated consequences. Theoretically,

their actions are likely to affect self-esteem, satisfaction and conflict experienced thereafter. Therefore, at the conclusion of the task, subjects were instructed to respond to the three corresponding questionnaires. When the tests were completed and before leaving the laboratory, subjects were fully debriefed.

Statistical Analyses

Data were analyzed using ANOVAs, planned contrasts, post hoc Scheffé tests, t-tests, chi square tests of independence and Pearson correlation coefficients.

Checks on the effectiveness of the independent variables and their interrelations entailed the use of t-tests, chi square tests of independence and Pearson correlation coefficients. T-tests were used to establish whether individuals classified as traditional or non-traditional on the basis of their scores on the B.S.R.I. and A.W.S. were in fact significantly different from one another. In addition, t-tests examined whether or not subjects randomly designated as experimental or control scored differently on the B.S.R.I. and A.W.S. The effectiveness of the behavioural measure (e.g., selection of pillows versus weight-benches) was gauged in part by analyzing the relationship of the behavioural choice with gender role identity; chi square tests of independence as well as contingency coefficients were utilized for this purpose. In addition, chi square tests and Pearson correlation coefficients were employed to assess the association among the independent and dependent variables as well as their relations with

the demographic characteristics of age, marital status, faculty and parenthood.

The major hypotheses (see p. 24) were tested by way of ANOVAs, a priori, planned contrasts and post hoc Scheffé tests. Univariate ANOVAs were chosen over MANOVAs in that the three dependent variables (i.e., self-esteem, lifestyle satisfaction and anxiety/conflict) are conceptually distinct. They are only moderately correlated with coefficients ranging from -.52 to +.67 (see Table 10). Furthermore, the use of univariate over multivariate ANOVAs reduces the probability of experimentwise error occurring. Hypothesized differences in comparisons of particular cells or combinations of cells were analyzed using planned contrasts. Other post hoc analyses of significant differences were examined via Scheffé tests.

Subsequent to the primary hypothesis testing, ANOVAs, contrasts and Scheffé tests were employed to analyze additional demographic information pertaining to the aforementioned marital status, age, faculty and parenthood. The possible impact of these characteristics on the dependent variables was therefore analyzed despite the absence of relevant a priori hypotheses. Given that these factors could have potentially accounted for a significant share of the variance within the dependent variables, subsequent ANCOVAs were employed to control for the effects of the demographic variables. As no significant differences occurred between ANOVAs and ANCOVAs, the ANCOVA results are not included in this report. They are, however, available to the interested reader.

CHAPTER 3

RESULTS

Before describing the results, some data that have bearing on the effectiveness of the independent and dependent measures will be presented.

Data will be presented to shed light on the extent to which the three independent variables were effective in their intended purpose. The A.W.S. and B.S.R.I. scores were intended to serve as criteria for designation of subjects as traditional or non-traditional. T-tests were used to assess the degree to which the two groups of women actually differed on the above criteria.

Subjects were to be randomly assigned to either the experimental (free choice) or control (no choice) conditions. T-tests were conducted to verify that the two groups were, in fact, selected at random.

The choice of pillows versus weight-benches was intended to serve as criteria of conformity/non-conformity to gender stereotypic behaviour. Chi square tests of independence, contingency coefficients and binomial tests were used to examine the women's selection patterns.

T-tests and chi square tests of independence were also conducted to examine the different demographic characteristics of the traditional versus non-traditional subjects.

Correlation coefficients were used to further substantiate that subjects designated as traditional versus non-traditional were selected

appropriately, i.e., at the extremes of both gender role attitudes and traits.

Finally, correlation coefficients were employed in order to examine the relationships among the three dependent variables, particularly the hypothesized relationship (see Chapter 1) between trait self-esteem and trait lifestyle satisfaction.

Independent Variables and Related Data

As stated in Chapter 2, the women subjects were categorized as either traditional or non-traditional on the basis of their A.W.S. and B.S.R.I. scores. The subjects in both categories were randomly assigned in equal numbers to the experimental (free choice group) or control (no choice group) conditions. Thus, the 160 subjects were divided into the following four groups of 40 subjects: traditional experimental, non-traditional experimental, traditional control and non-traditional control. These four groups were then further subdivided into eight cells on the basis of whether the subjects within stuffed pillows or assembled weight-benches as illustrated below:

Choice / No Choice	Gender Identity: Traditional Gender Role Behaviour — Conformity	Traditional — Non-Conformity	Non-Traditional Gender Role Behaviour — Conformity	Non-Traditional — Non-Conformity
Choice	Cell 1 n = 22	Cell 2 n = 18	Cell 3 n = 8	Cell 4 n = 32
No Choice	Cell 5 n = 20	Cell 6 n = 20	Cell 7 n = 20	Cell 8 n = 20

FIGURE 4

DISTRIBUTION OF SUBJECTS BY INDEPENDENT VARIABLES

Using t-tests, comparisons of the B.S.R.I. and A.W.S. scores obtained by the traditional and non-traditional subjects yielded the following significant differences: The traditional group obtained lower A.W.S. ($p < .001$) and B.S.R.I. masculinity ($p < .001$) scores, but higher B.S.R.I. femininity ($p < .001$) and B.S.R.I. total ($p < .01$) scores, than did the non-traditional group (see Table 1).

To check on the effectiveness of the random assignment of subjects to conditions, the A.W.S. and B.S.R.I. scores of the experimental and control groups were compared by means of t-tests (see Table 2). As expected, there were no statistically significant differences between the two groups.

The selection of pillows versus weight-benches had been intended to reflect conformity/nonconformity to gender stereotypic norms. The relationship of the women's choice patterns to gender role identity and demographic characteristics was examined via chi square tests of independence, contingency coefficients and binomial tests. Of the 80 control subjects, half the traditional and half the non-traditional

Table 1

T-TESTS FOR TRADITIONAL VS. NON-TRADITIONAL
WOMEN'S SCORES ON THE AWS AND BSRI

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
AWS	SCORE ON AWS						
	GROUP 1 (a)	80	32.6750	4.996	-14.89	111.26	0.000
	GROUP 2 (b)	80	41.8375	2.308			
BSRIM	MASCULINITY BSRI						
	GROUP 1	80	4.2456	0.480	-15.80	158.00	0.000
	GROUP 2	80	5.4419	0.477			
BSRIF	FEMINITY BSRI						
	GROUP 1	80	5.3619	0.322	14.82	154.67	0.000
	GROUP 2	80	4.5437	0.374			
BSRI	TOTAL BSRI SCORE						
	GROUP 1	80	1.1056	0.501	23.30	154.35	0.000
	GROUP 2	80	-0.8994	0.585			

(a) Group 1 = Traditional Subjects
(b) Group 2 = Non-Traditional Subjects

Table 2

T-TESTS OF EXPERIMENTAL VS. CONTROL GROUP SCORES
ON THE AWS AND BSRI

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
AWS	SCORE ON AWS						
	GROUP 1 (a)	80	36.9250	6.270	-0.70	156.91	0.488
	GROUP 2 (b)	80	37.5875	5.767			
BSRIM	MASCULINITY BSRI						
	GROUP 1	80	4.8456	0.852	0.03	150.31	0.975
	GROUP 2	80	4.8419	0.677			
BSRIF	FEMINITY BSRI						
	GROUP 1	80	4.9400	0.599	-0.30	149.92	0.764
	GROUP 2	80	4.9656	0.473			
BSRI	TOTAL BSRI SCORE						
	GROUP 1	80	0.0869	1.315	-0.18	143.55	0.858
	GROUP 2	80	0.1194	0.947			

(a) Experimental Group
(b) Control Group

women were randomly assigned to assemble the weight-benches while the other half stuffed pillows. The 80 subjects in the experimental group were free to choose whichever activity they preferred. The breakdown of subjects is illustrated in Table 3. The vast majority (80%) of non-traditional (experimental) subjects (32), selected the non-traditional activity, the weight-bench. However, the 40 traditional (experimental) subjects split almost evenly between the pillows (55%) and weight-benches (45%). Overall, 62.5% of the experimental subjects selected the weight-benches. Both the chi square test for independence ($p < .01$) and the contingency coefficient ($c = .34$) suggest that gender-role identity is, in fact, related to choice of activity (see Table 4). However, binomial tests were conducted in order to determine the probability that the above combination of events (i.e., the proportion of women who selected pillows versus weight-benches) occurred at random (Mendenhall, Ott & Larson, 1974, pp. 164-165). These tests clarified that while the selection of activity did appear to be linked to gender-role identity in non-traditional women ($p < .0001$), the choice of activity in traditional women occurred randomly. Selection of activity did not appear to be related to age or to parenthood, (see Appendices L and M).

Demographic Characteristics of Traditional and Non-Traditional Women

Other chi square tests illuminated the socio-cultural and academic/career related differences between the traditional and non-traditional women (see Tables 5-9).

Table 3

DISTRIBUTION OF SUBJECTS BY CELLS IN RAW NUMBERS AND PERCENTAGES

Variables	Cell	Frequency	%
EX-T-P	1.	22	13.7
EX-T-WB	2.	18	11.2
EX-NT-P	3.	8	5.0
EX-NT-WB	4.	32	20.0
CON-T-P	5.	20	12.5
CON-T-WB	6.	20	12.5
CON-NT-P	7.	20	12.5
CON-NT-WB	8.	20	12.5
	TOTAL	160	100.0

Ex = Experimental
T = Traditional
P = Pillows
WB = Weight-Bench
CON = Control

Table 4

CHI SQUARE TEST OF INDEPENDENCE BY CONFORMITY/
NON-CONFORMITY AND GENDER-ROLE IDENTITY

Gender-Role Identity	COUNT / ROW PCT / COL PCT / TOT PCT	Conformity/Non-Conformity: Pillow (1)	Conformity/Non-Conformity: Weight-Bench (2)	ROW TOTAL
TRADITIONAL	1	22	18	40
		55.0	45.0	50.0
		73.3	36.0	
		27.5	22.5	
NONTRADITIONAL	2	8	32	40
		20.0	80.0	50.0
		26.7	64.0	
		10.0	40.0	
	COLUMN TOTAL	30	50	80
		37.5	62.5	100.0

CORRECTED CHI SQUARE = 9.01333 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0027
RAW CHI SQUARE = 10.45333 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0012
PHI = 0.36148
CONTINGENCY COEFFICIENT = 0.33995

Table 5

CHI SQUARE TEST OF INDEPENDENCE BY GENDER-ROLE IDENTITY AND AGE GROUP

		GENDER-ROLE IDENTITY		
	COUNT / ROW PCT / COL PCT / TOT PCT	TRAD[a]	NONTRAD[b]	ROW TOTAL
		1	2	
17-23	1	48	28	76
		63.2	36.8	54.7
		65.8	42.4	
		34.5	20.1	
24 OR OLDER	2	25	38	63
		39.7	60.3	45.3
		34.2	57.6	
		18.0	27.3	
	COLUMN TOTAL	73	66	139
		52.5	47.5	100.0

CORRECTED CHI SQUARE = 6.70018 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0096
RAW CHI SQUARE = 7.61248 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0058
PHI = 0.23402
CONTINGENCY COEFFICIENT 0.22786

NUMBER OF MISSING OBSERVATIONS = 21

(a) Traditional Subjects
(b) Non-Traditional Subjects

Table 6

CHI SQUARE TEST OF INDEPENDENCE BY MARITAL STATUS AND GENDER-ROLE IDENTITY

MARITAL STATUS

Gender-Role Identity	COUNT / ROW PCT / COL PCT / TOT PCT	SINGLE	MAR.[a]	SEP[b]	ENGAGED	ROW TOTAL
TRADITIONAL	1	56	12	2	10	80
		70.0	15.0	2.5	12.5	50.0
		51.4	36.4	33.3	83.3	
		35.0	7.5	1.2	6.3	
NONTRADITIONAL	2	53	21	4	2	80
		66.3	26.3	5.0	2.5	50.0
		48.6	63.6	66.7	16.7	
		33.1	13.1	2.5	1.2	
COLUMN TOTAL		109	33	6	12	160
		68.1	20.6	3.8	7.5	100.0

2 OUT OF 8 (25.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.
MINIMUM EXPECTED CELL FREQUENCY = 3.000
RAW CHI SQUARE = 8.53711 WITH 3 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0361
CRAMER'S V = 0.23099
CONTINGENCY COEFFICIENT = 0.22506

(a) Married or Common-Law
(b) Separated or Divorced

Table 7

CHI SQUARE TEST OF INDEPENDENCE BY FACULTY AND GENDER-ROLE IDENTITY

Gender-Role Identity	COUNT / ROW PCT / COL PCT / TOT PCT	FACULTY SS/H[a] 1	SCI[b] 2	ED[c] 3	ADV RN[d] 4	LAW[e] 5	ROW TOTAL
TRADITIONAL	1	6	24	40	5	5	80
		7.5	30.0	50.0	6.3	6.3	50.0
		42.9	57.1	70.2	45.5	13.9	
		3.7	15.0	25.0	3.1	3.1	
NONTRADITIONAL	2	8	18	17	6	31	80
		10.0	22.5	21.3	7.5	38.8	50.0
		57.1	42.9	29.8	54.5	86.1	
		5.0	11.2	10.6	3.7	19.4	
COLUMN TOTAL		14	42	57	11	36	160
		8.8	26.3	35.6	6.9	22.5	100.0

RAW CHI SQUARE = 29.29222 WITH 4 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0000
CRAMER'S V = 0.42787
CONTINGENCY COEFFICIENT = 0.39338

(a) Social Sciences/Humanities
(b) Sciences or Engineering
(c) Education or Basic Nursing
(d) Advanced Nursing Programme
(e) Law, Medicine or Graduate Studies

Table 8

T-TEST OF THE AVERAGE AGE OF TRADITIONAL VS.
NON-TRADITIONAL WOMEN

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
AGE	AGE OF SUBJECT						
	GROUP 1 (a)	80	23.0750	5.028	-2.43	157.24	0.016
	GROUP 2 (b)	80	25.0750	5.391			

(a) Traditional
(b) Non-Traditional

Table 9

CHI SQUARE TEST OF INDEPENDENCE BY PARENTHOOD AND GENDER-ROLE IDENTITY

Gender-Role Identity	COUNT / ROW PCT / COL PCT / TOT PCT	PARENTHOOD: Without Children (0)	PARENTHOOD: Mothers (1)	ROW TOTAL
1 TRADITIONAL		74	6	80
		92.5	7.5	50.0
		52.5	31.6	
		46.2	3.7	
2 NONTRADITIONAL		67	13	80
		83.8	16.3	50.0
		47.5	68.4	
		41.9	8.1	
COLUMN TOTAL		141	19	160
		88.1	11.9	100.0

CORRECTED CHI SQUARE = 2.15005 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.1426
RAW CHI SQUARE = 2.92646 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0871
PHI = 0.13524
CONTINGENCY COEFFICIENT = 0.13402

These tests indicated that gender-role identity was related significantly to age, marital status and faculty (i.e., career path), but not to parenthood. Subjects less than 24 years of age were more likely to be traditional; those aged 24 or older were more likely to be non-traditional ($p < .01$, see Table 5). In addition, the significant age difference between traditional and non-traditional subjects was supported by the t-test indicated in Table 8 ($p < .02$).

Single women were more likely to be traditional than non-traditional while those who were married, separated or divorced were more likely to be non-traditional ($p < .04$, see Table 6).

Those in nursing, education, science and engineering were more likely to be traditional than those in the social sciences/humanities, law, medicine, graduate studies or the advanced nursing programmes ($p < .001$, see Table 7). It may be noteworthy that the women in the former faculties were typically single (as illustrated in Chapter 2). All of the subjects in the latter faculties except those in the social sciences/humanities were likely to fall in the older age group.

In summary, the profile of the traditional subject in this study is that of a young, single women enrolled in nursing, education, science or engineering programmes. The non-traditional woman is more likely to be older than her traditional counterpart; married, separated or divorced; studying in the social sciences/humanities, law, medicine, graduate studies or the advanced nursing programme.

Correlations Among Independent and Dependent Variables

Independent Variables

The following correlation matrix (Table 10) presents Pearson correlations among all continuous independent and dependent variables. Of particular interest are the correlations among the A.W.S. and B.S.R.I. scales. They provide further evidence as to the efficacy of the selection procedures of the target sample. As expected, the A.W.S. showed a modest but highly significant positive correlation with the B.S.R.I. masculinity scale (r = .58, p < .001). In addition, it was negatively correlated with the B.S.R.I. femininity scale (r = -.62, p < .001) and with the B.S.R.I. total score (r = -.67, p < .001, see Figures 5-7). These correlations are somewhat stronger than the low and/or insignificant coefficients found by Bem (1977) or Spence and Helmreich (1978, 1979). These results are probably due to the elimination of androgynous and undifferentiated subjects from the initial pool of 541 women. The final selection of only those (160) women who scored at the extremes on both scales may explain why the correlations found in this study were higher than those found in the literature. (Similarly, the above authors have suggested that the magnitude of the correlations occurring in their research could be accounted for largely by high and low scorers.)

Furthermore, the correlation between the B.S.R.I. masculinity and femininity scales was of considerably greater magnitude than those reported by Bem (1981c). Whereas the coefficients reported by Bem

Table 10

PEARSON CORRELATION MATRIX OF INDEPENDENT AND DEPENDENT VARIABLES

	AGE	AWS	BSRIM	BSRIF	BSRI	S.E. TRAIT	S.E. STATE	L.S. TRAIT	L.S. STATE	A/C TRAIT	A/C STATE
AGE	1.0000 n=0										
AWS	.2122** n=160	1.0000 n=0									
BSRIM	.1216 n=160	.5812*** n=160	1.0000 n=0								
BSRIF	-.1282 n=160	-.6191*** n=160	-.5433*** n=160	1.0000 n=0							
BSRI	-.1391* n=160	-.6737*** n=160	-.9151*** n=160	.8306*** n=160	1.0000 n=0						
S.E. TRAIT	.2971*** n=154	.2613*** n=154	.4037*** n=154	-.1476* n=154	-.3428*** n=154	1.0000 n=0					
S.E. STATE	-.0430 n=80	.0209 n=80	.0003 n=80	-.0591 n=80	-.0231 n=80	.0894 n=75	1.0000 n=0				
L.S. TRAIT	.2086** n=154	.1379* n=154	.3563*** n=154	-.0089 n=154	-.2376*** n=154	.6260*** n=153	.0966 n=74	1.0000 n=0			
L.S. STATE	-.1843 n=79	.0024 n=79	-.0679 n=79	-.0214 n=79	.0514 n=79	.2114* n=74	.6647*** n=79	.2001* n=73	1.0000 n=0		
A/C TRAIT	-.1948** n=159	-.2671*** n=159	-.4310*** n=159	.2125** n=159	.3892*** n=159	-.6195*** n=153	-.1350 n=79	-.5219*** n=153	-.0046 n=78	1.0000 n=0	
A/C STATE	-.0609 n=78	-.1134 n=78	-.0960 n=78	.1095 n=78	.1071 n=78	-.3624*** n=73	-.0632 n=78	-.3104** n=72	-.1297 n=77	.5240*** n=77	1.0000 n=0

*p < .05 **p < .01 ***p < .001

S.E. = Self-Esteem L.S. = Lifestyle Satisfaction A/C = Anxiety/Conflict

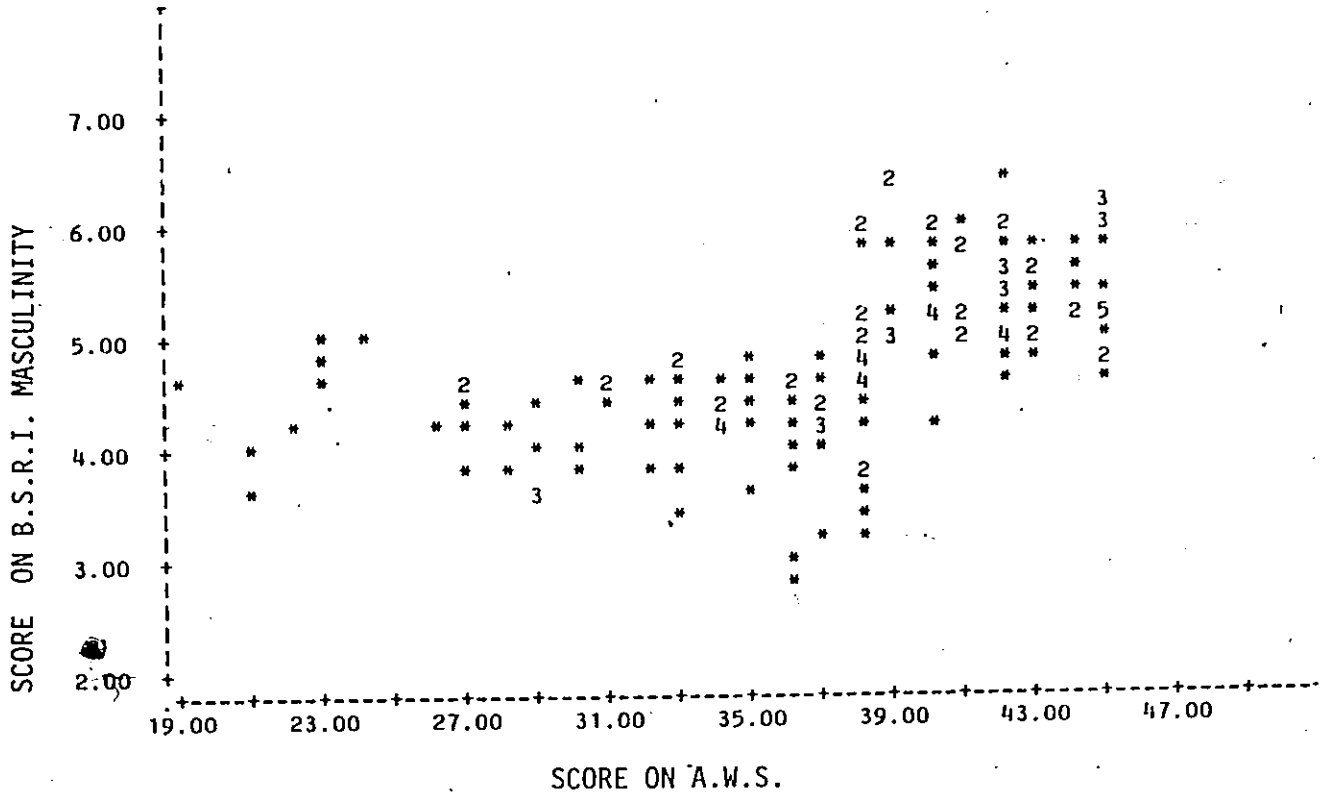

FIGURE 5

CORRELATION AND SCATTERPLOT OF A.W.S. AND B.S.R.I. MASCULINITY SCORES

STATISTICS..					
CORRELATION (R)-	0.58124	R SQUARED -	0.33784	SIGNIFICANCE -	0.00000
STD ERR OF EST -	0.62584	INTERCEPT (A) -	2.08310	SLOPE (B) -	0.07410
PLOTTED VALUES -	160	EXCLUDED VALUES-	0	MISSING VALUES -	0

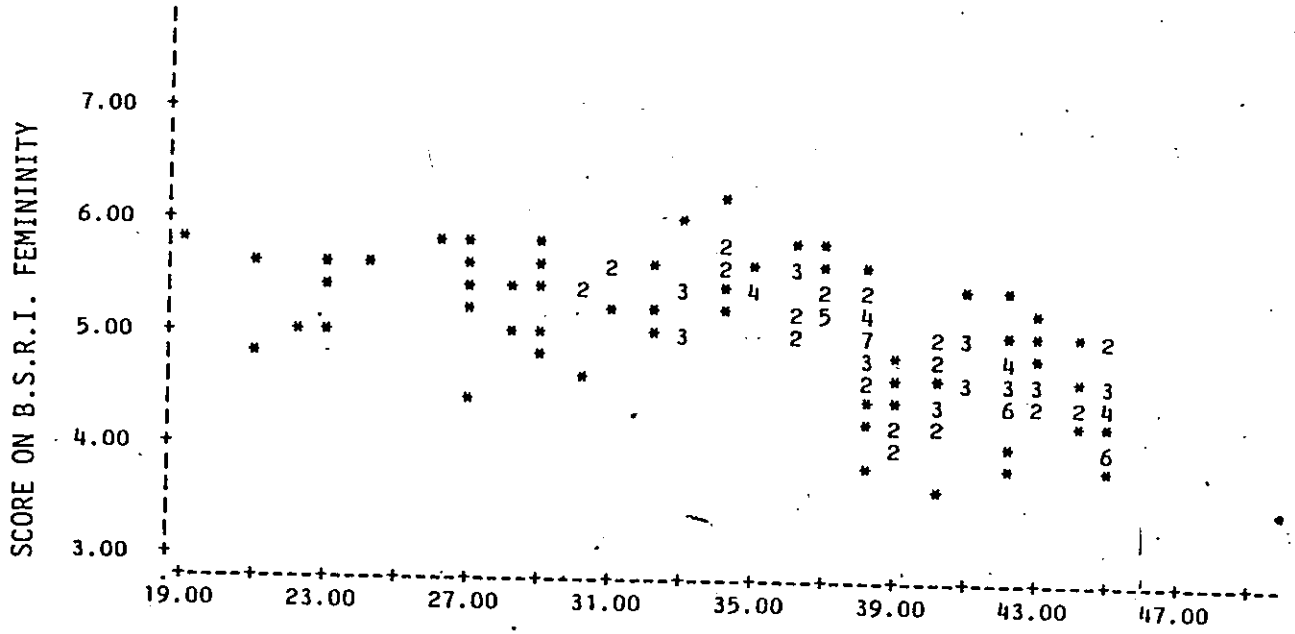

FIGURE 6

CORRELATION AND SCATTERPLOT OF A.W.S. AND B.S.R.I. FEMININITY SCORES

STATISTICS..

CORRELATION (R)-	-0.61909	R SQUARED -	0.38327	SIGNIFICANCE -	0.00000
STD ERR OF EST -	0.42388	INTERCEPT (A) -	7.01641	SLOPE (B) -	-0.05539
PLOTTED VALUES -	160	EXCLUDED VALUES-	0	MISSING VALUES -	0

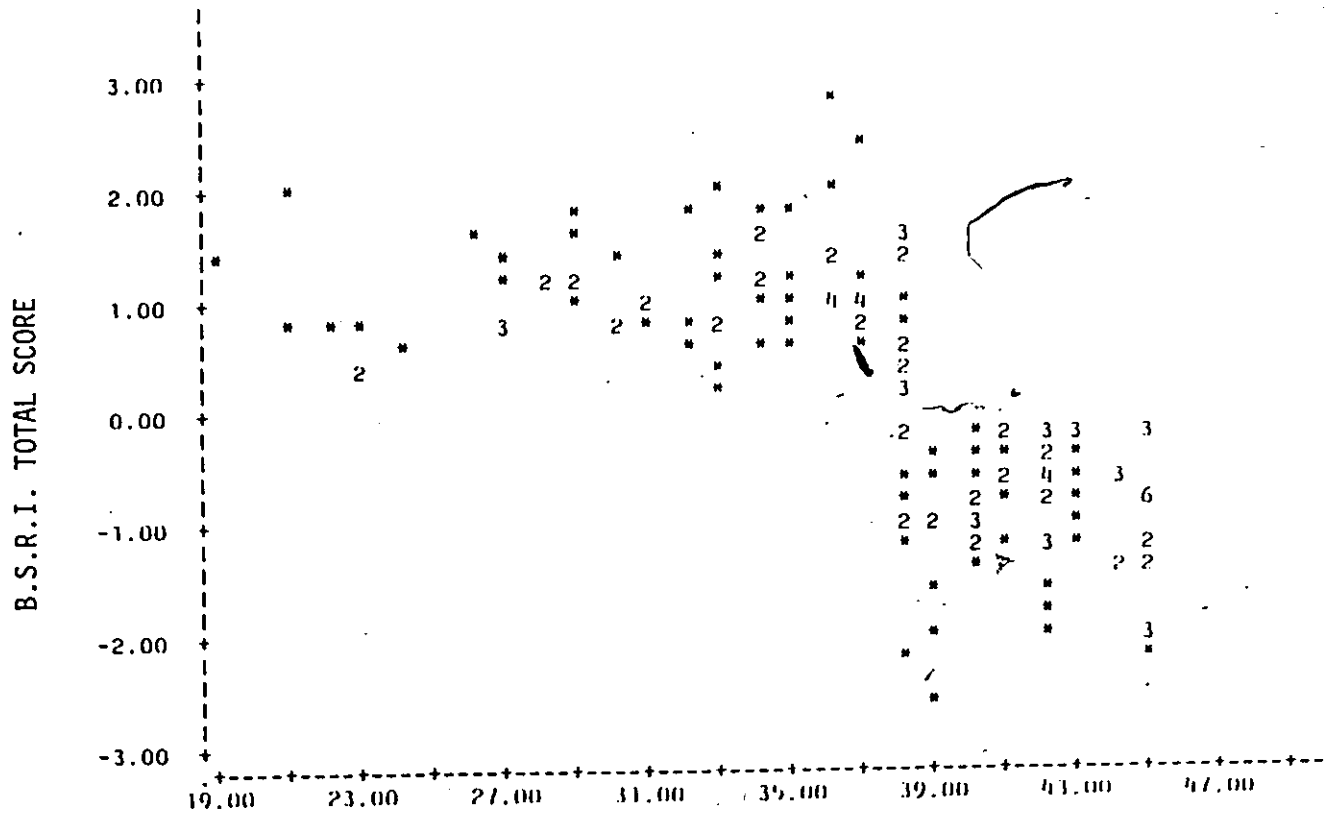

FIGURE 7

CORRELATION AND SCATTERPLOT OF A.W.S. AND B.S.R.I. TOTAL SCORES

STATISTICS..					
CORRELATION (R)-	-0.67366	R SQUARED -	0.45382	SIGNIFICANCE -	0.00000
STD ERR OF EST -	0.84711	INTERCEPT (A) -	4.87170	SLOPE (B) -	-0.12799
PLOTTED VALUES -	160	EXCLUDED VALUES-	0	MISSING VALUES -	0

ranged from r = .00 to r = +14, a moderate but significant negative correlation was found in this study (r = -.54, p < .001). The B.S.R.I. masculinity and femininity scales were each highly correlated with the B.S.R.I. total score, with coefficients of r = .-92, p < .001 and r = .83, p < .001 respectively (see Table 10).

Dependent Variables

Various moderate, significant correlations occurred among the dependent variables. Although it had been predicted that an inverse relationship would occur between trait self-esteem and trait lifestyle satisfaction, a positive correlation was found (r = .63, p < .0001, see Figure 8). State measures of self-esteem and lifestyle satisfaction were also positively intercorrelated (r = .67, p < .001, see Table 10).

As one would expect, trait self-esteem was moderately, negatively correlated with trait anxiety/conflict (r = -.62, p < .01). No significant intercorrelation occurred between state measures of self-esteem and state anxiety/conflict (see Table 10).

Finally, a negative intercorrelation was found between trait measures of lifestyle satisfaction and trait anxiety/conflict, (r = -.52, p < .001). No significant correlation was found between state lifestyle satisfaction and state anxiety/conflict.

(These low, insignificant correlations of state self-esteem and state lifestyle satisfaction with state anxiety/conflict may be related to the nature of the items in these measures. That is to say while the questions in the former scales deal only with feelings regarding the

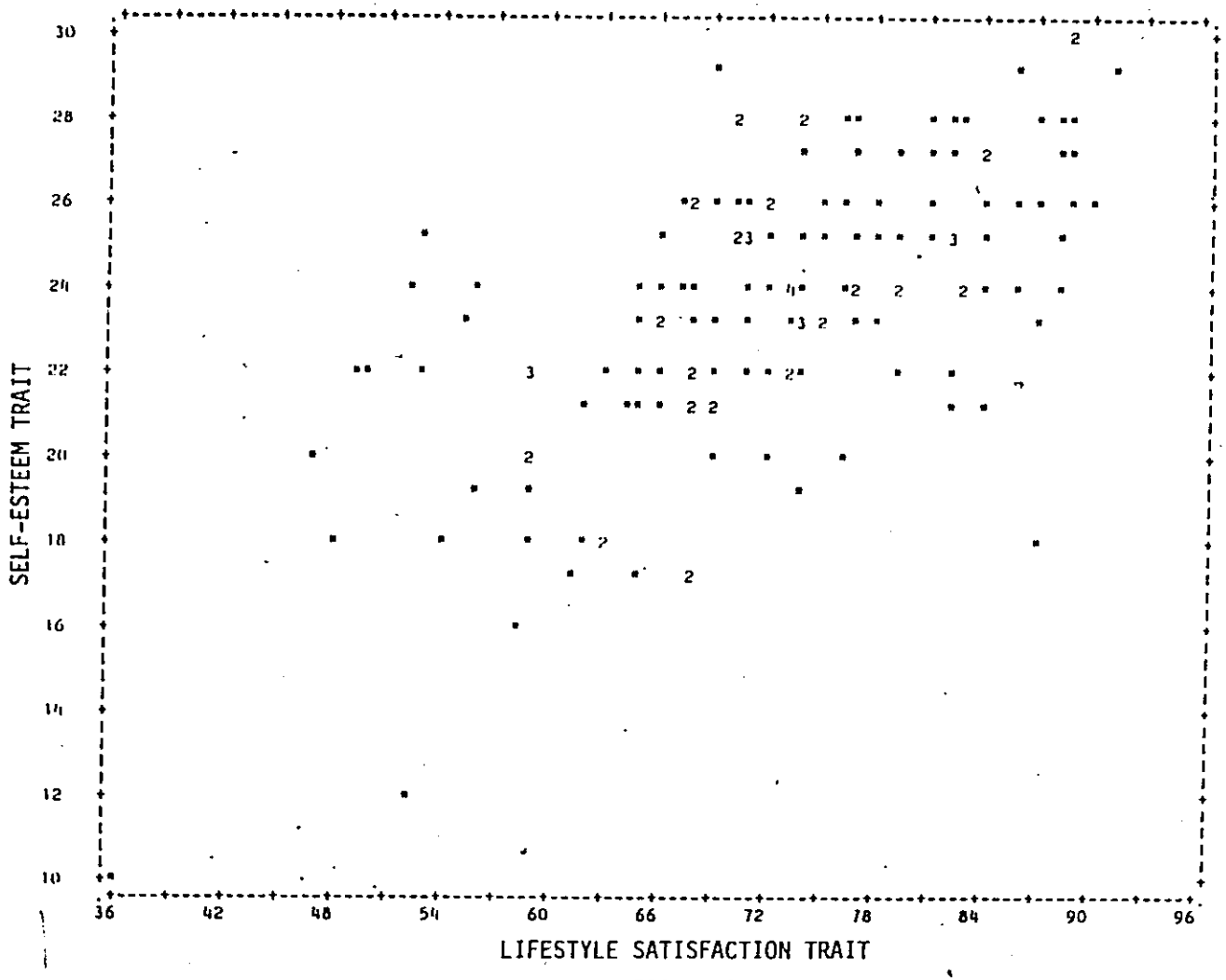

FIGURE 8

CORRELATION AND SCATTERPLOT OF TRAIT LIFESTYLE SATISFACTION AND TRAIT SELF-ESTEEM

STATISTICS..					
CORRELATION (R)-	.62598	R SQUARED -	.39185	SIGNIFICANCE -	.00000
STD ERR OF EST -	2.59973	INTERCEPT (A) -	9.09724	SLOPE (B) -	.19987
PLOTTED VALUES -	153	EXCLUDED VALUES-	0	MISSING VALUES -	7

activity just completed, the majority of items in the latter scale derive from the State-Trait Anxiety Inventory and are therefore more general.)

Results of ANOVAs, Planned and Post Hoc Comparisons on Dependent Variables

The results will be divided into three sections as follows: self-esteem, lifestyle satisfaction and anxiety/conflict. The data were analyzed by ANOVAs and planned contrasts (as indicated in Chapter 2). A summary of these findings is presented in Table 11. Post hoc Scheffé tests were performed where warranted by overall significant F-test results.

The ANOVAs compared subjects (n = 160) in each of the eight cells on all trait measures. Control subjects had been randomly assigned to engage in the behavioural tasks. They could not be asked to respond to questions that examined their post-decisional state, i.e., pertaining to choice of pillow versus weight bench, because they had had no choice (see items 78, 91, 92 and 147 in Appendix H). As a result, all ANOVAs on state measures compared the four experimental cells (1-4, n = 80) only.

In addition, ANOVAs (n = 160) on all trait measures were conducted by marital status, parenthood, faculty and age group (above/below $\overline{X}$ = 24). No state measures were employed, as explained above. (Depending on cell size) either post hoc Scheffé tests or contrasts were conducted on significant ANOVAs.

Table 11

SUMMARY OF THE ANALYSES OF VARIANCE AND CONTRASTS ON TRAIT AND STATE MEASURES OF ALL DEPENDENT VARIABLES

		'T' Tests - Contrasts							
Variables	F Tests ANOVAs	Traditional vs. Non-Traditional	Pillow vs. Weight Bench	Experimental vs. Control	Cells 1 vs. 4	Cells 1 vs. 5	Cells 4 vs. 8	Difference of Cells (1-4) vs. (5-8)	Sum of Cells (1+4) vs. (5+8)
S.E. Trait	2.994** n=154	-3.289** n=154	0.138 n=154	-0.344 n=154	-2.868** n=54	-1.327 n=42	0.567 n=52	-1.421 n=94	-0.798 n=94
S.E. State	5.188** n=80	2.422* n=80	-5.018*** n=80		-1.826 n=54				
L.S. Trait	2.132* n=154	-1.994* n=154	-0.564 n=154	-1.086 n=154	-1.799 n=54	-1.103 n=42	-0.800 n=52	-0.337 n=94	-1.360 n=94
L.S. State	11.586*** n=79	3.014** n=79	-5.475*** n=79		-2.554** n=54				
A/C Trait	4.045*** n=159	3.937*** n=159	-1.420 n=159	-0.441 n=159	3.157** n=54	1.221 n=42	-1.976 n=52	2.168* n=94	-0.225 n=94
A/C State	0.293 n=78	0.691 n=78	0.186 n=78		0.685 n=54				

*p < .05 **p < .01 ***p < .001

S.E. = Self-Esteem
L.S. = Lifestyle Satisfaction
A/C = Anxiety/Conflict

Self-Esteem - Trait and State

The following results on trait self-esteem pertain to hypotheses 1 and 3 (p. 24). Significant differences occurred on overall trait ($p < .0058$) and state measures of self-esteem ($p < .0028$, see Tables 12 and 13 respectively). As stated in hypothesis 1 (p. 24), it had been predicted that traditionally oriented women would have lower self-esteem than non-traditional women. Contrasts of cells 1, 2, 5 and 6 versus cells 3, 4, 7 and 8 confirmed that indeed traditional women scored significantly lower on trait self-esteem than non-traditional women ($p < .002$) thereby confirming hypothesis 1 (see Table 12).

Furthermore, hypothesis 3 (p. 24) suggested that traditional-conforming women would have lower self-esteem than non-traditional-non-conforming women. Traditional-conforming women (i.e., cell 1, traditional women who chose to stuff pillows) did have lower scores on trait self-esteem ($p < .007$, see Table 12) than non-traditional-non-conforming women (i.e., cell 4, non-traditional women who chose to assemble weight-benches). Thus, hypothesis 3 was confirmed.

For purposes of comparison with the literature, the first 16 of the 19 items of the self-esteem measure (i.e., items 61-76, see Appendix H) were analyzed separately. As described in Chapter 2, these 16 items comprise the entire Self-Regard scale of the P.O.I. (Shostrom, 1974). Thus, in addition to the analyses described above, the ANOVAs examining only the Sr scale of the P.O.I. indicated significant differences among groups ($p < .0038$). Contrasts reconfirmed that traditionally oriented women scored lower than their non-traditional

Table 12

ANALYSIS OF VARIANCE AND CONTRASTS ON TRAIT
SELF-ESTEEM BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	217.6876	31.0982	2.9935	.0058
WITHIN GROUPS	146	1516.7540	10.3887		
TOTAL	153	1734.4416			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	2.2168	-3.289	57.3	0.002
CONTRAST 2	2.2168	0.138	57.3	0.891
CONTRAST 3	2.2168	-0.344	57.3	0.732
CONTRAST 4	0.9214	-2.868	36.3	0.007
CONTRAST 5	1.0547	-1.327	39.9	0.192
CONTRAST 6	0.6929	0.567	44.5	0.574
CONTRAST 7	1.2620	-1.421	70.1	0.160
CONTRAST 8	1.2620	-0.798	70.1	0.428

Table 13

ANALYSES OF VARIANCE, CONTRASTS AND SCHEFFE TESTS
ON STATE SELF-ESTEEM (ITEM 78) BY CELLS (1-4)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	17.0415	5.6805	5.1184	.0028
WITHIN GROUPS	76	84.3460	1.1098		
TOTAL	79	101.3875			

CONTRAST COEFFICIENT MATRIX

		Grp 1	Grp 2	Grp 3	Grp 4	
CONTRAST	1	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST	2	1.0	0.0	0.0	-1.0	Traditional-Conformists vs. Non-Traditional-Non-Conformists
CONTRAST	3	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches

		S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST	1	0.4070	2.422	63.9	0.018
CONTRAST	2	0.2894	-1.826	51.6	0.074
CONTRAST	3	0.4070	-5.018	63.9	0.000

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cell	GRP03	GRP01	GRP04	GRP02
3.8750	GRP03				
4.4091	GRP01				
4.9375	GRP04				
5.3889	GRP02	*	*		

counterparts ($p < .001$), and that traditional-conformists scored significantly lower than non-traditional-non-conformists ($p < .004$, see Appendix N). By comparison with Shostrom's (1974, p. 12) norms, it appears that the traditional-conformist women (cell 1) in this study scored at approximately the same level on the Sr scale ($\bar{x} = 11.77$) as the college women in his normative sample ($\bar{x} = 11.5$). However, the non-traditional-non-conformist women in cell 4 ($\bar{x} = 13.84$) fell almost one standard deviation (2.3) above Shostrom's mean or the women in cell 1. That is, there were large and noteworthy differences between traditional-conformists and non-traditional-non-conformists on the Sr scale of the P.O.I. in the present study (see Scheffé test, Appendix N).

No other comparisons on the trait of self-esteem proved to be significant (see Table 12). No significant differences occurred between the experimental (cells 1, 2, 3 and 4) versus control (cells 5, 6, 7 and 8) groups nor among subjects who performed the traditional task (i.e., stuffing pillows, cells 1, 3, 5 and 7) versus those who engaged in the non-traditional task (i.e., assembling the weight benches, cells 2, 4, 6 and 8). That is, no significant main effects occurred for choice/no choice nor for engaging in the gender sterotypic tasks on trait self-esteem.

Hypotheses 6, 8 and 10 (p. 24) pertained to predicted three-way interaction effects on trait self-esteem. Hypothesis 6 stated that traditional-conforming women in a choice condition (cell 1) will have lower self-esteem than traditional-conforming women in a no-choice condition (cell 5). Hypothesis 8 predicted that non-traditional-non-conforming women in a choice condition (cell 4) would have higher

self-esteem than non-traditional-non-conforming women in a no-choice condition (cell 8). Hypothesis 10 stated that the difference between traditional-conformists (cell 1) and non-traditional-non-conformists (cell 4), where both are in a choice condition, will be greater than the difference between traditional-conformists (cell 5) and non-traditional-non-conformists (cell 8) in a no-choice condition, on trait self-esteem. No significant differences occurred among the above planned comparisons of cell 1 and 4 within the experimental (free choice) condition with their counterparts (cells 5 and 8) in the control (no choice) condition. Therefore, hypotheses 6, 8 and 10 were not supported (see Table 12).

The following results on state self-esteem pertain to hypotheses 1 and 3 (p. 24). It had been predicted (hypothesis 1) that non-traditional women (cells 3 and 4) would score higher on state self-esteem (item 78) than traditional women (cells 1 and 2). In fact, traditional women scored significantly higher than non-traditional women on state self-esteem ($p < .018$, see Table 13). Thus, hypothesis 1 was not confirmed.

As stated in hypothesis 3 (p. 24), it had been predicted that non-traditional-non-conforming women (cell 4) would receive higher scores on state self-esteem than traditional-conforming women (cell 1). A contrast of cell 1 versus cell 4 showed no significant differences (see Table 13). Therefore, hypothesis 3 was not supported.

These unexpected results on hypotheses 1 and 3 were clarified by post hoc Scheffé tests (see Table 13) which indicated that subjects in cell 2 scored significantly higher on state self-esteem than those in

cells 1 and 3 ($p < .05$). This suggests that traditional women who chose to assemble the weight-benches were significantly more pleased with themselves thereafter than both traditional and non-traditional women who chose to stuff pillows. This seems to be further supported by a contrast indicating significantly higher state self-esteem among those engaging in the non-traditional task (cells 2 and 4) than those who engaged in the traditional task (cells 1 and 3), ($p < .000$, see Table 13). Thus, the hypothesized impact of gender-role on state self-esteem has not been confirmed. (The possible implications of the tasks per se upon these results will be examined below, see Discussion, pp. 95-98).

Impact of Demographic Variables - Trait Self-Esteem

The availability of data on the demographic characteristics of the sample, permitted additional analayses despite the absence of pertinent a priori hypotheses. The following section presents the results of ANOVAs and post hoc comparisons which examine the impact of socio-cultural and academic/career related factors upon trait self-esteem in these women.

ANOVAs that examined trait self-esteem (across all eight cells) by marital status, parenthood, faculty and age group were all highly significant. Trait self-esteem varied significantly by marital status ($p < .0027$, see Table 14). Post hoc pairwise comparisons suggest that married women (group 2, $\bar{x} = 25.23$) have higher trait self-esteem ($p < .05$) than single women (group 1, $\bar{x} = 22.99$).

Table 14

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON TRAIT SELF-ESTEEM BY MARITAL STATUS

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	156.0109	52.0036	4.942	0.0027
WITHIN GROUPS	150	1578.3987	10.5227		
TOTAL	153	1734.4094			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP4	GRP1	GRP2	GRP3
22.3333	GRP04				
22.9905	GRP01				
25.2258	GRP02		*		
25.3333	GRP03				

Group 1 = Single
Group 2 = Married or Common-Law
Group 3 = Separated or Divorced
Group 4 = Engaged

An examination of trait self-esteem by parenthood resulted in highly significant differences ($p < .008$, see Table 15). The accompanying contrast indicates that mothers scored significantly higher on this measure than women without children ($p < .007$).

The findings on trait self-esteem by faculty were also significant ($p < .0199$, see Table 16). Scheffé tests found no significant differences in pairwise comparisons of individual faculties. The means for each faculty suggest that those in the sciences and engineering (faculty 2) scored lowest on trait self-esteem ($\bar{x} = 22.34$), while those in the advanced nursing programme had the highest scores on this variable (faculty 4, $\bar{x} = 25.55$).

Finally, the ANOVA by age group yielded significant results ($p < .0045$, see Table 17). A contrast indicates that women in the older half of the subject pool scored higher on trait self-esteem than those in the younger half ($p < .004$).

Lifestyle Satisfaction - Trait and State

The following results on trait lifestyle satisfaction pertain to hypotheses 2 and 4 (p. 24). Significant differences occurred on overall trait ($p < .0438$) and state measures of lifestyle satisfaction ($p < .0000$, see Tables 18 and 19 respectively). As stated in hypothesis 2 (p. 24), it had been predicted that women who engage in gender stereotypic behaviour would score higher on the trait of lifestyle satisfaction than those who are non-conforming to such norms. A contrast of those who stuffed pillows (cells 1, 3, 5 and 7) versus

Table 15

ANALYSIS OF VARIANCE AND CONTRAST ON TRAIT SELF-ESTEEM BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	78.6092	78.6092	7.216	0.0080
WITHIN GROUPS	152	1655.8130	10.8935		
TOTAL	153	1734.4221			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01	
CONTRAST 1	1.0	-1.0	Women Without Children vs. Mothers

	SEPARATE VARIANCE ESTIMATE			
	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.7574	-2.936	23.1	0.007

Table 16

ANALYSIS OF VARIANCE, MEANS AND STANDARD DEVIATIONS OF SCORES ON TRAIT SELF-ESTEEM BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	129.9628	32.4907	3.017	0.0199
WITHIN GROUPS	149	1604.4763	10.7683		
TOTAL	153	1734.4390			

STATISTICS BY FACULTY

Faculty	N	Mean	S.D.
1	14	23.57	3.37
2	42	22.34	3.21
3	57	24.12	3.12
4	11	25.55	3.45
5	36	23.03	3.56

Faculty 1 = Social Sciences/Humanities
Faculty 2 = Sciences or Engineering
Faculty 3 = Education or Basic Nursing
Faculty 4 = Advanced Nursing Programme
Faculty 5 = Law, Medicine or Graduate Studies

Table 17

ANALYSIS OF VARIANCE AND CONTRAST ON TRAIT SELF-ESTEEM BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	72.4684	72.4684	8.348	0.0045
WITHIN GROUPS	131	1137.2175	8.6810		
TOTAL	132	1209.6858			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02	
CONTRAST 1	1.0	-1.0	Younger vs. Older Subjects

	SEPARATE VARIANCE ESTIMATE			
	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.5104	-2.916	126.6	0.004

Table 18

ANALYSIS OF VARIANCE AND CONTRASTS ON TRAIT LIFESTYLE SATISFACTION BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	1533.3495	219.0499	2.1314	.0438
WITHIN GROUPS	146	15004.7349	102.7777		
TOTAL	153	16538.0844			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Height-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	7.1434	-1.994	54.1	0.051
CONTRAST 2	7.1434	-0.564	54.1	0.575
CONTRAST 3	7.1434	-1.086	54.1	0.282
CONTRAST 4	2.9389	-1.799	34.8	0.081
CONTRAST 5	3.2758	-1.103	38.3	0.277
CONTRAST 6	2.7222	-0.800	36.0	0.429
CONTRAST 7	4.2593	-0.337	72.7	0.737
CONTRAST 8	4.2593	-1.360	72.7	0.178

Table 19

ANALYSIS OF VARIANCE, CONTRASTS AND SCHEFFE TESTS ON STATE LIFESTYLE SATISFACTION (ITEMS 91-94) BY CELLS (1-4)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	436.6156	145.5385	11.5857	.0000
WITHIN GROUPS	75	942.1439	12.5619		
TOTAL	78	1378.7595			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	
CONTRAST 1	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	0.0	0.0	-1.0	Traditional Conformists vs. Non-Traditional-Non-Conformists
CONTRAST 3	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	1.8675	3.014	24.9	0.006
CONTRAST 2	0.9000	-2.554	49.4	0.014
CONTRAST 3	1.8675	-5.475	24.9	0.000

SCHEFFE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cell	GRP03	GRP01	GRP04	GRP02
14.2500	GRP03				
17.0454	GRP01				
19.3438	GRP04	*			
22.1765	GRP02	*	*		

those who assembled weight-benches (cells 2, 4, 6 and 8) indicated no significant differences, thus, hypothesis 2 was not upheld.

It had been predicted in hypothesis 4 (p. 24) that traditional-conforming women (cell 1) would have higher levels of lifestyle satisfaction than non-traditional-non-conforming women (cell 4). No significant differences occurred on this contrast either, therefore, hypothesis 4 is rejected (see Table 18).

The only significant differences that occurred on trait lifestyle satisfaction compared traditional and non-traditional women. A contrast of cells 1, 2, 5 and 6 versus cells 3, 4, 7 and 8 found that traditionally oriented women scored lower on this measure than non-traditional women (see Table 18, $p < .051$).

The following results on trait lifestyle satisfaction pertain to hypotheses 7, 9 and 11 (p. 24). No significant differences occurred between the experimental (cells 1, 2, 3 and 4) versus control (cells 5, 6, 7 and 8) groups on this measure (see Table 18). Hypotheses 7, 9 and 11 predicted three-way interaction effects on trait lifestyle satisfaction. Hypothesis 7 stated that traditional-conforming women in a choice condition (cell 1) will have higher lifestyle satisfaction than traditional-conforming women in a no-choice condition (cell 5). Hypothesis 9 predicted that non-traditional-non-conforming women in a choice condition (cell 4) will have lower lifestyle satisfaction than non-traditional-non-conforming women in a no-choice condition (cell 8). Hypothesis 11 stated that the difference between traditional-conformists (cell 1) and non-traditional-non-conformists (cell 4), where both are in a choice condition, will be greater than the

difference between traditional-conformists (cell 5) and non-traditional-non-conformists (cell 8) in a no-choice condition, on lifestyle satisfaction. No significant differences emerged among the above planned comparisons of subjects in cells 1 and 4 within the experimental (free choice) group with their counterparts (cells 5 and 8) in the control (no choice) group. Therefore, there was no evidence of three-way interactions to confirm hypotheses 7, 9 and 11 (see Table 18).

No comparison of the subjects' scores on trait lifestyle satisfaction with Gough's (1956) norms was possible as only 25% of the items in the C.P.I. Well-Being scale were utilized for this study (see Method, p. 32). However, further information was gleaned (see Appendix O) by a breakdown of results on items 95-106 inclusive separately, adapted from Campbell (1980) and Manis (1980).

The following results on state lifestyle satisfaction pertain to hypotheses 2 and 4 (p. 24). It had been predicted that traditional women (cells 1 and 2) would score higher than non-traditional women (cells 3 and 4) on state lifestyle satisfaction (items 91-94). The results suggest that as hypothesized, traditional women scored significantly higher than non-traditional women ($p < .006$, see Table 19).

In addition, it had been predicted (hypothesis 4, p. 24) that traditional-conformists (cell 1) would score higher than non-traditional-non-conformists (cell 4) on this measure. However, quite the reverse occurred, i.e., that traditional-conformists scored significantly lower than non-traditional-non-conformists on state

lifestyle satisfaction ($p < .014$, see Table 19). Thus, hypothesis 4 was not supported.

The apparently contradictory results on these hypotheses were clarified by post hoc Scheffé tests which indicate that subjects in cells 2 and 4 scored significantly higher than those in cell 3 on this measure ($p < .05$); subjects in cell 2 also scored higher than those in cell 1 ($p < .05$). Furthermore, a contrast of subjects who stuffed pillows (cells 1 and 3) versus those who assembled the weight-benches (cells 2 and 4) found that the latter group scored significantly higher ($p < .001$, see Table 19) on state lifestyle satisfaction (items 91-94). These results suggest that both traditional and non-traditional women who chose to assemble the weight-benches found the activity significantly more interesting and enjoyable than those who chose to stuff pillows, regardless of gender-role identity. These findings indicate that the hypothesized impact of gender-role on state lifestyle satisfaction (hypotheses 2 and 4, p. 24) has not been supported within the context of this study.

Impact of Demographic Variables - Trait Lifestyle Satisfaction

As suggested above (see p. 66) the availability of additional data on the demographic characteristics of the sample allowed for further statistical analysis. Thus, despite the lack of a priori hypotheses, the following section will analyze the role of these demographic variables upon trait lifestyle satisfaction.

Significant differences were yielded in ANOVAs examining trait lifestyle satisfaction by marital status ($p < .007$), age group

($p < .0414$) and faculty ($p < .0272$, see Tables 20, 22 and 21 respectively). Post hoc pairwise comparisons indicate that married women (group 2) had significantly higher lifestyle satisfaction ($p < .05$) than single women (group 1). A contrast by age group suggests that older women were likely to score higher on trait lifestyle satisfaction than their younger counterparts ($p < .039$). Although Scheffé tests did not reveal significant differences in comparisons of individual faculties, the means indicate that those in the sciences and engineering (faculty 2, $\bar{x} = 68.61$) held the lowest scores on trait lifestyle satisfaction while women in the advanced nursing programme (faculty 4, $\bar{x} = 79.18$) attained the highest scores on this variable. Finally, the ANOVA by parenthood yielded marginal significance ($p < .0557$, see Table 23).

Anxiety/Conflict -Trait and State

The following results on trait anxiety/conflict pertain to hypothesis 5 (p. 24). It had been hypothesized that no significant differences would emerge on anxiety/conflict. However, highly significant differences did occur on overall ANOVAs for trait anxiety/conflict ($p < .0004$) although as predicted, none were found on state measures of this variable (see Tables 24 and 25 respectively). It had been predicted (hypothesis 5, p. 24) that no significant differences would occur between traditional-conforming women and non-traditional-non-conforming women on trait anxiety/conflict. Contrasts revealed significant differences in this area.

Table 20

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON TRAIT LIFESTYLE SATISFACTION BY MARITAL STATUS

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	1279.7069	426.5688	4.193	0.0070
WITHIN GROUPS	150	15258.2773	101.7218		
TOTAL	153	16537.9805			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP03	GRP01	GRP04	GRP02
* 66.3333	GRP03				
70.9905	GRP01				
72.5000	GRP04				
77.6452	GRP02		*		

Group 1 = Single
Group 2 = Married or Common-Law
Group 3 = Separated or Divorced
Group 4 = Engaged

Table 21

ANALYSIS OF VARIANCE, MEANS AND STANDARD DEVIATIONS OF SCORES ON TRAIT LIFESTYLE SATISFACTION BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	1163.8622	290.9653	2.820	0.0272
WITHIN GROUPS	149	15374.2349	103.1828		
TOTAL	153	16538.0938			

STATISTICS BY FACULTY

Faculty	N	Mean	S.D.
1	14	73.79	7.38
2	42	68.61	11.61
3	57	73.26	9.29
4	11	79.18	10.27
5	36	72.13	10.62

Faculty 1 = Social Sciences/Humanities
Faculty 2 = Sciences and Engineering
Faculty 3 = Education or Basic Nursing
Faculty 4 = Advanced Nursing Programme
Faculty 5 = Law, Medicine or Graduate Studies

Table 22

ANALYSIS OF VARIANCE AND CONTRAST ON TRAIT LIFESTYLE SATISFACTION BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	400.7358	400.7356	4.243	0.0414
WITHIN GROUPS	131	12372.9609	94.4501		
TOTAL	132	12773.6953			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02	
CONTRAST 1	1.0	-1.0	Younger vs. Older Subjects

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	1.6740	-2.091	128.4	0.039

Table 23

ANALYSIS OF VARIANCE AND CONTRAST ON TRAIT LIFESTYLE SATISFACTION BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	394.8094	394.8093	3.717	0.0557
WITHIN GROUPS	152	16143.1978	106.2052		
TOTAL	153	16538.0039			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01	
CONTRAST 1	1.0	-1.0	Women Without Children vs. Mothers

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	2.7431	-1.816	21.0	0.084

Table 24

ANALYSIS OF VARIANCE AND CONTRASTS ON TRAIT ANXIETY/CONFLICT BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	1720.6287	245.8041	4.0454	.0004
WITHIN GROUPS	151	9174.9311	60.7611		
TOTAL	158	10895.5597			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	5.2959	3.937	86.6	0.000
CONTRAST 2	5.2959	-1.420	86.6	0.159
CONTRAST 3	5.2959	-0.441	86.6	0.660
CONTRAST 4	2.2377	3.157	27.3	0.004
CONTRAST 5	2.7405	1.221	38.6	0.230
CONTRAST 6	2.0846	-1.976	27.2	0.058
CONTRAST 7	3.4432	2.168	65.2	0.034
CONTRAST 8	3.4432	-0.225	65.2	0.823

Table 25

ANALYSIS OF VARIANCE AND CONTRASTS ON STATE ANXIETY/CONFLICT
(ITEMS 107-126 AND 147) BY CELLS (1-4)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	47.4930	15.8310	.2925	.8307
WITHIN GROUPS	74	4004.4686	54.1144		
TOTAL	77	4051.9615			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	
CONTRAST 1	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	0.0	0.0	-1.0	Traditional Conformists vs. Non-Traditional-Non-Conformists
CONTRAST 3	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	3.3948	0.691	41.0	0.494
CONTRAST 2	2.1732	0.685	37.6	0.498
CONTRAST 3	3.3948	0.186	41.0	0.853

Traditional-conformists (cell 1) reported higher trait anxiety/conflict ($p < .004$) than non-traditional-non-conformists (cell 4). Thus, hypothesis 5 was not supported (see Table 24).

Contrasts yielded two additional, unexpected significant differences: Traditional women (cells 1, 2, 5 and 6) had considerably higher trait anxiety/conflict ($p < .001$) than non-traditional women (cells 3, 4, 7 and 8). Furthermore, the difference between traditional-conformists (cell 1) and non-traditional-non-conformists (cell 4) in the experimental group on conflict/anxiety, was greater than the difference between their counterparts in the control group (cells 5 minus 8, $p < .034$). This latter finding may be accounted for in part by the conflict/anxiety created by the forced choice imposed on the experimental group; choice was not a factor for the control group subjects who were randomly assigned to participate in one of the designated tasks.

As stated above, no significant differences occurred on state measures of anxiety/conflict, nor among the contrasts on this variable (see Tables 25).

As described in Chapter 2 (pp. 32-33) the anxiety/conflict measure consisted of the entire State-Trait Anxiety Inventory (1970) plus two additional items designed to measure the conflict associated with making choices in this study. For comparative purposes, the 40 items comprising the S.T.A.I. were analyzed separately (i.e., items 107-146). Thus, in addition to the analyses described above, the ANOVAs examining only the Trait scale of the S.T.A.I. (i.e., items 127-146) found significant differences among groups ($p < .0001$, see

Appendix P, Table P.1). Contrasts indicated significant differences in the same three areas as above: traditional women (cells 1, 2, 5 and 6) reported significantly higher trait anxiety ($p < .001$) than non-traditional women (cells 3, 4, 7 and 8). Traditional-conforming subjects reported significantly higher trait anxiety than non-traditional-non-conforming subjects ($p < .002$). Furthermore, the difference on this measure between cell 1 and cell 4 was greater than the difference between their counterparts in the control group (cells 5 minus 8, $p < .027$). By comparison with the normative sample of college women described by Spielberger; et al., 1970 ($\bar{x} = 38.25$), it appears that women in cell 6 ($\bar{x} = 41.10$) reported relatively high trait anxiety (i.e., 70th percentile by Spielberger's norms). Scheffé tests (see Appendix P) indicate that those in cell 6 scored significantly higher ($p < .05$) than those in cells 7 ($\bar{x} = 30.50$) and 4 ($\bar{x} = 31.59$). Those in cell 7 scored at the 20th percentile while those in cell 4 scored at the 24th percentile (by S.T.A.I., 1970 norms). That is, those in the latter cells reported just over one standard deviation (9.14) lower trait anxiety than those in cell 6. In addition to the magnitude of the differences found at the extremes, it is noteworthy that all four non-traditional cells (in order, cells 7, 4, 3 and 8) had lower levels of trait anxiety than all four traditional cells (in order, cells 5, 2, 1 and 6).

No significant differences occurred in ANOVAs examining only the State scale of the S.T.A.I., i.e., items 107-126 (see Appendix P, Table P.2), $\bar{x} = 33.95$ (cells 1-8).

Impact of Demographic Variables - Trait Anxiety/Conflict

Of the four ANOVAs on trait anxiety/conflict by marital status, parenthood, faculty and age group, only the results by faculty showed significant differences ($p < .0368$, see Table 26). Scheffé tests found no significant differences in pairwise comparisons of individual faculties.

Summary of Results

The following section will not reiterate the results of Chapter 3 but will rather highlight the noteworthy findings that will be of particular importance in the following Discussion.

It had been hypothesized that non-traditional women would score higher on trait self-esteem than traditional women. This hypothesis was confirmed. It had also been predicted that non-traditional-non-conformists would have significantly higher scores on this measure than traditional-conformists. This, too, was supported.

It had been hypothesized that women who engaged in gender stereotypic behaviour, i.e., stuffing pillows, would score significantly higher on trait lifestyle satisfaction than would women who assembled weight-benches. There was no evidence in support of the above hypothesis, nor for a hypothesis predicting higher scores on this measure for traditional-conformists than for non-traditional-non-conformists. The only significant difference found on this variable

Table 26

ANALYSIS OF VARIANCE, MEANS AND STANDARD DEVIATIONS OF SCORES ON TRAIT ANXIETY/CONFLICT BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	695.7241	173.9310	2.626	0.0368
WITHIN GROUPS	154	10199.7690	66.2323		
TOTAL	158	10895.4922			

STATISTICS BY FACULTY

Faculty	N	Mean	S.D.
1	14	41.00	8.10
2	42	43.85	9.49
3	57	38.72	6.62
4	11	39.27	9.83
5	36	39.53	8.15

Faculty 1 = Social Sciences/Humanities
Faculty 2 = Sciences and Engineering
Faculty 3 = Education or Basic Nursing
Faculty 4 = Advanced Nursing Programme
Faculty 5 = Law, Medicine or Graduate Studies

indicated that non-traditional women have higher lifestyle satisfaction than traditional women.

Although it had been predicted that self-esteem, (both trait and state), would be inversely correlated with lifestyle satisfaction, (both trait and state), a positive relationship was found between them.

No significant differences had been predicted for trait anxiety/conflict. However, it appears that traditional women scored significantly higher on this measure (i.e., were more anxious/conflicted) than non-traditional women and that traditional-conformists scored significantly higher than non-traditional-non-conformsits.

Various results suggest that the pillows and weight-benches may have been less than optimal criteria of gender stereotypic behaviour. The choice pattern indicates that the majority of women chose the weight-benches. The data on state measures of self-esteem and lifestyle satisfaction illustrate that women who chose to assemble weight-benches were significantly more pleased with themselves thereafter; they found the activity significantly more interesting and enjoyable than those who chose to stuff pillows, regardless of gender-role identity. Furthermore, no significant differences occurred on trait self-esteem or trait lifestyle satisfaction in contrasts of experimental (free choice) versus control (no choice) groups nor between those who stuffed pillows versus weight-benches.

Finally, the demographic profiles are of interest. The traditional subject in this study is a young, single woman in nursing, education, the sciences or engineering. The non-traditional woman is

likely to be older than her traditional counterpart; married, separated or divorced; studying in the social sciences/humanities, law, medicine, graduate studies or the advanced nursing programme. The former profile corresponds approximately to that of the low scorer on trait self-esteem and trait lifestyle satisfaction while the latter profile approximates that of the high scorer on these dependent measures.

CHAPTER 4
DISCUSSION

The results will be discussed in the following sequence: First, the results of data on the trait and state measures of self-esteem, lifestyle satisfaction and anxiety/conflict will be examined. Second, the profiles of subjects scoring high on self-esteem and lifestyle satisfaction will be considered. The hypothesized relationship of self-esteem to lifestyle satisfaction will then be re-assessed and discussed. The profile of highly anxious/conflicted subjects will be considered. Finally, the limitations of this study and its theoretical and research implications will be discussed.

Self-Esteem

Trait

As had been predicted in hypothesis 1 (p. 24), traditionally oriented women, (cells 1, 2, 5 and 6) had significantly lower self-esteem than non-traditional women (cells 3, 4, 7 and 8). Furthermore, traditional-conforming women (cell 1) had lower self-esteem than non-traditional-non-conforming women (cell 4). These findings are consistent with those of previous researchers such as Antill & Cunningham (1979), Deutsch & Gilbert (1976), Doherty & Schmidt (1978), Hoffman & Fidell (1979), Kelly & Worell (1977), Spence & Helmreich (1978), Stericker & Johnson (1977), Whitley (1983).

Several possible explanations for these results are suggested in the literature. Non-traditional women may receive more positive evaluations than their traditional counterparts and as such develop higher self-esteem (Bardwick, 1971; Bem, 1974; Feather, 1985; Greenglass, 1982; Jones, Chernovetz & Hansson, 1978; Maccoby & Jacklin, 1974; Taylor & Hall, 1982). In that such women demonstrate typically "masculine" attributes (e.g., assertiveness, autonomy, achievement orientation) they are likely to elicit the same desirable feedback that men have traditionally obtained for their masculine characteristics. Jones, Chernovetz and Hansson (1978, p. 308) speculate that the differential social valuation of feminine/expressive versus masculine/instrumental characteristics may also explain their finding that feminine women, "Subjects indicated a strong desire to increase their capacity to behave in an instrumental fashion, that is, more assertively, more decisively, and so forth."

Whereas this approach focuses on the social value assigned to stereotypically masculine traits (regardless of the bearer) a second explanation suggests that the non-traditional woman's mastery of the environment and subsequent achievements contribute inherently to a strong, stable self-concept (Adams & Sherer, 1985; Chesler, 1972; Chodorow, 1974; DeFronzo & Boudreau, 1979; Elpern & Karp, 1984; Shainess, 1970). That is, unlike most girls who become dependent on interpersonal relations as their source of esteem income from adolescence onwards, non-traditional girls continue to derive their self-esteem from their own action upon the world. In addition, they may regard their accomplishments in ways that are likely to further

enhance their self-esteem (Hoffman & Fidell, 1979). Unlike most women (Bar-Tal & Frieze, 1977; Deaux, 1976; Frieze, 1977), non-traditional girls and women may be likely to self-attribute their achievements to internal processes (e.g., ability, talent) rather than to such external factors as luck.

Whereas the above approaches suggest that a non-traditional gender-role contributes to the development of high self-esteem in women, a third position argues that the sequence is reversed, i.e., that high self-esteem in women fosters the development of non-traditional gender-roles. Some authors have indicated that individuals already possessing high levels of self-esteem are in a more advantageous position to then reject conventional gender-role norms (Baruch, 1977; Erickson, 1977; Orlofsky, 1977). Rather than non-traditional attributes leading to high self-esteem, (whether socially or intrinsically), it may be high levels of self-esteem that enable women to flout traditional social standards.

Whether any one or some combination of the above hypotheses best explains the results found herein, this study has found new evidence that non-traditional gender-role identity in women is strongly associated with higher self-esteem. A further examination of possible mediating linkages between these factors (e.g., mutual, cyclical interaction of self-esteem and non-traditional gender-roles such that each heightens the other) is recommended for future investigation.

These results linking higher self-esteem to a non-traditional orientation and to non-traditional-non-conformists were reflected in the feelings, attitudes and opinions expressed by the subjects during

the debriefing sessions. For example, many of the women in law and medicine (86% of whom scored as non-traditional, see Table 9), spoke of being held in admiration and respect by friends and acquaintances if not by colleagues. They were pleased and amused by others who would tell them that, "Any 'girl' who was admitted into law or medical school must be extraordinarily bright." One medical student, thirty-five years of age, was asked what benefits she hoped to derive from pursuing a non-traditional career. She answered that she expected to feel better about herself. Fifteen years earlier she had planned to apply to medical school but was dissuaded from doing so by her family. They had warned that no man would be attracted to a female physician and that she would "end up an old maid." Instead, she had spent the ensuing years as a nurse resenting her parents, her profession, disliking herself, "and wound up alone, anyhow." She finally decided to enter medical school in 1985, despite the family acrimony it stirred up. She added that the change had proven worthwhile via her new feelings of self-respect. Her only regret was in not having done so earlier.

These sentiments were in marked contrast to those expressed by subjects in the sciences or engineering. The prevailing belief appears to be that women who enter these historically male-dominated fields hold primarily non-traditional identities; this was not the case in this study. The majority of these women (57%, see Table 9) scored as traditional. Several of the engineering students described being forced to contend with "macho jocks" upon entering the engineering programme. At first, they felt awkward when confronted with frequent

sexist jokes and other derogatory remarks about women. They soon realized that in order to survive within the faculty, both in psychosocial and practical terms (e.g., in order to maintain productive relationships with lab partners) it was necessary to "become one of the boys." By the second or third year in the faculty they had not only learned to laugh at sexist jokes but were telling them too. They described their ambivalence about the dubious privilege of being "treated as an exception", as possibly different from other women. Paradoxically, while pursuing non-traditional engineering/science careers, these subjects had adopted stereotyped (masculine) sex-role values. This transition both results from and perpetuates a double-bind situation, in which "femininity" is seen as a hinderance while "masculinity" is treated as suspect in a woman (M.I.T., 1983). In a study of barriers encountered by women at the Massachusetts Institute of Technology, one individual commented (1983, p. 11):

> Stereotypes make it harder for me to work here because they reinforce the idea that I can't be a good engineer ... It affects other people's behavior towards me as well as my own self-image.

Unfortunately, it is precisely these women who are likely to be adversely affected by such an academic/working environment. Hertle & Kaufman (1980, p. 6) examined women engineering students and concluded, "Women who have low self-esteem are more vulnerable to accepting negative stereotypes about themselves and their career choice." It is thus noteworthy that women in the sciences and engineering had the

lowest scores on trait self-esteem ($\bar{x}$ = 22.34) among the five faculty groups participating in this study (see Table 19).

No significant differences occurred in trait self-esteem among the experimental (i.e., choice, cells 1, 2, 3 and 4) versus control (i.e., no choice, cells 5, 6, 7 and 8) groups nor among subjects who performed the traditional task (i.e., stuffing pillows, cells 1, 3, 5 and 7) versus those who engaged in the non-traditional task (i.e., assembling the weight-bench, cells 2, 4, 6 and 8, see hypotheses 6, 8, 10, p. 24). This lack of significance among the above groups persisted throughout the study on almost all dependent measures. One possible conclusion then may be that conformity/non-conformity to gender-role appropriate behaviour is unrelated to women's self-esteem. In addition, whether one freely chooses or is (randomly) assigned to engage in gender-role specific behaviour also appears to be unrelated to self-esteem. Thus one might conclude that of the three major independent variables, gender-role identity is a better predictor of self-esteem than either gender-role behaviour (conformity/non-conformity) or choice/no choice of behaviour. Unfortunately, while the above alternative hypotheses cannot be accepted at this time, further interpretation of the data may be confounded by the unsuitability of the activities employed in this project, i.e., the choice of pillow versus weight-bench.

As stated above (see Results, p. 43), gender-role identity appeared to be related to choice of activity (i.e., in the experimental, free choice condition). However, these results may be accounted for by the non-traditional subjects' overwhelming choice of

the weight-bench and the traditional subjects splitting almost evenly between the two activities. This breakdown was unexpected given that (as described in Procedure) 76% of both males and females in the pretesting of the traditional versus non-traditional tasks predicted that the "average" woman would select the pillow. Furthermore, during the debriefing, all of the 160 subjects stated that they they had been aware of the stereotypic gender-role behaviour associated with stuffing pillows or assembling weight-benches. Their feedback also suggested that the presence of the highly visible videotape camera had achieved its intended effect, viz., the increased social salience of the choosing process. Nonetheless, the majority (62.5%) of the 80 subjects in the choice condition seemed to find assembling the weight-benches more appealing than stuffing pillows. This conclusion is substantiated by the subjects' mean scores on items 78 and 91-94 (see Tables 15 and 22 respectively). The results on these items indicate that both traditional and non-traditional women who selected the weight-bench found the activity more enjoyable and interesting (items 91-94) than those who chose to stuff pillows ($p < .000$, see Results, pp. 75-76). Even when comparisons were made within gender-role categories, these significant differences were maintained. Post hoc Scheffé tests found that among traditional women, those who assembled the weight-benches (cell 2, $\bar{x} = 22.18$) scored significantly higher ($p < .05$) on items 91-94 than those who chose to stuff pillows (cell 1, $\bar{x} = 17.05$). The range of possible scores on items 91-94 is 4-28. Within the non-traditional groups, those who assembled the weight-benches (cell 4, $\bar{x} = 19.34$) preferred their activity significantly more ($p < .05$) than

those who stuffed pillows (cell 3, $\bar{x}$ = 14.25). Similarly, regardless of gender-role identity, those who selected the weight-benches were significantly more pleased with their choices, with themselves for having chosen the weight-benches and with how they spent their time than those who stuffed pillows (see Results, pp. 65-66). Thus, when gender-role identity is held constant on these items, significant differences remain, indicating differential appeal between the two activities. It would appear then that while the two tasks were both highly gender stereotypic, (as indicated during pretesting and confirmed by subjects' comments in the laboratory), there may be a confound with the greater intrinsic interest value of the weight-benches for the majority of subjects.

This analysis is further supported by the comments of subjects who described the weight-bench as challenging, novel and interesting compared to the pillows. Many who chose the pillows did so simply because they thought it would be quicker or they were not properly dressed for getting on the floor and wrestling with a screwdriver and monkey-wrench. Thus, even though the tasks were equally stereotypical in the eyes of a similar group of participants, the greater reported attractiveness of weight-bench activity in the laboratory confounded the interpretation of the data involving conformity to gender-role norms in interaction with gender-role identity.

Self-Esteem

State

It had been predicted (Hypothesis 1, p. 24) that non-traditional women (cells 3 and 4) would score higher on state self-esteem than traditional women (cells 1 and 2). The reverse appears to be the case. It was further predicted (Hypothesis 3, p. 24) that non-traditional-non-conforming women (cell 4) would receive higher scores on this measures than traditional-conforming women (cell 1). No significant differences occurred in this instance. These apparently contradictory results may be explained once again in terms of the appropriateness of the behavioural measures. Post hoc Scheffé tests as well as planned contrasts confirm that regardless of gender role identity, subjects who assembled the weight-benches were more pleased (item 78) with themselves thereafter than those who chose to stuff pillows. As suggested above, these results may be due to the greater intrinsic appeal of the former task; they do not appear to reflect on women's self-esteem nearly as much as upon the unforeseen differential interest value of the two activities.

Lifestyle Satisfaction

Trait

Contrary to the predictions (hypotheses 2 and 4, p. 24) stated in Chapter 1, traditionally oriented women (cells 1, 2, 5 and 6) had lower levels of lifestyle satisfaction than non-traditional women (cells 3, 4, 7 and 8). No significant differences were found between traditional-conformists (cell 1) and non-traditional-non-conformists (cell 4).

These results are inconsistent with the literature which suggests that non-traditional women receive negative social sanctions for their aberrant behaviour (Baruch & Barrett, 1979; Chesler, 1972; Clance & Imes, 1978; Horner, 1972; Weitzman, 1975). Furthermore, women, (especially traditional women), often regard these repercussions (i.e., social ostracism, resentment, disapproval, particularly from men) as so adverse that they choose to misrepresent themselves as hyper-feminine, i.e., "playing dumb", feigning deference, (Sherman, 1982, 1983; von Beyer, Sherk & Zanna, 1980; Zanna & Pack, 1975) rather than incur these consequences. Therefore, it seems somewhat surprising that notwithstanding these ominous social consequences, these non-traditional women have described themselves as more satisfied with their lifestyle than their 80 traditional counterparts.

One possible explanation of these results became apparent repeatedly during the debriefing interviews. While traditional women must in fact contend with the aforementioned social sanctions (whether by incurring or averting them) non-traditional women may elect to circumvent the dilemma entirely. Athanassiades (1977) has suggested that negative social sanctions are imposed (if not perpetuated) upon non-traditional women by traditional men and women. The non-traditional women in this study, however, often chose to surround themselves with likeminded peers. Such friends and colleagues, sharing similar sex-role attitudes and values, were likely to support and reinforce non-traditional women for their non-conformist behaviour. For example, several of the law students mentioned participation in the Women in the Law Society on campus.

One subject, an attractive, nineteen-year-old, non-traditional woman described the importance of weight-training in her life. She pointed to her well-developed musculature and explained that she was in training for her next triathalon. To her, it represented the challenge of striving for a goal, self-discipline and a commitment to physical fitness. (In fact, she mentioned that she planned to attend medical school and would be forced to postpone childbearing until the age of thirty; she expected to maintain her body in optimal condition through rigorous exercise and thereby facilitate future family planning.) However, to her mother, these activities were unacceptable. Her mother had berated her throughout her teens, saying that such behaviour was unfeminine and that no man would be attracted to a muscular, athletic and competitive young woman. Despite these admonitions, she continued to work out and received support and admiration from other athletes, particularly her boyfriend. She added that he would never expect her to deliberately underplay her abilities and that he regarded her as a worthy competitor in triathalon training - an attitude that her mother would never comprehend or appreciate.

Of course, it might be argued that traditional women are also supported and reinforced by their peers; however, their options may be more closely and narrowly circumscribed than the broader range of choices advocated by non-traditional women.

This may suggest another possible explantion for these results. Non-traditional women may experience greater lifestyle satisfaction simply because they are doing what they genuinely wish to do with their lives. Perhaps traditional women choose to lead their lives according

to traditional sex-role norms in the hope of receiving anticipated social rewards and avoiding expected social costs. However, the results of this study may imply that it may not be worth their efforts, i.e., they may be doing so at the expense of their own lifestyle satisfaction. Following one's own inner desires may be more intrinsically rewarding/satisfying than the benefits that extrinsic consequences typically provide.

Campbell (1980) suggests that evaluating one's lifestyle satisfaction entails an implicit judgment of the degree of conjunction or dysjunction of one's actual life with one's ideal life. This conceptualization of lifestyle satisfaction has implications for the operational definition used in Campbell's (1980) and Manis' (1980) work and paraphrased in this study (see questions 100-106 in Appendix D). For example, question 105 asks: "Taking your day-to-day life in general, are you doing the things that really interest you, that you would really like to be doing?" while item 106 states, "I lead the kind of life I enjoy most." On both these items non-traditional women scored significantly higher than traditional women. The results of contrasts on items 105 ($p < .021$) and 106 ($p < .044$) both indicated significant differences (see Appendix O, Tables 0.19 and 0.23). These results may support the notion that more satisfaction and pleasure are derived by non-traditional women who pursue their own goals, despite potential social consequences, than by traditional women who may modify their goals to conform with environmental standards.

Many of the traditional subjects discussed grappling with these concerns with great awareness and insight. Some described wanting to

pursue advanced degrees or at least devote more time to their studies, but would encounter suspicions and discouragement from family and friends when their academic efforts would detract from their attentions to dating. For example, one nursing student stated that she had always dreamed of going into medicine and had prepared accordingly, taking the required science courses in high school. However, her boyfriend, a medical student, regarded her plans as incompatible with the roles of wife and mother. She felt pressured to enroll in the nursing programme if they were to marry and raise a family. She chose to alter her career plans rather than lose her boyfriend. Like many other subjects, both traditional and non-traditional, she expressed resentment at being forced to choose between family and career, when her "boyfriend could have it all" without question.

No significant differences occurred among the other independent variables (i.e., experimental choice, cells 1, 2, 3 and 4) versus control (no choice, cells 5, 6, 7 and 8) groups nor among subjects who assembled the pillows versus the weight-benches (see hypotheses 2, 7, 9, 11). As explored above (see Self-Esteem: Trait) the meaning of these results may be obscured by the employment of pillows versus weight-benches as a measure of gender stereotypic behaviour in this study. Therefore, one cannot accept (or reject) the hypothesis that women who conform to gender stereotypic behaviour would have higher trait lifestyle satisfaction than non-conforming women.

Lifestyle Satisfaction

State

It had been predicted that traditional women (cells 1 and 2) would score higher than non-traditional women (cells 3 and 4) on state lifestyle satisfaction. It had further been hypothesized (hypothesis 4, p. 24) that traditional-conformists (cell 1) would score higher than non-traditional-non-conformists (cell 4). While the hypothesis was confirmed in the former instance the reverse appears to be the case in the latter. This split in these results is clarified by the post-hoc Scheffé tests (see Table 22). These indicate that subjects in cell 4 (who assembled the weight-benches) scored significantly higher on state lifestyle satisfaction than those in cell 3 (who stuffed pillows) where both cells were non-traditional. Similarly, subjects in cell 2 (who assembled weight-benches) scored significantly higher on this measure than subjects in both cells 3 and 1 (who stuffed pillows). These findings were confirmed by a contrast which found that women who assembled the weight-benches found the activity significantly more interesting and enjoyable than those who stuffed pillows regardless of gender-role identity ($p < .000$, see questions 90-94). Once again, these results seem to reflect more on the unexpected discrepancy in the intrinsic interest value of the two activities rather than upon the satisfaction that women of different orientations derive from their choices.

Anxiety/Conflict

Trait

It had been predicted (hypothesis 5, p. 24) that no significant differences would be found among the analyses on anxiety/conflict. However, highly significant differences were found, with traditional women (cells 1, 2, 5 and 6) reporting more anxiety/conflict than non-traditional subjects (cells 3, 4, 7 and 8). In addition, traditional-conformists (cell 1) scored as significantly more anxious/conflicted than non-traditional-non-conformists (cell 4). In Chapter 1, it was suggested that both traditional and non-traditional women face a tradeoff of costs and benefits anticipated/associated with either gender-role status. Given the dilemma inherent in choosing between these positions, it was expected that equivalent degrees of conflict would occur for both groups of women, but for different reasons (see pp. 18-20). It was suggested that all women must choose between the internal reward of high self-esteem versus the positive, external, social attributions and rewards for adherence to traditional gender-roles. As described above, the hypothesized results did not occur. On the contrary, it appears that non-traditional women in this study do "have it all", scoring significantly higher than traditional subjects on both self-esteem and lifestyle satisfaction. As such, it follows that traditional women experience higher levels of anxiety/conflict. Although the literature in this area is inconclusive, these results are consistent with those of Adams and Sherer (1982), Biaggio and Nielsen (1976), as well as those of Erdwins, Small and Gross (1980).

Given the prevalent media focus (as well as the attention in the psychological literature (e.g., Johnson & Johnson, 1976; Richards, 1984; Rosenow, 1982; Shaevitz, 1984; Schwartz, 1980) upon the conflict, stress and pressure felt by career oriented women, attempting to combine both home and work roles, the above results seem almost counter-intuitive. However, it must be noted that the subjects in this sample are university students, most of whom have not yet faced the role strain of worker versus wife and/or mother (see below, Limitations and Implications). Nonetheless, it seems ironic that non-traditional women, fighting their culture's gender-role values would score lower on anxiety/conflict than traditional women.

Greenglass (1982) and Holahan and Gilbert (1979) suggest that stress or role conflict may indeed be lower in career women. While such individuals must admittedly juggle two or more roles simultaneously, the satisfaction and/or feelings of control that arise from the work role may alleviate stress originating at home (Baruch, Barnett & Rivers, 1983; Bernard, 1972; St. John-Parsons, 1978; Weissman & Klerman, 1979). Holahan and Gilbert indicate that the women who regards her paid labour as a career rather than as a job may gain an additional avenue for self-expression and personal fulfillment that offsets the demands of her dual roles. They also note the importance of the supportive husband in reducing the carrer oriented woman's role conflict. Career oriented women tended to receive more spousal support than did job oriented women (Holahan & Gilbert, 1979).

The significance of this latter element was reflected in the comments of the subjects during the debriefing interviews. Many women, regardless of gender-role identity, discussed their need/desire for

their partners, (past, present or future), to assume greater responsibility for housework and child care than is typically the case. Perhaps this issue was more salient or more of a priority in partner selection for non-traditional than traditional women; in any case, non-traditional subjects seemed more likely to spontaneously describe their relationships as egalitarian with respect to the career/home split. For example, a few of the women in law and medicine described the agreements they had struck with husbands in the same profession. Rather than each having a separate career, they anticipated sharing a professional practice with their husbands. Each would work on a half-time basis professionally and assume responsibility for the home during the remainder of the week. While such arrangements are hardly practical or accessible to most women today, the pre-requisite of finding a partner who would value such a situation seemed to be of greater concern to the non-traditional subjects. They often indicated that they had devoted themselves to their studies for too long to be diverted from their career goals, notwithstanding their desires for a family. These women hoped that their partners would appreciate their various goals, the "juggling act" that was often entailed in fulfilling them, and that their husbands would facilitate this process. As suggested by Holahan and Gilbert (1979), such spousal support is "crucial" in determining women's levels of role-conflict.

Another factor that may contribute to a significantly greater degree of trait anxiety/conflict in traditional than non-traditional women involves the apparent discrepancy between subjects' gender-role identity and their lifestyle patterns. As described in Chapter 3 (p. 51) the traditional woman in this study is young and single. In

contrast, the non-traditional woman is likely to be significantly older than her traditional counterpart and is currently or has been married. In addition, 68% of the mothers in this study were non-traditional women (see Table 9). Similar demographic profiles are beginning to appear in the literature (e.g., Blackman, 1986; Komarovsky, 1985; Renzetti, 1987). (In the following sections, the social consequences of this configuration will be explored.) However, the intra-psychic ramifications of this outward discrepancy between real life and ideal lifestyle may involve greater anxiety/conflict for traditional women. The traditional woman in this sample may have the demographic profile that suggests a different gender-role status (i.e., non-traditional), but may yearn for a husband and children. She may be perceived erroneously as non-traditional while desiring a more traditional lifestyle, consistent with her gender-role identity. This possibility may not only explain her relatively low lifestyle satisfaction (as discussed above) but also her relatively high anxiety/conflict. (While such a provocative notion has not been explored in the psychological literature, it is addressed daily in Cathy, [Guisewite, 1987]. The popular comic strip focuses on the daily struggles of its heroine to reconcile her exhaustive efforts to lose weight, wear the right fashions, etc., in order to find a husband, with the reality of working and living alone in an era of transition.) Future research in this area may benefit from further, "consideration of personality-life style fit" (Puglisi & Jackson, 1980, p. 137).

Significant differences on trait anxiety/conflict occurred on only one other ANOVA. The difference between traditional-conformists

and non-traditional-non-conformists in the experimental group was greater than the difference between their counterparts in the control group, i.e., (cell 1 - cell 4) > (cell 5 - cell 8). Given that the experimental group was required to choose between the two activities while the control group was randomly assigned to participate in one of the designated tasks, it follows that the former group would experience greater anxiety/conflict. No significant differences occurred among those who stuffed pillows versus those who assembled the weight-benches. These results are consistent with the fact that all (experimental) subjects were confronted with choosing between the same two activities.

Anxiety/Conflict

State

It had been predicted (hypothesis 5, p. 24) that no significant differences would occur on state anxiety/conflict. No significant differences were found on this variable. Only the experimental group (i.e., free choice condition) could be tested on this measure (see Results, p. 59). Given that each member was confronted with the same choice, it seems reasonable that no significant differences would be found among these four cells (1-4) in the anxiety/conflict produced by the request that they select between these tasks.

Profile of Subjects with High Self-Esteem

The various ANOVAs have indicated that women scoring high in self-esteem are more likely to be non-traditional than traditional; non-traditional-non-conformists rather than traditional-conformists; married rather than single; mothers rather than childless; falling in the older rather than younger half of the subject pool. Furthermore, as demonstrated earlier by chi-square tests, there seems to be an association between non-traditional gender identity and motherhood as well as with being married. The profile that emerges then of the high self-esteem subject is of a non-traditional-non-conforming, older, married mother. This profile stands in stark contrast to the common belief that the youthful, childless, single, sexually mature woman of child-bearing age is highly prized in our society and presumably regards herself accordingly.

> As young women, whether students or not, we're still in the stage most valued by male-dominant cultures: we have our full potential as workers, wives, sex partners, and child-bearers (Steinem, 1982, p. 212).

Yet the results of this study indicate that it is the more mature wife and mother with greater life experience who has greater self-esteem.

Several authors have begun to address this issue (Bardwick, 1980; Bird, 1979; Campbell, 1980; Eme, 1979; Serlin, 1980; Steinem, 1982). They point out that various factors may, in combination, produce the differences among groups found here. These factors include female socialization to be other-directed, the political climate of this era,

the changes that are brought about by women's life experience from their mid-twenties and beyond and particularly from personal experience of sex discrimination.

As suggested earlier (see pp. 3-5) to the extent that women are reliant upon others for self-definition their grasp on self-esteem will be tenuous (Bardwick, et al., 1970; Basow, 1980; Muff, 1982b; Weitz, 1977). Bardwick (1980) and Serlin (1980) have examined changes that occur in this regard among women across various life stages. They suggest that women in their late teens and early 20s are more likely to be dependent on heterosexual relationships for their core identities than are women in their late twenties or thirties. Furthermore, while all women within this age range have been affected by the feminist movement which began in the late 1960s, those who are younger may be more apt to be influenced by the more recent conservative backlash in values. These factors may begin to explain the results of this study, i.e., both that the older women were more likely to be non-traditional and that they were more likely to have high self-esteem than their younger counterparts.

Serlin (1980) and Steinem (1980) have indicated that these elements combine with women's life experiences to provide for a transition during their twenties. Steinem suggests that women college students of any era are probably treated more as equals than they will be at any other time in their lives; after university, women may never be viewed again by their society as quite so valuable, desirable and full of potential ("fertile") as during their youth. Paradoxically, it is shortly thereafter, as women typically confront the "real world" for the first time that they are forced to reexamine their perceptions,

values and self-worth, becoming more inner-directed in the process (Serlin, 1980). As Steinem (1982, p. 212) notes, it is not until after university that such women encounter the realities of:

> The life events that are most radicalizing for women: entering the paid-labor force and discovering how women are treated there; marrying and finding out that it is not yet an equal partnership; having children and discovering who is responsible for them and who is not; and aging, still a greater penalty for women than men.

That is, women discover via increased life experience that the promise of adult womanhood is not to be fulfilled in quite the manner that they had anticipated. Rather than being debilitating, this realization may impel women to search for value and to develop strength within; rather than continuing to depend on the illusion of a perpetual source of esteem-income being available externally, such women grow to rely upon their own inner resources for their identities and self-esteem. As Renzetti (1987, p. 275) adds, "Personal experiences of sex discrimination also serve as a catalyst for the development of a feminist perspective and support for the women's movement."

The epitome of this developmental change in values and identity was seen among the nursing students. At the University of Ottawa students may enrol in either the basic B.Sc. in nursing programme or in the Post-R.N. programme (see Subjects). The latter consists of students who already have an R.N. degree but have returned to university to receive a B.Sc. after several years in the paid labour force. During the debriefing interviews, it became increasingly clear that the women in these two programmes were psychosocially distinctive.

Subsequent analyses verified that those in the basic programme were most likely to score as traditional while those in the latter programme were more likely to be non-traditional. The former subjects often described their attraction to nursing as wanting to work with people, to care for and serve others, to assist physicians, etc. These motives stood in stark contrast to those expressed by their more experienced counterparts regarding their continuing education. They almost uniformly cited dissatisfaction with being taken for granted, demeaned and sexually harrassed by physicians and hospital personnel, being overworked but rarely having their value or contributions acknowledged, except by their patients. All indicated that they had chosen to pursue a B.Sc. degree in order to increase their status and opportunity for advancement, primarily as a result of years of disillusionment and being stereotyped. A surprising number mentioned that they hoped to secure positions in isolated northern communities in order to have primary responsibility for local health care, unimpeded by physicians or medical bureaucracy. While the younger students seemed to fulfill many of the stereotypes that have typically pervaded nursing (Muff, 1982a, b), their older counterparts were attempting to transcend these myths, to act as professionals and be treated accordingly. The results appear to be consistently with those of Gauthier and Kjervik (1982) who examined graduate nursing students. They found higher self-esteem than had been found in previous studies having largely younger, undergraduate samples. Furthermore, they found that non-traditional nursing students held significantly higher self-esteem than traditional nurses.

Profile of Subjects with High Lifestyle Satisfaction

The ANOVAs on lifestyle satisfaction have indicated that the profile of women scoring high on this variable is rather similar to that of subjects who have high levels of self-esteem. Women who have high scores on lifestyle satisfaction were significantly more likely to be non-traditional than traditional, married rather than single and falling in the older half of the subject pool. In addition, these women were more likely to be mothers than childless, although not at the $\alpha = .05$ level of significance, ($p < .08$).

Some of the possible reasons for women bearing these characteristics scoring high on self-esteem were explored earlier and may apply as well to lifestyle satisfaction. However, what is most striking about this subject profile is the configuration of gender-role orientation with lifestyle patterns. That is, the non-traditional woman who reports high lifestyle satisfaction does not, in fact, appear to lead the kind of lifestyle typically associated with such women. The image most commonly held of the non-traditional woman is of one who is young, single and childless; in contrast, older, married mothers are often assumed to hold traditional sex-role values. It is most interesting that by conventional superficial standards, there appears to be a discrepancy between the gender-role orientation and the lifestyle pattern found among these subjects.

Bardwick suggests that in the wake of the social upheaval of the 1960s, various combinations of internal gender-role identities and external behaviours may co-exist (1980, pp. 37-38):

> A wider range of styles and objectives exists among women today, because since the changes in society are so recent, women can have values, a self-perception, and a life-style either deriving from or combining both traditional and modern patterns.

Perhaps neither our social stereotypes nor our psychological measures are attuned to the more complex realities of the 1980s. The subjects in this study, both traditional and non-traditional, frequently expressed the desire for a better balance among the private and public spheres in their lives. For the moment, others may be misattributing values to them which they do not hold, based on unnecessarily crude observations. Furthermore, the implications for social psychology research may involve the development of more sophisticated behavioural measures; these would ideally be capable of detecting subtle lifestyle choices which are meaningful in women's experience. (This will be discussed more fully below. See Limitations and Implications.)

Relationship of Self-Esteem to Lifestyle Satisfaction

One of the aims of this study had been to investigate the costs and benefits that traditional-conformists and non-traditional-non-conformists incur in terms of self-esteem and lifestyle satisfaction. It had been predicted that a tradeoff would be found between these two dependent variables. Specifically it had been hypothesized that traditional-conformist women would have relatively low self-esteem but relatively high lifestyle satisfaction. The reverse had been predicted for non-traditional-non-conformists, i.e., that they would have

relatively higher self-esteem but be relatively more dissatisfied with their lifestyles (see pp. 12-18).

The results did not support the above hypotheses. Traditional-conformists did have significantly lower self-esteem than non-traditional-non-conformists but also scored lower on lifestyle satisfaction. (Traditional-conformists scored lower than non-traditional-non-conformists on the latter variable, although not at the $\alpha = .05$ level of significance, $p < .081$. However, traditional women did score significantly lower than non-traditional women on lifestyle satisfaction). That is, traditional-conformists scored lower on both variables than non-traditional-non-conformists; traditional women scored significantly lower on both dependent variables than non-traditional women. The predicted tradeoff between self-esteem and lifestyle satisfaction did not occur, as illustrated by comparing Figures 2 and 9 on the following page. On the contrary, a positive correlation between these variables was found, ($r = .63$, $p < .0001$, see Results, p. 57).

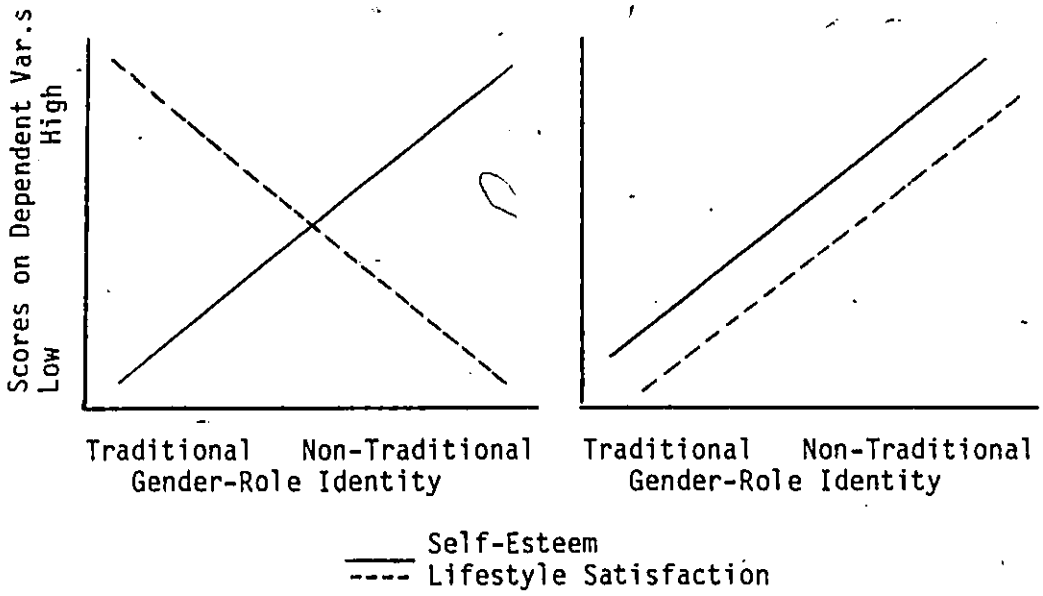

FIGURE 2

PREDICTED RELATIONSHIP BETWEEN SELF-ESTEEM AND LIFESTYLE SATISFACTION

FIGURE 9

ACTUAL RELATIONSHIP BETWEEN SELF-ESTEEM AND LIFESTYLE SATISFACTION

These findings are counter to the thrust of Chapter 1, i.e., that women face a "no-win" situation in which they must choose between the anticipated psychosocial consequences of traditional versus non-traditional gender-role identity and/or life choices. It would appear that traditional-conformists are neither satisfied with themselves nor their lifestyles relative to their non-traditional-non-conformist counterparts, who seem to have the advantage on both counts. (Possible explanations for the results on each of these variables have been explored in the corresponding sections above.) Yet these results present more questions than answers. This study has indicated the rewards of being a non-traditional-non-conformist and the costs of being a traditional-conformist woman and suggests that these

consequences are quite skewed. What, however, are the costs of the former and the benefits of the latter? Furthermore, why do women maintain the traditional gender-role identity if they have so much to lose in the process and when their non-traditional counterparts appear to have higher self-esteem and lifestyle satisfaction?

A variety of possible reasons for these findings bear investigation in future research. Perhaps the explanation is simply that non-traditional women are better adjusted than traditional women (Bart, 1972; Basoff & Glass, 1982; Spence & Helmreich, 1978; Spence, Helmreich & Holahan, 1979; Thomas & Reznikoff, 1984). Research is now suggesting that the instrumental aspects of traditionally "masculine" characteristics/behaviours may be responsible for both self-esteem and general well-being (Adams & Sherer, 1985; Taylor & Hall, 1982). As such, both self-esteem and lifestyle satisfaction would be beneficially or adversely affected, depending on one's gender-role identity. One further possibility may be that self-esteem per se acts as an intervening variable, linking "masculinity"/non-traditional gender-role identity to well-being, thereby preventing maladjustment/depression (Feather, 1985; Whitley, 1984).

Another issue that may prove relevant in future research in this area involves the unexpected demographic profiles of the traditional and non-traditional women in this study, i.e., age, marital and family status. As suggested earlier, a discrepancy seems to exist between self-reported gender-role identity and the stereotypical profiles often associated with traditional and non-traditional women. Perhaps the social sanctions meted out by our society for non-conformity to

traditional values are esentially being misdirected. The 22-year-old single, childless woman in the engineering faculty may be experiencing the suspicions, disapproval and social isolation intended for a non-traditional woman. These attributions and accompanying sanctions are incongruent with her own gender-role identity. The 32-year-old married woman with two school-aged children, now working towards her B.Sc. in nursing may receive the support and encouragement of a society that fails to look beneath the surface. Each woman's values and private expression of her gender-role identity, may be too subtle/complex for the public world to judge and sanction appropriately. For example, while the young, traditional, engineering student may still wait passively for men to ask her out, the older, non-traditional nurse may expect her husband to share major responsibility for housework and child care. These behaviours, however, are less visible to the outside world than is one's demographic status. As such, perhaps non-traditional women have the best of both worlds; they may receive positive sanctions from others who reward them for an apparently traditional lifestyle while within, they have the high self-esteem associated with a non-traditional gender-role identity. It would then follow that the reverse would be true for traditional women.

A further consideration for future investigators may involve framing new questions in interdisciplinary terms. The costs to non-traditional women and/or benefits for traditional women may exist in the sociological or economic spheres. For example, what is the relationship between gender-role identity and women's financial

dependence or independence? Is gender-role identity affected by increasing age and number of children? What are the antecedents/ conseguences of gender-role identity as they relate to long-range family/career goals? Exploration of questions such as these may help to illuminate the causes, purposes or effects of women's gender-role related choices.

Profile of Subjects with High Anxiety/Conflict

The results have suggested that the students with high scores on this variable were more likely to be traditional than non-traditional and traditional-conformists rather than non-traditional-non-conformists. Although significant differences occurred on the ANOVA by faculty, post-hoc pairwise comparisons failed to indicate significant differences between individual faculties. No further significant differences emerged on ANOVAs by marital status, presence/absence of children nor by age group. Apparently, the most prominent feature in distinguishing among women with high versus low anxiety/conflict is gender-role. This is consistent with the profiles which emerged of high scorers on self-esteem and lifestyle satisfaction. (As stated in Results, p. 57) while these two dependent variables were positively correlated with one another, each was moderately, negatively correlated with anxiety/conflict respectively (r = -62, p < .01 and r = -.52, p < .01). It would appear then that high scorers on self-esteem were also likely to be high scorers on lifestyle satisfaction and would in turn have low scores on anxiety/conflict.

Limitations and Implications

The two major limitations of this study involve the subject sample and the use of pillows and weight-benches as choices of gender stereotypic behaviour. The use of only female, university students in this sample narrowed the subject pool to a highly selective group in terms of sex, age range and socioeconomic status. While college students form a common, accepted target group for psychological researchers, they are an elite group and hardly representative of the "average" Canadian woman. This study purported to examine traditional and non-traditional women. Particularly given these stated objectives, it would have been valuable to select women at random or perhaps to seek a stratified random sample. The interesting demographic profiles of traditional and non-traditional women found in this study support the recommendation that future investigations aim for a subject pool with broader age and life experience.

This study began by questioning the costs and benefits experienced by traditional and non-traditional women. As such, it could have been ameliorated by examining individuals who have already made important gender-role related choices, discovered and lived with their consequences. Therefore, middle-aged and older women might have been preferable subjects, e.g., comparing full-time older homemakers to women (their peers), who have always been employed in the paid labour force may illuminate consequences that university students may not typically anticipate or appreciate.

An ideal research approach could involve a cross-sectional or longitudinal design. Either of these methodologies would be capable of addressing the developmental changes that occur in women's identities as they pertain to values, life experience and socio-political climate. Furthermore, subsequent researchers might wish to include not only women at the gender-role extremes but to also compare androgynous women. Indeed, it might be interesting to evaluate traditional, non-traditional and androgynous men on the same dependent variables (Eichler, 1981, 1985).

The second major limitation of this study involved the selection of stuffing pillows versus assembling weight-benches as gender stereotypic activities. Most of the literature in this area relies on self-report data only. The studies that also utilize behavioural measures are notably rare (e.g., Bem & Lenney, 1976). Vaughter (1983, p. 148) suggests that the examination of sex-role, "Behaviours may yield more accurate assessments and more definitive recommendations for social policy change." It had been hoped that this study might contribute in part to the research literature by combining both types of gender-role measures, i.e., scores on two self-report measures as well as behavioural choices. The A.W.S. and B.S.R.I. distinguished quite clearly between traditional and non-traditional women's gender-role identities. However, throughout this study, there have been indications that the use of pillows and weight-benches were not entirely effective as criteria of conformity/non-conformity to gender-role specific behaviour. While these particular activities may have proven less than optimal, future attempts at using behavioural

measures need not be futile. While stuffing pillows and assembling weight-benches are blatantly gender-stereotypic tasks, they held limited relevance for these women's experience of conforming/non-conforming choices in their lives. In addition, assembling the weight-benches had higher intrinsic task appeal than did the pillows. Although subjects were able to identify these activities correctly as stereotypically masculine or feminine, and engaged in them while allegedly being videotaped, the choices that are meaningful in their daily lives may be impossible to recreate in the artificial context of the laboratory.

Before such a determination can be made, it may be advisable to seek women's input in attempting to develop research paradigms that are capable of addressing women's choices of conformity/non-conformity (Klein, 1983; Reinharz, 1983). Exploratory investigations using open-ended or semi-structured interviews may be valuable in eliciting material concerning the relatively complex dilemmas which women encounter regularly. (As the demographic profiles that emerged in this study seem to indicate), even such choices as whether or not to marry, have children, enter a historically male/female dominated career, may all be too crude to be useful as indices of gender-role conformity. Future research may benefit from simply asking women to share some of the more subtle, yet meaningful choices they confront.

The resulting information could provide the basis for new kinds of behavioural measures, addressing activities outside the laboratory. Behaviourally based/anchored rating scales (c.f., Campbell, Dunnette, Arvey & Hellervik, 1973) could incorporate the types of choices and

ensuing behaviours that occur in women's everyday lives and were echoed during the debriefing interviews. Some examples are as follows: When one's child (or the babysitter) suddenly becomes ill, which parent will leave work to care for their son/daughter? Who plans meals and prepares shopping lists? When a woman is out with a male partner, who drives the car? How frequently does she initiate sexual overtures? Women's responses to these questions and concerns, (with the possibility of arranging for partners to respond as well), could potentially provide more relevant and accurate measures of women's conformity or non-conformity to traditional gender-roles. Such an approach may not be as "rigorous" as methods which permit all behaviours to be observed in the laboratory by the experimentor; however, rating scales focusing on concrete activities may fill the gap existing between such self-report instruments as the A.W.S. or B.S.R.I. and the relatively controlled but less relevant choices imposed in this study.

One theoretical issue that bears upon the interpretation of this study involves its initial premises. Although the objectives of this project entailed examining the consequences of women's gender-role specific choices, the results may warrant additional consideration of their antecedents. Non-traditional women students experience significantly higher levels of self-esteem, lifestyle satisfaction and significantly less anxiety/conflict than their traditional counterparts. If the costs and benefits in the above areas clearly favour non-traditional women, what compels the traditional woman to maintain her gender-role? Perhaps her motives are more closely related

to early socialization than to sanctions incurred in adulthood. Such factors as maternal employment status, paternal non-traditional occupations, parental education, gender-role values, warmth and encouragement may affect the development of children's gender-role orientation (Hertle & Kaufman, 1980; Katz, 1979; Kelly & Worell, 1976; Orlofsky, 1979; Zuckerman et al., 1982). These elements may create as much or more enduring impact on women's subsequent choices as do various potential costs or benefits of each option. Flouting gender-roles that had been inculcated in the home during childhood may engender excessive anxiety or threat and thereby be too costly a choice, regardless of other "objective" sanctions. Future researchers may then wish to analyze both antecedents and consequences of women's gender-role related choices in tandem and to measure their relative importance/salience in women's experience.

Greater Inequity for Women

Finally, the implications of this study for society and for social policy must be addressed. Throughout the debriefing interviews, women focused repeatedly on the persistent problem of being burdened with the responsibility for choices given a paucity of viable options. Regardless of gender-role orientation and values, subjects resented being confronted with dilemmas that did not seem to exist, or at least perturb, their male partners or colleagues. Their awareness and insight was striking and indicated that these issues had been of concern for some time. For example, they recognized that they would

eventually be required to make choices with respect to pregnancy, childbirth and their "biological clocks"; however, they resented their male counterparts' lack of acknowledgement and acceptance of their choices and share in the responsibility for childcare. The vast majority of these subjects either were already mothers or hoped to bear children. Yet they felt that in a society which ostensibly values the family unit, it was incumbent on them to forego other options if they sought parenthood in the absence of social and often spousal support. These women could not - and were not expected to - take the educational financial and career choices for granted that their male counterparts regard as their entitlement. Repeatedly, women described their boyfriends or husbands (whether accurately or otherwise) as "able to have it all", without the questioning, struggles and self-doubts/ recriminations which women encounter daily.

Wider Range of Options for Women

As such, it is recommended that the options available to women confronting difficult gender-role related choices be broadened and more readily accessible. Some suggestions are as follows and were generated primarily during the debriefing sessions. Interestingly, all of them seem to involve increasing social support systems. Many women indicated that their schooling/career versus home decisions would be facilitated by consistent, reliable, affordable childcare or assistance, (preferably in the home or neighbourhood); more night courses, part- and flex-time employment and job-sharing arrangements

could enhance both parents' commitment to family and career with reduced stress. Some of the burden and struggle that women experience, particularly young, traditional women, might be alleviated by sharing these feelings with others, especially older women. The increased presence and visibility of female role-models and mentors (e.g., professors, supervisors, management) for women entering historically male-dominated fields might offer women new options, rather than adopting the prevailing mores or risking social/professional isolation (Colwill, 1982; Gilbert, Gallessich & Evans, 1983; Kanter, 1984; M.I.T., 1983). Inter-generational networking may provide valuable support for women, regardless of which choices they are drawn towards (Beutler, 1980). This, in fact, may be what many of these subjects seemed to desire most, i.e., that whatever their choices, that they obtain the appreciation if not respect, from both men and women, for the delicacy and magnitude of their decisions. The most important implication of this study may then be that society attempt to assist individuals in freely choosing whatever gender-role options fulfill them most, regardless of gender-role orientation and indeed, regardless of sex.

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APPENDIX A

BEM SEX ROLE INVENTORY

On the following page, you will be shown a large number of personality characteristics. We would like you to use those characteristics in order to describe yourself. That is, we would like you to indicate, on a scale from 1 to 7, how true to you these various characteristics are. Please do not leave any characteristic unmarked.

Example: sly

Mark a 1 if it is NEVER OR ALMOST NEVER TRUE that you are sly

Mark a 2 if it is USUALLY NOT TRUE that you are sly

Mark a 3 if it is SOMETIMES BUT INFREQUENTLY TRUE that you are sly

Mark a 4 if it is OCCASIONALLY TRUE that you are sly

Mark a 5 if it is OFTEN TRUE that you are sly

Mark a 6 if it is USUALLY TRUE that you are sly

Mark a 7 if it is ALWAYS OR ALMOST ALWAYS TRUE that you are sly

Thus, if you feel it is sometimes but infrequently true that you are "sly", never or almost never true that you are "malicious", always or almost always true that you are "irresponsible", and often true that you are "carefree", then you would

Sly	3	Irresponsible	7
Malicious	1	Carefree	5

DESCRIBE YOURSELF

1	2	3	4	5	6	7
Never or almost never true	Usually not true	Sometimes but infrequently true	Occa-sionally true	Often true	Usually true	Always or almost always true

Self-reliant	_	Reliable	_	Warm	_	Yielding	_	Analytical	_	Solemn	_
Helpful	_	Sympathetic	_	Willing to take a stand	_	Defends own beliefs	_	Jealous	_	Tender	_
Cheerful	_	Has leadership abilities	_	Friendly	_	Moody	_	Sensitive to the needs of others	_	Aggressive	_
Independent	_	Truthful	_	Gullible	_	Shy	_	Willing to take risks	_	Inefficient	_
Conscientious	_	Understanding	_	Acts as a leader	_	Athletic	_	Secretive	_	Childlike	_
Affectionate	_	Makes decisions easily	_	Adaptable	_	Theatrical	_	Compassionate	_	Individualistic	_
Assertive	_	Sincere	_	Does not use harsh language	_	Flatterable	_	Self-sufficient	_	Unsystematic	_
Happy	_	Eager to soothe hurt feelings	_	Competitive	_	Strong personality	_	Conceited	_	Loves children	_
Loyal	_	Dominant	_	Tactful	_	Unpredictable	_	Soft-spoken	_	Ambitious	_
Forceful	_	Likable	_	Gentle	_	Feminine	_	Masculine	_	Conventional	_

APPENDIX B

ATTITUDES TOWARDS WOMEN SCALE (SHORT FORM)

		Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly
1.	Swearing and obscenity is more repulsive in the speech of a women than a man	1	2	3	4
2.	Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry	1	2	3	4
3.	It is insulting to women to have the "obey" clause remain in the marriage service	1	2	3	4
4.	A women should be as free as a man to propose marriage	1	2	3	4
5.	Women should worry less about their rights and more about becoming good wives and mothers	1	2	3	4
6.	Women earning as much as their dates should bear equally the expense when they go out together	1	2	3	4
7.	Women should assume their rightful place in business and all the professions along with men	1	2	3	4

	Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly
8. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man	1	2	3	4
9. Sons in a family should be given more encouragement to go to college than daughters	1	2	3	4
10. It is ridiculous for a woman to run a locomotive and for a man to darn socks	1	2	3	4
11. In general, the father should have greater authority than the mother in the bringing up of children	1	2	3	4
12. The intellectual leadership of a community should be largely in the hands of men	1	2	3	4
13. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set by men	1	2	3	4
14. There are many jobs in which men should be given preference over women in being hired or promoted	1	2	3	4
15. Women should be given equal opportunity with men for apprenticeship in the various trades	1	2	3	4

APPENDIX C

ITEMS FROM THE SELF-REGARD (Sr) SCALE ON THE PERSONAL ORIENTATION INVENTORY

1.a I am afraid to be myself.
b I am not afraid to be myself.

2.a I sometimes feel embarrassed by compliments.
b I am not embarrassed by compliments.

3.a It is possible to live life in terms of what I want to do.
b It is not possible to live life in terms of what I want to do.

4.a I can cope with the ups and downs of life.
b I cannot cope with the ups and downs of life.

5.a I live in terms of my wants, likes, dislikes and values.
b I do not live in terms of my wants, likes, dislikes and values.

6.a I trust my ability to size up a situation.
b I do not trust my ability to size up a situation.

7.a I believe I have an innate capacity to cope with life.
b I do not believe I have an innate capacity to cope with life.

8.a I often feel it necessary to defend my past actions.
b I do not feel it necessary to defend my past actions.

9.a It is important that others accept my point of view.
b It is not necessary for others to accept my point of view.

10.a I feel free to be myself and bear the consequences.
b I do not feel free to be myself and bear the consequences.

11.a Self-interest is natural.
b Self-interest is unnatural.

12.a I am assertive and affirming.
b I am not assertive and affirming.

13.a It is a good idea to think about your greatest potential.
b A person who thinks about his greatest potential gets conceited.

14.a I am self-sufficient.
b I am not self-sufficient.

15.a I feel certain and secure in my relationship with others.
b I feel uncertain and insecure in my relationship with others.

16.a I can feel comfortable with less than a perfect performance.
b I feel uncomfortable with anything less than a perfect performance.

Self-Esteem

1. I am the kind of person that I would like to be

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

2. As a result of choosing to stuff pillows/assemble work bench, I feel

Rather less pleased with myself			No change			Rather more pleased with myself
1	2	3	4	5	6	7

3. In general, I find that the choices I make cause me to feel

Rather less pleased with myself			No change			Rather more pleased with myself
1	2	3	4	5	6	7

APPENDIX D

ITEMS FROM THE SENSE OF WELL-BEING (Wb) SCALE ON THE CALIFORNIA PSYCHOLOGICAL INVENTORY

(all are true of false, marked on a separate answer sheet)

1. I find it hard to keep my mind on a task or job.
2. I usually feel that life is worthwhile.
3. People treat me more like a child than a grown-up.
4. When I am feeling happy and active, someone who is blue or low will spoil it.
5. I have very few quarrels with members of my family.
6. No one seems to understand me.
7. Anyone who is able and willing to work hard has a good chance of succeeding.
8. I hardly ever feel pain in the back of the neck.
9. I would have been more successful if people had given me a fair chance.
10. Life usually hands me a pretty raw deal.
11. My family has objected to the kind of work I do, or plan to do.

Satisfaction

1. I am pleased that I chose to select the activity that I have just completed

Not true al all			Moderately true			Absolutely true
1	2	3	4	5	6	7

2. As a result of choosing to stuff pillows/assemble the weight-bench. I now feel

Rather displeased with how I spent my time			No change			Rather pleased with how I spent my time
1	2	3	4	5	6	7

3. I found this activity

Extremely boring			Moderately interesting			Extremely interesting
1	2	3	4	5	6	7

4. I found this activity

Not at all enjoyable			Moderately enjoyable			Extremely enjoyable
1	2	3	4	5	6	7

5. As far as my schooling/career development is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

6. As far as my home situation/family life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

7. As far as my love life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

8. As far as my social life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

9. In general, I am pleased with how I spend my time

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

10. In general, I find my lifestyle satisfying and rewarding

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

11. I live according to my own ideas

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

12. Do you believe that you are getting your "fair share" of happiness or are you "missing out" on life?

Missing out						Fair share
1	2	3	4	5	6	7

13. Do you feel rushed or do you have time to do the things that matter to you?

Extremely rushed			Moderately rushed			Not at all rushed
1	2	3	4	5	6	7

14. Do you feel stressed by different roles in your life?

Extremely stressed			Moderately stressed			Not at all stressed
1	2	3	4	5	6	7

15. Taking your day-to-day life in general, are you doing the things that really interest you, that you would really like to be doing?

Definitely no						Definitely yes
1	2	3	4	5	6	7

16. I lead the kind of life I enjoy most

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

SELF-EVALUATION QUESTIONNAIRE

Developed by C. D. Spielberger, R. L. Gorsuch and R. Lushene

STAI FORM X-1

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *feel* right now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I feel calm	①	②	③	④
2. I feel secure	①	②	③	④
3. I am tense	①	②	③	④
4. I am regretful	①	②	③	④
5. I feel at ease	①	②	③	④
6. I feel upset	①	②	③	④
7. I am presently worrying over possible misfortunes	①	②	③	④
8. I feel rested	①	②	③	④
9. I feel anxious	①	②	③	④
10. I feel comfortable	①	②	③	④
11. I feel self-confident	①	②	③	④
12. I feel nervous	①	②	③	④
13. I am jittery	①	②	③	④
14. I feel "high strung"	①	②	③	④
15. I am relaxed	①	②	③	④
16. I feel content	①	②	③	④
17. I am worried	①	②	③	④
18. I feel over-excited and "rattled"	①	②	③	④
19. I feel joyful	①	②	③	④
20. I feel pleasant	①	②	③	④

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	①	②	③	④
22. I tire quickly	①	②	③	④
23. I feel like crying	①	②	③	④
24. I wish I could be as happy as others seem to be	①	②	③	④
25. I am losing out on things because I can't make up my mind soon enough	①	②	③	④
26. I feel rested	①	②	③	④
27. I am "calm, cool, and collected"	①	②	③	④
28. I feel that difficulties are piling up so that I cannot overcome them	①	②	③	④
29. I worry too much over something that really doesn't matter	①	②	③	④
30. I am happy	①	②	③	④
31. I am inclined to take things hard	①	②	③	④
32. I lack self-confidence	①	②	③	④
33. I feel secure	①	②	③	④
34. I try to avoid facing a crisis or difficulty	①	②	③	④
35. I feel blue	①	②	③	④
36. I am content	①	②	③	④
37. Some unimportant thought runs through my mind and bothers me	①	②	③	④
38. I take disappointments so keenly that I can't put them out of my mind	①	②	③	④
39. I am a steady person	①	②	③	④
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	①	②	③	④

APPENDIX E

Conflict

When I considered whether to stuff pillows or to assemble the weight bench

1. I had a hard time deciding which activity I would prefer to do

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

2. Generally, I find it easy to make choices

No, not at all			Moderately easy			Yes, absolutely
1	2	3	4	5	6	7

APPENDIX F

INSTRUCTIONS TO SUBJECTS

Over the next hour, your participation is requested for one of the following two projects. You may choose whichever you prefer. A weight bench (for lifting weights, doing bench-presses, working out, etc.) is to be assembled or alternately, you might want to put together animal-shaped stuffed pillows. The materials for both tasks are available here in kits that come fully equipped and with easy to follow instructions. Each task can be completed within an hour, even if you have no previous experience with these kinds of activities. If you should have any questions or encounter any difficulties, please feel free to ask and help will be provided.

___ Stuffing the pillow

___ Assembling the weight bench

APPENDIX G

SURVEY OF STUDENTS

The women who participate in the next stage of this study will be given the following instructions upon entering the laboratory:

Over the next hour, your participation is requested for one of the following two projects. You may choose which ever you prefer. A weight bench (for lifting weights, doing bench-presses, etc.) must be assembled for use, (that is, working out), at the University of Ottawa gym. Alternately, you might want to put together animal-shaped stuffed pillows to be donated to the patients at the Children's Hospital of Eastern Ontatio. The materials for both tasks are available here in kits that come fully equipped and with easy to follow instructions. Each task can be completed within an hour, even if you have no previous experience with these kinds of activities. If you should have any questions or encounter any difficulties, please feel free to ask and help will be provided.

(The materials are visible and consist of pillow kits with Walt Disney characters such as Donald Duck and Mickey Mouse and weight bench kits with pictures of muscle-men.)

Which activity do <u>YOU</u> think the average woman would choose?

☐ Stuffing the pillow

☐ Assembling the weight bench

☐ Male ☐ Female

APPENDIX H

INSTRUCTIONS

Please mark all your answers to the following questions on the accompanying computerized answer sheet.

61. 1 I am afraid to be myself.
    2 I am not afraid to be myself.

62. 1 I sometimes feel embarrassed by compliments.
    2 I am not embarrassed by compliments.

63. 1 It is possible to live life in terms of what I want to do.
    2 It is not possible to live life in terms of what I want to do.

64. 1 I can cope with the ups and downs of life.
    2 I cannot cope with the ups and downs of life.

65. 1 I live in terms of my wants, likes, dislikes and values.
    2 I do not live in terms of my wants, likes, dislikes and values.

66. 1 I trust my ability to size up a situation.
    2 I do not trust my ability to size up a situation.

67. 1 I believe I have an innate capacity to cope with life.
    2 I do not believe I have an innate capacity to cope with life.

68. 1 I often feel it necessary to defend my past actions.
    2 I do not feel it necessary to defend my past actions.

69. 1 It is important that others accept my point of view.
    2 It is not necessary for others to accept my point of view.

70. 1 I feel free to be myself and bear the consequences.
    2 I do not feel free to be myself and bear the consequences.

71. 1 Self-interest is natural.
    2 Self-interest is unnatural.

72. 1 I am assertive and affirming.
    2 I am not assertive and affirming.

73. 1 It is a good idea to think about your greatest potential.
    2 A person who thinks about his greatest potential gets conceited.

74. 1 I am self-sufficient.
    2 I am not self-sufficient.

75. 1 I feel certain and secure in my relationship with others.
    2 I feel uncertain and insecure in my relationship with others.

76. 1 I can feel comfortable with less than a perfect performance.
    2 I feel uncomfortable with anything less than a perfect performance.

77. I am the kind of person that I would like to be.

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

78. As a result of choosing to stuff pillows/assemble work bench, I feel

Rather less pleased with myself			No change			Rather more pleased with myself
1	2	3	4	5	6	7

79. In general, I find that the choices I make cause me to feel

Rather less pleased with myself			No change			Rather more pleased with myself
1	2	3	4	5	6	7

For the following items until number 90, please mark 1 for true or 2 for false on the accompanying computerized answer sheet.

80. I find it hard to keep my mind on a task or job.

81. I usually feel that life is worthwhile.

82. People treat me more like a child than a grown-up.

83. When I am feeling happy and active, someone who is blue or low will spoil it.

84. I have very few quarrels with members of my family.

85. No one seems to understand me.

86. Anyone who is able and willing to work hard has a good chance of succeeding.

87. I hardly ever feel pain in the back of the neck.

88. I would have been more successful if people had given me a fair chance.

89. Life usually hands me a pretty raw deal.

90. My family has objected to the kind of work I do, or plan to do.

91. I am pleased that I chose to select the activity that I have just completed.

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

92. As a result of choosing to stuff pillows/assemble the weight bench. I now feel

Rather displeased with how I spent my time			No change			Rather pleased with how I spent my time
1	2	3	4	5	6	7

93. I found this activity

Extremely boring			Moderately interesting			Extremely interesting
1	2	3	4	5	6	7

94. I found this activity

Not at all enjoyable			Moderately enjoyable			Extremely enjoyable
1	2	3	4	5	6	7

95. As far as my schooling/career development is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

96. As far as my home situation/family life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

97. As far as my love life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

98. As far as my social life is concerned, I find that I have usually been

Rather displeased						Rather satisfied
1	2	3	4	5	6	7

99. In general, I am pleased with how I spend my time

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

100. In general, I find my lifestyle satisfying and rewarding

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

101. I live according to my own ideas

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

102. Do you believe that you are getting your "fair share" of happiness or are you "missing out" on life?

Missing out						Fair share
1	2	3	4	5	6	7

103. Do you feel rushed or do you have time to do the things that matter to you?

Extremely rushed			Moderately rushed			Not at all rushed
1	2	3	4	5	6	7

104. Do you feel stressed by different roles in your life?

Extremely stressed			Moderately stressed			Not at all stressed
1	2	3	4	5	6	7

105. Taking your day-to-day life in general, are you doing the things that really interest you, that you would really like to be doing?

Definitely no						Definitely yes
1	2	3	4	5	6	7

106. I lead the kind of life I enjoy most

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

STAI FORM X-1

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *feel* right now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

		NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
107.	I feel calm	①	②	③	④
108.	I feel secure	①	②	③	④
109.	I am tense	①	②	③	④
110.	I am regretful	①	②	③	④
111.	I feel at ease	①	②	③	④
112.	I feel upset	①	②	③	④
113.	I am presently worrying over possible misfortunes	①	②	③	④
114.	I feel rested	①	②	③	④
115.	I feel anxious	①	②	③	④
116.	I feel comfortable	①	②	③	④
117.	I feel self-confident	①	②	③	④
118.	I feel nervous	①	②	③	④
119.	I am jittery	①	②	③	④
120.	I feel "high strung"	①	②	③	④
121.	I am relaxed	①	②	③	④
122.	I feel content	①	②	③	④
123.	I am worried	①	②	③	④
124.	I feel over-excited and "rattled"	①	②	③	④
125.	I feel joyful	①	②	③	④
126.	I feel pleasant	①	②	③	④

STAI FORM X-2

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

		ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
127.	I feel pleasant	①	②	③	④
128.	I tire quickly	①	②	③	④
129.	I feel like crying	①	②	③	④
130.	I wish I could be as happy as others seem to be	①	②	③	④
131.	I am losing out on things because I can't make up my mind soon enough	①	②	③	④
132.	I feel rested	①	②	③	④
133.	I am "calm, cool, and collected"	①	②	③	④
134.	I feel that difficulties are piling up so that I cannot overcome them	①	②	③	④
135.	I worry too much over something that really doesn't matter	①	②	③	④
136.	I am happy	①	②	③	④
137.	I am inclined to take things hard	①	②	③	④
138.	I lack self-confidence	①	②	③	④
139.	I feel secure	①	②	③	④
140.	I try to avoid facing a crisis or difficulty	①	②	③	④
141.	I feel blue	①	②	③	④
142.	I am content	①	②	③	④
143.	Some unimportant thought runs through my mind and bothers me	①	②	③	④
144.	I take disappointments so keenly that I can't put them out of my mind	①	②	③	④
145.	I am a steady person	①	②	③	④
146.	I get in a state of tension or turmoil as I think over my recent concerns and interests	①	②	③	④

When I considered whether to stuff pillows or to assemble the weight bench

147. I had a hard time deciding which activity I would prefer to do

Not true at all			Moderately true			Absolutely true
1	2	3	4	5	6	7

148. Generally, I find it easy to make choices

No, not at all			Moderately easy			Yes, absolutely
1	2	3	4	5	6	7

APPENDIX I

CONSENT FORM

I, _____, agree to participate in a study of women's values and choices. This investigation is being carried out by Ms. P. Kleinplatz and Dr. M. McCarrey of the School of Psychology, University of Ottawa.

I understand that I will be asked to participate in an activity involving the assembly of one item. In addition, I will be asked to fill out a questionnaire immediately thereafter.

I understand the responses I give will be regarded as confidential and that the results reported will not identify me personally as a participant. I have been assured that my participation in this study is totally voluntary and that I may withdraw from participation at any time. Following participation in the study, a complete description of the project will be provided.

In the event that I have concerns or complaints about this study, I have been told that I may express my concerns to Dr. M. McCarrey (231-4242), School of Psychology, University of Ottawa.

Signed _____

Date _____

To the participant:

A consent form is a standard requirement for all studies involving the School of Psychology, University of Ottawa. A consent form does not imply that the study is potentially hazardous or embarrassing; its use simply acknowledges the concern of the School for the rights of the individual participant. If you have agreed to participate, then we thank you for your cooperation.

APPENDIX J TABLE J.1

DISTRIBUTION OF TRADITIONAL
VS. NON-TRADITIONAL SUBJECTS

Gender-Role Identity		Frequency	%
TRADITIONAL	1.	80	50.0
NONTRADITIONAL	2.	80	50.0
	TOTAL	160	100.0

APPENDIX J TABLE J.2

DISTRIBUTION OF EXPERIMENTAL VS. CONTROL SUBJECTS

Choice		Frequency	%
EXPERIMENTAL	1.	80	50.0
CONTROL	2.	80	50.0
	TOTAL	160	100.0

APPENDIX J TABLE J.3

DISTRIBUTION OF SUBJECTS BY PARTICIPATION IN GENDER STEREOTYPIC TASKS

Gender-Stereotypic Behaviour		Frequency	%
Pillow	1.	70	43.8
Weight-Bench	2.	90	56.3
	TOTAL	160	100.0

APPENDIX K TABLE K.1

DEMOGRAPHIC CHARACTERISTICS OF
SUBJECTS BY FACULTY

Faculty		Frequency	%
Social Sciences/Humanities	1.	14	8.7
Sciences or Engineering	2.	42	26.2
Education or Basic Nursing	3.	57	35.6
Advanced Nursing Program	4.	11	6.9
Law, Medicine or Graduate Studies	5.	36	22.5
	TOTAL	160	100.0

APPENDIX K TABLE K.2

DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS
BY MARITAL STATUS

Marital Status		Frequency	%
Single	1.	109	68.1
Married or Common-Law	2.	33	20.6
Separated or Divorced	3.	6	3.7
Engaged	4.	12	7.5
	TOTAL	160	100.0

APPENDIX K TABLE K.3

DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS
BY PARENTHOOD

Parenthood		Frequency	%
Without Children	0.	141	88.1
Mothers	1.	19	11.9
	TOTAL	160	100.0

APPENDIX K TABLE K.4

DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS
BY AGE GROUP AND FACULTY

Age Group	COUNT / ROW PCT / COL PCT / TOT PCT	FACULTY SS/H[a] 1	SCI[b] 2	ED[c] 3	ADV RN[d] 4	LAW[e] 5	ROW TOTAL
17-23	1	10	35	28	1	6	76
		13.2	46.1	31.6	1.3	7.9	54.7
		71.4	89.7	49.0	10.0	22.2	
		7.2	25.2	17.3	0.7	4.3	
24 OR OLDER	2	4	4	25	9	21	63
		6.3	6.3	39.7	14.3	33.3	45.3
		28.6	10.3	51.0	90.0	77.8	
		2.9	2.9	18.0	6.5	15.1	
	COLUMN TOTAL	14	39	49	10	27	139
		10.1	28.1	35.3	7.2	19.4	100.0

(a) Social Sciences/Humanities
(b) Sciences or Engineering
(c) Education or Basic Nursing
(d) Advanced Nursing Programme
(e) Law, Medicine or Graduate Studies

APPENDIX K TABLE K.5

DEMOGRAPHIC CHARACTERISTICS OF SUBJECTS
BY FACULTY AND MARITAL STATUS

Marital Status	COUNT / ROW PCT / COL PCT / TOT PCT	FACULTY SS/H[a] 1	SCI[b] 2	ED[c] 3	ADV RN[d] 4	LAW[e] 5	ROW TOTAL
Single	1	10	39	31	4	25	109
		9.2	35.8	28.4	3.7	22.9	68.1
		71.4	92.9	54.4	36.4	69.4	
		6.3	24.4	19.4	2.5	15.6	
Married or Common-Law	2	2	2	16	6	7	33
		6.1	6.1	48.5	18.2	21.2	20.6
		14.3	4.8	28.1	54.5	19.4	
		1.2	1.2	10.0	3.7	4.4	
Separated or Divorced	3	1	0	5	0	0	6
		16.7	0.0	83.3	0.0	0.0	3.8
		7.1	0.0	8.8	0.0	0.0	
		0.6	0.0	3.1	0.0	0.0	
Engaged	4	1	1	5	1	4	12
		8.3	8.3	41.7	8.3	33.3	7.5
		7.1	2.4	8.8	9.1	11.1	
		0.6	0.6	3.1	0.6	2.5	
COLUMN TOTAL		14	42	57	11	36	160
		8.8	26.3	35.6	6.9	22.5	100.0

(a) Social Sciences/Humanities
(b) Sciences or Engineering
(c) Education or Basic Nursing
(d) Advanced Nursing Programme
(e) Law, Medicine or Graduate Studies

APPENDIX L

CHI SQUARE TEST OF INDEPENDENCE BY
GENDER STEREOTYPIC BEHAVIOUR AND AGE GROUP

GENDER STEREO-
TYPIC BEHAVIOUR

Age Group	COUNT / ROW PCT / COL PCT / TOT PCT	Weight Bench: Pillow (1)	Weight Bench: Bench (2)	ROW TOTAL
17-23	1	35	41	76
		46.1	53.9	54.7
		55.6	53.9	
		25.2	29.5	
24 OR OLDER	2	28	35	63
		44.4	55.6	45.3
		44.4	46.1	
		20.1	25.2	
	COLUMN TOTAL	63	76	139
		45.3	54.7	100.0

CORRECTED CHI SQUARE = 0.00034 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.9853
RAW CHI SQUARE = 0.03595 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.8496
PHI = 0.01608
CONTINGENCY COEFFICIENT = 0.01608

NUMBER OF MISSING OBSERVATIONS = 21

APPENDIX M

CHI SQUARE TEST OF INDEPENDENCE BY PARENTHOOD AND PARTICIPATION IN GENDER STEREOTYPIC TASKS

PARENTHOOD

Gender Stereotypic Behaviour	COUNT / ROW PCT / COL PCT / TOT PCT	Without Children (0)	Mothers (1)	ROW TOTAL
Pillow	1	61	9	70
		87.1	12.9	43.8
		43.3	47.4	
		38.1	5.6	
Weight-Bench	2	80	10	90
		88.9	11.1	56.3
		56.7	52.6	
		50.0	6.3	
	COLUMN TOTAL	141	19	160
		88.1	11.9	100.0

CORRECTED CHI SQUARE = 0.00853 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.9264
RAW CHI SQUARE = 0.11471 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.7348
PHI = 0.02678
CONTINGENCY COEFFICIENT = 0.02677

APPENDIX N

ANALYSIS OF VARIANCE, CONTRASTS AND SCHEFFE TESTS ON THE SELF-REGARD SCALE OF THE P.O.I. BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	109.7847	15.6835	3.1642	.0038
WITHIN GROUPS	151	748.4417	4.9566		
TOTAL	158	858.2264			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillow vs. Weight-Bench
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	1.5127	-3.595	70.0	0.001
CONTRAST 2	1.5127	-0.068	70.0	0.946
CONTRAST 3	1.5127	0.164	70.0	0.870
CONTRAST 4	0.6578	-3.149	32.1	0.004
CONTRAST 5	0.7575	-1.224	39.2	0.228
CONTRAST 6	0.4394	1.010	45.7	0.318
CONTRAST 7	0.8757	-1.566	63.8	0.122
CONTRAST 8	0.8757	-0.552	63.8	0.583

SCHEFFE PROCEDURE

[*] DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cells	GRP01	GRP02	GRP03	GRP04
11.7727	GRP01				
12.6111	GRP02				
13.2500	GRP03				
13.8438	GRP04	*			

APPENDIX O

Lifestyle Satisfaction - Breakdown of Results on Items 95-106 by Cells (1-8) and by Demographic Characteristics

Further information on lifestyle satisfaction was gleaned by conducting ANOVAs, contrasts and Scheffé tests on each of the items from 95-106 inclusive individually; these items had been designed to investigate various aspects of women's lives, e.g., love life, social life, schooling (as described in Chapter 2). A summary of these results is presented in Table O.1. These findings are consistent with those for trait scores on lifestyle satisfaction. Please note that the conformity/non-conformity to gender-role behaviour variable (i.e., pillows versus weight-benches) has not been included in this table as no significant differences occurred on contrasts among these items.

Although the results of the ANOVAs by cell on items 95-99 did not indicate significant differences among groups, subsequent ANOVAs and contrasts did illuminate the presence of other noteworthy findings. The contrast of cells 1 versus 4 on item 95 indicated that non-traditional-non-conformists are significantly more satisfied with their schooling/career development than traditional-conformists, ($p < .031$, see Table O.2).

On items 96, 97 and 98 the results indicated that married women's satisfaction with home situation/family life, love life and social life is greater than that of single women (see Tables O.4, O.6 and O.8 respectively). Furthermore, post hoc Scheffé tests suggested that

APPENDIX O TABLE O.1

SUMMARY OF THE ANALYSIS OF VARIANCE AND CONTRASTS ON ITEMS 95-106 BY CELLS (108) AND BY DEMOGRAPHIC CHARACTERISTICS

Item #	ANOVAs	Contrasts			Demographics - ANOVAs			
		Trad.vs. Non-Trad.	Ex. vs. Control	1 vs. 4	Marital Status	Pres./Abs. Children	Faculty	Age Group
95	1.190 n=160	-1.447 160	-.413 160	-2.236* 80	1.118 160	.500 160	1.191 160	.034 139
96	1.059 n=160	-.202 160	-.317 160	-.710 80	4.648** 160	1.157 160	.963 160	.599 139
97	.291 n=160	-.569 160	-.192 160	-.860 80	12.866*** 160	.635 160	1.373 160	2.900 139
98	.502 n=160	-.166 160	-1.185 160	-.593 80	3.666** 160	.450 160	1.643 160	.140 139
99	1.744 n=160	-2.358* 160	-.547 160	-1.609 80	.886 160	3.805* 160	4.421** 160	5.568* 139
100	3.228** n=160	-2.200* 160	-1.650 160	-2.011* 80	2.006 160	5.275* 160	5.142*** 160	4.191* 139
101	6.850*** n=155	-6.455*** 155	.376 155	-3.566*** 76	.846 155	.654 155	1.767 155	2.965 134
102	3.222** n=155	-.547 155	-.608 155	-.590 75	1.725 155	1.691 155	2.074 155	1.020 134
103	.545 n=155	.422 155	-.457 155	.558 75	.308 155	.100 155	.967 155	.002 134
104	.851 n=155	-1.158 155	-1.570 155	-1.000 75	1.627 155	.006 155	.610 155	.018 134
105	2.367* n=155	-2.401* 155	-.577 155	-1.254 75	1.992 155	8.587** 155	2.845* 155	9.579** 134
106	2.549* n=155	-2.066* 155	-1.488 155	-1.511 75	2.056 155	10.759*** 155	5.201*** 155	7.798** 134

*p < .05 **p < .01 ***p < .001

APPENDIX O TABLE O.2

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 95 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	10.6778	1.5254	1.1905	.3115
WITHIN GROUPS	152	194.7659	1.2810		
TOTAL	159	205.4437			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.7492	-1.447	78.3	0.152
CONTRAST 2	0.7492	-0.958	78.3	0.341
CONTRAST 3	0.7492	-0.413	78.3	0.681
CONTRAST 4	0.3583	-2.236	36.9	0.031
CONTRAST 5	0.3778	-1.757	37.8	0.087
CONTRAST 6	0.2788	0.134	45.4	0.894
CONTRAST 7	0.4695	-1.493	72.3	0.140
CONTRAST 8	0.4695	-1.334	72.3	0.187

APPENDIX O TABLE 0.3

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 96 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	15.7017	2.2431	1.0586	.3930
WITHIN GROUPS	152	322.0733	2.1189		
TOTAL	159	337.7750			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.9813	-0.202	71.1	0.840
CONTRAST 2	0.9813	-0.712	71.1	0.479
CONTRAST 3	0.9813	-0.317	71.1	0.752
CONTRAST 4	0.4204	-0.710	39.5	0.482
CONTRAST 5	0.4461	-1.019	39.0	0.314
CONTRAST 6	0.3773	-0.812	41.4	0.422
CONTRAST 7	0.5842	-0.254	77.5	0.800
CONTRAST 8	0.5842	-1.302	77.5	0.197

APPENDIX O TABLE O.4

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 96 BY MARITAL STATUS

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	27.7127	9.2376	4.648	0.0039
WITHIN GROUPS	156	310.0619	1.9876		
TOTAL	159	337.7747			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP03	GRP01	GRP04	GRP02
4.5000	GRP03				
5.4862	GRP01				
6.0000	GRP04				
6.3333	GRP02	*	*		

Group 1 = Single
Group 2 = Married or Common-Law
Group 3 = Separated or Divorced
Group 4 = Engaged

APPENDIX O TABLE O.5

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 97 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	7.0209	1.0030	.2911	.9566
WITHIN GROUPS	152	523.7541	3.4458		
TOTAL	159	530.7750			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	1.2921	-0.569	54.5	0.571
CONTRAST 2	1.2921	-0.716	54.5	0.477
CONTRAST 3	1.2921	-0.192	54.5	0.848
CONTRAST 4	0.5580	-0.860	39.1	0.395
CONTRAST 5	0.6408	-0.291	40.0	0.773
CONTRAST 6	0.4758	-0.118	43.5	0.906
CONTRAST 7	0.7982	-0.163	75.2	0.871
CONTRAST 8	0.7982	-0.304	75.2	0.762

APPENDIX O TABLE O.6

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 97 BY MARITAL STATUS

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	105.2750	35.0917	12.866	0.0000
WITHIN GROUPS	156	425.4934	2.7275		
TOTAL	159	530.7683			

SCHEFFE PROCEDURE

* (*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP03	GRP01	GRP04	GRP02
3.0000	GRP03				
4.8532	GRP01				
6.1667	GRP04	*			
6.4545	GRP02	*	*		

Group 1 = Single
Group 2 = Married or Common-Law
Group 3 = Separated or Divorced
Group 4 = Engaged

APPENDIX O TABLE O.7

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 98 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	6.6474	.9496	.5024	.8317
WITHIN GROUPS	152	287.3276	1.8903		
TOTAL	159	293.9750			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.9683	-0.166	63.0	0.869
CONTRAST 2	0.9683	0.242	63.0	0.810
CONTRAST 3	0.9683	-1.185	63.0	0.240
CONTRAST 4	0.3594	-0.593	34.7	0.557
CONTRAST 5	0.4084	-1.302	39.5	0.200
CONTRAST 6	0.4008	-0.172	28.6	0.865
CONTRAST 7	0.5722	-0.809	66.8	0.421
CONTRAST 8	0.5722	-1.050	66.8	0.298

APPENDIX O TABLE O.8

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 98 BY MARITAL STATUS

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	3	19.3589	6.4530	3.666	0.0137
WITHIN GROUPS	156	274.6155	1.7604		
TOTAL	159	293.9744			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP03	GRP04	GRP01	GRP02
4.0000	GRP03				
5.4167	GRP04				
5.4495	GRP01				
5.9091	GRP02	*			

Group 1 = Single
Group 2 = Married or Common-Law
Group 3 = Separated or Divorced
Group 4 = Engaged

married women are those likely to be most satisfied in each of the above areas. On item 96, the ANOVA by marital status ($p < .0039$) was followed by a Scheffé test. This found that married women (group 2) were likely to be significantly more satisfied with their home situations/family life ($p < .05$) than separated or divorced (group 3) and single women (group 1) as illustrated in Table 0.4. To continue the pattern, the result of the ANOVA by marital status on item 97 was highly significant ($p < .0000$). Post hoc pairwise comparisons suggested that the married woman was likely to be significantly more satisfied with her love life than the separated, divorced or single woman ($p < .05$). In addition, engaged women (group 4) scored higher on this item than separated or divorced women ($p < .05$, see Table 0.6). Similarly, significant differences among women by marital status emerged on item 98 ($p < .0137$). Scheffé tests indicated again that married women appeared to be happier with their social lives than separated or divorced women ($p < .05$, see Table 0.8).

A second pattern emerges in analyzing items 99-102 and 105-106. These six items address the subject's perception of her quality of life and the extent to which she lives according to her own preferences and values (see Tables 0.9-0.26). For each item, the results indicated that non-traditional women score higher than traditional women in this area. In addition, on four of these items, i.e., questions 99, 100, 105 and 106, significant differences occurred on ANOVAs by presence/absence of children, by faculty and by age group. It is noteworthy that on each of these items, i.e., 99, 100, 105 and 106 the accompanying contrasts illustrate that women in the older half of the

APPENDIX O TABLE O.9

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 99 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	12.6389	1.8056	1.7441	.1027
WITHIN GROUPS	152	157.3549	1.0352		
TOTAL	159	169.9937			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference in Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.6695	-2.358	92.1	0.021
CONTRAST 2	0.6695	-0.723	92.1	0.472
CONTRAST 3	0.6695	-0.547	92.1	0.586
CONTRAST 4	0.3302	-1.609	29.4	0.118
CONTRAST 5	0.3761	-0.532	37.9	0.598
CONTRAST 6	0.2860	-0.590	29.9	0.560
CONTRAST 7	0.4725	-0.066	66.3	0.947
CONTRAST 8	0.4725	-0.780	66.3	0.438

APPENDIX O TABLE 0.10

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 99 BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	3.9971	3.9971	3.805	0.0529
WITHIN GROUPS	158	165.9955	1.0506		
TOTAL	159	169.9926			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01
CONTRAST 1	1.0	-1.0

Women Without Children vs. Mothers

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2312	-2.113	24.4	0.045

APPENDIX O TABLE O.11

ANALYSIS OF VARIANCE OF CONTRAST ON ITEM 99 BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	5.2996	5.2996	5.568	0.0197
WITHIN GROUPS	137	130.3977	0.9518		
TOTAL	138	135.6972			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02
CONTRAST 1	1.0	-1.0

Younger vs. Older Subjects

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.1644	-2.385	136.2	0.018

APPENDIX O TABLE O.12

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 99 BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	17.4093	4.3523	4.421	0.0021
WITHIN GROUPS	155	152.5837	0.9844		
TOTAL	159	169.9930			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP02	GRP03	GRP05	GRP01	GRP04
4.8095	GRP02					
5.4035	GRP03					
5.4444	GRP05					
5.5000	GRP01					
6.0000	GRP04	*				

Group 1 = Social Sciences/Humanities
Group 2 = Sciences or Engineering
Group 3 = Education or Basic Nursing
Group 4 = Advanced Nursing Programme
Group 5 = Law, Medicine or Graduate Studies

APPENDIX O TABLE O.13

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 100 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	22.5940	3.2277	3.2277	.0032
WITHIN GROUPS	152	151.9997	1.0000		
TOTAL	159	174.5937			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.7271	-2.200	43.8	0.033
CONTRAST 2	0.7271	-0.695	43.8	0.491
CONTRAST 3	0.7271	-1.650	43.8	0.106
CONTRAST 4	0.2995	-2.011	32.7	0.053
CONTRAST 5	0.3641	-1.311	40.0	0.197
CONTRAST 6	0.2094	-1.552	44.4	0.128
CONTRAST 7	0.4200	-0.363	64.5	0.718
CONTRAST 8	0.4200	-1.910	64.5	0.061

APPENDIX O TABLE O.14

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 100 BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	5.6408	5.6408	5.275	0.0229
WITHIN GROUPS	158	168.9516	1.0693		
TOTAL	159	174.5924			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01
CONTRAST 1	1.0	-1.0

Women Without Children vs. Mothers

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2060	-2.818	27.1	0.009

APPENDIX O TABLE O.15

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 100 BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	3.5263	3.5263	4.191	0.0425
WITHIN GROUPS	137	115.2641	0.8413		
TOTAL	138	118.7904			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02	
CONTRAST 1	1.0	-1.0	Younger vs. Older Subjects

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.1558	-2.054	133.7	0.042

APPENDIX O TABLE O.16

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 100 BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	20.4520	5.1130	5.142	0.0006
WITHIN GROUPS	155	154.1409	0.9945		
TOTAL	159	174.5929			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	G G G G G R R R R R P P P P P 0 0 0 0 0 2 5 3 1 4
5.0476	GRP02	
5.6389	GRP05	
5.7719	GRP03	*
5.8571	GRP01	
6.2727	GRP04	*

Group 1 = Social Sciences/Humanities
Group 2 = Sciences or Engineering
Group 3 = Education or Basic Nursing
Group 4 = Advanced Nursing Programme
Group 5 = Law, Medicine or Graduate Studies

APPENDIX O TABLE O.17

ANALYSIS OF VARIANCE, CONTRASTS AND SCHEFFE TESTS ON ITEM 101 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	46.8999	6.7000	6.8509	.0000
WITHIN GROUPS	147	143.7711	.9780		
TOTAL	154	190.6710			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Calls (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.6841	-6.455	91.7	0.000
CONTRAST 2	0.6841	0.070	91.7	0.944
CONTRAST 3	0.6841	0.376	91.7	0.708
CONTRAST 4	0.2822	-3.566	32.7	0.001
CONTRAST 5	0.3958	0.345	37.5	0.732
CONTRAST 6	0.3390	0.389	35.0	0.700
CONTRAST 7	0.4623	0.094	61.1	0.925
CONTRAST 8	0.4623	0.496	61.1	0.622

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cell	GRP06	GRP05	GRP02	GRP01	GRP03	GRP08	GRP07	GRP04
4.8000	GRP06								
5.0000	GRP05								
5.0556	GRP02								
5.1364	GRP01								
5.8571	GRP03								
6.0500	GRP08	*							
6.1000	GRP07	*							
6.1429	GRP04	*	*						

APPENDIX O TABLE O.18

ANALYSIS OF VARIANCE, CONTRASTS AND SCHEFFE TESTS ON ITEM 102 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	31.2679	4.4668	3.2219	.0033
WITHIN GROUPS	147	203.8031	1.3864		
TOTAL	154	235.0710			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.8321	-1.547	46.4	0.129
CONTRAST 2	0.8321	-0.001	46.4	0.999
CONTRAST 3	0.8321	-0.608	46.4	0.546
CONTRAST 4	0.3359	-0.590	38.3	0.559
CONTRAST 5	0.3718	-0.379	39.8	0.706
CONTRAST 6	0.2636	-1.490	48.8	0.143
CONTRAST 7	0.4554	0.553	73.4	0.582
CONTRAST 8	0.4554	-1.172	73.4	0.245

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cell	GRP 06	GRP 03	GRP 02	GRP 01	GRP 05	GRP 04	GRP 07	GRP 08
4.9500	GRP06								
5.2857	GRP03								
5.8889	GRP02								
5.9091	GRP01								
6.0500	GRP05								
6.1071	GRP04								
6.2000	GRP07								
6.5000	GRP08	*							

APPENDIX O TABLE O.19

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 105 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	25.3117	3.6160	2.3668	.0255
WITHIN GROUPS	147	224.5851	1.5278		
TOTAL	154	249.8968			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.8690	-2.401	43.6	0.021
CONTRAST 2	0.8690	0.530	43.6	0.599
CONTRAST 3	0.8690	-0.577	43.6	0.567
CONTRAST 4	0.4092	-1.254	39.3	0.217
CONTRAST 5	0.4142	-0.911	37.5	0.368
CONTRAST 6	0.3767	-0.436	39.6	0.665
CONTRAST 7	0.5599	-0.380	76.0	0.705
CONTRAST 8	0.5599	-0.967	76.0	0.336

APPENDIX O TABLE O.20

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 105 BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	13.2795	13.2795	8.587	0.0039
WITHIN GROUPS	153	236.6158	1.5465		
TOTAL	154	249.8952			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01	
CONTRAST 1	1.0	-1.0	Women Without Children vs. Mothers

	S.E. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2803	-3.259	23.3	0.003

APPENDIX O TABLE O.21

ANALYSIS OF VARIANCE AND CONTRAST ON
ITEM 105 BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	14.1396	14.1396	9.579	0.0024
WITHIN GROUPS	132	194.8518	1.4761		
TOTAL	133	208.9914			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02	
CONTRAST 1	1.0	-1.0	Younger vs. Older Subjects

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2031	-3.228	131.7	0.002

APPENDIX O TABLE O.22

ANALYSIS OF VARIANCE, MEANS AND STANDARD DEVIATIONS OF SCORES ON ITEM 105 BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	17.6211	4.4053	2.845	0.0261
WITHIN GROUPS	150	232.2745	1.5485		
TOTAL	154	249.8956			

STATISTICS BY FACULTY

Faculty	N	Mean	S.D.
1	14	5.14	.95
2	42	4.67	1.57
3	57	4.89	1.10
4	11	5.73	1.10
5	36	5.45	1.15

Faculty 1 = Social Sciences/Humanities
Faculty 2 = Sciences and Engineering
Faculty 3 = Education or Basic Nursing
Faculty 4 = Advanced Nursing Programme
Faculty 5 = Law, Medicine or Graduate Studies

APPENDIX O TABLE O.23

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 106 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	24.0268	3.4324	2.5490	.0166
WITHIN GROUPS	147	197.9474	1.3466		
TOTAL	154	221.9742			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 5 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.7903	-2.066	54.8	0.044
CONTRAST 2	0.7903	-0.494	54.8	0.623
CONTRAST 3	0.7903	-1.488	54.8	0.142
CONTRAST 4	0.3718	-1.511	40.6	0.139
CONTRAST 5	0.3970	-1.397	39.7	0.170
CONTRAST 6	0.3379	-1.311	41.5	0.197
CONTRAST 7	0.5213	-0.214	78.6	0.831
CONTRAST 8	0.5213	-1.913	78.6	0.059

APPENDIX O TABLE 0.24

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 106 BY PARENTHOOD

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	14.5839	14.5839	10.759	0.0013
WITHIN GROUPS	153	207.3895	1.3555		
TOTAL	154	221.9734			

CONTRAST COEFFICIENT MATRIX

	GRP00	GRP01	
CONTRAST 1	1.0	-1.0	Women Without Children vs. Mothers

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2889	-3.314	21.8	0.003

APPENDIX O TABLE 0.25

ANALYSIS OF VARIANCE AND CONTRAST ON ITEM 106 BY AGE GROUP

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	1	10.8195	10.8195	7.798	0.0060
WITHIN GROUPS	132	183.1499	1.3875		
TOTAL	133	193.9695			

CONTRAST COEFFICIENT MATRIX

	GRP01	GRP02	
CONTRAST 1	1.0	-1.0	Younger vs. Older Subjects

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.2008	-2.856	130.6	0.005

APPENDIX O TABLE O.26

ANALYSIS OF VARIANCE AND SCHEFFE TESTS ON ITEM 106 BY FACULTY

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	4	27.0375	6.7594	5.201	0.0006
WITHIN GROUPS	150	194.9364	1.2996		
TOTAL	154	221.9739			

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

MEAN	GROUP	GRP02	GRP03	GRP05	GRP01	GRP04
4.4286	GRP02					
5.0351	GRP03					
5.0645	GRP05					
5.6429	GRP01	*				
5.8182	GRP04	*				

Group 1 = Social Sciences/Humanities
Group 2 = Sciences and Engineering
Group 3 = Education or Basic Nursing
Group 4 = Advanced Nursing Programme
Group 5 = Law, Medicine or Graduate Studies

subject pool scored significantly higher than their younger counterparts while mothers scored significantly higher than women without children.

Although the ANOVA by cell on item 99 failed to prove significant differences among groups, a contrast indicated that non-traditional women are more likely to be pleased with how they spend their time than traditional women ($p < .021$, see Table 0.9). Significant differences occurred as well on ANOVAs by parenthood ($p < .0529$) and by age group ($p < .0197$, see Tables 0.10 and 0.11 respectively). An ANOVA by faculty ($p < .0021$) and post hoc comparison suggested that women in the advanced nursing programme are more likely to be pleased with how they spend their time than those in the sciences and engineering ($p < .05$, see Table 0.12).

On item 100, results indicated significant differences among groups ($p < .0032$, see Table 0.13). Planned contrasts showed that non-traditional women are more likely to report their lifestyles to be satisfying and rewarding than traditional women ($p < .033$). Similar resuls were found in comparing traditional-conformists to non-traditional-non-conformists ($p < .053$, see Table 0.13). In addition, significant differences were found by parenthood ($p < .0229$), by age group ($p < .0425$) and by faculty ($p < .0006$, see Tables 0.14, 0.15 & 0.16 respectively). Scheffé tests on the ANOVA by faculty indicated that women in education, nursing and the advanced nursing programme were more likely to find their lifestyles to be satisfying and rewarding than those in the sciences or engineering ($p < .05$, see Table 0.16). Significant differences occurred among groups on

question 101 ($p < .0000$, see Table 0.17). Post hoc Scheffé tests indicated that women in cells 4, 7 and 8 scored higher than those in cell 6 on this item ($p < .05$); subjects in cell 4 also scored significantly higher than those in cell 5 ($p < .05$, see Table 0.17). This suggests that non-traditional women were more likely to live according to their own ideas than traditional women, regardless of whether they were assigned to the control or experimental groups, whether they assembled weight-benches or stuffed pillows. These findings were confirmed in highly significant contrasts which illustrated that non-traditional women were likely to score higher on this item than traditional women ($p < .0000$) and that non traditional-non-conformists were more likely to live according to their own ideas than traditional-conformists ($p < .001$, see Table 0.17). No significant differences occurred on the demographic variables (i.e., marital status, parenthood, faculty and age group).

Significant differences occurred among groups on question 102 ($p < .0033$, see Table 0.18). Post hoc Scheffé tests found that women in cell 8 scored higher on this item than those in cell 6 ($p < .05$, see Table 0.18). This suggests that among women in the control group who were assigned to assemble weight-benches, non-traditional women were more likely to report, "getting their 'fair share' of happiness", than their traditional counterparts. No significant differences occurred on contrasts or on the demographic variables.

Questions 105 and 106 address similar content, i.e., the extent to which the subjects live according to their own preferences. As a consequence, the results on these items were nearly identical. The

ANOVA on item 105 showed significant differences among groups ($p < .0255$) as was the case with item 106 ($p < .0166$). Contrasts indicated that non-traditional women scored higher than traditional women on both items 105 ($p < .021$) and item 106 ($p < .044$, see Table 0.19 and Table 0.23 respectively). On item 105, significant differences occurred by parenthood ($p < .0039$), by age group ($p < .0024$) and by faculty ($p < .0261$, see Tables 0.20, 0.21 and 0.22 respectively). Similarly, on item 106, highly significant differences occurred by parenthood ($p < .0013$), by age group ($p < .0060$) and by faculty ($p < .0006$, see Tables 0.24, 0.25 and 0.26 respectively). Furthermore, post hoc Scheffé tests on the ANOVA by faculty indicated that women enrolled in the advanced nursing programme or the social sciences/humanities were more likely to live according to their own preferences than those in the sciences or engineereing ($p < .05$, see Table 0.26).

Questions 103 and 104 addressed time/role stress. No significant differences were found on any of the analyses of these items (see Tables 0.27 and 0.28 respectively).

APPENDIX O TABLE O.27

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 103 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	6.5114	.9302	.5446	.7994
WITHIN GROUPS	147	251.0628	1.7079		
TOTAL	154	257.5742			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.9272	0.422	47.3	0.675
CONTRAST 2	0.9272	-0.850	47.3	0.399
CONTRAST 3	0.9272	-0.457	47.3	0.650
CONTRAST 4	0.3605	0.558	45.1	0.579
CONTRAST 5	0.4000	0.557	39.3	0.581
CONTRAST 6	0.3787	-1.000	39.9	0.323
CONTRAST 7	0.5508	1.092	78.9	0.278
CONTRAST 8	0.5508	-0.283	78.9	0.778

APPENDIX O TABLE O.28

ANALYSIS OF VARIANCE AND CONTRASTS ON ITEM 104 BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	10.8752	1.5536	.8513	.5467
WITHIN GROUPS	147	268.2602	1.8249		
TOTAL	154	279.1355			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	-1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.9017	-1.158	65.0	0.251
CONTRAST 2	0.9017	0.354	65.0	0.724
CONTRAST 3	0.9017	-1.570	65.0	0.121
CONTRAST 4	0.4123	-1.000	46.3	0.323
CONTRAST 5	0.3749	-1.576	37.8	0.123
CONTRAST 6	0.4388	-0.293	40.9	0.771
CONTRAST 7	0.5771	-0.801	77.7	0.425
CONTRAST 8	0.5771	-1.247	77.7	0.216

APPENDIX P TABLE P.1

ANALYSIS OF VARIANCE, CONTRASTS AND SCHEFFE TESTS ON THE TRAIT SCALE OF THE S.T.A.I. BY CELLS (1-8)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	2279.3661	325.6235	4.850	0.0001
WITHIN GROUPS	151	10138.4326	67.1419		
TOTAL	158	12417.7969			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	T PROB.	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	0.000	5.5276	4.604	90.9	0.000
CONTRAST 2	0.135	5.5276	-1.508	90.9	0.135
CONTRAST 3	0.744	5.5276	-0.328	90.9	0.743
CONTRAST 4	0.000	2.3814	3.530	26.9	0.002
CONTRAST 5	0.120	2.9165	1.372	38.5	0.178
CONTRAST 6	0.070	2.1833	-1.949	27.1	0.062
CONTRAST 7	0.018	3.6432	2.266	64.8	0.027
CONTRAST 8	0.941	3.6432	-0.070	64.8	0.944

SCHEFFE PROCEDURE

(*) DENOTES PAIRS OF GROUPS SIGNIFICANTLY DIFFERENT AT THE 0.050 LEVEL

Mean	Cell	GRP07	GRP04	GRP03	GRP08	GRP05	GRP02	GRP01	GRP06
30.5000	GRP07								
31.5938	GRP04								
31.8750	GRP03								
35.8500	GRP08								
36.0000	GRP05								
38.1667	GRP02								
40.0000	GRP01								
41.1000	GRP06	*	*						

APPENDIX P TABLE P.2

ANALYSIS OF VARIANCE AND CONTRASTS ON THE STATE SCALE OF THE S.T.A.I. BY CELLS (1-4)

ANALYSIS OF VARIANCE

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
BETWEEN GROUPS	7	393.6261	56.2323	1.0867	.3746
WITHIN GROUPS	150	7761.9688	51.7465		
TOTAL	157	8155.5949			

CONTRAST COEFFICIENT MATRIX

	Grp 1	Grp 2	Grp 3	Grp 4	Grp 5	Grp 6	Grp 7	Grp 8	
CONTRAST 1	1.0	1.0	-1.0	-1.0	1.0	1.0	-1.0	-1.0	Traditional vs. Non-Traditional
CONTRAST 2	1.0	-1.0	1.0	-1.0	1.0	-1.0	1.0	-1.0	Pillows vs. Weight-Benches
CONTRAST 3	1.0	1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	Experimental vs. Control
CONTRAST 4	1.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	Cells 1 vs. 4
CONTRAST 5	1.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	Cells 1 vs. 5
CONTRAST 6	0.0	0.0	0.0	1.0	0.0	0.0	0.0	-1.0	Cells 4 vs. 8
CONTRAST 7	1.0	0.0	0.0	-1.0	-1.0	0.0	0.0	1.0	Difference of Cells (1-4) vs. (5-8)
CONTRAST 8	1.0	0.0	0.0	1.0	-1.0	0.0	0.0	-1.0	Sum of Cells (1+4) vs. (5+8)

	S. ERROR	T VALUE	D.F.	T PROB.
CONTRAST 1	4.7011	1.244	87.6	0.217
CONTRAST 2	4.7011	-0.870	87.6	0.387
CONTRAST 3	4.7011	1.101	87.6	0.274
CONTRAST 4	2.1343	0.998	38.8	0.325
CONTRAST 5	2.5797	1.124	39.5	0.268
CONTRAST 6	1.9033	-0.252	40.7	0.803
CONTRAST 7	3.2058	1.054	73.2	0.295
CONTRAST 8	3.2058	0.755	73.2	0.453