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ABSTRACT

This study was the first stage in an analysis of academic and career administrators' perceptions of their functioning in management and leadership capacities and focused in particular on the perceptions of female faculty and administrators. Volunteer participants included 179 male and female university academic and career administrators. Of interest to the study were participants' self-reported job dissatisfaction, competitiveness, and time urgency as a function of age, educational background and gender. Participants were given a questionnaire that collected demographic information and contained the Survey of Work Styles, a scale developed using a Type A Behavior Pattern construct approach. Measures were taken to maintain confidentiality. The data were analyzed using dichotomous variables. Findings indicated that older men, and younger and middle-aged women indicated higher stressful work style scores than either older women or younger men. In addition women without doctoral degrees demonstrated higher dissatisfaction scores than women with doctoral degrees. Also, job dissatisfaction among the younger participants was greater compared to either middle or senior administrators. Overall, the study found that gender and age are related to an individual's work style and job satisfaction. (Contains 27 references.) (JB)

Women Academic and Career Administrators Role Perceptions and Occupational Satisfaction: Implications for Appointment and Professional Development

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Running Head: ROLE PERCEPTION & OCCUPATIONAL SATISFACTION

Abstract

The present study is the first stage in an analysis of academic and career administrators' perceptions of their functioning in management and leadership capacities. Volunteer participants included 179 male and female university academic and career administrators. Of interest to the study were participants' self-reported behavioral responses to their work environment. Of significance were the findings on their work styles and their occupational satisfaction. For instance, older men, and younger and middle aged women demonstrated higher stressful work style scores than either older women or younger men. Furthermore, gender and educational differences in perceptions of job satisfaction were found. First, non-Ph.D. women demonstrated higher dissatisfaction scores than Ph.D. women. For men, the difference was not as apparent, although non-Ph.D. men did demonstrate a slightly higher dissatisfaction scores than Ph.D. men. Second, job dissatisfaction among the younger participants (ages 28-30) was greater compared to either middle or senior administrators. Other significant variables such as competitiveness and time urgency were also examined. These results are discussed in relation to their importance to the institution's organizational culture.

Women Academic and Career Administrators Role Perceptions and Occupational Satisfaction: Implications for Appointment and Professional Development

As North America moves into the global marketplace and becomes internationally competitive in higher education, policies and procedures to fully engage the talents of all groups within the population are required. Universities and colleges will play a critical role in the development of the country and effective management of higher education institutions will be essential to fully utilize the available resources. Effective management in higher education institutions is, in large part, influenced by the organizational culture. An important issue affecting the ability of institutions to reach their full potential is the participation of women, and other minority groups, as full partners in the academic enterprise. To achieve this partnership, it is important for institutions to understand how under-represented groups within, see themselves in leadership roles. Thus, the focus of this paper is on the critical issues concerning the role perceptions of female administrators in the university setting.

Representing the first stage of a longitudinal study, the present study examined individual differences distinguishing university administrators. It was expected that variables such as education, gender, and age would have important influences on

administrators in regards to their work styles; more particularly, in how they deal with job satisfaction, competitiveness, and time urgency. Of specific interest was the examination of how women perceive themselves as functioning in administrative capacities.

Administrators and Work Styles: Type A/B Behavior Patterns

Administrators as an occupational group, either through selection or consequence, are viewed as being more susceptible to factors contributing to the Type A behavior syndrome. Western culture rewards Type A behaviors in males and increasingly in females. Type A behavior pattern is characterized by competitiveness, striving for achievement, intensity, easy provocation, time urgency, impatience, accelerated activity, job dissatisfaction, and polyphasic functioning (Friedman & Rosenman, 1974; Mavrogiannis & Jackson, 1987). Type A behavior pattern has been related to coronary heart disease, with Type As twice as prone to coronary heart disease, twice as likely to die prematurely from coronary heart disease, and five times more likely to have a second heart-attack (Howard, Cunningham, & Rechnitzer, 1976; Rosenman, 1974). Type B behavior pattern is defined by the absence of Type A behaviors and is inversely related to coronary heart disease risk.

Generally, Type A behavior pattern is not as prevalent in females as in males (Waldron, 1977). However, controlling for occupational hierarchy, this difference disappears. For

instance, the proportion of successful women managers who are Type A is about equal to the proportion of their male corporate counterparts who are Type A (Moore, 1986). Moreover, women managers may be subjected to greater number of work-related pressures than their male counterparts (Davidson & Cooper, 1979; 1982). Furthermore, women are experiencing heart disease, ulcers, high blood pressure, hyperventilation, abnormally rapid heart beats, and other illnesses traditionally associated with executive males (Puff & Moeckel, 1979). Factors postulated to account for this include job-stress, prejudice, management lifestyle, designation as a "token woman", lack of role models, and minimal support systems (Rowney & Cahoon, 1990). Finally, the organizational climate plays a major role in expecting and reinforcing Type A-like behavior, to a point where its corporate culture can be more clearly defined as Type A (Lipton, 1985; Rowney & Cahoon, 1990). For instance, Type A women are perceived as more masculine and thus "fitting" in with the group and with the highly competitive environment (Moore, 1986).

The present study examined female compared to male administrators' Type A perceptions, and whether or not their perceptions reflect their institutions' organizational climate. According to past research, women were hypothesized to differ significantly from males in their Type A perceptions. Women's scores were thought to be exaggerated because of the organizational climate's influence in rewarding and expecting

such behavior. These differences are believed to be reflected in low-inference behaviors defining Type A: job dissatisfaction, competitiveness, and time urgency.

Job dissatisfaction, a subcomponent of Type A behavior pattern, develops from work that has become intrinsically less engaging, less challenging, and less rewarding. Attitudes and perceptions of job dissatisfaction, in turn, translate into commitment to work and are related to two correlates of productivity: turnover and absenteeism (Atkinson, 1983). In this regard, two job dissatisfaction issues were of particular interest. First, administrators' perceptions of job satisfaction and second, the extent to which age influence their perceptions of job dissatisfaction.

Age has an important influence on how individuals perceive a job as satisfying. Given the greater tendency for men to base their self-concepts in occupational affiliation (McNeely, 1989), mid-life may be associated with harsher outcomes for certain males than females. For instance, the "sobering reality that men have not achieved all they desire career-wise and that the likelihood of reaching previously defined goals is fading", becomes prevalent at midlife. Furthermore, "work as an important predictor of one's sense of personal efficacy increases substantially and is especially predictive for males" (Bharadwaj & Wilkening, 1980; Draughn, 1984; McNeely, 1989). While men experience "midlife crisis", according to Crawford (1970), women

are likely to be experiencing a menopausal assault on their own self-concepts. However, there are individuals, both male and female who do achieve their goals (e.g., self-actualization, Maslow, 1971) and feel satisfied with their accomplishments. Therefore, job dissatisfaction differences are hypothesized between female and male administrators. Furthermore, educational background is thought to play a major role in administrators' perception of job satisfaction, such that highly educated administrators would perceive their jobs as more satisfying due to the probability of having achieved the position of an administrator, a position representing high rank and status for many.

The Present Study

The present study investigated Type A, job dissatisfaction, competitiveness, and time urgency as a function of age, educational background, and gender groups. These latter variables were expected to have an important influence on administrators in regards to their work styles, more particularly, in how they deal with job satisfaction, competitiveness, and time urgency. Specifically, it was hypothesized that: (1) female administrators would differ significantly from their male counterparts in perceptions of Type A due to the organizational culture which expects and reinforces Type A; (2) difference in job dissatisfaction would occur between females and males and that this differences would be elevated by lower levels of educational

background and by age. Age, gender, and educational background served as the independent variables, whereas behavioral measures of Type A behavior served as dependent variables. The responses on the dependent variables were elicited from both female and male administrators.

Method

Subjects

One hundred and fifty university administrators who participated in management courses offered by the Centre for Higher Education Research and Development, volunteered to participate in the study. Participants represented two major groups: senior administrators (i.e., directors, deans, vice-presidents, and presidents) and middle administrators (department heads, associate deans, and associate directors of academic units).

Materials

The following study was based on participants' responses to a portfolio of questionnaires involving demographics and the Survey of Work Styles.

Demographics questionnaire. The demographics questionnaire requested information regarding date of birth, gender, and the highest educational degree obtained.

Survey of Work Styles (Jackson & Mavrogiannis, 1987). Given that particular work styles of executives have been encouraged

and rewarded by corporate and institutional cultures, and that a massive body of research has demonstrated that these behaviors predict coronary heart disease (see Matthews & Haynes, 1986), the Survey of Workstyles scale was employed in the present study. This scale was developed using a Type A Behavior Pattern construct approach to scale construction and consists of six subscales: impatience, anger, work involvement, time urgent, job dissatisfaction, and competitiveness. The median reliability of its subscales is 0.815, and for the total questionnaire 0.90 (Mavrogiannis & Jackson, 1987). A discriminant function analysis yielded a classification accuracy of 92.5 percent for Type A in relation to Rosenman's Structured Interview measure, a reliable measure for predicting risk rate of coronary heart disease among executives in Western societies (Mavrogiannis & Jackson, 1987).

Procedure

Participants were given a questionnaire booklet consisting of demographics and the Survey of Work Style items. They were told that the purpose of the study was to enhance research in higher education, specifically in regards to administrative leadership. Participants were ensured confidentiality of their responses by generating their own five digit identification number. Participants returned their responses by mail, and a research assistant, blind to the nature of the study, removed the responses from the envelops in order to conceal the sender's location and thereby further ensure confidentiality.

Statistical Analysis

Given the exploratory nature of the study, the main focus was to investigate individual differences among groups of participants. Statistical analyses (ANOVAs) were conducted using dichotomous variables Gender (male, female), level of Educational Background (Ph. D., nonPh. D.), and Age Cohorts (young, middle, old) as independent variables (2 x 2 x 3 design). The omnibus three-way interaction was not pursued given the small n size that resulted in some of the cells (i.e., n = 2). Therefore, the study only explored simple interactions and main effects. Alpha was set at 0.05 for the omnibus two-way interactions. The dependent variables included responses to the Survey of Work Styles questionnaire. A maximum of 7 planned comparisons were explored using two-tailed Bonferroni t tests (which control for familywise error rate; Kirk, 1982). With the alpha set at .05, the critical $t_B(181)$ was 2.77. Table 1 displays the means and standard deviations observed in the present study.

Insert Table 1 here

Results

Demographics. Participants' age ranged from 27 to 62 years (M = 45.35, SD = 6.80). They were categorized into three age

cohorts: **young** (27-39 years; N = 40, M = 35.8, SD = 2.66), **middle** (40-49 years; N = 88, M = 45.07, SD = 2.85), and **older** (50-62 years; N= 52, M = 53.27, SD = 2.74). The group consisted of 95 females and 85 males. Their educational background consisted of 75 Ph. D.'s, 42 M.A.'s, 53 B.A.'s, and 10 with diplomas. Given the interest in the comparison of Ph.D's with non-Ph.D's, M.A.'s, B.A.'s, and diplomas' scores were collapse to form the nonPh.D. group (N = 106).

Survey of Workstyles. As a group, the administrators' mean score was 274.01 (SD = 28.63), a little lower than the midpoint of the scale (288), suggesting a normal distribution for this group. However, the range of scores (209 - 348) suggests that interesting findings may be uncovered when looking at the various subgroups of administrators. An Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA was conducted on Survey of Workstyles$_{total}$ score, revealing a significant Education main effect, $F(1,179) = 4.01$, MSe = 28.33 $p < .05$. Ph.D.'s as a group had lower Type A scores than nonPh.D.'s (M = 269.03, SD = 28.97 vs M = 277.56, SD = 27.98). By breaking down the nonPh.D.'s into their respective groups (i.e., diplomas, B.A.s, M.A.s), the results demonstrated that the greatest difference occurred between Ph. D's and diploma holders, $t_B(179) = 8.24$, $p < .01$, with the later scoring the greatest and the former the least (M = 282.80, SD = 24.09 vs M= 269.03, SD = 28.97). Although not statistically significant, the pattern

represented by all groups would suggest that Type A may be inversely related to educational training, such that higher levels of education are related to lower levels of Type A (see Figure 1). Thus, administrators' level of educational background may in fact determine their Type A behavior pattern, possibly predisposing those with lower education to higher levels of coronary heart disease risk.

Place Figure 1 here

Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA conducted on Survey of Workstyles$_{total}$ score revealed a significant Age by Gender interaction, $F(2,179) = 3.06$, $MSe = 28.33$ $p < .05$. Bonferroni t tests probed various interactions. Figure 2 demonstrates age to be inversely related to Type A for women, $t_B(179) = 7.88, 7.58$, p's $< .05$ (young vs older; middle vs older), whereas for men, age was directly related to Type A, $t_B(179) = 3.85, 5.73$, p's $< .05$ (young vs middle; young vs older). Next, the older females demonstrated lower scores than older males $t_B(179) = 4.47$, p's $< .05$. Finally, the young and middle female age cohort demonstrated the highest Type A scores, whereas the young male cohort demonstrated the lowest t_B's$(179) = 8.76, 8.50$, p's$< .05$. Thus, Type A behavior pattern is distinguishing between different groups of administrators, particularly on Gender and Age

dimensions.

Insert Figure 2 here

Survey of Workstyles subscales. A closer look at the dimensions defining Type A behavior demonstrates which low inference behaviors are most prominent and among which groups they are most characteristic. Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA's were conducted on each of the six Survey of Workstyles subscales: Time Urgency, Competitiveness, Job Dissatisfaction, Work Involvement, Anger, and Impatience. Only the former three demonstrated significant results and are further described below.

A significant Gender main effect on the **Time Urgency**, $F(1,146) = 7.47$, $MSe = 9.07$, $p < .01$, demonstrated that women perceived themselves as more time urgent than men ($M = 56.31$, $SD = 9.17$ vs $M = 52.22$, $SD = 8.94$). In other words, low inference behaviors such as the inability to take breaks or stop because of time pressures, were more descriptive of female administrators than male. Thus, time urgency seems to be related to gender.

An Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA yielded a significant two-way interaction on **Time Urgency**, $F(2, 146) = 2.84$, $MSe = 9.07$, $p < .06$ (see Figure 3). Bonferroni t tests demonstrated that older nonPh.D.'s described themselves as most Time Urgent

versus older Ph.D.'s, $t_B(179) = 8.06$, $p < .05$. Furthermore, both younger and middle administrators with or without educational backgrounds, had similar but significantly lower time urgent scores than the older nonPh.D's, t_B's(179) = 5.76, 2.87, 5.77, 4.57, p's < .05. Also, both Ph.D. and nonPh.D. middle-aged administrators had significantly higher time urgent scores than older Ph.D. administrators, t_B's(179) = 4.34, 3.28, p's < .05. According to these results, time urgency is not only gender specific, but also distinguishes administrators on age and academic background dimensions. Older non-Ph.D's perceived themselves as the most time urgent whereas older Ph. D's thought of themselves as the least time urgent. Thus, time urgency is a critical work style behavior that demonstrates gender and age by academic background differences in administrators.

Insert Figure 3 here

An Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA demonstrated a significant Education main effect on **Competitiveness** $F(1,179) = 4.44$, $MSe = 8.49$, $p < .05$. NonPh.D.'s described themselves as more Competitive ($M = 44.38$, $SD = 8.43$) than Ph.D.'s ($M = 41.23$, $SD = 8.80$). A significant Gender by Age interaction, $F(2,179) = 4.20$, $MSe = 8.49$, $p < .01$, demonstrated that age was directly

related to competitiveness for women and inversely related with men (see Figure 4). Bonferroni t tests revealed that older women had the lowest scores in comparison to older men and middle aged men and women, t_B's(179) = 6.04, 5.56, 6.57, p's < .05. Younger women, on the other hand, had highest scores in comparison to younger men, $t_B(179) = 3.09$, $p < .05$ and older women, $t_B(179) = 8.15$, $p < .05$, whereas younger men had higher scores than older women, $t_B(179) = 3.52$, $p < .05$. Thus, the work style behavior of competitiveness is also important in distinguishing administrators on age and gender by age dimensions Non- Ph.D's and young female administrators demonstrated the highest competitiveness scores whereas Ph. D's and older female administrators had the lowest scores.

Insert Figure 4 here

An Age Cohort (young, middle, older) by Education (Ph.D., nonPh.D.) by Gender (male, female) ANOVA demonstrated significant main effects on **Job Dissatisfaction**, $F(2,179) = 7.75$, $MSe = 8.08$, $p < .001$ and $F(2,179) = 6.57$, $MSe = 8.08$, $p < .01$, for Age and Education, respectively. These main effects demonstrated that younger administrators felt more job dissatisfied ($M = 36.58$, $SD = 7.67$) than either middle ($M = 31.88$, $SD = 8.79$) or older administrator ($M = 30.04$, $SD = 7.67$) and that nonPh.D.'s also felt more dissatisfied with their jobs

($\underline{M}$ = 34.33, $\underline{SD}$ = 7.34) than Ph.D.'s ($\underline{M}$ = 29.67, $\underline{SD}$ = 8.58). Therefore, job dissatisfaction as a low inference behavior of works styles also distinguishes administrators on dimensions of age and academic backgrounds. Both age and academic background tend to be related to job satisfaction.

A significant Education by Gender interaction on **Job Dissatisfaction,** $\underline{F}(1,179) = 3.66$, $\underline{MSe} = 8.08$, $\underline{p} < .05$, was probed using Bonferroni $\underline{t}$ tests and demonstrated that all groups were significantly different from one another (see Figure 5). NonPh.D. females demonstrated the highest job dissatisfaction scores, $\underline{t}_B$'s(179) = 2.53, 6.22, 12.34, $\underline{p}$'s < .05, followed by nonPh.D. males, $\underline{t}_B$'s(179) = 3.64, 9.63, $\underline{p}$'s < .05, then Ph.D. males $\underline{t}_B$'s(179) = 5.94, $\underline{p}$'s < .05, and least job dissatisfied were the Ph.D. females. According to these findings, gender and academic background are related to job dissatisfaction scores such that nonPh.D female administrators perceive themselves as having the greatest job dissatisfaction whereas Ph.D. females felt the most satisfied with their occupations.

Insert Figure 5 here

In summary, significant Type A behavior scores, as defined by the Work Styles of the administrators, were distinguishable on various dimensions, Age, Gender, and Education, and in various subscales representing the subcomponents of Type A behavior: Time

Urgency, Competitiveness, and Job Dissatisfaction. Gender differences were defined by time urgency, age differences were distinguished by competitiveness, academic backgrounds were characterized by job dissatisfaction, age by academic background differences were defined both by time urgency and competitiveness, and finally, gender by academic background was identified by job dissatisfaction. Thus, work styles of administrators are related to gender, age differences, and academic backgrounds.

Discussion

The strength of an educational institution lies within its members. By understanding the differences between its members and making them its strength, the international competitiveness of institutions of higher education can be maintained in the global marketplace. However, a paucity of empirical research on Canadian university administrators investigating their work style behaviors and attributions exists. In this connection, the present study is exploratory and should be interpreted as tentative, but should encourage researchers, policy makers and practitioners to further explore specific issues.

Survey of Work Styles. Extensive research has demonstrated that older men in managerial positions who self-reported highly stressful workstyles (i.e., Type A behaviors) subsequently had higher incidence of coronary heart disease (Matthews &

Haynes,1986). In the present study, older men were not the only group describing highly stressful workstyles. Younger- and middle-aged women also self-reported high Type A scores, a behavior pattern that is highly predictive of coronary heart disease. Thus, these individuals may be at a high risk of coronary heart disease.

What dictates this difference of work styles among these groups of administrators? Furthermore, is it possible that certain administrators who are exposed to the organizational culture(s) of universities are more predisposed to adopting a health-threatening work style than others. A number of possible interpretations involving the organizational climate may explain these results. For example, the prominent role of the male stereotype in the current work environment may seek, select, and actively reinforce Type A in women pursuing and maintaining administrative positions. For instance, job classifications for administrative positions tend to encourage individuals possessing Type A behavior pattern: competitive, challenging, control-oriented, stress-seeking, high achieving and hard working. Thus, women who portray Type A or who are willing to assume these behaviors, are the more likely candidates for such positions. Once women have attained the administrative role they may be pressured to adopt stereotypic male behaviors, traditionally defined by masculine roles, in order to achieve their occupational goals (Bartol, 1978; Bass, 1985; Wong et al., 1985). Furthermore, the institution is more likely to reinforce

these behaviors (Bass, 1985), rewarding and promoting Type As (Mettlin, 1976; Burke & Deszca, 1982). Thus, these women may not only adopt more masculine executive characteristics, but also the health-threatening workstyle accompanying them! Interestingly, Type A behaviors appear to be more closely associated with younger female administrators than with older ones. Either health factors remove Type As from the work place or a "mellowing" with age may be occuring.

Survey of Work Style subscales. A better understanding of this phenomenon requires a closer scrutiny of the Survey of Work Styles' subscales and the significant effects related to them. The Survey of Work Styles is qualified by six subscales: time urgency, competition, job dissatisfaction, impatience, work involvement, and anger. Of these six subscales, time urgency, competitiveness, and job dissatisfaction were instrumental in distinguishing various individual differences in the present study.

The Time Urgency subscale revealed different levels among gender, education, and age groups. For instance, women demonstrated significantly higher time urgent scores than men. These differences were best described by items reflecting the inability to take breaks or stop because of time pressures. These behaviors may be a consequence of the expectations to out-perform male counterparts in order to achieve or maintain similar levels of occupational status. Sutton and Moore (1981) found that women perceived their work as more demanding, calling for more of a sacrifice of their personal lives. Thus, time urgency may be an important a behavior defining Type A in

women administrators.

Education by age differences in Time urgency scores were best displayed between older administrators. For instance, older nonPh.D. administrators described themselves as more time urgent than young, middle and older Ph.D. administrators. Why do education and age level identify differences between these two groups? It may be likely that education is related to better management skills, and therefore, older Ph.D's are better able to deal with time urgent matters than older nonPh.D.'s. On the other hand, less educated administrators may be more inclined to seek time urgent events. It is also conceivable that time urgent individuals are less likely to have a Ph.D. and thus be distinguishable at the administrative level. These are only some of the possible explanations. Further research is needed to explore this phenomenon and identify the reasons for the differences in time urgency among administrators.

The Competitiveness subscale found differences among gender and age groups. The results suggest a direct relationship between age and competitiveness for men and an inverse relationship for women, respectively. However, these results should not be interpreted as age related per se, but rather as an age cohort phenomenon. In other words, these differences may be as a result of the social perspective or gestalt, representative of each age cohort as well as the expectations imposed on them by the institutional climate. Furthermore, most of the older administrators have entered the workforce prior to 1970's, thereby being exposed to different

institutional expectations as compared to the newer generations of administrators. Longitudinal studies would be useful in discerning the reasons for these differences in administrators' perceptions.

Significant differences were also observed in Job Dissatisfaction perceptions. In today's workforce, this behavior grows out of work that has become intrinsically less engaging, challenging, and rewarding. In the present study, job dissatisfaction was most evident among young and middle aged administrators and administrators with lower educational backgrounds (nonPh.D's). In other words, Ph.D.'s and older administrators were the most satisfied groups. Obviously, education and experience may be directly related to the availability of occupational opportunities, and therefore, these latter individuals are the most likely to have achieved the highest administrative positions. Table 2 demonstrates the relationship between age and education. Older administrators tend to hold the highest frequency of Ph.D's (65%), whereas the youngest administrators have the highest frequency of B.A.'s (50%). Individuals in higher administration positions, in turn, have higher levels of personal control and lower levels of superiors to whom they are accountable to as compared to middle management positions. Thus, educational achievement and experience may be synonymous with career position and career position may be indicative of job satisfaction, so that higher educational backgrounds or greater experience may predict higher administrative positions that lead to feelings of job satisfaction.

Insert Table 2 about here

The interaction found for job dissatisfaction suggests that gender and age are related to an individual's work styles of job dissatisfaction. First, non-Ph.D. women and men had higher dissatisfaction scores than Ph.D. women and men. Furthermore, among the Ph.D. sample, men demonstrated higher dissatisfaction scores than women. Although occupational opportunities may explain the higher satisfaction scores among Ph.D.'s, why are women Ph.D.'s more satisfied then their male counterparts? Perhaps the attainment of their present administrative roles are in themselves more rewarding for them than for men, because of the many hurdles that women as compared to men have to face in order to achieve this position (Bass, 1985)? Why are nonPh.D. women more dissatisfied than their male counterparts? One hypothesis holds that men and women value different aspects of work. Women are more concerned with security, physical surroundings and relationships with supervisors and co-workers, whereas men, with pay, advancement, and recognition (Atkinson, 1983). The latter values are more characteristic of the institutional climate than the former, and as a consequence, women, may be exposed to more aversive environmental situations because of their priorities and values. Further research on factors responsible for their dissatisfaction is needed.

In conclusion, overall Type A behavior was best described by

high scores of time urgency, competitiveness, and job dissatisfaction. These behavior patterns were related to gender, education, and age. Furthermore, institutional climate is thought to play a major role in influencing employees, especially women, to be more Type A, in order to fit into the subculture of the institution. Ironically, those adopting the valued institutional Type A behavior pattern may at the same time be adopting a health threatening lifestyle that may eventually lead to coronary heart disease.

Implications

The present findings have a number of important implications for policy makers, workshop and program developers, and researchers. Policy makers are challenged with the task of reducing the reinforcement of health threatening behaviors (Type A) in the institutional climate, while maintaining the achievement of their administrators. These include modifications of job descriptions, reward structures, promotions, etc. Program and workshop developers are encouraged to create remedial programs that deal with the reduction of health-threatening behaviors, providing alternative behaviors for approaching stressful situations. Incorporating the experiences of low Type A administrators (i.e., younger males or the older female administrators) may provide case studies. Furthermore, administrative training courses should develop programs that are

aware of women's perceptions of themselves as leaders so that institutions will be better able to engage the talents and expertise of all their members.

Implications for future research include three main objectives: (1) to help raise participant's awareness, through exploration, of the organizational culture's reinforcement of health-threatening behaviors and why this occurs only in certain administrative groups; (2) to develop viable theoretical frameworks for systematic future investigation of administrative differences; (3) to investigate and disseminate selected administrative skills exhibited by outstanding administrators of effective institutions.

By enhancing the strengths of its administrators, the international competitiveness of North American institutions in the global marketplace of higher education may be influenced. As Thompson stated (1985, p. 27), "we have the possibility to understand our differences and make them [our] strength, and to create a world in which all can flourish".

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	YOUNG (27-39)				MIDDLE (40-49)				OLDER (50-62)			
	Ph.D.		NonPh.		Ph.D.		NonPh.		Ph.D.		NonPh.	
	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE
SWS												
Mean	274.67	276.00	279.74	263.00	272.39	271.56	281.9	270.91	254.70	269.29	279.91	294.00
SD	17.62	52.33	19.21	24.35	25.31	31.43	28.86	31.09	20.03	32.88	28.86	36.22
N	3	2	23	12	18	18	30	22	10	24	11	7
TMU												
Mean	54.00	54.50	56.83	48.33	55.00	55.11	55.87	51.95	54.60	50.96	60.73	56.00
SD	10.39	16.26	9.22	8.24	7.93	9.04	10.01	9.30	8.15	8.93	9.69	5.51
N	3	2	23	12	18	18	30	22	10	24	11	7
JOD												
Mean	35.67	42.50	37.30	34.42	27.50	30.94	34.13	33.14	24.80	30.54	31.91	32.86
SD	8.02	13.44	7.64	7.13	6.30	7.42	11.29	6.45	5.90	7.78	5.92	9.77
N	3	2	23	12	18	18	30	22	10	24	11	7
CMP												
Mean	43.00	35.00	45.52	43.50	43.72	41.39	43.33	44.45	36.30	41.54	41.09	51.57
SD	8.00	2.83	7.12	8.96	7.91	10.04	7.52	9.46	7.12	9.12	6.98	11.79
N	3	2	23	12	18	18	30	22	10	24	11	7
Effort												
Mean	6.33	5.00	5.39	6.25	5.88	4.61	5.30	5.36	4.11	4.42	5.91	5.71
SD	0.58	2.83	1.78	0.97	1.69	2.03	1.53	1.26	2.20	2.21	1.64	2.14
N	3	2	23	12	17	18	30	22	9	24	11	7
LUCK												
Mean	4.33	2.00	2.48	2.50	1.88	1.89	2.67	2.18	2.00	1.88	2.55	2.71
SD	0.58	1.41	1.53	1.31	1.22	1.32	1.60	1.44	1.50	1.08	1.92	1.25
N	3	2	23	12	17	18	30	22	9	24	11	7

NOTE: SWS= Survey of Workstyles$_{total}$ score; TMU=Time Urgency; CMP=Competitiveness; JOD=Job Dissatisfaction. Although this table lists the participants into 12 separate groups, yielding some cells with less than 10 participants, the study never made comparisons of these groups solely. Comparisons were made with these above groups collapsed to allow for the following: Agegroup x Gender; Agegroup x Education; Gender x Education. High scores represent more Type A characteristic.

Table 2: Age by Academic Background Frequency Chart

	Young		Middle		Older		
Diploma(s)	n=3	8%	n=3	3%	n=4	8%	N=10
B.A.	n=20	50%	n=24	27%	n=9	17%	N=53
M.A.	n=12	30%	n=25	28%	n=5	10%	N=42
Ph.D.	n=5	12%	n=36	41%	n=34	65%	N=75
	N=40		N=88		N=52		NTOTAL=180

Figure Captions

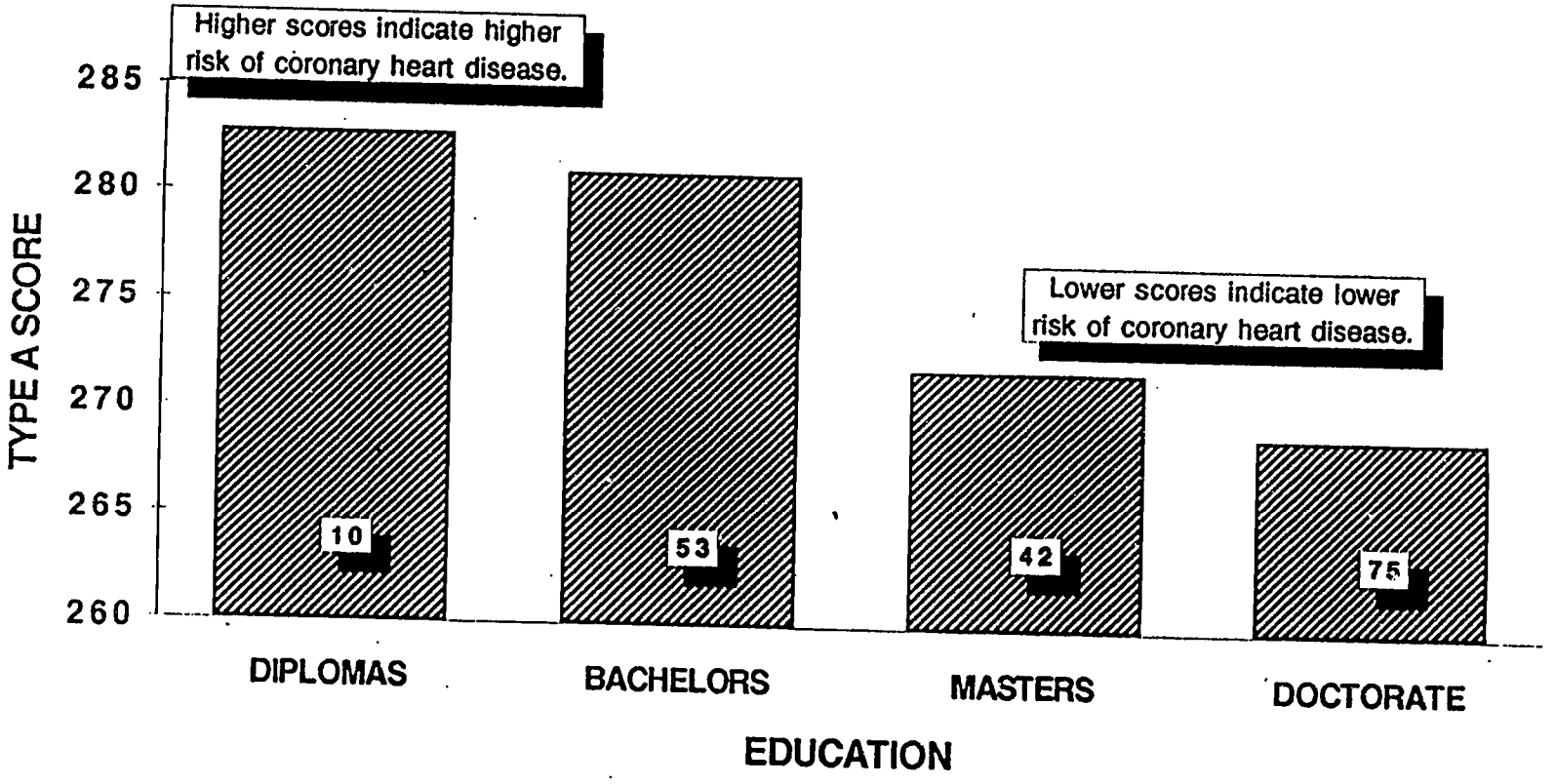
Figure 1: A comparison of young, middle, and older administrators on Survey of Workstyles total score.

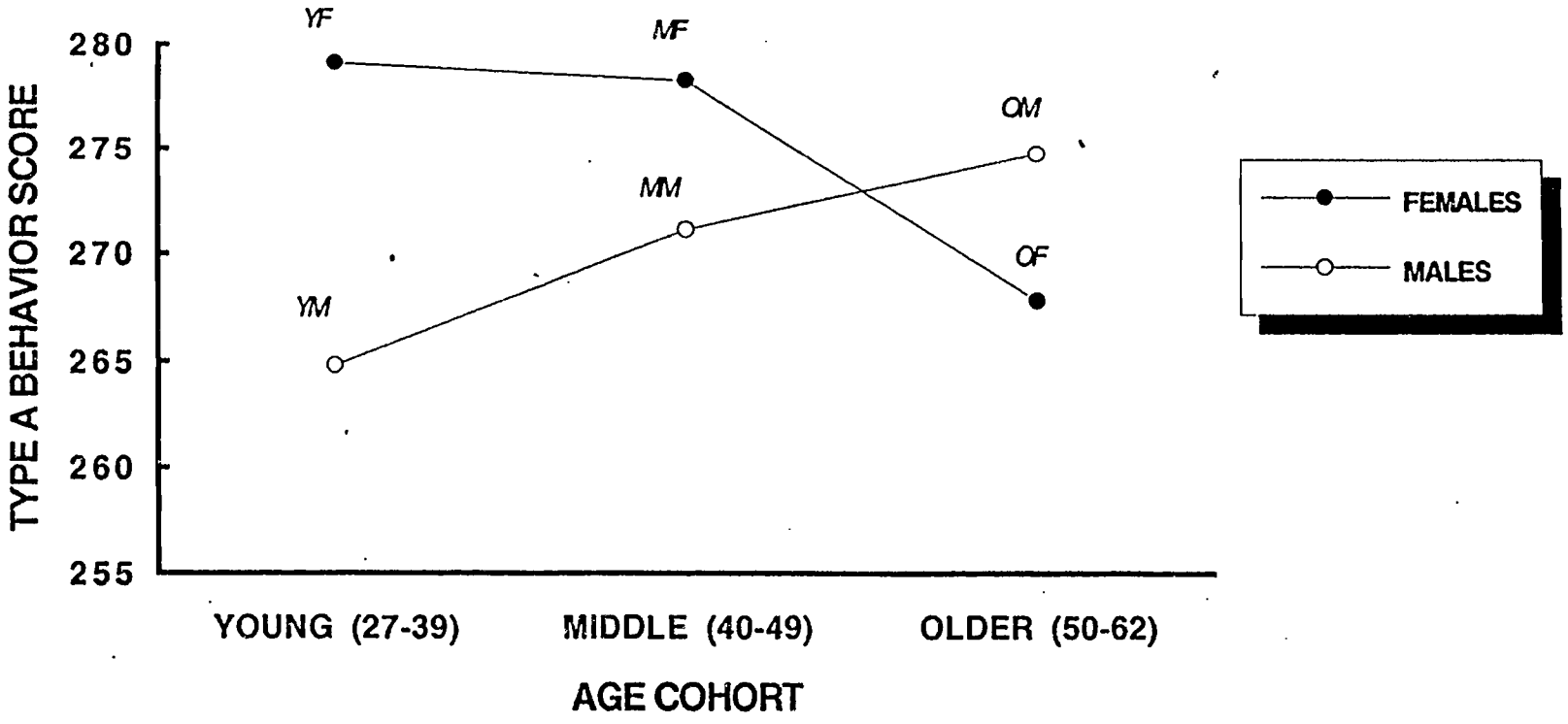
Figure 2: The interactional effects of Age and Gender on Survey of Workstyles total score.

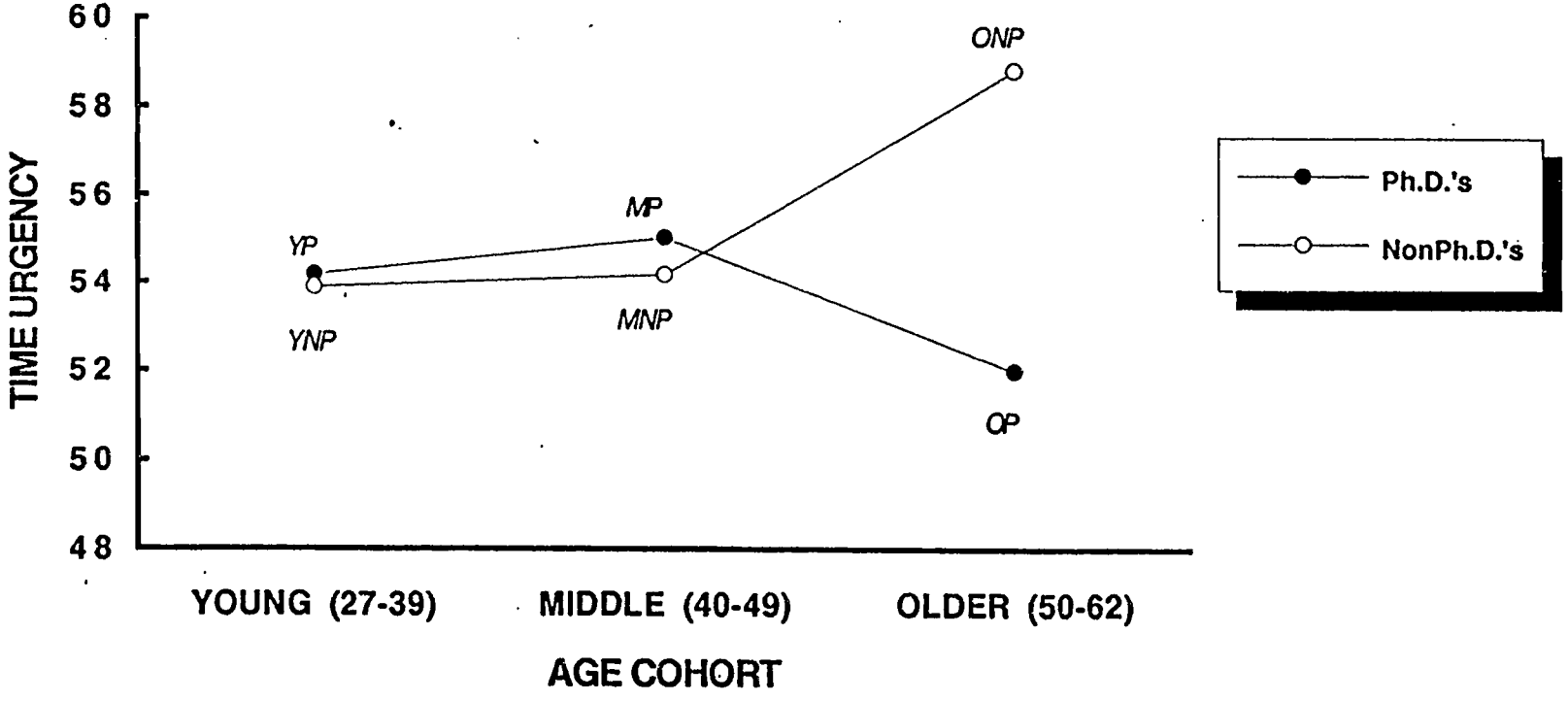
Figure 3: The interactional effects of Age and Education on Time Urgency.

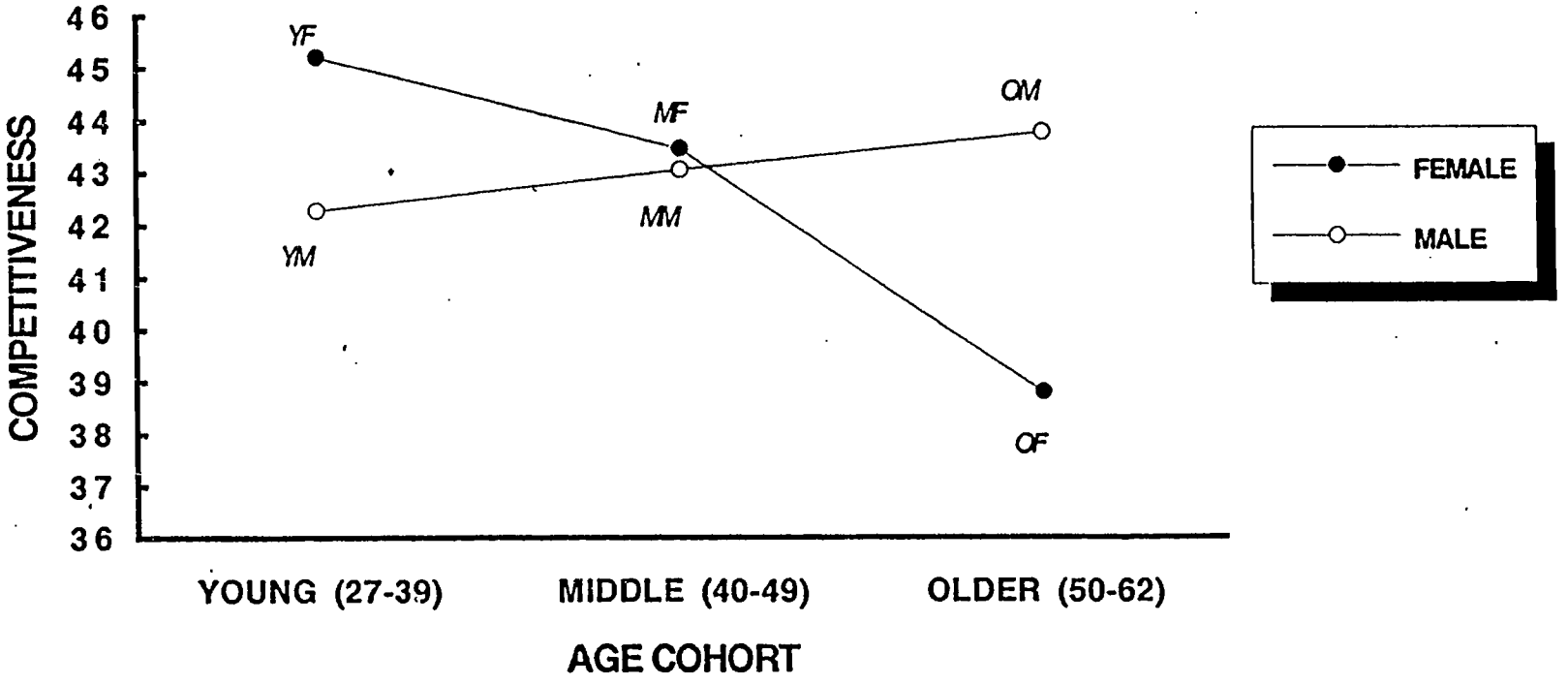
Figure 4: The interactional effects of Age and Gender on Competitiveness.

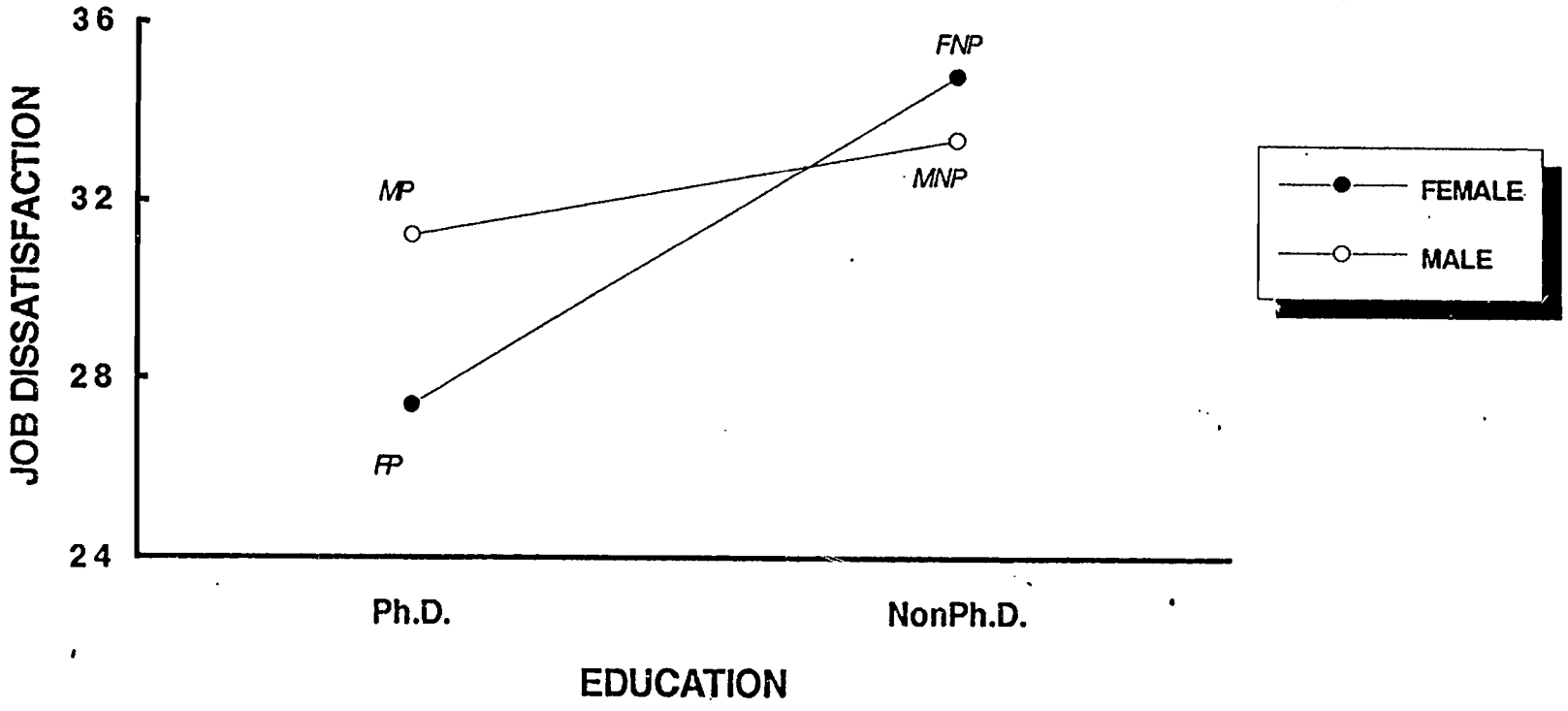
Figure 5: The interactional effects of Gender and Education on Job Dissatisfaction.


Higher scores indicate higher risk of coronary heart disease.
Lower scores indicate lower risk of coronary heart disease.
TYPE A SCORE
285
280
275
270
265
260
10
53
42
75
DIPLOMAS
BACHELORS
MASTERS
DOCTORATE
EDUCATION


YF
MF
OM
MM
OF
YM
280
275
270
265
260
255
TYPE A BEHAVIOR SCORE
YOUNG (27-39)
MIDDLE (40-49)
OLDER (50-62)
AGE COHORT
FEMALES
MALES


60
58
56
54
52
50
48
TIME URGENCY
YP
MP
ONP
YNP
MNP
OP
Ph.D.'s
NonPh.D.'s
YOUNG (27-39)
MIDDLE (40-49)
OLDER (50-62)
AGE COHORT


COMPETITIVENESS
46
45
44
43
42
41
40
39
38
37
36
YF
MF
OM
YM
MM
OF
YOUNG (27-39)
MIDDLE (40-49)
OLDER (50-62)
AGE COHORT
FEMALE
MALE


36
32
28
24
JOB DISSATISFACTION
FNP
MP
MNP
FP
Ph.D.
NonPh.D.
EDUCATION
FEMALE
MALE