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Determinants of Organizational Commitment Among U.S. Workers

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Determinants of Organizational Commitment Among U.S. Workers

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I. Introduction

This study examines the relationship between organizational commitment, job performance and several individual and work-related variables. My research proceeds in two steps. I will replicate the analysis in, *Organizational Commitment and Job Performance in the U.S. Labor Force*, by Kalleberg and Marsden of the relationship between commitment and job performance. Second, I will analyze the relationship between the three dimensions of organizational commitment and the personal characteristics, job characteristics, work experiences and structural characteristics of the organization. This second step provides a model of organizational commitment that was not a part of the Kalleberg and Marsden study.

This study examines three dimensions of commitment. The three dimensions of are affective commitment, effort commitment and continuance commitment. Affective Commitment is also known as value commitment, and it measures whether the respondent believes his or her values are in line with those of the organization. Effort commitment is related to affective commitment, and it measures whether the respondent is willing to exert effort to see the organization succeed. Continuance commitment is also known as behavioral commitment and it measures the member's behavioral dedication to the survival of the organization.

I replicate and extend the analysis of job performance and organizational commitment found in *Organizational Commitment and Job Performance in the U.S.*

Labor Force, by Arne Kalleberg and Peter Marsden. Their work found that organizational commitment increases job performance. My research extends the work of Kalleberg and Marsden by exploring the determinants of job commitment among U.S. workers. Kalleberg and Marsden develop their study using characteristics found to be related to commitment in industry specific literature. In other words, Kalleberg and Marsden used literature conducted on single industries or industry types, such as manufacturing or service, to find which characteristics were found to be related. They then analyzed the relationship between those characteristics and job performance without analyzing the relationship between those characteristics and organizational commitment. Their study used data from the 1992 GSS, a nationwide survey, and assumed that the past industry specific findings were true without actually testing them. The Kalleberg and Marsden study uses data that is not industry or factory specific. My study will test the relationship between the individual task and work-related characteristics and organizational commitment. To do this I will first replicate their analysis of the relationship between organizational commitment and job performance and then test the theory that the individual task and work-related characteristics are in fact related to organizational commitment.

The proposed null hypothesis is that: there is no relationship between the individual and work structure characteristics discussed by Kalleberg and Marsden and the different dimensions of organizational commitment.

II. <u>Literature Review</u>

       Literature on organizational commitment has been the concern of several

researchers beginning with Etzioni in 1961. Etzioni classifies commitment or

involvement into three dimensions moral, calculative and alienative. According to

Mowday, et al. (1982), Etzioni's typology was "based on a larger model of member

compliance with organizational directives" (p. 21). Etzioni asserted that the control

organizations exert over individuals is embedded in the nature of involvement or

commitment. Moral involvement is a positive relationship that is, "…based on the

internalization of the organization's goals, values, and norms on an identification with

authority" (Mowday, Porter and Steers 1982:21). This suggests that members of the

organization are involved because they feel the organization is pursuing useful societal

goals. Examples of this involvement would be volunteer work for nonprofit

organizations, like the United Way or Goodwill. These members derive satisfaction from

their involvement with these organizations.

       Calculative involvement is a less intense relationship built on an exchange of

benefits between the organization and its members. Members are involved with the

organization out of the rewards offered by the organization, while the organization

benefits from the services that are provided to it. According to Mowday, et al. (1982), a

similar theory was advanced by March and Simon's (1958) inducements-contribution

theory (p. 23). Finally, alienative commitment is a negative relationship, "…which is

typically found in situations where individual behavior is severely constrained"

(Mowday, Porter and Steers 1982:23). The involvement of the members in this

relationship in compulsory, as in prison, where inmates are involved not by their own volition but as a result of their unlawful actions.

Etzioni also suggests organizational control instruments are important in each relationship to ensure conformity from its members. The mechanism for moral involvement is normative (symbolic) power, for calculative involvement it's remunerative power, and for alienative involvement it's coercive power. Thus, organizations, according to Mowday, et al. (1982), "attempt to secure compliance behavior on the part of their members by tying influence attempts to the nature of the involvement by the member" (p. 23).

Kanter (1968) is the next major author to discuss and propose a typology. Her typology suggests "…that different types of commitment result from the different behavioral requirements imposed on members by their organizations" (Mowday, Porter and Steers 1982:23). Like Etzioni, she promotes three types of commitment, which are continuance, cohesion and control commitment. Continuance commitment is defined, "in terms of the member's dedication to the survival of the organization" (Mowday, Porter and Steers 1982:23).   According to this type of commitment, members make sacrifices for the organization to the point that it becomes too costly for them to leave. In other words, the members are so invested in the organization that they work to ensure its survival. Examples of this commitment would be workers who serve in an apprenticeship program or those who have remained with an organization over a long period.

Cohesion commitment is described as, "an attachment to social relationships in an organization brought on by such techniques as public renunciation of previous social ties

or by engaging in ceremonies that enhance group cohesion" (Mowday, Porter and Steers 1982:23). In this typology, organizations use ceremonies or other programs to build group cohesion between members. Mowday, et al. (1982) points to pledging to a fraternity or sorority or first-day employee orientation as examples of activities developed to build group cohesion (p. 23). Even the use of uniforms or badges is a mechanism for building cohesion. According to Kanter (1968), by building group cohesion, the organization is also developing cohesion between the group and the organization. Members are committed to the organization because they identify with the organization as they identify with other members.

Finally, control commitment is defined as, "a member's attachment to the norms of the organization that shape behavior in desired directions" (Mowday, Porter and Steers 1982:24). This type of commitment exists when an employee believes that the norms and values of an organization represent an important guide to suitable behaviors as is influenced by such norms as everyday life. In control commitment, members are thought to redevelop their values in terms of what is best for the organization and of which the organization would approve. Mowday, et al. (1982) cite the "organization man" syndrome, where the lives of the employees are largely determined by what is best for the organization, as a good example of control commitment (p. 24).

In contrast to Eztioni, Kanter believes organizations combine these approaches to develop member commitment. In other words, multiple mechanisms can operate simultaneously. According to Mowday, et al. (1982), "in many ways, each of these three aspects of commitment is seen as reinforcing the others as they jointly influence the individual to increase his or her ties with the organization" (p. 24).

In what Mowday, et al. (1982) call, "one of the most significant developments in the literature on organizational commitment, both Staw (1977) and Salancik (1977) emphasize the need to differentiate between commitment as seen by organizational behavior researchers and commitment as seen by social psychologists" (p. 24). According to Staw (1977), organizational behavior researchers describe the process through which members identify with the goals and values of an organization, which he terms "attitudinal commitment" (1997). However, he also notes that there are several problems associated with this kind of commitment. First, its concern is with commitment as conceptualized from the organization's perspective. Second, the aspects of attitudinal commitment maybe constructs in their own right and that summarizing them into a single concept may lose information and may not be justified on theoretical grounds (Hall 1977). Finally, some aspects of attitudinal commitment are simply verbal expressions of the behaviors that one seeks to predict.

In contrast, Staw and Salancik suggest the concept of behavioral commitment, which "focuses on the process by which an individual's past behavior serves to bind him or her to the organization" (Mowday, Porter and Steers 1982:25). In this theory, workers become committed due to, what Becker (1964) calls, "side bets" made with the organization. The workers future behavior then becomes constrained to protect or maintain his or her extraneous interests, which could be actions or rewards such as pensions or reputation. As Becker (1964) notes,

> If a person refuses to change jobs, even thought the new job would offer him a higher salary and better working conditions, we should suspect that his decision is a result of commitment, that other sets of rewards than income and working conditions have become attached to his present job so that it would be too painful for him to change (p. 50).

In other words, workers become bond to their organizations for interests beyond income. For example, they may stay to keep their pension or they may dread having to make new friends, regardless they become behaviorally committed to the organization to justify their retention.

Salancik (1977) continues this argument by suggesting there are three characteristics that bind individuals to a particular behavior hence committing him or her. These are visibility, irrevocability, and the volitionality of behavior (Mowday, Porter and Steers 1982:64). Once members have made these commitments they adjust psychologically. Salancik (1977) notes, "the power of commitment in shaping attitudes stems from the fact that individuals adjust their attitudes to fit the situations to which they are committed" (1977:70). Like Kanter's continuance commitment, as the duration of ones tenure grows, they develop attitudes to justify remaining with the organization.

III. Conceptualization

In their book, *Employee-Organizational Linkages*, Mowday, Porter, and Steers

(1982) define commitment as,

> …the relative strength of an individual's identification with and involvement in a
> particular organization. Conceptually, it can be characterized by at least three
> factors: a) a strong belief in and acceptance of the organization's goals and
> values; b) a willingness to exert considerable effort on behalf of the organization;
> and c) a strong desire to maintain membership in the organization (p. 27).

This definition suggests commitment is a multidimensional construct consisting of what

are commonly described as affective commitment, effort commitment and continuance

commitment. Affective commitment is attitudinal and is commonly associated with

value commitment (Kalleberg and Marsden 1995:238). The second factor, effort

commitment is related to affective commitment in that employees who are committed

attitudinally are thought more likely to exert greater levels of effort in their work.

Finally, continuance commitment describes the attempt by workers to remain in the

organization.

According to most researchers, variables affecting commitment can be divided

into four categories: personal characteristics, job characteristics and work experiences

and structural characteristics (Nijhof, et al. 1998; Mowday Porter and Steers 1982). I

will review each of these categories and the variables researchers have discussed that are

related to each category.

A. **Personal Characteristics**

Personal characteristics are those characteristics specific to the individual such as gender, race and education. These are attributes of the individual that are either ascribed or acheieved. They include education, gender and race.

Several studies conducted on U.S. workers have found education to be negatively related to commitment. In other words, the higher the commitment, the lower the workers organizational commitment. While there is no definitive explanation for this relationship, Lincoln and Kalleberg (1990) note that highly educated workers typically report intrinsic in their jobs thus lowering their commitment (p. 156). More educated workers typically have higher expectations when entering a position and these expectations are typically not met by their employers, thus they derive less satisfaction from their work and have lower levels of commitment.

Women have less opportunities with other organizations and overcome more barriers to get where they are, thus they are more likely to be committed to their organizations (Lincoln and Kalleberg 1990:154).

Nonwhite workers experience many of the same barriers and obstacles that women face, thus the same theory holds true. Since they overcome more barriers, nonwhite workers are more likely to be committed to their organizations and are less likely to leave (Lincoln and Kalleberg 1990:154).

B. **Job Characteristics**

Job characteristics are those attributes of the job position. These are role-related characteristics. They include self-employment, autonomy, measurement of output and hours worked

Self-employement has been found to increase commitment (Lincoln and Kalleber 1990:92). Precisely because self-employed individuals make up the values of the organization and will work harder to see the organization succeed. Also, they more control over their work.

Autonomy is thought to be one of the most powerful indicators of organizational commitment among U.S. workers (Lincoln and Kalleberg 1990:92). Researchers have found that the more control and freedom a worker has, the more likely that worker is to be committed to the organization. In the same token, workers who are under supervision are more likely to be less committed.

Measurement of output is related to autonomy in that it measures the degree of supervision. Thus, like autonomy, the less supervision the greater the commitment (Lincoln and Kalleberg 1990:92).

There is little research on the effect of hours worked on organizational commitment however, it follows that workers who work longer hours would be less committed to their organization.

C. **Work Experiences**

Work experiences are the attitudinal or behavioral consequences of engaging in these jobs. These are experiences had by the individual that can increase or decrease attitudinal and behavioral commitment. They include satisfaction.

Satisfaction has been found to be positively related to organizational commitment (Thatcher, et al. 2002:235). As workers satisfaction with their work so does their organizational commitment. This theory is reasonable, as workers who are not satisfied with their employment will most likely move on to a new organization.

D. **Structural Characteristics**

Structural characteristics are attributes of the organization designed to illicit attitudinal or behavioral commitment. They are characteristics developed to increase individual commitment to the organization. They include career advancment, future promotion and earnings.

Career advancement measures the rate at which a respondent has advanced through the organization. Lincoln and Kalleberg (1990) measure advancement in terms of the likelihood that a worker will be promoted and the actual rate to which a worker has been promoted. They note, "workers who perceive they have a career with the company are more likely to be committed to its goals and fortunes over a long period of time" (p. 105). This suggests that workers who have been promoted or expect to be promoted are more likely to be committed.

Future promotion is similar to advancement except that it measures expected advancement. This is similar to Lincoln and Kalleberg's (1990) measure of career advancement (p. 105).

Earnings are not typically found to be a significant indicator of organizational commitment. However, they are, according to Lincoln and Kalleberg (1990), one of the most often used inducements that employers use to promote commitment (p. 100). As Etzioni, Edwards and Clark and Wilson have found, "[extrinsic rewards] are seen as unreliable guarantors of employee performance, for while they may evoke specific behavior to which the inducement is geared, they contribute little to the development of strong and lasting commitment to the organization (qtd in Lincoln and Kalleberg 1990:100).

IV. <u>Methodology</u>

Kalleberg and Marsden (1995) used three dimensions of organizational commitment: affective commitment, effort commitment and continuance commitment (See Appendix A for operational measurement). Affective commitment is the degree to which an employee believes his or her values and beliefs reflect those of the organizations. This is often referred to as emotional or attitudinal commitment, as it refers to the emotional attachment that one has to his or her organization (Marchiori and Henkin 2004:353). Effort commitment is the amount of work an employee is willing to exert in order for the organization to succeed. Employee's who are more committed to the organization are thought to be willing to exert more effort into their work in order to see the organization succeed and thus survive (Dardin, Hampton and Howell 1989:102). Finally, continuance commitment measures whether or not an individual is willing to leave an organization. This form of commitment is identified with Becker's "side-bet" theory, which suggests that individuals are likely to stay with an organization due to the extraneous benefits of staying (Becker 1960). Kalleberg and Marsden use two dimensions of job performance: quality and quantity. Quality measures the degree to which the respondent does his or her job compared to others who do the same or similar job. Quantity is the amount of work one does compared to others who do the same or similar job.

The independent variables formed four categories. They are ability, task characteristics, other work characteristics and other individual characteristics. Ability characteristics include education, career advancement and future promotion. Education

involves the respondents highest degree earned. Career advancement is an assessment of

how quickly the respondent has advanced with their current organization. Whereas,

future promotion is an assessment of how rapidly the respondent expects to be promoted

in the next five years. Task characteristics include autonomy, measurability of output

and earnings. Autonomy is the respondent's ability to work independently, make

decisions, control what happens in their job and the closeness of their supervision.

Measurability of output involves how easy it is for the respondent's supervisor to

evaluate the quantity and quality of work produced. Earnings are measured using the

natural logarithm of respondent's income. Work-related characteristics include job

satisfaction, supervision and self-employment. Job satisfaction is an assessment of the

respondent's satisfaction with job. Supervision was not used in the 1991 survey thus it

was removed from my analysis. Self-employment is assessment of whether the

respondent is self-employed. Finally, individual characteristics include gender, race and

hours worked. Gender measured respondent's gender. Race measured the respondent's

race. Hours Worked is an assessment of the number of hours worked in the previous

week. Hours worked in a typical week was substituted if the respondent was employed

but did not work in the previous week.

To understand the zero-order relationship between organizational commitment

and job performance, Kalleberg and Marsden ran correlations and regressions. Next,

they ran correlations between the two dependent variables and the thirteen independent

variables followed by regressions. I will replicate those analyses.

V. <u>Research Design and Data</u>

The Kalleberg and Marsden (1995) study used data from the 1992 General Social Survey (GSS). The GSS is a multitopic nationwide survey conducted by the National Opinion Research Center. It is administered to English-Speaking Americans, 18 and older. The GSS includes sociodemographic data on the attitudes and opinions of Americans. The GSS study uses multistage area probability sampling in an effort to achieve an accurate reflection of the larger population. The 1992 study surveyed 1,517 respondents and included a "work organization" topical module, which asked questions concerning organizational commitment and job performance. According to Kalleberg and Mardsen (1995), "this is the *only* nationally representative sample of which we are aware that contains information on job performance" (1995:240). Those questions referring to job performance and organizational commitment in the Kalleberg and Marsden (1995) study were not included in a single GSS study after 1992.

VI. <u>Data Analysis</u>

A. **Descriptive Statistics**

In Table 1 we see descriptive statistics for our dependent and independent variables. At the top of the table are statistics for the different dimensions of commitment. Affective commitment has 869 cases with a minimum of 3 and a maximum of 12. The mean for affective commitment is 9.31 with a standard deviation of 1.78. Effort commitment has 895 cases with a minimum of 1 and a maximum of 4. The mean for effort commitment is 3.27 with a standard deviation of .66. Continuance commitment has 833 cases with a minimum of 3 and a maximum of 12. The mean for continuance commitment is 7.80 with a standard deviation of 2.19.

Next, we see statistics for the two dimensions of job performance. Quality of job performance has 892 cases with a minimum of 2 and a maximum of 5. The mean for quality is 4.05 with a standard deviation of .78. Quantity of job performance has 888 cases with a minimum of 1 and a maximum of 5. The mean for quantity is 3.80 and a standard deviation of .83.

The bottom half of the table contains statistics for the different characteristics of independent variables. First are the ability characteristics that represent those variables that measure a respondent's ability to perform their job. Education has 1510 cases with a minimum of 0 and a maximum of 20. The mean for education is 12.88 and a standard deviation of 2.98. Career advancement has 814 cases with a minimum of 1 and a maximum of 4. The mean for career advancement is 2.55 and a standard deviation of .71.

Future promotion has 848 cases with a minimum of 1 and a maximum of 4. The mean for future promotion is 2.33 and a standard deviation of 1.18.

Next, we see statistics for task characteristics, which are those characteristics that are related to the task of the job. Autonomy has 886 cases with a minimum of 1 and a maximum of 4. The mean for is autonomy 2.22 and a standard deviation of .53. Measurement of output has 1517 cases with a minimum of 1 and a maximum of 4. The mean for measurement of output is 1.75 and a standard deviation of .57. Log earnings has 952 cases with a minimum of 0 and a maximum of 3.09. The mean for earnings is 2.29 and a standard deviation of .73.

Following task characteristics we see work characteristics, which measure the respondents status and satisfaction with their work. Job satisfaction has 1149 cases with a minimum of 1 and a maximum of 4. The mean for job satisfaction is 3.26 and a standard deviation of .80. Self-employment has 1517 cases with a minimum of 0 and a maximum of 1. The mean for self-employment is .11 and a standard deviation of .31.

Finally, we see statistics for individual characteristics. These are characteristics of the respondent. Female has 1517 cases with a minimum of 0 and a maximum of 1. The mean for female is .58. White has 1517 cases with a minimum of 0 and a maximum of 1. The mean for white is .83. Hours worked has 911 cases with a minimum of 0 and a maximum of 89. The mean for hours worked is 40.21 and a standard deviation of 14.93.

B. **Bivariate Analysis**

The Pearson correlation coefficient measures the amount of scatter around a regression line (Allison 1999:105). Two variables are linearly related if their points

cluster around a straight line on a scatterplot. If all the points fall exactly on a line with a positive slope then the correlation would be +1 and if all the points fall exactly on a line with a negative slope then the correlation would be –1. The value of the Pearson correlation tells you how tightly the points fall around the line (Norusis 2000:425). A Pearson correlation of 0 shows there is no linear relationship between the variables.

Multicollinearity can be a problem in multiple regressions when two or more independent variables perfectly, or almost perfectly, share a linear relationship. To test for multicollinearity among the independent variables, a collinearity diagnostic was run for each dependent variable. The results show that in all three regressions there was not a single variable with a tolerance below .70 and a variance inflation factor (VIF) above 1.5. Multicollinearity is considered to be a problem when the tolerance level is below .40 or the VIF above 2.5 (Allison 1999:141). Thus, in all three cases multicollinearity does not appear to be a concern.

Replication

At the top of table 2 we have correlation probabilities and number of observations between the two dimensions of performance and three dimensions of commitment that represents my replication of the Kalleberg and Marsden (1992) study. These authors found a Pearson correlation between affective commitment and quality of .059. Where I found a Pearson correlation of .068. They found a Pearson correlation between effort commitment and quality of .105. While I found a Pearson correlation of .105. Finally, Kalleberg and Marsden found a Pearson correlation of .020 between continuance commitment and quality. My findings gave a Pearson correlation of .015.

Kalleberg and Marsden have a Pearson correlation of .056 between affective commitment and quantity. My findings gave a Pearson correlation of .065. They found a Pearson correlation of .177 between effort commitment and quantity. My findings gave a Pearson correlation of .177. Finally, Kalleberg and Marsden found a Pearson correlation between continuance commitment and quantity of .052. My findings gave a Pearson correlation of .049.

In all three instances my correlations are very close to their findings. I was able to replicate the findings between the performance mearsures and effort commitment. However, I was unable to replicate the correlations between the performance measures and affective and continuance commitment. The differences lie in the manner in which I built the indexes. I built the indexes by first tabulating the responses from those questions consisting of the index. When this was found to be incorrect, I then built the indexes using the mean of responses for those variables consisting of the index, as Kalleberg and Marsden had done with a couple of independent variables indexes. When this too gave different results, I returned to using the tabulation, which gave the closest results. Kalleberg and Marsden gave no indication as to how they constructed their variables, so while my data is not identical it is as close as possible with the information they provided. Number of observations were not supplied in the Kalleberg and Marsden text. Difference in number of observations may account for any difference in strength of correlation.

Affective Commitment

In the second half of table 2 we see correlations between the three dimensions of commitment and the individual task and work-related variables. Affective commitment measures whether the respondent believes his or her values are in line with those of the organization. Affective commitment is often referred to as value commitment.

The null hypothesis is that education and affective commitment are independent. Education is positively related to affective commitment with a Pearson correlation of .07. The probability of finding this number if the null hypothesis were true is .039, therefore we may reject the null hypothesis. This is an unusual finding. According to the literature, education is found to be negatively related to organizational commitment. It is believed that highly educated workers have higher expectations that the organization is unable to meet thus negatively affecting organizational commitment (Lincoln and Kalleberg 1990:156).

The null hypothesis is that career advancement and affective commitment are independent. Career advancement is positively related to affective commitment with a Pearson correlation of .174. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Lincoln and Kalleberg (1990) find that career advancement is positively related to organizational commitment (p. 105). Clearly, worker's who advance rapidly are more likely to believe that their values and beliefs are in line with those of the organization.

The null hypothesis is that autonomy and affective commitment are independent. Autonomy is positively related to affective commitment with a Pearson correlation of .417. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we can reject the null hypothesis. Lincoln and Kalleberg (1990) do

suggest that as autonomy increases so does commitment (p. 92). It follows that works who are given more autonomy are more likely to develop attitudinal attachments to the organization.

The null hypothesis is that earnings and affective commitment are independent. Log earnings is positively related to affective commitment with a Pearson correlation of .106. The probability of finding this number if the null hypothesis were true is .002, therefore we can reject the null hypothesis. In their research on pay inequality, Stewart and Moore (1992) have noted that workers who earn more are more likely to perform better and are more committed to the work and the organization (p. 83). My research supports their finding.

The null hypothesis is that job satisfaction and affective commitment are independent. Job satisfaction is positively related with a Pearson correlation of .423. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. The literature on commitment and job satisfaction does support this claim that as job satisfaction increase so does commitment (Thatcher, et al 2002:235). Thus it follows that workers who are satisfied with their jobs are more likely to believe that their values are reflective of the organizations.

The null hypothesis is that self-employment and affective commitment are independent. Self-employment is a dummy variable coded works for oneself (=1) and does not work for oneself (=0). Self-employment is positively related to affective commitment with a Pearson correlation of .346. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. According to the literature, as autonomy increases so does commitment and

as self-employment is related to autonomy then this relationship is supported by the literature (Lincoln and Kalleberg 1990:92). However, this finding seems unusual because one would expect to find a perfect correlation between self-employment and affective commitment. Logic seems to dictate that the values of a business would be the same as the values of the individual that owns the business. However, this finding suggests that the values of the individual and their business are not completely correlated.

The null hypothesis is that race and affective commitment are independent. Race is a dummy variable coded white (=1) and nonwhite (=0). Race is positively related to affective commitment with a Pearson correlation of .086. The probability of finding this number if the null hypothesis were true is .012, therefore we may reject the null hypothesis. According to Lincoln and Kalleberg (1990), females are more committed to their organizations than men because they overcome more obstacles to get to their place in an organization, thus it would follow that nonwhite respondents, who face many of the same obstacles, would also me more committed than white workers (p. 154). However, these findings suggest that the opposite is true. It appears that white workers are more likely to be committed to their organization than nonwhite workers.

The null hypothesis is that hours worked and affective commitment are independent. Hours worked is positively related to affective commitment with a Pearson correlation of .104. The probability of finding this number if the null hypothesis were true is .002, therefore we may reject the null hypothesis. While there is little literature on the effect of hours worked on commitment, Becker's side-bet thesis can help us understand these findings. Becker (1960) suggests that individuals become committed to

organizations due to side-bets, such as pensions, friendship or reputation, and will remain committed to justify their tenure with an organization (p. 36). As Shoemaker, et al (1977), note, the greater the investment in an organization, the more difficult it is for the individual to leave (p. 598). With individuals working in unfavorable environments, such as those with longer working hours, their commitment can be understood by examining the side-bets at stake. It appears that as individuals justify working longer hours by developing attitudinal commitments to the organization.

Those variables thought to be significant but found not to be include future promotion, measurement of output, and gender. Future promotion had a Pearson correlation of –0.032 with a significance of .357. Future promotion was expected to be positively related to commitment it is related to career advancement (Lincoln and Kalleberg 1990:105). Measurement of output has a Pearson correlation of –0.047 with a significance of .166. Measurement of output is related to autonomy and was expected to be positively related to commitment (Lincoln and Kalleberg 1990:92). Gender had a Pearson correlation of –0.053 with a significance of .120. Lincoln and Kalleberg (1990) suggest that females are more committed to their organizations than men because they overcome more obstacles to get to their place in an organization, thus gender was expected to be positively related to commitment (p. 154).

Effort Commitment

Next we see statistics for the bivariate correlations between effort commitment and the individual and work-related characteristics. Effort commitment measures the degree to which and individual is willing to exert effort in order to see the organization succeed. Effort commitment is related to affective commitment.

The null hypothesis is that career advancement and effort commitment are independent. Career advancement is positively related to effort commitment with a Pearson correlation of .125. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Lincoln and Kalleberg (1990) find that career advancement is positively related to organizational commitment (p. 105). Worker's who advance rapidly are more likely to exert effort to see their organization succeed than those who do not.

The null hypothesis is that autonomy and effort commitment are indepenedent. Autonomy is positively related to effort commitment with a Pearson correlation of .326. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we can reject the null hypothesis. Autonomy has been found to increase effort in the literature (Lincoln and Kalleberg 1990:92).

The null hypothesis is that earnings and effort commitment are independent. Log earnings is positively related to effort commitment with a Pearson correlation of .158. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Stewart and Moore's (1992) research supports this finding as they have found that workers who earn more are more likely to perform better and are more committed to the work and the organization (p. 83).

The null hypothesis is that job satisfaction and effort commitment are independent. Job satisfaction is positively related to effort commitment with a Pearson correlation of .275. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Thatcher's, et al (2002), findings support the claim that as job satisfaction increase so does effort. They argued that as satisfaction increased so would commitment (p. 235). Thus it follows that effort would increase with satisfaction.

The null hypothesis is that self-employment and effort commitment are independent. Self-employed is a dummy variable coded works for oneself (=1) and does not work for oneself (=0). Self-employment is positively related to effort commitment with a Pearson correlation of .216. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Workers who are self-employed are more autonomous and according to the literature, as autonomy increases so does commitment (Lincoln and Kalleberg 1990:92). This finding is unusual because logic would suggest that a person who owns a business would be willing to work harder in order to see that business succeed. Thus, we would expect self-employment and effort commitment to be perfectly correlated. However, the findings suggest that on some level, self-employed individuals are unwilling to exert effort in order to see their business succeed.

The null hypothesis is that gender and effort commitment are independent. Gender is a dummy variable coded female (=1) and male (=0). Gender is negatively related to effort commitment with a Pearson correlation of –0.087. The probability of finding this number if the null hypothesis were true is .009, therefore we may reject the

null hypothesis. This suggests that women are less likely to be committed to their organizations than men. However, Lincoln and Kalleberg (1990) suggest that females are more committed to their organizations than men because they overcome more obstacles to get to their place in an organization (p. 154). This finding is different than what was expected from the literature.

The null hypothesis is that hours worked and effort commitment are independent. Hours worked is positively related to effort commitment with a Pearson correlation of .169. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. Becker's side-bet thesis can help us understand these findings. Becker (1960) suggests that individuals become committed to organizations due to side-bets, such as pensions, friendship or reputation, and will remain committed to justify their tenure with an organization (p. 36). Often, the greater the investment in an organization, the more difficult it is for the individual to leave (Shoemaker, Snizek and Bryant 1977:598). Shoemaker, et al (1977) note that, "many of these investments are structurally arranged… [thus] individuals have little control over the investments or cost features of these factors" (p. 599). It may be the case that individuals find themselves invested in an organization and increase their effort to maintain their position.

Those variables thought to be significant but found not to be include education, future promotion, measurement of output, and race. Education had a Pearson correlation of .026 and a significance of .434. Literature on commitment suggests that highly educated workers have higher expectations that the organization is unable to meet and was thus expected to be negatively related to commitment (Lincoln and Kalleberg

1990:156).   Future promotion had a Pearson correlation of –0.009 and a significance of

.789. Future promotion was expected to be positively related to commitment it is related

to career advancement (Lincoln and Kalleberg 1990:105). Measurement of output had a

Pearson correlation of –0.062 and a significance of .066. Measurement of output is

related to autonomy and was expected to be positively related to commitment (Lincoln

and Kalleberg 1990:92). Race had a Pearson correlation of .021 and a significance of

.522. Like females, nonwhite workers overcome more obstacles to achieve their

positions in an organization thus race was expected to be positively related to

commitment (p. 154).

Continuance Commitment

Finally, we see statistics for the correlation probabilities between continuance

commitment and the individual and work-related characteristics. Continuance

commitment is described as a member's behavioral dedication to the survival of the

organization. Continuance commitment is also referred to as behavioral commitment and

is related to Becker's side-bet theory.

The null hypothesis is that career advancement and continuance commitment are

independent. Career advancement is positively related to continuance commitment with

a Pearson correlation of .151. The probability of finding this number if the null

hypothesis were true is less than .0005, therefore we may reject the null hypothesis. This

question asks the rate a person has advanced in their current organization and the

literature does suggest advancement to be positively related to organizational

commitment (Lincoln and Kalleberg 1990:105).

The null hypothesis is that autonomy and continuance commitment are independent. Autonomy is positively related to continuance commitment with a Pearson correlation of .278. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. According to the literature, as autonomy increases so does commitment and as self-employment is related to autonomy then this relationship is supported by the literature (Lincoln and Kalleberg 1990:92).

The null hypothesis is that earnings and continuance commitment are independent. Log earnings is positively related to continuance commitment with a Pearson correlation of .116. The probability of finding this number if the null hypothesis were true is .001, therefore we can reject the null hypothesis. Earnings was found to be significantly related to performance and commitment in the work of Stewart and Moore (1992:83).

The null hypothesis is that job satisfaction and continuance commitment are independent. Job satisfaction is positively related to continuance commitment with a Pearson correlation of .371. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. This is consistent with what Thatcher, et al (2002) found in regards to commitment and job satisfaction (p. 235).

The null hypothesis is that self-employment and continuance commitment are independent. Self-employment is a dummy variable coded works for oneself (=1) and does not work for oneself (=0). Self-employment is positively related to continuance commitment with a Pearson correlation of .241. The probability of finding this number if

the null hypothesis were true is less than .0005, therefore we may reject the null hypothesis. According to the literature, as autonomy increases so does commitment and as self-employment is related to autonomy then this relationship is supported by the literature (Lincoln and Kalleberg 1990:92). While this finding is consistent with the literature, we would expect to see a perfect correlation between self-employment and continuance commitment. Logic would suggest that a self-employed individual would want to continue working for his or her business. However, the findings suggest that this may not always be the case.

The null hypothesis is that hours worked and continuance commitment are independent. Hours worked is positively related to continuance commitment with a Pearson correlation of .151. The probability of finding this number if the null hypothesis were true is less than .0005, therefore we can reject the null hypothesis. Becker's side-bet thesis helps us to understand these findings. Becker (1960) suggests that individuals become committed t o organizations due to side-bets, such as pensions, friendship or reputation, and will remain committed to justify their tenure with an organization (p. 36). As Shoemaker, et al (1977), note, the greater the investment in an organization, the more difficult it is for the individual to leave (p. 598). It appears that individuals invested in an organization are found to adopt the values of the organization presumably to maintain their tenure.

Those variables thought to be significant but found not to be include education, future promotion, measurement of output, gender and race. Education had a Pearson correlation of –0.057 with a significance of .098. Literature on commitment suggests that highly educated workers have higher expectations that the organization is unable to

meet and was thus expected to be negatively related to commitment (Lincoln and Kalleberg 1990:156). Future promotion had a Pearson correlation of –0.028 with a significance of .426. Future promotion was expected to be positively related to commitment it is related to career advancement (Lincoln and Kalleberg 1990:105). Measurement of output had a Pearson correlation of –0.037 with a significance of .288. Measurement of output is related to autonomy and was expected to be positively related to commitment (Lincoln and Kalleberg 1990:92). Gender had a Pearson correlation of –0.054 with a significance of .117. The literature suggests that females overcome more obstacles to get to their position in an organization thus gender was expected to be positively related to commitment (Lincoln and Kalleberg 1990:154). Race had a Pearson correlation of –0.016 with a significance of .637. Like females, nonwhite workers overcome more obstacles to achieve their positions in an organization thus race was expected to be positively related to commitment (154).

C. **Multivariate Analysis**

Bivariate correlation analysis is a way of measuring the relationship between two variables. In contrast, a multivariate analysis measures the relationship between two variables when controlling for others in the model (Allison 1999:105). Bivariate analyses measure the degree of shared variance between the independent and dependent variables. However, the multivariate analysis measures the variance that is not accounted for by the other independent variables. The previous section examined the relationship between the bivariate anaylsis and the literature. This section will discuss the multivariate findings as they relate to the bivariate findings in the previous section. Table 3 will test to see if significant bivariate relationships hold when controlling for the overall combination of variables in this model.

Affective Commitment

The regressions between the dependent variable for affective commitment and the independent variables had a multiple r-square of .292. Those variables found to be significant are career advancement, autonomy, job satisfaction, self-employed, and gender.

The null hypothesis is that career advancement and affective commitment are independent. Advancement is positively related to affective commitment with an unstandardized coefficient of .230 and a t value of 2.721. The probability of finding these values is .007 therefore we may reject the null hypothesis. The unstandardized coefficient of .230 concludes that for every one-unit increase in career advancement, affective commitment increases by .230 units. This finding is consistent with the

bivariate correlation, that there is a positive relationship between career advancement and affective commitment.

The null hypothesis is that autonomy and affective commitment are independent. Autonomy is positively related to affective commitment with an unstandardized coefficient of .497 and a t value of 6.000. The probability of finding these numbers is less than .001 therefore we may reject the null hypothesis. The unstandardized coefficient of .497 concludes that for every one-unit increase in autonomy, affective commitment increases by .497 units. This finding is consistant with the bivariate correlation, that there is a positive relationship between autonomy and affective commitment.

The null hypothesis is that job satisfaction and affective commitment are independent. Job satisfaction is positively related with an unstandardized coefficient of .741 and a t value of 9.699. The probability of finding these values is less than .001 therefore we may reject the null hypothesis. The unstandardized coefficient of .741 concludes that for every one-unit increase in job satisfaction, affective commitment increases by .741 units. This is consistent with the findings of the bivariate correlation, that there is a positive relationship between job satisfaction and affective commitment.

The null hypothesis is that self-employment and affective commitment are independent. Self-employment is positively related with an unstandardized coefficient of 1.014 and a t value of 4.979. The probability of finding these values is .001 therefore we may reject the null hypothesis. The unstandardized coefficient of 1.014 suggests that for every move from a sample of all respondents not working for themselves to a sample of all self-employed, affective commitment increases by 1.014 units. This is consistent with

the findings of the bivarite correlation, that there is a positive relationship between self-employment and affective commitment.

The null hypothesis is that gender and affective commitment are independent. Gender was a dummy variable coded female. It is positively related to continuance commitment with an unstandardized coefficient of .362 and a t value of 3.030. The probability of finding these values is .003 therefore we may reject the null hypothesis. The unstandardized coefficient of .362 indicates that for every move from a sample of all male respondents to a sample of all female respondents, affective commitment increases by .362 units. This is unusual given that the bivariate correlation found no significant relationship between gender and affective commitment.

Those variables that were not found to be significant but were assumed to be include education, earnings, race and hours worked. Education was found to be not significant even though the bivariate correlation suggests that education and affective commitment are positively related. Education had an unstandardized coefficient of .013, t value of .587 and significance of .557. Earnings was found to be not significant even though the bivariate correlation found earnings to be positively related to affective commitment. Earnings had an unstandardized coefficient of –0.012, t value of –0.116 and significance of .908. Race was found to be not significant even though the bivariate correlation suggests that race and affective commitment are positively related. White had an unstandardized coefficient of –0.045, t value of –0.283 and significance of .777. Hours worked was found to be not significant even though the bivariate correlation

suggests that hours worked and affective commitment are positively related. Hours worked had an unstandardized coefficient of .004, t value of .887 and a significance of .375.

Effort Commitment

The regressions run between the dependent variable for effort commitment and the independent variable had a multiple r square of .147. Those variables found to be significant are job measurement of output, autonomy, and satisfaction.

The null hypothesis is that autonomy and effort commitment are independent. Autonomy is positively related to effort commitment with an unstandardized coefficient of .169 and a t value of 5.133. The probability of finding these numbers is less than .001 therefore we may reject the null hypothesis. The unstandardized coefficient of .169 concludes that for every one-unit increase in autonomy, effort commitment increases by .169 units. This is consistent the findings of the bivariate correlation, which suggests there is a positive relationship between autonomy and effort.

The null hypothesis is that measurement of output and effort commitment are independent. Measurement of output is negatively related to effort commitment with an unstandardized coefficient of –0.078 and a t value of –2.602. The probability of finding these numbers is .009 therefore we may reject the null hypothesis. The unstandardized coefficient of -0.078 concludes that for every one-unit increase in measurability of output, effort commitment decreases by .078 units. This is unusual given that the bivariate correlation found no significant relationship between measurement of output and effort.

The null hypothesis is that job satisfaction and effort commitment are independent. Job satisfaction is positively related with an unstandardied coefficient of .152 and a t value of 5.000. The probability of finding these values is less than .001 therefore we may reject the null hypothesis. The unstandardized coefficient of .152 concludes that for every one-unit increase in job satisfaction, effort commitment increases by .152 units. Thatcher's, et al (2002), findings support the claim that as job satisfaction increase so does effort. They argued that as satisfaction increased so would commitment (p. 235). Thus it follows that effort would increase with satisfaction.

Those variables that were not found to be significant but were assumed to be, include career advancement, earnings, self-employment, gender and hours worked. Career advancment was found to be not significant even though the bivariate correlation suggests that it it is positively related to effort commitment. Career advancement had an unstandardized coefficient of .03, t value of .901 and significance of .368. Earnings was found to be not significant even though the bivariate correlation suggests that it is positively related to effort commitment. Earnings has an unstandardized coefficient of .044, t value of 1.034 and significance of .302. Self-employement was found to be not significant even though the bivariate correlation suggests that it is positively related to effort commitment. Self-employement had an unstandardized coefficient of .154, t value of 1.919 and significance of .055. Gender was found to be not significant even though the bivariate correlation suggests that it is negatively related to effort. Female had an unstandardized coefficient of .047, t value of .992 and significance of .322. Hours worked was found to be not significant even though the bivariate correlation suggests that it is positively related to effort. Hours worked had an unstandardized coefficient of

.003, t value of 1.472 and a significance of .142.

Continuance Commitment

The regression analysis between the dependent variable for continuance commitment and the independent variable had a multiple r square of .200. Those variables found to be significant are education, career advancement, autonomy, job satisfaction, self-employed, and race.

The null hypothesis is that education and continuance commitment are independent. Education is negatively related to continuance commitment with an unstandardized coefficient of –0.062 and a t value of –2.099. The probability of finding these numbers is .036 therefore we may reject the null hypothesis. The unstandardized coefficient of -0.062 concludes that for every one-unit increase in education, continuance commitment decrease by .062 units. This is an unusual finding because the bivariate correlation found no significant relationship between education and continuance commitment.

The null hypothesis suggests that career advancement and continuance commitment are independent. Career advancement is positively related to continuance commitment with an unstandardized coefficient of .429 and a t value of 3.798. The probability of finding these values is less than .000 therefore we may reject the null hypothesis. The unstandardized coefficient of .429 concludes that for every one-unit increase in career advancement, continuance commitment increases by .429 units. This is consistent with the findings of the bivariate correlation, which found a positive relationship between career advancement and continuance commitment.

The null hypothesis suggests that autonomy and continuance commitment are independent. Autonomy is positively related to continuance commitment with an unstandardized coefficient of .250 and a t value of 2.321. The probability of finding these numbers is .021 therefore we may reject the null hypothesis. The unstandardized coefficient of .250 concludes that for every one-unit increase in autonomy, continuance commitment increases by .250 units. The findings of the bivariate correlation supports this claim that autonomy is positively related to continuance commitment.

The null hypothesis is that job satisfaction and continuance commitment are independent. Job satisfaction is positively related with an unstandardized coefficient of .871 and a t value of 8.707. The probability of finding these values is less than .001 therefore we may reject the null hypothesis. The unstandardized coefficient of .871 concludes that for every one-unit increase in job satisfaction, continuance commitment increases by .871 units. This is consistent with the findings of the bivariate correlation, which suggests a positive relationship between job satisfaction and continuance commitment.

The null hypothesis suggests that self-employment and continuance commitment are independent. Self-employment is positively related with an unstandardized coefficient of .771 and a t value of 2.884. The probability of finding these values is .004 therefore we may reject the null hypothesis. The unstandardized coefficient of .771 concludes that for every move from a sample of all respondents not working for themselves to a sample of all self-employed, continuance commitment increases by .771 units. This is consistent with the findings of the bivariate correlation, which found a positive relationship between self-employment and continuance commitment.

The null hypothesis suggests that race and continuance commitment are independent. Race was dummy coded white. It is negatively related to continuance commitment with an unstandardized coefficient of –0.504 and a t value of –2.409. The probability of finding these values is .016 therefore we may reject the null hypothesis. The unstandardized coefficient of –0.504 concludes that for every move from a sample of all nonwhite respondents to a sample of all white respondents, continuance commitment decreases by .504 units. This is an unusual finding because the bivariate correlation found no significant relationship between race and continuance commitment.

Those variables that were not significantly related but were thought to be include earnings and hours worked. Earnings was found to be not significant even though the bivariate correlation suggests that it is positively related to continuance commitment. Earnings had an unstandardized coefficient of .171, t value of 1.233 and a significance of .218. Hours worked was found to be not significant even though the bivariate correlation suggests that it is positively related to continuance commitment. Hours worked had an unstandardized coefficient of .004, t value of .674 and significance of .501.

VII. Results

Table 4 summarizes the findings of the multivariate analysis by representing the slope of all significant variables. Education is an interesting variable because in the bivariate correlations, education is positively related to affective commitment, however, in the regression analyses it is negatively related to continuance commitment. The literature suggests that education is negatively related to commitment because highly educated workers are more likely to have values that differ from the organization and are more likely to leave an organization, as they have greater skills in the market (Lincoln and Kalleberg 1990:156). When all other variables are taken into consideration this hypothesis is correct. However, on it's own, education serves to increase affective commitment among workers.

In the bivariate correlations, career advancement was positively related to all three measures of commitment. In the regression analyses, it was positively related to affective commitment and continuance commitment, but not effort commitment. Career advancement has been generally thought to increase commitment (Lincoln and Kalleberg 1990:105). It would seem that employees that have advanced, would put more effort into their work and according to the bivariate correlation this is true. However, when taking the other variables into consideration, career advancement does not have a significant impact on effort commitment.

Autonomy was found to be positively related to all three measures of organizational commitment in both the bivariate correlations and the regression analyses.

As Lincoln and Kalleberg (1990) suggest, autonomy is one of the strongest indicators of organizational commitment and the results support this claim (p. 92).

Measurement of output was not found to be significant in any of the bivariate correlations. It was found to be negatively related to effort commitment in the regression analysis. Measurement of output, measures the ease to which a supervisor can oversee the output of the respondent. The regression analysis suggests that workers whose output is monitored put less effort into their work. These workers often have less autonomy making these finds consistent with those of Lincoln and Kalleberg (1990:92).

Earnings are often considered when a person is looking for employment. However, commitment researchers do not credit earnings to significantly impact commitment (Lincoln and Kalleberg 1990:100). The bivariate correlations show earnings to be positively related to all three measures of commitment. The regression analyses show earnings to not be significantly related to any of the measures. Clearly, on its own, earnings is an important factor in determining satisfaction. When taken into consideration with other variables, earnings has little effect.

Job satisfaction, like autonomy, was significant for all three measures of commitment for both the bivariate correlations and the regression analyses.   Job satisfaction is closely related to commitment and is considered a strong indicator of commitment (Lincoln and Kalleberg 1990:235). The results support this claim.

Self-employment was found to be positively related to all three measures of commitment in the bivariate correlations and positively related to affective commitment and continuance commitment but not effort commitment in the regression analyses. Self-employment is closely related to autonomy thus it is reasonable to assume that self-

employment would increase commitment (Lincoln and Kalleber 1990:92). However, it is unusual that self-employment would not significantly increase effort commitment. One would assume that if a person was self-employed they would exert greater effort to see their organization survive. The regression analysis suggests that taken into consideration with other variables this is not the case. It is also interesting to note that self-employment is not completely related to any of the commitment measures at either the bivariate or multivariate level. We would expect these variables would be completely correlated because logically commitment to the organization would equal commitment to ones self.

Gender is an unusual variable because the bivariate correlations found it to be negatively related to effort commitment and not significantly related to the other measures. In contrast, the regression analyses found gender to be positively related to affective commitment and not significantly related to either measure. The literature suggests that women are more likely to be committed to their organizations because they overcome more barriers to get where they are and the regression analysis for affective commitment supports this claim (Lincoln and Kalleberg 1990:154). However, the bivariate correlation suggests the opposite, that men are more committed to their organizations than women.

Race is also an unusual finding in that the bivariate correlation found it to be positively rated to affective commitment but not significantly related to the other measures. On the other hand, the regression analyses found race to be negatively related to continuance commitment and not significantly related to the other measures. Lincoln and Kalleberg (1990) suggest workers that overcome barriers to get where they are, are more likely to be committed (p. 154). The regression analysis for continuance

commitment supports this claim when it suggests that nonwhite workers are more likely to be behaviorally committed to their organization. However, the bivariate correlation for affective commitment contradicts this claim.

Hours worked was found to be positively related to all three measures of commitment in the bivariate correlations. It was not found to be significantly related to any of the measures in the regression analyses. Commitment theorists do not speculate that hours worked is a significant indicator of commitment and the regression analyses support this claim (Lincoln and Kalleberg 1990:100). However, the bivariate correlations suggest that on its own, hours worked can be a significantly related indictor to increase organizational commitment.

VIII. <u>Implications and Conclusions</u>

The study of organizational commitment has both practical and theoretical importance. This research is not only important to the employee and the organization, but also for researchers and society. As Mowday, et al (1982), note, "when a man or a woman goes to work for an organization, an exchange relationship is set up in which each party trades or exchanges something in return for receiving something of value from the other party" (p. 3). They also note that this exchange includes a number of factors, central to which is the employee's connection to the organization (p. 3). Membership in an organization provides many economic and psychological rewards for the individual and the more an individuals invests in the organization the greater his or her rewards.

The development of such linkages is often considered crucial for an organization to prevent absenteeism and turnover. However, Mowday, et al (1982), note a less obvious benefit in that individuals who are committed to an organization are more likely to internalize the organizations goals. They note, "if positive extra-role behavior can be generated by voluntary actions of the employee, rather than brought about through role prescriptions or reward system incentives, the "cost" to the organization is lowered" (p. 4). However, organizations who develop too strong of a link may have difficulty in dismissing unproductive workers and thus bringing in new employee's.

The subject of commitment linkages is important to scholars and researchers because it poses a number of empirical and conceptual questions (Mowday, Porter and Steers 1982:6). The area of commitment and those related to it, like absenteeism and turnover, provide ground for developing models of behavioral processes. In the area of

turnover alone, Mowday, et al (1982), note that over 1000 studies have been carried out (p. 7). While absenteeism and commitment have not reached this level, they have been the topic of many journal articles. Mowday, et al (1982), attest that these, "…topics represent concrete manifestations of *behavioral actions*, in the case of turnover and absenteeism, or *attitudes*, in the case of commitment, that are simultaneously interesting in their own right and potentially very important to organizations" (p. 7).

Commitment research is important for policy because society benefits from strong employee-employer linkages in that these linkages provide individuals with a source of belonging and identity. Societies with low commitment linkages would have organizations that simply do not work (Mowday, Porter and Steers 1982:5). Also, organizations with weak commitment are often less productive and if this occurs broadly throughout a number of organizations then the quality of products and services may decline. Where turnover and absenteeism is minimum and product quality and services is high, then society will be healthier and more competitive.

The conclusions of this study raise a number of questions that suggest further research. The findings that career advancement, autonomy and measurability of output relate to commitment indicate that the creation of job ladders and job flexibility will maximize commitment and thus minimize absenteeism and turnover. This has important policy implications for deterring trends that impact low production quality and competitiveness. However, the findings also suggest that characteristics like gender, race and education can determine commitment, though only in a limited capacity. This raises the question, does the results found between gender, race, education and commitment suggest policy implications for hiring? The findings suggest that women, nonwhite and

less educated workers are more likely to be committed. Does this suggests that employers should seek out nonwhite female employees with less education? Second, Also, are there features of organizational design that obstruct or facilitate females commitment to the organization? Additional research is necessary to understand this connection and to examine what the implications are for this finding.

There is also questions raised by the findings of self-employment. First, why isn't the association between commitment and self-employment higher than what was found? And why was it not related to effort commitment in the multivariate analysis? Being self-employed would suggest that the organization reflects the individual, thus the values should be the same and the individual ought to be willing to exert effort in order to see his or her organization succeed. Self-employment is not a typical variable found in a commitment study, but the findings suggest that additional research is needed to understand this phenomenon.

Table 1. Descriptive Statistics

Variable	Mean	Minimum	Maximum	Standard Deviation	Number
Dependent Variables					
Organizational Commitment					
- Affective Commitment	9.305	3	12	1.7781	869
- Effort Commitment	3.27	1	4	.656	895
- Continuance Commitment	7.804	3	12	2.1910	833
Job Performance					
- Quality	4.05	2	5	.787	892
- Quantity	3.80	1	5	.833	888

Variable	Mean	Minimum	Maximum	Standard Deviation	Number
Independent Variables					
Ability					
- Education	12.88	0	20	2.984	1510
- Career Advancement	2.55	1	4	.708	814
- Future Promotion	2.3255	1	4	1.18040	848
Task Characteristic					
- Autonomy	2.2286	1	4	.53265	886
- Measurability of Output	1.7502	1	4	.56907	1517
- (Log) Earnings	2.2917	.00	3.09	.73118	952
Work Characteristics					
- Job Satisfaction	3.2646	1	4	.79937	1149
- Self-Employed	3.16	0	1	2.466	1517
Individual Characteristics					
- Female	.5808	0	1	.49360	1517
- White	.8332	0	1	.37290	1517
- Hours Worked	40.21	0	89	14.931	911

Table 2. Correlations of Commitment on Explanatory Values

Replication		Affective Commitment	Effort Commitment	Continuance Commitment
Organizational Commitment				
Quantity	Pearson Correlation	.065	.177**	.049
	Sig (2-tailed)	.56	.000	.161
	N	856	881	823
Quality	Pearson Correlation	.068*	.105**	.015
	Sig (2-tailed)	.045	.002	.668
	N	860	884	827
Independent Variables				
Ability				
Education	Pearson Correlation	.070**	.026	-.057
	Sig (2-tailed)	.039	.434	.098
	N	867	893	831
Career Advancement	Pearson Correlation	.174**	.125**	.151**
	Sig (2-tailed)	.000	.000	.000
	N	785	806	756
Future Promotion	Pearson Correlation	-.032	-.009	-.028
	Sig (2-tailed)	.357	.789	.426
	N	819	841	786
Task Characteristics				
Autonomy	Pearson Correlation	.417**	.326**	.278**
	Sig (2-tailed)	.000	.000	.000
	N	851	876	818
Measurement of Output	Pearson Correlation	-.047	-.062	-.037
	Sig (2-tailed)	.166	.066	.288
	N	869	895	833
(Log) Earnings	Pearson Correlation	.106**	.158**	.116**
	Sig (2-tailed)	.002	.000	.001
	N	817	843	781
Other Work Characteristics				
Job Satisfaction	Pearson Correlation	.423**	.275**	.371**
	Sig (2-tailed)	.000	.000	.000
	N	867	893	831
Self-Employed	Pearson Correlation	.346**	.216**	.241**
	Sig (2-tailed)	.000	.000	.000
	N	868	894	832
Other Individual Characteristics				
Gender (1=Female)	Pearson Correlation	-.053	-.087**	-.054
	Sig (2-tailed)	.120	.009	.117
	N	869	895	833
Race (1=White)	Pearson Correlation	.086*	.021	-.016
	Sig (2-tailed)	.012	.522	.637
	N	869	895	833
Hours Worked	Pearson Correlation	.104**	.169**	.119**
	Sig (2-tailed)	.002	.000	.001
	N	869	895	833

** = Correlation is significant at the 0.01 level (2-tailed)
* = Correlation is significant at the 0.05 level (2-tailed)

Table 3. Regressions of Commitment on Explanatory Values

Independent Variables		Affective Commitment	Effort Commitment	Continuance Commitment
Ability				
Education	B	.013	.004	-.062*
	Std Error	.023	.009	.030
	Sig	.557	.627	.036
Career	B	.230**	.049	.429**
Advancement	Std Error	.085	.034	.113
	Sig	.007	.151	.000
Future Promotion	B	-.014	-.004	-.083
	Std Error	.051	.021	.068
	Sig	.783	.859	.221
Task Characteristics				
Autonomy	B	.497**	.169**	.250*
	Std Error	.083	.033	.108
	Sig	.000	.000	.021
Measurement	B	-.101	-.078**	-.019
of Output	Std Error	.075	.030	.100
	Sig	.180	.009	.848
(Log) Earnings	B	-.012	.044	.171
	Std Error	.105	.042	.138
	Sig	.908	.302	.218
Other work characteristics				
Job Satisfaction	B	.741**	.152**	.871**
	Std Error	.076	.030	.100
	Sig	.000	.000	.000
Self-employed	B	1.014**	.154	.771**
	Std Error	.204	.080	.267
	Sig	.000	.055	.004
Other individual characteristics				
Gender	B	.362**	.047	.179
(1= Female)	Std Error	.119	.047	.158
	Sig	.003	.322	.257
Race (1=White)	B	-.045	-.043	-.504*
	Std Error	.159	.063	.209
	Sig	.777	.496	.016
Hours Worked	B	.004	.003	.004
	Std Error	.005	.002	.006
	Sig	.375	.142	.501
Intercept		4.399	2.013	3.884
R^2		.292	.147	.200
R^2 (adjusted)		.281	.134	.187
Degrees of Freedom		699	716	672

Notes: $*p < .05$
$**p < .01$
Unstandardized coefficients (standard errors)

Figure 1.   Significant Variables and Slope

	Affective Commitment	Effort Commitment	Continuance Commitment
Education			-
Career Advancement	+		+
Future Promotion			
Autonomy	+	+	+
Measurement of Output		-	
(Log) Earnings			
Job Satisfaction	+	+	+
Self-employment	+		+
Gender (1= Female)	+		
Race (1= White)			-
Hours			

The independent variables used in the Kalleberg and Marsden study include:

Affective Commitment – Please tell me how much you agree or disagree with the following statements. Would you say that you strongly agree [=4], agree [=3]. Disagree [=2], or strongly disagree [=1]?

   (1) "I feel little loyalty to this organzation" [reflected].

   (2) "I feel that my values and the organization's values are very similar."

   (3) "I am proud to be working for this organization."

Effort commitment – Please tell me how much you agree or disagree with the following statements. Would you say that you strongly agree [=4], agree [=3]. Disagree [=2], or strongly disagree [=1]?

"I am willing to work harder than I have to in order to help this organization succeed."

Continuance Commitement - Please tell me how much you agree or disagree with the following statements. Would you say that you strongly agree [=4], agree [=3]. Disagree [=2], or strongly disagree [=1]?

   (1) "I would take almost any job to keep working for this organization."

   (2) "I would turn down another job for more pay in order to stay with this organization."

   (3) "All in all, how likely is it that you will try hard to find a job with another organization within the next 12 months?" Would you say that are not likely at all [=4], somewhat likely [=2.5], or very likely [=1].

Job Performance

Quality – "Compared to other people who do the same or similar kind of work that you do, how well would you say you do your job? Would you say much better [=5], somewhat better [=4], about the same [=3], somewhat worse [=2], or much worse [=1]?

Quantity – "Compared to other people who do the same or similar kind of work that you do, how much work would you say you do? Would you say much more [=5]. somewhat more [=4], about the same [=3], somewhat less [=2], or much less [=1]?

The independent variables used in the study include:

Education – Highest year of education completed.

Career advancement – Since your full full-time job with this organization, have you advanced rapidly [=4], made steady advances [=3], stayed at about the same level [=2], or lost some ground [=1]?

Future Promotion – In the next five years, how likely are you to be promoted? Would you say very likely [=4], likely [=3], not very likely [=2], or not at all likely [=1]?

Autonomy – A four-item scale, computed as the mean of items measuring the extent to which a respondent says that he or she: (1) can work independently; (2) has a lot of say over what happens to the job; (3) is allowed to take part in making decisions; and (4) is (not) closely supervised.

Measurability of output – A two-item scale, computed as the mean of two questions indicating the respondent's perception of how hard or easy it is for his / her supervisor to evaluate the quantity and quality of the work that is done by a person in a job like the respondent's. Scale ranges from 1 = very easy to 4 = very hard. Missing values on this variable were assigned the mean of the cases on which information was present.

Annual earnings (logged) – Natural logarithm of respondent's own income from employment in 1990, obtained by assigning midpoints (in thousands of dollars) to response categories offered.

Job Satisfaction – "On the whole, how satisfied are you with the work you do—would you say you are very satisfied [=4], moderately satisfied [=3], a little dissatisfied [=2], or very dissatisfied [=1].

Supervisor – In your main job, do you supervise or are you directly responsible for the work of other people? Yes [=1] or No [=0].

Note: The variable supervisor found in the Kalleberg and Marsden study was removed from this replication as the GSS variable used was found only in the 1989 database. The questions was not asked in 1992.

Self-employed – (Are/Were) you self employed or (do/did) you work for someone else? Self employed [=1] or someone else [=0].

Female – Respondents sex. Female [=1] or Male [=0].

White – What race do you consider yourself? White [=1] or nonwhite [=0].

Hours worked – Respondent's report of the number of hours worked in the week prior to the interview; a report of hours worked in a typical week was substituted if respondent was employed but was not at work in the prior week.

Variable descriptions

To begin the study, I reflected most of the dependent variables from their original

design from the GSS. The variables HELPORG, PROUDORG, SAMEVALS,

STAYORG, STAYORG1, STAYORG2, CHNGEORG, WRKMUCH and WRKWELL

were reflected so that the higher the organizational commitment and job satisfaction, the

greater the value. The variable NOTLOYAL did not need to be reflected. Once

reflected, I conducted frequency tables that included means and standard deviations. In

all cases except for CHNGEORG, I was able to replicate the values of the Kalleberg and

Marsden study. CHNGEORG showed a mean of 3.220 and standard deviation of 1.1344

whereas the mean from the Kalleberg and Marsden study was 3.12 and the standard

deviation was 1.21. After realizing the discrepancy between CHNGEORG, I compared

frequencies between the original variable and the reflected variable only to find that they

were in fact recoded correctly. The results of my correlation between QUALITY and

QUANTITY (.513) were consistent with those of the authors (.51).

After attempting to replicate the dependent variables, I created indexes for

affective commitment and continuance commitment. Once the indexes were created, I

ran regressions and correlations to determine the relations between dimensions of

organizational commitment and job performance. The correlations show an exact match

for EFFORT with QUALITY at .105 and QUANTITY at .177. The correlations were

close but not exact with the affective commitment and continuance commitment indexes.

In these tests the correlations and regressions showed significantly different findings

compared to the Kalleberg and Marsden study. My regressions had almost 70 more respondents in both categories (QUALITY and QUANTITY). This suggests that the authors selected for traits that were not expanded upon in their article. Therefore, I selected only those workers who answered full-time or part-time under WRKSTAT. In every combination the number of respondents was significantly higher than the authors.

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