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Perceptions of advancement opportunities as a barrier for women in management

Michelle Espeleta Balisi

PERCEPTIONS OF ADVANCEMENT OPPORTUNITIES

AS A BARRIER FOR WOMEN IN MANAGEMENT

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A Thesis

Presented to the

Faculty of

California State University,

San Bernardino

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In Partial Fulfillment

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Master of Science

in

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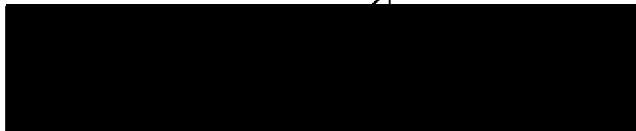
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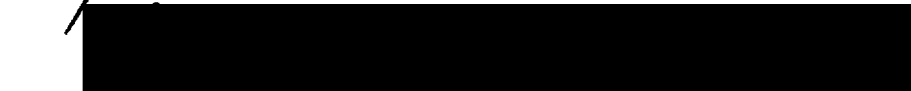_____

by

Michelle Espeleta Balisi

March 2012

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ABSTRACT

Previous research reveals that many women report that they left their organizations because advancement opportunities were scarce. In addition, statistics indicate that women are under-represented in upper-level organizational positions. With the small proportion of women represented in top organizational positions, it is evident that the glass ceiling remains, and that perception of advancement opportunities represents one possible explanation for its continued existence. Thus, in the present study, factors that may affect perceptions of advancement opportunities were examined. These include stereotype threat, gender role perceptions, procedural justice, and family-friendly policies. Results of the present study showed that stereotype threat and procedural justice both predicted perceptions of advancement opportunities. In addition, perceptions of advancement opportunities were found to mediate the relationship between procedural justice and organizational commitment. Practical implications and ideas for future research are discussed.

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CHAPTER ONE

INTRODUCTION

Statistics on women in management indicate that
women have advanced into higher positions within
organizations, but are still outnumbered by men. Although
the number of women who now enter management positions
illustrates a dramatic shift in occupations since the
late nineteenth century, statistics indicate that women
remain poorly represented at the managerial level as well
as higher-level positions in many fields (Soars, Cobb,
Lebow, Winsten, and Wojnas, 2011; Catalyst, 2011). For
example, in Catalysts' 2011 Statistical Overview of Women
in the Workplace, it was reported that in Fortune 500
companies, only 14.1% of the population who obtained
Executive Officer positions were women, while in 2009
only 13.5% of women held these positions (Catalyst,
2011). Despite this slight increase, women remain
underrepresented in high-status positions, and the gender
gap in senior leadership persists (Soars et al., 2011).

Many researchers once believed that professional
women would remain a small portion of the total female
work force (Kozlara, Moskow, & Tanner, 1987). However,

recent statistics suggests that this is not true for

women in the general work force, but remains accurate for

women in upper level management. The glass ceiling theory

is the idea that the existence of an invisible barrier

within an organization is responsible for hindering women

from obtaining impressive positions on the corporate

ladder (Davies-Netzley, 1998). Factors that have already

been found to significantly contribute to the

glass-ceiling phenomenon include gender stereotypes,

gender bias, and an absence of role models (Kozlara et

al., 1987; Mattis, 1995). Women are believed to be

deterred by these factors from attaining prestigious jobs

that are of comparable pay to that of their male

counterparts (Kozlara et al., 1987). However, other

factors may also contribute to the glass-ceiling problem.

Research indicates that work family conflict also

contributes to the slow advancement of women in

organizations. Results of a study conducted by

Davies-Netzley (1998) indicate that a major reason

contributing to the slow advancement of women in

organizations is that women simply do not have enough

time to balance work and family. As a result, many women

are forced to leave their jobs and take care of their

children instead. Although this argument explains a portion of the problem, not all women choose to prioritize family lives. Many of the women in the study also reported that they must put forth extra effort in order to be considered for top positions within their organization. Moreover, not only did they feel that they were required to put more effort into their work, they were less recognized for their efforts in comparison to men (Davies-Netzley, 1998).

What past research studies have shown is that there are many factors that contribute to the glass ceiling effect. Few studies however, have examined an individual's perceptions of advancement opportunities. One exception is a study conducted by Stroh, Bret, and Reilly (1996), which revealed that women reported limited advancement opportunities to be a major reason for leaving their current organization in search of an organization with more opportunities to advance. It is unclear however, as to what exactly contributed to their perceptions of limited advancement opportunities. According to Stroh et al. (1996), it is evident that perceptions of advancement opportunities affect an individual's commitment to an organization.

The present study is intended to examine factors that may influence a woman's perception of advancement opportunities. Specifically, individual and organizational factors will be examined. Individual factors stem from within an individual woman, while organizational factors stem from the environment in which a woman works. Individual factors, which result from personal influences, include stereotype threat and gender role perceptions. According to previous research, stereotype threat potentially results in negative consequences for women based upon their exposure to and experiences with gender stereotyping, such as reducing self esteem and work production (Steele & Aronson, 1995). Gender role perceptions may also influence perceptions of advancement opportunity through their impact on a woman's views about her gender and career (Crawford, 1978; Stroh et al., 1996). For instance, women with traditional gender role perceptions may not be interested in advancement opportunities versus women who have modern gender role perceptions.

It is also important however, to consider the environment in which perceptions of advancement opportunities are formed. Thus, organizational factors

such as family-friendly work policies and fairness of personnel practices should also be considered. Research indicates that family-friendly policies and fairness practices (e.g., Human Resources decisions) affect women because they address gender bias issues within organizations (Allen, 2001; Gilliland & Chan, 2002). For example, family-friendly policies have proven to alleviate the stresses of work-family conflict and role overload in women (Allen, 2001). In addition, perceptions of procedural justice have been related to positive organizational outcomes such as increased job performance and decreased organizational turnover (Gilliland & Chan, 2002).

One final note: Organizational commitment is often found to develop from organizational factors such as family-friendly work policies and perceived procedural justice (Mathieu & Zajac, 1990). As a result, organizational commitment has been found to increase or decrease depending on an individual's experience at a particular organization. Interestingly, organizational commitment has also been associated with perceptions of advancement opportunities (Stroh et al., 1996). Specifically, organizational commitment decreased when

women perceived that and her perceptions of advancement

opportunities for other advancement opportunities were

scarce within the organization. Following these findings,

the present study was designed to determine which factors

affect a woman's perceptions of her own opportunities to

advance within an organization (perceptions of personal

advancement opportunities), women within her organization

(perceptions of advancement opportunities for women in

general), as well as to determine whether or not these

perceptions will affect their commitment to an

organization.

CHAPTER TWO

LITERATURE REVIEW

Personal Factors

<u>Gender Stereotypes and Stereotype Threat</u>

One factor responsible for the scarce advancement opportunities for women in organizations is gender stereotypes. Stereotyping occurs when individuals categorize other individuals into social groups based on their characteristics (Heilman, 1995). According to Heilman (1995), social stereotypes are the most prominent element in organizational decision-making. They influence selection decisions as well as performance evaluations, and can result in negative consequences for women, including low self-esteem. For years, women have been characterized in ways that give others the impression that they are not as capable as men of tackling the corporate world. Women have been characterized as sensitive, warm, patient, understanding, passive, and nimble fingered, while men are characterized as adventuresome, confident, aggressive, rational, tough, and individualistic (Kozlara et al., 1987).

Stereotypic characteristics may deter women from advancing in organizations. Research indicates that many individuals, especially males, who are more likely to be in charge of promotions, do not attribute stereotypic female characteristics to managerial positions or positions of higher caliber (Eagly & Karau, 2002). This is important because research also shows that women who do not possess managerial characteristics such as assertiveness, a typical male characteristic, are not usually considered for high job positions (Eagly & Karau, 2002). This may be problematic for women in that gender stereotypes may have an impact on their careers (Dubno, 1985). For example, research conducted by Fottler and Bain (1980) indicates that as a result of experiencing gender stereotypes, women did not perceive themselves to be as competent as their male counterparts in male dominated fields such as math, science, and engineering, thus they did not aspire to fill positions in those areas (Fottler & Bain, 1980).

Many studies have found that gender stereotypes are persistent and still exist in organizations (Eagly & Karau, 2002). Further, Tabak (1997) noted that a substantial percentage of men within organizations have

negative attitudes toward women in management. This can greatly affect women's advancement into prestigious positions. As discussed by Eagly and Karau (2002), a phenomenon known as role incongruity is another potential obstacle for women's advancement within organizations. Because gender stereotypes persist, individuals have beliefs about how men and women should behave. For example, if a man believes that women should be traditional and behave according to stereotypical female characteristics, he may not be willing to consider a woman for a leadership position because that role would be incongruent with his views about what a conservative and traditional female should be. When expected social roles and behaviors are violated, the result is often discrimination. Also, according to Mattis (1995), Catalyst conducted a survey of CEOs and Human Resources professionals in order to identify barriers that keep women from advancing within corporations. Findings of the survey indicate that the main barrier was stereotypes and preconceptions about women's ability and suitability for a career in business. Evidence that shows that role incongruity leads to stereotype actuation, resulting in negative perceptions about women and their abilities

(Eagly, 1987; Mattis, 1995). As a consequence, career advancement opportunities may be limited for women.

Due to the persistence of gender stereotypes, women are susceptible to actually conforming to the stereotypes that they believe are held against them. This is known as stereotype threat. According to Steele and Aronson (1995), stereotype threat is the phenomenon in which an individual at risk of confirming a negative stereotype about their group experiences deficits in performance that lead to their "conformation" to the stereotype. In addition, some women may start to believe the stereotypes held against them are true, resulting in decreased work performance or reduced organizational commitment. Further, such perceptions may affirm a woman's belief that all women need to work harder than men in order to achieve the same accomplishments as men do (Davies-Netzley, 1998).

Not only do women feel pressure to disconfirm the stereotypes that are held against them, they must demonstrate that they possess the male characteristics that are ideal for management positions such as strength, sensibility, and effectiveness in order to be perceived as equally competent to their male counterparts (Prentice

& Carranza, 2002). Given the small number of women who are represented in higher positions within an organization, especially in technical fields that are dominated by men, stereotype threat is most apparent. In addition, research indicates that stereotype threat is most prominent in areas where women are the minority (Inzlicht & Ben-Zeev, 2000). Inzlicht and Ben-Zeev (2000) asserted that women will experience performance deficits when placed in situations in which they are the minority.

Research on stereotype threat indicates that women are likely to underperform in areas such as mathematics and science, and are less likely to enter fields in these areas (Brown & Pinel, 2003). For example, in a study conducted by Spence, Steele, and Quinn (1999), women who were aware of the stereotype associated with women and performance in fields such as mathematics and science did not perform as well as women who were not aware of the stereotypes. In the workplace, research findings indicate that such work performance differences may be due to the lack of feedback seeking. Roberson, Deitch, Brief, and Block (2003) found that when a woman experiences stereotype threat, she is less likely to seek feedback directly from their supervisors. Rather, individuals are

likely to seek feedback indirectly through observation of others, which is often less useful due to its ambiguity (Roberson et al., 2003), and may impact work related perceptions.

Today, women are considered to possess more male characteristics than in the past (Rodler, Kirchler, & Hoelzl, 2001). For instance, in addition to being more aggressive and assertive, Conway and Vartanian (2001) posit that women are now perceived as logical and ambitious. Though this can be perceived as a positive change, this is still problematic for women trying to achieve success by obtaining higher positions. For instance, Rodler et al. (2001) found that women who adopt masculine characteristics to fit in the work environment are penalized. Ideally, women need to display masculine characteristics in order to be perceived as an ideal candidate for top organizational positions. However, when women actually do possess those characteristics, they are vulnerable to facing conflicts and prone to receiving negative evaluations by their superiors as a result of role incongruity (Eagly & Karau, 2002).

Contrary to this finding, Powell, Butterfield, and Parent (2002) found that many characteristics of good

managing are those attributed to women. These include

exceptional communication and people skills, as well as

coaching. However, Rodler et al. (2001) assert that men

who adopt feminine characteristics into their leadership

styles are not penalized, suggesting stereotype

incongruity is a much greater problem for women than for

men.

Though gender stereotypes still exist, there is

evidence that they have changed. Though these changes may

be attributed to an increased rate of gender integration

in the workforce (Nesbit & Penn, 2000), this does not

guarantee equal and increased opportunities for women in

terms of advancement into higher positions. What the

discussion about gender stereotypes communicates is this

notion that they continue to exist and are used by

decision makers and by those who hold power within

organizations. As Powell et al. (2002) suggest,

stereotypes are utilized for the simplicity of the

perceiver. It is a tool used in making decisions,

consciously or not. Decision makers who use gender

stereotypes to finalize their decisions put women at a

disadvantage because they will not fulfill the decision

maker's description of what an ideal leader should

possess. They have a preconceived notion about what characteristics a leader should encompass. Usually, this entails possessing masculine characteristics. The presence of gender stereotypes in the workplace, reinforces their presence in the minds of organizational decision makers, and may affect women's perceptions of advancement opportunities negatively by facilitating experienced stereotype threat.

Gender Role Perceptions

In addition to experiencing stereotype threat at work, women can be faced with the struggle of either adhering to the traditional gender stereotypes that are attributed to them, or pursue careers that defy these gender stereotypes. Stroh et al. (1996) made an important distinction among working women. Results from their study suggest that there are career primary women and career family women. Career-primary women are primarily focused on their careers regardless of their marital or family status. Career-family women leave their jobs, and leave the breadwinning task to their husbands. An important distinction that should be noted in the characteristics of these women is their gender role perceptions. Career-family women believe that parenting is associated

with women, while careers are associated with men (Stroh et al.). A study conducted by Crawford (1978) found similar results. Crawford suggested that a woman's career choice can be influenced by their gender role perceptions. For example, she makes a distinction between traditional and non-traditional gender role perceptions. Women who have traditional gender role perceptions believe that women should attend to family responsibilities first, while non-traditional women believe that they should be treated equally to their male counterparts. Findings of Crawford's (1978) study suggested that women who have non-traditional gender role perceptions were more likely to strive for positions that are predominantly male including leadership positions (Crawford, 1978). However, women who hold traditional gender role perceptions were likely to fill positions that were thought to be more characteristic of women such as clerical, teaching, or nursing positions (Crawford, 1978).

For the present study, it will be important to determine how each woman perceives gender roles. According to Stroh et al. (1996), many working women left their organizations for career related concerns, rather

than family related issues. Specifically, women reported to leave their organizations because advancement opportunities were limited. These findings may possibly suggest that women who have non-traditional gender role perceptions are more likely to have higher perceptions of advancement opportunities because their focus is on their careers versus their families. Thus, their organizations will not have to invest in accommodating their familial needs, and will therefore be rewarded by aiding in their advancement within the organization. Conversely, women who have traditional gender role perceptions will have lower perceptions of advancement opportunities within their organizations because they may perceive that familial priorities are viewed as a hindrance by their organization.

Organizational Factors

Family-Friendly Work Policies

Because it has been reported that women leave their organizations due to limited advancement opportunities in search of organizations that provide more extensive advancement opportunities, organizations began to implement family-friendly work policies. Family-friendly

work policies have proved to alleviate stress in a working-woman's life such as work-family conflict, role overload, and exhaustion (Posig & Kickul, 2003). Work-family conflict is a problem that many working women face that deals with establishing a balance between work and family (Kinnunen & Mauno, 1998; Martins, Eddleston, & Veiga, 2002). In studying work family conflict, researchers have noted that women fulfill many roles. According to Gutek, Searle, and Klepa (2002), many working women reported they experienced high levels of work-family conflict because from wife to mother to a contributing bread winner, it is not unusual to experience role overload or role conflict. Role overload can be described as handling many responsibilities while trying to complete them in a short period of time, where as role conflict is described as a conflict of demands inflicted on an individual. Both potentially result in stress, anxiety, depression, and emotional exhaustion (Cooper, Dewe, & O'Driscoll, 2001; Posig & Kickul, 2003). Ultimately, this is problematic because not only will perceptions of advancement opportunities be negatively affected, but both role overload and role conflict are sources of stress that can lead to organizational

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consequences such as increased turnover (Cooper et al.; Killiath & Beck, 2001). In addition, negative outcomes such as job and life dissatisfaction were also reported by individuals, which may likely contribute to negative perceptions of advancement opportunities within an organization (Kossek & Ozeki, 1998).

One way that organizations have attempted to alleviate this problem is by implementing "family-friendly" work policies. This is a term used to describe organizational policies and programs that assist employees in allowing them to fulfill their everyday familial responsibilities (Scheible & Dex, 1998). For example, family friendly benefits may include leaves of absence, flexible work hours, or child care referrals (Allen, 2001). Empirical evidence notes that family-friendly organizational policies and programs may be responsible for positive outcomes in women's perceptions about the organization they belong to. For example, women are likely to choose an organization that promotes these policies (Galinsky, Bond, & Friedman 1996; Stroh et al., 1996), and many women who are career-family oriented are more likely to leave their organizations for organizations that envelope a family structure (Stroh et

al.). Moreover, Kossek and Ozeki (1998), and Allen (2001) found that employees who perceived their organization to be family-supportive by implementing family friendly policies experienced less work-family conflict, were more likely to be satisfied with their jobs, and were more committed to their jobs. Implementation of family-friendly work policies can also be attributed to reduced absenteeism, turnover, improved work attitudes, and a reduction in role strain (Warren & Johnson, 1995; Lobel, 1999).

Although implementation of these benefits has been proven to be useful to employees, the same results may not apply to individuals who hold high-level management positions. According to Baltes, Briggs, Huff, Wright, and Newman (1999), managers have positions that are already in less need of such policies because their positions are high in autonomy. There are additional inconsistencies in the literature in regards to the implementation of such policies. Empirical evidence also shows that differences in organizational commitment between those who utilized the policies and those who did not utilize the policies were not apparent in some organizations (Baltes et al., 1999). This suggests that perhaps implementation of these

policies may be more useful for some women than to others, indicating that the implementation of family-friendly work policies may have a limited influence on a woman's perceptions of advancement opportunities. Despite inconsistencies in the literature, and although family-friendly policies may be less important to some women, many women may actually find the existence of the policies to be helpful. Thus, if women perceive that an organization is willing to accommodate their employees by implementing family-friendly work policies, then this may lead to positive perceptions of advancement opportunities within the organization.

Fairness of Personnel Practices

Another organizational factor that may affect a woman's perceptions of advancement opportunity is organizational justice. Researchers have defined organizational justice as a way for employees to determine whether or not they are being treated fairly in their jobs (Moorman, 1991; Gilliland & Chan, 2002). Organizational justice has been shown to predict organizational citizenship behaviors, organizational commitment, and turnover (Moorman, 1991; Gilliland & Chan, 2002). Specifically, procedural justice, which

refers to the fairness of procedures used to determine outcomes, was found to predict organizational outcomes including organizational commitment, compliance and acceptance of work rules (Colquitt, 2001; Blader, 2003). Gilliland and Chan (2002) note key pieces of information that is particularly important for women to perceive procedural justice. A few include freedom to express voice during the evaluation procedure, the perception that procedures were consistently applied throughout the evaluation process, and the perception of a bias free evaluation. If these conditions are met, one is likely to perceive procedural justice. Notably, perceived fairness of performance appraisals has been linked to organizational commitment (Colquitt, 2001; Blader, 2003).

Previous research indicates that evaluation bias in organizations may be responsible for the limited advancement of women into higher positions (Maher, 1997; Davison & Burke, 2000; Baur & Baltes, 2002; Carli & Eagly, 2001). For example, unstructured evaluations can leave opportunity for bias to enter. Previous research was conducted to illustrate the existence of a phenomenon known as "pro-male bias" (Nieva & Gutek, 1980). This occurs when males are evaluated higher than females when

they have performed at the same level. In addition, bias is also likely to enter when subjective ratings are utilized, especially in high organizational positions when there is a high demand to base performance evaluations on inference alone (Nieva & Gutek, 1980).

Often, when conducting a performance appraisal for promotions, the individual responsible for making the final decision has limited knowledge of an employee's work performance. Thus, inferences, rather than information from a formal performance evaluation are utilized. Moreover, there is evidence that suggests that decisions made regarding performance or promotions are often made based on a lack of information (Davison & Burke, 2000). Carli and Eagly (2001) posit that women are perceived as less competent than men in organizations, especially when they are in leadership positions. As a result, biased decisions may be made and women may receive lower ratings on their performance evaluations. In addition, a self-fulfilling prophecy may lead evaluators to encourage behaviors based on their expectations (Heilman, 1995).

In addition, Maher (1997) asserts that women will be at a disadvantage when males are the ones who conduct

performance evaluations. It is believed that the presence

of stereotypes contribute to this occurrence. Empirical

evidence suggests that women were likely to be evaluated

negatively and less accurately especially under the

conditions that evaluators were men, and evaluators

already had their preconceived notions about what

characteristics a leader should possess (Baur & Baltes,

2002). In a study that examined performance evaluations

of women in military settings, findings show that

although women and men did not differ on objective

measures of performance, women were evaluated less

favorably in comparison to men upon completion of a

training program (Boldry, Wood, & Kashy, 2001).

Characteristics attributed to women simply do not fit the

ideal description of a leader or hard worker that is

attributed to men. Thus, evaluators who hold traditional

gender role perceptions of women are likely to attribute

characteristics of ineffectiveness and negative

performance to them (Bauer & Baltes, 2002). Moreover, as

a result of this bias, women are overlooked when

advancement opportunities are present (Maher, 1997).

These historic trends illustrate how the performance

appraisal process may be distorted through subjective

ratings, and may contribute to the perceptions of unfairness in the performance appraisal process. Therefore, examining perceptions of the evaluation process for this study is important.

In order to examine the link between perceptions of advancement opportunities and evaluation processes, procedural justice in performance appraisals will be measured. According to Greenberg (1986), the process of the performance appraisal was more influential on employees than the actual ratings that were given, indicating that employees are more concerned with the process (e.g. fairness) of the evaluation versus their ratings. In addition, Gilliland and Chan (2002) assert that an individual's perceptions of procedural justice of the performance appraisal is related to positive employee attitudes and employee behaviors such as organizational commitment and organizational citizenship behaviors. Individuals who perceived their performance appraisal process to be fair had increased organizational commitment and engaged in a greater number of organizational citizenship behaviors. In the present study, perceived procedural justice will be examined in order to determine its relationship to perceptions of

advancement opportunities. If women perceive their

performance evaluations to be procedurally just, then

perceptions of advancement opportunities will be high.

Perceptions of Advancement Opportunities and
Organizational Commitment

Previous research indicates that a number of factors

hinder women from moving into middle and upper management

positions (Stroh et al., 1996). Gender stereotypes,

gender role perceptions, work-family conflict, and

fairness perceptions have been proven to affect

organizational outcomes such as work performance, job

satisfaction, and organizational commitment (Stroh et

al., 1996; Davies-Netzley, 1998; Allen, 2001; Colquitt,

2001; Blader, 2003). These factors are among many that

lead women to resign from their organizations and search

for employment elsewhere, where advancement is perceived

to be quicker and easier to achieve (Davies-Netzley,

1998; Allen, 2001).

In a study conducted by Stroh et al. (1996), women

noted that they were leaving their organizations for

career related concerns instead of family reasons, as

once predicted. Findings of their study suggested that

women were dissatisfied with their opportunities to

advance within their organizations. Thus, it is important to determine which factors affect a woman's perceptions of advancement opportunities.

The present study examines perceptions of personal advancement opportunities and perceptions of advancement opportunities for women in general. Perceptions of personal advancement opportunities refers to the advancement opportunities a woman perceives for herself. Perceptions of advancement opportunities for women in general refers to the advancement opportunities a woman perceives for other women in her organization as a group. Women form perceptions about advancement opportunities not only as a result of organizational policies and procedures, but also as a result of their personal experiences and views associated with gender stereotyping and gender role perceptions. If a woman perceives that other woman are able to advance within the same organization, she might perceive that she is also able to advance within the organization. Therefore, examining perceptions of advancement opportunities on both the individual and group level should provide a more comprehensive understanding of how women perceive advancement opportunities in their organization.

Because perceptions of advancement opportunities has been linked to organizational commitment (Stroh et al., 1996), examining perceptions of advancement opportunities can be helpful in determining which factors affect a woman's level of commitment to her organization.

Organizational commitment can be defined as an individual's willingness to remain with an organization due to work related events (Allen & Meyer, 1990). Organizational commitment has been linked to organizational behaviors including level of performance, effort, punctuality, turnover, and absenteeism (Mathieu & Zajac, 1990; Allen & Meyer, 1990; Randall, 1990. An increase in organizational commitment is also believed to decrease lateness and turnover (Mathieu & Zajac, 1990). Aside from predicting performance, turnover, and absenteeism, understanding organizational commitment can prove to be beneficial for employees, organizations, and society. Increased organizational commitment may also be beneficial to employees in terms of compensation. At times, employees remain with an organization as a result of the benefits they receive. Thus, the longer an employee is committed to an organization, the better her benefits will be (Mathieu & Zajac, 1990).

Organizational commitment is comprised of three general themes: affective commitment, continuance commitment, and normative commitment (Mathieu & Zajac, 1990; Allen & Meyer, 1990; Randall, 1990). Affective commitment refers to an individual's affective orientation toward their commitment to an organization and is the result of work experiences (Allen & Meyer, 1990). Continuance commitment can be determined through an individual's recognition of costs and benefits associated with termination or commitment of an organization. It is also the result of investments made into an organization such as time, energy, and mastering job skills (Allen & Meyer, 1990). Normative commitment can be described as commitment to an organization because it is the morally right to do so and is a result of and individual's prior experiences upon entry into an organization such as socialization of family and culture (Allen & Meyer, 1990). In addition, the organization itself may also have influence over the experience of an individual (Allen & Meyer, 1990). Although they can be conceptualized as three separate and independent scales, together they make up what is known as general organizational commitment (Allen & Meyer, 1990). Because

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organizational commitment has proven to be an important individual outcome, it will also be examined in the present study as an outcome of perceived advancement opportunities.

Present Study

Empirical evidence illustrates that women still have a long journey ahead of them in order to be considered as equals to men. In fact, factors such as stereotype threat, gender role perceptions, implementation of family-friendly policies, and procedural justice exist because women exist in the work force. Moreover, those factors all have the potential to influence a woman's perceptions of advancement opportunities within an organization. Because women often report leaving their organizations for career-related reasons rather than family-related reasons (Stroh et al., 1996), and given the continued deficit of women in top management positions, it is important to examine women's perceptions of advancement opportunities.

Continuous research conducted on organizational commitment suggests that it is linked to various organizational outcomes such as absenteeism, turnover,

and other organizational behaviors (Allen & Meyer, 1990; Matheiu & Zajac, 1990). The present study will examine whether or not the experience of stereotype threat, a woman's gender role perceptions, the presence of family-friendly work policies in organizations, and a woman's perception of the fairness of personnel practices will predict their perceptions of advancement opportunities. Furthermore, perceptions of advancement opportunities will be examined to determine whether or not it mediates the relationship between the personal and organizational factors and organizational commitment. Consequently, the following hypotheses are proposed:

Hypothesis 1: Higher levels of perceived stereotype threat will be related to lower perceptions of advancement opportunities.

Hypothesis 2: Non-traditional gender role perceptions will be related to greater perceptions of advancement opportunity.

Hypothesis 3: Women who belong to organizations that have a higher number of family-friendly work policies will perceive greater advancement opportunities than women who belong to organizations that have fewer family-friendly work policies.

Hypothesis 4: Positive perceptions of procedural justice related to the performance appraisal process will lead to higher perceptions of advancement opportunities.

Hypothesis 5: The relationship between stereotype threat, gender role perceptions, family-friendly policies, and procedural justice and organizational commitment will be mediated by perceptions of advancement opportunities.

CHAPTER THREE

METHODOLOGY

Participants

Participants were working women, at least 18 years of age, who worked in an organization where there was opportunity for advancement. The present study included 113 participants which represents a moderate level of power, according to the Mackinnon (2004) power analysis for a meditational model. The majority of the sample was Hispanic (41%), followed by Caucasian (38%), Asian (11%), African-American (6%), other (4%), and Native American (2%). Twenty-two percent of the participants had completed high school, with 22% who possessed a 2-year degree, 30% possessed a 4-year degree, 8% obtained masters degrees, and 1% obtained doctoral degrees. One-half of the participants were single, 43% of the participants married, and 7% either divorced or widowed. One-half of the participants did not have children to tend to in the household, while 27% had one child, and 43% had two or more children in the household.

With regard to employment, 68% of participants indicated that they were at the "employee" level of their

organization, while 13% occupied managerial positions, and 12% occupied supervisory positions at their organization. The average number of hours spent at work was 37 hours, with a mode of 40 hours. In addition, 32% of participants reported to have been associated with their organization for less than one year, while 28% reported being with their organization for approximately one year, 21% for two years, and 19% for three or more years. Finally, in regards to the type of organization participants were associated with, 40% reported that their organization was a service related organization, 16% reported retail, 8% government, 5% manufacturing, and 28% reported other.

Procedures

Participants were recruited from Psychology classes at a mid-sized University in the southwest. They were also recruited from organizations within Riverside County, Orange County, and Los Angeles County. The duration of the survey was approximately 20 minutes, and participants were asked to complete the surveys at the school site or work site, or at home. Surveys were distributed to participants via a contact person who was designated to collect the surveys upon completion.

Participants were given one week to complete the survey, and all surveys were anonymous.

The procedure used for the present study was a paper and pencil survey consisting of 25 items aimed at measuring a woman's gender role attitudes (Attitudes Toward Women scale; Spence, Helmreich, & Stapp, 1973), 11 items that examine whether or not a woman experiences stereotypes threat in her work environment (Stereotype Vulnerability; Steele & Aronson, 1995; Steele, 1997; Spencer, Steele, & Quinn, 1999), 19 items examining the presence or absence of organizational work-family policies (Johnson, 1995), and 8 items examining perceived fairness during the performance appraisal process (Colquitt, 2001). Organizational commitment was measured using 24 items from the Organizational Commitment Scale (Allen & Meyer, 1990), and perception of advancement opportunities was measured using 14 items derived from the perceptions of career advancement scale (Heilman, Block, & Lucas, 1992; Stroh et al., 1996). Demographic questions were also included regarding participant age, job title, years of employment at current organization, and number of children.

Measures

Stereotype Threat

Stereotype threat was defined as the risk of conforming to a negative stereotype that is held about a certain group (Steele & Aronson, 1995). Steele and colleagues conducted research on racial minorities and gender minorities and examined stereotype threat. Stereotype vulnerability is the result of stereotype threat, and can be defined as the apprehension of reflecting the stereotypes held about a group (Steele & Aronson, 1995). Their results indicated that minorities experienced stereotype vulnerability when they were requested to perform based on their abilities. In addition, Steele and Aronson (1995) suggested that women are a minority and their performance, attitudes, and actions may be affected by stereotype threat and stereotype vulnerability.

Based on the work by Steele and Aronson (1995), Steele (1997), and Spencer, Steele, and Quinn (1999), 11 items were created by Walker and Agars (2004) in order to measure stereotype vulnerability. Items such as "I sometimes think that people in my organization will draw conclusions about females' abilities, based on my

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performance" were answered utilizing a Likert scale format with anchors of 1 = strongly disagree and 5 = strongly agree). A low value on the scale indicated low perceptions of stereotype vulnerability, and a high value indicated that a high degree of stereotype vulnerability was perceived. In the present study, the alpha reliability coefficient for this measure was .83.

Gender Role Perceptions

Gender role perceptions were defined as the extent to which a woman perceives herself to hold traditional gender role attitudes with conservative attitudes or modern gender role attitudes. This variable was measured using a 25-item short version of the Attitudes toward Women Scale (AWS-S) (Spence, Helmreich, & Stapp, 1973). Subjects were asked to record their answers using a Likert-type scale with anchors of 1 = agree strongly and 4 = disagree strongly. An example of an item on the AWS-S is "Swearing and obscenity are more repulsive in the speech of a woman than of a man." A low value on the scale indicates traditional gender role perceptions and a high value on the scale indicates modern gender role perceptions. In the present study, the alpha reliability coefficient for this scale was .71.

Family-Friendly Work Policies

In the present study, family friendly policies were defined as the number of family-friendly policies available within an organization. Subjects were required to indicate the existence or absence of such policies. Based on the work by Johnson (1995), a 19-item family friendly policy measure was created (Flye & Agars, 2002). Johnson (1995) found many benefits of implementing family-friendly policies such as increased staff availability, improved employee retention, reduced stress, and promotions of good work performance. If family friendly policies exist within a particular organization, subjects were required to mark which policies actually exist within their organization such as flextime, caregiver fairs, and work-family support groups. The scale was measured in an additive manner thus, values indicate the number of benefits known to be offered at the organization. In the present study, the alpha reliability coefficient for this scale was .79.

Procedural Justice

Procedural justice was defined as the extent to which a woman perceives her evaluation process to be conducted fairly. Procedural justice was measured using a

15-item scale created by Colquitt (2001) based on works by Greenberg (1986), Thibaut and Walker (1975), Leventhal (1980), and Bies and Moag (1986). This scale includes items that measured procedural and interpersonal justice. For example, an item that reflected procedural justice was "Has your performance evaluation upheld ethical and moral standards," while an item that measures interpersonal justice will be "Has your supervisor treated you in a polite manner?" All items were measured using a Likert-type scale with anchors of 1 = no extent and 5 = to a large extent. Greenberg (1986) used an importance rating scale to identify 5 procedural factors: (1) soliciting and using input prior to evaluation (2) two-way communication during the feedback interview (3) ability to challenge evaluation (4) rater familiarity with ratee's work (5) consistent application of standards. A low value on the scale indicates little or no perception of procedural justice in the performance appraisal process, and a high value indicates perceived procedural justice in the performance appraisal process. In the present study, the alpha reliability coefficient for this scale was .89.

Advancement Opportunities

Perceptions of advancement opportunities was operationalized at the individual and group levels. Specifically, perceptions of personal advancement opportunities and perceptions of advancement opportunities for women in the organization. Perceptions of personal advancement opportunities was defined as the extent to which a woman perceives advancement opportunities for herself within her organization. Three items from the Perception of Career Potential Scale (Heilman, Block, & Lucas, 1992), and seven items from the Career Opportunity Perception scale (Greenhaus & Parasuraman, 1993; Stroh, Brett, & Reilly, 1996) were utilized. Participants responded to these questions using 5-point Likert-type scale with anchors ranging from 1 = highly unlikely to 5 = highly likely, in order to indicate their perceived likelihood of advancement within their organization. Items included "How likely is it that you will reach a high position in this organization?" and "I will be promoted to a higher position sometime during my career with this company." A low value on the scale indicates the perception that it is unlikely to advance within the organization and a high value indicates the

perception that it is very likely to advance within the organization. The alpha reliability coefficient for this scale was .86

Perceptions of advancement opportunities for women in general was defined as the extent to which a women perceives advancement opportunities to be present for women, collectively, within her organization. Four Items were developed by the author and resulted in an alpha reliability of .76. An example of an item in this scale is "One of the reasons why women do not advance in this organization is due to the performance evaluation process," and was rated on a 5-point Likert scale with 1 = Highly unlikely and 5 = Highly likely.

Organizational Commitment .

Organizational commitment was measured using 24 items from the Organizational Commitment Questionnaire derived from Allen and Meyer (1990). This scale is comprised of three components of organizational commitment: affective, continuance, and normative. The affective component represents an individual's affective desire to remain at an organization. An item that represented affective commitment was "I really feel as if this organization's problems are my own." Alpha

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reliability for the affective commitment scale was .82. Continuance commitment is based on an individual's perception of the costs and benefits associated with remaining with the organization. An example of an item in this scale is "It wouldn't be too costly to leave my organization now." The alpha reliability for the continuance commitment scale is .58.

Normative commitment represents the obligation to commit to the organization because it is morally right to do so. An example of this item is "Jumping from organization to organization does not seem at all unethical to me (Allen & Meyer, 1990)." The alpha reliability for normative commitment scale was .64. All scales were combined and the overall commitment scale was utilized. These scales were Likert type scales that were based on a 7-point scale ranging from 1 = strongly disagree to 7 = strongly disagree. Low values on the scale indicate a low level of commitment to the organization and high values indicate a high level of commitment to the organization. The overall alpha reliability for the overall commitment scale was .76.

Demographic Variables

Demographic items were included at the end of the survey for descriptive purposes. These items included age, gender, ethnicity, highest degree obtained, marital status, number of children, hours worked per week, income, and perceived percentage of women who occupy management positions within their organization.

CHAPTER FOUR

RESULTS

Prior to conducting primary analyses, attitudes toward women, stereotype threat, procedural justice, family-friendly policies, perceptions of personal advancement opportunities, perceptions of advancement opportunities for women, and organizational commitment were examined though SPSS for violations of normality, accuracy of data entry, out of range values, missing data, univariate outliers, and multivariate outliers.

Normality of variables was examined by skewness and kurtosis values. Variables appeared normal, with the exception of Perceptions of advancement opportunities for women which was positively skewed. A successful logarithmic transformation was conducted. Family-friendly policies was also severely negatively skewed. Therefore, an inverse logarithmic transformation was applied. For all subsequent study analyses, the transformed variables were used. In order to determine the presence of out of range variables, frequencies were examined. No out of range values were detected. Univariate outliers were examined through z-scores, scatterplots, and histograms.

No univariate outliers were detected in the sample. Finally, multivariate outliers were examined using the Mahalanobis distance. No multivariate outliers were present. With a sample size of 113 working women, there were no out of range variables, univariate outliers, or multivariate outliers identified. See table 1 for means, standard deviations, and bivariate correlations of all study variables.

Table 1. Means, Standard Deviations, and Bivariate Correlations

Independent Variable	M	SD	1	2	3	4	5	6	7
1. Attitudes Toward Women	3.41	.29		.00	.16	.03	.07	-.03	-.15
2. Stereotype Threat	2.29	.71			-.11	-.07	-.13	.37**	.14
3. Procedural Justice	3.17	.92				.14	.31**	-.17	-.28
4. Family-Friendly Policies	8.35	3.58					.17	-.09	-.27
5. Individual Advancement Opportunities	2.89	1.04						-.07	-.49
6. Advancement Opportunities for Women (log)	.18	.18							.17
7. Organizational Commitment	3.76	.70							

**$p < .01$

Hierarchical-multiple regression analyses were conducted to test Hypotheses 1 through 4. Order of entry for variables in this study was determined by examining the individual outcomes then determining contextual outcomes. Hypothesis 1 predicts that higher levels of perceived stereotype threat will be related to lower perceptions of advancement opportunity. Table 2 illustrates that perceptions of advancement opportunities for women (log) are significantly predicted in Step 1 when attitudes toward women and stereotype threat are in the model [$F_{(2,108)} = 8.24$, $p < .05$]. With a standardized beta weight of .36, stereotype threat is a significant predictor of perceptions of advancement opportunities for women (log) in the first model.

In Step 2, the overall model, perceptions of advancement opportunities for women (log) are also significantly predicted when family-friendly work policies and procedural justice are included [$F_{(4,106)} = 4.77$, $p < .05$]. Examination of standardized beta weights show that stereotype threat is a significant predictor of perceptions of advancement opportunities for women (log) for the overall model with a beta value of .35. See Table 2.

Table 3 illustrates that perceptions of personal advancement opportunities is not significantly predicted in Step 1 when attitudes toward women and stereotype threat are included in the model [$F_{(2,108)} = 1.17$, $p > .05$]. The overall model in Table 3 also indicates that perceptions of personal advancement opportunities is significantly predicted when family-friendly work policies and procedural justice are included in the model [$F_{(4,16)} = 3.66$, $p < .05$]. However, with a standardized beta coefficient of -.10, stereotype threat is not a significant predictor of perceptions of personal advancement opportunities. These results partially support Hypothesis 1. Perceptions of advancement opportunity for women in general are significantly predicted by stereotype threat, but personal advancement opportunities is not.

Hypothesis 2 predicts that non-traditional gender role perceptions will be related to greater perceived advancement opportunities. Hierarchical-multiple regression results indicate that perceptions of advancement opportunities for women (log) is significantly predicted in Step 1, when attitudes toward women and stereotype threat are included in the model

[F(2,108) = 8.24, p < .05]. However, with a standardized beta coefficient of -.01, attitudes toward women is not a significant predictor of perceptions of advancement opportunity for women(log) in Step 1 (p > .05). See Table 2. In the overall model, when family-friendly work policies and procedural justice are included, perceptions of perceived advancement opportunity for women (log) is again predicted [F(4,106) = 4.77, p < .05]. However, attitudes toward women is not a significant predictor in the overall model with a standardized beta coefficient of .02.

Non-traditional gender role perceptions was also examined to determine its predictability of perceptions of personal advancement opportunities. Table 3 shows that when attitudes toward women and stereotype threat are included in Step 1, perceptions of personal advancement opportunity is not significantly predicted [F(2,108) = 1.17, p > .05]. In the overall model however, perceptions of personal advancement opportunities is predicted when family-friendly work policies and procedural justice are included [F(4,16) = 3.66, p < .05]. In Table 3, the overall model also indicates that attitudes toward women is not a significant

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predictor (p > .05) of perceptions of personal

advancement opportunities, with a standardized beta value

of .02 (p > .05). These results do not support hypothesis

2.

Table 2. Summary of Multiple Regression Analyses

Predicting Perceptions of Advancement Opportunities (log)

for Women

Independent Variables	B	SE B	β
Step 1			
Attitudes Toward Women	.00	.06	-.01
Stereotype Threat	.09	.02	.36*
Step 2			
Attitudes Toward Women	.01	.06	.02
Stereotype Threat	.09	.02	.35*
Family-friendly Work Policies	.00	.00	-.05
Procedural Justice	-.03	.02	-.13

*p < .05 Note: R^2 for Step 1 = .13, Overall R^2 = .15

Hypothesis 3 predicts that women who belong to

organizations that have a higher number of

family-friendly work policies will perceive more

advancement opportunities than women who belong to

organizations that have fewer family-family work

policies. Hierarchical-multiple regression results

indicate that in the overall model that included

attitudes toward women, stereotype threat,

family-friendly policies, and procedural justice,

perceptions of advancement opportunities for women(log)

was significantly predicted [$F(4,106) = 4.77$, $p < .05$].

However, with a standardized beta coefficient of -.05,

family-friendly work policies is not a significant

predictor ($p > .05$) of perceptions of advancement

opportunities for women (log) (See Table 2).

In table 3, the overall model including attitudes

toward women, stereotype threat, family-friendly

policies, and procedural justice significantly predicts

perceptions of personal advancement opportunities

[$F(4,16) = 3.66$, $p < .05$]. However, with a standardized

beta value of .13, family-friendly work policies is not a

significant predictor ($p > .05$) of perceptions of

personal advancement opportunity. Thus, these results do

not support hypothesis 3.

Hypothesis 4 proposed that strong perceptions of

procedural justice will lead to higher perceptions of

advancement opportunities, while weaker perceptions of

procedural justice will lead to lower perceptions of

advancement opportunities. Hierarchical-multiple

regression analyses illustrate that an overall model that

includes attitudes toward women, stereotype threat,

family-friendly policies, and procedural justice

significantly predicts perceptions of advancement

opportunities for women (log) [$F(4,106) = 4.77$, $p < .05$].

However, with a standardized beta value of $-.13$,

procedural justice alone does not significantly predict

($p > .05$) perceptions of advancement opportunities for

women (log) (See Table 2).

Hierarchical-multiple regression analyses also show

that in an overall model that includes attitudes toward

women, stereotype threat, family-friendly policies, and

procedural justice, perceptions of personal advancement

opportunities is significantly predicted [$F(4,16) = 3.66$,

$p < .05$], with 12% of the variance in personal

advancement opportunities accounted for by attitudes

toward women, stereotype threat, family-friendly

policies, and procedural justice. The model also

indicates that with a standardized beta value of .28,

procedural justice is a significant predictor ($p < .05$)

of perceptions of personal advancement opportunities,

(See Table 3). These results support hypothesis 4 in that

procedural justice predicts perceptions of advancement opportunities.

Table 3. Summary of Multiple Regression Analyses Predicting Perceptions of Personal Advancement Opportunities

Independent Variables	B	SE B	β
Step 1			
Attitudes Toward Women	.25	.35	.07
Stereotype Threat	-.19	.14	-.13
Step 2			
Attitudes Toward Women	.07	.34	.02
Stereotype Threat	-.13	.13	-.10
Family-friendly Work Policies*	.04	.03	.13
Procedural Justice	.32	.11	.28*

*$p < .05$ Note: R^2 for Step 1 = .02, Overall R^2 = .12

Hypothesis 5 proposes perceptions of advancement opportunities will mediate the relationship between the four antecedents (stereotype threat, gender role perceptions, family-friendly work policies, procedural justice) and organizational commitment. Steps taken in order to conduct a mediation analyses were used to test the relationship between individual and organizational factors to organizational commitment as mediated by

perceptions of advancement opportunity. A four step model developed by Baron and Kenny (1986) establishes the conditions necessary for a mediated model. In the first step, it is necessary to establish a relationship between independent (predictor) variables and dependent variables (criterion). In the present study, the relationships between individual factors and organizational commitment as well as organizational factors and organizational commitment were tested.

Results indicate that a model including stereotype threat, attitudes toward women, family-friendly work policies, and procedural justice significantly predicts organizational commitment [$F(4,106) = 4.72$, $p < .05$]. Beta coefficients were examined in order to determine significant predictors of organizational commitment. With standardized beta coefficients of -.22 and -.22 respectively, results show that family-friendly work policies and procedural justice are significant predictors of organizational commitment [$F(4,106) = 4.72$, $p < .05$], with 15.1% of the variance in organizational commitment accounted for (See table 4). Neither of the personal factors (stereotype threat and gender role perceptions) were significant.

Table 4. Step 1 of Mediation Analysis: Independent
Variables Predicting Organizational Commitment

Independent Variables	B	SE B	β
Step 1			
Attitudes Toward Women	-.34	.23	-.15
Stereotype Threat	.14	.09	.14
Step 2			
Attitudes Toward Women	-.26	.22	-.11
Stereotype Threat	.10	.09	.10
Procedural Justice	-.17	.07	-.22*
Family-friendly Work Policies*	-.04	.02	-.22

*p < .05, Note: R2 for Step 1 = .04, Overall R2 = .15

The second step of Baron and Kenny's (1986) model
proposes that a relationship between the predictor
variables and the mediator variable must be established.
For the present study, individual factors and
organizational factors must significantly predict
perceptions of personal advancement opportunity as well
as perceptions of advancement opportunity for women.
Results indicate that in a model that includes stereotype
threat, attitudes toward women, family-friendly policies,
and procedural justice, perceptions of advancement
opportunities for women is significantly predicted
[F(4,106) = 4.77, p < .05]. Beta coefficients were

examined in order to determine which variables significantly predicted perceptions of advancement opportunities for women. Results show that stereotype threat was the only variable that significantly predicted perceptions of advancement opportunities for women, with a standardized beta coefficient of .35 $[F(4,106) = 4.77, p < .05]$, with 15% of the variance in perceptions of advancement opportunities for women accounted for (See Table 5).

Table 5. Step 2 of Mediation Analysis: Independent Variables Predicting Perceptions of Advancement Opportunities for Women (log)

Independent Variables	B	SE B	β
Step 1			
Attitudes Toward Women	.00	.06	-.01
Stereotype Threat	.09	.02	.36*
Step 2			
Attitudes Toward Women	.01	.06	.02
Stereotype Threat	.09	.02	.35*
Procedural Justice	-.03	.02	-.13
Family-friendly Work Policies	.00	.00	-.05

*p < .05, Note: R2 for Step 1 = .13, Overall R2 = .15

In a model that assesses the relationship between predictor variables and perceptions of personal advancement opportunities, results indicate that stereotype threat, attitudes toward women, family-friendly work policies, and procedural justice are significant predictors of that criterion [$F(4,106) = 3.66$, $p < .05$]. Beta coefficients were examined in order to determine significant predictors of perceptions of advancement opportunities for women. With a standardized beta coefficient of .28, results indicate that procedural justice significantly predicts perceptions of personal advancement opportunities, with 12% of the variance in perceptions of personal advancement opportunity accounted for by procedural justice, (See Table 6).

Table 6. Step 2 of Mediation Analysis: Independent

Variables Predicting Personal Advancement Opportunities

Independent Variables	B	SE B	β
Step 1			
Attitudes Toward Women	.25	.35	.07
Stereotype Threat	-.19	.14	-.13
Step 2			
Attitudes Toward Women	.07	.34	.02
Stereotype Threat	-.13	.13	-.09
Family-friendly Work Policies	.04	.03	.13
Procedural Justice	.32	.11	.28*

*$p < .05$ Note: Step 1 $R2 = .02$, Overall $R2 = .12$

The third step of Baron and Kenny's (1986) model suggests that a relationship between the mediated variable and the outcome must be established. Multiple regression analyses were conducted between the mediator variables (perceptions of advancement opportunities for women and perceptions of individual advancement opportunities) and the criterion (organizational commitment). Results indicate that with a standardized beta coefficient of .08, perceptions of advancement opportunities for women does not significantly predict organizational commitment ($p > .05$). Thus, the variable does not serve as a mediator. However, perceptions of

personal advancement opportunity significantly predicts organizational commitment $[F(6,104) = 7.84, p < .05]$. In Table 7, Step 3 of Barron and Kenny's Mediation analysis (1998), the overall model indicates that procedural justice has a standardized beta value of -.09. There is a substantial decrease in the standardized beta value for procedural justice from Step 1 of the mediation analysis which provides evidence for the mediation between procedural justice and organizational commitment. Beta coefficients also indicate a possible partial mediation of perceptions of personal advancement opportunities between Family-Friendly Policies and Organizational Commitment. The standardized beta coefficient for family-friendly work policies was -.17 in step 1, resulting in a significant relationship between family-friendly policies and organizational commitment. A Sobel test was conducted to test this possible partial mediation.

Sobel Test

The purpose of performing a Sobel test of mediation is to determine whether or not a proposed mediator variable significantly influences the relationship

between predictor and criterion variables (Baron and Kenny, 1986). Because initial statistical evidence suggests that perceptions of personal advancement opportunities may partially mediate the relationship between family-friendly work policies and organizational commitment, a Sobel test was conducted utilizing the following formula:

$$Z = \frac{ab}{\sqrt{\left(b^2 * S_a{}^2 + a^2 * s_b{}^2\right)}}$$

Where:

a = unstandardized Beta value associated with independent variable and mediator (step 1)

b = unstandardized Beta value associated with mediator and dependent variable (step 2)

S_a = standard error associated with Step 1

S_b = standard error associated with Step 2

Partial mediation will exist and be significant at the .05 level if the Z value exceeds 1.96. For this study, an interactive calculation tool was obtained via Internet (Preacher & Leonardelli, 2004). Results from the Sobel test indicate that with a Z-score of -1.31 and a significance level of p > .05, perceptions of personal advancement opportunities does not partially mediate the

relationship between family-friendly work policies and organizational commitment. Therefore, there is a significant direct relationship between family-friendly policies and organizational commitment, (See Table 8). An additional Sobel test was conducted to ensure that the relationship between family-friendly work policies and organizational commitment was not partially mediated by perceptions of advancement opportunities for women. With a Z score of -.45 and a significance level of p > .05, perceptions of advancement opportunities for women did not mediate the relationship between family-friendly work policies and organizational commitment (See Table 9).

Table 7. Step 3 of Mediation Analysis: Independent

Variables Predicting Organizational Commitment

Independent Variable	B	SE B	β
Step 1			
Opportunities for Women	-.33	.06	-.49*
Personal Advancement (log)	.50	.33	.13
Step 2			
Opportunities for Women	-.32	.06	-.47*
Personal Advancement (log)	.45	.36	.11
Attitudes Toward Women	-.28	.20	-.12
Stereotype Threat	.40	.08	.04
Step 3			
Opportunities for Women	-.28	.06	-.42*
Personal Advancement (log)	.35	.35	.09
Attitudes Toward Women	-.25	.20	-.10
Stereotype Threat	.03	.90	.04
Procedural Justice	-.07	.07	-.09
Family-Friendly Work Policies	-.03	.02	-.17*

*$p < .05$ Note: Step 1 R^2 = .26, Step 2 R^2 = .28, Overall
R^2 = .31

Table 8. Sobel Test for Perceptions of Personal

Advancement Opportunities

Input	Test Statistic (Z)	p-value
$a = .04$	−1.31	0.19
$b = -.28$		
$S_a = .03$		
$S_b = .36$		

Table 9. Sobel Test for Perceptions of Advancement

Opportunities for Women

Input	Test Statistic (Z)	p-value
$a = -.00$	−0.45	0.65
$b = .35$		
$S_a = .00$		
$S_b = .35$		

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Discussion

The purpose of the present study was to examine the influence of individual factors and organizational factors on a woman's perceptions of advancement opportunities within an organization, and to test whether or not perceptions of advancement opportunities explain the relationships between individual and organizational factors, and organizational commitment. What we found was that stereotype threat and procedural justice predicted perceptions of advancement opportunities. However, no effect was found for gender role perceptions or family-friendly work policies. In addition, it was found that perceptions of advancement opportunities mediate the relationship between procedural justice and organizational commitment, but not the relationship between family-friendly work policies and organizational commitment.

First, the overall model suggests that perceptions of advancement opportunities play a role in a woman's commitment to an organization. Specifically, perceptions

of personal advancement opportunities mediated the relationship between procedural justice, an organization factor, and organizational commitment. Not only do we know that the perception of procedural justice is linked to commitment, but evidence suggests that the relationship is determined by whether or not a woman perceives that she can move up in her organization. As Greenberg (1986) suggested, the performance appraisal process itself may be more important than the actual ratings of an evaluation that is given to an employee. The present results are consistent in that woman who perceived that those in their organization who conducted the appraisal process fairly, also perceived they have a higher chance of advancing within the organization. Thus, organizational commitment is increased.

Next, the present study indicates that both individual and organizational factors predict perceptions of advancement opportunities. The first hypothesis was partially supported. Stereotype threat was a factor that predicted perceptions of advancement opportunities for women in general, but did not predict perceptions of personal advancement opportunities. This is somewhat surprising because previous research shows that effects

of stereotype threat will most likely affect perceptions
of personal advancement opportunities and may even lead
to decreased negative outcomes such as reduced work
performance (Steele & Aronson, 1995). One explanation for
the finding that stereotype threat predicts perceptions
of advancement opportunities for women in general, but
not perceptions of personal advancement opportunities,
may be the presence of negative attitudes toward women at
work. According to Fottler and Bain (1980), career
development is impacted by experiencing gender
stereotypes at work. Specifically, women often believe
they are less competent in relation to their male
counterparts. Thus, beliefs that women as a group, need
to work harder to achieve what men achieve at work,
including the most coveted positions within an
organization, may persist. Another reason why perceptions
of advancement opportunities for women in general are
affected, but not perceptions of personal advancement
opportunities may be related to findings supported by
research conducted by Keller and Dauenheimer (2003).
Their study indicates that females who were concerned
about excelling in math while identifying themselves with
the stereotype that females do not excel in math, were

affected by stereotype threat. Thus, when this finding is related to findings of the present study, it can be argued that stereotype threat affects perceptions of advancement opportunities for women in general because on a personal level, a woman would have to believe the stereotype is indeed true for her group or for herself, as well as have a concern for advancement opportunities within her organization. This finding suggests that not only do women internalize stereotypes about their gender on an individual level, they also recognize that stereotypes are a hindrance to their gender as a whole. Importantly, the present study demonstrates that when a woman experiences stereotype threat, she perceives that other women in the context will experience hardships in advancing within an organization.

Importantly, the present study reveals that stereotype threat can affect perceptions of advancement opportunity which in turn, may hinder women from pursuing job or career advancement opportunities within their organization. According to Roberson et al. (2003), stereotype threat is related to whether or not women pursue career advancement opportunities. Their findings, which are supported in the present study, indicate that

pursuing career advancement opportunities are also linked

to feedback seeking behavior. Thus, women who experience

stereotype threat are not likely to seek feedback from

their supervisors or co-workers. If women seek feedback,

then they are likely to seek indirect feedback from

observation or from their peers versus direct feedback

from their supervisors. Relying on indirect feedback can

prove to be detrimental to a woman's career because they

are likely to obtain inaccurate information about their

job performance as opposed to when information is

obtained directly from the source (Roberson et al, 2003).

Although feedback seeking behavior is not examined in the

present study, it represents one plausible explanatory

mechanism for the findings. Thus, if stereotype threat is

decreased in the work environment, feedback seeking

behavior can increase, as well as perceptions of personal

advancement opportunities, both of which are likely to

increase actual advancement.

Findings on each organizational factor have

important implications. First, the presence of

family-friendly work policies within an organization did

not have a significant effect on perceptions of personal

advancement opportunities, nor did they have a

significant effect on perceptions of advancement

opportunities for women in general. However, the presence

of family-friendly work policies within organizations did

predict organizational commitment. Previous literature

conducted on family-friendly work policies suggest that

when these policies are implemented in an organization,

women have a sense of importance and value to the

organization, as well as the mentality that advancement

opportunities are present (Stroh et al., 1996). What this

finding suggests is that implementing family-friendly

work policies within an organization is important because

they relieve women of their daily stresses in relation to

work and family, which affect women in a positive way.

Women are able to balance their daily struggles in

relation to work and family and this proves to increase

their commitment to an organization (Warren & Johnson,

1995; Kossek & Ozeki, 1998; Lobel, 1999; Allen, 2001).

Conversely, though implementation of family-friendly work

policies determines organizational commitment, they may

not be so important in terms of advancement

opportunities.

One reason why family-friendly work policies may not

predict perceptions of advancement opportunities can be a

direct result of unsupportive supervisors or managers.
Although not examined in this particular study, it should
be noted that Grandey (2001), Allen (2001), and Schwartz
(1996) found that key pieces to successfully implementing
family-friendly work policies in an organization include
family supportive organizations and family supportive
supervisors. They found that without family supportive
organizations and supervisors, women may be unaware of
the benefits available to them and they may even be
afraid to utilize the policies available to them
(Schwartz, 1996). In a study conducted by Shaffer,
Joplin, Fancesco, and Lau, women believed that though
they belonged to an organization that had family-friendly
work policies, they did not believe that they were able
to advance within their organization because their
supervisors were unsupportive of the policies (Poelmans,
2005). Their findings indicate that women described
supportive bosses as female, married, and family
oriented. Therefore, if her boss was perceived as
supportive, then she may perceive career advancement as a
possibility (Poelmans, 2005).

Poelmans and De Waal-Andrews found similar results
(Poelmans, 2005). They found that after Proctor and

Gamble incorporated new flex work arrangements such as part-time work and leaves of absences in 1991, the Fortune 500 American Multinational Corporation was sure to retain more women and that those women would reach higher positions within the organization. However, a turnover study revealed that two out of every three employees who left the organization were women that the company valued. Researchers also found that the women who quit the organization left and took high profile positions and high stress jobs (Poelmans, 2005). Importantly, the study revealed that having the flexible work arrangements was not enough, and that women who were able to move upward within an organization had supervisors and managers who considered and accepted the family-friendly work policies while those who were not able to advance within their organizations did not have supervisors who supported the policies. Additionally, women who provided this information happened to be working in male dominated environments (Poelmans, 2005). To further illustrate these findings, research conducted by Mattis (1995) shows that a woman's perceptions about the culture and environment in an organization might affect their perceptions of advancement. Women who worked

in male dominated fields (e.g. engineering) believed that not only do they have to prove that they could do the work, but that they also had to re-establish their credibility by trying to obtain more work assignments in order to be considered for promotions (Mattis, 1995). Thus, women may believe that taking advantage of family-friendly work policies within organization that provide them, may hinder them from perceiving that advancement opportunities are actually present.

Procedural justice in the performance appraisal process, another organizational factor, had a significant effect on perceptions of personal advancement opportunities, but not on perceptions of advancement opportunities for women in general. Greenberg (1986) concluded that employees take the evaluation process seriously because it is a determinant of their role in their organization. What Greenberg's (1986) findings illustrate is that the evaluation process can influence organizational outcomes such as commitment at the individual level. Moreover, the evaluation process has also been found to lead to positive employee outcomes at the individual level such as increased employee morale, increased job satisfaction, and increased job commitment

(Greenberg, 1986). In addition to this literature, the present study affirms that procedural justice in the performance appraisal process plays an important role in affecting a woman's perceptions of advancement opportunities for herself, but not for a woman's perceptions of advancement opportunities for women in general.

One explanation for why procedural justice in the performance appraisal process might play an important role in affecting a woman's perceptions of advancement opportunities for herself but not her perceptions of advancement opportunities for women is that research findings suggest that employees place great value on procedural fairness (Leventhal, 1980). According to Leventhal (1980), individuals desire fairness procedures, even though specific outcomes are affected. Importantly, Lind and Tyler (1988) found that when an individual perceives that performance appraisal procedures are fair, their self esteem increases, and the individual feels like a valued member of their organization. In addition, they assert that individuals value fair procedures because it gives the individual a sense of identity. Thus, a woman's perceptions of personal advancement

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opportunities may be affected, rather than their

perceptions of advancement opportunities for women in

general because procedural justice affects an employee on

a personal level. Specifically, a woman may perceive

fairness procedures during the performance appraisal

process for herself, therefore affecting perceptions of

personal advancement opportunities. However, a woman may

not perceive that other women within her organization

have the same perceptions of fairness during their

performance appraisal process thus, her perceptions of

advancement opportunities for women in general remain

unaffected.

The findings in the present study confirm that

individual factors such as the presence of stereotype

threat in an organization, and an organizational factor

such as perceived procedural justice used in the

performance appraisal process predicts an individual's

overall commitment to their organization. Importantly,

the present study found that perceptions of personal

advancement opportunities explains the relationship

between an organizational factor, procedural justice and

organizational commitment, suggesting that a woman's

commitment to her organization is likely to increase if

she perceives that procedural justice is present in the performance appraisal process within the organization to which she belongs.

Implications and Future Research

The present study offers a number of practical and empirical implications. First, a mediated relationship was found between procedural justice and organizational commitment by perceptions of personal advancement opportunities. This implies that perceptions of personal advancement opportunities explains the relationship between procedural justice and organizational commitment, in that, when a woman perceives the presence of procedural justice in the performance appraisal process, then she is more likely to stay with her organization. Because perceptions of advancement opportunities was examined as a mediator in the present study, future research can be focused on perceptions of advancement opportunities as a predictor or as an outcome tied to other gender-related phenomena. For example, research conducted by Clay-Warner, Reynold, and Roman (2005) found that procedural justice was a strong predictor of job satisfaction. The present study focused on whether or not

procedural justice affected perceptions of advancement

opportunities. Since procedural justice is linked to

perceptions of advancement opportunities, it might be

interesting to see whether or not perceptions of

advancement opportunities is also related to job

satisfaction. Limited research has been conducted on

perceptions of advancement opportunities, and more

research on the topic will be beneficial to

organizations.

Next, results from the present study reveal two

factors that affect perceptions of advancement

opportunities. First, stereotype threat, an individual,

factor, predicted perceptions of advancement

opportunities for women in general. This implies that

gender stereotypes still exist in organizations, and

impact individual perceptions. Thus, if the factors that

lead to stereotype threat can be found and diminished,

then perceptions of advancement opportunities will

decrease. As noted by Keller and Dauenheimer (2003), when

a stereotype about an expected performance is made

salient, an individual feels threatened by that

stereotype and may perform poorly. Previous research

conducted on stereotype threat revealed results driven

from classroom or learning environments. The present study attempted to examine stereotype threat in individuals from an actual working environment. Since limited research on stereotype threat was conducted in organizations, future research should continue to focus on investigating what actually causes stereotype threat in organizations. Specifically, stereotype threat research can be conducted on women in male dominated fields including areas such as business or engineering in both private and public sector organizations in order to determine if the same effects arise from organizational settings as they did in classroom settings. Moreover, it is possible that women in one type of organization (private vs. public) or industry might experience more stereotype threat or a higher level of procedural justice than the other. What's more, according to Catalyst's 2006 census of women corporate officers and top earners, 49% of the total workforce in corporate officer positions in industries such as finance, insurance, and services are comprised of women. Goodman, Fields, and Blum (2003) found that women who were in top management positions were likely to be in the non-manufacturing organizations versus manufacturing organizations. Thus, if future

research focused on a comparison between different industries, perhaps women would also report to have experienced different levels of stereotype threat in addition to finding differences or similarities of the causes of stereotype threat in organizations.

Procedural justice, an organizational factor, predicted perceptions of personal advancement opportunities. The practical implication of this finding is that if women perceive the performance appraisal system to be fair, then they are likely to perceive that there is more opportunity to advance within their organization. Thus, it would be beneficial for organizations to implement an evaluation system that exerts fairness such as allowing employees to express their opinions, as well as offering and receiving feedback (Greenberg, 1986). Because a specific type of justice was chosen for the present study, it may be interesting to examine whether or not other types of justice such as distributive or interactional justice will have the same effect on perceptions of advancement opportunities.

Distributive justice has been defined as one's perception of fairness as a result of a direct outcome

(Colquitt, 2001). If two individuals, one male and the other female, both compete for a promotional opportunity within an organization, and the male is chosen for the position, the outcome may or may not affect her perceptions of advancement opportunity more than it would as a result of perceiving a performance evaluation as fair. Interactional justice can be defined as one's perception of fairness as a result of the amount of information provided to her in relation to a decision that was made (Colquitt, 2001). For example, if the female who was not selected for the promotional position perceived she was provided with an adequate amount of information regarding the decision that was made, the result may positively affect her perceptions of advancement opportunities. Thus, she might perceive higher chances of advancement. However, if she perceived that an inadequate amount of information was provided to her in regards to the decision that was made, this might negatively impact her perceptions of advancement opportunities and she may perceive very low chances of advancement opportunities within the organization. Fairness plays an important role in affecting a woman's perceptions of advancement opportunities. Thus,

organizations should focus on how to improve fairness by focusing on providing women with feedback so that they may have an opportunity to grow professionally by improving on any shortcomings they may possess.

Finally, the present study also revealed two null findings involving gender role perceptions, an individual factor, and family-friendly policies, an organizational factor. Neither variables predicted perceptions of personal advancement opportunities, or perceptions of advancement opportunities for women. This finding implies that a woman's gender role perception of herself, whether traditional or non-traditional, as well as the implementation of family-friendly work policies in an organization may not affect whether or not she will perceive advancement opportunities for herself or for women in general within her organization. One possible explanation for the null finding between gender role perceptions and perceptions of advancement opportunities, is that regardless of how women are distinguished (e.g. career-primary versus career-family oriented, or traditional versus non-traditional), both type of women may still have the same aspirations of advancing within their organizations. As a result, future research can

examine whether or not career-primary, career-family, traditional, or non-traditional women do have the same aspirations to advance within their organization. In addition, future research can examine what factors affect their organizational commitment.

The present study also reveals that the implementation of family-friendly work policies in organizations is related to commitment, perhaps because they are helpful in the day to day lives of women, but has no affect on perceptions of advancement opportunities. Family-friendly work policies do offer alleviation of daily stresses for women such as balancing work and family life (Stroh et al., 1986). Although women may find these policies to be useful, they may not be seen as linked to career advancement. Previous research indicates that many women are unaware of the policies or choose not to utilize them due to unsupportive organizations or unsupportive supervisors. Although not examined in the present study, such perceptions may have a negative effect on perceptions of advancement opportunities (Schwartz, 1996). Underutilization of these policies may also lead to additional stress on the job. Thus, research should be conducted in order to explore

whether or not educating supervisors to be
family-supportive will have a positive effect on the
utilization of family-friendly work policies by women in
organizations.

Limitations

Several factors may have limited the
generalizability of the present study. Importantly, these
factors may have affected perceptions of advancement
opportunities. For instance, the sample gathered for this
study ranged in ages between 19 and 60 years. The mean
age was 32 years with a mode of 22 years. Because the
most frequent age reported was 22 years, many of these
participants may have been at the beginning of their
careers. Therefore, they may not have been as concerned
with advancement opportunities at that point in time. In
addition, much of the sample was recruited from a
four-year university, indicating that many of the
participants were working students. Although 82.3% of the
sample indicated that they work full-time (40 hours or
more per week), 63.7% indicated that they have been
employed with their current employer for three years or
less. Thus, the sample may not have been interested in

advancing at their current place of employment, and may have been waiting to obtain their degree to pursue an organization in which they would like to advance in.

It should also be noted that 23% of the participants in this sample indicated that at least 50% of upper level management and higher positions were occupied by women in their organization. Therefore, advancement opportunities may be less of an issue for these participants because it is apparent to them that women are able to easily advance within the organization. In addition, this sample may have impacted the relationship between stereotype threat and perceptions of personal advancement opportunities. Because these participants belonged to organizations that employed women in top positions, many women may not have experienced stereotype threat in their organization.

Lastly, 40% of the participants reported being employed within the service industry such as health care. In this industry, women are not scarce in management and upper-level management positions, which may have also affected the relationship between stereotype threat and perceptions personal advancement opportunities. Specifically, advancement opportunities may not have been a critical concern if many women already occupied

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high-level positions within the organization. Participants who belong to an organization in which the majority of employees are women may not experience stereotype threat. Therefore, their perceptions of personal advancement opportunities may not be affected.

Because the present study represented a cross-section of working women and their perceptions of advancement opportunities within their organization, future research in this area should be longitudinal in order to capture the effects over time. A longitudinal study may aid in determining the actual magnitude of a participant's commitment to an organization over months or years. Specifically, a longitudinal study can determine whether or not women within an organization who perceive procedural justice in the performance appraisal process actually perceive more advancement opportunities within their organization. Furthermore, a longitudinal study will be able to determine how long on average, a woman is committed to her organization as a result of her perceived advancement opportunities.

Conclusion

The present study argues that four factors will affect perceptions of advancement opportunities: stereotype threat, gender role perceptions, procedural justice, and family-friendly work policies. Two of the four factors, stereotype threat and procedural justice predicted perceptions of advancement opportunities. Procedural justice and family-friendly work policies were also found to predict organizational commitment. Moreover, a mediated relationship between procedural justice and organizational commitment by perceptions of personal advancement opportunities was revealed.

Women are an important, yet scarce resource within upper levels of organizations. Thus, it is important to focus on what can be done to increase their mobility within the organizational hierarchy. Findings from the present study provide useful information for organizations that want to increase the population of women within the organizational hierarchy or within the organization itself. Decreasing stereotype threat while implementing fair performance appraisal procedures can be beneficial to organizations. When women perceive higher opportunities to advance, organizations will be able to

retain successful and talented individuals who can aid in

the process of organizational growth and value.

APPENDIX A

INFORMED CONSENT FORM

INFORMED CONSENT

You are invited to participate in a study being conducted by Michelle Balisi under the direction of Dr. Mark D. Agars, Ph.D. of the Psychology Department at the California State University, San Bernardino. This study has been approved by the Psychology Department Human Subjects Review Board at CSUSB. The stamp of approval from the IRB should be evident on this form. The purpose of this study is to assess your perceptions of your work and organizational environment. There are no foreseeable risks or direct benefits associated with your participation in this study. The survey packet provided should take approximately 20 minutes to complete. You are free to withdraw from the study without penalty at any time. Results from this study will be reported in group format only so the confidentiality and anonymity of your data will be maintained. Results from this study will be available from Dr. Mark Agars (909-880-5433 or magars@csusb.edu) after August 2004.

Please read the following before indicating that you are willing to participate.

1. The study has been explained to me and I understand the explanation that has been given and what my participation will involve.

2. I understand that I am free to choose not to participate in this study without penalty, free to discontinue my participation in this study at any time and am free to choose not to answer any questions that make me uncomfortable.

3. I understand that my responses will remain anonymous. I may request group results of this study.

4. I understand that, at my request, I can receive additional explanations of this study after my participation is completed.

Please do not put your name on this questionnaire.

Please place a check or an X in the space provided below to acknowledge that you are at least 18 years old and have read and understand the statements above. By marking the space below you give consent to participate voluntarily in this study.

Thank you

_____   _____
Place an X here   Date

APPENDIX B

SURVEY

Gender Role Perceptions

Survey 1: The following statements describe the attitudes toward the role of women in society that different people have. There are no right or wrong answers, only opinions. Using the scale below, please indicate how you feel about each statement.

(1) Agree strongly (2) Agree mildly (3) Disagree mildly (4) Disagree strongly

1. Swearing and obscenity are more repulsive in the speech of a woman than of a man.	1 2 3 4
2. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.	1 2 3 4
3. Both husband and wife should be allowed the same grounds for divorce.	1 2 3 4
4. Telling dirty jokes should be mostly a masculine prerogative.	1 2 3 4
5. Intoxication among women is worse than intoxication among men.	1 2 3 4
6. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.	1 2 3 4
7. It is insulting to women to have the "obey" clause remain in the marriage service.	1 2 3 4
8. There should be a strict merit system in job appointment and promotion without regard to sex.	1 2 3 4
9. A woman should be as free as a man to propose marriage.	1 2 3 4
10. Women should worry less about their rights and more about becoming good wives and mothers.	1 2 3 4
11. Women earning as much as their dates should bear equally the expense when they go out together.	1 2 3 4
12. Women should assume their rightful place in business and all the professions along with men.	1 2 3 4
13. A woman should not expect to go to exactly the same places or to have quite the same freedom of actions as a man.	1 2 3 4
14. Sons in a family should be given more encouragement to go to college than daughters.	1 2 3 4
15. It is ridiculous for a woman to do construction and for a man to sew.	1 2 3 4
16. In general, the father should have greater authority than the mother in the bringing up of children.	1 2 3 4

17. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiancés.	1 2 3 4
18. The husband should not be favored by law over the wife in the disposal of family property of income.	1 2 3 4
19. Women should be concerned with their duties of childbearing and house tending, rather than with desires for professional and business careers.	1 2 3 4
20. The intellectual leadership of a community should be largely in the hands of men.	1 2 3 4
21. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set up by men.	1 2 3 4
22. On the average, women should be regarded as less capable of contributing to economic production than are men.	1 2 3 4
23. There are many jobs in which men should be given preference over women in being hired or promoted.	1 2 3 4
24. Women should be given equal opportunity with men for apprenticeship in the various trades.	1 2 3 4
25. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.	1 2 3 4

Spence, J. T., Helmreich, R., & Stapp, J. (1973). A short version of the attitudes toward women scale (AWS). *Psychonomic Society Bulletin, 2*(4), 219-220.

Career Advancement Scale

Survey 2: The following items refer to the procedures used during a performance appraisal/evaluation. Using the scale below, indicate the extent to which you feel these procedures were used to arrive at the outcome of your performance appraisals.

(1) No extent (2) small extent (3) some extent (4) considerable extent (5) large extent

1. Have you been able to express your views and feelings during the evaluation procedure?	1 2 3 4 5
2. Have you had influence over the outcomes arrived at by those procedures?	1 2 3 4 5
3. Have those procedures been applied consistently?	1 2 3 4 5
4. Have those procedures been free of bias?	1 2 3 4 5
5. Have those procedures been based on accurate information?	1 2 3 4 5
6. Have you been able to appeal the outcomes arrived at by those procedures?	1 2 3 4 5
7. Have those procedures upheld ethical and moral standards?	1 2 3 4 5

Heilman, M. E., Block, C. J., & Lucas, J. A. (1992). Presumed incompetent? Stigmatization and affirmative action efforts. *Journal of Applied Psychology, 77*(4), 536-544.

Stroh, L. K., Brett, J. M., & Reilly, A. H. (1996). Family structure, glass ceiling, and traditional explanations for the differential rate of turnover of female and male managers. *Journal of Vocational Behavior, 49,* 99-118.

Organizational Commitment

Survey 3: The following items deal with the extent to which you feel committed to your organization. Using the scale below, please indicate the extent to which you...

(1) Strongly Agree (2) Agree (3) Slightly Agree (4) Neutral
(5) Slightly Disagree (6) Disagree (7) Strongly Disagree

1. I would be very happy to spend the rest of my career with this organization.	1 2 3 4 5 6 7
2. I enjoy discussing my organization with people outside it.	1 2 3 4 5 6 7
3. I really feel as if this organization's problems are my own.	1 2 3 4 5 6 7
4. I think that I could easily become as attached to another organization as I am to this one.	1 2 3 4 5 6 7
5. I do not feel like 'part of the family' at my organization.	1 2 3 4 5 6 7
6. I do not feel 'emotionally attached' to this organization.	1 2 3 4 5 6 7
7. This organization has a great deal of personal meaning for me.	1 2 3 4 5 6 7
8. I do not feel a strong sense of belonging to my organization.	1 2 3 4 5 6 7
9. I am not afraid of what might happen if I quit my job without having another one lined up.	1 2 3 4 5 6 7
10. It would be very hard for me to leave my organization right now, even if I wanted to.	1 2 3 4 5 6 7
11. Too much in my life would be disrupted if I decided wanted to leave my organization now.	1 2 3 4 5 6 7
12. It wouldn't be too costly for me to leave my organization now .	1 2 3 4 5 6 7
13. Right now, staying with my organization is a matter of necessity as much as desire.	1 2 3 4 5 6 7
14. I feel that I have too few options to consider leaving this organization.	1 2 3 4 5 6 7
15. One of the few serious consequences of leaving this organization would be the scarcity of available alternatives.	1 2 3 4 5 6 7
16. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice- another organization may not match the overall benefits I have here.	1 2 3 4 5 6 7

17. I think that people these days move from company to company too often.	1 2 3 4 5 6 7
18. I do not believe that a person must always be loyal to his or her organization.	1 2 3 4 5 6 7
19. Jumping from organization to organization does not seem at all unethical to me.	1 2 3 4 5 6 7
20. One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	1 2 3 4 5 6 7
21. If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.	1 2 3 4 5 6 7
22. I was taught to believe in the value of remaining loyal to one organization.	1 2 3 4 5 6 7
23. Things were better in the days when people stayed with one organization for most of their careers.	1 2 3 4 5 6 7
24. I do not think that wanting to be a 'company man' or company woman' is sensible anymore.	1 2 3 4 5 6 7

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-18.

Stereotype Threat

Survey 4: As you are reading each statement below, think about yourself in the context of your work environment. Using the scale below, indicate the extent to which you agree or disagree with each statement. Circle the number associated with the extent to which you agree or disagree with each statement. Remember, you are indicating the level of your agreement or disagreement, so there are no correct or incorrect responses.

1) Strongly Disagree 2) Somewhat Disagree 3) Agree 4) Mostly Agree 5) Strongly Agree

1. Stereotypes about women's ability in work settings have affected me personally.	1 2 3 4 5
2. I sometimes wonder if my work performance in my organization will be viewed as stereotypically female.	1 2 3 4 5
3. When interacting with my coworkers, I feel like they interpret my actions in terms of the fact that I am a woman.	1 2 3 4 5
4. My being female doesn't influence how others in my organization act with me.	1 2 3 4 5
5. I sometimes think that people in my organization will draw conclusions about female's work abilities, based on my performance.	1 2 3 4 5
6. I don't worry that people in my classes will draw conclusions about my work ability based on what they think of women.	1 2 3 4 5
7. I sometimes wonder if my supervisors judge my work ability based on my being female.	1 2 3 4 5
8. I sometimes wonder if the suggestions and/or criticisms I receive from supervisors and/or coworkers is influenced by their beliefs about women.	1 2 3 4 5
9. I never let others' beliefs about women stop me from asking questions during work or after work.	1 2 3 4 5
10. I sometimes worry that people will not see me as competent because I'm a woman.	1 2 3 4 5
11. I think about the fact that I am a woman in my organization.	1 2 3 4 5

Walker, C. (2004). *Predicting women's persistence in math and science-related college majors* (master's thesis). California State University, San Bernardino.

Performance Appraisal Process

Survey 5: The following items refer to the person in charge of conducting your performance evaluation. Using the scale below, indicate the extent to which you feel this person enacted the procedure.

(1) No extent (2) small extent (3) some extent (4) considerable extent (5) large extent

1. Has he/she treated you in a polite manner?	1 2 3 4 5
2. Has he/she treated you with dignity?	1 2 3 4 5
3. Has he/she treated you with respect?	1 2 3 4 5
4. Has he/she refrained from improper remarks or comments?	1 2 3 4 5
5. Has he/she been candid in his/her communications with you?	1 2 3 4 5
6. Has he/she explained the procedures thoroughly?	1 2 3 4 5
7. Were his/her explanations regarding the procedures reasonable?	1 2 3 4 5
8. Has he/she seemed to tailor his/her communications to individual's specific needs?	1 2 3 4 5

Colquitt, J. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-400.

Advancement Opportunities

Survey 6: The next items deal with the extent to which you believe you can move upward in your organization. Using the scale below, indicate the likelihood that you will move up in your current organization, the likelihood that you will receive an early promotion, and the likelihood that you will reach a high level in your current · organization.

1) Highly unlikely 2) Somewhat likely 3) Likely 4) Most likely 5) Very/highly likely

1. How likely is it that you will move up in your current organization?	1 2 3 4 5
2. How likely is it that you will receive an early promotion?	1 2 3 4 5
3. How likely is it that you will reach a high position in this organization?	1 2 3 4 5
4. My future career with this company looks bright.	1 2 3 4 5
5. My future career with this company looks less bright than it was a few years ago.	1 2 3 4 5
6. My chances for promotion are good.	1 2 3 4 5
7. I will be promoted to a higher position sometime during my career with this company.	1 2 3 4 5
8. Women in my organization are treated unfairly in the performance appraisal process.	1 2 3 4 5
9. Men have a greater opportunity to advance in the organization due to the performance appraisal process.	1 2 3 4 5
10. One of the reasons why women don't advance in this organization is due to the performance evaluation process.	1 2 3 4 5
11. Advancing into a higher position in this organization would be easier if the performance evaluation process was eliminated.	1 2 3 4 5

Heilman, M. E., Block, C. J., & Lucas, J. A. (1992). Presumed incompetent? Stigmatization and affirmative action efforts. *Journal of Applied Psychology*, *77*(4), 536-544.

Greenhaus, J. H., & Parasuraman, S..(1993). Job performance attributions and career advancement prospects: An examination of gender and race effects. *Organizational Behavior and Human Decision Processes, 55*(2), 273-297.

Stroh, L. K., Brett, J. M., & Reilly, A. H. (1996). Family structure, glass ceiling, and traditional explanations for the differential rate of turnover of female and male managers. *Journal of Vocational Behavior, 49*, 99-118.

Procedural Justice

Survey 7: The following items refer to your performance evaluation. Using the scale below, indicate to what extent...

(1) No extent (2) small extent (3) some extent (4) considerable extent (5) large extent

1. Does your performance evaluation reflect the effort you have put into your work?	1 2 3 4 5
2. Is your performance evaluation appropriate for the work you have completed?	1 2 3 4 5
3. Does your performance evaluation reflect what you have contributed to the organization?	1 2 3 4 5
4. Is your performance evaluation justified, given your performance?	1 2 3 4 5

Colquitt, J. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-400.

Family-Friendly Work Policies

Survey 8: The following items deal with work policies that may or may not exist in your organization. Please indicate to your knowledge the existence, non-existence, or uncertainty of the program provided.

1. Time off for childbirth and/or adoption and parenting	Yes	No	Not Sure
2. Time off to care for sick family members	Yes	No	Not Sure
3. Time off for dependent care	Yes	No	Not Sure
4. Sick child care	Yes	No	Not Sure
5. Child care resource and referral	Yes	No	Not Sure
6. Elder care resource and referral	Yes	No	Not Sure
7. Employer-sponsored child care on/near worksite	Yes	No	Not Sure
8. Caregiver fairs	Yes	No	Not Sure
9. Part time work	Yes	No	Not Sure
10. Job sharing	Yes	No	Not Sure
11. Telecommunting / flexspace	Yes	No	Not Sure
12. Flextime	Yes	No	Not Sure
13. Compressed work week	Yes	No	Not Sure
14. Personal leave of absence	Yes	No	Not Sure
15. Employee assistance programs	Yes	No	Not Sure
16. Work-family resource center of support groups	Yes	No	Not Sure
17. Health promotion	Yes	No	Not Sure
18. Training for managers on work-family issues	Yes	No	Not Sure
19. Statement of acknowledging importance of family and personal life	Yes	No	Not Sure

Flye, L. B., Agars, M. D., & Kottke, J. L. (2003, April). *Organizational approaches to work-family conflict: Testing an integrative model.* Paper presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology (SIOP). Orlando, FL.

Demographic Variables

Demographic Questions: Please provide the following information. These questions will help us describe the population of people who participated in the study. Again, the answers to these questions will not be tied to you in any way, therefore please answer all questions completely and to the best of your ability.

1. Age _____

2. Male _____   Female _____

3. Ethnicity (please circle)
   (A) Asian-American   (B) African-American   (C) Hispanic-American
   (D) Native-American   (E) Caucasian   (F) Other _____

4. Please circle the highest degree you obtained
   (A) High School   (B) A.A.   (C) B.A. / B.S.   (D) Some College
   (E) M.A. / M.S.   (F) Ph. D.   (G) Some Graduate School
   (H) Other _____

5. Please circle the job level which best represents the level for your current job:
   (A) Manager
   (B) Supervisor
   (C) Employee
   (D) Other: _____

6. Please circle the answer that best describes your marital status
   (A) Single (B) Married (C) Divorced   (D) Separated   (E) Widow/Widowed

7. How many people are you responsible for taking care of in your household? Please indicate the number of children or other persons (e.g. elder parents, grandparents, etc) you care for in your household: _____

8. Please indicate the type of work you are committed to:
   (A) Full time   (B) Part time

9. Please indicate the average number of hours you work per week _____

10. Please indicate the length of time have worked at your present organization
    _____ years _____ months

11. Please circle the answer that bests describes your current individual range of income:
(A) $0 - $25,000
(B) $25,001 - $35,000
(C) $35,001 - $45,000
(D) $45,001 - $55,000
(E) $55,001 - $65,000
(F) $65,001 - $75,000
(G) $75,001 - $85,000
(H) $85.001 - $95,000
(I) $95,000 - $105,000
(J) $105,000 +

12. Please think about the women who hold upper level management and higher positions in your organization. What percentage of women in comparison to men do you believe occupy those positions? For example, if you believe ½ of the women in your organization occupy such positions indicate 50%. _____ %

13. Please indicate the type of organization in which you work (circle the type that best describes your organization):
(A) Manufacturing   (B) Service   (C) Government   (D) Retail
(E) Other _____

Developed by Michelle Balisi

APPENDIX C

INSTITUTIONAL REVIEW BOARD

**Human Subjects Review Board
Department of Psychology
California State University,
San Bernardino**

PI:	Michelle Balisi, Mark Agars
From:	John Clapper, HSRB Chair
Project Title:	Individual and organizational factors: Effects of perceptions of upward mobility
Project ID:	H-04SP-07
Date:	April 28, 2004

Disposition

Exempt review

- Your IRB proposal is approved. This approval is valid until 4/28/05.

Good luck with your research!

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