

An Academic Approach: Using Alumnae Perspectives for Developing a University's Strategic Female-Focused Initiatives

Jill K. Maher, Daria Crawley, and Gayle Marco
Robert Morris University

Abstract

The purpose of this study is to illustrate the utility of conducting research with alumni, specifically in the development of special curriculum, programs, and centers geared toward women. Utilizing an electronic survey distributed to a sample of alumnae, assessments of how a series of workplace attitudes including organizational citizenship, organizational culture, and work-family balance are related to three sub-dimensions of women's perceived job satisfaction. Results indicate masculine culture is negatively related to all sub-dimensions, while collectivist cultures have the opposite relationship. Further only organizational citizenship, not team citizenship is related to satisfaction. Finally, corresponding to work-family balance, findings suggest that absorption in work is significantly related to the compensation and recognition aspects of job satisfaction. Implications for the utility of conducting research with alumni for the development of strategically-focused initiatives are suggested.

Introduction

Despite reports that alumni data are underutilized (Sun, Hoffman, and Grady, 2007); it is well known that studies with alumni are important for assessment and growth in colleges and universities. Pace (1979) was among the first to examine alumni reports of the outcomes of college, while others have since reported how alumni play an important role in specific outcomes assessment for universities and colleges (Ainsworth and Morely, 1995; Bailey et al., 1997; Jennings, 1989; Pike, 1990; Williford and Moden, 1989) and donor giving (Okunade and Berl, 1997; Wastyn, 2009; Weerts, Cabrera, and Sanford, 2010). Further, research has shown that studies with alumni provide higher levels of alumni satisfaction due to an increase in their feelings of involvement with the institution. This satisfaction contributes to improved donor relations between alumni and their institutions (Gaier, 2005).

Alumni have reported on how well an institution has prepared them for the real world. For example, Delaney (2000) presented an alumni research study as a model for assessing

how well higher education prepares students for the changing professional and labor market realities. Results revealed that while alumni valued the innovative curriculum, they recommended an increased focus on functional skills, more balance between team work and individual work, and expansion of the program's area of specialization. In this regard, alumni can serve a vital role in the development of curriculum, programs, centers, and interest/advisory groups in universities and colleges. In other words, studies with alumni can support and guide the policy development and strategic decision-making of institutions of higher education. This type of alumni support has been referred to as discretionary collaborative behaviors (DCBs) (Heckman and Guskey, 1998). These behaviors are those that are performed by a "customer" to help an institution and contribute to the effective functioning of the relationship between the customer and institution. These behaviors are outside the formal obligations and are performed without expectation of a direct reward. In other words, when alumni participate in research which ultimately guides the institution's decision-making, they are in effect providing a service without any payment. It is this type of behavior that is being investigated in the current analysis.

Purpose

The purpose of this research is to illustrate the utility of conducting research with alumni, specifically in the development of special curriculum, programs, and centers, designed for female students. In 2005, women represented 57 percent of the university and college population (Marklein, 2005). Just four years later, in 2009, 60 percent of the degrees awarded in institutions of higher education went to women (Perry, 2009). The Department of Education reports that in the 2010-2011 academic year, there will be 677,000 bachelor degrees awarded to males, while 972,000 will go to women (National Center for Education Statistics, 2007). These statistics illustrate dramatic growth in the female population in today's colleges and universities, hence an important target market. Interestingly however, in the case of the university under study, the opposite situation exists. There are 2,156 undergraduate males attending the university and only 1,770 undergraduate females. At a time when the female population is rising in American colleges and universities and females outnumber males, this particular institution is questioning why more women are not attracted to the school, making the university an interesting research domain.

History of the Institution

The institution in this study is a private school founded in 1921 in the Northeastern part of the U.S. Started as a school for aspiring accountants, it achieved university status in 2002. The university offers 80 degree programs in five academic schools. There are 3,926 undergraduates and 1,069 graduate students attending the university. There are over 40,000 alumni across the country.

Board Directive and Committee Representation

At the University's Board of Trustees meeting in the spring of 2010, the unbalanced nature of gender among the undergraduate student population was discussed. It was decided that two female members of the university's board of trustees would direct an initiative to assess the university's current situation. The two trustee members formed a leadership group in the fall of 2010. Among the leadership group were the deans of each academic school at the university. All of these deans were female, which created heightened awareness of the gender imbalance at the executive level of the university. The leadership group was directed to assess the current satisfaction level among the university's female alumni. It was believed that an understanding of current satisfaction levels and what contributes to women's satisfaction after graduation would assist the university in its development of effective female-focused strategic initiatives aimed to increase female student enrollment, and perhaps improve the relationships with female alumni. One of the deans formed an ad hoc committee comprised of female administrators from Student Life, International Affairs, and several female faculty members from each academic school. Ex-Officio members consisted of the deans from each school and a female representative from institutional development. This committee was charged with designing the research study.

An Academic Research Approach

Strout (2007) suggests there should be an increased focus on research with female alumni in order to understand what makes an institution's relationship with women different from that with men. She further suggests that colleges and universities should create opportunities for female graduates to support female driven programs as a way to increase donor behavior among female graduates. Thus, in order to design programs attracting female students, and ultimately improving the alumni relations with female graduates, polling female alumni about their perceptions of the current challenges and opportunities facing women in the workplace and contributing to feelings of satisfaction was the decided direction of the committee.

During early meetings, the committee examined previous literature in the areas of gender studies, specifically as they relate to organizational culture, organizational citizenship, and work/family balance. All of these have been found to influence satisfaction among working women (Erdogan et.al., 2004; Jandeska & Kramer, 2005; Rhoades and Eisenberger, 2002; Wellington et al., 2003). It was decided that the research would be academic in nature consisting of a thorough literature search, and using reliable and valid measures. Two female faculty members from the committee championed the research project with input from all committee members. The following details the research approach, beginning with a review of the relevant literature, the employed method, and a presentation of the results

Relevant Literature

Women's labor force participation rates increased significantly during the 1970s and 1980s, climbing to 57.5 percent in 1990, 59.9 percent in 2000 and falling slightly to 58.6 percent in 2010 (Bureau of Labor Statistics, 2011). While these gains are significant, and the gender pay gap has narrowed from women working full time earning 62 percent of what men did in 1979 to 81 percent of men's earnings in 2010" (Bureau of Labor Statistics, 2011) working women continue to struggle with juggling work outside the home with family and care giving responsibilities (U.S. Congress Joint Economic Committee, 2010). Moreover, though the percentage of women working has increased they have experienced fewer gains in leadership positions (Catalyst, 2007). Each step forward and subsequent new challenge has increased the research interest in women's job attitudes. Research focused on basic job attitudes such as job satisfaction and organizational citizenship suggest that they play a role in employment outcomes such as turnover (Valentine, Godkin, Fleischman, and Kidwell, 2011; Paillé, 2011) and productivity (Podsakoff, MacKenzie, Paine, and Bachrach, 2000). Moreover, the increase of female employees brings to the forefront the intersection of work and family. Findings suggest that work-family conflict leads to stress, time constraints, and/or dysfunctional behavior in the other role (Greenhaus and Beutell, 1985) and the work-family enrichment perspective asserts that experiences in either role generate resources that may be profitably used in the other role, thereby enhancing the quality of life (Frone, 2003; Greenhaus and Powell, 2006). Our study examines the relationship of perceived job satisfaction and a series of workplace attitudes to more fully understand women's organizational realities.

Job satisfaction is viewed as positive attitudes toward one's work when both tangible and/or intangible incentives meet one's expectations (Thesaurus of Psychological Index Terms,

2005). More simply put, job satisfaction has been defined as the extent to which people like or dislike their jobs (Spector, 1997). The Minnesota Satisfaction Questionnaire (MSQ) is often used to measure this concept (Furnham, 2004; Weiss, Davis, England, & Lofquist, 1967). This measurement illustrates that job satisfaction is multi-dimensional. The dimensions include: (1) activity, (2) independence, (3) variety, (4) social status, (5) supervision-human relations, (6) supervision-technical, (7) moral values, (8) security, (9) social service, (10) authority, (11) ability utilization, (12) company policies and practices, (13) compensation, (14) advancement, (15) responsibility, (16) creativity, (17) working conditions, (18) co-workers, (19) recognition, and (20) achievement. While the original measurement includes 100 items measuring all 20 dimensions, many have used shorter versions assessing only certain aspects of job satisfaction (e.g., Holcomb-McCoy & Addison-Bradley, 2005).

Important to satisfaction among women is the organizational culture in which they work (Erdogan et.al., 2004; Jandeska & Kramer, 2005; Wellington et al., 2003). Organizational culture is defined as the values, norms, and beliefs internalized by employees and direct the organizational behaviors and attitudes that are rewarded (Schein, 1992). Often examined in organizational culture studies are collectivist and masculine culture types (Bierema, 2001; Chatman et.al., 1998; Jandeska & Kramer, 2005). Masculine cultures reflect traditional work environments with very independent, competitive, and aggressive traits, while more collectivist cultures are those with cooperative, harmonious, and team-oriented traits. Research has shown that women prefer collectivistic cultures (Erdogan et.al., 2004; Jandeska & Kramer, 2005).

Also examined in the current analysis was organizational citizenship. Citizenship behaviors are not required or compensated for by the organization. While these behaviors have been found to improve organizational performance (Koys, 2001; Smith et al., 1983) and the accumulation of social capital (Bolino et al., 2002), they have also been found to be related to employees' feelings of good treatment by the organization (Rhoades and Eisenberger, 2002).

Finally, the balance between work and family was also investigated as a related variable to satisfaction. Thought of as "engagement," workers are forced today more than ever to balance multiple roles. Further, more linkages between work and family have been found for women than for men (Rothbard, 2001). Engagement in a role means one's psychological attention to and absorption in that role (Kahn, 1990). Attention to a role is defined as the cognitive ability and the amount of time a person spends thinking about a given role (Gardner et al., 1989), whereas absorption in a role means being engrossed and focused in that role (Kahn,

1990). In this research, both attention to family and work, as well as absorption in family and work were assessed.

Method

An online survey was developed and sent to the university's alumnae. The survey consisted of 49 questions measuring the relationships among the variables. Also included were several demographic as well as organizational questions. We issued an email message from the university's trustees with a link to the survey during a 4 week period in the spring of 2010.

Measures

Job Satisfaction. Upon examination of the MSQ, we measured three dimensions (i.e., nine items) from the original questionnaire. These dimensions were compensation, supervision and human relations, and recognition. It was thought that these three dimensions were most appropriate for the analysis as they are emphasized in undergraduate business management courses at the university under study (i.e., courses such as compensation management, organizational behavior, and supervisory skills). Further, in the introductory management course taught at the university, these dimensions are also emphasized in the course text (i.e., *Organizational Behavior: Key Concepts, Skills and Best Practices*). All nine items were scored on a 7-point scale ranging from 1 = very dissatisfied to 7 = very satisfied and were summed as three unique scales. Examples of the items include "The way I am noticed when I do a good job," and "How my pay compares to that of other workers." Reliability estimates for each of the three scales ranged from .943 to .977.

Organizational Culture. Alumnae's perceptions of the culture in which they work (i.e., masculine versus collectivist) was assessed by their responses to a 13-item scale (Jandeska and Kraimer 2005). Six items measured perceptions of a masculine culture while seven items measured a collectivist culture. Women responded to the 13 descriptions of culture on a scale from 1 = does not describe my organization at all to 5 = describes my organization completely. Examples of items include, "Women are visible in management roles in this organization," and "Men tend to choose other men for project collaboration." The results of reliability testing were .895 for the masculine culture sub-scale and .872 for the collectivist scale.

Organizational Citizenship. Items measuring organizational citizenship were adapted from Welbourne et al.'s (1998) role-based performance scale and used by Jandeska and Kraimer (2005). These eight items measured both team and organizational citizenship

activities. Respondents indicated their level of agreement with each statement from 1 = strongly disagree to 7 = strongly agree. Examples of items include “I respond to the needs of others in my workgroup,” and “I help others even when it’s not part of my job” ($\alpha = .85$ for organizational citizenship and $.87$ for team citizenship).

Work/Family Engagement. As in Rothbard (2001), attention to work and family were measured with four items each. Respondents were asked to provide their level of agreement on a scale from 1 = strongly disagree to 7 = strongly agree. An example of an item measuring attention to work is “I spend a lot of time thinking about my work,” while “I concentrate a lot on my family/personal commitments” was an item from the attention to family scale. Scale reliabilities were $.906$ for attention to work and $.958$ for attention to family.

Absorption in work and family were measured using five items each. An example of an item measuring absorption in work is “When I am working, I am completely engrossed by my work.” Female respondents indicated their level of agreement. For absorption in family, again respondents indicated their level of agreement with statements like, “I often get carried away by what I am working on in terms of my family/personal commitments.” Scale reliabilities were $.913$ for absorption in work and $.934$ for absorption in family.

Respondents

The sample consisted of 160 alumnae. Forty-seven percent of these women were between the ages of 41-55, 67 percent were married, and 59 percent reported having children. Geographically, 64 percent lived in the surrounding region while 25 percent lived out of state. Ninety-two percent were Caucasian and 83 percent reported incomes of less than \$150,000 per year. Finally, 43 percent had master’s degrees.

Professionally, 35 percent of these women reported working in business and industry with 19 percent in education. Forty-five percent reported being in their current job for less than 5 years and 40 percent were in middle to upper management. For a complete demographic sample description, see Table 1.

Results

Means scores and standard deviations for each of the variables included in the study can be found in Table 2. The objective of the committee’s research was to examine whether various organizational and personal characteristics are related to female’s rating of each of the

sub-dimensions of job satisfaction. Organizational culture (i.e., masculine and collectivist), organizational citizenship (i.e., organizational and team) and work/family engagement (i.e., attention to and absorption in) were investigated. Correlations were examined.

Correlation results indicate that organizational culture has a significant relationship with all sub-dimensions of job satisfaction. See Table 3. Specifically, masculine culture is negatively and significantly related to each of the sub-dimensions, while collectivist cultures have the opposite relationship. Further, while collectivist cultures are significantly and positively related to all job satisfaction dimensions, they are most greatly related to the recognition aspect of job satisfaction. Regarding citizenship behaviors, only organizational citizenship (and not team citizenship behaviors) is significantly related to job satisfaction; both the compensation and recognition dimensions. Finally, corresponding to work/family engagement, only respondents' absorption in work is significantly related to the compensation and recognition aspects of job satisfaction. See Table 3.

Implications for the Institution and for Research with Alumni

Traditionally universities viewed alumni primarily as philanthropic guests who returned to campus for homecoming and various athletic events. Increasingly this role is changing as institutional leaders seek to expand alumni participation and include them in the fabric of campus life. Research indicates that alumni participate in lobbying efforts to help secure taxpayer support for their alma mater (Koral, 1998), on advisory boards lending their experience and knowledge as universities embark on strategic planning initiatives (Weerts, 1998) and as mentors to new alumni moving to a new town (Weerts, Cabrera & Sanford, 2010). While alumni often share advice, such as hiring trends or skills needed among graduates (Winsor, Curtis, Graves, & Heck, 1992), expanding this role to include more in-depth conversations regarding the work environment can provide engaging and informative encounters for students. For example, as in this study, having alumnae share information about their current work environments has helped this institution understand the importance of assisting young female students in recognizing the elements of collectivist organizational cultures. Since collectivist cultures were found to be related to higher levels of job satisfaction, university professors, mentors, and counselors must educate young females about these sorts of cultures and provide them with the knowledge of how to recognize and identify these future places of employment, hence timely and useful information, helping them successfully navigate the job market. The university in this study used the research data to develop a task force to evaluate current

curriculum to determine if its current course offerings include this important conceptual as well as applied information. Also, this task force is examining the potential development of courses such as “Women in Science” and “Women in Business.”

Further, from a corporate outreach perspective, the university has begun to develop corporate education modules to address the importance of culture in attracting female employees. Since this alumnae research illustrates that women experience higher levels of job satisfaction in collectivist cultures, the university has a community responsibility to assist organizations in the region to develop collectivist cultures which will lead to better hiring practices and decreased turnover. In addition, the university is searching for partnership opportunities with companies that also have female-focused initiatives.

Similarly, findings from the research on citizenship behaviors bring to the forefront the need to educate young female students on the importance of engaging in these behaviors as a means for increased job satisfaction. Educating young women on what these nonmandated, and uncompensated behaviors are, providing opportunities for them to practice these behaviors inside and outside the classroom, and partnering with organizations where students can apply these learned behaviors are current new initiatives of the university.

As the results suggest, female alumni of the university pay more attention to and are absorbed more by their work than their family. Even though greater levels of work absorption were found to be positively related to higher levels of job satisfaction, the university is exploring ways to assist current female students as well as alumnae in “balancing” the work/family engagement struggle. Special seminars, on-campus panel discussions, and a women’s studies conference are in the planning phases. Bringing alumnae to campus to participate in these events will assist in increasing their engagement with the university.

Conclusion

Carr et. al., (2006) suggests that alumni’s perspective on programs tend to receive little attention. Our research brings attention to the intended value added in including alumni research when developing student programs. Many educational institutions use advisory boards as a vehicle for alumni to share their expertise and concerns. While these advisory boards serve as an initial sounding board they are composed of members who were nominated by faculty and are limited in size. Conducting a survey provides the opportunity to obtain feedback from a broader range of alumni whose viewpoints and/or employment experience may

not be represented on the advisory board. Moreover, soliciting alumni input can identify prospective opportunities for connections that go beyond career advice and present students with opportunities to learn about diverse viewpoints. Utilizing alumni in this format may give them an opportunity to join faculty and university administrators in owning the student experience.

The university in this study is investing a significant number of resources in the development of female-focused programs based on the results of the study. It is thought that these new university initiatives will eventually lead to the attraction of a greater number of females to the institution. As Strout (2007) suggests, creating opportunities for female graduates to support female based programs will increase levels of engagement with the university and result in increased donor giving. While this effect has not yet been realized by the university in this study, future research will examine whether this intended outcome has occurred. Further, future research will also assess enrollment numbers at this university. An increase in the number of female students attracted to the university’s female-focused initiatives is expected.

References Available Upon Request

Table 1
Demographic Characteristics of the Respondents

| | No. of Respondents | Percentage of Total Sample |
|--------------------------|--------------------|----------------------------|
| <u>Age</u> | | |
| 22-25 | 6 | 3.8% |
| 26-30 | 15 | 9.4% |
| 31-35 | 21 | 13.1% |
| 36-40 | 19 | 11.9% |
| 41-45 | 18 | 11.3% |
| 46-50 | 22 | 13.8% |
| 51-55 | 35 | 21.9% |
| 56-60 | 15 | 9.4% |
| Over 60 | 15 | 9.4% |
| <u>Marital Status</u> | | |
| Single | 36 | 22.5% |
| Married | 107 | 66.9% |
| Divorced | 12 | 7.5% |
| Separated | 4 | 2.5% |
| Widowed | 1 | .6% |
| <u>Employment Status</u> | | |

| | | | |
|----------------------|-----|----|-------|
| Employed full-time | 142 | | 90.4% |
| Employed part-time | 11 | | 7.0% |
| Currently Unemployed | | 4 | 2.5% |
| <u>Race</u> | | | |
| African American | 6 | | 3.8% |
| Caucasian | 146 | | 91.8% |
| Hispanic | 4 | | 2.5% |
| Other | 3 | | 1.9% |
| <u>Education</u> | | | |
| Bachelor's Degree | 77 | | 51.7% |
| Master's Degree | 65 | | 43.6% |
| Doctoral Degree | 7 | | 4.7% |
| <u>Income</u> | | | |
| Less than 40K | 15 | | 9.6% |
| 40K-59,999K | 29 | | 18.5% |
| 60K-99,999K | 54 | | 34.4% |
| 100K-149,999K | | 32 | 20.4% |
| 150K-250K | 15 | | 9.6% |
| Over 250K | 12 | | 7.7% |

Table 2
Means and Standard Deviations of Variables under Study
N = 160

| Variable | Mean | Standard Deviation |
|--|-------|--------------------|
| Job Satisfaction | | |
| Compensation (3 item 7-point scale) | 12.58 | 5.13 |
| Supervision (3 item 7-point scale) | 13.12 | 5.39 |
| Recognition (3 item 7-point scale) | 13.13 | 5.14 |
| Organizational Culture | | |
| Masculine (6 item 5-point scale) | 18.16 | 5.95 |
| Collectivist (7 item 5-point scale) | 21.12 | 6.17 |
| Organizational Citizenship | | |
| Organizational (4 item 7-point scale) | 24.82 | 3.33 |

| | | |
|------------------------|-------|------|
| Team | 24.54 | 3.77 |
| (4 item 7-point scale) | | |
| Engagement | | |
| Attention to Work | 24.01 | 3.63 |
| (4 item 7-point scale) | | |
| Absorption to Work | 25.75 | 6.10 |
| (5 item 7-point scale) | | |
| Attention in Family | 19.77 | 5.82 |
| (4 item 7-point scale) | | |
| Absorption in Family | 21.52 | 7.51 |
| (5 item 7-point scale) | | |

Table 3. Correlations Among The Variables Under Study

| Correlations | | Masculine Culture | Collectivist Culture | Team Citizenship | Organizational Citizenship | Attention to Work | Absorption of Work | Attention to Family | Absorption of Family | Job Satis Compensation | Job Satis Recognition | Job Satisfaction Supervision and HR |
|-------------------------------------|---------------------|-------------------|----------------------|------------------|----------------------------|-------------------|--------------------|---------------------|----------------------|------------------------|-----------------------|-------------------------------------|
| Masculine Culture | Pearson Correlation | 1 | -.433** | -.036 | -.146 | -.122 | -.056 | -.056 | -.032 | -.291** | -.476** | -.368** |
| | Sig. (2-tailed) | | .000 | .656 | .073 | .129 | .484 | .488 | .695 | .000 | .000 | .000 |
| | N | 158 | 153 | 156 | 152 | 157 | 158 | 158 | 153 | 156 | 156 | 155 |
| Collectivist Culture | Pearson Correlation | -.433** | 1 | .116 | .294** | .150 | .233** | .148 | .146 | .358** | .612** | .521** |
| | Sig. (2-tailed) | .000 | | .154 | .000 | .064 | .004 | .068 | .075 | .000 | .000 | .000 |
| | N | 153 | 154 | 152 | 148 | 153 | 154 | 154 | 149 | 152 | 152 | 151 |
| Team Citizenship | Pearson Correlation | -.036 | .116 | 1 | .677** | .383** | .228** | .064 | .013 | .049 | .111 | .105 |
| | Sig. (2-tailed) | .656 | .154 | | .000 | .000 | .004 | .428 | .872 | .542 | .169 | .197 |
| | N | 156 | 152 | 157 | 152 | 156 | 157 | 157 | 152 | 155 | 155 | 154 |
| Organizational Citizenship | Pearson Correlation | -.146 | .294** | .677** | 1 | .517** | .423** | .109 | .090 | .175 | .187 | .149 |
| | Sig. (2-tailed) | .073 | .000 | .000 | | .000 | .000 | .182 | .273 | .032 | .022 | .068 |
| | N | 152 | 148 | 152 | 153 | 152 | 153 | 153 | 149 | 151 | 151 | 150 |
| Attention to Work | Pearson Correlation | -.122 | .150 | .383** | .517** | 1 | .620** | .132 | .071 | .063 | .119 | .045 |
| | Sig. (2-tailed) | .129 | .064 | .000 | .000 | | .000 | .100 | .384 | .436 | .139 | .582 |
| | N | 157 | 153 | 156 | 152 | 158 | 158 | 158 | 153 | 156 | 156 | 155 |
| Absorption of Work | Pearson Correlation | -.056 | .233** | .228** | .423** | .620** | 1 | .219** | .339** | .267** | .180 | .094 |
| | Sig. (2-tailed) | .484 | .004 | .004 | .000 | .000 | | .006 | .000 | .001 | .024 | .241 |
| | N | 158 | 154 | 157 | 153 | 158 | 159 | 159 | 154 | 157 | 157 | 156 |
| Attention to Family | Pearson Correlation | -.056 | .148 | .064 | .109 | .132 | .219** | 1 | .687** | -.002 | .117 | .064 |
| | Sig. (2-tailed) | .488 | .068 | .428 | .182 | .100 | .006 | | .000 | .982 | .146 | .427 |
| | N | 158 | 154 | 157 | 153 | 158 | 159 | 159 | 154 | 157 | 157 | 156 |
| Absorption of Family | Pearson Correlation | -.032 | .146 | .013 | .090 | .071 | .339** | .687** | 1 | .123 | .061 | .116 |
| | Sig. (2-tailed) | .695 | .075 | .872 | .273 | .384 | .000 | .000 | | .132 | .453 | .156 |
| | N | 153 | 149 | 152 | 149 | 153 | 154 | 154 | 154 | 154 | 152 | 151 |
| Job Satis Compensation | Pearson Correlation | -.291** | .358** | .049 | .175 | .063 | .267** | -.002 | .123 | 1 | .460** | .479** |
| | Sig. (2-tailed) | .000 | .000 | .542 | .032 | .436 | .001 | .982 | .132 | | .000 | .000 |
| | N | 156 | 152 | 155 | 151 | 156 | 157 | 157 | 152 | 157 | 156 | 154 |
| Job Satis Recognition | Pearson Correlation | -.476** | .612** | .111 | .187 | .119 | .180 | .117 | .061 | .460** | 1 | .670** |
| | Sig. (2-tailed) | .000 | .000 | .169 | .022 | .139 | .024 | .146 | .453 | .000 | | .000 |
| | N | 156 | 152 | 155 | 151 | 156 | 157 | 157 | 152 | 156 | 157 | 154 |
| Job Satisfaction Supervision and HR | Pearson Correlation | -.368** | .521** | .105 | .149 | .045 | .094 | .064 | .116 | .479** | .670** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .197 | .068 | .582 | .241 | .427 | .156 | .000 | .000 | |
| | N | 155 | 151 | 154 | 150 | 155 | 156 | 156 | 151 | 154 | 154 | 156 |

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