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# The Relationship Between Leadership Style and Job Satisfaction in Multinational Oil and Gas Services

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**Abstract**

The purpose of this research was to examine the relationship between leadership style and job satisfaction in multinational oil and gas service companies. This was nonexperimental research and it utilized a convenience sample of 153 participants. The *Multifactor Leadership Questionnaire*-5x Short (Bass & Avolio, 2004) was used to assess participants' perceptions of their supervisors' leadership style while participants' job satisfaction level was assessed using the *Abridged Job Descriptive Index* and the *Abridged Job in General* (Bowling Green State University, 2009). Participants' demographic data was obtained through an online survey. The study found that age predicted Satisfaction with Opportunities for Promotion. Gender predicted Satisfaction with Pay with a unique gender difference ($t(151) = -2.84$, $p = .005$) represented by a higher mean score ($M = 3.96$) for females than males ($M = 3.58$). Transformational leadership was a predictor of Satisfaction with Work on Present Job, Pay, Opportunities for Promotion, and Supervision. Passive avoidant leadership was a significant predictor of Satisfaction with People on Present Job, Supervision, and Job in General. The study concluded that the oil and gas services sector may have more equal pay than other industries. In addition to transformational leadership being strongly related to satisfaction, the unique finding from the study showed it is also important not to be passive avoidant as it determines the overall job satisfaction. Finally, though this study utilized a sample of convenience, the sample was comprised of a diverse group of people from a variety of multinational oil and gas service companies, giving the findings good generalizability.

*Keywords:* ***Leadership, Job Satisfaction, Multinational Oil and Gas Service companies***

## 1 Introduction

Research from a variety of sectors shows that leadership style impacts employee job satisfaction (Specchia et al., 2021). There are limited studies, however, that explain whether these findings also apply to the oil and gas services sector. Gaining a better understanding of the relationship between leadership style and job satisfaction in the oil and gas services sector may clarify if some of the leadership variables that have previously been found to impact employee job satisfaction in other industries also apply to the oil and gas services sector. These insights could serve to counteract the challenge of retaining talent created by the volatile and dynamic nature of the multinational oil services industry (Jauhar et al., 2017). The National Research Council (2013) found that the oil and gas industry have an aging workforce with an average age of 50 years. The loss of young talent, particularly Generation Y, which has the tendency to switch jobs, limits growth (Wan Yusuf et al., 2013). These employees are often lured by attractive job offers, the transformational environment of other organizations, and the prospect of greater job satisfaction (Jefri & Daud, 2016). Job satisfaction is assumed to be an effective tool of retention for the Generation Y employees because they place more emphasis on work life balance, high pay, immediate reward, as well as instant satisfaction (Aruna & Anitha, 2015). Moorthy (2014) noted that Generation Y thrives under leaders who are well informed, diligent, determined, and accountable. These preferences reflect the attributes of idealized influence, an aspect of the transformational leadership style within the full range leadership model developed by Bass and Avolio (1994). We investigated how oil and gas services employees' job satisfaction is influenced by their perception of their supervisors' leadership style. In examining leadership style and job satisfaction in the oil and gas services sector, this study contributes to the job sector literature on leadership style and job satisfaction.

### 1.1 Theory

According to Bass and Avolio (2004), the full range leadership model expands the explanation of leadership to include three broad leadership styles beyond initiation of structure and consideration. These include transformational, transactional, and passive-avoidant leadership. Job satisfaction has been defined as the view, feeling, or affective response to facets within the employees' jobs (Bowling Green State University, 2009; Smith et al., 1969).

Meta-analytic results from a variety of sectors have found positive correlations between transformational and transactional leadership and job satisfaction in contrast to a negative relationship between passive-avoidant leadership and job satisfaction (Aydin et al., 2013; Belias & Koustelios, 2014; Borgmann et al., 2016; Cantarelli et al., 2016; Derue et al., 2011; Hoch et al., 2016; Javed et al., 2014; Judge & Piccolo, 2004; Podsakoff et al., 2006; Zangaro & Soeken, 2007).

The universal applicability of transformational leadership implies that leaders in any sector could achieve more success with their followers' satisfaction and commitment (Rowald, 2008). Consequently, Juahar et al. (2017) suggested that in the oil and gas industry, transformational leadership practices could be a great tool for sustaining organizational knowledge in a turbulent business environment and for overcoming the human capital challenges by increasing job satisfaction and employee organizational commitment.

We anticipated findings like literature evidence of association between perceived leadership style and job satisfaction. Our goal was to start by testing the kind of variables research focusing on leadership and job satisfaction in non-oil and gas companies found to matter to see if they still matter in the oil and gas services sector. Specifically, our study focused on the degree to which the existence of transformational leadership could help oil and gas services' employees to be more satisfied with their jobs and potentially help them to navigate the dynamic nature of the industry. Our six research questions were:

1. Is there a relationship between a leader's Full Range Leadership Style (Transformational, Transactional, and Passive) as perceived by the followers and followers' Satisfaction with Work on Present Job when controlling for the leader's gender, followers' gender, followers' age, tenure, and ethnicity?
2. Is there a relationship between a leader's Full Range Leadership Style (Transformational, Transactional, and Passive) as perceived by the followers and followers' Satisfaction with People on Present Job when controlling for the leader's gender, followers' gender, followers' age, tenure, and ethnicity?
3. Is there a relationship between a leader's Full Range Leadership Styles (Transformational, Transactional, and Passive) as perceived by the followers and followers' Satisfaction with Pay when controlling for the leader's gender, followers' gender, followers' age, tenure and ethnicity?
4. Is there a relationship between a leader's Full Range Leadership Style (Transformational, Transactional, and Passive) as perceived by the follower and followers' Satisfaction with Opportunities for Promotion when controlling for the leader's gender, followers' gender, followers' age, tenure, and ethnicity?
5. Is there a relationship between a leader's Full Range Leadership Style (Transformational, Transactional, and Passive) as perceived by the followers and followers' Satisfaction with Supervision when controlling for the leader's gender, followers' gender, followers' age, tenure, and ethnicity?
6. Is there a relationship between a leader's Full Range Leadership Style (Transformational, Transactional, and Passive) as perceived by the followers and followers' Satisfaction with Job in General when controlling for the leader's gender, followers' gender, followers' age, tenure, and ethnicity?

## 2 Methods

### 2.1 Context, Procedure, and Participants

This study was performed in 2020 through a global survey of multinational oil and gas services employees reached through electronic mail and social media contact. Individuals invited to participate were asked to forward the emailed survey link to their contacts in the oil and gas services industry. Of the 1000 survey links that were distributed to employees of various oil and gas service companies across the world, a total of 196 individuals (19.6%) responded to the request for participation and 153 participants (15.3%) completed the survey.

Qualifying questions required that participants worked in oil and gas services and were between the ages of 18 and 65 years. Those not meeting the requirements were unable to continue. Though a sample of convenience usually limits the ability to generalize results to the targeted population of all oil and gas services workers globally, this research sample has good representation because the researchers sampled a diverse group of people from multinational oil and gas service companies around the world.

### 2.2 Ethical Considerations and Approval

Human participants research training was completed, and data collection began after receiving IRB approval from Our Lady of the Lake University. The participants were required to provide their informed consent before participating. Participants were informed of the risks and benefits associated with their participation in the survey and how the information would be used. Participation was voluntary and anonymous. Permission for administering the instruments to conduct the study was obtained from the proprietary institutions holding rights to their use.

### 2.3 Measurements

#### 2.3.1 Leadership Style

Participants assessed their leader's leadership style (Transformational, Transactional, and Passive-Avoidant) using the *Multifactor Leadership Questionnaire*-5x Short (Bass & Avolio, 2004). The instrument is also called the MLQ 5X. It has 36 items using a 5-point Likert scale extending from 0 = *not at all* to 4 = f*requently if not always*. The MLQ is a validated and primary instrument with a universal outcome of high validity (Rowald, 2004). It is composed of 20 questions measuring Transformational Leadership, 8 questions for Transactional Leadership, and 8 questions for Passive-Avoidant Leadership. The MLQ-5X Cronbach's alpha reliability values of .74 for Passive-Avoidant Leadership, .85 for Transactional Leadership, and .94 for Transformational Leadership indicate a moderate to a high degree of internal consistency reliability (Bass & Avolio, 1997).

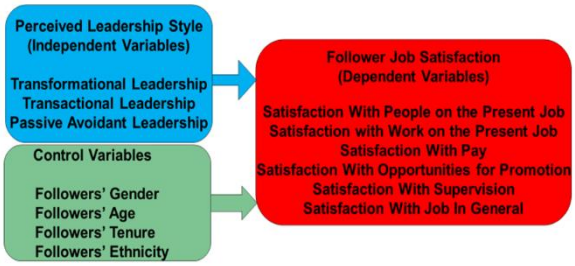


**Figure 1.** Research Graphical Model

#### 2.3.2 Job Satisfaction

The instrument used to measure job satisfaction is the combination of the *Abridged Job Descriptive Index* (aJDI) and *Abridged Job in General* (aJIG). These are shortened versions of the original *Job Descriptive Index* scales and significantly reduces the overall length compared to the original 72 items. The combination ensures completeness and they are therefore distributed together. The instruments have high reliability and predictive validity (Bowling Green State University, 2009). The five facets of the aJDI include, People on Your Present Job (6 items), Satisfaction with Pay (6 items), Satisfaction with Opportunity for Promotion (6 items), Satisfaction with Supervision (6 items), Satisfaction with Work on your Present Job (6 items). The 6 items for each of the five facets make a total of 30 items. The aJIG has a total of 8 items. The aJDI and the aJIG were administered using a 5-point Likert scale from 0 to 4. Cronbach's alpha for the aJDI and the aJIG ranges from .75 to .92. Satisfaction with work on Present Job is .84, Satisfaction with Pay is .75, Satisfaction with Opportunities for Promotion is .82, Satisfaction with Supervision is .83, Satisfaction with People on Present Job is .76, and Job in General is .92 (Stanton et al., 2002).

## 3 Statistical Analysis

The independent variables of the study were the Full Range Leadership Styles (Transformational, Transactional, and Passive-Avoidant) as shown in Figure 1. The dependent variables of our study were the six facets of job satisfaction: Satisfaction with Work on Present Job, Satisfaction with Pay, Satisfaction with Opportunities for Promotion, Satisfaction with Supervision, Satisfaction with People on Present Job and Job in General (Stanton et al., 2002). Cronbach's alpha measured the internal reliability of the *Multifactor Leader Questionnaire* (MLQ-5X), the *Abridged Job Descriptive Index* (aJDI) and the *Abridged Job in General* (aJIG). Descriptive statistics were used to show the calculated mean, median, mode, range, skewness for all independent, dependent, and control variables. The Pearson correlation was used to measure the correlation between leadership styles and job satisfaction. Multiple regression was performed to measure whether leadership styles predicted any of the six facets of the *Abridged Job Descriptive Index* (aJDI) and the *Abridged Job in General* (aJIG). In each regression analysis, we controlled for age, gender, ethnicity, and tenure. The first block consisted of continuous and dichotomous control variables that were put into SPSS using the stepwise method. Block two consisted of the control variable ethnicity, a categorical variable, which was placed into SPSS utilizing the enter method. Block three consisted of the continuous independent variables of transformational leadership, transactional leadership, and passive-avoidant leadership They were entered into SPSS using the stepwise method. For significant dichotomous categorical variables, the *t* test was conducted to determine the difference between two sample means. Variance was explained using R squared ($R^2$) and adjusted R-squared ($\Delta R^2$). For significant continuous variables, the Beta weights (β) and Partial correlations ($r_p$) were calculated. All statistics were at the $p < .05$ which is the conventional measure for social sciences.

### 3.1 Descriptive Statistics

Participants' ages ranged from 25 years to 57 years ($M = 41.09$, $SD = 7.2$). From a total of 153 ($N = 153$) responses for gender, 120 were males (78%), and 33 were females (22%). Of the 152 ($N = 152$) participants who indicated their ethnicity, 16 participants (10.5 %) were Hispanic, 35 participants (22.9 %) were White, 62 participants (40.4 %) were Black or African American, and 28 participants (18.4 %) were Asian. Tenure ranged from 1 to 33 years ($M = 14.05$, $SD =$ -6.9). The participants' ($N = 153$) perceptions of their leader's behavior resulted in a range of mean scores as follows: transformational leadership ($M = 2.5$, $SD = 6.9$); transactional leadership ($M = 2.2$, $SD = .57$); and passive-avoidant ($M = .91$). Mean scores for the dependent variables ranged from 3.89 to 3.36 and were as follows: Satisfaction with People on Present ($M = 3.89$, $SD = .66$), Satisfaction with Work on Present Job ($M = 3.81$, $SD = .64$), Satisfaction with Pay ($M = 3.66$, $SD = .69$), Satisfaction with Opportunity for Promotion ($M = 3.13$, $SD = .87$), Satisfaction with Supervision ($M = 3.71$, $SD = .61$), and the Job in General ($M = 3.36$, $SD = .35$). The

**Table 1**. Correlations among variables

| | Age | Tenure | Transformational Leadership | Transactional Leadership | Passive-Avoidant Leadership | People on Present Job | Work on Present Job | Satisfaction with Pay | Opportunies for Promotion | Satisfaction with Supervision |
|---|---|---|---|---|---|---|---|---|---|---|
| Tenure | .748** | | | | | | | | | |
| Transformational Leadership | -0.097 | -0.155 | | | | | | | | |
| Transactional Leadership | -0.073 | -0.050 | .526** | | | | | | | |
| Passive-Avoidant Leadership | 0.017 | 0.064 | -.546** | -0.119 | | | | | | |
| People on Present Job | 0.044 | 0.090 | .287** | 0.154 | -.314** | | | | | |
| Work on Present Job | 0.155 | 0.026 | .330** | .275** | -.184* | .364** | | | | |
| Satisfaction with Pay | -.174* | -0.094 | .162* | 0.067 | -0.131 | .281** | .239** | | | |
| Opportunities for Promotion | -.184* | -0.126 | .353** | .240** | -.246** | .367** | .440** | .166* | | |
| Satisfaction with Supervision | -0.075 | -0.075 | .751** | .453** | -.521** | .375** | .390** | .186* | .472** | |
| Job in General | 0.019 | 0.007 | .279** | .177* | -.278** | .336** | .597** | .176* | .424** | .365** |

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

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

❖ .10 to .29 and below Weak ❖ .30 to 49 Moderate ❖ .50 and above Strong

high correlations between transactional and transformational leadership are indicative of a strong covariance. Correlations among the study's variables are displayed in Table 1.

### 3.2 Regression

Results of regression analysis for Null Hypothesis 1, shown in Table 2, found that Passive-Avoidant Leadership was a significant predictor of Satisfaction with People on the Present Job ($p$ = .000). It accounted for 12% of the total variance for Satisfaction with People on the Present Job ($R^2$ = .120, β =.-.339, $p$ < .05). The more the followers perceived their leader's passive avoidant behavior the less satisfied the followers were with People on Present Job. The null hypothesis was rejected.

**Table 2.** Model Summary for Null Hypothesis **1 ($H_{01}$)** Satisfaction with People on the Present Job

| Model | *R* | *R* Square | *R* Square Change | Beta | $r_p$ | df1 | df2 | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | .347[b] | .120 | | -.339 | | 1 | 151 | .000 |

a. Predictor: Passive-Avoidant Leadership

Results of the regression analysis for Null Hypothesis 2, found transformational leadership was a significant predictor of Satisfaction with Work on the Present Job with a significant p value of .001, accounting for 12% of the total variance in Satisfaction with Work on the Present Job ($R^2$ = .114, β = .286, $p$ < .05), as shown in Table 3. The more the followers perceived their leader's transformational leadership behavior the more satisfied the followers were with work on present job. The null hypothesis was rejected.

**Table 3.** Model Summary for Null Hypothesis 2 ($H_{02}$) Satisfaction with Work on the Present Job

| Model | *R* | *R* Square | *R* Square Change | Beta | $r_p$ | df1 | df2 | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | .338[b] | .114 | | .286 | | 1 | 151 | .001 |

a. Predictor: Transformational Leadership

Shown in Table 4 are results of the multiple regression for Null Hypothesis 3, which found that gender and transformational leadership were significant predictors of Satisfaction with Pay with significant p values of .005 and .034. Gender accounted for 5.1% of the total variance in satisfaction with pay ($R^2$ = .051, $p$ = .005). A $t$-test conducted to identify gender mean differences revealed a significant difference among female and male ratings of satisfaction with pay. Females had a higher mean score ($M$ = 3.96) than males ($M$ = 3.58, ($t$(151) = -2.84, $p$ = .005), as shown in Figure 2. Transformational leadership accounted for additional 2.8% of the total variance in Satisfaction with Pay beyond the effects of gender (Δ$R^2$ = .028, β = .168, $r_p$ = .172, $p$ < .05). The more the followers perceived their leader's transformational leadership behavior the more satisfied the followers were with pay. The null hypothesis was rejected.

**Table 4.** Model Summary for Null Hypothesis 3 ($H_{03}$) Satisfaction with Pay

| Model | *R* | *R* Square | *R* Square Change | Beta | $R_p$ | Df1 | df2 | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | .225[a] | .051 | | | | 1 | 151 | .005 |
| 2 | 281[b] | .079 | .028 | 168 | .172 | 1 | 150 | .034 |

a. Predictors: Gender
b. Predictors: Gender, Transformational Leadership

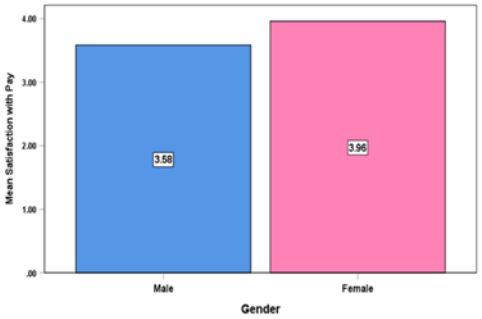


**Figure 2.** Gender and Satisfaction with Pay

Results of the multiple regression for Null Hypothesis 4, demonstrated on Table 5, revealed that age, gender, and transformational leadership were significant predictors of Satisfaction with Opportunities for Promotion with significant $p$ values of .026, .027 and .000 respectively. The higher the age of the followers the less satisfied the followers were with opportunities for promotion ($R^2$ = .034, β = -.214, $p$ < .05). Gender accounted for additional 3.2% of the total variance in Satisfaction with Opportunities for Promotion beyond the effects of age ($R^2$ = .032, $p$ = .027). A $t$-test conducted to identify gender mean differences for follower ratings of satisfaction with opportunities for promotion was not significant ($t$(150)= -1.603, $p$ = .111). Transformational leadership accounted for additional 11.3% of the total variance in satisfaction opportunities for promotion beyond the effects of age and gender (Δ$R^2$ = .113, β = .338, $r_p$ = .348, $p$ < .05). The null hypothesis was rejected.

**Table 5.** Model Summary for Null Hypothesis 4 ($H_{04}$) Satisfaction with Opportunities for Promotion

| Model | *R* | *R* Square | *R* Square Change | Beta | $r_p$ | df1 | df2 | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | .184[a] | .034 | | -.214 | | 1 | 152 | .026 |
| 2 | .257[b] | .066 | .032 | | | 1 | 151 | .027 |
| 3 | 423[c] | .179 | .113 | .338 | .348 | 1 | 150 | .000 |

a. Predictors: Age
b. Predictors: Age, Gender
c. Predictors: Age, Gender, Transformational Leadership

Results of the multiple regression analysis for Null Hypothesis 5 found that Transformational leadership and Passive-Avoidant leadership were significant predictors of satisfaction with supervision with significant *p* values of .000 and .020. Transformational leadership accounted for 60% of the total variance in satisfaction with supervision ($R^2$ = .600, β = .663, $p$ < .05). The beta weight of β =.663 shows that the more the followers perceived their leader's transformational leadership behavior the more satisfied the followers were with supervision. Passive-avoidant leadership accounted for additional 1.6% of the total variance in satisfaction with supervision beyond the effects of transformational leadership ($\Delta R^2$ = .016, β = -.156, $r_p$ = -.202, $p$ < .05). The beta weight of β = -.156 shows that the more the followers perceived their leader's passive-avoidant leadership behavior the less satisfied the followers were with supervision. This is demonstrated in Table 6. The null hypothesis was rejected.

**Table 6.** Model Summary for Null Hypothesis 5 ($H_{05}$) Satisfaction with Supervision

| Model | *R* | *R* Square | *R* Square Change | Beta | $r_p$ | df1 | df2 | Sig |
|---|---|---|---|---|---|---|---|---|
| 1 | .774[b] | .600 | | .663 | | 1 | 152 | .000 |
| 2 | 785[c] | .616 | .016 | -.156 | -.202 | 1 | 151 | .020 |

a. Predictors: Transformational Leadership
b. Predictors: Transformational Leadership, Passive-Avoidant Leadership

The results of multiple regression for Null Hypothesis 6 indicated that Passive-avoidant leadership was a significant predictor of Satisfaction with Job in General with significant p values of .002. Passive-Avoidant leadership accounted for 9.8% of the total variance in Satisfaction with Job in General ($R^2$ = .098, β = -.264, $p$ < .05). The beta weight of β = -.264 shows that the more the followers perceived their leader's passive-avoidant leadership behavior the less satisfied the followers were with supervision. See table 7. The null hypothesis was rejected.

**Table 7.** Model Summary for Null Hypothesis 6 ($H_{06}$) Satisfaction with Job in General

| Mode | *R* | *R* Square | *R* Square Change | Beta | $r_p$ | df1 | df2 | Significance |
|---|---|---|---|---|---|---|---|---|
| 1 | .312[b] | .098 | | -.264 | | 1 | 151 | .002 |

a. Predictor: Passive-Avoidant Leadership

## 4 Discussion and Implications

Age accounted for 3.4.% of the variance explained in opportunities for promotion, and older employees were less satisfied with opportunities for promotion ($R^2$ = .034, β= -.214, $p$ < .05). This finding is similar to those of many studies that show that age is related to satisfaction with promotion and older employees who have aged out of promoting were found to be less satisfied (Kollman et al., 2020). It is important for the oil and gas services sector to be aware that older employees may not be satisfied with their opportunities for promotion and to consider developing innovative ways to promote and recognize the achievement of older employees.

Gender was a significant predictor of Satisfaction with Pay, explaining 5.1% of the variance ($R^2$ = .051, $p$ = .005). A *t*-test revealed significant differences ($t$(151)= -2.84, $p$ = .005) with females having a higher mean score ($M$ = 3.96) than males ($M$ = 3.58). This may be related to remuneration and incentives in the oil and gas service sector being based on educational qualifications of engineers. Policies such as fixed-step remuneration from entry level to management ensure equal treatment based on growth and performance of employee. Therefore, speculation could lead to the idea that oil and gas services may have more equal pay than other industries. This could also mean that this is an industry where women may be paid what they should be paid, and this could matter in job satisfaction as this research found women to be more satisfied with pay than men. This is a unique and significant finding. Further study should be done to analyze if this finding could be related to educational qualification as engineers, the job role, salary bracket for these individuals, or because women tend to be more satisfied with equal pay which is common in the oil and gas services. It is also important for the industry to be aware that men may be less satisfied with their pay compared with women. Additional study about why men could be less satisfied will add transparency to this unique finding and add to the body of knowledge in leadership style and job satisfaction.

Transformational leadership was the strongest predictor of Satisfaction with Supervision ($R^2$ = .600, β = .663, p < .05), and also accounted for Satisfaction with Work on Present Job ($R^2$ = .114, β = .286, $p$ < .05), an additional 2.8% of the variance explained in satisfaction with pay ($\Delta R^2$ = .028, β = .168, $r_p$ = .172, $p$ < .05) and an additional 11.3% of the variance explained in Satisfaction with Opportunities for promotion ($\Delta R^2$ = .113, β = .338, $r_p$ = .348, $p$ < .05). These findings are consistent with other studies and could lead to the speculation that transformational leadership is also positively related to job satisfaction in the oil and gas services like the various sectors highlighted in literature. These findings are also consistent with the view that regardless of the sector, leadership style is related to job satisfaction, and leaders who use a transformational style foster greater employee job satisfaction (Specchia et al., 2021). Therefore, it is important for this sector to truly understand, study, and develop transformational leadership, seeing that it makes such a strong difference especially in satisfaction with supervisors. Given that older employees expressed less satisfaction with pay and promotion opportunities in this sample and that transformational leadership is positively correlated with satisfaction of the same, it would be additionally worthwhile to explore the potential mediating effect of transformational leadership on the relationship between age and satisfaction with pay and promotion. New leaders also need to be trained on how important being transformational seems to be. The technical nature of this industry means the leaders could be good in their jobs as engineers, but they may not know how to be transformational in their jobs. The less transformational the leader in oil and gas services is, the less satisfied the followers will be. A huge implication is that data from the oil and gas services sector is a unique sample from a group that has not been studied before. The findings could include this sector in the body of knowledge for a variety of industries where transformational leadership has been studied and found to matter in various facets of followers' job satisfaction. More so, we sampled a diverse group of people from various multinational oil and gas service companies giving the findings good generalizability.

Though transactional leadership had a weak to moderate positive correlation with Satisfaction with Work on Present Job ($r$ = .275), Satisfaction with Opportunities for Promotion ($r$ = .240), Satisfaction with Job in General ($r$ = .177) and Satisfaction with Supervision ($r$ = .453); it surprisingly did not predict any of the facets of follower job satisfaction in the oil and gas services. This could be because of multicollinearity. Transactional leadership had a strong covariation with transformational leadership (r = .526). The shared variance with Transformational leadership results in

transactional leadership not adding additional unique variance after transformational leadership had predicted facets of job satisfaction. Our result is contrary to studies in other sectors that found that transactional leadership is related to job satisfaction (M Alshahrani & Baig, 2016; Morsiani et al., 2017; Nebiat & Asresash, 2013). This could be implying that group performance-based incentives in oil and gas services may not reflect on individual job satisfaction. This could also imply that the technical nature of this sector means that the leaders may tend to lean more towards transactional and transformational behaviors than passive avoidant behaviors. Thus, managers need to consider adopting transformational leadership and innovative ways of rewarding performance so they can recognize and validate individual achievement.

Passive-avoidant leadership accounted for 12% of the variance explained in satisfaction with people on present job ($R^2$ = .120, β= -.339, $p$ < .05). Passive-avoidant leadership also predicted an additional 1.6% variance in Satisfaction with Supervision ($\Delta R^2$ = .016, β = -.156, $r_p$ = -.202, $p$ < .05); even though being transformational had explained a large variance (60%). These findings for oil and gas services support the existing research that passive avoidance is negatively related to job satisfaction. This industry is data driven and the passive avoidant leader would be non-engaged or engaged only when problems arise. The pressure to respond to crisis situations could lead inexperienced managers to be quick to blame followers' performance for problems. Such reactions suppress the creativity of employees who could be too cautious to intervene or use discretionary measures when things go wrong. Such leaders are less likely to give ongoing feedback and evaluations. Being non-engaged in conflict situations would likely have a negative effect on the follower relationships with coworkers, creating a chaotic work culture and a blame climate eroding satisfaction with different aspects of work.

It is easy to assume that the best solution here is to focus on being transformational because it made a huge impact and studies have demonstrated it has the greatest impact on performance metrics in other studies (Howell & Avolio, 1993; Naseem et al., 2018). However, leaders must be keenly aware that any occurrence of passive-avoidance neutralizes the impact and makes employees less satisfied as our finding indicates ($\Delta R^2$ = .016, β = -.156, $r_p$ = -.202, $p$ < .05).

Transformational leadership predicted various aspects of Job Satisfaction but not the Job in General. We found that passive-avoidant leadership was the sole predictor of Satisfaction with Job in General even though transformational leadership had predicted four facets of Job Satisfaction. Passive-avoidant leadership accounted for 9.8% of the variance explained in Satisfaction with Job in General ($R^2$ = .098, β = -.264, $p$ < .05). This means that people who are satisfied with doing their jobs may become less satisfied with their job in general if they become unhappy with manager's non-response or negative response. The speculation is that even with a strong impact of transformational leadership, especially with 60% variance for supervision ($R^2$ = .600, β = .663, p < .05), an additional 1.6% variance ($\Delta R^2$ = .016, β = -.156, $r_p$ = -.202, $p$ < .05) explained by passive avoidance, may have made it the only predictor for Satisfaction with Job in General. The potential negative impact of being passive avoidant could outweigh the long-term impact of being transformational, by quickly eroding trust that has been built brick by brick over time. In practical application it is important to be aware that while it is often assumed that being transformational is the best way to lead, the unique finding from this study is that it is also very important not to be passive avoidant especially for Satisfaction with People on Present Job and Job in General.

## 5 Limitations

There are several limitations related to this study. The first limitation was that the researchers used a convenience sample that included people in their social contact. This means not all potential oil and gas sample participants had an equal chance of being selected. This limits the ability to infer causation, since the research method was a nonexperimental design. However, this research still had good generalizability because of the diverse group of people sampled from diverse oil and gas service companies. Secondly, one measure of leadership and one measure of job satisfaction were used. Results could have been different if different instruments were used. This could include other leadership models like servant leadership or authentic leadership models and a different job satisfaction instrument. Thirdly, as a result of the inadequate research in this sector, the goal was first, to start by testing the variables that have been studied in non-oil and gas companies research that seemed to matter to see if they still matter in the oil and gas services. This limited the study to individual demographics that have been studied in other sectors. Subsequent research can be done to build on these findings and include oil and gas specific variables like location or company size. Also, variables to reflect the impact of the COVID 19 pandemic were not included and this may have influenced the data collected or the response rate. Lastly, the study sample included everything from office employees to oilfield workers. Not focusing on one specific section of the oil and gas services may limit the opportunity for more transparency to the unique findings from the research.

## 6 Recommendations for Future Research

Some recommendations for future studies include repeating the study using other leadership models like servant leadership or authentic leadership models and a different Job satisfaction instrument. Secondly, future studies could focus on one sample from one aspect of the oil and gas services like people on rigs, people at the corporate office, etc. Thirdly, future studies could consider measuring education and salary to reflect that these dynamics exist with female satisfaction with pay and add transparency and credibility to the unique findings of this study. The research also found a significant positive relationship between individual demographics that have been studied in other sectors and found to be significant in the oil and gas services. Replication of this research and including oil and gas services specific demographic variables like the countries they operate in or how large the companies are could add to this body of knowledge in Leadership Style and Job Satisfaction.

## Conclusions

The study concluded that the oil and gas services sector may have more equal pay between men and women than other industries. Also, in addition to transformational leadership being strongly related to job satisfaction, the unique finding from the study shows it is also important not to be passive avoidant as it determines the overall job satisfaction. Finally, though the sample was a sample of convenience, it comprised a diverse group of people from a variety of multinational oil and gas service companies, giving the findings good generalizability.

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