An Examination the Factors Influence on Unethical Behaviour among Jordanian external auditors: Job Satisfaction as a mediator

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Abstract

In the past several years, the auditors’ unethical behaviour has been increasingly highlighted. This is particularly true following the Enron collapse that heralded that the demise of Arthur Andersen LLP and downgraded the confidence of the public on the whole accounting system and firms. The negative publicity stemming from the professional auditing firms with regards to the execution of an efficient audit led efficient auditing, and the reasons and causes behind negative behaviours should be highlighted to eliminate them. This is particularly important as there is a high likelihood of another Enron waiting to happen. Therefore, in this paper, some of the factors influencing the inclination towards engaging in unethical behaviours among Jordanian external auditors were examined. According to recent studies, dysfunctional audit behaviour is an expansive issue and studies to dedicated to the topic has yet to sufficiently shed an insight into the causes/determinants of deviant behaviour among auditors (Donnelly et al., 2011). The present study developed and tested a theoretical model that identifies locus of control, time pressure, and leadership style and job satisfaction as determinants of attitude towards DAB through a path analysis method.

Key words

Locus of control, time pressure, leadership style, job Satisfaction, DAB, Jordanian external auditors

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1. Introduction

The AICPAs public oversight board established the panel of audit effectiveness in an attempt to examine the audit quality issue and thereby, the panel collected information via peer reviews and surveys from financial executives, internal auditors and external auditors. They found dysfunctional audit behaviour (DAB) to be an ongoing concern for the profession of auditing. To compound the issue further, financial scandals and crises has garnered more interest in the external auditors’ ethical judgment and behaviour all over the world and thus the trust among the public as well as the confidence of the investors towards the financial reports have weakened. There have been several business scandals in the current marketplace, beginning with Enron that has led to the distrust in public accounting firms.

In the audit environment, the financial statement users cannot easily assess the work quality of auditors and based on studies, the factors that directly and indirectly impact dysfunctional behaviours are still ambiguous. There is therefore a dire need to conduct new studies in order to identify the variables causing auditors’ DAB during auditing. Some authors have argued that because accounting firms’ primary concern is profit making, then the audit staff may be perpetually willing to please their clients to the detriment of the interests of all that is concerned (Hanlon, 1994). Added to this, firms may have significant pressures in regards to staff, and some firms have tackled this issue by exercising irregular auditing practices and by falsifying audit working papers (Alleyne et al., 2013; Willett and Page, 1996), and take part in dysfunctional behaviour (voluntary or involuntary).

Moreover, according to studies in literature (Alleyne et al., 2013; Dart, 2011; Khan et al., 2013), the reliability of the professional codes of conduct among auditors in addressing the scandals and protecting the public interest have been lambasted by several scandals. The adverse impacts of DAB that combine together are out of control. On the basis of the study conducted by Paino et al. (2010), auditors adopting
DABs have brought about the most undesirable and serious outcome of organization’s social context. In this background, the audit firm is responsible for breach of contract, malpractices, breach of fiduciary duty, and failure to exercise professional care (Ginanjar, 2009). This is not to say that the failures of auditors to effectively conduct audit steps lead directly to inappropriate audit opinion, and the increasing level of occurrence (Coram et al., 2003). DABs among auditors has been extensively examined in literature, referred to as reduced audit quality practices (RAPs) that cover the following activities; underreporting of chargeable time and premature audit sign-off activities. These activities lack a strong theoretical basis in general (Shapeero et al., 2003) and in this study, the intention to take part in DAB among Jordanian auditors is examined.

In relation to this, academic studies have time and again investigated the effects of time pressure on DABs (e.g., Alderman and Deitrick, 1978; Margheim and Pany, 1986; Rhode, 1978). In addition, the moderating impact of the interaction between supervisor and leadership on auditor personality. This work was extended by Otley and Pierce (1995) who examined the leadership styles of audit managers as a moderating factor on the behaviour of audit seniors. The studies indicated that a strong supervisor-subordinate match can assist in limiting dysfunctional reactions to control systems.

Another identified environmental factors in literature aside from time pressure is leadership style, where such factors contribute to DAB although extant literature has yet to find individual differences among auditors that significant impact DAB. Essentially, more studies are needed to support the notion that pre-dispositions towards DAB may be a function of personal characteristics, as all auditors are assumed to have the same reactions to environmental factors (e.g., time pressure (Donnelly et al., 2011).

Also, the adverse impacts of dysfunctional audit behaviours (DAB) combined together are difficult to tackle, where auditors engaging in such behaviours have been the reasons for undesirable and critical outcomes in the social context and organizational benefits (Paino et al., 2010). Khan (2013) stated that it is the primary responsibility of the audit firm to address breach of contract, malpractices, breach of fiduciary duty and failure to exercise due professional care and in this background of responsibility, the financial statements of audit should be carried by skilled, qualified and responsible professionals who are experienced in handling behavioural intention of any negligent or dysfunctional behaviour. In other words, a dysfunctional act by the auditors adversely impacts the quality of audit and is often referred to as DAB (Otley and Pierce, 1996).

In this paper, the factors that contribute to individual auditor differences in their attitudes towards DAB are examined as aligned with the processes highlighted in SAS No. 82. The article requires auditors to consider the attitudes of management towards misstatements and reporting that are fraudulent indicates actual financial statement fraud (AICPA, 1997). In other words, the identification of the factors contributing to the attitudinal acceptance of DAB is considered as a crucial step in determining the dysfunctional behaviour in light of its why, when and how. This paper develops a theoretical model that links locus of control, leadership style and job satisfaction to the attitudes of auditors towards DABs (i.e., premature sign-offs and underreporting of time) in Jordanian firms with the help of a path analysis, Partial Least Squares (PLS).

2. Theoretical Development

Figure 1 presents the complete theoretical model, with each link in the model depicted with its respective hypothesis that is subsequently discussed.
2.1. Locus of Control and Job Satisfaction

In literature dedicated to behavioural studies, locus of control has been extensively discussed to shed light on human behaviour in the context of organizations. According to Rotter (1966), individuals possess generalized expectations if the success/failure of a situation depends on their personal behaviour or on external forces. More specifically, individuals have a general tendency to link outcomes with effort exerted by them or to associate them with controllable events—such individuals are known as internals whereas externals are those who are convinced that events or outcomes are always uncontrollable (Spector, 1982). Hence, individuals that are internally and externally directed can face identical situations but they have specific perceptions of how their actions will have different effects on their activities (Donnelly et al., 2011).

Moreover, locus of control is a crucial parameter employed to understand job satisfaction among auditors and it may be viewed a bipolar variable that hangs from external towards internal locus of control. According to Specter (1982), the individuals in the latter category are more satisfied with their jobs and are not as likely to be dissatisfied, and in turn, they are more successful. Also, Cummins (1989) examined the social support-locus of control relationship in identifying job satisfaction levels as well as stress. His findings showed that internally focused individuals are more satisfied with their jobs notwithstanding their stress levels, whereas those who are externally focused are less satisfied with their jobs and they depend on their supervisor’s support for stress reduction. On this basis, the following hypothesis is proposed;

\( H_1: \) There is a negative relationship between external locus of control and job satisfaction.

2.2. Time Pressure and Job Satisfaction

Literature underlines two specific forms of time pressure in the audit environment namely time budget pressure and time deadline pressure (e.g., DeZoort, 1998; Margheim et al., 2011; Sweeney and Price, 2004). Contrastingly, job satisfaction is referred to as the attitude towards the job that is re-integrated with the impact generated by the perception of the individual of his needs achievement in relation to this work environment (Pushpakumari, 2008). Job satisfaction is a global variable that possesses many dimensions (Lund, 2003), where it is crucial for organizational productivity. This is because only satisfied employees are capable of achieving organizational success (Zavyalova and Kucherov, 2010). Therefore, time pressure can be stated to negatively impact job satisfaction among employees, and as such, this study proposes that;

\( H_2: \) There is a negative relationship between time pressure and job satisfaction.

2.3. Leadership Styles and Job Satisfaction

Auditing refers to a profession carried out by auditors in teams and because of this, team leadership influences the subordinates’ behaviours. Literature dedicated to the topic showed that leaders’ behaviours may influence the leadership effectiveness and employees’ behaviour (e.g., House and Mitchell, 1974; Shoemaker, 1999). Additionally, in a more recent study, Morris (2014) found that leaders’ behaviour impacts those of employees, where the employees’ forms audit quality aspect. Literature shows that leadership style affects job performance and job satisfaction. For instance, employees who are generally over-controlled by the supervisor and are recipients of penalties and warnings rather than coaching and feedback, generally feel low job satisfaction (Lee, 2008). Therefore, in this study, the direct effect of leadership style is investigated in the context of Jordanian audit firms, where the hypotheses proposed for testing in this relationship state;

\( H_{3a}: \) There is a relationship between structured leadership and job satisfaction.

\( H_{3b}: \) There is a relationship between consideration leadership and job satisfaction.

2.4. Locus of Control and Attitudes toward DAB

A significant correlation has been established in literature between locus of control and the willingness of the employee to use deception/manipulation (e.g., Comer, 1985; Donnelly et al., 2011; Gable and Dangello, 1994; Solar and Bruehl, 1971). On the basis of Mudrack’s (1990) meta-analytical review of 20 studies of the relationship, he concluded that the use of manipulation, deception or ingratiating behaviours may indicate an attempt on the part of externals to influence hostile or stressful environment. In other
words, where externals are incapable of obtaining support for their survival, they manipulate others (Solar and Bruehl, 1971).

In the context of auditing, manipulation/deception arises in the form of DAB – behaviours that could enable auditors to manipulate the process of auditing to realize his objectives in light of his performance. The limitation in audit quality stemming from these behaviours can be seen as a required sacrifice for individual survival in the audit environment. It is thus expected that the higher the external locus of control of the individual, the more tendency he will have for accepting DAB. Therefore, the proposed hypothesis is that;

\[ H_4: \text{There is a positive relationship between external locus of control and DAB acceptance.} \]

2.5. **Time Pressure and Attitudes toward DAB**

Limitation in allocated time to task performance may lead to time budget pressure (Todd DeZoort and Lord, 1997). In the context of auditing, tasks have to be achieved within a limited time to meet deadlines and audit firms often communicate these limitations to the auditors. According to prior studies, time budgets may potentially lead to work pressure among auditors as they function as control mechanisms and performance measurement tools (McNair, 1991). Such time budgets are sometimes very tight and not achievable. According to Pierce and Sweeney (2004), acceptance of DAB is significant linked to time pressure and evaluation of performance. Some other factors that may influence the behaviour of auditors include firm characteristics, leadership and organizational structure. Researchers have also investigated the effect of time budget and related variables like lack of auditor experience on DAB. In the current market, audit firms are faced with dynamic competition indicating that auditors work under a lot of stress (Gundry, 2006). The perceptions of the auditors of time budget pressure have recently heightened, as dynamic competitive markets demand that auditors have to achieve work in less time (McNamara and Liyanarachchi, 2008). In this background, DAB are considered as behaviours that may indirectly result in limited audit quality (e.g., underreporting or recording of the time that auditors take to performance their tasks) (Lightner et al., 1982). Moreover, Kelley and Margheim’s (1990) findings revealed that underreporting instances and the reductions of audit quality frequently occur in practical professional auditing. This leads to the following hypothesis;

\[ H_5: \text{There is a positive relationship between time pressure and the DAB acceptance.} \]

2.6. **Leadership Styles and Attitudes towards DAB**

Literature on dysfunctional behaviour reveals that such behaviour arises in circumstances wherein individuals perceive themselves incapable of achieving the expected result via their efforts (Gable and Dangello, 1994). This is why DAB is deemed to be a required recourse in cases where personal goals cannot be achieved through normal performance (Donnelly et al., 2003), and this holds more viability in an environment that is perceived by the employee as highly structured or controlled (Gable and Dangello, 1994). A structured environment is primarily characterized by audit programmers, time budgets and close supervision in auditing.

More specifically, audit firms are run through a hierarchical structure where audit senior reports directly to the audit manager, while the latter reports to a partner. The structured evaluation of both the audit senior and manager’s performance is conducted by the partner. Hence, the partner’s behaviour, in the role of leadership, is expected to impact both the senior and the manager’s behaviour. According to Kelley and Margheim (1990), leadership style is measured by two dimensions namely consideration and structure. The consideration and structure were defined by Stogdill (1963) as the level to which and individual has tendency to have job relationships characterized by particular actions (mutual trust, respecting subordinates’ ideas, consideration of feelings), and the level to which an individual has a tendency to define his role and his subordinates’ role towards goal achievement respectively. The control theory posits that the structured application of controls in an auditing environment leads to defensive attitudes and DABs and based on the above discussion, the proposed hypotheses state;

\[ H_{6a}: \text{High levels of structure in the leadership style are associated with high levels of DAB.} \]

\[ H_{6b}: \text{High levels of consideration in the leadership style are associated with low levels of DAB.} \]
2.7. Job Satisfaction and Attitudes towards Dysfunctional Behaviour

The pioneering conception of job satisfaction is attributed to Hoppock’s (1935) study (Tsai et al., 2007). The job satisfaction concept is a subjective one that has been defined by researchers in different ways (e.g., Cho et al., 2013; Fichter and Cipolla, 2010; Lai Wan, 2007; Panatik et al., 2012; Sahinidis and Bouris, 2008; Vakola and Bouradas, 2005; Yucel and Bektas, 2012). According to Locke (1976), job satisfaction is a positive relationship that is attributed to the pleasurable/positive mind state that stems from the experience on the job.

Furthermore, job satisfaction has been found to play a key role in the positive emotional state that arises when an individual appears to achieve job values, considering that the values are aligned with the person’s needs. It indicates the emotional reaction of the individual to the job. Highly satisfied individual shows that he likes and values his job and feels positive towards it (McShane and Von Glinow, 2012). Job satisfaction has also been found to mediate the relationship between work and work conditions, and organizational and individual results (Dormann and Zapf, 2001; Judge and Klinger, 2008). Generally speaking, job satisfaction is highly correlated to performance of complex jobs, as compared to less complex ones (Johnson and Johnson, 2000). Hence, it can be stated that there are several behaviours and employee outcomes that have been hypothesized to stem from job satisfaction/dissatisfaction in the profession of auditing. Therefore, the following hypothesis is proposed to be tested;

\[ H: \text{High levels of job satisfaction are associated with low levels of DAB.} \]

3. Job Satisfaction mediating the relationship between the factors and their influence on DAB

Integrating the interconnections between external locus of control and job satisfaction can shed better light on the complex reasons behind DAB. Extant literature shows that job satisfaction among auditors may play a key role in individual factors via its impact on DAB. Therefore, a discussion of such associations is imminent. Locus of control is an antecedent of job satisfaction and theoretically, committed employees work harder and are loyal and committed to the organization and thus, they effectively contribute to the organization (Mowday et al., 1979). Studies like Andrisani and Nestel (1976) and Heisler (1974) showed that locus of control significantly related to performance, promotion and salary decisions. On the basis of this discussion, locus of control is proposed to be related to job satisfaction, and job satisfaction is proposed to be related to DAB and thus, the following hypothesis is developed;

\[ H: \text{Job satisfaction mediates the relationship between locus of control and DAB.} \]

Time pressure is found to occur owing to time constraints and resource limitation that is allocated to the performance of the task (DeZoort and Lord, 1997). Auditing is appropriated a time limit in order for the auditors to meet the deadline, and audit firms frequently relay such limitations to the auditors by providing them with time budgets. According to studies, time budgets could lead to work pressure and limit job satisfaction among auditors, as they function as control mechanisms and performance measurement tools (McNair, 1991). Such time budgets are sometimes tight or unreachable. An empirical study conducted by Pierce and Sweeney (2004) showed that DAB acceptance is significantly related to time performance and evaluation of performance. In the current audit firms environment, dynamic competition is present indicating that auditors have to work in great stress (Gundry, 2006) and thus, the following hypothesis is proposed;

\[ H: \text{Job satisfaction mediates the relationship between time pressure and DAB.} \]

In addition to the above two factors, research has also delved into the influence of different auditor leadership characteristic on auditor perception of DAB acts. The most prominent characteristic are the two leadership dimensions of initiating structure and consideration. The former refers to the level to which a supervisor sets up his and subordinates’ roles and responsibilities and the way such can be achieved (Fleishman and Peters, 1962). On the other hand, the latter was found to positively correlate with the audit team performance, relationship of audit team and satisfaction of audit staff (Pratt and Jiambalvo, 1981), and to negatively correlate with DAB acts (e.g., audit supervisor shows higher levels of consideration behaviour, auditor not as likely to take part in RAQ acts). It is thus posited that an audit managers having high levels of consideration are more inclined towards providing a supportive environment, where audit
and budget issues can be discussed, and in turn, this would be related with lower DAB behaviours. In the statement of hypotheses;

\[ H_{10a}: \text{Job satisfaction mediates the relationship between structure leadership and DAB.} \]

\[ H_{10b}: \text{Job satisfaction mediates the relationship between consideration leadership and DAB.} \]

4. Methodology of research

4.1. Data Collection

This study employs the questionnaire method for data collection where the participants and firms information were kept confidential due to the sensitive nature of the topic. The researcher opted against using interviews as they have serious limitations in that participants may not be as inclined to confess to their DAB on a one-on-one situation. The Likert scale was used in the questionnaires as the variables are measured effectively while making the respondents at ease with providing the answers to their perceptions and attitudes. The Likert scale refers to a scaling method that can be understood easily for measuring and indicating response towards an attitude (Edmondson, 2005). In this situation, cross-organizational generalizability was allowed where data was collected from 189 auditors from Jordanian public accounting firms. The firms were of different types including the Big 4, large international firms, and large local firms. One hundred auditors were randomly selected to take part in the filling of questionnaires. The sample presented 52.9% of the study population comprising of 189 auditing firms.

4.2. Measures

The questionnaire variables are locus of control, leadership style, time pressure, job satisfaction and attitudes towards DAB. The entire measures were adopted from prior literature. The measurements of the variables are as follows; locus of control was measured through 16 items provided in Spector’s (1988) locus of control scale. The researcher decided against using Rotter’s (1966) measure because of its general scope and because its items cut throughout domains (education, work, politics and life in general). Measures for time budget pressure numbered 6 items, and were adopted from Kelley and Margheim’s (1990). The respondents were requested to indicate the time budget in their current auditing job and whether or not time frame was easy to achieve, and whether or not underreporting occurred. The measurement for leadership behaviour structure and leadership behaviour consideration were obtained from Otley and Pierce (1996), and Pratt and Jiambalvo (1981) that were based on Stogdill’s (1963) Leader Behaviour Descriptive Questionnaire (LBDQ). Moreover, the measurement of job satisfaction comprised of 6 items adopted from Quinn and Shepard’s (1974) Global Job Satisfaction Survey, developed by them and later modified by Pond and Geyer (1991) and Rice et al. (1991).

Furthermore, auditor’s attitudes towards DAB was measured through Donnelly et al.’s (2011) 10-item measurement, two part dysfunctional audit behaviour instrument to capture the information of DAB in an audit environment. More specifically, five items related to each of the types of dysfunctional audit behaviour to measure how accepting the auditor is to the different DAB types. The entire items were developed on a seven-point Likert scale that is anchored from 1 depicting strong disagree to 7 depicting strong agree. The questions were developed in a way that the number 7 shows a positive attitude towards DAB occurrence. The overall DAB measure was calculated through the total of the 10 items responses.

4.3. Data Analysis

4.3.1. Structural Equation Modelling (SEM) Approach

The statistical analysis of the measurements was conducted by using the PLS software of Structural Equation Modelling (SEM) method (Ringle et al., 2005). The measurement model in SEM presents the relationships between the latent variables their manifest variables while the structural model encapsulates the hypothesized causal relationships among the variables (Chin and Newsted, 1999). On the contrary to AMOS and LISREL that are both covariance-based approaches, Smart PLS is a regression-based method that is based on path analysis.

In fact, Smart PLS is a powerful method to examine causal models that entail multiple constructs with many indicators (Chinomona and Surujjal, 2012). It is a component-based method that is capable of modelling latent constructs that are uncontaminated by measurement error under non-normality
conditions. It is also capable of addressing complex predictive models that are small-sized to medium-sized. Because the current study has a relatively small sample size (100), the research found Smart PLS to be appropriate for the purpose of the study. Also, the bootstrapping re-sampling method was employed for the statistical significance testing of the relationships – such a method called for the generation of 200 sub-samples of cases that were randomly selected, with replacement from the initial data. Table 1 shows the reliability and the validity of the measurement model.

*Table 1. Reliability and Validity Analysis*

<table>
<thead>
<tr>
<th>Constructs</th>
<th>AVE&lt;sup&gt;a&lt;/sup&gt;</th>
<th>CR&lt;sup&gt;b&lt;/sup&gt;</th>
<th>R&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Cronbach’s alpha</th>
<th>Communality</th>
<th>Redundancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time pressure</td>
<td>0.680</td>
<td>0.862</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction</td>
<td>0.659</td>
<td>0.852</td>
<td>0.499</td>
<td>0.737</td>
<td>0.465</td>
<td>0.224</td>
</tr>
<tr>
<td>Locus of control</td>
<td>0.525</td>
<td>0.883</td>
<td>0.844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dysfunctional Audit Behavior</td>
<td>0.565</td>
<td>0.928</td>
<td>0.631</td>
<td>0.913</td>
<td>0.592</td>
<td>0.227</td>
</tr>
<tr>
<td>Structure</td>
<td>0.510</td>
<td>0.901</td>
<td>0.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consideration</td>
<td>0.513</td>
<td>0.863</td>
<td>0.809</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>0.573</td>
<td></td>
<td></td>
<td></td>
<td>0.565</td>
<td></td>
</tr>
</tbody>
</table>

Goodness-of-fit \( \text{GoF} = \sqrt{0.565 \times 0.573} = 0.570 \)

In Table 2, it is clear that discriminant validity (based on Fornell-Larcker’s criterion) values were calculated from the square root of AVE value. The diagonal values represent the square root of AVE, while the rest of the values are the related constructs correlations. Discriminant validity is said to be present if the diagonal value is greater than the values contained within the row and column. According to the results, discriminant validity is achieved.

*Table 2. Correlations between Constructs*

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Time Budget</th>
<th>job satisfaction</th>
<th>Locus of control</th>
<th>Dysfunctional Audit Behavior</th>
<th>Structure</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Budget</td>
<td>0.832</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>job satisfaction</td>
<td>0.342</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locus of control</td>
<td>0.216</td>
<td>0.266</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dysfunctional Audit Behavior</td>
<td>0.410</td>
<td>0.392</td>
<td>0.345</td>
<td>0.789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>0.453</td>
<td>0.356</td>
<td>0.517</td>
<td>0.370</td>
<td>0.715</td>
<td></td>
</tr>
<tr>
<td>Consideration</td>
<td>0.318</td>
<td>0.229</td>
<td>0.323</td>
<td>0.128</td>
<td>0.277</td>
<td>0.852</td>
</tr>
</tbody>
</table>

4.3.2. Path Analysis

PLS is also used to generate the path coefficients for the relationships represented by the constructs. The coefficients significance was analyzed through the bootstrapping method using 200 sub-samples that generated the t-values of each path estimate. The results of the path analysis of the structural model with their path estimates and t-values are presented in Table 3. The support for the proposed hypotheses can be determined through the examination of the direction (positive/negative) of the path coefficients and the t-values significance. The researcher made use of a two-tailed t-test with a significance level of 5% - in regards to this, the path coefficient is considered significance if the t-statistics is higher than 1.96 (Hair et al., 2014). This is considered for the path coefficients of the inner model (See Table 3) and the outer model. The entire t-statistics were found to be higher than 1.96 indicating that the loadings are highly significant and they support prior findings.

According to the results for R² for DAB (0.631), the research model is revealed to explain over 63% of the variance in the endogenous variables, and JS is revealed to explain around 50% of the same (0.499).
Table 3. Results of Structural Equation Model Analysis

<table>
<thead>
<tr>
<th>No</th>
<th>Hyp</th>
<th>Path Coefficient</th>
<th>Std. Error</th>
<th>T-Value</th>
<th>P-Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>LC -&gt; JS</td>
<td>0.609***</td>
<td>0.056</td>
<td>10.971</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>TP -&gt; JS</td>
<td>0.708***</td>
<td>0.038</td>
<td>18.481</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a</td>
<td>S -&gt; JS</td>
<td>0.213***</td>
<td>0.055</td>
<td>3.839</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b</td>
<td>C -&gt; JS</td>
<td>0.768***</td>
<td>0.035</td>
<td>21.989</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>LC -&gt; DAB</td>
<td>0.362***</td>
<td>0.053</td>
<td>6.865</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>TP -&gt; DAB</td>
<td>0.537***</td>
<td>0.070</td>
<td>7.666</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6a</td>
<td>S -&gt; DAB</td>
<td>0.287***</td>
<td>0.082</td>
<td>3.521</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6b</td>
<td>C -&gt; DAB</td>
<td>0.536***</td>
<td>0.047</td>
<td>11.507</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>JS -&gt; DAB</td>
<td>0.124*</td>
<td>0.087</td>
<td>1.427</td>
<td>0.077</td>
<td>Supported</td>
</tr>
</tbody>
</table>

***: p < 0.001; **: p < 0.01; *: p < 0.05

Based on Tenenhaus et al.’s (2005) formula, the global goodness-of-fit (GoF) statistic for the research model was calculated through the following equation; GoF = $\sqrt{0.565 \times 0.573} = 0.570$

The GoF was found to be 0.57 - a value that exceeds the threshold of GoF > 0.36 as recommended by Wetzel et al. (2009), indicating the good overall fit of the model.

4.3.3. Mediation Analysis

Mediation occurs if the t-statistics absolute values is higher than 1.96 following the Bootstrapping method. According to Hair et al. (2014), Variance account for (VAF) is the one that determines the indirect effect size in light of the total effect (direct effect + indirect effect). In this case, if the value of VAF is lower than 20%, no mediating effect exists, but if it is above 20% but lower than 80%, partial mediating effect exists. VAF values above 80% indicate that a full mediating effect exists. In regards to the present study, the direct effect between locus of control, time pressure, structured leadership and consideration leadership as independent variables, and the dependent variable (DAB) was examined to determine the existence of the significant effect of each path. This is followed by the carrying out of the SOBEL test to determine the significant statistics mediation, which resulted in absolute value higher than 1.96, and 2-tailed probability values of less than 0.05 of the entire independent variables with the exception of tangible that explained 95% confidence level. The next step involved the establishment of the indirect effect – from the independent variable to the mediating variable, and from the latter to the dependent variable. In this regard, VAF analysis for locus of control and DAB was fully mediated by job satisfaction (89.5%), and that of time pressure and DAB was also fully mediated (98.2%). As for the VAF analysis for the relationship between structured relationship and DAB, it was partially mediated by job satisfaction (66.7%), and the relationship between consideration leadership and DAB was fully mediated by job satisfaction (87.5%). The results of the mediating analysis and the proposed decisions are displayed in Table 4.

Table 4. Result of Mediating Analysis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path coeff. T</th>
<th>Path coeff. T</th>
<th>Path coeff. T</th>
<th>Variance accounted for (VAF)</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8</td>
<td>0.282***</td>
<td>4.833</td>
<td>0.533***</td>
<td>11.539</td>
<td>0.124</td>
</tr>
<tr>
<td>H9</td>
<td>0.223***</td>
<td>3.597</td>
<td>0.22***</td>
<td>2.754</td>
<td>0.004</td>
</tr>
<tr>
<td>H10a</td>
<td>0.293***</td>
<td>5.737</td>
<td>0.48***</td>
<td>11.408</td>
<td>0.146</td>
</tr>
<tr>
<td>H10b</td>
<td>0.044</td>
<td>2.383**</td>
<td>0.116</td>
<td>1.669*</td>
<td>0.007</td>
</tr>
</tbody>
</table>

*p < 0.1; **p < 0.05; ***p < 0.01
5. Conclusions

The proposed model attempted to demonstrate the effect of locus of control, time pressures, leadership styles and job satisfaction on DAB. Based on the results, the proposed relationships were supported, and five endogenous latent variables in the model explained 36.1% of the variance of DAB. The findings are expected to lead to valid predictions and evaluations of the DAB behaviour if new constructs are integrated into the model. The findings also revealed that job satisfaction fully mediated the locus of control-DAB relationship, time pressure-DAB relationship, and consideration leadership-DAB relationship. As for the structured leadership-DAB relationship, job satisfaction partially mediated it. The model significantly contributed to literature as the recent attributes define actions and trends in DAB. The model can be extended by future studies.

References


