RESEARCH ARTICLE

The Relationship among Transformational Leadership, Job Satisfaction and Service Quality in Public Institutions of Amhara Regional State, Ethiopia

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ABSTRACT

The intent of the study was to examine the interactions among service quality, job satisfaction and transformational leadership in the public sectors of Amhara regional state, Ethiopia. The mixed research approach and explanatory sequential design were used in this study. In the study, 354 respondents for survey and 12 interviewees for qualitative data were involved. To collect data, close-ended questionnaires and semi-structured interviews were employed. The quantitative data was analyzed by employing Partial Least Squares Structural Equation Modeling (PLS-SEM), whereas, to the qualitative data, thematic analysis was employed. The path analysis result demonstrated that transformational leadership had a positive and significant influence on both job satisfaction and service quality directly. Job satisfaction also exhibited positive relationship with service quality. Besides, job satisfaction mediates the link between transformational leadership and service quality partially. While, the findings of the thematic analysis indicated ‘poor’ practice of transformational leadership that resulted in low practice of job satisfaction and service quality. Based on this, the more transformational leadership is used, the greater will be job satisfaction and service quality practice in public institutions. Thus, the research suggests conceptually that transformational leadership has a good link with both job satisfaction and service quality. The results also have important practical contributions for leaders and practitioners, who should take note of them and endeavor to improve the application of the research variables in their own setting. Hence, leaders in public sectors are advised to apply transformational leadership effectively in order to become fruitful in service quality practice either directly or through job satisfaction.

INTRODUCTION

The aim of this work is to investigate the relationship among service quality, job satisfaction and transformational leadership in public sectors. To examine the relationship among these variables, the study was focused on the public sectors of Amhara regional state, Ethiopia. This research was motivated by the practical exposure of the researchers for public sectors and their exposure of lack of quality service delivery in these institutions. Hence, conducting this research will have the following benefits. First, public sector leaders and employees might learn about the effects of job

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satisfaction and transformational leadership on service quality in order to pinpoint the areas in which service delivery needs to be improved. Second, the findings of this study would have also significance to the academics to use it as a basis for future research and as inspiration to perform additional investigations on the problems in various social settings. Third, the findings and recommendations of the study would have importance to policymakers by drawing their attention to some of the points that will need corrective measures regarding the issues.

Hence, service quality has been conceived by a number of authors. Concerning this, Parasuraman et al. (1988) explained it as consumers’ attitude towards the perceived overall superiority and excellence of the delivered service. Again, to describe and offer a precise explanation of service quality, understanding of its characteristics is vital. With respect to this, Cronin and Taylor (1992) identified five service quality dimensions. The first is reliability, which is explained as the capability to offer the promised service consistently and precisely. The second is assurance that is described as workers’ expertise and civility, together with their capacity to communicate with trust and confidence. The third is tangibles, which represents appearance of all the physical buildings, equipment, and communication materials. The fourth trait of service quality is empathy, which is described as giving clients sympathetic and personalized attention. The final aspect of service quality is responsiveness. It refers to the institution’s readiness to assist clients and to deliver prompt service (Cronin & Taylor, 1992). Thus, with the advent of flat organizations and new public management that embrace the notion of a buy-and-sell organization, social service organizations have changed drastically over the previous few decades (Tetteh et al., 2021). New public management, is part of a wave of new ideas that infiltrated its way into the public sector (Lane, 2002). According to this writer, the intention was to introduce business concepts into the public sector to make it more market-oriented, with the goal of improving efficiency and control.

Despite the fact that the major objective of public institutions is to provide service quality to the customers, service provision among employees has decreased and customer demands have increased (Zygiaris et al., 2022). New expectations have been placed on people in leadership roles as a consequence of these changes. With even greater disruption expected in the future as a result of shifting legal, social, technical, and competitive situations, effective leadership is considered critical to retaining people and managing the rapid speed of change in today’s public sectors (Van Der Wal & Demircioglu, 2020). As Muindi (2021) added, the position of leadership is significant among the numerous factors that affect service quality. Other writers further stated that leadership affects followers’ loyalty and, as a result, improve the organization’s efficiency (Darcey-Baah et al., 2021). To this end, the concept explained by Northouse (2016) “Leadership is the process whereby an individual influences a group of individuals to achieve a common goal”, presents a vivid picture of how leaders might persuade their subordinates to attain their objectives.

Hence, from the leadership styles, transformational leadership (TFL) is the one that appears promising in terms of managing continuous change in public organizations (Nam and Park, 2019), and it is the concern of this study. According to Bass (1984) as cited in Udin et al. (2023) transformational style of leadership represents a visionary relationship between leaders and subordinates that is built on trust, confidence, admiration, and respect. Moreover, transformational leaders use a variety of approaches and methods to inspire and improve the performance of their members, including leading by example, and empowering subordinates to collaborate with communities to accomplish the desired outcomes (Becker et al., 2022). Transformational leaders also strive to improve employee and staff efficiency by providing resources for personal and professional development (Rajabi et al., 2023). As to Gaudes et al. (2007), cited in Ayalew and Ayenew (2022), a transformational leadership can be also described as motivating, communicating a vision and a contagious excitement for the initiatives, and introducing energy and enthusiasm into the workforce. Again, transformational leadership is distinguished from other styles of leadership by its five dimensions of focus: idealized influence (attribute), idealized influence (behavior), inspirational
motivation, individual consideration, and intellectual stimulation (Bass & Riggio, 2006; Rashid et al., 2023).

In addition, among the many determining factors of service quality, this study was also focused on employee job satisfaction. As Armstrong (2006) argued, people’s attitudes and feelings about employment determine job satisfaction. He asserts that having a positive attitude towards one’s work and workplace means job satisfaction. On the contrary, a negative attitude towards one’s work indicates job dissatisfaction. Thus, in the study to measure job satisfaction, the nine aspects of it such as work, pay, development and growth, recognition, remunerations, operating environment, supervision, coworker and interpersonal relation (Spector, 1997) were employed.

Besides, the researchers have also looked the connections among service quality, job satisfaction and leadership styles. Theoretical underpinnings and empirical findings of the studies suggest that service quality, job satisfaction, and leadership styles are interrelated (Chang et al., 2019; Atmojo, 2012; Omar & Hussein, 2013; Bushra et al., 2011; Kanval et al., 2024). Accordingly, Yee et al. (2008) found that the provision of high-quality services in institutions is significantly impacted by staff satisfaction. Additional studies in this field have also exposed that job satisfaction affects service quality (Ghayas & Hussain, 2015). Additionally, Atmojo (2012) offered evidence to the influence of transformative leadership on the quality of services and job satisfaction. The findings indicated that service quality is influenced by job satisfaction. The results also showed that TFL had a considerable influence on employee work satisfaction. In this respect, Bushra et al. (2011) also conducted research to the issues under consideration. His research found a solid connection among TFL practice with organizational service quality and job satisfaction. Lastly, authors asserted that TFL can promote employees’ good attitudes towards providing services, which will greatly improve their service efficacy (Liao & Chuang, 2007; Jam et al., 2018). However, as far as the researchers’ knowledge is concerned there were no prior studies on the mediating effect of employee's job satisfaction in the connection between transformational leadership style and service quality in public institutions.

In addition to the empirical literatures, this study also reviewed the leader-member exchange theory. The premise of the leader-member exchange theory is that followers are divided into two groups by their leaders: an in-group and an out-group. Members of the in-group have higher status, more benefits, and more consideration in their organizations. Besides, these individuals are given some leeway in their jobs by their leader. They operate inside the leader’s intimate communication network. On the other hand, out-group members are those who are not part of the leader’s inner circle, are subject to formal rules and procedures, and get less attention and few benefits (Lunenburg, 2010). Moreover, evidence from research explained that members of the organization who established a strong attachment and high quality relationship with their leader take on more responsibility on the job, give more to the organization, and receive higher performance ratings than members of the out-group who report a low-quality relationship with their leader (Yukl, 2010).

Thus, Chau et al. (2022) claimed that experts call for further empirical research on transformational leadership in the public sector to better understand how the context may interfere with job satisfaction and service quality practices. This showed that a comprehensive study on the link among transformational leadership, job satisfaction and service quality in public institutions has received less attention. Therefore, the theoretical gap identified in relation to these variables was lack of a comprehensive understanding of possible relationship among service quality, job satisfaction and transformational leadership by using leader-member exchange theory as a guiding framework. Empirically, the causal association between these variables in the public institutions of Ethiopia is inadequately explored. Regarding this, in specific to Ethiopia, Zerihun and Melese (2014) claimed that reform programs aimed at improving the efficiency of public sectors were not implemented at the pace that both the government and the public required. Besides, according to the writers, although empirical studies in relation to transformational leadership in public institutions are on the
rise, they are still few and far between, and they seldom relate to one another. The writers further emphasized that the big issues relating to organizational service quality in one manner or another are inextricably linked to a lack of transformational leadership. Hence, against these drawbacks, the current study exerts an effort to evaluate the link among service quality, job satisfaction and transformational leadership in the public institutions of Amhara regional state, Ethiopia by employing leader-member exchange theory as its theoretical framework.

**Study Objectives**

- To test the direct effect of job satisfaction on service quality in public institutions of Amhara regional state.
- To test the direct effect of transformational leadership on service quality in public institutions of Amhara regional state.
- To investigate the direct effect of transformational leadership on job satisfaction in public institutions of Amhara regional state.
- To determine whether job satisfaction mediates the relationship between transformational leadership style and service quality in public institutions of Amhara regional state.

**Hypotheses of the Study**

**H1:** There is a significant positive effect of job satisfaction on service quality in public institution of Amhara regional state.

**H2:** There is a significant positive effect of transformational leadership on service quality in public institutions of Amhara regional state.

**H3:** There is significantly positive effect of transformational leadership on job satisfaction in public institutions of Amhara regional state.

**H4:** Job satisfaction mediates significantly the effect of transformational leadership on service quality in public institutions of Amhara regional state.

Thus, based on the literatures reviewed above, the following conceptual framework is designed to show the possible relationship that might exist among the study variables as presented in Figure 1 below.

**Figure 1. Conceptual framework of the study**
METHODOLOGY

Sampling Design
The mixed research approach and explanatory sequential design (QUANT→qual) were employed in this study, which are in line with the pragmatic perspective (Creswell, 2014). The rationale to use this design is because of its effectiveness in conducting quantitative research first, analyzes the results, then expands the results to explain them in more in-depth through qualitative research.

Sample and sampling procedures
The population of this study involved public institutions’ leaders and employees in Amhara regional state. The study was used two separate sets of participants for its first and second data collection stage. Thus, for the first phase to make the sample areas and sample size representative and manageable enough, multi-stage random sampling that allowed using two or more probability sampling techniques in a combination was employed. When there is a large population and impossible to research every individual from a geographically dispersed incomplete list of all the target population members, this sampling technique is appropriate to use, as it allows the researcher to create clusters and sub-clusters until he/she reaches the desired group size (Wang et al., 2006). Hence, the sample size of the study computed from the target population by using Cochran (1963) sample size determination formula was 354. Then, to determine the target population and arrive on the specific sample individuals, the procedures followed were:

- First dividing zones of the region in to four clusters based on their geographical proximity.
- Select one zone from each cluster in a lottery method.
- Select one district (Woreda) from each of the selected zone by using lottery method.
- Then, dividing public institutions of the selected districts in to four clusters based on their service similarity.
- Proportionally allocate the determined sample size into the clustered institutions.
- Finally, select the determined sample employees and leaders from the source lists of the clustered institutions by using lottery method simple random sampling.

Data collection
This study employed an explanatory sequential design whereby quantitative data collection is followed by the qualitative and integrated the results at the interpretation stage (Creswell & Plano-Clark, 2018) cited in Yaikaew and Ruagchoengchum(2024). This was done with the interest of supplementing the quantitative results with the qualitative findings.

Part 1
From a sample of 354 respondents, the survey data was collected using closed-ended questionnaires that utilized to measure job satisfaction, service quality, and transformational leadership using 36 items of job satisfaction survey (JSS), 22 items of service performance (SERVPERF), and 12 items of MLQ created by Spector (1994), Cronin and Taylor (1992), and Avolio and Bass (1995) respectively. Thus, the five aspects of service quality were operationalized using a 5-point Likert-scale ranging from 1 = strongly disagree to 5 = strongly agree. Besides, JSS that employed a Likert-type scale with six response options for each component, ranging from "disagree very much" to “agree very much" was used to measure job satisfaction. Besides, to measure transformational leadership components a 5-point Likert-type scale extending from 0 = not at all to 4 = frequently, if not always was employed. In the survey data collection process, the researchers themselves and four assistant data collectors were involved.
Part 2

In addition, after the quantitative data analysis was done, qualitative data were collected from interviewees. Semi-structured interview instruments were used to get the qualitative data. By using data saturation technique 12 interviewees: 6 from leaders and 6 from employees were chosen purposively based on their service duration. This was done to find participants who acquired in depth information on the variables under study. The interviews were conducted in the participants’ work setting through face to face interview process. Each interview was taken 42 minutes on average.

Reliability and Validity of Instruments

In order to determine the reliability of the questionnaires, the Cronbach alpha value of 0.70 is considered as the threshold value (Surucu & Maslakci, 2020). To this, a pilot test was conducted to check the workability of the instruments in the study setting. The outcome indicated that the instruments had reliability scores of 0.922, 0.833 and 0.816 for SERVPERF, JSS and MLQ respectively which showed excellent reliability. Besides, data triangulation, respondent validation and reflexivity were applied to ensure the reliability and accuracy of the qualitative data. The researchers also recorded all interviews and transcribed into notes. Besides in order to enhance the validity, clarity, and free communication, the researchers conducted the interviews in the researchers’ and interviewees’ native language.

Data Analysis

In the study, quantitative data was analyzed using PLS-SEM analysis with a smart PLS 4 software and tested using a level of significance of 0.05. This study analyzed indicator loading, construct reliability, convergent validity, and discriminant validity test under the measurement model. While, for the structural model, the evaluation was taken into account the bootstrapping and determined the significant level of p-value, the significant level of effect size and the coefficient of determination. To the qualitative, on the other hand, interview data was recorded, transcribed and classified into themes in accordance with the variables and sub-variables and was analyzed thematically, followed by descriptions and narrations.

RESULTS

In the study, 354 survey questionnaires were disseminated to respondents. Besides, 12 respondents were also involved in the interview. From the distributed questionnaires, the properly filled in and used for the analysis were accounted for 327 (92%). However, 11 or (3%) of the questionnaires were partially filled and rejected. Again, 16 or (5%) of the distributed questionnaires were not returned.

Measurement Model Evaluation

By using the PLS algorithm, convergent validity, internal consistency, discriminant validity, and multicollinearity tests were done to ascertain whether the measured variables operate in a manner that is in line with the theoretical anticipation on how they operate.

Reliability Test

Transformational leadership style, job satisfaction, and service quality indicators were evaluated. Since the factor loading of each item should be equal to or greater than 0.70 (Bontis & Sereko, 2007) to meet the model’s goodness of fit, some job satisfaction indicators (Pay, Promotion, Working Condition, and Contingent Reward) that were discovered to have factor loadings less than 0.70 were eliminated from the model. Then, as displayed in the outputs of the Path, after a retest was conducted, the items met the criteria (λ > 0.70), as shown in Table 1 and Figure 2 below. Furthermore, the three latent constructs showed a Cronbach’s alpha value more than 0.7.
Table 1. Internal Validity Test of the Measurement Model

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Indicators</th>
<th>Loadings</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Benefit</td>
<td>0.834</td>
<td>0.869</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>0.750</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coworker</td>
<td>0.852</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td>0.778</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>0.837</td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>Assurance</td>
<td>0.703</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>0.722</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>0.805</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsive</td>
<td>0.752</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tangible</td>
<td>0.811</td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>IIA</td>
<td>0.721</td>
<td>0.862</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td>0.893</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td>0.846</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td>0.808</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>0.743</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Measurement Model

Convergent Validity Test

Convergent validity describes how well items actually represent the desired latent construct and relate with other measures of the same latent construct. As a result, it is verified by applying the average variance extracted, and composite reliability. Hence, the convergent validity can be confidently confirmed if all the items are substantially significant in measuring their constructs, whereby the composite reliability values are at least 0.70 and the average variance extracted (AVE) are at least 0.50 (Hair et al., 2022; Ghasemey et al., 2020). Hence, the results showed that all of the items employed are highly and significantly loaded on the corresponding construct, exceeding the 0.70 threshold. For this study, as shown in Table 2 below every construct’s composite reliability that ranges from (0.822-0.872) is higher than the prescribed 0.70 criterion. A variable’s average variance extracted (AVE) measures the amount of difference it extracts from its indicators in comparison to
the variation caused by measurement error. Thus, the results in Table 2 below indicated that all AVE values were more than 0.50. Therefore, the measurement model utilized in this investigation fulfilled and exceeded the criteria of convergent validity.

### Table 2. Convergent Validity Analysis

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Indicators</th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Benefit</td>
<td>0.869</td>
<td>0.874</td>
<td>0.658</td>
<td>2.680</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coworker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td></td>
<td></td>
<td></td>
<td>2.666</td>
</tr>
<tr>
<td>Service quality</td>
<td>Assurance</td>
<td>0.816</td>
<td>0.822</td>
<td>0.577</td>
<td>1.626</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
<td>1.576</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
<td>2.325</td>
</tr>
<tr>
<td></td>
<td>Responsive</td>
<td></td>
<td></td>
<td></td>
<td>1.633</td>
</tr>
<tr>
<td></td>
<td>Tangible</td>
<td></td>
<td></td>
<td></td>
<td>2.367</td>
</tr>
<tr>
<td>Transformational</td>
<td>IIA</td>
<td>0.862</td>
<td>0.872</td>
<td>0.648</td>
<td>1.704</td>
</tr>
<tr>
<td></td>
<td>IIB</td>
<td></td>
<td></td>
<td></td>
<td>3.197</td>
</tr>
<tr>
<td></td>
<td>IM</td>
<td></td>
<td></td>
<td></td>
<td>2.405</td>
</tr>
<tr>
<td></td>
<td>IS</td>
<td></td>
<td></td>
<td></td>
<td>2.064</td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td></td>
<td></td>
<td></td>
<td>1.731</td>
</tr>
</tbody>
</table>

### Discriminant Validity

Three evaluation criteria were used in this study to determine discriminant validity: item cross-loadings on multiple variables, Fornell-Larcker, and Heterotrait-Monotrait (HTMT) ratio approaches. The following section provides descriptions of each of these analyses. Cross-loadings are the first technique used to evaluate the discriminant validity. In this case, discriminant validity is determined by comparing the indicator loadings with cross loadings. Thus, the indicator loadings are contrasted with other reflecting indicators in Table 3. The result showed that all indicator loadings exceeded the cross-loadings, indicating sufficient discriminant validity that allowed for more investigation.

### Table 3. Discriminant validity–Cross loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Job satisfaction</th>
<th>Service quality</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit</td>
<td>0.834</td>
<td>0.515</td>
<td>0.449</td>
</tr>
<tr>
<td>Communication</td>
<td>0.750</td>
<td>0.397</td>
<td>0.402</td>
</tr>
<tr>
<td>Coworker</td>
<td>0.852</td>
<td>0.518</td>
<td>0.449</td>
</tr>
<tr>
<td>Supervision</td>
<td>0.778</td>
<td>0.495</td>
<td>0.497</td>
</tr>
<tr>
<td>Work</td>
<td>0.837</td>
<td>0.531</td>
<td>0.473</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.401</td>
<td>0.703</td>
<td>0.463</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.383</td>
<td>0.722</td>
<td>0.438</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.546</td>
<td>0.805</td>
<td>0.468</td>
</tr>
<tr>
<td>Responsive</td>
<td>0.430</td>
<td>0.752</td>
<td>0.424</td>
</tr>
<tr>
<td>Tangible</td>
<td>0.516</td>
<td>0.811</td>
<td>0.455</td>
</tr>
</tbody>
</table>
Besides, Table 4 below displays the outcomes of the Heterotrait-Monotrait (HTMT) and Fornell-Larcker ratio techniques. The square root of the average variance extracted (AVE) of each construct must be higher than its correlation score with all other constructs in order for discriminant validity to be established (Fornell & Larcker, 1981). In this instance, Fornell and Larcker advised to use AVE with a score of 0.50 or above as a general criterion for assessing discriminant validity. They also recommend that the square root of AVE should be larger than the correlations among latent constructs in order to attain appropriate discriminant validity. Thus, Table 3 below displays the correlation between the constructs in the off-diagonal as well as the average variance extracted-diagonal values (0.811, 0.760, and 0.805). The outcome demonstrates that the AVE’s square root (shown diagonally) was bigger than its association with other constructs (represented by the off-diagonal numbers), which supports the discriminant validity of the test.

Henseler et al. (2015) also recommended employing HTMT ratio to measure discriminant validity. As to them, due to the logical similarity of the ideas, the HTMT value above 0.90 reflects no discriminant validity. However, according to the results of the current study as shown in Table 4, all of the constructs are theoretically and empirically unique from one another as they all have HTMT scores of less than 0.90.

Table 4. Discriminant validity by using the Fornell-Larcker and HTMT Ratio criterions

<table>
<thead>
<tr>
<th></th>
<th>Job satisfaction</th>
<th>Service quality</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fornell–Larcker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td><strong>0.811</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td>0.609</td>
<td><strong>0.760</strong></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>0.561</td>
<td>0.591</td>
<td><strong>0.805</strong></td>
</tr>
<tr>
<td>Heterotrait–Monotrait (HTMT) Ratio Criterion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Quality</td>
<td>0.714</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>0.647</td>
<td>0.700</td>
<td></td>
</tr>
</tbody>
</table>

Bold represents the square root of AVE

Assessment of Structural Model

After the measurement model was validated, the structural model was computed to test the conceptual model, which addresses the direct and indirect links that consisted of four different theoretically motivated assumptions. Here, measures such as t-value, path coefficients, and p-values were calculated using the PLS Bootstrapping technique. Figure 3 below provides a visual depiction of the findings displayed in the Smart PLS screen that showed the p-values and the coefficient of determination. The $R^2$ statistic, which displays the variance in the endogenous variable that is
explained by the exogenous variables, can be used to evaluate the structural model’s quality. Based on the results displayed in Figure 3 below, the $R^2$ for job satisfaction and service quality respectively, were discovered to be 0.315 and 0.462. The result showed that transformational leadership dimensions accounted 31.5% of the variation in job satisfaction. Moreover, the result also illustrated that job satisfaction and transformational leadership together constituted 46.2% of service quality variation in public sectors of Amhara regional state, Ethiopia.

Figure 3. Structural Model

In the study, path coefficients for direct and indirect effect were employed to evaluate the proposed hypotheses as shown in Table 5 below.

Table 5. Path coefficients for direct and indirect effects

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>$\beta$</th>
<th>SD</th>
<th>$t$</th>
<th>P</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Direct effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job Satisfaction $\rightarrow$ Service Quality</td>
<td>0.404</td>
<td>0.052</td>
<td>7.714</td>
<td>0.000</td>
<td>2.5% - 97.5%</td>
</tr>
<tr>
<td>H2</td>
<td>Transformational Leadership $\rightarrow$ Service Quality</td>
<td>0.364</td>
<td>0.047</td>
<td>7.695</td>
<td>0.000</td>
<td>0.272 - 0.456</td>
</tr>
<tr>
<td>H3</td>
<td>Transformational Leadership $\rightarrow$ Job Satisfaction</td>
<td>0.561</td>
<td>0.039</td>
<td>14.529</td>
<td>0.000</td>
<td>0.485 - 0.636</td>
</tr>
<tr>
<td>H4</td>
<td>Indirect effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transformational Leadership $\rightarrow$ Job Satisfaction $\rightarrow$ Service Quality</td>
<td>0.227</td>
<td>0.031</td>
<td>7.417</td>
<td>0.000</td>
<td>0.167 - 0.287</td>
</tr>
</tbody>
</table>

The results in the model showed that job satisfaction had a substantial influence on service quality ($\beta=0.397$, $t=7.440$, $p<0.001$), which aid to accept the proposed hypothesis (H1). As a result, this finding signifies that job satisfaction significantly predicts service quality. Additionally, the predicted path association between transformational leadership and service quality was significant at ($\beta=0.365$, $t=7.579$, $p<0.001$), which also helped to accept H2. Furthermore, the predicted path relationship between transformational leadership and job satisfaction at ($\beta=0.570$, $t=15.311$, $p<0.001$) was statistically significant, which supported to confirm H3.

For the indirect effect, this study looked at the role job satisfaction played in mediating the link between transformational leadership and service quality. The finding supported hypothesis (H4) by showing that job satisfaction at ($\beta=0.226$, $t=8.086$, $p<0.001$) demonstrated a considerable variation in the link between transformational leadership and service quality. Thus, this result displayed that
job satisfaction partly mediates the relationship between transformational leadership and service quality.

**Qualitative Results**

This study also addressed the variables relationship with qualitative analysis. Thus, customers feel comfortable when they receive service in the institutions, and personnel in the institutions are courteous and respectful were ideas raised to the respondents in order to get their opinions on the relations of service quality and job satisfaction. The knowledge, civility and reward system used by public sector staffs were described as follows.

“Even though we appreciate and care for service providers, their kindness to us falls short of our expectations. The respect provided to service receivers by staffs is characterized as moderate that led customers to feel disrespected”. (Interviewee 9, 10, 11, 12)

Thus, the implementation status of job satisfaction falls short of influencing service quality in public institutions. Again, in relation to the results of this study, Karunaratne and Jayawardena (2010) discovered that high service quality offered by employees were related to staff members' dependability, quietness, composure, and respect. Heung (2000) also revealed that an organization's security, competency, and credibility were the determining factors for higher satisfaction of customers in the service rendered.

Similarly respondents were questioned about the nature of the leadership practice and service delivery relationships. The respondents state that they are dissatisfied with the regular leadership practice and the nature of services provided. The following idea that extracted from the interviewees reveal the degree of the relationships of leadership practice and satisfaction of employees regarding the services rendered.

“Due to the rigidity of the rules and regulations, which exclude any opportunity for empowerment in our own job, we do not have an appealing working environment. Growth and promotion are not based on merit; rather, those staff members with frequently visit the office of their heads are given strong opportunities for progress, growth, and development, even if they are not that much more effective than many other staff members. Strong relationships between staff members and their managers allowed them to represent the case and core process departments at various trainings and workshops”. (Interviewee 7, 8, 9, 10, 11, 12)

The subject of transformational leadership link with job satisfaction was also discussed with interviewees. Concerning on this, leader respondents answered that they have the characteristics of individualized consideration in exchange for the services delivered. As to them, it is one mechanism used in order to motivate employees to perform their task as per the standards set. In specific to this component, employee respondents have different response to that of leaders. Employees who responded to this claimed that their superiors lack to address employees' personal interest when they meet requirements. To ascertain this, the response of one employee from district 'C' is presented as follows:

“In exchange for properly outlining our strategy, doing well in our case or core process departments, as well as when we carry out our duties in accordance with the established standards, the leader and management bodies hardly motivate us with different benefits”. (Interviewee 7)

The interviewees were also asked to elucidate their opinion about the values of the use of transformational leadership in service quality delivery and employee job satisfaction in their institution. As per the respondents, leaders' capacity to apply transformational leadership components has significant impacts on their job happiness and the provision of high-quality services.
They also mentioned that a leader’s style of practice has a high determination on the quality of services that employees provide and on contentment at work. They went on to say that weak and slack leaders in firms cause employee dissatisfaction and client complaints about the quality of the services provided.

**DISCUSSION**

This investigation is attempted to examine the relationship among service quality, job satisfaction and transformational leadership in public institutions. Thus, the outputs of the survey data revealed the existence of relationship among the variables under investigation. In this regard, the coefficient of determination ($R^2$) for job satisfaction and service quality were 0.315 and 0.462 in order. The result showed that transformational leadership dimensions accounted 31.5% of the variation in job satisfaction. Again, the result also demonstrated that job satisfaction and transformational leadership in combination explained 46.2% of service quality variation in public sectors of Amhara regional state. In this respect, Cohen (1988) suggested that the $R^2$ value of 0.26 is significant, 0.13 is moderate, and 0.02 is weak. Thus, based on this cut value, the $R^2$ values in this study showed that transformational leadership style has a significant impact in explaining job satisfaction. Again, transformational leadership and job satisfaction together have showed a significant amount of explaining power for the variation in service quality practice in the public sectors of Amhara regional state.

Furthermore, the path analysis finding showed that job satisfaction predicts service quality with statistically significant and strong positive relationship. The findings of this study are, therefore, supported by earlier research conducted on the subject (e.g., Aziri, 2011; Savari et al., 2013). In this context, Aziri (2011) asserted that a successful employee is one who is happy at work and is, therefore, content with their job. The author also said that happy staffs are better likely to put a lot of effort and deliver superior services through corporate citizenship behavior. Hence, happy workers are more likely to contribute to their companies. Still other authors went on to say that when workers are happy in their jobs; they are more likely to offer high-quality services (Yoon and suh, 2003). Again, the study displayed that the predicted path analysis between transformational leadership and service quality was significant and positive. Regarding this, researches also demonstrated that transformational leadership has a favorable impact on employee service quality (Belias and Koustelios, 2014). Besides, writers like Donkor et al. (2021) discovered a positive correlation between transformational leadership and service quality, which is consistent with the findings of this study.

Statistically substantial predictive capacity of transformational leadership on the practice of job satisfaction in the study area was also demonstrated by the outputs of the direct path analysis. As a result, aligned with this finding, writers claim that transformational leadership has a long-term effect on satisfaction and productivity (Befekadu & Peter, 2021).

Furthermore, in the indirect path analysis, the result showed that job satisfaction mediates the link between transformational leadership and service quality partially. The findings of this research elaborated that transformational leadership style had a sizable indirect impact on service quality through job satisfaction. The finding confirmed with academics who stressed the contribution of transformational leadership as the most effective strategy in both the public and private sectors to improve service quality and job satisfaction (Chau et al., 2022). Despite this, to the researchers’ knowledge, however, no studies before had looked at whether job satisfaction among employees mediates the link between transformational leadership and service quality in Ethiopia.

Moreover, the tenet of leader-member exchange theory, which was used as a guiding framework for this inquiry, is aligned with this study results. As to this theory, members of the in-group have gained higher status, more benefits, and consideration from their leaders. On the other hand, out-group members are those who are not part of the leader’s inner circle, are subject to formal rules and
procedures, and get less attention and few benefits (Lunenburg, 2010). Other findings by Karunaratne and Jayawardena (2010) also showed a similar output. These writers in their finding discovered that high service quality provision is related with staff members’ compassion, quietness, composure, and respect attained as a result of the fertile work environment established by their leaders.

**Theoretical and Practical Implications**

Thus, the implications of this investigation can be comprehended from theoretical and practical importance. Regarding theoretical importance, this study displayed that transformational leadership and job satisfaction have relationship with service quality. This implies that there are significant work-related consequences of the leader-employee relationship quality. The study’s findings specifically support the leader-member theory, which held that workers with strong leader-employee attachments experience increased motivation, productivity, and job satisfaction as well as more positive workplace citizenship behaviors. As a result, leaders treat those who they believe will perform well differently than they do other members and devote more resources to them. Thus, it is plausible to propose that in order for leaders to become proficient in providing services and to ensure that workers are satisfied with their jobs, they should cultivate excellent communication with a large number of subordinates. In this respect, George and Jones (2008) also advised leaders to have as many members of in-group and as small member of an out-group. Practically, the outputs of this research can be utilized as a guide by organization leaders’ to enhance the effectiveness of their leadership practices for the betterment of service quality through the mediating function of job satisfaction.

**Limitation and Future Direction**

Although this study provides important insight into the positive link between service quality job satisfaction and transformational leadership in public institutions of the study site, it has the following limitation. Due to the nature of the study, participants’ relationship with their supervisors as employees might affect their authenticity in evaluating them, answering correctly and providing honest responses about the real leadership practices in their respective organizations. In other way round, this responding bias may influence the validity of the data used in the study.

**CONCLUSION AND RECOMMENDATION**

To conclude, the path analysis displayed that job satisfaction has a partial mediation influence on the link between transformational leadership style and service quality. Thus, one can deduce from the PLS-SEM results of this work that for both direct and indirect path relations, transformational leadership significantly affects both job satisfaction and service quality positively. That means, the more transformational leadership is used, the greater will be job satisfaction and service quality in public sectors. Hence, the contributions of transformational leadership should, therefore, be taken into consideration by leaders in order to provide quality service in the public sectors. Hence, organizations to become effective in their practice, the following recommendations should be taken into consideration. First, leadership practices will be effective if employees are constantly learning about new knowledge, important skills and high moral values. Second, transformative leadership style can be meaningful if followers are empowered. Third, interactions and interrelation between employees and leaders will boost constructive personal outcomes.

**Authors’ Contributions**

Destaw Amare has generated the idea of the study, designed the project, collected the data and wrote the manuscript.

Matebe Tafere participated in the design of the study, assisted in writing the manuscript and supervised the work.
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REFERENCES


