The Impact of Transformational Leadership Factors on Project Progress and which Factor has Significant Influence and Great Contribution towards Project Success

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Abstract

Projects are essential drivers for business growth and success. The project’s aim is analyzing the effect of transformational leadership factors on succeeding the projects. The study will investigate transformational leadership factors (Idealized Influence, Inspirational Motivation, Intellectual Stimulation & Individualized Consideration) and their direct influence on project success. Examining the impact of each factor will support project leaders and project resources to influence project progress for delivering and achieving project success and eliminating potential project losses and unnecessary project failures. Data from 216 project members working in Saudi Arabia for managing and executing projects were gathered and screened before being analyzed and empirically tested using the Structural Equation Model. The findings are supported for hypotheses suggested and showed that transformational leadership as well as 3 factors (idealized influence, intellectual stimulation and individual based consideration) have a significant relationship influencing progress and ultimately impacting project success. The study concludes that inspirational motivation has insignificant effect on project success. The results are inviting project leaders to adopt transformational leadership and raise the awareness, which stimulates the employees to express their ideas, effective feedback, and concerns to create a situation for the employee to deliver best performance levels. The most significant contribution is recognizing the positive effect of at the transformational leadership on study progress and ultimately help project managers to secure the success.

Keywords

Introduction

The demand for effective leadership has become increasingly important and a critical organizational requirement for projects and organizations. It has become essential for achieving strategic objectives, desired and sustained growth and success in their area of business and their projects. Organizations are increasingly hiring project leaders who are proactive and respond innovatively to solving problems. Through planned project success, organizations can seek to maintain their continual growth and success.

This study examines the direct empirical relationship among the factor for transformational leaderships (idealized influence, inspirational motivation, intellectual stimulation, individual based consideration) and project success.

Results obtained from project management studies have driven more organizations for becoming more focussed on projects as well as application of those ideas to build the smart business strategy. A “fast changes in the functional work domain has caused establishments to forgo conventional hierarchy dependent leadership roles in favour of design in which the decisions are made based on authority” is distributed to lesser hierarchical level inside the establishment (Peterson, 2014).

Hence, objective of the project is exploring the literature as well as establishing structure for achieving better clarity about the association among transformational leadership as well as succeeding in the project, taking into account the importance of each dimension of the theory as well the impact on securing project success. Saudi Arabian government projects were studied and evaluated by the National Anti-Corruption Commission (Nazaha). In a publication, dated April 2015, they reported that 672 projects out of 1,526 government projects (44% of the total) were considered to be delayed and failed projects resulting in 44% failure rate and 56% success rate. This percentage of success is much lower than the global average; hence, it is necessary to study why project success rates are low and what is needed to improve the situation.

Obviously, project failure contributes negatively to an organization’s goals and objectives, and a high percentage of project failure is a real problem. Studies have shown that just 64% project attain their objective (Project Management Institute: Pulse of the Profession, 2015). That shows 32% to 36% project are considered to have failed or incurred losses, which poses a considerable loss of opportunities and global resources. Therefore, the problem of unsuccessful projects requires further attention and investigation.
Also, previous research has shown that appropriate behaviours by project managers is a major factor in attaining project success (Zwikael & Unger-Aviram, 2010; Scott-Young & Samson, 2008).

Achieving the successful completion of project are vital for organizations along all units due to the strategic benefits offered. These drive projects from conception of the idea to commercialization and fulfilment. This study will explore the presence of considerable association among transformational leadership factors as well as project success. Some factors to be considered are leadership for employees, proper project management, and employee recognition (Zikael & Unger-Aviram, 2010). A vital point to be noted, because of the short-term nature of projects, it is often becoming a general technique for the companies for delivering ideas which have good strategies as well as tactics. For creating a business with good values, companies now focus on managing projects for optimizing project outcomes, thus helping them move to positions of competitive advantage.

This paper explores the area of project management focusing on developing a framework that will encourage project leader as well as manager to recognize advantages of transformational leadership factors and their positive impact on project success. Also, eliminating failure rates by raising awareness of transformational leadership as well as its factors with respect to project management.

This paper talks about the managing project both on both literal and application. Theoretically, this study uses the theory of transformational leadership and its factors in demonstrating their impact and relationships on project success, the findings of which provides body of knowledge with respect to project management. The framework would provide project managers in Saudi Arabia with critical skills of leadership that will support them for securing the intended levels of performance from different project resources towards the ultimate goal of achieving project success.

**Literature Review**

**Transformational Leadership**

It is a way of "leadership that is able to transform followers to go beyond own motivation by influencing the interests, morals, ideals, as well as values, and motivate to be more potential” (Bass, 1985).

Bass (1985) was interested in how much a leader is capable of influencing his/her followers. A leader who is trustworthy, honest, and nurturing, among other qualities, inspires greater
loyalty from his or her followers. In other words, being a role model and exhibiting these qualities transform followers and can even inspire them to action. The revolutionary is an example of this. Bass outlined the following factors of transformational leadership:

- Idealized influence
- Inspirational motivation
- Intellectual stimulation
- Individual consideration

It is defined as leadership that generates awareness and acceptance among followers, allows their subordinates to advance, encourages them to look beyond their needs to accomplish organizational goals and motivates them through the leader’s behaviours (Avolio et al., 2004).

In addition, the leaders also act as role models to their followers and provide feedback and coaching, which when combined with role modelling are important sources of self-efficacy that enhance feelings of competence (Seibert et al., 2011). Leaders play such an important role due to their ability to provide information on strategic and operational goals, enabling employees to increase meaningfulness when they see the value of their work (Seiber et al., 2011).

**The Factors of Transformational Leadership**

1. **Idealized Influence as a Dimension of Transformational Leadership**

   The definition of the idealized influence is a leader’s charismatic behaviour that draws followers to them. This definition includes the aspects of the leader’s behaviours as well as the view points of the people who follow the leader (Bass & Avolio, 1996). Transformational leaders who have idealized influence display confidence and instil moral values such as dignity, integrity, and honour, and exhibit an act of altruism as well as dignify the one who follows them (Loon et al., 2012). Therefore “Idealized influence is where the leader becomes a role model, demonstrating the qualities of trust, honesty, enthusiasm and so on.”

2. **Inspirational Motivation as a Dimension of Transformational Leadership**

   Leader’s ability to present a clear organizational vision and inspire teams or the organization to work toward it is known as Inspirational motivation (Schweizer & Patzelt, 2012). The aim is building an aspiration to excel while accepting changes with confidence
as well as enthusiasm (Sitkin & Pablo, 2005). Inspirational motivation inspires employees through the idealized influence, responds to the expectations of individuals also attends to the issues (individual consideration), and encourages to think creatively towards novel ideas in solving organizational challenges (the intellectual stimulation). In the case of acquired companies, inspirational leadership is employed to increase the employees' commitment as it helps them better know the goals of the novel organization and direction (Schweizer & Patzelt, 2012). Therefore, “Inspirational motivation by a leader means giving meaning to the tasks that are undertaken. They usually provide a vision or goal. Having a purpose motivates the group in carrying out their tasks.”

3. Intellectual Stimulation as a Dimension of Transformational Leadership

Intellectual stimulation refers to the extent to where the one who leads motivates their workers to think creatively in order to solve issues and identify the solutions (Bass, 1985; Bass, 1990). It is the capability of the leaders to encourage subordinates for thinking with wider perspective during challenging situations at work (Bass & Avolio, 1996; 1997). This is done by challenging the employees to assume questions, think from different angle, finally tackle the conventional issues with novel methods (Avolio & Bass, 2004). Therefore, “Intellectual stimulation is provided by a leader by challenging the group to question common assumptions or ways to do things. He or she seeks input and innovations from the team mates so as to motivate them to bring forward their views, acquire knowledge as well as be self-sufficient. They often assumes the role of a teacher.”

4. Individual Consideration as a Dimension of Transformational Leadership

Individual consideration is the extent to which a leader is aware of employees’ individual needs, responds to these needs, and acts as a mentor in the development of their employees (Judge & Piccolo, 2004). In the context of company acquisitions particularly, the authors (1986) mentioned workers from the organizations acquired go through psychological shock hence require emotional supports. By making available the necessary resources and training, encouragement and information, the leader works towards improving their level of acceptability, secured feeling as well as improve their own capability. Therefore, “Individual consideration is where a leader responds to a group member’s needs. He or she acts as a role model, mentor, facilitator, or teacher to involve and motivate a member of the group to do tasks.”

Transformational leaders who show idealized influence display confidence and optimism and expect high levels of morality and follow ethics. This includes transformational leaders providing team members with challenging and meaningful engagement in shared tasks and
a common vision. With intellectual stimulation, they encourage creativity and innovation to keep followers engaged and take ownership. Transformational leaders also practice individual consideration by considering the individual’s needs and providing advice and encouragement where necessary.

**Project Success**

Projects are contemporaneous endeavour initiate to make distinctive products, services, or results. The projects being temporary provides an assured initiation and completions as well as have an impact on society, economy as well as environment that helps in long term success. Distinct nature of the project implies that the works done for production, services, etc., are different from others. It can make products which could be a part of another item or ends in self, the ability to offer services, otherwise results like an outcome or organizational change. The project management concept are being often employed in various companies and institutions (Kerzner, 2009; Packendorff, 1995). Also, the organizations have come to an understanding that the project management helps in adapting to the modifications involved (Koskela and Howell, 2002).

Project management needs a method-based strategy to plan and guide project process of project from initiation to completion. Hence it can be told as meticulously designed as well as grouped hard work for accomplishing a particular work, for example construction of a building or introduction of a novel Enterprise Resource Planning (ERP) system to an organization. “Some project management subjects are often are often spoken about yet occasionally agreed as concept for succeeding in the project” (Pinto & Slevin, 1988). Systems to measure projects can succeed only if it meets the need and requirement of all stakeholders. Their capability has to undergo assessment and measurement all through the project phases for ensuring zero conflicts, disputes, or blames that could occur during the finishing situation (R. Takim & A. Akintoye, 2002).

Going through various studies on project management, Diallo & Thuillier (2003) listed the factors for assessing project success with the generally identified items:

1. "3 conventional limitation-time, cost and scope should be respected."
2. "Consumer satisfaction"
3. "Attainment of the goals listed in the framework."
4. “Impact of the project”
5. "Capability of the organization to build it by the project."
6. “Profits (for productive projects) or the economic or social benefits (in the case of public sector projects), and
7. “Innovations in the projects (outputs, management or design)

By definition, “critical success factors (CSFs) identifies the necessity to complete the deliverables for the client, and congruently they are helpful in identifying the necessary elements for project success” (Kerzner, 2009).

For achieving project success, the persons who manage the project should adopt suitable methodologies and approaches for meeting the goals of the project and comply with the needs and expectations of stakeholders. Furthermore, they are expected to balance the cost, scope, time, quality, resources, and risk of producing the specific product. The concept of project management has been increasingly practiced in various industries and organizations (Packendorff, 1995; Kerzner, 2009). Organizations have understood that appropriately managing the projects can be the key in facilitating the changes involved (Koskela and Howell, 2002).

It is a common belief that possessing technical skills, having experience on various project teams, or exhibiting some level of aggressiveness and enthusiasm makes a person suited to the project manager's role. However, these criteria have become increasingly inadequate to achieve project goals as more and more projects today are from matrix organizations. With more than one line of reporting managers, leadership skills are essential in creating a conducive environment for success.

Project management involves developing a project plan, specifying goals and objectives, deciding how goals will be measured, listing the required resources, and estimate budget as well as milestone for completing. Projects needs to be managed effectively in all organizations. Therefore, an understanding of what is the project, project management, leadership and project success are essentials for securing project success and avoiding potential project failures.

Research Problems and Questions

Project management involves developing a project plan, specifying goals and objectives, deciding how goals will be measured, listing the required resources, and estimate budget as well as timeline for completing the projects. Projects needs to be managed effectively in all organizations. Therefore, an understanding of what is the project, project management, leadership and project success are essentials for securing project success and avoiding potential project failures.
Research proves that right behaviours by those who manage projects is a major factor in succeeding in the projects (Zwikael & Unger-Aviram, 2010; Scott-Young & Samson, 2008). It is known that vital challenge faced by leader nowadays is the capability to inspire project teams for achieving best-performance levels that will to succeeding in the projects.

Project managers have to prioritize leadership training as well as to practice continuous professional development to improve leadership skills. Similar researches have also given assistance for the usefulness of training as well as development aimed at enhancing transformational leadership behaviours (Dvir et al., 2002; Barling, Weber, & Kelloway, 1996).

Accordingly, to support project managers for creating a supportive environment for project success, it is essential to introduce the factors of transformational leadership in depth and ensure that a transformational leadership style is present to inspire and engage project resources to work for achieving the ultimate objective for a project which is project success.

Transformational leaders inspire their team members for performing to their maximum potential. These create a positive environment among the workers (Sohmen, 2013).

The National Anti-Corruption Commission (Nazaha), dated April 2015, reported that 672 projects out of 1,526 government projects (44% of the total) were considered to be delayed and failed projects which resulted in 44% failure rate and 56% success rate. This percentage of success is much lower than the global average; hence, it is necessary to study how to improve it and how effective leadership can play a role in controlling failure rate.

Obviously, project failure contributes negatively to the organizational goals and a high percentage of project failure is a real global problem. Studies have shown just 64% of projects attain their objectives (Project Management Institute: Pulse of the Profession, 2015). Therefore, 32% to 36% of projects are considered to be failed or incurred losses, which poses a considerable loss of opportunities and resources globally. Concluding that the problem of unsuccessful projects requires further attention and investigation to be attended.

This paper seeks to narrow this gap by increasing the awareness of transformational leadership and its factors in order to be adopted and properly implemented for securing project success and eliminate the source of project failure and losses.

By this, the scientists has introduced the following questions:-
1. What is the association among transformational leadership as well as project success with respect to project management in Saudi Arabia?
2. What is the association among idealized influence as well as project success in the context of project management in Saudi Arabia?
3. What is the association among inspirational motivation as well as project success with respect to project management in Saudi Arabia?
4. What is the relationship between intellectual stimulation—and project success with respect project management in Saudi Arabia?
5. What is the relationship between individualized consideration and project success with respect to project management in Saudi Arabia?

Proposed Conceptual Framework and Hypotheses

The hypothesized model is depicted to support the approach for exploring the relationships between all variables suggested for this paper. The model will help in creating a space to discuss the concept, associated definitions, and all interrelated activities in depth.

After studying the literature and analysing numerous studies that have been dealing with study variables, the scientists depended on transformational leadership ideas for building concept based frameworks that is expected to help in filling in the gap existing in project management and contribute to improving the situation of project failure with respect to project management in Saudi Arabia.

The framework is based on theory and variables, depicted in Figure 1, selected post review of the past literature and results of project performance in Saudi Arabia as reported by NAZAHA in 2015.

Problem statements indicates that the importance of effect of transformational leadership role to succeed in project, and ultimately to eliminate project failure rates. Considering that transformational leadership plays a vital part for changes, because the leadership position became a matter of utmost importance in various issues for multiple reason known and revealed in the literature. These issues are constantly changing, there is a increase in their pace, as well as the business organizations futures are dependent on the capability of the leaders (Knies et al., 2016). Furthermore, it is important to introduce the importance of transformational leadership factors that have the influence and potential significance on the association among transformational leadership as well as project success.

The hypothesized design is depicted in Figure 1 to support studying the relationships between all variables suggested for this study. The model will help in creating a space to
discuss the concept, associated definitions, and all interrelated activities of the research in depth. The conceptual framework allows the author to state and define concepts within the problem.

Based on the above, this research consists of five key hypotheses which are:

- The first hypothesis (H1): Transformational Leadership provides a great optimistic influence on project success.
- The second hypothesis (H1a): Idealized Influence as a dimension of Transformational Leadership is positively capable for influencing project success.
- The third hypothesis (H1b): Inspirational Motivation as a dimension of Transformational Leadership is positively capable for influencing project success.
- The fourth hypothesis (H1c): Intellectual Stimulation as a dimension of Transformational Leadership is positively capable for influencing project success.
- The fifth hypothesis (H1d): Individualized Consideration as a dimension of Transformational Leadership is positively capable for influencing project success.

The study will follow the conceptual model as shown below:

![Figure 1 Conceptual Framework and Hypotheses](http://www.webology.org)

The model in the theoretical framework consists of the main predictors of transformational leadership factors conceptualized as Idealized influence (IDI), Inspirational motivation (INM) Individualized consideration (INC), as well as Intellectual stimulation (INS). The above factors of transformational leadership suggested for studying their impact
individually and combined on succeeding in the projects. Therefore, this research will follow the conceptual model as shown.

**Table 1 Research hypotheses, descriptions, relationships**

<table>
<thead>
<tr>
<th>H</th>
<th>Description</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Transformational Leadership provides a great optimistic influence on project success.</td>
<td>TL → PS</td>
</tr>
<tr>
<td>H1a</td>
<td>Idealized Influence as a dimension of Transformational Leadership is positively capable for influencing project success.</td>
<td>IDI → PS</td>
</tr>
<tr>
<td>H1b</td>
<td>Inspirational Motivation as a dimension of Transformational Leadership is positively capable for influencing project success.</td>
<td>INM → PS</td>
</tr>
<tr>
<td>H1c</td>
<td>Intellectual Stimulation as a dimension of Transformational Leadership is positively capable for influencing project success.</td>
<td>INS → PS</td>
</tr>
<tr>
<td>H1d</td>
<td>Individualized Consideration as a dimension of Transformational Leadership is positively capable for influencing project success.</td>
<td>INC → PS</td>
</tr>
</tbody>
</table>

**Methodology**

**Research Method**

Quantitative research method was suitable for this study. The reason is for the investigation of the "effect of transformational leadership factors such as idealized influence, inspirational motivation, intellectual stimulation individualized consideration in succeeding in the project" as well as the impact of achieving project success by application of \( H_0 \) testing which needs a quantitative methodology for dealing with the data for best results.

**Sampling Method**

Here the information was collected through a survey administered by the participant. A random sampling by stratification is used. The required respondents were 216 project members estimated to be working for project management firms that are undertaking construction work in Saudi Arabia. These project management firms are assumed to be in charge of executing projects under implementation in Saudi Arabia. Here the information was collected through a survey administered by the participant. A random sampling by stratification is used. The respondent’s numbers (population of the sample) was scattered among individuals targeted and drawn from the population of 489 project members who were estimated to be assigned project leadership roles to manage multiple projects under implementation in Saudi Arabia.
Questionnaire Design

The primary data collection is done by surveys. The questions planned to be administered included 2 parts. The former collects demographic details of the participants such as gender, age, education, experience; The former includes questions to the participants regarding the study variables, that includes (1), Transformational Leadership and its factors and (2) project success. 300 questionnaires have been distributed. Among those 216 responses were obtained. Sample size of 216 was taken to be appropriate for the data analysis as recommended by Sekaran (2003).

Data Analysis and Results

Normality Testing

Multivariate analysis needs normality testing. By this assumption we consider the data is normally distributed (Hair et al., 2013). Chou and Bentler, 1995; Ghozali, Fuad and Seti, (2005) tell that the values are normally distributed if the Z-value skewness has to be < ±3 as well as the Z-value kurtosis is < ±7. Here the scientists taken into account the recommendations of Hair et al., (2006) for considering the critical cut-off value ±2.58. Table 4.3 depicts that the value of kurtosis and skewness to each construct is in-between the range (± 2.58). The Illustrations by the descriptive analysis show nearly normal distributions with mean skewness ranging among the values of -1.274 and -1.000 whereas kurtosis values lies between 1.242 and 0.270. The below table shows skewness and kurtosis for variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Skewness Statistic</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>-1.274</td>
<td>.166</td>
<td>1.242</td>
<td>.330</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>-1.173</td>
<td>.166</td>
<td>.865</td>
<td>.330</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>-1.000</td>
<td>.166</td>
<td>.270</td>
<td>.330</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>-1.009</td>
<td>.166</td>
<td>.334</td>
<td>.330</td>
</tr>
</tbody>
</table>

Descriptive Analysis of Latent Variables

The measurement scales mean and SD have been computed. Here we use 5 point likert scale which ranges between 1-Strongly agree and 5-strongly disagree.

Table 4 depicts the maximum mean was Individualized Consideration with 4.151 out of a maximum 5 making up approximately 83.2%. This is followed by Intellectual Stimulation
which was 4.129 making up 82.5%. However, Inspirational Motivation was the lowest mean at 4.091 making up 82%. Adding to that, the standard deviations (SD) for all variables ranges between .85235 and .74241, that shows the presence of significant acceptable variability inside the data set. Table 3 depicts the descriptive statistics for all variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Percent</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>1.00</td>
<td>5.00</td>
<td>4.1142</td>
<td>82.4%</td>
<td>.84897</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>1.33</td>
<td>5.00</td>
<td>4.0918</td>
<td>81.8%</td>
<td>.85235</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>1.67</td>
<td>5.00</td>
<td>4.1296</td>
<td>82.5%</td>
<td>.84735</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>1.67</td>
<td>5.00</td>
<td>4.1512</td>
<td>83.2%</td>
<td>.83265</td>
</tr>
<tr>
<td>Project Success</td>
<td>2.00</td>
<td>5.00</td>
<td>4.1231</td>
<td>82.4%</td>
<td>.74241</td>
</tr>
<tr>
<td>Overall</td>
<td>1.50</td>
<td>5.00</td>
<td>4.1216</td>
<td>82.2%</td>
<td>.78242</td>
</tr>
</tbody>
</table>

Assessment of PLS-SEM Path Model Result

SEM fuses a two-stage technique in analysing the data that depicts the evaluation of the measurement design. The measurement model is assessed by construct validity, convergent validity, reflective constructs’ discriminant validity. The study, during these lines, have taken the two-stage successive strategy though application of PLS-based SEM (Hair et al., 2014). By the research by Hair et al., (2014) where he first tested the measurement model, later tested the structural model analysis as well as hypothesis testing. The evaluation of convergent validity is a basic method of assessment of the measurement model. The author, (2019), depicted that convergent validity is assured in SmartPLS in which the materials get loaded high (greater than 0.70 or 0.60 in exploratory research), constructs have an average variance extracted (AVE) minimum 0.5, and composite reliability (CR) measure internal consistency reliability is above 0.70 and ranged between 0.867 and 0.943. Table 2 reveals the reliability (Cronbach’s alpha) value more than 0.70 and ranged from 0.769 to 0.934.

Convergent Validity

In our research the factor loading for the items is > 0.70 as well as is accepted if there are more than two hundred participants (Hair 2013, p. 128). This proof is enough for convergent validity. Hence, all indicators used in the current research are linked to specific constructs, and provides sufficient evidence of the model’s convergent validity.

The convergent validity was confirmed in the study (see Table 5). Factor loading analysis is shown in Figure 3 and Table 2. All loadings are more than 0.60 and ranged between 0.719
and 0.888. The author, (2019), tells that convergent validity’s confirmation in Smart-PLS when the items are highly loaded (greater than 0.70 or 0.60 in exploratory research). As per Hair et al., (2013) outer loading above 0.60 is considered significant. For achieving sufficient convergent validity, Chin (1980) considered that the Average Variance Extracted (AVE) of every hidden construct needs to be more than or equal to 0.50. Here, they were >0.50 which ranges between 0.582 and 0.734, suggesting accepted values indicate sufficient convergent validity. Hence the convergent validity has been validated in the research (see Table 4 and Figure 2).

Table 4 Items loading, Cronbach’s alpha, Composite Reliability and AVE

<table>
<thead>
<tr>
<th>Variables</th>
<th>Code</th>
<th>Loading</th>
<th>Cronbach’s alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>TL1</td>
<td>0.843</td>
<td>0.769</td>
<td>0.867</td>
<td>0.684</td>
</tr>
<tr>
<td></td>
<td>TL8</td>
<td>0.807</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL15</td>
<td>0.831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>TL2</td>
<td>0.863</td>
<td>0.818</td>
<td>0.892</td>
<td>0.733</td>
</tr>
<tr>
<td></td>
<td>TL9</td>
<td>0.861</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL16</td>
<td>0.845</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>TL3</td>
<td>0.845</td>
<td>0.819</td>
<td>0.892</td>
<td>0.734</td>
</tr>
<tr>
<td></td>
<td>TL10</td>
<td>0.837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL17</td>
<td>0.888</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>TL4</td>
<td>0.826</td>
<td>0.795</td>
<td>0.880</td>
<td>0.709</td>
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<td></td>
<td>TL11</td>
<td>0.847</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL18</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Success</td>
<td>PS1</td>
<td>0.721</td>
<td>0.934</td>
<td>0.943</td>
<td>0.582</td>
</tr>
<tr>
<td></td>
<td>PS2</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS3</td>
<td>0.747</td>
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<tr>
<td></td>
<td>PS4</td>
<td>0.730</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS5</td>
<td>0.719</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS6</td>
<td>0.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS7</td>
<td>0.800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS8</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS9</td>
<td>0.747</td>
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<tr>
<td></td>
<td>PS10</td>
<td>0.734</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>PS11</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PS12</td>
<td>0.748</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discriminant Validity

There is an indication of Discriminant validity shown by the, AVE values is higher than that of the squared correlations for each set of construct. Also, the sq. root of the Average Variance Extracted was more compared to the absolute value of the correlation square of with any other factor (AVE > correlation square). Table 5 depicts the square root of the Average Variance Extracted for all constructs are more than the correlations in-between the one construct to another in the model.

Discriminant validity provides the distinction between one construct and another (Hair et al., 2010). It is assessed with the help of Average Variance Extracted for each construct which is more than the squared correlation with constructs (Fronell & Larcker, 1981).

### Table 5 Discriminant Validity for Latent Variables

<table>
<thead>
<tr>
<th></th>
<th>Idealized Influence</th>
<th>Individualized Consideration</th>
<th>Inspirational Motivation</th>
<th>Intellectual Stimulation</th>
<th>Project Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>0.827</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>0.810</td>
<td>0.842</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>0.822</td>
<td>0.813</td>
<td>0.856</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>0.810</td>
<td>0.825</td>
<td>0.798</td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td>Project Success</td>
<td>0.717</td>
<td>0.729</td>
<td>0.696</td>
<td>0.720</td>
<td>0.763</td>
</tr>
</tbody>
</table>
Coefficient of Determination: $R^2$ Value

The authors (1992) suggested that the $R^2$ values $\geq 0.10$ for the explained variance of specific endogenous construct to be accepted as sufficient. The author, (1988b) recommend $R^2$ is acceptable while it is $> 0.26$ with adequate power of 0.02. s per Chin (1998) $R^2$ is adequate if it is $> 0.65$ with accepted power of $>0.19$. On the contrary, the author (2017) suggested an $R^2$ value $> 0.75$ to be considered sufficient with accepted power $>0.25$.

This methodology proved to be appropriate for this data as proved by $R^2$ value for the dependent variables: Project Success (PS) was 0.598. Hence, idealized influence (IDI), Inspirational motivation (INM) individualized consideration (INC) and intellectual stimulation (INS) explained 59.8% of the variance in Project Success among project members in Saudi Arabia. Table 7 and Figure 3 show the result of squared multiple correlation from the PLS-SEM, as well as shows that $R^2$ value is sufficient for the model to obtain considerable explanatory power.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IDI, INM, INS and INC</td>
<td>PS</td>
<td>0.598</td>
<td>Moderate</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

Source: Prepared by researcher using Smart PLS Version 3

Assessment of Effect Size ($f^2$)

We can beneficially dictate the effect dimensions of specific latent variables’ impact the dependent variables with the help of effect size ($f^2$) analysis that is supportive to $R^2$ (Chin, 2010). Cohen (1988) suggested the formula for effect size ($f^2$) the as given below:

$$\text{Effect size } (f^2) = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}} \quad (1)$$

here $R^2$ included depicts R-square got through the endogenous latent variable whereas the predictor exogenous latent variable is applied for structural model. $R^2$ excluded depicts R-square got from the endogenous latent variable while this is not applied in the structure model. The author tells that (1988), an $f^2$ of 0.02 is low, 0.15 is medium and $>0.35$ is high.

The results show idealized influence, intellectual stimulation and individualized consideration had a small effect size of predictive variable on the project success at 0.030, 0.032 and 0.043, respectively. However, inspirational motivation was no $f^2$ of predictive
variable on project success at 0.008. Table 7 depicts the values obtained on the $f^2$ of the exogenous latent variables on endogenous latent variable.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Depending Variables</th>
<th>R² Included</th>
<th>R² Excluded</th>
<th>$f^2$</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>Project Success</td>
<td>0.598</td>
<td>0.586</td>
<td>0.030</td>
<td>Small</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>Project Success</td>
<td>0.598</td>
<td>0.595</td>
<td>0.008</td>
<td>Non</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>Project Success</td>
<td>0.598</td>
<td>0.585</td>
<td>0.032</td>
<td>Small</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>Project Success</td>
<td>0.598</td>
<td>0.582</td>
<td>0.043</td>
<td>Small</td>
</tr>
</tbody>
</table>

Figure 3 Structural Model with Path coefficient ($R^2$ and $f^2$)

**Hypotheses Results**

The results indicate that Transformational Leadership has a significantly strong and optimistic impact on project success ($\beta = 0.794; t = 22.514; P = 0.000$), therefore H1 is supported.

Furthermore, the first sub-hypothesis: Idealized Influence which had a strong and optimistic impact on project success ($\beta = 0.222; t = 2.215; P = 0.027 < 0.05$), thus H1a is supported but Inspirational Motivation was not significant influence on project success ($\beta = 0.111; C.R = 1.005; P = 0.315$); hence, H1b is not accepted.
Furthermore, Intellectual Stimulation had a strong and optimistic impact on project success ($\beta = 0.228; t = 2.311; P = 0.021$), so H1c is supported. Finally, Individualized Consideration had a strong and optimistic impact on project success among project members of construction work in Saudi Arabia ($\beta = 0.272; C.R = 2.493; P = 0.013$). Table 8 and Figure 5 show the $H_0$ result of the structural model.

**Table 8 Summary of Structural Model Assessment (Hypotheses Results)**

<table>
<thead>
<tr>
<th></th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Estimate (path coefficient) $B$</th>
<th>S.D</th>
<th>C.R (t-value)</th>
<th>P-value</th>
<th>Hypothesis Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Transformational Leadership</td>
<td>$\rightarrow$ PS</td>
<td>0.760</td>
<td>0.036</td>
<td>21.179</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H1a</td>
<td>Idealized Influence</td>
<td>$\rightarrow$ PS</td>
<td>0.222</td>
<td>0.100</td>
<td>2.215</td>
<td>0.027</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Inspirational Motivation</td>
<td>$\rightarrow$ PS</td>
<td>0.111</td>
<td>0.110</td>
<td>1.005</td>
<td>0.315</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H1c</td>
<td>Intellectual Stimulation</td>
<td>$\rightarrow$ PS</td>
<td>0.228</td>
<td>0.099</td>
<td>2.311</td>
<td>0.021</td>
<td>Supported</td>
</tr>
<tr>
<td>H1d</td>
<td>Individualized Consideration</td>
<td>$\rightarrow$ PS</td>
<td>0.272</td>
<td>0.109</td>
<td>2.493</td>
<td>0.013</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Prepared by researcher using Smart PLS Version 3

**Figure 4 Structural Model with (Bootstrapping) (Main-Hypothesis Result)**
Discussion and Implications

The study’s findings suggest that transformational leadership had a considerable strong and optimistic impact on project success among project members in Saudi Arabia.

The result shows that all variables were supported and were significant towards influencing project success. However, the Inspirational Motivation H1b is not supported as shown in Table 8 and Figure 3 ($\beta =0.111$; C.R = 1.005; $P = 0.315$). Previous studies are in agreement with this result, indicating that inspirational motivation has no influence on project success (Loon et al., 2012; Avolio & Bass, 2004; Bass & Avolio, 1996; 1997).

The probable reason for this finding is the limitation of project scope, boundaries and time limits governed by project plans and schedules, that leave no room for inspirational practices to be exercised by project leaders.

Not surprisingly, transformational leadership has a demonstrable significance in making the project successful.
It shows the optimistic impact of transformational leadership on making the project successful would be very strong while the organizational context and provisions are considering the implementation of all transformational leadership factors.

The study observations supports the same on the impact of transformational leadership on employee performance. We can also tell that, transformational leadership is marked by its capability for creating efficient behaviours which improves its self-motivation among workers for achieving organizational performance (Soane et al., 2015).

Also, as stated by Spreitzer (2008), transformational leaders are particularly important promoters of employee empowerment due to their position in the organization.

The probable reason for this finding is because the project members believe that transformational leadership enabled employees to see meaning in their tasks, to create an environment of mutual trust, address their higher-level needs, motivated employees to work together for the good of the project and organization beyond their personal interests, and as a result, accomplish more than originally intended or expected of them. These benefits are in agreement with Bass’ (1985) suggestion that leaders not only influenced the psychological empowerment of employees, but also their beliefs, values, needs, self-confidence, self-esteem and emotions. Creating an empowered resource will support project progress continuously and drive everything towards achieving project success.

Hence the organizations that are more focused on projects has to improve a transformational leadership methodologies within project managers, such as by selection and leadership training programs, that was also recommended by previous empirical studies."

Finally, project leaders in positions are required to consider the proper implementation of all transformational leadership factors. It is a soft skill that is needed and very important for motivating and empowering a project’s resources to attain their best performance and outcome levels. This would ultimately result in securing project success and support the approach for eliminating possible situations that may lead to project failure.

**Conclusion**

The researcher has centred his study on examining the effect of the empirical association among the transformational leadership factors as well as to succeed in the projects among project members working for project management firms that are executing and managing project. Achieving project success is the objective for this research and expected to be
accomplished with three variables ("Idealized Influence, Intellectual Stimulation and Individual Consideration).

The findings demonstrate that transformational leadership shows considerable impact on achieving project success by project members in Saudi Arabia. Furthermore, the findings also showed that (idealized influence, intellectual stimulation, and individualized consideration) significantly influences project success yet inspirational motivation does not affect project success.

This finding of inspirational motivation that is insignificant, could be explained as a result of project boundaries scope, time schedule and budget. Project leaders are not allowed to go beyond boundaries, inspiration may call for additional ideas that will definitely result in additional scope affecting schedule and budget.

This is to be considered a project failure and to be avoided during project schedule unless change control procedures are properly implemented and accept inclusion of new changes to be additional scope and accordingly to revise budget and schedule for adopting new changes Therefore the inspirational motivation is not supported to secure original project aim and objectives for the success. Therefore, the awareness of this point is equally important to other three factors.

Project-based organizations would derive immense value from increased knowledge and understanding about the reasons which impact in succeeding in the projects. This study has "shown, among the context of project management, transformational leadership consists both direct as well as indirect impacts on making the project successful. Furthermore, the organizations that are more focused on projects has to improve a transformational leadership methodologies within project managers, such as by selection and leadership training programs, that was also recommended by previous empirical studies."

This study results recommends that that project managers who display transformational leadership have increases chances to provide a positive workspace which would assist them in realizing success of the projects. This must add trainings such as setting goals for the project, interpersonal relations, clarifying the roles, as well as skills to solve problems. These all motivates and empowers a team handling a projects toward make the project successful.

The researcher recommends that future research should employ a probabilistic sampling technique for providing the right basis for the generalizability of the findings in settings
other than those similar to Saudi Arabia. Again, future studies may manipulate the demographic factors to see if the study would yield the same results. In short, transformational leadership three factors are the essential ingredients (idealized influence, intellectual stimulation and individualized consideration) that have tangible policy implications for addressing project success among project members who are working for project management firms in Saudi Arabia.

**Limitation and Future Research**

As this particular study is within the context of project management, several limitations were seen. First, the difficulty in accessing the project details and information that would help in evaluating to draw better conclusions about project performance, project managers are not permitting the access, claiming it is confidential. Second, the history record for completed projects and lesson learned kept available at the library were focusing on project technical issues and do not provide adequate details about the behaviors of project leaders and their impact on progress and performance, this would have be a very helpful to support the study, these limitations must be considered by researchers in future.

**Declaration of Conflicting Interests**

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**References**


