The Halo and Devil Effects: Impediments to Project Delivery

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Abstract

While successfully executed and delivered projects are desired, most often that is not realized. This paper explores the Halo and Devil Effects with the core objective of proving that they impede project delivery. It was seen that the Halo and Devil Effects are errors in rating, when an estimator tend to allow a perception of one factor, to influence his ratings on all other factors. To investigate how these biases impede project delivery, an actual project execution case was examined. First it was shown that, the Halo and Devil Effects affected ratings and selection of individuals into the project team. One project success factor (time) was selected against which the actual performances of the individuals in the selected project team were measured, with the mean taken as the group performance. The individuals that did not make the team were given identical work to do, their performances were also measured, and the mean noted. Then a comparative analysis of the mean performances of the two groups was done.

The results of the analysis show that the Halo and Devil Effects, by distorting ratings, affected optimal selection of project team and their performance thereafter. The below-optimal performance of project team negatively impacted all factors of project success, and project delivery was impeded.

Keywords: Performance Appraisal, Ratings, Halo Effect, Devil Effect, Project team selection, Project delivery

1.0 INTRODUCTION

One problem that has consistently plagued Nations is poor project delivery. This is evident in the number of abandoned projects and badly executed projects in many private and public spheres (Adebayo, 2013). A Presidential Projects Assessment Committee (PPAC) set up in March 2011, by the Nigerian President (Goodluck Jonathan) to look into cases of abandoned federal government projects reported that there are eleven thousand, eight hundred and eighty-six (11,886) abandoned projects that will cost an estimated N7.78 trillion to complete. If the government does not start any new projects, it will take more than five years budgeting about N1.5 trillion annually to complete them all – and that is assuming no cost-over runs or delays (El Rufai, 2012). And these alarming figures represent federal projects only, if projects initiated and then abandoned by state governments (or other private entities) were to be added to this list, the figure would be considerably much higher.
Project delivery is handing over of successfully executed projects. Successful in that, they meet time, cost and quality requirements, and also customers' satisfaction. While a number of factors can be identified as responsible for the problem of poor project delivery, one of the foremost factors is that of human resource – the people that will ultimately bring about the project. Okorafor (2011) identifies the workforce or labour as the most important input or factor of production in any enterprise because it is the labour that turns and utilizes other inputs in appropriate ratios to produce the necessary outputs which the economy needs for growth and development. He added that an ineffective workforce can lead to negative influences with attendant cost implications. Losey et al (2005) had earlier declared that: “I do not know of any major project backed by good idea, vigour and enthusiasm that have been stopped by shortage of cash, but I do know of industries whose growth has been partly stopped or hampered because they cannot maintain an efficient and enthusiastic labour force”.

Human resource is the most important resource to a project, this is because;

- The very mission and objectives of the organization are determined by management (human resource)
- Actual tasks and work packages will need to be completed by the project team (human resource)
- The equipments and machines, no matter how sophisticated, will need an operator. Even when automated, they will need to be powered on and off at some time.

The importance of the human resource to a project cannot be over-emphasized, but this is not to say that anybody can be taken to fill roles. Only resourceful, effective and efficient individuals having the requisite skills, knowledge and experience, and manning the right jobs can lead to the realization of project goals. It is therefore important to get those individuals from the available pool of people at any given time. One way this can be accomplished is by appraising each individual in the pool on certain criteria and selecting those that best conform to the criteria. The process of appraising and rating individuals is very important as it help firms determine where their employees excel, where they can improve, and how well they have followed the goals set by the firm (Kondrasuk, 2011). Thus, it helps firms determine the competencies of their employees and ensure that only competent individuals are selected and placed in projects. The rationale behind this is not rocket-science; a competent worker will perform well on the job, and good performance translates to good results.

A problem therefore arises if errors cause flaws in the appraisal and rating system that the ratings obtained cease to be a true reflection of competencies. An error that seriously causes flaws in the result of ratings is the HALO EFFECT, and another is its opposite, called the DEVIL EFFECT. Thus, the Halo and Devil Effects can seriously compromise ratings, resulting in incongruous placement of individuals to jobs with its attendant consequences of poor performance and poor project delivery.
2.0 LITERATURE REVIEW

Skeletally, the Halo and Devil Effects are biases in judgment when rating. These biases are occasioned by the rater’s preconception of the individual being rated, or the individual’s history and current form.

2.1 THE HALO EFFECT

More specifically, Halo Effect is the error in rating when one rate an individual high on all factors on the basis of a high rating on some specific factor, or on the basis of some previous high rating.

Edward Thorndike, the man who coined the term “Halo Effect”, was the first researcher to study the Halo Effect and support it with empirical research. Thorndike (1920) showed that the ratings of one of the special qualities of an officer tend to start a trend in the rating results. If an officer had a particular “admirable” attribute (say intelligence) it would correlate in the rest of that officer’s ratings and the officer would be perceived to be “admirable” on the whole (including being dependable, selfless, cooperative, responsible, neat, meticulous etc). He called the correlation in the experiment Halo error or Halo effect. The Halo effect was shown to be the potential inaccuracy in ratings when a rater makes favourable evaluation of the individual being rated by drawing generalizations from perception of certain outstanding characteristic of the individual.

In explaining the Halo Effect, Mulcahy (2005) said that the Halo Effect is in play in the statement “You are a great programmer. Therefore, we will make you a project manager and also expect you to be great”

2.2 THE DEVIL EFFECT

Effect is also called the “reverse Halo Effect”, it is the error in rating when one rates an individual low on all factors on the basis of a low rating on some specific factor, or on the basis of some previous low rating.

While the Halo Effect generally leads to biased high ratings of individuals, the Devil Effect leads to biased low ratings of individuals.

2.3 EVOLUTION OF THE BIASES

Because it is the onus of the rater to appraise individuals and make project team selection on the basis of the appraisal, any error in such appraisal is seen chiefly as due to the rater. Thus, the biases (Halo and Devil Effects) are seen as errors by raters. It should be noted however that the biases cannot be exclusively blamed on the raters.

But Nisbett and Wilson (1977) pointed out that global evaluations of a person can induce altered evaluations of the person. Thus, the general public can cause a development of the biases. The individuals being rated can also cause a development of the biases in the rater. This is to mean that sometimes certain attributes of the individuals being rated and the general public make it almost humanly impossible for raters to produce ratings devoid of the biases. The Halo and Devil Effects should not be
seen as errors exclusively due to the rater. Without question, they are errors made by raters, but they are caused not just by the rater but by “RIG” (Rater, Individual being rated and the General Public)

2.3.1 THE RATER

Some attributes of the rater that can cause development of the biases are:

- Preconceptions

  Preconceptions are the ideas and opinions of the rater about the individual being rated before having adequate information. Preconceptions exert a strong influence on ratings. When the rater forms opinions about the individual to be rated before having adequate information or facts, there is the tendency not to do an honest evaluation of the individual’s credentials. If the opinions so formed are positive, the individual is assumed to be good and the Halo Effect will inflate ratings; if the opinions formed are negative, the individual is seen in a bad light, and the Devil Effect will seriously plummet ratings. Kettner (2005) showed that teachers who held negative expectancies towards emotionally disturbed children, maintained those expectancies even when presented with normal behaviour.

- Cultural beliefs

  Cultural beliefs are the beliefs and attitudes about something that people in a particular group share. Culture can pass to raters a code of ethics and values, and can also affect their tolerance levels of the attitudes of individuals being rated.

- Religious beliefs

  The system of worship that raters practice will have deeply ingrained in them a philosophy of life, and a code of social and moral behavior that they follow. Most often, they will question the morality of others not sharing their moral convictions, and this would rub-off on their general ratings of those individuals. To appreciate how religious beliefs can cause the biases to develop, collect and compare the ratings of a beauty model as rated by two raters, one a very religious person whose beliefs abolishes all forms of jewelry, and revealing and tight-fitting clothing, and the other a much more liberal person without the religious beliefs of the former.

2.3.2 THE INDIVIDUAL BEING RATED

Some attributes in the individual being rated that can cause the development of the biases are:

- History
The things that the individual did in the past (i.e. past record) can cause the biases to develop. An individual who is reputed to have slapped his boss in some distant past, will receive low ratings in attributes like obedience, submission, self-control and loyalty; and alarmingly the low ratings will rub-off on ratings of other attributes like level of responsibility, maturity, reasoning, intelligence etc.

- Current form

This has to do with what the individual is doing at the present time that can cause the development of the Halo and Devil biases. This paper identifies two type of current form that exists:

- Actual – this is what the individual is doing at the present that they would do whether they are being watched or not. It is a genuine and real current form of an individual from which their performance rate can be accurately gotten. This can cause the biases to develop because if an individual is known to be doing well on a certain job, it would create a Halo Effect that will inflate overall ratings. Conversely, poor current performance will bedevil ratings.

- Fictitious – this is what the individual is doing at the present that they would not normally do or want to do. They invent and assume the unreal form in order to “cheat” in the rating process, especially when they know that they are being rated. It is reflected by such acts as; trying to impress, coming in very early, leaving very late and taking up extra works that may not even be in their job description. They do this to create a persona of a great employee so as to cause a Halo Effect to develop in the rater and gain favourable ratings, but when the rating period is over, they will go back to their actual below par performance.

- Physical form and Attractiveness

Landy and Sigall (1974) study demonstrated the Halo Effect caused by the physical attributes or attractiveness of the individuals being rated. In the study, participants gave significantly better writing evaluations for the more attractive author, showing that people are generally more willing to give physically attractive people the benefit of the doubt when performance is below standard, whereas unattractive people are less likely to receive this treatment. Other studies have shown that attractive individuals receive lesser sentences and are less likely to be found guilty than an unattractive person, showing the halo effect on jurors that can be caused by physical attractiveness of the individuals being rated.

2.3.3 THE GENERAL PUBLIC

The term “General Public” as used in this study is relative. It refers to the people that will impact on the project or be impacted by it.
• Federal character

The federal character principle seeks to ensure that certain appointments fairly reflect linguistic, ethnic and geographical diversity of a country. Where the principle is enshrined in constitution and the general public lends support to it, the Halo and Devil Effect will develop. For example, if the former head of a particular public service institution is from the southern part of a country; and there are two candidates (one from the South and the other from the North) for the position of the new head, the federal character principle will cause to develop a Devil Effect for the candidate from the south, and a Halo Effect for the candidate from the North. The federal character is here classified as an attribute of the General Public because it is borne by the General Public's perceived need for a proper representation and geographical spread of “power”.

• Opinions

The opinions the “General Public” have about the individuals to be rated can cause the biases to develop in the rater. The “General Public”, although, will not be doing the ratings can form negative opinions about a person and declare that the person will not be accepted; that the rater in the interest of the project will concede to the General Public wishes and not select the particular individual. Conversely, the General Public good opinion of a particular individual could start clamours for the selection of the individual that will largely sway ratings to that effect.

2.4 EFFECT OF THE BIASES

These are some of the effects

i. They prejudices ratings
ii. They confer on the rater tags of unfairness and partiality
iii. They make workers want to “cheat” – put up a show of efficiency in the period of rating – so as to get positive overall ratings and hence appointment
iv. Ratings ceases to be a true reflection of capabilities
v. They result in incongruous placement of project team members to jobs i.e. workers being placed in jobs they have limited or no skill in, while the more skillful workers that would have been compatible with the job are left out.
vi. They make performance on a project fall below optimal level, since efficiency of incongruously placed workers is low.
vii. Below optimal performance of project team will negatively impact all project success factors
viii. They threaten successful project delivery

3 CASE OF HALO AND DEVIL EFFECT

A Project Coordinator who was employed recently in a particular project organization had to assemble a team to work on a building construction project. He was given a group of ten (10) individuals from which he could select his team of five (5). Being new
in the organization, he had had no previous relations with the persons, and had limited information to help with his selection. He had only the credentials of the 10 individuals to help him with the selection; and worst still, one full working day to observe them. He was also given glowing recommendations about 4 of the persons (one was very loyal, two very neat, and the other always willing to take up extra tasks), he was told that two of the persons are reputed to have had issues with their supervisors at some time, although the nature of the issues was not disclosed. About the other four he was told nothing.

The work to be done was a painting job that required intricate patterns on the walls, so it required a combination of skill, intelligence, meticulousness, neatness and resourcefulness. The Project Coordinator had to rate the 10 individuals on those criteria and select his team of five on the basis of his ratings. The rating was done on a scale of 1 to 10 for each rating criterion, after which the average was taken to determine the rating for each individual.

Table 1: Ratings of individuals on factors relating to work

<table>
<thead>
<tr>
<th>Individuals rated</th>
<th>loyalty</th>
<th>neatness</th>
<th>intelligence</th>
<th>resourcefulness</th>
<th>meticulousness</th>
<th>skill</th>
<th>Overall rating</th>
<th>Remark</th>
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<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
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</table>

(✓) shows the individuals that were selected into the team. The individuals with the (*) are those known to have one special characteristic and are hereafter called the “plus” individuals. The individuals with the (−) are those that have the bad reputation, and are hereafter called the “minus” individuals. The last class is those individuals of whom nothing is known and they form the “neutral” individuals.

The four (4) “plus” individuals got overall high ratings (9, 8, 7 and 8) and they all got selected into the project team. The “minus” individuals got lower overall ratings (4 and 6), and did not make the team. The other four persons got the following overall ratings; 5, −, −, and 7. The rater explained that (−) is not zero, but that the individuals could not be rated, as there was no adequate time or information to do so. The person rated 7 in this category made the final member of the project team.

4 DISCUSSION AND ANALYSIS OF THE CASE

That the Halo and Devil Effects influence ratings is evident in the rating results. The “plus” individuals had overall good ratings, the “minus” individuals had significantly lower overall ratings while the “neutral” individuals’ overall ratings fell in the middle; showing that a certain known factor of the individuals being rated tend to rub-off on their overall rating.
This study goes beyond proving that the Halo and Devil Effects influence ratings, it has as its core objective proving that the Halo and Devil Effects impact negatively on project success factors and thus impede project delivery.

To do this, a particular project success factor was taken against which the actual performances of the individuals in the selected project team were measured, with the mean taken as the group performance. The individuals that did not make the team (the test group) were given identical work to do, their performances were also measured, and the mean noted. Then a comparative analysis of the mean performance of the two groups was done.

The project success factor used in the analysis is time, thus the time taken for each group to finish their respective work was what was measured. An 8-hour (8 a.m. – 5 p.m.) working day was used with no overtime work permitted.

The following precautions were taken to ensure that test results from the two groups can justifiably be compared.

I. That a test was being carried out was not disclosed to any of the groups, so measured performances of the individuals were their actual performance rates borne by their respective skills and capabilities. The tendency to “cheat” was therefore stifled.

II. That one can buy time by cutting quality is acknowledged, so the work done by each individual was monitored to ensure that prescribed quality baselines are met.

III. Care was taken to ensure that the work done by the two groups was identical (The area to be painted was equal, the surface condition of the walls was similar and the patterns were identical). In each group, entire work was divided into 5 different work packages (A – E) executed by the five individuals in each group. The work packages in the project team and the test group were identical; such that a test group individual doing work package A does the same work as a project team member doing work package A.

IV. The experiment was not done with just one individual but with the five individuals in the groups so that the result will not be interpreted as a one-off result

The result of the experiment is tabulated below.
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Table 2: Summary of performance

<table>
<thead>
<tr>
<th>Work Package</th>
<th>Project Team Performance (time to do work in hours)</th>
<th>Test Group Performance (time to do work in hours)</th>
<th>Optimal Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>135</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>B</td>
<td>87</td>
<td>109</td>
<td>87</td>
</tr>
<tr>
<td>C</td>
<td>133</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>D</td>
<td>123</td>
<td>142</td>
<td>123</td>
</tr>
<tr>
<td>E</td>
<td>104</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>582</td>
<td>501</td>
<td>460</td>
</tr>
<tr>
<td>Mean</td>
<td>116hrs 24mins</td>
<td>100hrs 12mins</td>
<td>92hrs</td>
</tr>
</tbody>
</table>

The result show that the individuals that did not make the team could have completed their deliverable approximately 2 full working days (100hrs 12mins less 116hrs 24mins) earlier than was achieved by the project team.

It also shows that despite being a better performance over the project team performance, the test group performance was not optimal. To get the optimal selection that will give optimal performance, the best performer from either group in each of the different five (5) work packages should be selected. Following this, for the execution of work package A, C and E the individuals from the test group should have been selected. While the individuals executing work package B and D are the only ones that will retain their position in the project team. This selection is optimal, and shows the true capabilities of the individuals. Project delivery would be made in about 3 working days earlier (92hrs less 116hrs 24mins) than that achieved by the selected team.

5 CONCLUSION

Whether a project is completely executed and delivered in the initial time frame estimated is an important factor in determining project success. The durations of the various activities that makes up a project (the critical path activities in particular) sum up to give the project duration. The critical path activities having no slack cannot be delayed, as any delay would invariably lead to time over-run. While time over-run in itself is a clear shout of unsuccessful project delivery; it usually does have cost implications and also increases the risk to a project, making it more undesirable.

This work uses time as the project success factor impacted but other factors of project success like cost, quality etc can also be seriously impacted by these biases. The Halo and Devil Effects, by distorting ratings, affect optimal selection of project team and the performance of selected team. By not performing optimally, all factors of project success will be negatively impacted, and project delivery is impeded.
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