Use of Project Narratives as a Method for Studying Project Leadership – A Critique

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Abstract

Leadership in the context of Projects has been a subject of research since the early 2000s. Most of these studies have either been based on in depth interviews or structured questionnaires or tested research instruments. Narratives which have been used in other fields such as Psychiatry and Health have however been rarely used in Project Management research. This paper which is based on the authors study of nearly 100+ Indian software export projects, is an attempt to discuss the utility of project narratives as a basis for study of Project Leadership behaviors and competencies.

Keywords: Project Leadership, Project Management, Project Narratives, Critical Incident Analysis, Behavior, Competency, Indian Software Projects, Qualitative Research

Introduction

Leadership in the context of Projects has been a subject of research since the early 2000s. Several researchers notably, Verma and Widemann (2002), Klimoski (2004) , Mohan Thite (1999) have studied various aspects of Leadership in the context of projects. Verma and Widemann (2003) conceptualized a model of project leadership. They also studied the behaviors and competencies at different stages of a project lifecycle. Their research was largely conducted using questionnaires and interviews. Kilmoski(2004) identified leadership competencies in projects – his research too largely depended on surveys. Mohan Thite (1999) focused on key technical characteristics of project leaders. He attempted to show that success at projects called for a greater degree of transformational leadership. His research was also conducted through a survey method.

The Critical Incident Narrative method quoted in Literature

Literature particularly in the area of psychiatry and related health research gives several examples of research projects conducted using a combination of detailed narrations/stories and at times supported by more in-depth interviews. In their book ‘Competence at work’ Spencer and Spencer (1993) mention Colonel John Flanagan (1954) who used narrations coupled with what he called the Critical Incident method. Dr Flanagan described the Critical Incident method along with the narratives as a very adaptable method which can be customized to the suit the nature of research. The word ‘Critical’ in this context meant – an action taken which lead to an effective outcome. Leonard Webster and Patricie Mertova (2008) described the use of Critical Incident narrative as an approach to study in the area of Learning and teaching. This method has also been used extensively in Service research notably by Bitner, Booms, and Tetreault (1990) and over 200+ researchers thereafter (Gremler (2004)). Woolsey, Lorette K. (1986) have described the Critical Incident Analysis method as an innovative qualitative research technique which has proven to be a reliable and valid technique for collecting information which is factual and about behaviors. The Critical Incident Narrative method has since been used by several researchers in various domains including Health, Human computer interaction, organization development and many others.

The advantage of narrations and detailed event interviews based on the narrations as it appears from the literature referred above seems to be its ability to capture detailed facts as well as the emotions and feelings of the respondent. Also the fact that the respondent has documented his/her experience of the situation may perhaps contribute towards a more complete description of the situation and the
behaviors and emotions of various actors in that situation. Unlike a questionnaire where the responses are more spontaneous, the narrative is perhaps well thought out and may even go through iterations to ensure completeness.

One of the key aspects of use of Narratives and event based narrative analysis is that it is focused on a limited set of events or situations. For example a psychiatrist wishing to understand some phobia in a patient may expect him/her to document or narrate the incident which seems to create that sense of fear. Thus the Critical Incident Narrative method seems to have been largely used for capturing narratives about few critical events or situations. The narratives also therefore tend to be short descriptions of what happened and how the person felt.

**Can Narratives as a method be used for research in Project Leadership**

The question before the project management researcher is whether such a method could be used for study of behaviors across an entire Project. A project being more than merely critical incidents. A project involves several stages / phases and several tasks and activities. Application of the Narratives should therefore span all these. Critical Incidents are indeed important – however the narrative should perhaps go beyond these. This comes close to case study method considering that a case study is a detailed description of a situation. Case Study as a method of teaching and learning as well as a method of research is fairly well established. Can a researcher attempt to use a large sample of case studies each describing all the stages of a project lifecycle, describe people behaviors, and describe contextual aspects and critical events. Also having captured the narrative would help in conducting behavioral study in the context of Project leadership. As mentioned earlier most project management and project leadership research has been based on surveys, questionnaires, interviews, standardized instruments and the like. This makes the choice of this approach in the context of project leadership study a difficult one.

**Application of Narrative with Critical Events for Research on Project leadership**

The author (Pendse(2010)) as a part of a longitudinal study of Indian software projects spread over a 6 year period from 2004-2010 used Project Narratives which described critical events in a project to identify key behaviors and competencies. This research was an example of use of Project Narrative coupled with the concept similar to a Critical Event Analysis used by Flanagan (1954) as quoted by Spencer and Spencer (1993)

**Stumbling on to the Project Narrative approach**

Over 100 Respondents who were team leaders/ project leaders/ Business Analysts working in leading IT companies were asked to participate in this research involving the use of the Project narrative approach. These respondents were participants in executive MBA program which the researcher was part of. Narrating a real life project was part of an assignment. The original thought behind asking the participants to write such a narrative was to reflect on a project which they had recently experienced and learn from that project. While project closure meetings include such a reflection, respondents confirmed that this seldom happened since the team would get disbanded even before the project was commercially closed leaving no time for the team members to sit together and capture the learning. The researcher in his role as a teacher realized that writing the narrative would also help the participants who were highly technical people to look at the project from a managerial perspective. It was only after collecting these narratives that the researcher realized the potential of these narratives for conducting research in behavioral aspects of Project Management.
The application of the Critical Incident Analysis technique which involved the use of narrations as described earlier when applied to the study of projects was for convenience named as 'the Project Narrative Approach'.

**Capturing Project narratives**

Respondents were asked to document a complete narrative of a project which they had recently experienced in person. All projects had to be described from the kick-off stage to the closure stage.

As a preparation towards writing a narrative, a simple form was designed to help the respondents to first identify the key stages and important events throughout the project lifecycle. The form also gathered several other demographic details about the respondent as well as the project which he/she planned to narrate. The project details captured included size of the project, cost, team size etc. Respondents then proceeded to flesh out the narrative around each of these stages and events.

**Profile of Project Case Narratives Studied:**

The Project Narratives Studied represented a fairly diverse range of Project types as well as Application Domain area. From the 100+ Narratives only 40 were selected. 25% of these represented BFSI domain, approx 9% each of Infrastructure, IT Security and Enterprise Solutions. The rest was a mix of various other domains and verticals such as Airline, Telecom, etc. Viewed by Project type the cases represented nearly 60% of software development projects. This was quite representative of the Indian IT export sector.

This shortlist of 40 Narrations was based on the quality of Narration, completeness (from project kick-off to closure), completeness of demographic information and diversity factor explained above.

Narratives submitted by the respondents were graded as C, C+, B, B+, A, A+ based on their quality of narration and completeness. This was based on an expert review by a peer team of researchers. Only those narratives which had A and A+ were considered for this research.

**Identifying Behaviors and competencies from the project Narratives**

The purpose of collecting these Narratives was to identify behaviors. Verbs describing responses of project leaders during a given situation helped identify behaviors. The 40 Project Narratives resulted in 900+ behavior instances. These behaviors were mapped into standard behavior descriptors drawn from Leadership literature. These behaviors were further grouped into 24 broad competency areas which were also drawn from leadership literature.

The standardized descriptors made it possible to compute frequency of occurrence of a behavior or competency in a given project as well as across all the projects taken together as a sample. The research went on to identify the top 10 ranking competencies by associating them with measures of success of a project as well as those for project leaders. These associations were analyzed using Cluster Analysis and ANNOVA.

While ANNOVA was used to confirm that the frequency of occurrence of the key competencies was significantly higher in successful projects and successful project leaders, than in not-so-successful projects/leaders. Cluster Analysis helped to detect a set of competencies which could be associated with project success and project leader success scales.

This lead to the identification of exemplary competencies of project leaders in the context of software export projects executed from India.
Validation of the Study

In order to validate the findings of the Narrative based approach, a separate study was conducted. This involved several focus group discussions (FGDs) with 120 project leaders to identify competencies which in their view were important. This list of competencies were then used to construct a questionnaire. One other benefit of the FGDs was that it helped in identifying contemporary descriptors for behaviors and competencies. These descriptors were used to enhance the dictionary of behaviors and competencies which had already been constructed based on literature.

Respondents were asked to select from the list of competencies given in the questionnaire – ‘the top 10 competencies which were required for project success ‘and then rank them (1..10). The respondents included 120 project leaders – about 60 working from offshore bases in India, about 30 Indian project leaders working on-site at clients place and near-shore. There were also 30 respondents who were non-Indian (read American/ European) client project managers.

Each of these respondents selected the top 10 competencies based on their experience and assigned a rank to the competency.

The frequency of occurrence of a competency in the list of top 10 was used to create a rank order of these competencies.

The rank order of competencies generated from this method was compared with the rank order generated based on the frequency of occurrence of a competency in the Case Narratives. The Pearson’s rank correlation was found to be significant at 1% level confirming the validity of the ranks generated from the project narratives.

In order to minimize errors in analysis, the research did not concern itself too much with the absolute rank generated from the Project narratives. Instead it focused on identifying a set of competencies which appeared most frequently in the top 10 ranks across sampled projects.

Additional Competencies Identified from FGDs:

Since the focus group discussions were open ended. There was a possibility of identifying competencies which had not featured in the case Narratives. Based on the Dictionary of Competencies compiled from Literature, similarities between such newly identified competency and those already in the Dictionary were found and the new competencies were mapped into the standardized descriptors.

Some of the Competencies mentioned during Focus Group Discussions and also had support in literature did not feature in the Project Narratives. For example Dale Christenson and Derek H.T. Walker (2004) emphasized the importance of Vision for success of projects. Vision for a project and for technology was mentioned during focused group discussions. Likewise House et all (1977) mention that while anyone can become a leader some people are inherently more inclined to be leaders. Thus disposition towards leadership was an important characteristic identified during FGDs.

Such competencies were added to the set of Project leader competencies on the basis of their occurrence during FGDs, ranking through the questionnaire and the support for these competencies from literature. However it was noted that these competencies were not reported in the Project narratives – perhaps due to the fact that the Narratives focused on describing the behaviors and actions of the project leaders rather than describe the project leader’s inherent traits.
Thus it appeared to the researcher some competencies could not be detected adequately through project narratives.

Understanding Differences in Competency Ranks

While the Pearson’s rank correlation was observed to be significant between the two sets of ranks viz those based on Project Narratives and those based on the field survey of top 10 competencies it was noticed that ranks of a few competencies in the two sets of data seemed differ substantially. For example Process Rigour and Monitoring/Review which appeared in the top 10 based on frequency of occurrence in the Project Narratives appeared well beyond the 15th rank based on the ranking survey. To understand this difference, the results were shared in a professional forum called the Software Process Improvement Network (SPIN) which consisted of experts and Heads of Quality Departments of various IT companies. This Delphi technique helped explain the difference in the ranks for Process Rigor and Monitor/Review as Project Leadership competency. According to the SPIN members, while successful projects seem to have high evidences of Process Rigour, the mindshare for Process rigour is not quite high. It could also imply that many project leaders and the team follow rigorous processes only due to compliance requirements rather than truly believing in them. This example seemed to indicate the utility of the Narrative approach to research in detecting the ‘actual’ behaviors found in real life situations as opposed to perceptions as it happens in survey based techniques.

On the other hand some of the aspects of emotional intelligence competency were under rated in the Narratives. One such example was ‘Positive attitude’ which was ranked in the top 10 more frequently during the survey but occurred less frequently in Project Narratives. This could not be said about other dimensions of emotional intelligence. For example Resilience and Tenacity were reported frequently in most Project Narratives and almost equally ranked in the ranking survey. This is perhaps for the reason that the focus of the narratives was on the event-behaviors and not on the inherent characteristics of the individual.

Final Set of Project leader Competencies

The final set of competencies therefore included four distinct sets – those which were clearly the core set of Project leadership competencies, those which were in the form of Stakeholder (such as client representatives) expectations (but not reflected in Project Narrations) and those which were not perceived to be important but seemed to be reflected in Project Narrations and those which were subtle and more inherent to a project leader and therefore not captured by project narratives. Thus it would be seen from the foregoing that while the Project Narrative is a good tool to capture behaviors of people in various situations, it has its pros and cons. These are discussed below.

A critique on the Project Narrative Approach

Benefits:
The use of Narratives in the researcher’s study seemed to bear out similar benefits as those observed by various previous researchers. To begin with the narrative completely described the project from kick-off to closure. The narrative described all major events which occurred in the project and the behaviors of project leader during that event. Almost all respondents described several minor and more subtle situations and the related behaviors. Since the respondents had themselves experienced the project situations and that too recently, they found it easier to report detailed facts, contextual information and emotions. Also since the responses were written in an offline mode and not in a face to face interaction with an interviewer, they were not spontaneous nor off the cuff and error prone – rather they were well thought off and revisited before submission.
Challenges Faced in using the Project Narrative approach

While using the Project Narrative Approach the researcher faced several challenges. One of these was to get a good quality Narrative. All respondents were highly technical IT project leaders. When asked to write a narrative they described the technical aspects of the project rather than leadership/behavioral aspects of the projects. In some cases the Narrative was very disjointed at stage boundaries or too terse to be useful enough for capturing behaviors. The Narratives improved in subsequent iterations. The researcher could ask for more iteration due to the teacher student relationship which he enjoyed. Other researchers may find this difficult. Hence the need to have strict guidelines, respondent training and short-listing of narratives before including the narrative in the final research sample.

The other challenge faced was the quality of the narrative depended a lot on the vocabulary and comfort of the project leader in expressing in English. The command over the language affected the manner in which the behaviors were described. The same behavior could be described in various ways using different phrases. This made the analysis of the Narrative very challenging. Hence the identification of the standard behavioral descriptors from literature were found useful. Since the frequency of occurrence of a behavior and hence the corresponding competency was important to the research– repetition, circuitous as well as terse descriptions could lead to errors in frequency count.

Last but not the least this approach is not feasible for many researchers since getting respondents to take out time and reflect and document previously experienced projects is usually very challenging. Hence as noted earlier there is a tendency to use questionnaire or interview as research tools.

Conclusion:

Project Narrative based on critical events was seen to be an effective means of uncovering behaviors and practices. This was seen through the validation test conducted by the researcher. Project Narrative as a research tool requires several pre-requisites – this includes but is not restricted to the following:

a) getting suitable respondents who have had firsthand experience of a project and can recount critical events and associated behaviors of people involved in these projects and are willing to document them
b) preparatory input in terms of a small questionnaire which can help them capture key aspects of the projects and key events which can then be expanded
c) guidance to respondents to write the narrative to focus on areas such as ‘project leader behavior’ depending on the purpose of the research; Also guiding respondents to capture somewhat subtle aspects and if appropriate asking them to describe the inherent characteristics of the actors in the narrative – which other wise would get missed out – this is particularly important when the research is aimed at studying behavior and competencies.
d) rigorous review of the narrative to ensure completeness and to minimize issues such as convoluted descriptions, repetition or alternatively terse descriptions and missing details – this is akin to code review in software where the same functionality is achieved but through an optimal and clean code
e) conducting an interview based on these narratives if possible to authenticate as well as gather more details where necessary
f) capturing demographics about the project and the project leader which can used during analysis
g) a suitable dipstick / validation to add to the reliability of the research.

As observed earlier, with a rigorous approach as described above, Project Narrative can be a wonderful tool in the hands of a researcher. It can be used for a wide variety of research applications aimed at studying various aspects related to a situation such as behaviors, people characteristics, emotions, contextual factors, underlying connections between multiple situations to name a few.
The paper was an attempt to share the researchers experience and provide a critique on the use of Project Narrative as a means of research and hopefully motivate other Project Management researchers to use the same and benefit by the richness of qualitative data which this method can offer.

References

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