Manager emotional intelligence and project success:
The mediating role of job satisfaction and trust

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Abstract

The number of complex projects is increasing across many sectors and the associated challenges are substantial. Using a field study we aim to understand how project managers' emotional intelligence (EI) contributes to project success. We propose and test a model linking EI to project success and examine the mediating effects of project managers' job satisfaction and trust on this relationship. Based on data collected from 373 project managers in the Australian defence industry, our results indicate that EI has a positive impact on project success, job satisfaction, and trust. Moreover, we found evidence that job satisfaction and trust mediate the relationship between EI and project success. Our findings suggest that top management should be aware of the importance of project managers' job satisfaction and trust, which can both serve to boost project success in complex project situations.

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1. Introduction

The globalisation and rapid growth of industry has increased the number of complex projects across many sectors, including defense, infrastructure, and aerospace. The challenges associated with these projects are substantial. Indeed, almost every complex project is seemingly a "first of its kind" (Sauser et al., 2009), intended to deliver new capacities and/or complex infrastructures. These projects tend to be characterised by large budgets and issues associated with complex systems, such as nonlinearity, irregularity, and uncertainty. Moreover, such complex projects typically attract strong public attention and political interest as a result of substantial social, environmental, national, and even international implications being associated with the success and failure of such enterprises (Whitty and Maylor, 2009).

The performance of these large, complex projects is often disappointing. Many complex projects experience substantial cost overruns and delays in completion, and fail to deliver their objectives (Chang et al., 2013; Eden et al., 2005; Williams and Samset, 2010). For example, the FIFA World Cup 2014 project budget increased from the originally estimated €1 billion to €11 billion. Such failures in complex projects are not unique to sport events. The construction of Denver International Airport exceeded the original budget by 200% and was delivered 16 months over schedule (Flyvbjerg, 2005). Clearly, any research that seeks to improve the record of accomplishment in complex projects merits attention.

Researchers including Dvir et al. (2006) and Sauser et al. (2009) have found that challenges in complex projects are primarily associated with managerial, rather than technical issues.

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In this regard, project management skills and leadership skills may be the most critical determinants of successful project outcomes (Kaulio, 2008; Müller et al., 2012). In developing our central arguments, we note the role of emotion has been highlighted recently as being a central factor in how successful leaders manage on a day-to-day basis (Jordan and Lindebaum, 2015). In order to incorporate emotions as an element in our research we draw on the principles of Affective Events Theory (AET; Weiss and Cropanzano, 1996) in developing a testable model of this process. Within the AET model, events at work result in employee affective reactions that, in turn, determine their subsequent work attitudes and behaviours. As Ashkanasy (2002) has pointed out, the underlying principles of AET enable us to understand the cause and consequence of emotional experience on employee work attitudes and behaviour. In our study we extend this to consider how emotion plays a role in the leadership of complex projects.

Leadership is a crucial part of managing complex projects, impacting directly on successful project outcomes (Shenhar et al., 2002). In this research we specifically focus on leaders' managerial skills and in particular the effect of project managers' emotional intelligence (EI), defined by Mayer et al. (2004) as the ability to be aware of, to utilise, to understand, and to manage emotions in self and others. We justify this approach in the context of project management on the basis of research by Clarke (2010) and Müller and Turner (2007), who identified EI as a key ingredient of effective complex project leadership (see also, Sunindijo et al., 2007; Thomas and Mengel, 2008). In more recent research, Mazur et al. (2014) have argued specifically that high EI project managers are able to solve new challenges and problems as well as to better communicate with their peers.

Although EI has been offered as a solution to resolving some complex project management issues, the underlying mechanisms influencing the EI–project success relationship remain unknown. In this regard, Müller and Jugdev (2012) have suggested that if we are to understand the factors that underlie the success of project outcomes then there is a need for researchers to explore variables that potentially mediate between project manager characteristics (such as EI) and project success.

In particular, in accordance with the principles underlying AET, we argue that job satisfaction and trust resulting from affective experiences may mediate the relationship between EI and project manager behaviours. We argue that emotionally intelligent project managers should be more likely to be satisfied with their jobs and to trust in others (Sy et al., 2006). Subsequently, we consider that higher levels of trust and job satisfaction will, in turn, lead to higher levels of project success in terms of high quality communication, effective troubleshooting, mission clarity, and top management support (Mazur et al., 2014). In this regard, Judge et al. (2001), Pheng and Chuan (2006), and Thompson (2008) found positive relationships between job satisfaction, trust, and project success. We also note that Güleryüz et al. (2008), Sy et al. (2006), and Wong and Law (2002) found that EI is an antecedent to job satisfaction and trust. In our study we extend these findings in an examination of variables in a field-based study within a complex project management organisation. A review of the literature reveals no studies that have tested the mediating relationships linking these variables in the context of a complex project management organisation.

We argue that our study contributes to theory and practice in three ways. First, we develop and empirically test a model of the impact of EI on a sample of managers working on large and complex defence projects. Second, we explore potential mechanisms by which an emotionally intelligent project manager may contribute to project success factors. Third, we add to an increasing body of literature on the emotional, attitudinal, and behavioural implications of EI in complex project management organisations.

2. Critical variables

The critical variables in our study are project managers': ratings of project success factors, EI, job satisfaction, and trust in others. In the following section we introduce these four variables and then describe our study model and hypotheses.

2.1. Project success

Although defining project success in complex projects – where timeframes for completion are long and the size of the projects are substantial – remains a challenging issue (Toor and Ogunlana, 2010; Wang and Huang, 2006), project management scholars generally agree on two components that define project success: *success criteria* and *critical success factors* (Müller and Jugdev, 2012; Turner and Zolin, 2012). *Success criteria* focus on objective measures, such as completion timeliness, quality, and cost (Pinto and Slevin, 1987). Such objective criteria, however, have been criticised, especially in the context of defining complex project success. This is because they tend to draw on overly simplistic constructs which do not mirror the experience in large, complex projects (Toor and Ogunlana, 2010). Moreover, as Jugdev and Müller (2005) have pointed out, such criteria fail to address broader factors that can be considered as success indicators, such as behavioural skills or strategic management objective criteria.

Critical success factors, on the other hand, focus on "soft" issues, such as behavioural skills of project teams as well as customer and stakeholder satisfaction, and therefore represent a more realistic progressive approach to assessing project success (Jugdev and Müller, 2005; Pinto, 1990). Turner and Zolin (2012) have pointed out that success factors, unlike impacts such as time, cost, and quality, can be measured prior to the end of the project. Given the long timeframes for complex projects this type of measurement is useful in assessing a project's progress. We employ Pinto and Slevin's (1987) approach, which uses project managers' ratings of "critical success factors". These are the factors that have been identified by Jugdev and Müller (2005) as the most widely recognised and used measures of success factors.

Taking our lead from Mazur et al. (2014) and Procaccino et al. (2005), we focus on the four project success factors that are regarded as "people related": (a) effective communication with internal and external stakeholders, (b) troubleshooting (i.e., unexpected complications and challenges are effectively