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Major project managers' internal and external stakeholder relationships: The development and validation of measurement scales

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Abstract

In this paper, we detail the development of two stakeholder relationships scales. The scales measure major project managers' perceived competence in developing (establishing and maintaining) high quality, effective relationships with stakeholders who are internal and external to their organization. Our sample consists of 373 major project managers from a sub-set of the Australian defense industry. Both the internal stakeholder relationships scale and the external stakeholder relationships scale demonstrated validity and reliability. This research has implications for the interpersonal work relationships literature and the stakeholder management literature. We recommend that researchers test these scales with multiple samples, across different project types and project industries in the future. The stakeholder relationship scales should be versatile enough to be applied to project management generally but are perhaps best suited to major project environments.

Keywords: Stakeholder relationships; Project management; Scale development

1. Introduction

The management of the project stakeholders is considered the responsibility of the project manager. This task constitutes one of the largest components of their role (Karlsen, 2008; PMI, 2008). To mitigate the risk to the project that the stakeholders pose and to obtain the multitude of project-related benefits that follow the achievement of successful stakeholder relationships (Bourne, 2011; Karlsen, 2008; Pinto, 2000), it is critical that the project manager develops relationships with the stakeholders that are effective and of high quality. Bourne and Walker (2006: 5) define project stakeholders as "individuals or groups who have an interest or some aspect of rights or ownership in the project, and can contribute to, or be impacted by, the outcomes of a project". The potential for stakeholders to impact the processes and outcomes of a project, and therefore its likelihood of success, has been well documented in the project management and stakeholder literature (Bourne, 2011; Bryde and Robinson, 2005; Olander and Landin, 2005; Toor and Ogunlana, 2010; Wang and Huang, 2006; Yang et al., 2011).

In particular, ineffective stakeholder management can: reduce stakeholder satisfaction with the project outcomes (Bourne, 2005); negatively impact the capabilities of an organization (Aaltonen et al., 2008); hinder future opportunities for collaboration with the stakeholders (Manowong and Ogunlana, 2010) and potentially cause harm to individuals or groups (Phillips, 2003). The stakeholder literature stipulates a number of steps for the effective management of stakeholders: 1) identify the stakeholders (Freeman, 1984); 2) select one of several stakeholder management models to categorize the stakeholders (Savage et

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al., 1991); 3) engage with the stakeholder (Greenwood, 2007); and, 4) maintain the stakeholder relationship or disengage from it (Post et al., 2002).

Within the project management field, stakeholder relationships have predominately been explored using qualitative methods such as interviews, observation, storytelling, document examination, case studies and social network analysis (Aaltonen et al., 2010; Beringer et al., 2013; Boonstra, 2006; Bourne, 2011; Rowlinson and Cheung, 2008; Vaagaasar, 2011). For example, an innovative approach from Bourne and Walker (2005) uses a social network tool, the stakeholder circle, to determine stakeholders' power and influence, as well as their impact on a project's outcomes. This tool can assist project managers to develop and maintain a stakeholder engagement strategy (Bourne and Walker, 2005). By comparison, quantitative studies are less prevalent with many focusing on stakeholder satisfaction (see Pinto et al., 2009; Yang and Peng, 2008)—often as an indicator of project success (Jugdev and Müller, 2005). Beringer et al. (2013) believe that the lack of quantitative research using stakeholders as the unit of analysis may be one of the reasons that there is a scarcity of valid and reliable stakeholder engagement measures.

Our review of the stakeholder and project management literature similarly failed to yield a suitable instrument for the measurement of stakeholder relationships. A possible explanation, in addition to the one offered by Beringer and colleagues, may be the conceptualization of stakeholders as groups or organizations that need to be managed as either a risk or a resource rather than at the interpersonal level where emphasis is on the development of relationships. Adjacent to the project management literature is the strategic management literature, which also places emphasis on the effective management of the stakeholders for optimal organizational performance (Freeman, 2010; Hitt et al., 2015). However, a suitable scale for the measurement of stakeholder relationships is also missing from the strategic management literature.

We respond to this gap by conceptualizing, developing and validating two quantitative stakeholder relationship measures—the internal stakeholder relationships (ISR) scale and the external stakeholder relationships (ESR) scale. Unlike qualitative measures, quantitative measures enable the researcher to make statistical inferences about a population. The context for the development of these scales is major projects in the Australian defense industry. The defense industry refers to government and commercial enterprises involved in research, development and production of military resources. We consider the defense industry to be a suitable explanatory context for stakeholder management, with regard to the broader project management community, as many defense acquisitions projects are managed by highly trained project managers who are recognized on a global-scale for their skills and expertise, and delivered in one of the most sophisticated project environments in the world. In addition, the number of national and international, internal and external stakeholders who typically contribute to a major defense project is considerable.

The question we address in this paper is which elements should be measured to evaluate major project managers' perceived internal and external stakeholder relationships competence? The paper is structured as follows. Theory is discussed in Section 2, followed by the method in Section 3, the results in Section 4, and the discussion in Section 5.

2. Theory

To conceptualize the internal stakeholder relationships and external stakeholder relationships constructs, the following sub-sections present our review of the relevant stakeholder management, relational competency, interpersonal relationships and project management theory and literature.

2.1. Stakeholder classification

Despite the considerable number of stakeholders typically involved in a major project, Manowong and Ogunlana (2010) stress the importance of considering all of the stakeholders' interests. In an effort to simplify stakeholder identification and management, attempts have been made to classify stakeholders. According to Mainardes et al. (2012) the literature has suggested classifying stakeholders by levels of an attribute, such as power, legitimacy and/or urgency (see Mitchell et al., 1997), and into groups based on the potential of the stakeholder to harm or cooperate with the organization (see Savage et al., 1991). In addition, project stakeholders have been divided by type: organizational stakeholders (executives, line leaders, employees and unions), product stakeholders (customers, suppliers, governments and the general public) and capital market stakeholders (shareholders, creditors and banks; Freeman, 1984; Kerzner, 2009). They have also been differentiated in terms of whether they are considered primary or secondary stakeholders (Cleland, 1998). Most often, anyone contractually involved with the project is considered a primary stakeholder, while the secondary stakeholders are unlikely to have a contractual claim over the project or to be directly involved (Cleland, 1998; Winch, 2004). For example, Winch (2004) classifies financiers, consulting engineers, suppliers, sponsors and clients as primary stakeholders, and environmentalists, local residents and regulatory agencies as secondary stakeholders.

Project stakeholders may also be differentiated by whether the project stakeholder is situated within a project manager's organization or outside of it. The locus of the stakeholder may impact the project manager's management of that stakeholder. However, Manowong and Ogunlana (2010) believe that the locus of the project stakeholders should have little practical impact as all stakeholders have to be identified, and have their needs and potential to impact the project assessed. In this paper, internal stakeholders have been defined as project stakeholders within the project manager's organization (i.e. supervisors and team members) while external stakeholders have been defined as project stakeholders outside the project manager's organization (i.e. customers, contractors, sub-contractors and environmental or government bodies). While contactors are typically viewed as external stakeholders, we view those contractors