Non-economic motivations for organizational citizenship behavior in construction megaprojects

Delei Yang \textsuperscript{a}, Qinghua He \textsuperscript{b,\ast}, Qingbin Cui \textsuperscript{c}, Shu-Chien Hsu \textsuperscript{d}

\textsuperscript{a} School of Construction Management and Real Estate, Henan University of Economics and Law, No.180, East of Jinhuai Road, Zhengzhou, 45000, PR China
\textsuperscript{b} Research Institute of Complex Engineering and Management, School of Economics and Management, Tongji University, Shanghai, 200092, PR China
\textsuperscript{c} Department of Civil and Environmental Engineering, University of Maryland, College Park, MD, 20742, United States
\textsuperscript{d} Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong

\textbf{ARTICLE INFO}

Keywords:
Megaproject citizenship behavior
Social value
Self-serving motive
Firm development
Political appeal

\textbf{ABSTRACT}

This study examined the primary non-economic motivations behind participating entities’ organizational citizenship behavior in construction megaprojects, referred to as their megaproject citizenship behavior (MCB), in terms of altruism and observed practice. A questionnaire-based survey designed to test the effect of non-economic drivers on MCB revealed that the pursuit of social value and self-serving motivation, including firm development and political appeal, function as significant non-economic drivers of MCB. And the self-serving motivation to perform MCB is generally less significant than the pursuit of social value, and the relationship between self-serving motivation and MCB is partially moderated by the governmental connections of the megaprojects. In government-hosted construction megaprojects, when the governmental connections of the individual participating entity are as strong as those of the megaproject itself, MCB engagement is actually driven by the pursuit of firm development and political appeal even where the apparent driver is the pursuit of social value.

1. Introduction

Once an agreement has been reached and all the contracts signed, within an intra-organizational context, the management effectiveness of a megaproject depends primarily on a combination of the mutual altruistic collaborative behavior of all the parties involved and the amount of positive voluntary effort they are prepared to devote to the project (Smith, Carroll, & Ashford, 1995). These behaviors and efforts, described as informal cooperation by (Smith et al., 1995), include engaging in close collaboration contingently, keeping and maintaining a harmonious relationship encompassing professional networks, the spontaneous investment of extra time and resources, and the willingness to voluntarily work hard to achieve a successful outcome. This type of positive behavior is referred to as megaproject citizenship behavior (MCB) (Organ, 1988; Yang, He, Cui, & Hsu, 2018).

In terms of altruism, MCB involves actions that do not occur spontaneously and require the investment of time and resources by multiple different actors (Organ, 1988). This type of behavior, therefore, requires internal motivational drivers that deliver potential implicit value (Bolino, Klotz, Turnley, & Harvey, 2013; Li, Kirkman, & Porter, 2014; Organ, 1988). Driven by such an internal initiative, participants will devote their best efforts to deliver a project successfully and achieve beyond their expected performance even if their contracts lack an economic incentive (Heere & Xing, 2012; Anvuur & Kumaraswamy, 2015). In practice, the stakeholders of construction megaprojects tend to obtain intangible and immaterial value in the long run by sacrificing their own interests rather than behaving solely based on their short-term economic returns. For example, the L-495 and L-95 Express Lanes in the Washington, D.C., area are maintained by the Transurban Group through a public-private-partnership (PPP) contract. A Transurban’s general manager reported that they on occasion arranged for maintenance staff to repair sinkholes in contiguous L-395 Express Lanes that were not included in the PPP contract. The goodwill they gain as a result then puts them in good standing when they next seek to negotiate long-term cooperation opportunities with the Virginia Department of Transportation (VDOT). In the South-to-North Water Transfer program and the Hongkong-Zhuhai-Macau bridge in China, the participants voluntarily compete with one another by highlighting their good site safety standards, high quality work, adherence to schedules, record of technological innovation, environmental protection and energy-saving operations, compliance with legal requirements, harmonious working practices, good citizenship, excellent service support, unity, and collaboration (HKZMB 2011; SHFTU and BSHEXCOR 2012). Those who win the competition are awarded diplomas and medals by the project.
manage their the management bureau and their role is publicized on the official website; as a report issued by the South-to-North Water Transfers Commission Office of the state council (Tang, Wan, & Zhang, 2013).

The participants in these examples tend to demonstrate MCB and their non-economic motivations by prioritizing the improvement of their project delivery and outcomes, as predicted by Müller, Turner, Andersen, Shao, and Kvalnes (2014). Although MCB that is driven by non-economic motivations has been observed in megaprojects, conflicting interests and even corruption among stakeholders have also been widely observed (Le, Shan, Chan, & Hu, 2014; Tukkainen, Aaltonen, & Murtonen, 2010). Consequently, previous studies have tended to focus on the economic interests of project stakeholders based on their “self-interest orientation.” Given the failure of these studies to acknowledge immaterial motives, the non-economic motivations for MCB practice remain unknown.

Recent work exploring the role played by altruism has broadened our understanding regarding the drivers of altruistic behaviors (Li et al., 2014; Podsakoff, Podsakoff, MacKenzie, Maynes, & Spelma, 2014). Given the contextual complexity involved, however, the motivation behind MCB practice has not been explained directly using previous research (Blatt, 2008; Heere & Xing, 2012). Additionally, relatively little empirical research has been performed to interpret how MCB engagement motivation might be impacted by related megaproject contextual factors such as the governmental connection of participants and projects. This study aims to identify and determine the inherent non-economic motivations behind MCB by addressing the following research questions:

RQ1. Why do construction participants perform and engage in MCB?

RQ2. What are the characteristics of the primary drivers behind MCB?

This study aims to identify empirically what the participants actually aim for when they engage in MCB and then determine the related construction megaproject contextual factors that characterize MCB motives. In this way, the inherent logistic and dynamic features of MCB will be revealed.

2. Theoretical framework

2.1. Megaproject citizenship behavior

Essentially, OCB is altruistic behavior meant to benefit others or organizational well-being and is thus adapted to capture altruistic actions that positively affect organizations in myriad fields (Organ, 1988; Li et al., 2014). Accordingly, OCB could be used to depict the altruism in megaprojects. From the literature review, shown in Fig. 1, six main OCB types were summarized as help, compliance, conscientiousness, harmonious relationship maintenance, initiative behavior and dedication (Yang et al., 2018).

However, existing OCB research mainly explains the topics within a corporate and common project contexts and is not adaptable when applying them to complicated megaproject environment (Braun et al. 2013; Li et al. 2019). In megaprojects, governments always play an important role and affect stakeholders’ behaviors (Boateng et al. 2015; Zhai, Ahola, Le, & Xie, 2017); megaproject management faces high uncertainty from social, political, economic, technical and environmental challenges (Boateng et al. 2015; Flyvbjerg, 2017); megaproject organizational field involves diverse stakeholders with various value expectations differing from general project (Eweje et al. 2012; Flyvbjerg, 2017); and relative to general projects, megaprojects comprise a complicated, multiorganizational, open social network consisting of stakeholders with complex inter-organizational relationships (Provan et al. 2014). These factors shape citizenship behavior in disparate formats than the permanent organization and general project do (Yang et al., 2018).

To describe citizenship behavior in megaprojects, megaproject citizenship behavior (MCB) was introduced by Yang et al. (2018). Based on the definition provided by Organ (1988), the discretionary positive behavior of stakeholders, which is not directly or explicitly recognized by formal contracts and management institutions, can facilitate the achievement of construction goals and hence is employed to describe MCB in this study. Fig. 1 and Table 1 shows the five types of MCB and their items identified in Yang et al. (2018).

According to Yang et al. (2018), contingent collaboration behavior (CCL) means willingness to flexibly assist others and collaborate without explicit description in formal contacts. It can include behavior such as providing others with possible convenience at an interface and between construction processes; Compliance behavior (PC) refers to voluntary compliance with and internalization of rules, norms, and procedures without supervision; Harmonious relationship maintenance (HRM) refers to behavior aimed at creating and preserving positive formal and informal connections with the internal and external stakeholders of a megaproject; Initiative behavior (IB) describes the task-related actions of voluntary creativity and innovation designed to improve project performance beyond the minimum requirement; Conscientious behavior (CB) refers to behavior where participating entities try to complete a task with maximum quality without monitoring.

In contrast with OCB, MCB presented obvious characteristics (Yang et al., 2018). For instance, it extends beyond considerations for project scope and is directed toward the whole megaproject social network, happens at inter-organizational level with continuous contingency and more flexibility, and shows concern for harmoniousness of inter-organizational relationships.

2.2. Motivation behind MCB

MCB invites some future recompense or value that is indirect and uncertain (Organ, 1997). Team altruism suggests that this type of value expectation involves dual motives, namely self-serving altruism that has