

Title: The influence of local community stakeholders in megaprojects: rethinking their inclusiveness to improve project performance

Abstract: This paper organizes and synthesizes different extant research streams through a systematic literature review to identify connections and major assumptions on the influence of stakeholders in major Public Infrastructure and Construction projects (PIC), at the local community level. Findings suggest that research on stakeholder management has focused strongly on those stakeholders able to control project resources, whilst the effect on the legitimate ‘secondary stakeholders’, such as the local community, remains widely unexplored. Due to the unavoidable impact of major PIC on both people and places, it is suggested that seeking local community opinions in the initiation phase of the project and monitoring the megaproject impact at the local level can help to improve project performance. The output provides scholars and practitioners with future research directions and practical implications for an inclusive stakeholder management approach in construction megaprojects.

Keywords: megaprojects; secondary stakeholders; local community; stakeholder analysis; systematic literature review

1. Introduction

The terms ‘major project’ or ‘major programme’ are frequently used interchangeably to define large public projects when referring to megaprojects (Flyvbjerg, 2014; Hu et al., 2014). When defining a ‘megaproject’ common characteristics in the literature include; a strategically-aligned set of multiple projects (Jaafari, 2004; Major Projects Association, 2014; Miller and Lessard, 2000), costs in excess of US \$500 million and that they take many years to complete (Sun and Zhang, 2011; The Federal Highway Administration of the United States, 2007). Megaprojects are becoming more ubiquitous with global infrastructure and spending is estimated to be US \$3.3 trillion for the period 2016 to 2030 (McKinsey Global Institute, 2016). This is the ‘biggest investment boom in history’ according to The Economist (2008), with the global infrastructure market continuing to grow between 6-7% yearly to 2025 (PwC, 2014).

Infrastructure spending is mainly driven by large-scale projects, and many more and larger Public Infrastructure and Construction projects (PIC) are being proposed and introduced as the preferred delivery model for goods and services (Flyvbjerg, 2014). Therefore, it is not surprising that construction megaprojects are attracting more attention as their growth results in an increased impact on people, budgets and urban spaces (Jia et al., 2011; Xue et al., 2015). Considered a built-in recipe for producing local impact, but not local benefits (Major Projects Association, 2014), megaprojects have seen little improvements in recent years and are often cluttered by misrepresentation and flawed decision making (Flyvbjerg, 2014). This paper stresses it is essential to minimize this through a better and inclusive stakeholder management approach, which will improve the performance of these projects. Improving infrastructure spending will enhance project selection and delivery and management of existing assets, which could translate into 40% savings (McKinsey Global Institute, 2016).

The poor performance of megaprojects highlights how managing time and cost has no direct impact on time and cost performance, with studies showing that nine out of ten such projects have cost and time overruns (Flyvbjerg, 2014). Not all megaprojects are complex, but almost all are complicated (Turner, 2014). To say a project failed because it is late and overspent, when it is almost impossible to judge the time and cost at the start is nonsensical (Atkinson, 1999; Turner, 2014); the project should be

judged worthwhile by its benefits at a time and cost that made it valuable (Turner, 2014). Therefore, managing time and cost constraints is regarded as ‘firefighting’ to keep afloat, which leads to unrealistic estimates in order to meet goals, whilst ignoring setting the real benefits in the feasibility stage. The authors believe that benefits realization has a greater impact on project performance, and managing those ‘secondary’, but legitimate stakeholders such as the local community, will help manage the benefits by reducing planning misjudgment and increasing transparency and accountability in the project decision making process.

By exploring the literature, this study recognizes that projects and the stakeholders operating within them are considered a temporary organization (Hanisch and Wald, 2012; Söderlund, 2004; Turner and Müller, 2003). Nevertheless, Lundin and Söderholm (1995), Söderlund (2004) and Bakker (2010) assert that temporary organization approaches see projects as social systems, whereby behaviour (not just decision-making) through social interactions is highly influenced by the context in which they are embedded. Projects are temporary and unique (Yang et al., 2011) and these characteristics require additional effort to generate trust between the project stakeholders (Grabher, 2002). Consequently, project managers need to be attuned to the cultural, organizational and social environments surrounding projects (Wideman, 1990). Therefore, the main theoretical background for this study draws on stakeholder theory, which is a recognized framework for analyzing the behavioral aspects of the project management process (Sutterfield et al; 2006). Taking into account the needs and requirements of both primary and secondary project stakeholders as an essential contributing element to better project performance provides a solid basis for stakeholder identification, classification and assessment (Cleland, 1986; Donaldson and Preston, 1995; Eskerod et al., 2015; Olander, 2007; Sutterfield et al., 2006), which are the first steps required for effective stakeholder engagement (Reed, 2008). However, project managers have mainly focused on technical skills and rigid procedures, and the political and social issues around megaprojects have been overlooked and stakeholders poorly managed (Flyvbjerg, 2013). Research has narrowly focused on those actors important to the project’s economic interests, such as suppliers, sponsors and customers (Aaltonen and Kujala, 2010; Eskerod et al., 2015), overlooking the human social needs around project developments.

In fact, current project stakeholder practices represent mainly a ‘management-of-stakeholders’ approach where stakeholders are seen as providers of resources (Huemann et al., 2016). This approach offers an instrumental perspective to stakeholder management which aims to make the stakeholders comply with project needs (Derry, 2012). However, especially in the last decade, the literature shows a growing interest for more ethical and sustainable projects and a conscious endeavor for fairness and engagement of all stakeholders through a ‘management-for-stakeholders’ approach (Eslerod and Huemann, 2103; Eslerod et al., 2015; Freeman et al., 2007). The seminal work of Freeman (1984), notes that the management-for-stakeholders approach offers an inclusive and holistic perspective which aims to engage with a broader group of stakeholders, who could be harmed by the organization’s strategy, by meeting or exceeding their needs and expectations and balancing the projects’ economic, ecologic and social interests. In this paper, the authors analyze the local community regularly affected by major PIC projects and how the stakeholder interests often differ from those of the project (Choudhury, 2014; Newcombe, 2003; Teo and Loosemore, 2014). For instance, understanding and minimizing the effect of megaprojects on people and places can help manage project benefits by rethinking a tailored approach for the local community, which will help project managers improve accountability and transparency in their decision making by moving towards more ‘community-inclusive’ megaprojects (Bornstein, 2010).

Due to a project’s limited resources, project managers cannot always address the concerns of every potential stakeholder and the prevalence of the instrumental perspective in stakeholder management is thus evident (e.g. Bourne and Walker, 2005; Johnson et al., 2005; Mitchell et al., 1997). However, it is believed that a broader view that takes into account the ‘less important’ secondary actors is highly essential in the context of major PIC projects. Nevertheless, although the literature on megaprojects is moving forward, there has not been an academic effort to identify, summarize and articulate the underlying assumptions that make the ‘management-for-stakeholders’ approach beneficial (or not) to megaproject performance. What is noticeable is the inefficiency of the classic stakeholder’s methods to capture and include the views of a broader range of stakeholders. This has not only prevented a more inclusive approach to stakeholder engagement, but has reinforced the lack of public support that megaprojects are historically facing. Therefore, by undertaking a Systematic

Literature Review (SLR) of stakeholder management practices in PIC, the authors try to identify those assumptions worthy of being challenged (Alvesson and Sandberg, 2011) by proposing future theoretical and empirical developments in the project stakeholder management field. Whilst different studies provide valuable insights into local community influence on project outcomes (e.g. Eesley and Lenox, 2006; Teo and Loosemore, 2011), they overlook the literature concerning the outcomes of megaprojects affecting the local communities' social needs in such projects. Reviewing the literature focusing on local communities in megaprojects is important from both theoretical and managerial perspectives, because they can negatively impact the project (Olander and Landin, 2008; Teo and Loosemore, 2014).

It is evident that stakeholder management procedures at the micro level of PIC projects have not been fully evaluated and, to date, the understanding of the megaproject impact at the local community level and how this can be minimized through a more inclusive approach to stakeholders' engagement remains marginal. This study consolidates the disparate literature to identify the issues which have prevented, to date, a full integration of a holistic approach to stakeholder engagement in PIC projects, which are essential for ethical and sustainable development over time. By focusing on those legitimate actors suffering the most from megaproject developments, namely the local community, the SLR aims to record the existing literature on how stakeholder management practices, of major PIC projects, are manifested at the local community level.

This provides academic researchers with an overview of '*what we know*' as well as '*what we need to know*' for future project stakeholder research. The focus of the SLR spans three knowledge areas i.e. megaprojects (context), stakeholder analysis (extent) and local community (phenomenon of interest). By recognizing the importance of generating the research question through problematization, rather than a gap-spotting approach (Alvesson and Sandberg, 2011), it was the authors aim to consolidate the extant research, by establishing connections and identifying major assumptions and limitations in the literature, within the identified domains relevant to stakeholder management practices of major PIC projects at the local community level. The natural link within the three areas of

investigation formed the conceptual grounds and future research guidance for an inclusive, rather than an instrumental approach for the management of stakeholders in major PIC projects.

In light of the above discussion, the authors aim to investigate how stakeholder management practices of PIC projects are manifested at the local community level. By interrogating the literature three main objectives were set:

- (1) To understand the interconnections within which PIC projects and the stakeholder local community interact.
- (2) To identify current stakeholder management approaches in major PIC projects.
- (3) To investigate how the local community stakeholder has been conceptualized and treated in current body of knowledge, relevant to stakeholder theory.

2. Methodology

This paper adapts and combines the guidelines suggested by Tranfield et al. (2003) and Mok et al. (2015) to conduct a Systematic Literature Review (SLR). This is also in line with the PRISMA systematic method in order to minimize bias and errors by providing ‘high-quality’ evidence (Moher et al., 2009).

2.1. Systematic procedure

Rigorous search criteria were established for paper retrieval. Following Davies and Crombie’s (1998) criteria for inclusion and exclusion of studies, the review was based on the best-quality evidence. Further selective criteria were adopted whereby the relevance of the paper to the review was dependent on its questions and quality of its methodology. This process implies that studies were assessed using validated quality criteria regarding the scope of the study and its outcomes. Therefore, according to Tranfield et al. (2003, p. 215), the authors refer to quality assessment as, “the appraisal of a study’s internal validity and the degree to which its design, conduct and analysis have minimized

biases and errors”. Further, as decisions regarding inclusion and exclusion remain relatively subjective (Tranfield et al., 2003), this stage was conducted by more than one researcher.

The first step was to identify an initial list of keywords specific to the research objective of ‘investigating stakeholder management procedures on the local community affected by megaprojects development’. The provisional list of relevant keywords was in the second instance refined through ongoing discussions with senior academics and industry practitioners. The results yielded a total of eight keywords which were used in the literature search. The following keywords are relevant to the area of investigation relating to megaprojects, stakeholder management procedures and the local context.

Megaprojects: megaprojects; large infrastructure projects; major construction projects.

Stakeholder Management Procedures: stakeholder analysis; stakeholder identification; stakeholder classification; stakeholder assessment.

Local Context: local community.

In the second step, search strings were developed from the identified keywords with the help of the Boolean operator **AND*/*OR** to search and access the relevant literature. Search strings employed in this review were: **1.** *‘megaprojects’ OR ‘large infrastructure projects’ OR ‘major construction projects’ AND ‘local community’* **2.** *‘megaprojects’ OR ‘large infrastructure projects’ OR ‘major construction projects’ AND ‘stakeholder analysis’ OR ‘stakeholder identification’ OR ‘stakeholder classification’ OR stakeholder assessment’* **3.** *‘local community’ AND ‘stakeholder analysis’ OR ‘stakeholder identification’ OR ‘stakeholder classification’ OR ‘stakeholder assessment’*.

Two academic databases: ABI/INFORM complete and Business Source Premier, were searched for relevant publications due to their international coverage from major business journals. Moreover, the scope of publication search was scaled down to a time span 1997-2015. This timeframe was selected according to Mok et al. (2015), which depicted that relevant publications specifically from the perspective of stakeholder management and megaprojects appeared only since 1997. A total of 212 articles were retrieved after the first selection stage. Therefore, using the screening process

suggested by the PRISMA method (Moher et al., 2009), a two stage filtering process previously applied by Yang et al. (2011b), and more recently Mok et al. (2015), was also adopted in this review. Subsequent to the exclusion of non-English papers, the first stage screened out publications which did not contain the above mentioned keywords in their titles and abstracts, excluding 53 records.

In the second stage, a brief review of the paper contents using a qualitative data analysis software package (NVivo) excluded the less relevant and irrelevant papers (n.39). Criteria for exclusion were based on the results obtained through the content analysis of the selected articles. By adapting the codebook (Table 1) proposed by Laplume et al. (2008), both quantitative (e.g. year, author, methodology) and qualitative (e.g. contributions, findings) variables were coded in the content analysis. The codebook was iteratively developed and offered a highly reliable method for papers' inclusion/exclusion, as the documented method can be replicated (Blumberg et al., 2011).

INSERT TABLE 1 HERE

The results suggested that some of the retrieved publications appeared to be less relevant as the keywords only appeared once in the paper, or they were not the main focus. Moreover, only studies relevant to large public construction projects were selected, excluding papers investigating projects such as IT, mergers and acquisition, supply chains or banking and also those articles whose main focus were on public and private partnership (PPP) procedures. The content analysis used for paper selection represented a structured and systematic technique to identify the current body of knowledge and observe emerging patterns in the literature (Mok et al., 2015). Papers were categorized, analyzed and selected based on deductively formed themes with specific reference to 'megaprojects', 'stakeholder analysis' and the 'local community' used as the keywords.

Moving to the eligibility stage suggested by the PRISMA method (Moher et al., 2009) full-text articles (n.120) were assessed for duplications. After checking for duplications, a total of 91 papers were included in this review. Figure 1 summarizes the retrieval process.

INSERT FIGURE 1 HERE

Table 2 presents the distribution of selected publications and their respective journals.

Although some authors in their SLR have preferred to narrow down their search to certain pre-definite journals representing the chosen field of study (e.g. Crossan & Apaydin, 2010; Littau et al., 2010; Podsakoff et al., 2005); the authors have included in their search a broader range of high quality peer reviewed journals (e.g. Hu et al., 2014; Mok et al., 2015; Yang et al., 2009). Project management has been widely recognized a multidisciplinary field (e.g. Blomquist et al., 2010; Davis, 2014; Littau et al., 2010) and the authors have supported the exploratory nature of the study by capturing insights from different management fields which have provided differing perspectives not yet fully captured in project management journals (e.g. the stakeholder management discussed by Dooms et al. (2013), Dunham et al., (2006) or Teo and Loosemore (2014)). Therefore, particularly when a problem persists, exploring varying bodies of knowledge and different territories will offer meaningful and constructive inputs. This has helped the authors to enlarge their perspectives and understanding around a topic that has been rarely investigated. However, it is also noticeable that the majority of the selected studies and knowledge around stakeholder management in PIC projects are provided by two main journals in Project Management (34%). In fact, from the 91 selected papers, it is evident that the International Journal of Project Management (19 papers) and Project Management Journal (12 papers) have been the most active in investigating either PIC projects or stakeholder management practices.

INSERT TABLE 2 HERE

2.2 Organizing framework

To organize the empirical evidence and key findings, an organizing framework of the literature was developed. The elements in Figure 2 are streams of literature representing three knowledge areas relevant to investigate (1) megaprojects (2) stakeholder analysis and (3) local community. By mapping and investigating those potential boundary areas, the authors aimed to consolidate the extant research by establishing connections and identifying major assumptions underlying the literature within the identified domains relevant to stakeholder management practices of major PIC projects at the local community level.

INSERT FIGURE 2 HERE

3. Descriptive Findings

Litteau et al. (2010) show how literature focusing on project evaluation and strategy are the major contributors to stakeholder theory development within their research scope; these previous reviews seem to be generic and their research focus is not specific on PIC. Although the majority of literature concerned regular size construction projects (Mok et al., 2015), selected studies recognized the growing importance of megaprojects as an area for further research due to their strategic relevance at the local, regional as well as global level. In fact, as demonstrated by Figure 3, interest focusing on stakeholder management in megaprojects has been rising in the last decade.

INSERT FIGURE 3 HERE

These findings support those of Hu et al. (2014) and Mok et al. (2015), which suggest that since 2005 there is a growing research interest in understanding the poor performance of major PIC and related problems in stakeholder management. The peer reviewed papers under investigation adopt either a qualitative or quantitative research strategy in different geographical settings.

Among the 91 selected studies, the markets investigated were prevalently Europe (22%), America (13%) and Asia (11%). This can be explained by Europe and America being historically very active in promoting major strategic programs (Major Project Association, 2014) and, on the other hand, by the recent accelerated infrastructure spending in Asia, where between 2004 and 2008 China spent more on infrastructure in real terms than during the entire 20th century (Flyvbjerg, 2014). However, the majority of studies were unspecified in terms of country (30%), and 16% of the papers were considered multi-country as multinational major PICs were their subject of study. Table 3 presents the number of publications by geographical jurisdiction.

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As Table 4 highlights, current research shows that 68% of the selected papers favored a qualitative approach in this area, 26% a quantitative and only 10% employing mixed methods.

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Within the favored qualitative approach the 62 papers were recorded and further compared against their geographical spread. The majority of the selected papers used case study methodology (45%), conceptual approach (29%) and literature review (18%) to investigate stakeholder's management procedures both in regular size construction projects and PIC, especially in Europe (25%) and America (19%). On the other hand, it is interesting to note how the Asian market has been the most compared through cross national case studies (37.5%). This can be explained by the developments and growing investments that China has made in PIC projects in recent years, which has captured the attention from practitioners and researchers alike. These results can be related to the novelty of the topic which calls for descriptive and exploratory research approaches. Therefore, it is logical that mainstream studies applied case studies and a conceptual approach as the research method (e.g. Aaltonen et al., 2015; Eskerod and Huemann, 2013; Eskerod and Vaagaasar, 2014; Flyvbjerg, 2014; Yang, 2013).

According to Cameron et al. (2015) and based on the above findings, more mixed methods studies are required in project management. The authors believe that a mixed methods approach can help to unravel the richness and depth of information of major PIC impacting the local community and will provide further empirical evidence to the majority of the investigated studies which, to date, are conceptual in nature.

4. Conceptual Findings

Via content analysis this study reveals that stakeholder management research, in relation to megaprojects, has only recently taken into account secondary stakeholders as demonstrated in Figure 4. This shows that relevant publications on megaprojects and stakeholder management are increasingly including a broader range of stakeholders in their analysis. The evolution over the last decade demonstrates that both practitioners and academics are seeking to improve project performance and sustainable development through a holistic approach to stakeholder management which includes both primary and secondary stakeholders. However, Figure 4 also shows how managerial attentions have

historically excluded those who are impacted on in their everyday lives from the social disruptions of major PIC projects, namely the local community. In fact, although varying stakeholder analysis methods exist, a tailored approach for the local community stakeholder is missing in the project management arena. The definition of the local community in stakeholder management is unclear and scholars represent it as a single entity and not as multiple separate (but at the same time interrelated, Long, 1958) components with their own needs, fears and expectations. Therefore, a new perspective is required to assess the social impact of megaprojects including the moral issues, interests and claims of different subgroups of the local community across the entire project life cycle. According to Reed (2008), stakeholders typically only get involved in decision making at the implementation phase of the project cycle, and not in earlier project identification and preparation phases. Managing the local community will help to manage benefits (Eweje, 2010; Li et al., 2012a, 2012b; Turner, 2014), by aligning major PIC objectives and interests with those of the local community through better transparency and accountability in decision making, enhancing a shared view of project objectives to aid in achieving improved project performance.

INSERT FIGURE 4 HERE

4.1. Megaprojects and local community

By combining the two areas of 'Megaprojects' and 'Local Community', the desired outcome was to understand the interconnections within which PIC projects and the stakeholder local community interact.

What we know – Zhai et al. (2009) argue a lack of formal definition of megaprojects in academia. However, the term emerged in North America in the late 1970s, describing a wide variety of highly visible, expensive and often controversial public transportation and construction projects (Bearfield and Dubnick, 2009). Sykes (1998) identifies nine characteristics that differentiate megaprojects from regular public infrastructure projects. These are; size, time, location, unique risks, financing difficulties, public opposition, market impact, insufficient experience and unpopularity. For Sun and Zhang (2011), mega construction projects are massive investments of infrastructure, initiated

by the government, which have extreme complexity, long schedules, immense lifespans and significant social impacts. Therefore, because of the dimensions of complexity and uncertainty, megaprojects are a different type of project to manage compared to regular size infrastructure programs, because they face intense pressure to minimize their construction and post-construction social impacts (Capka, 2004).

There has been a negative focus in academic megaprojects literature of large infrastructure developments; this could be explained by the inability of managers and project promoters with invested interests to manage globalization and city growth (Elmlund, 2015). The performance of megaprojects in private and public sector projects have seen little improvement, with studies showing that nine out of ten such projects have cost overruns (Flyvbjerg, 2014) and up to 50% benefit shortfalls (Flyvbjerg et al., 2002, 2005). This is due, in part, to a lack of accountability or public participation (Bruzelius et al., 2002; Flyvbjerg *et al.*, 2003). While Jia et al. (2011) affirm that megaprojects have close connections with globalization and civilization; Moulaert et al. (2003) add that megaprojects are how globalization becomes urbanized. It is inevitable that megaprojects will attract high socio-economic and political interest, and high industrial and public attention (Turner and Zolin, 2012). In fact, many countries see megaprojects as a tool to enhance their status in global political and economic systems, satisfying human, economic and social needs, elevating a country's social image, and delivering leading international events (Jia et al., 2011). This has resulted in many over estimates of the potential of major PIC projects and leads to the temptation of 'going where no man has gone before' (Frick, 2008).

Literature shows that project failure can be traced back to human error or misjudgment which can negatively affect the way decisions are made (Johnson, 2006; Virine and Trumper, 2008). It is rare when megaprojects are not cluttered either by 'delusional optimism' or 'deception', and repeatedly project managers promote ventures that are unlikely to come in on budget, on time, or to deliver the promised benefits (Flyvbjerg et al., 2009). The decision making of megaprojects is typically not driven by the real needs of society, but only by the technological, political, economic and aesthetic sublimines

presented by Flyvbjerg (2014, p. 8) which “ensure coalition between those who benefit from these projects and who will therefore work for more such projects”.

Decisions made by project managers have a significant impact on the strategic value delivered by megaprojects in the construction industry (Eweje et al., 2012). However, organizational strategy frequently fails to achieve the desired results and, historically, megaprojects have performed poorly in terms of benefits and public support due to their unavoidable impact on people and places (Bruzelius et al., 2002). This study reinforces how focusing too much on technical skills leads to inadequate stakeholder management and the omission of focus on the social and political issues around projects.

The literature discusses the negative impact that the local community can exert on project results (Aaltonen and Kujala, 2010; Olander and Landin, 2005) and consequently major PIC programs and urban spaces (Olander and Landin, 2008; Xue et al., 2015). However, in this study, it is identified that there are only 22 articles (out of 91) which linked ‘megaprojects’ and ‘local community’ together. Although many publications provide a generic classification on the types of environmental (Melchert, 2007; Zimmermann et al., 2005) and social (Vanclay, 2002) impact of construction projects on communities, a more in-depth study has been presented by Xue et al. (2015), which empirically identified four major environmental and social impact factors of urban subway constructions affecting citizen’s daily lives. They presented residents’ travel, transportation, environment and daily life as the major factors impacted by infrastructure projects. However, people and places can be affected by megaprojects’ development in different ways, and Xue et al’s (2015) study is restricted to a case in China which does not qualitatively capture moral issues, different needs or expectations of residents.

Unpopularity and local opposition is a common threat for megaprojects whereby secondary and external groups try to influence the implementation of facility development projects (Boholm et al., 1998) and is commonly labelled ‘Not in My Backyard’ (NIMBY) syndrome. This concept is defined by Dear (1992, p. 288) as “the protectionist attitude of and oppositional tactics adopted by community groups facing an unwelcome development in their neighborhood”. Burningham (cited in Olander and Landin, 2008) used the concept of NIMBY to identify opponents of new developments who recognize that a facility is needed, but are opposed to it siting within their locality. While for Lake

(1993), NIMBYism should be recognized for what it is, “an expression of people’s needs and fears” (cited in Olander and Landin, 2008, p. 553). The widespread criticism of the NIMBY concept attempts to provide alternative explanations, drawing on disparate factors such as personal characteristics, place attachments, and project-related constructs (Devine-Wright, 2013). However, according to Xue et al. (2015), there is urgency for developing more rational construction programs to minimize the negative impact on citizen's daily lives and in urban development. Therefore, it is necessary for project managers of major programs to better understand and analyze the concerns, needs and moral issues of (local) stakeholders, not only at the inception phase of the project, but throughout its entire life cycle.

What we need to know - Findings show that practitioners and academics have focused on megaprojects relating to national government and large public or private sector organizations (e.g. Eweje et al., 2012; Flyvbjerg, 2009; Flyvbjerg et al., 2009; Jia et al., 2010). Therefore, the local community stakeholder offers an interesting research perspective because it is repeatedly excluded from the project communication plan, with negative implications for project success. There is almost non-existent research which has examined the social implications of megaprojects at the local community level.

Megaprojects frequently promote optimistic pro-growth visions of the city far away from the realities of urban problems and challenges (Altshuler and Luberoff, 2003), and rare are the occasions when megaproject estimations on time and budget are close to reality. Errors were found in the feasibility stage, where project planners and decision makers failed to treat megaprojects as a different project type to manage, compared to conventional construction projects, owing to their long life expectancy which goes well beyond the immediate completion of the project (Eweje et al., 2012; Sanderson, 2012).

Therefore, because of the unique characteristics of megaprojects, a better focus on how to manage project benefits is required. The main importance is not whether the project is finished in accordance with time and cost targets, but that it produces an outcome at a time and cost that made it valuable (Turner, 2014). To further explain this point, Turner and Zolin (2012) noted how the perceived final project outcomes are influenced by stakeholder perception. The way stakeholders

perceive project outcomes also change with time (Dalcher and Drevin, 2003; Turner et al., 2009), and what really ‘fits’ the unique characteristics of complexity, long and expensive developments (scope, time, budget) of a megaproject are the benefits that it will produce to the wider community. For example, the Thames Barrier was “priced at £110.7 million in October 1973 (compared with initial estimates of £13-18 million) [and] was ultimately delivered at a cost of £440 million” (Dalcher, 2012, p.648). Further, it took just under twice the estimated four years because of delays during the preconstruction phase. However, regardless of the delays, it is considered a great engineering achievement with the value of preventing floods and saving lives (Morris and Hough, 1987). On the other hand, Heathrow Terminal Five was completed successfully within time and cost constraints however, British Airways had minor commissioning issues relating to check-in procedures for oversized baggage, leading to the later public and customer perception that the project was not able to deliver the promised benefits with consequent damage to the reputation of British Airways (Brady and Davies, 2009, 2010a, 2010b; Brady and Maylor, 2010). This raises the question of whether a better focus on benefits realization is required, especially for complex projects whose value is not immediately obvious at completion.

Although it is widely recognized that minimizing benefit-shortfalls and enhancing positive input is achievable through better stakeholder management procedures, (Bourne and Walker, 2005; Cleland, 1986; Cleland and Ireland, 2007; Donaldson and Preston, 1995; Olander 2007) academic thinking on major PIC projects seldom aligns project objectives with those of the local community (Choudhury, 2014). Little has been done by managers and academics alike to achieve a people centered vision for cities which enhances quality of life and produces prosperous neighborhoods. In fact, common examples are where megaprojects have delivered local disruption, but not local benefits. For example, the 20 years of protest in Susa Valley against the High-Speed Rail connecting Italy (Turin) to France (Lyon) (Hooper, 2012), the riots during the World Cup in Brazil (Watts, 2014), or the violent protests in Turkey over the construction of a shopping center in 2013 (Letsch, 2013). From the authors’ point of view, these are arguable examples of the ramifications of projects which overlooked the social and political context.

The literature is prevalently silent about the interconnections within which major PIC projects and the local community stakeholder interact. Therefore, future research agendas could investigate the social effect of major PIC on the local community in different phases of the project life cycle. Xue et al. (2015) presents a starting point for developing more rational construction programs through quantitatively capturing the key environmental and social impacts of urban subway construction in China. However, the published study lacks any qualitative insights affecting citizen's daily lives, not only during the project execution, but also throughout the entire life cycle of the project. Importantly, there is a need for an increased focus on understanding concerns, needs, and moral issues of the local community impacted by megaprojects, which has not been fully captured by practitioners and academics in stakeholder management research, therefore allowing NIMBY syndrome to be persistent in PIC project developments. Based on the underlying assumptions which emerged by combining the two areas of 'Megaprojects' and 'Local Community', the SLR highlights the limitations in the current body of knowledge and suggests future research directions which have been summarized and illustrated in Table 5.

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4.2. Megaprojects and stakeholder analysis

By combining the two areas of 'Megaprojects' and 'Stakeholder Analysis', this section identifies current stakeholder management approaches in major PIC projects.

What we know - Major PIC should not be viewed as simply more expensive versions of normal projects; 'mega' also relates to the skill level and attention required to manage and understand conflicting stakeholder interests and needs through the extensive project life cycle of major programs (Capka, 2004). In fact, findings from the literature show that a major challenge affecting large infrastructure developments is a lack of understanding of the various interest groups, the motivation behind their actions and their potential influence during the project life cycle (IFC, 2007; Miller and Ollerros, 2001; Winch and Bonke, 2002).

During major PIC projects, stakeholder needs are often different and disputes occur. Stakeholders' objectives, composition, relationship patterns and claims are unique and dynamic along different stages of PIC (Windsor, 2010). In order to satisfy individual vested interests, stakeholders apply strategies to affect project decision making. Understanding these strategies is helpful for project managers in forecasting stakeholders' likely behaviors (Frooman, 1999). Therefore, listening and responding to stakeholder interests and concerns is a process that helps project managers maximize stakeholder positive input and minimize any detrimental or negative impact (Bourne and Walker, 2005; Cleland and Ireland, 2007). Since Cleland (1986) brought the stakeholder concept into the project management field, the management of project stakeholders can be considered an established area in contemporary standards of project management (APM, 2013; PMI, 2013). However, often the project owner fails to take the opinions of other stakeholders into consideration and this will attract hostility towards the project. Therefore, a vast number of interests will be affected, both positively and negatively, throughout a construction project life cycle (Olander, 2007). According to Olander (2007), representatives of these interests are referred to as the project's stakeholders.

Although many researchers have emphasized the importance of effective communication (Bakens et al., 2015) through empirical studies concerning stakeholder management and relationships in megaprojects (Feige et al., 2011; Lizarralde, 2011; Patel et al., 200; Pinto et al., 2009), the significance of trust building between government and the public (Dalahmeh et al., 2009) or a bottom up approach for stakeholder engagement (Bosher et al., 2009); there have been criticisms that approaches for handling project stakeholders cannot be easily comprehended by construction practitioners (Agle et al., 2008). Problems arising from stakeholder management in major PIC has been discussed by Mok et al. (2015) who found weaknesses in four major research topics; stakeholder interests and influences, stakeholder management process, stakeholder analysis methods and stakeholder engagement. The authors reveal that stakeholder management approaches in megaprojects are subject to national context of the project, indicating recommendations and the need for further research on stakeholder management in the specific context of major PIC.

Yang (2013) focuses on stakeholder analysis considering it either as a process or an approach to support decision making and strategy formulation. Whereas, Olander and Landin (2008, p. 561) state that the “stakeholder analysis process should be to identify the extent to which the needs and concerns of external stakeholders can be fulfilled, and analyze the possible consequences if they are not”. Aaltonen (2011) states that stakeholder analysis in PIC is an interpretation process by project managers analyzing the project stakeholder environment. Therefore, the importance of identifying exactly who the participants are also includes an accurate identification of the stakeholders’ interests and their impact on the project (Achterkamp and Vos, 2008).

Stakeholder identification is widely regarded as the first step in stakeholder analysis (Cleland and Ireland, 2007; Jepsen and Eskerod, 2008; McElroy and Mills, 2000) where classification is considered an important element of the identification process (Achterkamp and Vos, 2008). Mok et al. (2015) state that current literature shows that ‘various stakeholder analysis methods’ are presented in previous research concerning stakeholder identification, classification and assessment, but does not provide details. In fact, when exploring the literature, scholars have classified stakeholders differently, for example; external/internal (Aaltonen and Sivonen, 2009), primary/secondary (Clarkson, 1995), direct/indirect (Lester, 2007), proponents/opponents (Winch and Bonke, 2002), core and fringe (Hart and Sharma, 2004), actively/passively involved (Vos and Achterkamp, 2006), fiduciary/non-fiduciary (Goodpaster, 1991). Therefore, within the broad context of stakeholder theory, stakeholder groups are identified and classified in different ways.

In order to identify and prioritize stakeholders among different and competing claims, Mitchell et al. (1997) developed the stakeholder ‘salience model’ based on three attributes of power, legitimacy and urgency. According to their typology, stakeholders belong to one of seven categories; ‘dormant’, ‘discretionary’, ‘demanding’, ‘dominant’, ‘dangerous’, ‘dependent’ and ‘definitive’. This classification system indicates the amount of attention that project managers should give to stakeholders needs (Mitchell et al., 1997). However, although many scholars cite this model in their work, important methods such as the ‘power/ interest matrix’ (Johnson et al., 2005) and ‘stakeholder circle methodology’ (Bourne and Walker, 2005) were developed from Mitchell et al’s 1997 work. However,

the model does not reflect stakeholder dynamic changing attitudes through the different phases of the project life cycle (Olander, 2007) and neither that the resources, nor the network positions of stakeholders can be considered static (Pajunen, 2006).

Literature shows growing attention to stakeholder attitudes toward a project. This attitude is captured by the model proposed by McElroy and Mills (2000), which distinguishes whether a stakeholder is an advocate or adversary of the project in five levels of 'active opposition', 'passive opposition', 'not committed', 'passive support' and 'active support'. Olander (2007) and Nguyen et al. (2009) propose a quantitative approach ('stakeholder impact index') to assess stakeholder impact integrating more variables from Mitchell et al. (1997), Bourne and Walker (2005) and McElroy and Mills (2000). Moreover, a social network approach (Rowley, 1997) has been applied in stakeholder analysis for a small infrastructure project by Yang et al. (2011a), which considers the interaction among multiple stakeholders by examining their simultaneous influence to forecast the corresponding responses and organizational strategies (Rowley, 1997).

Based on an infrastructure project in Hong Kong, Li et al. (2012) consolidated a list of 17 stakeholder interests and different priorities in large PIC of major stakeholder groups. What emerged is that in many cases stakeholders seek to prevent their vested interest from being jeopardized and an issue that is very important to one stakeholder group may be the lowest priority of another group (Li et al., 2012). Some scholars focus on the link between spatial dynamics and stakeholder impact. This concept has been applied in the context of infrastructure planning by Dooms et al. (2013), which examine that stakeholder structure and interests vary with their spatial distance from the project, with stakeholders gaining higher salience as they become geographically closer to the project (Dooms et al., 2013). However, although conceptual frameworks and analytical models have been suggested by stakeholder theory scholars, managerial priorities and concerns have been focused almost exclusively on those primary stakeholders important to the project's economic interests (Aaltonen and Kujala, 2010; Hart and Sharma, 2004).

What we need to know - In the pioneering work of Freeman (1984) 'Strategic Management: A Stakeholder Approach', the central argument was that the organization should not consider only those

groups who can affect it, but also those who are affected by its operations. Freeman (1984) was the first scholar who clearly identified the strategic importance of other groups and individuals to the organization but, ironically, “the resulting work on stakeholder management has focused almost exclusively on the former: primary groups that are critical to the firm’s survival in its current business” (Hart and Sharma, 2004, p. 9).

Scholars have mainly distinguished primary stakeholders from secondary stakeholders, and classified them using the literature’s prevailing stakeholder salience model proposed by Mitchell et al. (1997). Primary stakeholders are characterized by contractual relationships with the project, such as customers or suppliers, or have a direct legal authority over the project, such as governmental organizations. Secondary stakeholders do not have a formal contractual bond with the project or direct legal authority over the project (Eesley and Lenox, 2006), but they can influence the project (Clarkson, 1995). According to Aaltonen et al. (2008), while actors of such interest include community groups, lobbyists, environmentalists and other non-governmental organizations, if secondary stakeholders are excluded by project managers, they may engage in a set of actions to advance their claims, with negative consequences to direct operational costs and to the reputation of the focal organization (Eesley and Lenox, 2006).

Much of the knowledge about stakeholder analysis practices in the megaproject context has been from the stakeholder impact perspective, especially on the impact that primary stakeholders can exert on project outcomes. This perspective, despite more than two decades of refinement and integration of stakeholder thinking into multiple disciplines, has led stakeholders to be defined mainly by their generic economic functions (Aaltonen and Kujala, 2010). In fact, the majority of prior project research has focused on the management of those primary stakeholders important to the project's resources. Secondary stakeholders seek a claim for a legitimate role in project decision making (Olander and Landin, 2008) and therefore, more time should be spent at the front end of a project (Pinto and Winch, 2016) and developing a stakeholder engagement plan which includes a broader range of stakeholders (Eskerod et al., 2015).

In the last decade, major steps have been made by practitioners and academics towards a broader inclusiveness of stakeholders. In fact, the NETLIPSE research (Hertogh and Westerveld, 2009; Hertogh et al., 2008), based on best practices and lessons learnt in large infrastructure projects in Europe, demonstrates the beneficial outcomes of involving stakeholders on an extended level in many megaprojects, such as the Øresund Crossing in Denmark, the West Coast Main Line in UK, the Bratislava Ring Road, the Lisboa-Porto High Speed Line and the North/South Metro line in the Netherlands. These projects are clear examples of how organizations have seen local stakeholder's involvement as valuable and considered them as an important issue in any project (Buuren et al., 2011; Hertogh and Westerveld, 2009; Hertogh et al., 2008). The management of megaprojects needs to increase and enhance transparency, fairness and participation by considering and balancing the project's stakeholders' economic, ecologic, and social interests. Project managers need to consider a long-term perspective for ethical and sustainable development which will take into account the global, regional and local stakeholders (Eskerod and Huemann, 2013). It is noted that scarce managerial attention has been given to the process of managing the social and political impact of megaprojects affecting the secondary stakeholders. Based on the combination of the two areas of 'Megaprojects' and 'Stakeholder Analysis', the SLR presents the limitations and future research directions which have been summarized in Table 6.

INSERT TABLE 6 HERE

4.3. Local community and stakeholder analysis

The combination of the areas 'Local Community' and 'Stakeholder Analysis' have led to investigations into how the local community stakeholder has been conceptualized and treated in current body of knowledge relevant to stakeholder theory.

What we know - Crane and Ruebottom (2011) highlight how in research and practice, stakeholders are typically listed as, 'owners/financiers/stockholders', 'customers', 'employees', 'suppliers' and 'competitors' (primary groups identified by their economic relationship to the company), with the secondary groups of 'community' and 'advocates' tacked on depending on the

environment of the company at that time (Buchholz and Rosenthal, 2005). 'Community' is regarded as a catch-all for interests that do not fit into any of the primary stakeholder concerns (Dunham et al., 2006). Therefore, the local community is commonly classified as a secondary stakeholder as it does not have a formal or official contractual relationship with or direct legal authority over the organization (Cleland and Ireland, 2007; Eesley and Lenox, 2006), also it does not directly engage with economic activity (Lester, 2007; Savage et al., 1991).

Although some scholars have recognized the primary importance of the local community stakeholder (e.g. Atkinson et al., 1997; Clarkson, 1995; Hillman and Keim, 2001) as "they provide infrastructure and markets, whose laws and regulations must be obeyed, and to whom taxes and other obligations may be due" (Clarkson, 1995, p. 106); other academics have perceived the local community as not vitally important for the successful delivery of a project. Common trends see project managers regarding local community stakeholders as having little power and therefore not considering them (Newcombe, 2003), different scholars have suggested that secondary stakeholders deserve more attention, as they may be the cause of major disruption to a project's development through unseen power and influential links (Bourne and Walker, 2005; Newcombe, 2003; Olander and Landin, 2008). In fact, the literature shows the ability of secondary stakeholders, especially the local community, in having a strong influence on the attitudes of the more powerful actors (Olander and Landin, 2008).

In recent years project promoters have faced legitimate pressure to demonstrate greater ethical responsibility in their decision-making (Deutsch and Valente, 2013). While stakeholder theory recognizes the growing importance of communities as a new class of stakeholders, the issue of stakeholder identification and prioritization has never been fully resolved (Crane and Ruebottom, 2011). In traditional stakeholder theory, stakeholder identification has assumed a generic and artificial nature (Crane and Ruebottom, 2011) which according to McVea and Freeman (2005) requires moving away from the simplifications offered by 'role-based identification' and towards identification as individuals with specific identities and interests and a 'names and faces approach'. In this way, the moral value of stakeholders can be more easily recognized. Furthermore, "the opportunities for satisfying their individual needs, exploring their multiple role relationships and determining how these

can be better understood and fulfilled would open up a vast new space for value creation and trade” (McVea and Freeman 2005, p. 67).

In the stakeholder management literature, the concept of community has been left constantly unclear and undefined. A unique solution of solving this dilemma was given by Dunham et al. (2006) whereby the authors raised ‘the problem of community’ as indicative of the definitional problems within stakeholder theory, enabling any number of entities to claim this role due to broad interpretation. Although many have explored the concept of ‘community’, defining its meaning is not an easy task. From the pioneering work of Hillery (1955), over 90 conflicting definitions of the term ‘community’ emerged, and the only common characteristic among them was that they dealt with people.

For Parsons (2008) a community refers to a fluid group of people united by at least one common characteristic such as geography, shared interests, value, experiences or traditions. Pacione (2001) has defined local community as a group of people who share a geographic area and are bound together by common culture, values, race or social class. Although Webber (1963) was the first, from the perspective of a construction project, to set the stage for broadening the notion of community away from purely place-based definitions, community refers to a multitude of overlapping, competing and conflicting interests groups, which shift over the project life cycle and whose interests are potentially affected by that project (Teo and Loosemore, 2011). Similarly, Atkinson and Cope (1997) state that the local community cannot be treated as a single homogeneous, easily identifiable group because, as mentioned by Skerratt and Steiner (2013), they possess their own perceptions and different visions. However, these differences were not fully captured by the authors and the conceptualization and management of the local community in the literature remains silent after the work of Dunham et al., dated 2006.

In their meaningful study, Dunham et al. (2006) state that we are simply told that ‘community’ is a stakeholder without regard to what a community actually is. They identified and described four distinct sub-categories of community; ‘community of place’, ‘community of interest’, ‘virtual advocacy groups’ and ‘community of practice’. They proposed sub-categories which were previously

aggregate under the unstructured heading of ‘community’. Community of place refers to those community stakeholders that live in close proximity to the organization’s operations. Community of interest refers to individuals that are unified by a common purpose or interest and may or may not be in close proximity to the organization’s operation. The virtual advocacy groups are those whose purpose appears to be the short-term goal of disruption, rather than any problem resolution. Community of practice denotes professional work groups united by a sense of shared interests, values and purpose (Dunham et al., 2006).

This study recognizes that community, built on interaction and identity, is playing an increasingly important role in the business world, especially with accelerated technological developments. However, this research emphasizes the traditional view based on geography, or place-based communities, which is centered on the physical proximity of the members to project developments (Dooms et al., 2013; Driscoll and Starik, 2004). This represents the most common conceptualization of what is meant by community by project managers in the construction industry (Teo and Loosemore, 2011).

What we need to know - Many theorists and practitioners have simply used an ordinary stakeholder strategy by mapping different actors using general references to customers, investors, employees, suppliers and the local community. However, what emerges is that most of the classifications in the literature see the local community (and arguably any other group) represented as a single entity, described with a broad-brush approach which, according to Dunham et.al (2006, p. 24), “ignore or fail to take account of important and marginalized interests” of many autonomous units of people with their own needs, fears and expectations.

There is a lack of application of knowledge to the local community in practice, especially within the context of PIC projects. This highlighted that if there is no clear definition, it is not possible to determine whether the relevant components of the community have been correctly identified and, consequently, whether a stakeholder analysis has been successfully accomplished. In fact, contemporary academic thinking on the role of local communities in stakeholder analysis does not explain why, despite tools and processes being in place, there is still a consistent shortfall in managing

megaprojects and their environmental and social impact on local communities and places. Therefore, the first step in future studies is toward an in-depth investigation of the notion of local community, which is still ambiguous in the project management arena. Future empirical work should capture the views of practitioners of PIC projects to understand how they perceive the different components of the local community stakeholder, and therefore how stakeholder management practices are applied at the local community level. Based on the underlying assumptions which emerged by combining the two areas of ‘Local Community’ and ‘Stakeholder Analysis’, the SLR highlights the limitations in the current body of knowledge and suggests future research directions which have been summarized and illustrated in Table 7.

INSERT TABLE 7 HERE

5. The Conceptual Framework

The previous sections presented a SLR of existing stakeholder management research relating to PIC and suggested underlying limitations and multiple points for future research. Existing literature will be used to build a starting point that will be analyzed through future proposed empirical work into the perception of both project managers and local community stakeholders. The literature unfolded how the project management discipline is in need of more mixed methods research, which the authors propose as a suitable method to address future studies in this direction. The framework for the study is shown in Figure 5.

INSERT FIGURE 5 HERE

Different PIC project dimensions related to stakeholders and project structure emerged from the literature and suggested future directions for improving project performance. Literature shows how the lack of decision making in PIC projects has rarely delivered benefits in a local context. In the same way, project structure dimensions suggested how time, cost and quality are still the main concerns for project managers. Technical considerations are often the priority compared to the social and political aspects of PIC projects and, historically, secondary stakeholders have been poorly managed.

Figure 5 illustrates that project stakeholder management has been recognized as an important element to enhance better project outcomes (Cleland, 1986; Donaldson and Preston, 1995; Olander, 2007; Sutterfield et al., 2006). Drawing from project stakeholder management theories, the systematic review of the literature related to PIC shows how the relative importance of different stakeholders depends on their ability to control project resources. The attribute of power is a necessity in order to increase managerial attention and has a strong influence on the decision making process (Aaltonen and Kujala, 2010; Olander, 2007), which very often lacks accountability and transparency (Bruzelius et al., 2002; Flyvbjerg et al., 2002; 2009). However, the stakeholders that hold the attribute of legitimacy are in a sense more important, because they are the risk bearers in the project. Thus, it is also very important, from a moral and ethical standpoint, to address the needs of the legitimate stakeholders fully.

More time should be spent at the front end of a project (Pinto and Winch, 2016) and developing a stakeholder engagement plan, which includes a broader range of stakeholders to achieve a long-term prospective for sustainable development (Eslerod and Huemann, 2013; Eslerod et al., 2015). Historically, the focus on PIC has been at national government level and in large public or private organizations and seldom at the local level; rare are the occasions when PIC aligns project objectives with those of the local community (Choudhury, 2014). To date, little has been done to highlight PIC benefits at the local level and understand the social and political impacts brought into the local community's daily lives by large infrastructure projects.

Although the local community has been recognized as an important class of stakeholder (e.g. Aaltonen, 2011; Clarkson, 1995; Hillman and Keim, 2001; Zhai et al., 2009), able to impact projects outcomes through long standing protests (e.g. Bornstain, 2010; Olander and Landin, 2005; Teo and Loosemore, 2014), a clear conceptualization of the stakeholder local community is currently missing in the project stakeholder management field (Dunham et al., 2006), especially in the context of PIC projects. The perception of the local community stakeholder in project management cannot be fully captured if a lack of understanding of its notion persists. This not only prevents stakeholder management practices at the local level being captured, but also a stakeholder analysis being successfully

accomplished and supported in project management decision making and strategy formulation (Aaltonen, 2011; Yang, 2013).

Scope creep and benefits shortfall are one of the problems of PIC (Flyvbjerg, 2014; Flyvbjerg et al., 2005), which can be considered even more important than time and budget performance (Turner, 2014). For instance, understanding and minimizing the effect of megaprojects on people and places can help manage project benefits by rethinking a tailored approach which integrates both the views of primary and secondary stakeholders and, in turn, will help project managers improve accountability and transparency in their decision making for better benefits realization.

In light of the conceptual framework, the authors propose that:

By focusing on benefits realization, the inclusiveness of a broader range of stakeholders in PIC projects can help to inform the decision making of project managers to achieve a more sustainable development of PICs at the local level; therefore improving the performance of these projects.

6. Managerial Implications

The authors were interested in the methods and practices employed when managing secondary stakeholders in PIC. Figure 6 presents the managerial implications which emerged from the SLR in the current body of knowledge. This highlights the underlying assumptions and limitations in current body of research which, to date, seem to have prevented a broader inclusiveness of secondary stakeholders and a more rational development of PIC projects. The authors have also underlined that future empirical work is required to provide practitioners with a better understanding of ‘secondary stakeholders’ management in PIC projects. In this section managerial implications are presented which will help practitioners to further develop stakeholder management practices in construction megaprojects.

INSERT FIGURE 6 HERE

6.1 Understanding the social and political impact of PIC on secondary stakeholders

This study revealed significant inconsistencies in the way the local community, as a class of stakeholder, has been treated and conceptualized in project management research. It reinforces the need for a transparent process that links risks and planning with more accountability, thereby producing a better focus on benefits realization by reducing adverse effects of megaprojects on both local communities and the surrounding environment. This can be achieved by capturing and managing the social and political impacts of PIC projects on (local) secondary stakeholders for the entire life cycle of major PIC.

However, there is little extant literature that examines the influence of the local community, as a secondary stakeholder, on improving the performance of megaprojects. It is suggested that treating them as an important stakeholder could allay their fears and manage their expectations making implementation an easier and successful task for practitioners in the construction industry.

6.2 Enhancing stakeholder management at the local level of PIC

Illustrating stakeholder management practices and correlated benefits at the local level of major PIC will offer practitioners the opportunity to increase public support and reduce local opposition to megaprojects. Organizations are beginning to recognize this risk, causing them to rethink their approach by including a broader group of stakeholders.

Notwithstanding the significance of analyzing project performance and correlated benefits from different perspectives, managers and project promoters have placed inadequate consideration on evaluating PIC impact and relative benefits at the local community level. A disproportionate amount of attention has been paid to include PIC into the national or international strategic agenda, at the expense of PIC consequences (either positive or negative), at the micro level. The current approach is based on the perception that national and or international economic benefits override local community interest. The stakeholder management process of (local) secondary stakeholders is not well documented and requires further empirical investigation. Therefore, to facilitate the overall effectiveness of stakeholder management in PIC, guidelines and procedures at the local level can be reported to support and develop a model for secondary stakeholders by project managers.

6.3 Capturing the impact of secondary stakeholders in the decision making of PIC

Identifying the impact of including a broader range of stakeholders in the decision making process of major PIC will allow practitioners to work towards more ethical and sustainable developments over time. Stakeholder management in major PIC projects has mainly focused on those stakeholders that control project resources, despite the fact that the impact of secondary stakeholders on project outcomes is well documented. However, it is suggested that organizations should not ignore stakeholders affected and possibly harmed by the organization's strategy by ensuring that ethical considerations are integral to project management.

The traditional instrumental approach (e.g. Mitchell et al., 1997) of 'management-of-stakeholders' is slowly being integrated with a 'management-for-stakeholder' approach (Eskerod and Huemann, 2013; Eskerod et al., 2015; Freeman et al., 2010). Although management-for-stakeholders presents unavoidable drawbacks, such as the danger of losing focus on those stakeholders vital for the project's survival, or it may lead to escalating stakeholders expectations without being able to deal with their inputs (Eskerod et al., 2015); according to Huemann et al. (2016), the authors strongly believe that it is possible to combine the 'of' and 'for' approaches. This approach will serve those legitimate stakeholders by not only meeting their needs, but also exceeding their expectations. Therefore, without overlooking the often limited resources available at the front end of the project, this approach will guide practitioners in balancing the projects' economic, ecologic, and social interests by combining the views of both the primary and secondary actors. Managerial implications have to consider the impact of engaging with a broader number of stakeholders from the initiation phase of the project. By evaluating the practical implications of including secondary stakeholders inputs in the decision making process during the initiation phase of major PIC, effective stakeholder management approaches could be developed to enhance project performance.

6.4 Developing a secondary stakeholder analysis model in major PIC

The detrimental impacts of secondary stakeholder groups on project outcomes to which managers were not able to respond effectively are well documented. To provide an effective tool for

practitioners and to address the current limitations in practice, a stakeholder model, based on empirical studies, will be proposed in future research. The model should attempt to incorporate both the social impact of major construction projects on secondary stakeholders and the views of primary stakeholders essential to organization survival. Ideally, the model would generate qualitative data from capturing and clarifying the views and accountability of primary and secondary stakeholders at each stage of the project life cycle. Using such a model will aid construction project managers and project promoters in ensuring that their projects were successful and welcomed by the local community, therefore achieving sustainable development through a management-for-stakeholder approach and reducing NIMBY attitude. There is a need for a tailored stakeholder analysis model to help the project manager and project team seek 'win-win' solutions rather than accept trade-offs for better transparency and accountability in project decision making and benefits realization.

6. Conclusions

A SLR is a method to gain an in-depth understanding of a research topic to identify the current body of knowledge and stimulate inspiration for future research (Mok et al., 2015). Within the review, the authors investigated to what extent the broader inclusiveness of 'secondary' stakeholders was treated in the current body of knowledge. What emerged was a limited knowledge about the broader involvement of secondary actors such as the local community stakeholder in large infrastructure projects, which indicated a potential issue with the methods used to manage local community groups to achieve better realization of project benefits.

This led to the investigation of deficiencies in current methods used to manage and engage secondary stakeholders groups. The current knowledge gaps emerged by combining three different, but interrelated areas namely; (1) megaprojects and local community, (2) megaproject and stakeholder analysis, (3) local community and stakeholder analysis. The stakeholders' managerial practices at the local level of PIC were examined in 91 peer reviewed articles to identify recurring themes in the literature from published academic journals from 1997 to 2015. These themes were further analyzed to ascertain the perception of the local community in the megaproject management arena.

Stakeholder management in PIC has strongly relied on traditional approaches which focus on the management of those stakeholders able to control project resources. The review shows the lack of an existing stakeholder management method which incorporates both the views of primary and secondary stakeholders who are impacted on in their everyday lives by major PIC projects. Little has been done to understand the social and political impacts of major PIC on secondary stakeholders and conceptualize the notion of the stakeholder local community in the context of megaprojects. This study also reveals that there were limited occasions when PIC aligns objectives with those of the local community. It is suggested that seeking local community opinions in the initiation phase of the project and monitoring the megaproject impact at the local level can help to improve project performance. Noted limitations are that this paper is conceptual in nature and requires further empirical work. Although bias in the literature selection was minimized by employing a SLR coding framework and thematic analysis of secondary stakeholders' management areas, the authors acknowledge the drawbacks associated with the SLR methodology (Denyer and Tranfield, 2009; Mostafa et al., 2016). Drawbacks include the literature sampling criteria and methods for inclusion and exclusion related to content analysis which, although executed with rigor, remains a subjective interpretation of the authors. However, the authors believe that this study contributes to the expansion of stakeholder management knowledge and the understanding of construction megaprojects at the local level. The output from the SLR was twofold; it not only provided guidance for sustainable improved decision making for practitioners, by rethinking their approach towards a more inclusive stakeholder engagement at the local level of PIC, but it also provided scholars with theoretical implications and future research initiatives.

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Table 1

Codebook for content analysis of the study (Adapted from Laplume et al., 2008)

CODE	DEFINITION OF CODE
<i>Quantitative Variables Coded</i>	
Year	Year of publication
Author	List of authors
Article Title	Title of the article
Journal	Publication in which the article was published
Concern	Primary stakeholders, secondary, both
Project	Type of mega PIC project
Perspective	Project or organizational perspective
Geography	Country from which the data was collected
Methodology	Qualitative, quantitative, mixed methods
Data Source	Survey, interview, secondary data, others
<i>Qualitative Variables Coded</i>	
Research Questions	Research question explicitly stated in the article
Contributions	Contribution explicitly stated in the article
Findings	Major findings explicitly stated in the article

Figure 1

Publications retrieval process (Adapted from Mok et al., 2015)

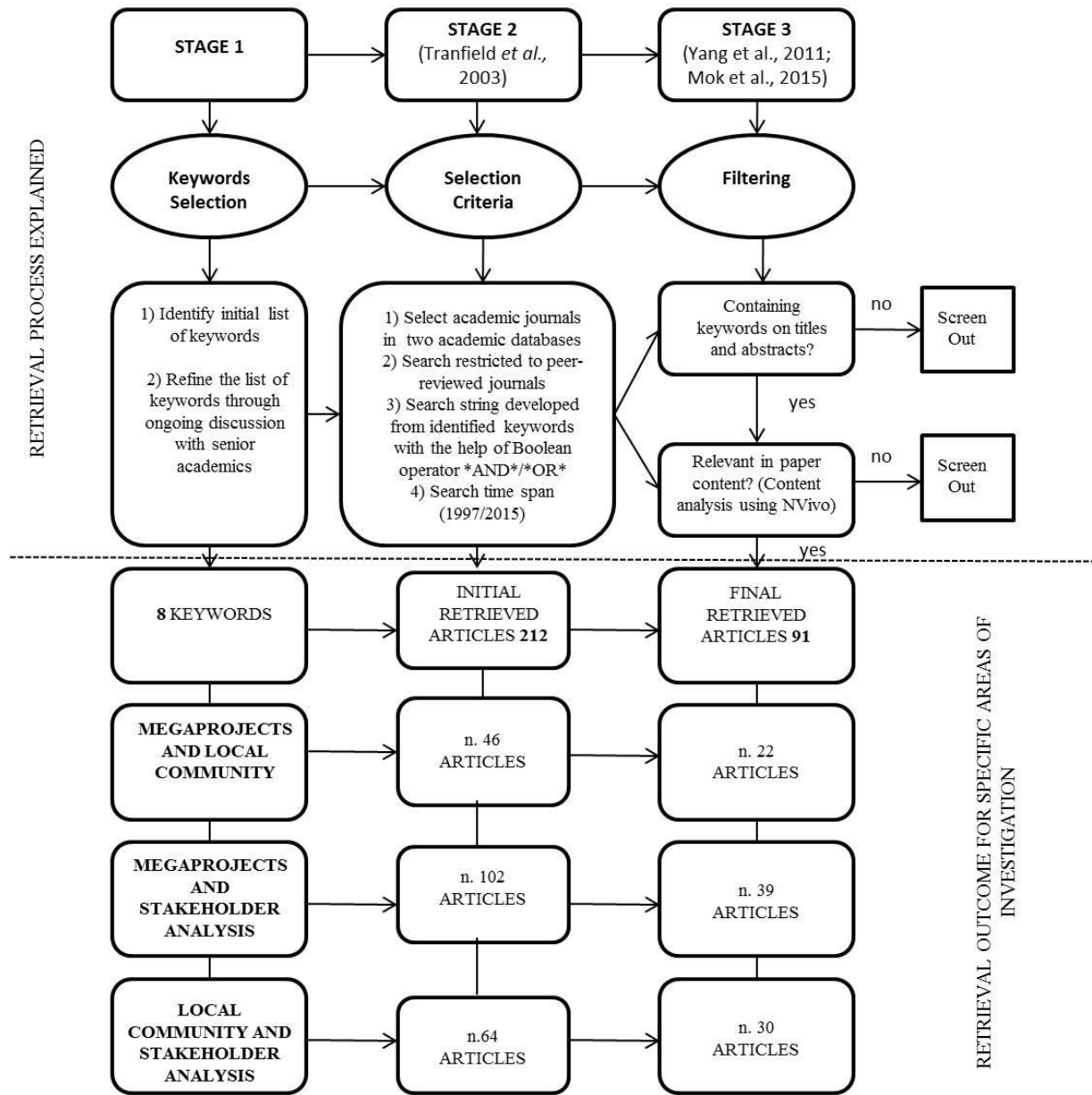


Table 2

Distribution of selected peer-reviewed papers

Journal Title	Number of Selected Papers
International Journal of Project Management	19
Project Management Journal	12
Construction Management and Economics	7
Journal of Business Ethics	5
Habitat International	4
Academy of Management Review	3
Building Research and Information	3
Journal of The American Planning Association	3
Strategic Management	3
Business Ethics Quarterly	2
International Journal of Managing Projects in Business	2
Academy of Management Executive	1
Biological Conservation	1
Building and Environment	1
California Management Review	1
Desalination	1
Disaster Prevention Management	1
Energy and Buildings	1
Environment and Behavior	1
Environmental Impact Assessment Review	1
European Journal Innovation Management	1
European Management Journal	1
Forum for Applied Research and Public Policy	1
Harvard Business Review	1
Journal of Facilities Management	1
Journal of Management	1
Journal of Management in Engineering	1
Journal of Management Inquiry	1
Journal of Management Studies	1
Journal of Public Budgeting, Accounting and Financial Management	1
Journal of Transport Geography	1
Land Use Policy	1
Local Economy	1
Management Decision	1
Oxford Review of Economic Policy	1
Review of Policy Research	1
Scandinavian Journal of Management	1
Sloan Management Review	1
Transport Policy	1
Total	91

Figure 2

Organizing Framework

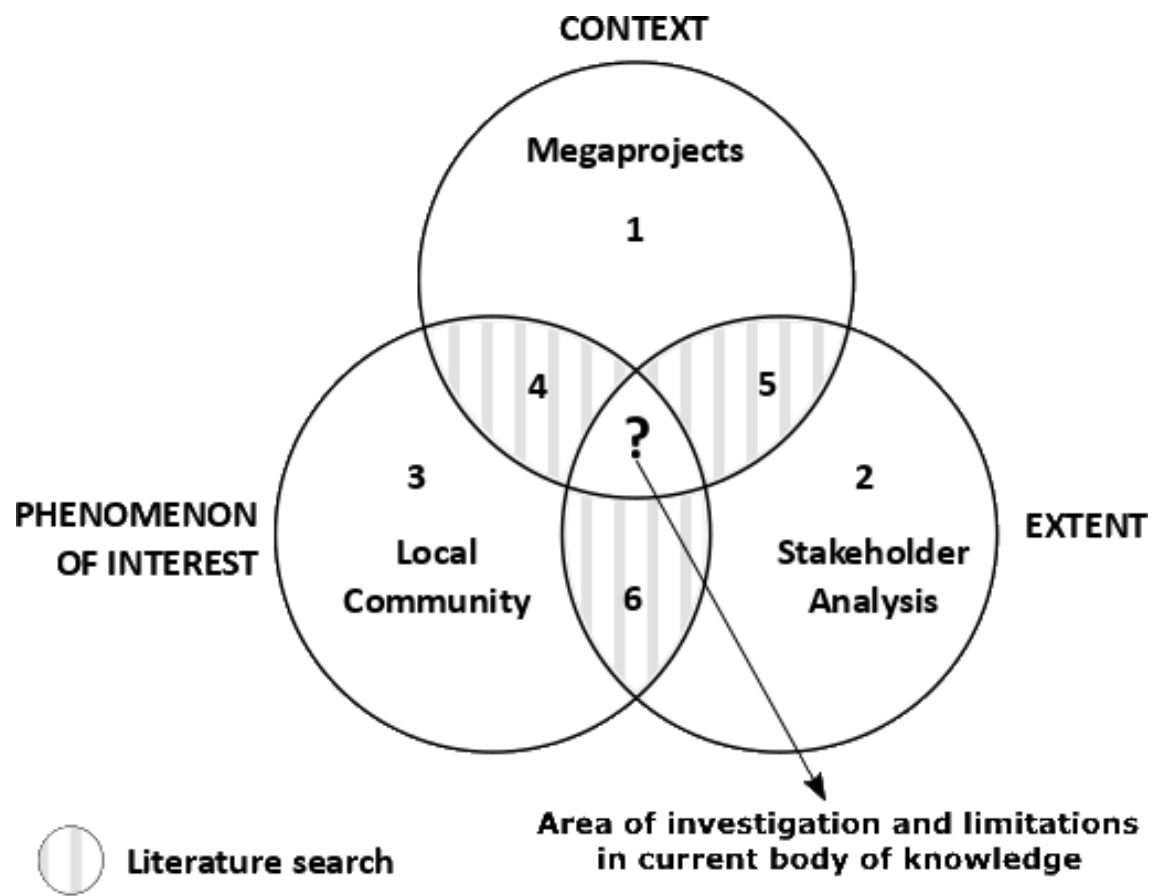


Figure 3

Number of relevant papers published yearly from 1997 to 2015

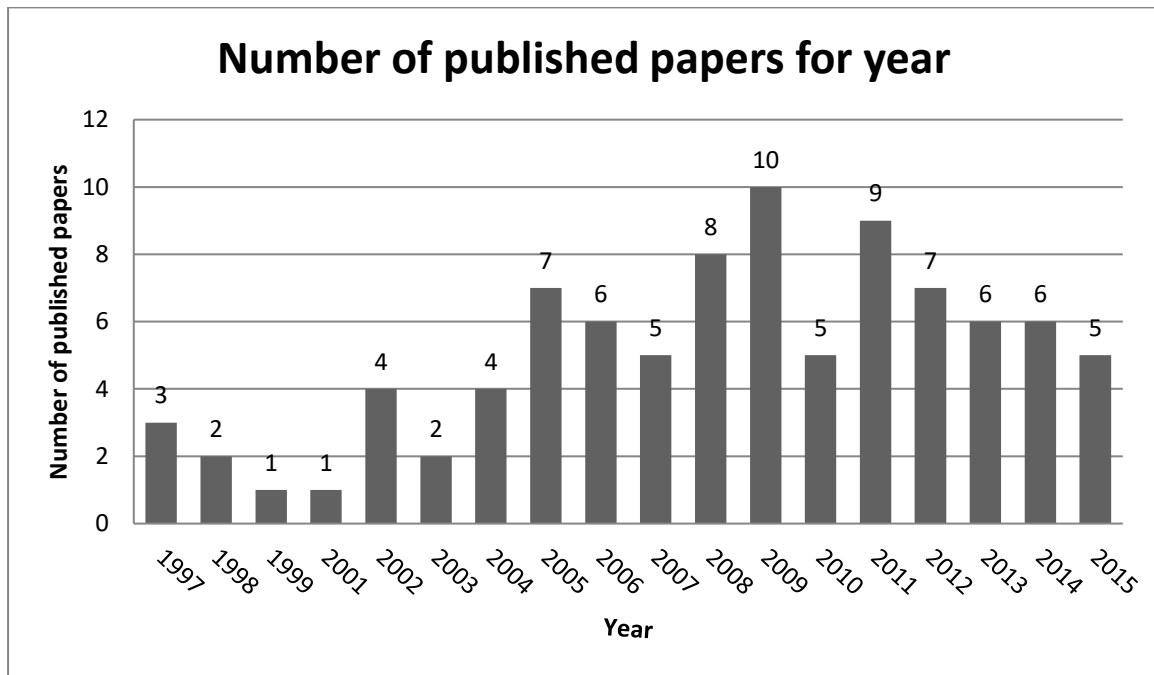


Table 3

Distribution of selected publications by geographical jurisdiction

Geographical Jurisdiction	Percentage of selected papers (%)
Asia	11
Europe	22
America	13
Australia	6
Africa	1
The Middle East	1
Multi-country	16
Unspecified	30
Total	100

Table 4

Classification and summary of selected papers

Methods	Number of Papers	Percentage of Selected Papers (%)
Qualitative	62	68
Quantitative	20	26
Mixed	9	10
Total	91	100

Qualitative Methods	Number of Papers	Percentage of Selected Papers (%)
<i>No. of articles</i>	62	68%
Research Method		
Case Study	28	45%
Conceptual Approach	18	29%
Literature Review	11	18%
Content Analysis	3	5%
Interview Survey	2	3%
Research Context in 28 Case Studies		
Europe	7	25%
America	5	19%
Asia	4	14%
Australia	4	14%
Africa	1	3.5%
The Middle East	1	3.5%
Multi-country	6	21%
-Asia	<i>Compared in 6 cases</i>	37.5%
-America	<i>Compared in 4 cases</i>	25%
-Europa	<i>Compared in 4 cases</i>	25%
-Australia	<i>Compared in 2 cases</i>	12.5%

Figure 4

Recognized stakeholder focus in the literature

PRIMARY STAKEHOLDERS	1997	1998	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Owner																		
Suppliers																		
Customers																		
Sponsor																		
Project Manager																		
Project Team																		
SECONDARY STAKEHOLDERS	1997	1998	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Authorities																		
Unions																		
Consumer advocates																		
Competitors																		
Environmentalists																		
Special interest groups																		
Local community																		
The media																		

Table 5

Limitations in current body of knowledge and future directions

4. Megaprojects and local community - What we need to know	Scholars
<ul style="list-style-type: none"> Practitioners and academics have focused on megaprojects relating to national government and large public or private sector organizations. 	Eweje et al. (2012); Flyvbjerg (2009); Flyvbjerg et al. (2005); Flyvbjerg et al. (2009); Jia et al. (2010)
<ul style="list-style-type: none"> There is limited research which has examined the social implications of megaprojects at the local community level. 	Bearfield and Dubnick (2009); Olander and Landin (2008); Xue et al. (2015)
<ul style="list-style-type: none"> Academic thinking on major PIC projects seldom aligns project's objectives with those of the local community. 	Choudhury (2014); Newcombe (2003); Teo and Loosemore (2014)
<ul style="list-style-type: none"> The local community as a class of stakeholder is repeatedly excluded from the project communication plan. 	Aaltonen and Kujala (2010); Olander and Landin (2008)
4. Megaprojects and local community – Future directions	
<ul style="list-style-type: none"> Investigation of the social effects of major PIC on the local community stakeholder in different phases of the project life cycle is currently missing. 	
<ul style="list-style-type: none"> Concerns, needs, moral issues of the local community impacted by megaprojects have not been fully captured by practitioners and academics in stakeholder management research. 	

Table 6

Limitations in current body of knowledge and future directions

5. Megaprojects and stakeholder analysis - What we need to know	Scholars
<ul style="list-style-type: none"> The majority of the literature on stakeholder theories concerned regular size construction projects. 	Jepsen and Eskerod (2009); Mok et al. (2015); Yang et al. (2010)
<ul style="list-style-type: none"> Much of the knowledge about stakeholder analysis practices in the megaproject context has been from the stakeholder impact perspective. 	Bourne and Walker (2005); Johnson et al. (2005); Mitchell et al. (1997); McElroy and Mills (2000); Nguyen et al. (2009); Olander (2007)
<ul style="list-style-type: none"> Project stakeholders are mainly defined by their generic economic functions. 	Aaltonen and Kujala (2010); Hart and Sharma (2004)
<ul style="list-style-type: none"> Managerial priority has been given to those ‘primary’ stakeholders able to control project resources (management-of-stakeholders). 	Aaltonen and Kulaja (2010); Olander (2007)
<ul style="list-style-type: none"> Cases are different when the ‘secondary’ stakeholders were excluded by project managers and engaged in a set of actions to advance their claims, with negative consequences for the project outcomes. 	Bornstain (2010); Bourne and Walker (2005); Eesley and Lenox (2006); Newcombe (2003); Strauch et al. (2014); Teo and Loosemore (2014)
5. Megaprojects and stakeholder analysis - Future directions	
<ul style="list-style-type: none"> The process of managing the social and political impact of megaprojects affecting secondary stakeholders requires in-depth analysis both from academics and practitioners. 	
<ul style="list-style-type: none"> The impact of engaging with a broader range of stakeholders (management-for-stakeholders) on PIC performance has not been fully captured and evaluated. 	

Table 7

Limitations in current body of knowledge and future directions

6. Stakeholder analysis and local community - What we need to know	Scholars
<ul style="list-style-type: none"> Persistence of the ‘role-based identification’, which prevents identification as individuals with specific identities and interests. 	Buchholz and Rosenthal (2005); Cleland and Ireland (2007); Crane and Ruebottom (2011); Easley and Lenox (2006); McVea and Freeman (2005)
<ul style="list-style-type: none"> Growing importance of communities as a new class of stakeholder although traditional stakeholder management models emphasize the management of ‘primary’ stakeholders. 	Bourne and Walker (2005); Clarkson (1995); Dunham et al. (2006); Hillmman and Keim (2011); Zhai et al. (2009)
<ul style="list-style-type: none"> In the stakeholder management literature the concept of community has been left constantly unclear and undefined. 	Dunham et al. (2006); Teo and Loosemore (2011)
<ul style="list-style-type: none"> Not easily identifiable, the local community refers to a multitude of overlapping, competing and conflicting interests groups, but it is currently treated as a single homogeneous group. 	Atkinson and Cope (1997); Skerratt and Steiner (2013)
6. Stakeholder analysis and local community - Future directions	
<ul style="list-style-type: none"> A clear perception and understanding of the stakeholder local community is currently missing in the project management arena. 	
<ul style="list-style-type: none"> A tailored stakeholder model which integrates both the view of primary and secondary stakeholders is currently missing in project and stakeholder management research. 	

Figure 5

Conceptual framework

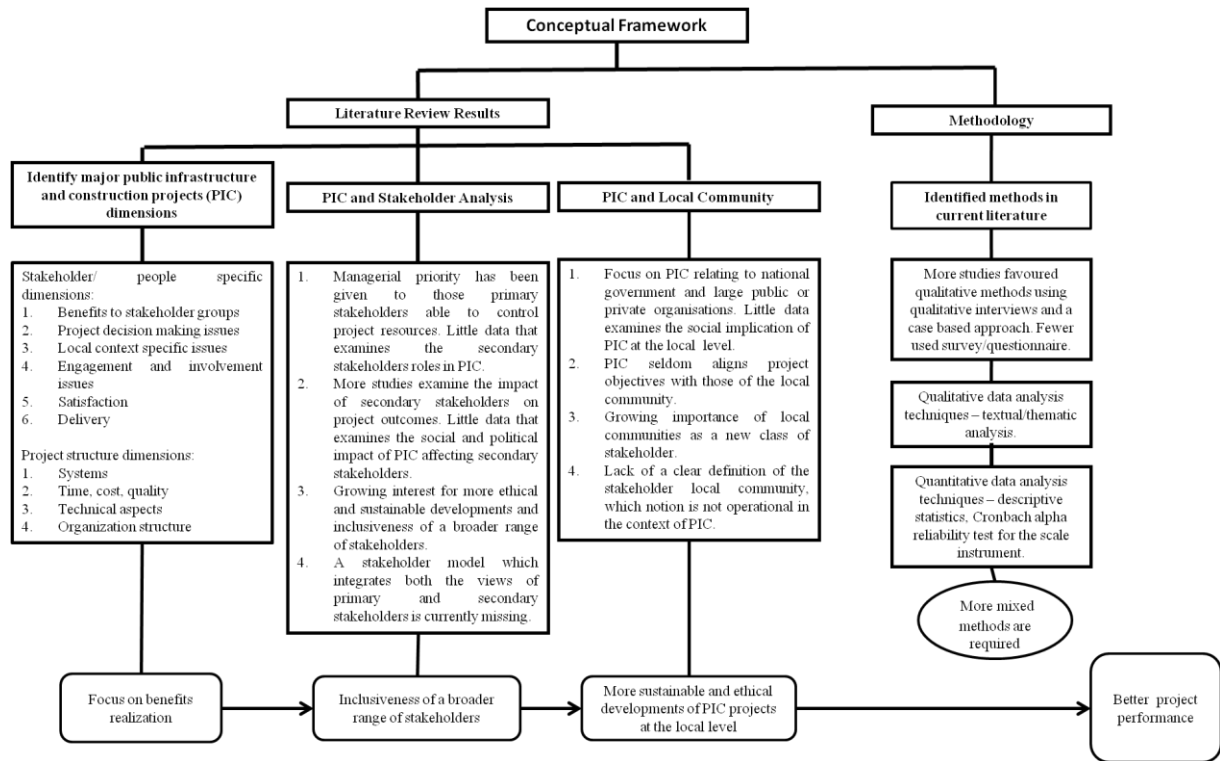


Figure 6

Limitations in current body of knowledge and managerial implications

