

## **Assignment of project team members to projects: Project managers' influence strategies in practice**

Shankar Sankaran

University of Technology Sydney, Ultimo, Australia

Anne Live Vaagaasar

BI Norwegian Business School, Oslo, Norway

Michiel Christian Bekker

Graduate School of Technology Management, Faculty of Engineering Built Environment and IT, University of Pretoria,  
Pretoria, South Africa

### **Abstract**

*Purpose:* The purpose of this paper is to investigate how project managers, influence the assignment of project team members by directly assigning or specifying who they want or by indirectly using lateral influence strategies to secure the appropriate resources. This study is part of a wider study investigating the balance between vertical and horizontal leadership in projects in which nomination (or assignment) was identified as a key event contributing to balancing the leadership. It focuses specifically on the nomination or assignment event at the start of a project.

*Design/methodology/approach:* Based on the philosophy of critical realism, case studies were used to collect data through 70 semi-structured interviews in Australia, Scandinavia and South Africa. Interviews were conducted with senior managers, project managers and project team members. Two project team members who worked with the same project manager were interviewed to gather diverse views. The data were analyzed individually by researchers from each location using a coding method proposed by Miles *et al.* (2014). The researchers then jointly analyzed the findings to arrive at five common themes from that explained how team members were assigned in practice.

*Findings:* Despite the recognized need for project managers to form their own teams, this study found that project team members were often assigned by others. This was because project managers lacked authority to secure their resources. Therefore, they used lateral influence strategies to help with assigning project team members. The study identified five lateral influencing strategies adopted by project managers to assign team members: creating an image of competence; creating coalitions; taking a gamble; waiting for the right moment; and reasoning with facts. Two of these lateral influencing strategies were not identified in the previous literature on influencing strategies used in organizations.

*Research limitations/implications:* The findings should not be viewed as representative of the respective continents where the cases were studied. However, this study contributes to the literature on project management, illuminating how project teams are assigned and by whom and, specifically, the role that influence plays during this event of the balanced leadership theory. It also identifies the types of lateral influence strategies used by project managers when assigning team members to their projects. It provides a pathway to explore the use of lateral influencing strategies by project managers beyond the assignment process.

*Practical implications:* This study will help project managers to become aware of influencing strategies that they can use in practice while assigning team members to their projects. It will also highlight the importance of assigning the right resources to projects with a view to achieving balanced leadership.

*Originality/value:* This research is of value to organizations using projects to successfully deliver their strategies by assigning suitable resources to their projects.

*Keywords:* Project manager; Power; Politics; Case study; Skills; Balanced leadership

## **Introduction**

It is important to assign and mobilise the right project team members to improve the chances of project success (Pinto & Slevin, 1987). It is also important that these resources are empowered to efficiently exploit their competencies in creating project deliveries as well as to take on leadership roles when needed (Drouin, Müller, Sankaran & Vaagasaar, 2018). Recent research has indicated that projects can be driven forward by both the project manager, i.e. the appointed leader of the project, and one or more project team members enacting leadership (Müller, Sankaran, Drouin, Vaagasaar, Bekker & Jain 2018). In other words, the leadership of the project could shift due to the situational requirements (Müller et al., 2018a). For the shifting of leadership to happen, project managers must identify the potential team member to take on leadership of a process (Müller, Zhu, Sun, Wang & Yu 2018) and then empower these members to properly oversee the process (Yu, Vaagasaar, Müller, Wang & Zhu, 2018). A prerequisite for the shift in leadership is then the assignment of the most appropriate team members to projects (Müller et al., 2018 a).

Even though the importance of getting the correct composition of project teams right from the start is widely acknowledged, prior research shows that most organizations lack adequate processes and fail to put systems in place to make team composition decisions ahead of time or simply neglect the attention required for team member selection (Mathieu et al., 2013). In some cases, the availability of competent resources could be limited resulting in assembling a suboptimal project team, thus affecting the project's capability to perform. It is also widely acknowledged that in many project-based organizations suitable resources and competencies are scarce resulting in conflict among projects for specific resources (Engwall & Jerbrant, 2003; Anantatmula, 2016). Under these conditions, how are project team members assigned in practice and by whom? What do project managers do to have their preferred resources allocated to their project? These were some initial questions that prompted the authors of this article to inquire about project team member assignment in practice.

However, as the initial data analysis progressed it became apparent that a project manager's influencing strategies were identified as successful ways to secure team members to be assigned to projects. So, the following questions were added to be addressed by this paper.

What influence strategies/tactics are being used in practice by project managers to assign team members to their projects? And, as a corollary to this question, which of these strategies have proven to be successful?

The article is structured as follows. First, it presents a review of relevant literature on staffing project teams. Second, it outlines how data was collected and coded through case studies conducted in three different continents – Australia, Europe (Scandinavia) and Africa (South Africa). Third, it explains how some common themes were derived through the coding. Fourth, it presents the empirical material with analyses, discussions, conclusions and recommendations.

### **Literature review**

Over the past three years, the concept of balanced leadership (Müller, Sankaran, Drouin, Nikolova & Vaagasaar, 2015; Müller et al., 2018a) has gained increasing attention within the field of project management. ‘Balanced leadership’ is defined as the leadership stemming from the dynamics of temporary back and forth transitions of leadership authority between the project manager (or vertical leader) and one or more project team members (horizontal leader) (Müller et al., 2018a). This is also confirmed by O’Toole et al. (2003), who suggest that projects often rely on a mix of vertical and horizontal leadership.

Balanced leadership was the focus of interest in a global research program that, based on 166 interviews, developed a theoretical framework to describe how the phenomenon evolves through the interaction of vertical leaders (also called person-centred leadership as exerted by project managers) and horizontal leadership (also called team-centred leadership as exerted by team members) (Müller et al., 2018a: 83). The research proposed that balanced leadership consists of a cycle of five events. An ‘event’ in this context is defined by Whitehead (2010: 73) as “a nexus of actual occasions, interrelated in some determinate fashions” in the actual world. These events are (for more detail see Müller et al., 2018a):

1. *Nomination* of project team members to the project. They are the potential candidates for enacting horizontal leadership.
2. *Identification* of possible candidates for horizontal leadership through a two-way process aiming for a fit between the characteristics of the situation and the empowered person.
3. *Empowerment* of the identified horizontal leader to enact leadership.
4. *Execution of horizontal leadership and its governance* by the vertical leader.
5. *Transition* of leadership from the team member(s) to the vertical leader or other team member(s).

For the purpose of this article the nomination event is referred to as the assignment of project team members as per common practice. As the nomination/assignment influences other processes that enable balancing of leadership, i.e. identification and empowerment, it is crucial to pay attention to

getting 'the right resources' assigned to succeed with a project (Pinto & Slevin, 1987). This article contributes towards increasing the understanding of the nature of this process.

### *Assigning project team members*

While assignment of team members to a project starts when the project is initiated, members are also added to the team during the project. At the outset a *core team* is formed that remains with the project until its end. During the life-cycle of the project new members join and leave the team as complementary and specialist skills are required. These new members form the *component team* (Chiocchio, Kelloway & Hobbs, 2015). Often the core team is composed of representatives from functional departments involved in developing and implementing the project deliverables so that they can direct the work of the people in their departments (Englund & Graham, 1997: 92-93). They can also identify component team members as they are knowledgeable about the capability of members in the functional organization. The core team also takes on an integrative role when bringing more specialised individuals or teams at various project phases to fulfil knowledge gaps (Hoegl, Weinkauff, & Gemünden, 2004; Pinto, 2017).

Taking a temporal lens, we outline four situations in terms of putting together project teams. First, a fully staffed team from the start, i.e. when all the essential roles required to complete the task are filled by the optimal number of members. Second, a team that is staffed through a sequential logic in which members are assigned to the team over a longer period – weeks, months or even a year or two, due to constraints such as inadequate funds, time or candidates, or as part of an evolutionary process where the team expands as the task evolves (Tannenbaum, Mathieu & Cohen, 2012; Pinto, 2017). This could also be due to lack of processes or systems in place to make composition decisions ahead of time in the organizations (Mathieu, Tannenbaum, Donbasch & Alliger, 2013: 533). Third, all members are selected within a short time (hours, days or weeks) as and when they are needed to perform a time-critical project task. Fourth, where selection could happen through substitution, i.e. when one or more new members are added to replace members who have exited the team or occasionally when the team member is found unsuitable.

While the literature on team selection in general and project team selection can enable our understanding of the assignment process, one weakness with most studies on team assignment is that they assume that the entire team can be assigned simultaneously whereas, in reality, ad hoc or temporary assignment, sequential selection and substitution are not uncommon (Tannenbaum et al., 2012; Pinto, 2017). Sequential selection is also very likely in projects due to the changes in resource

requirements over different phases of a project (Chiocchio et al., 2015), and replacement of members becomes necessary as intent and requirements change (Tannenbaum et al., 2012). Project members could also leave the project due to being posted to other assignments by their parent function, especially when a project is delayed, and new members may have to be recruited to fill the gap.

### *Characteristics expected of project team members*

What characteristics are desirable when members are assigned to project teams? Appropriate knowledge and skills required for the task to be performed and processes related to performing this task has been found to be important in all projects. According to IPMA's competency baseline for portfolio, program and project management (IPMA 4 2015 : 25), 'Knowledge is the collection of information and experience that an individual possesses whereas skills are specific technical capabilities that enable an individual to perform a task'. However, the literature on project management does not limit skills of project managers and team members to only technical skills but includes cognitive and social skills as well. IPMA 4 (2015: 25) defines individual competence as 'the application of knowledge, skills and abilities to achieve the desired results', where ability 'is the effective delivery of knowledge and skills in a given context'. In this paper, the context refers to projects.

Stern (2017) explains how agile teams are often formed by bringing together subject matter experts, i.e. people recognized as having specific competences, instead of just looking for resources in general. Investigating team member assignment in laboratory projects, Markaki, Sakas and Chadjipantelis, et al. (2011: 159) found that 92% of managers they interviewed considered technical skills to be salient. Eighty-four percent of the managers also looked at what job positions the candidate had in previous projects, 'to find the right person for the job'.

Beyond technical skills, cognitive and social skills are also identified as key predictors of project performance and thus preferred (Katzenbach & Smith, 2003: 115). One way to ascertain such skills, is by looking for a preference for teamwork among potential team members; reviewing their biodata or resumes; using an assessment centre rating; or through personality tests (Mclough & Rogelberg, 2003: 56). Often technical skills and personality traits are insufficient to make an efficient project team, as one also needs team members to possess social skills and knowledge of teamwork (Morgenson, Reider & Champion, 2005), and an ability to contribute positively to the teamworking climate (Burch &

Anderson, 2008). It may also be that different industry sectors may look for different skills or attributes while assigning project team members.

Studying the characteristics of the members preferred by managers of high technology projects, Markaki, Salas and Chadjipantelis(2012) found that ‘a project manager recruits and/or selects workers target oriented hard working persons, positive to learn and to develop innovation’ (p. 159). In addition, Gorla and Lam (2004) suggest looking at personality types while selecting software project teams. They recommend finding team members with personalities that match the roles that team members have to perform (team leader, systems analyst, and programmer). They point out that using a Myers–Briggs Type Indicator of attributes can enable proper matching. In addition, heterogeneity in personalities between the team leader and team members, and among team members could enable social interaction and a larger variety of views (Gorla & Lam, 2004). Buvik and Rolfsen (2015), based on their research on project teams in the construction industry, add that it is important to look for candidates with prior ties, because they know and trust one another. Prior ties help in establishing a team that is capable to work in an integrated way, create a common philosophy, and develop clear role expectations. Therefore, looking for prior ties between team members can enable a good start up and execution of the project. Hosseini and Akahvan (2017) developed a model for team formation in complex engineering projects in which they used a Motivation-Opportunity-Ability (MOA) framework for assigning team members.

In summary, previous relevant experience, social skills, knowledge about working in teams, motivation to work in a project, ability to learn and be innovative are also considered important characteristics besides technical skills. From the literature reviewed different contexts also seem to emphasise some additional skills or attributes specific to the context.

#### *Team member assignment in practice*

Despite the importance of team composition to project performance and success, the research on assignment of project team members remains scarce. Reviewed literature however does point to a few methods such as interviews, work sample tests, job knowledge tests, working with assessment centres, in-tray exercises and group discussions methods (Markaki et al., 2011). Morgenson, Reider and Campion (2005), emphasise the importance of structured interviews, personality tests and situational judgement in selecting team members. Of these different methods, interviews were found to be the most preferred (90% respondents) while work samples were only used if needed. Assessment centres were generally not preferred (Markaki et al., 2011). With the emergence of virtual

teams there also seems to be an increase in models and mathematical techniques to assist in forming project teams. This is often the case when team members are selected from an available pool of resources at a distant location, and prior knowledge of team members is not available (Hosseini & Akhavan, 2017). These methods include using social network analysis (Wi et al., 2009), the use of algorithms to select teams for specific tasks (Gronau et al., 2007), or fuzzy optimisation techniques that take constraints into account (Baykasoglu et al., 2007). A project manager's ability to assign the team he or she wants is affected by the authority vested in the project manager or the power S/he can wield in such decisions. This leads us to a discussion on the authority that project managers have in their organizations to assign resources to their projects.

### *The authority gap*

Project managers often do not have the freedom to assign their team members, but rather seem to inherit them (Stern 2017) and are often given whoever is available at the time of the assignment (Lee & Bohlen, 1997). Pinto (2000) points to how project managers lack power to secure the resources for their project, due to which they actively try cultivating tactics to influence and negotiate to get the right resources when required. The use of influence is discussed in detail later in this article.

Anantatmula (2016: 141) suggests that 'whenever feasible the project manager should play a key role in team selection'. The challenge is that project managers do not have the formal authority to assign their preferred team members unless the project itself is so important, complex or large that the project manager is allowed some input, or even a free rein, in team assignment. The product innovation literature often refers to such project managers as 'heavyweight project leaders' (Blindenbach-Driessen & van Den Ende, 2010). One of the reasons for the lack of authority of project managers is the matrix structure in organizations where functions and project co-exist. According to Ford and Randolph (1992), authority and responsibility is split between functional and project managers creating a competition for resources. Functional managers often block recruitment of resources to projects as they view the initiation of a new project with suspicion because of its potential to upset the power balance by reducing the authority a line manager has over his or her staff (Pinto 2000: 89).

Hodgetts (1968: 211), one of the early authors to write about the authority of project managers, found that project managers face an 'authority gap', and must be vested with power if this is to be reduced. Pinto (2000) also confirms that project managers do not have a general base of power. Dunne, Stahl and Melhart (1978), Singh, (2009), and Thamhain and Gemmill (1974) have used French and Raven's (1959) 'bases of power' model to examine the power of project managers. The bases of power proposed by French and Raven (1959) are: legitimate, reward, coercive, expert and referent. Singh

(2009) suggests that, in general, expert and referent power bases are effective, but coercion does not work. However, Lovell (1993: 77) argues that 'the power base of the individual project managers depends on the status of the particular project and his/her reputation and influencing skills'. Crawford and De Ros (2002) add that project managers who are known to be successful can invoke additional power. Thus, the importance of the project and the reputation of the project manager could elevate the status of a project manager giving them more authority.

#### *Project manager's influence in assigning team members*

According to Pinto (2000: 86), 'Project managers must also "cultivate other methods of influence" to secure the resources required for their project to succeed as they do not seem to possess power nor authority during the assignment process'. Pinto (2000) suggests further that a project manager will have to take steps to understand the politics of an organization to cultivate the appropriate tactics to be able to influence and negotiate when required. Petter and Carter (2017) consider this to be particularly important in assigning team members, stating that one must consider 'which groups and people have informal power in areas of importance to the project' (p. 77). Crawford and de Ross (2002) support the need for political acumen in securing resources by stating that 'there is a strong correlation between organizational politics and acquisition of resources'.

Several authors have expressed the need for political acumen in project managers to be successful. Pinto (2000: 91) argues that 'for better or worse project managers do not have the luxury of turning their backs on organizational politics' and 'politics constitutes one organizational process that is ubiquitous; that is, it operates across organizational and functional boundaries'. Lovell (1993: 73) adds that 'failure to understand the [...] political process has been the downfall of many good projects'. Peled (2000: 27) also emphasises the relationship between interpersonal and political skills, explaining that political skills require the application of interpersonal skills that project managers are often trained in. 'Political skills refer to the manager's ability to use his/her interpersonal relationships with employees, colleagues, clients and supervisors'. Ferris and Davidson (2005: 3) point out that political skills are closely related to influencing skills: 'Being able to influence others at work through persuasion, orchestrating support, and inspiring trust and confidence is the essence of political skills'. So, we discuss the literature on influence next.

A review of some of the seminal literature on influence tactics used in organizations will help to understand the ways in which project managers use influence in assigning team members. While the literature on upward and downward influence in organizations has been investigated, the role of



lateral influence is not discussed in detail in the literature. However, in the study reported in this article, lateral influence was observed to be one of the common strategies used in practice by project managers when they did not enjoy power or authority to assign team members.

According to Keys and Case (1980: 38), 'Influence is simply the process by which people successfully persuade others to follow their advice suggestion, or order'. They further elaborate that managers must orchestrate relationships between four interest groups that include superiors, peers, subordinates and outsiders. This requires different abilities to influence – upward with superiors, downwards through subordinates and laterally to gain resources. Keys and Case explain that 'lateral relationships require the ability to influence without formal authority' (p. 39).

Keys and Case refer to the work of Leidecker and Hall on the importance of lateral relations that help exert lateral influence while managing participatively in organizations. According to Leidecker and Hall (1974: 28), 'lateral relations are, essentially those a manager has with his peers or other members of the organization with whom he does not stand in either a superior or subordinate position'. They further quote Leonard Sayles' work on matrix management (Sayles, 1976: 13), that lateral relations become important when managers in a relationship 'have separate lines of authority, and see the world from separate perspectives', which is the situation that project managers and functional managers find themselves in an organization.

One of the early studies on managerial influence is by organizational behaviorists Kipnis, Schmidt and Wilkinson (1980: 440), who wanted to know how 'people at work influence their colleagues and superiors to obtain personal benefits or to satisfy organizational goals'. They noted that existing studies found that people 'do not exercise influence in ways predicted by rational classification schemes'. They studied more than 350 influence tactics offered by respondents that were combined into 58 dominant influence tactics. Based on their study, Kipnis and colleagues propose seven dimensions or strategies of influence (Kipnis, Schmidt, Swaffin-Smith & Wilkinson, 1984):

1. Reason: Use of facts and data
2. Friendliness: Using impression management, flattery and creating goodwill
3. Coalition: Mobilising other people
4. Bargaining: Negotiation using exchange and favours
5. Assertiveness: Being direct and forceful
6. Higher authority: Gaining support of higher levels
7. Sanctions: Use of reward and punishment

Yukl and Falbe (1990) developed measures and scales and successfully carried out two studies replicating most of the results of Kipnis et al.'s exploratory study (1980: 139). They also confirmed that 'managers have different reasons for influencing subordinates, peers and superiors'. They then added two more tactics – inspirational appeal and consultation to the ones proposed by Kipnis et al. (1980).

1. Inspirational appeal – Emotions using values and ideals to arouse enthusiasm
2. Consultation – Including others in a decision or when planning a policy, strategy or change

Higgins, Judge and Ferris (2003: 8), who carried out a meta-analysis of influence tactics and work outcomes, note that 'individuals may not use the same strategy for influencing in every situation' and 'different individuals may choose different influential strategies'. They suggest that 'a number of contextual factors and individual differences determine' the choice of a tactic. They also report that Jones and Pitman (1982: 91) added self-promotion by 'creating an appearance of competence or that you are capable of completing the task' as another tactic for influencing.

In summary, due to lack of formal authority and legitimate power, project managers must rely on their ability to influence laterally to secure the preferred resources for their project. Research where project managers examine their influence tactics have used the work carried out by Kipnis et al. (1980) and Yukl and colleagues (Yukl & Falbe, 1990; Yukl & Tracey, 1992).

Therefore, the authors would like to address the following additional research question in this article:

What influence strategies/tactics are being used in practice by project managers to assign team members to their projects? And, as a corollary to this question, which of these strategies have proven to be successful?

## **Method**

The empirical material reported on in this article makes use of the data collected as part of a global study on balancing leadership. So, we first describe the research methodology adopted in the overall balanced leadership research before explaining how the data collected for the main research project is subsequently used to develop this article. The main study was based on the philosophical stance of critical realism (Archer et al., 1998). This combines the perspective of an objective and measurable reality with the assumption that people's interpretation of this reality is situation dependent and subjective. Hence, similar experiences are interpreted differently by different actors (Archer et al., 1998), and studying phenomena aims for identification of a possible but not necessarily the only explanation of the phenomena (Bhaskar, 2016). This philosophical stance also underlies the

theoretical framework to which this study contributes (Müller et al., 2018a), which provides for consistency in perspectives between the main study and this article.

The first phase of the global study (using mixed methods) was carried out as an exploratory case study (Yin, 2009), with interviews and secondary data from websites and published company information as the main sources of data. The data used for this article is from this first qualitative phase. At this phase, abduction was chosen as the research approach, which combines the credibility of deductive reasoning rooted in existing publications on empowerment with the creativity of inductive reasoning from new empirical insights and the researchers' own experience (Alvesson & Sköldbberg, 2009), in order to derive new knowledge. Interviews were chosen as the main source of qualitative data collection in a cross-sectional time setting.

For this article, only data from case studies conducted in Australia, Scandinavia and South Africa have been used. According to Yin (2009), using more than one case provides the possibility to predict similar as well as contrasting results. Looking for similar results helps to determine under which conditions a phenomenon is likely to be found and looking for contrasting results can help explain the conditions when the phenomenon is not likely to be found. Also, including more than one case can broaden and add robustness to the findings (Yin, 2009). The details of the case studies used for this article are shown in Table 1.

<b>Country/Region</b>	<b>Australia (Aus.)</b>	<b>Scandinavia (Scan.)</b>	<b>South Africa (SA)</b>
<b>Number of cases</b>	4	5	4
<b>Number of interviews</b>	20	26	24
<b>Category of people interviewed</b>	Senior Leaders, SL (6) Vertical Leaders, VL (6) Horizontal Leaders, HL (8)	SL (8) VL (12) HL (6)	SL (8) VL (4) HL (12)
<b>Industry Sectors</b>	Financial Services, Software Firm Construction	Construction Defence Consultancy	Financial Services Engineering
<b>Analysis Method</b>	NVIVO 11	NVIVO 11	NVIVO 11

**Table 1: Summary of Data Collection and Analysis**

### *Interviews*

The qualitative part of the study consisted mainly of interviews. The age of the interviewees ranged from 25 to 50 (mean=35.5) years, with a tenure of 2 to 12 (mean=6.5) years in their current position, and project team sizes from 4 to 50 (mean=19) team members.

The interviews were carried out by a team of 2 to 4 researchers, where one researcher led the discussion, while the others asked additional probe questions and took notes. The interviews lasted between 30 and 90 minutes and were audio recorded and then transcribed, with informed consent from the interviewees. Informed consent was collected after carefully explaining the nature, scope and aims of the study, as well as the ethical implications for the interviewee (anonymity, can stop at any time, free to skip questions, no right or wrong answers).

All interviews followed the same set of questions, which was developed upfront and piloted in four interviews. Three blocks of questions were asked: a) general information about the organization, its projects, interviewee's role and experience; b) questions for senior leaders; and c) questions for project managers and team members

To ensure validity of the questionnaire a research protocol was developed, and pilot tested in three case studies in China and Australia. An English-speaking and a non-English-speaking country were selected for the pilot to ensure that the questions elicited the expected responses even when they were translated. The data from the pilot cases were also analysed to ensure the quality of the questions (Müller et al., 2015). Questions were then improved based on the responses. The researchers in the three countries followed the research protocol agreed upon to maintain consistency in collecting data. The pilot study revealed that we needed to also interview senior managers as they sometimes influenced how projects were led. The questions constructed for the research protocol were then segregated so that only relevant questions were asked at the different levels (senior manager, project manager and team member) for increased efficiency. Human Research Ethics Approval was obtained prior to starting the study.

### *Analysis approach*

We followed Miles et al.'s (2014) process of data collection, data display, data reduction and conclusion finding. Initial coding provided for identification of relevant information by interpretation of the interviewee responses.

Peer reviews of transcripts can enhance rigour, so three members of the research team separately interpreted the interview material from all locations and engaged in subsequent discussions to reflect

on similar and different interpretations and worked together to tease out the empirical findings. NVIVO 11 coding was used to capture information related to the team assignment process.

Coding was carried out as follows. First interviews from each case were coded using some preselected codes, and new codes emerged as the analysis progressed. Once each case was analysed, a constant comparison process was undertaken with new codes emerging through the comparison. Categories were then developed and refined after checking the relevance of previously coded text and newly created codes. To improve transparency, we provide rich descriptions of our findings using actual quotes from interviewees in our analysis (Bansal & Corley, 2011). The categories arrived at each location were then exchanged between the authors and the final categories discussed in this article were arrived at jointly.

### **Data analysis – findings**

From the analysis of the data the following practices were found in the case studies. The identifiers used for the respondents use codes combining the country where they were from and their role. For example:

AusSL – Australian Senior Leader

AusVL – Australian Vertical Leader

AusHL – Australian Horizontal Leader

From the open coding, five overarching themes emerged (from the sub-themes that resulted from the open and axial coding):

The first two themes are related to a project manager's power or influence, or lack thereof, in the assignment of team members to their project.

1. The Project Manager (VL) was able to influence the assignment of team members.
2. The Project Manager (VL) had no control over who was assigned to his/her project.

Table 2 shows a summary of the subthemes that led to the main themes.

<b>VL able to select or influence team nomination/selection</b>	<b>VL is provided a team for the project</b>
VL able to choose	Functional managers assigned team members
Identified by VL	Team members were assigned by external organizations
Ask others about prospective team members	HR department recruited the team members
VL able to specify needs	

**Table 2: Summary of sub-themes from the case studies** (Developed from this study)

*Theme 1: Project manager had the power or was able to influence team member assignment*

The case studies demonstrated that project managers used various sources of power to gain resources. One project manager considered past successes (expert power in managing a successful project) as a way of attracting resources. ‘People like to keep following past successes. If you’ve delivered something in the past well and you worked well, then they always jump at the chance to work [with you] again’ (AusVL). Even though not recommended in the literature (Keys & Case, 2010), project managers sometimes used a higher authority to support them in securing resources using legitimate power indirectly. This has been observed by Crawford et al. (2008) where the sponsor can provide such indirect support.

The case studies demonstrated a few instances where the project manager had the power to ask for resources. It was also evident that team members were attracted to join projects led by successful project managers.

As one project manager said, ‘I was able to recruit. In the first line of work with X to get the right skills and the right people on board, and that was really great’ (AusVL). Another project manager confirmed that project success could make it easier to recruit team members to the project. ‘People like to keep following past successes’ (AusVL).

In general, it was rare to find cases where the project manager had full authority to assign a team member. Instead power, politics, influence and relationships played a part.

One tactic used by project managers to find suitable team members involved using their *social relationship* with functional managers, who had control over the human resources, to identify ‘stars’

whom they later tried to allocate to the project. According to an SL from Scandinavia, project managers went to the functional manager in charge of the functional unit who could help them as they knew ‘Some people are “stars” – people know about them’. This was echoed by a Scandinavian project manager (ScanVL)’.

Another strategy was using the project manager’s *prior knowledge* about people who would fit before asking for these people to be assigned to the project team. An Australian project manager confirmed, ‘I worked with people here before. I know what person that I might want. I’ll go and talk to them to see if that person is available’ (AusVL). This indicated that the agreement from the team member to join the team was confirmed before approaching the stakeholder who could release this member to the project team.

The case studies also indicated another tactic that project managers used. They tended to keep track of people they had previously known as high performers, in order to try to assign them when they recognised a need for their competence.

‘So, it’s just about trying to see who you really think could do a good job and then keep track of where they are. I have one candidate now [...] who I very much would like to have, but she’s in the United States and, when she comes back, she’s on my short list. And I have a few of those [types of] candidates’ (ScanVL). This project manager was willing to wait for the appropriate team member to be available.

It was important to know whom to ask. For instance, a Scandinavian project manager explained that ‘We just ask the right people to be involved. You know, we know each other. We know who needs to be involved in the project and then we try to get them on board. We have worked together for many years, most of us”. (ScanVL)

Prior knowledge of team members seemed to be a key factor for project managers trying to secure efficient resources for their project. This was particularly evident from the Scandinavian cases. ‘I have known the project team members for many years. They are carefully selected for this project’ (ScanVL); ‘We have been working together a long time, many of us. I know who I should include in the project’ (ScanVL); and ‘I know quite quickly who I should include in my project. I’ve been lucky to meet a number of talented people in VIA (the firm). Mostly, I guess, I trust the people that have been recruited to be the right people for their positions; recruit them to the project accordingly” ( ScanVL). In some cases, informal conversations are used to gauge the suitability of a team member before approaching their managers:

*'But when it comes to getting the right people I try to... I walk around, try to see what people discuss a little bit and then I always get an impression that this one or this one is really a talent. So, I try to have a list of, or, not a formal list, but I have 3-4, perhaps up to 10 people that I have sort of seen having a good capacity and that could be in the project or other places. Because when we need change in a function, I have a list of candidates in my head that I can start discussing with. So, I have a very good overview.'* (ScanVL)

When prior knowledge was not available, or it was difficult to talk to the potential members, project managers seemed to resort to specifying the type of people they wanted; for example, an Australian project manager described it like this:

*'With my team lead on this program, we needed somebody that was going to have to roll into operations afterwards, so [...] we needed an IT treasury system lead, for lack of a better term. Somebody that would be able to understand the business, understand everything we've delivered for them and how certain escalations would actually work in operation.'* (AusVL)

On the other hand, in South Africa the managers seem to identify appropriate stakeholders and build a rapport with them to look for resources. 'So upfront, you identify the appropriate stakeholders they're going to approve. That is documented and reviewed and that's normally your core team or people involved and then your authoriser.' (SoAVL).

#### *Theme 2: Project manager had no control or influence:*

Next, we discuss instances from our case studies where the project manager had no, or very limited, control or influence over the assignment of team members to their projects. This problem was more prominent when other organizations held the resources, which prevented project managers from using their authority or exerting any influence.

For example, one project manager said: 'The size of this program, [...] because we've obviously got partners, so we are in the hands of those in terms of giving us the right people.' (AusVL)

In other instances, it was found that the functional manager decided who should be assigned. 'Sometimes in organizations you're given people. When you're given people, you can mould them. So, if I'm given a person, I've got to understand what their strengths are. Then I've got to look at what my needs are.' (AusVL)

There were also examples where neither the project manager nor the functional manager influenced the assignment, as this was left to the human resources department:



*'The human resources department prevented project managers from recruiting the right people. I had very little input. Again, I had a rap on the knuckles because I was interviewing some of our partners, and the human relations manager and the partners side said: "No, no, you can't interview the people. We need to tell you these are the right people for you".'* (AusVL)

Another project manager echoed the lack of control over assignments: 'It's not entirely up to me, I don't choose who I want to work with.' (SoAVL); 'Like I said, they introduced this resource pool idea, so you just send out your requirements to all the teams and then they tell you "you will be working with this person".'

 (SoAVL)

In addition to the two themes on project managers' high/low influence, the following three themes emerged from the analysis:

3. Some specific characteristics sought in team members
4. Issues that arose about nomination or selection assignment that affected the project in some ways.
5. Practices adopted in assigning team members

### *Theme 3: Characteristics*

A variety of expectations about team members emerged from the interviews, some of which were in alignment with the literature. The project managers emphasised that they look for:

1. People who are very technically skilled, and with a high ability to perform; for example, they said: 'I don't want people who just want a seat, I want people who want to make a difference.' (ScanVL)
2. Interpersonal skills were seen as most important; as an example, one project manager said: 'In recruiting, I'm looking for persons who are able to present themselves, using humour in the way they speak. I think I'm kind of looking for [...] interpersonal skills.' (ScanVL)
3. Project managers emphasised the ability and willingness to be a team player and good fit with the team. They talked about the need for balancing the team and have complementary skills/diversity; for example, a project manager from Australia said: 'You need to, kind of, start to build a team that will complement each other. Not necessarily exactly, they're not all of the same mould, just complement each other' (AusVL). Another project manager described this well:

*'I often end up involving the people I find most competent. And then, there is something about respect I think. They are humble – competent in their disciplines but not screaming out loud. Humble and show respect for others. Then I feel I can involve them. I want them to be team players – we like to work in a flat structure – and I want them to include each other.'* (ScanVL)

This was also echoed by a South African project manager. 'It is solely dependent on the role players of the project. All role players must be willing to enter in collaboration and they must participate for a single goal.' (SoA VL)

4. The project managers also looked for experienced people to become part of the project team. 'Also, I tend to involve people with long experience. I like that people are experienced and I listen to them. My team is a group of high age and experience – and only men [...] I have a tendency to recruit the old guys. It is important though, that they show that they want to take part.' (ScanVL)

5. Leadership traits were also frequently mentioned by the project managers when listing the characteristics, they sought. A project manager in South Africa suggested adopting strategies to select team members to be ready to take on leadership roles. 'You have to have a strategy to put the right people in your team that will lead horizontally.' (SoAVL)

#### *Theme 4: Issues*

Several issues arose in team selection that had a detrimental effect on the project. Project managers described multiple issues like tensions between the project manager and the functional manager; the problems they faced when functional managers decided to retrieve valuable resources from the project; and the problems related to being assigned resources who lack required knowledge; for example, on the project context.

The cases demonstrated tensions between *project managers and functional managers* when both played a vertical leadership role in a large program. One project manager described it like this:

*'The slight variation is our team leaders still have a portfolio of work with what to deliver as well, so there's sometimes that tension ... because we have a small pipeline of work that we're always going to deliver from the business, so you start creating that tension of where we need to be using resources going into various projects.'* (AusSL)

Another issue was the perceived impact on project development, when project managers were *not* given the people they wanted and had *no* authority to change that decision. One said; 'That's where I start failing because the five resources who were committed to me are now gone, but the delivery manager he says, "No, I'll give you another five". They are treated as numbers like, "A, B, C, D and E

are gone, I'll give you others". I said, "No, I need A, B, C, D and E only. If you give me X, Y and Z, it won't work.' (AusVL)

Many project managers also described how parts of their project assignment were outsourced and how the company involved assigned the resources to take care of the tasks. Project managers described problems with these resources they had been assigned as having very limited knowledge about the context of the project – and how that was challenging for collaboration in the team. For example, one project manager explained:

*'When it's someone in Poland, or in India, or in Dublin, they don't know what's happening. When we write documents, we work on a very explicit-implicit model, as in 30% to 50% of the content will be explicit on your document, 30% to 50% will be implicit and shared knowledge. Whereas if you were for example in India in Bangalore, you don't have that implicit knowledge. You have 17 questions when I send your document, and then you and I think this person is so ... She claims to be an expert and she's asking really basic-level questions. That's because she doesn't know the environment, she doesn't have the implicit knowledge.'* (VL)

#### *Theme 5: Practices Adopted*

From the case studies we also identified some practices adopted in evaluating team members for assignment:

1. Project managers look for people who are recommended by senior persons, rather than looking at personality tests etc. For example, one project manager said:

*'When people start in VIA [the firm] they take different tests like personality tests. They have very good processes for recruiting so people are generally easy to work with. They can take responsibility and they want to. We have databases and competence matrixes, but I don't find them useful for me in recruiting. Better to ask a senior person's advice on whom to contact.'* (ScanVL)

2. Project managers set tasks to evaluate. As one project manager explained, 'Also, I test them in different ways to see if they should be part of the project, like I give them tasks, so they can try out.' (ScanVL)

3. In South Africa a joint workshop by external experts helped to find team members.

*'In the beginning of the project, once you understand what the scope is, we do what we call a method adoption workshop. So, it's external guys, the technical review board I think it's called, but it's external guys that's not on the project that have got expertise in testing and expertise in the requirements and expertise in development and they attend those sessions as well and they make decisions for the project.'* (SoA VL)

In general, the project managers interviewed seemed to rely on personal judgement; opinions of others who had knowledge about team members; prior engagement with competent team members; and rarely used tests or similar evaluation methods reported in the literature. There were some instances as reported above where some structured methods were used. No mathematical methods were used.

## **Discussion**

The first two questions that led to the paper were:

1. How are project team members assigned in practice and by whom?
2. What do project managers do to have their preferred resources allocated to their project?

Despite the recognized need for project managers to form their own teams, this study found that project team members were more frequently assigned by their functional managers, the HR department or external organizations than by project managers. This was mainly because project managers lacked the authority or power to secure their resources.

The analysis indicates that the Australian and Scandinavian project managers, who assigned project members when they could, emphasised knowledge and skills of potential team members, i.e. to achieve high performance, but they also considered the importance of interpersonal skills. Other important characteristics they looked for were the person's capability to be a team player, to take on leadership – as well as how the potential team member would affect the balance in the team in terms of its diversity and complementarity in competencies. In recruiting, they also considered if the member is recommended by others. Even though the interpersonal skills and the ability of being a team player is emphasised, they also described how they found it hard to assign the 'right' team members as well as difficulties to specify the skills they needed in the project. In other words, the competence aspect seems highly important in considerations about whom to nominate but this became an issue when the project manager was not fully cognisant about the needs as he or she was not a technical expert about the competencies required in the team members. Our findings align with the emphasis on the competence and technical skills of the member assigned as being important (Katzenbach & Smith, 1993), that interpersonal skills were important as well (Morgenson et al., 2005) but did not find evidence that project managers placed much emphasis on shared values (Chiocchio et al., 2015) or looked for a much deeper sense of purpose (Martinelli et al., 2017).

Our findings point to a rather structured process of assigning resources in South Africa, embedded in considerations about competence and capacity, while the project managers in Australia and Scandinavia assign team members through less structured and more social processes. Obviously, for

the managers who have high influence on the selection of team members it becomes important to get to know people in the organization to identify potential candidates, and to ask the managers from which team members are drawn to recommend potential candidates. When they were unsure about a certain member, they described a process of testing them in the form of assigning them a few tasks and evaluating their work. In this way, they could test both the candidates' ability to perform but also, to some extent, their commitment to the team and the project. Commitment has been recommended as important to develop teams and especially to the develop high performance teams (Katzenbach & Smith, 2003). Using this method, the managers could also see if the candidates are accountable, which is another important asset for high performance (Martinelli et al., 2017: 56).

As the authors analysed the data collected from the case studies, a third question arose:

3. What influence strategies/tactics are being used in practice by project managers to assign team members to their projects? And, as a corollary to this question, which of these strategies have proven to be successful?

Our analysis pointed to some specific influence strategies used by the project managers to secure the right team members for their projects. One of the strategies used by project managers was their 'creating an *image of competence* or "heroism" by promoting previous successful projects'. This can be found in statements such as 'people like to keep following previous successes'. This also supports the finding that expert power is one of the aspects that is effective in organizations, confirming similar findings from the literature (Singh, 2009).

Another strategy used by project managers in the case studies was *coalition* with other managers in the organization to identify the right people, which is evident from statements such as 'some people are "stars" – people know about them', and 'we just have to ask the right people to be involved'. Also, project managers looked for coalition: 'You identify the appropriate stakeholders that they are going to approve'.

Also, the case studies demonstrated a strategy that has not been previously identified in the literature – '*taking a gamble*', supported by statements such as 'You don't always get a yes for requested resources, but you can always try', and 'build rapport' with such stakeholders.

Another strategy emerging from the case studies is *waiting for the right time* when it was observed that a project manager 'keeping track of where [resources] are' to nab them when they become free. This is also confirmed by the statement that 'I walk around, try to see what people discuss a little bit'

with an effort to identify talent; and ‘I know what person I might want. I will go and talk to them if the person is available’.

While many of the Scandinavian and Australian project managers in this study could exercise direct influence on who would be assigned to the project, all four cases from South Africa indicated that the project manager had very limited or no direct influence on the selection of project team members. Rather, they tried to influence the staffing of the team in subtler ways. So, the national culture seems to influence the tactic used, with more direct approaches in Australia and Scandinavia and more lateral influencing tactics in South Africa. This would require further investigation for confirmation.

Table 3 lists the lateral influence strategies observed in the case studies reported in this article.

<b>Found in the literature</b>	<b>New strategies identified from the cases studied</b>	<b>Description of strategies</b>
<i>Creating an image of competence</i> (Jones & Pitman, 1982)		Convincing people that you are a capable project manager through delivering successful projects.
<i>Creating coalitions: Mobilising other people</i> (Kipnis et al., 1984) Could also refer to <i>Consultation</i> (Yukl & Falbe, 1990)		Working with stakeholders and functional managers to secure the right resources. Although this can also be interpreted as gaining support of higher authorities, this may have a negative effect on future relationships.
	<i>Taking a gamble</i>	Asking for resources without expecting success, hoping that it might work.
	<i>Waiting for the right timing to approach</i>	Keeping track of resources to get them when they are released from another project or scouting for them through informal channels.
<i>Reason: Use of facts and data</i> (Kipnis et al., 1984)		In project situations this could refer to specifying the characteristics of the team members required.

**Table 3 Influencing Strategies adopted by managers interviewed in the case study**

The study of influence strategies by project managers has also been reported in the project management literature. However, most of these studies have focused on team management and not on team assignment, which was examined in this article. Soitiriou and Wittmer (2001: 18) argue that influencing is an essential people management skill for project managers. Based on two studies they conducted to develop an influence model for project managers, they found that influencing is one of the ways in which project leaders try to overcome the authority gap. They emphasise that 'creating professionally challenging projects is the single most important factor for team members'. They concluded from their studies that 'from the project manager's perspective, important factors in overcoming the authority gap included persuasive ability, negotiation and management competence' (p. 18).

Two studies have been reported on influence strategies of project managers in engineering management journals, which also refer to the previous studies of Kipnis et al. (1980), Yukl and Falbe (1990), and Yukl and Tracey (1992). Lee and Bohlen (1997: 8) suggest that while the role of a project manager has many dimensions 'the essence of effectiveness lies within the ability of the project manager to successfully influence people'. They add that 'the success of influence attempts depends on the methods employed, the skill in applying these methods and the perceptions of the target people'. Lee and Sweeney (2001: 10), following a study of Lee and Bohlen (1997), carried out an assessment of influence tactics used by project managers. They propose that 'one noteworthy interpersonal skill is the ability to influence other people' (p.16). Another key observation they make is that 'it might be a serious mistake to simply transfer influence study results from traditional management setting directly to the project management area' (Lee & Sweeney, 2001: 16). The important findings from this research were (Lee & Sweeney, 2001: 23):

1. There is no one best tactic or set of tactics for all situations.
2. Different tactics require different skills to apply and commitment of time.
3. Some interpersonal skills are more important to pursue some of the tactics.
4. All influence methods are not based on any logic.
5. Low-use tactics (such as assertiveness) may have a downside

Lee and Sweeney (2001) differentiate between the terms 'influence strategy' and 'influence tactic' by stating that 'Strategy refers to a higher level of generality than tactic, i.e. tactics are specific expressions of a general strategy (p. 17). However, this article does not distinguish between the two as the project managers used both to 'solve complex social problems that arose in organizations' (Mumford 2000). The requirement of relational and social competencies has also been emphasised in recent work on project manager competencies (Chipulu, Neoh, Ojiako & Williams, 2013), which

supports the finding of this paper on the importance of relational competencies for project managers that can develop their influencing strategies.

In summary, influence tactics are becoming an essential skill for project managers to succeed. From our study we found that project managers used three of the influencing skills reported in the literature: creating an image of a competent project manager to attract team members; creating coalitions or consulting with stakeholders who had the power to assign resources; and using facts and data to convey required skills and attitudes from team members. They also used two new tactics: waiting for the right opportunity; and taking a gamble as part of their array of influencing tactics. These tactics have appeared to have had success with securing the right resources.

### **Limitations**

Even though this study involved three diverse locations around the world; namely, Europe, Australia and Africa, the results should not be viewed as representative of the continents where the interviews were conducted. The European study also focused mostly on Scandinavian countries, Africa only involved South African organizations and most of the Australian interviews were conducted in the state of New South Wales. The results should be viewed as indicative and would require more data to be collected to confirm or disconfirm the findings from this study. The study did not anticipate that national or organizational culture would play a part in the tactics used, which aligns with the thoughts expressed by Lee and Sweeney (2001) that different tactics may succeed in different contexts. This will be worth investigating in the future.

### **Conclusions and Recommendations**

This article explored the concept of assigning members to project teams. The study contributes to the project management knowledge base by providing evidence to support two main points; namely, the project manager's influence, or lack thereof, on team member assignment and the process of identifying characteristics desired of team members. There also seemed to be differences between the Scandinavian/Australian approach and the South African approach. The research has practical implications for project managers for team assignment that are summarised below.

#### *Implications for project managers*

The implication from our research to project managers in practices are as follows:

It is important that project teams are assigned based on the competencies required in the project as several issues can arise if they are not right for the project. We identified several issues in our research



such as: the team members provided did not have the right knowledge; they were unavailable when they were needed as they were required elsewhere; and the problem becomes particularly severe when they are assigned from external organisations and the people assigned are often unknown to the project manager. All these issues can have an impact on the performance of the project. Even though it is an undesirable practice, sometimes project managers may have to go over the head of the functional managers and get the sponsors to intervene if a critical resource is required in the interests of the project.

Project managers should make their 'reputation' as a successful project manager within the organization. It was found in this research that expert power or the knowledge that working with a project manager can lead to a successful project might help to attract a team member.

Project managers should develop good relationships with functional managers. This can help them to identify 'stars'. They should also keep track of competent team members they have worked with before.

It is also important for project managers to develop a list of characteristics required of team members including technical, social and cognitive skills, appropriate experience as well as their ability to work in teams so that when they do not have the authority to select, they are ready with their requirements. If they do not have sufficient knowledge of the requirements, they should consult with people who are knowledgeable about the project's requirements. This becomes even more important when the project is assigned team members from other organizations or when part of a project is outsourced.

As this research was carried out as part of a study into person-centered and team-centered leadership it is important that project managers are also able to assign team members who may be able to take on leadership roles of specific tasks within the project during execution.

While this research did not identify many selection practices by project managers it is clear from the literature reviewed that such practices such as task-related tests, interviews and personality tests could help in selecting the appropriate team members. Project managers can help their organizations to identify good practices and use them.

It is important that project managers also develop relational competencies so that they can adopt influencing strategies identified through this research for team assignment. These are listed in Table 3 and overlap with some of the other points emphasised in this section of the paper. As several scholars have emphasised (Crawford & de Roos, 2002; Petter & Carter, 2017; Pinto, 2000), learning about politics and power structures in an organization is necessary to acquire adequate resources for a project.

A competent and efficient project team remains one of the most important aspects of project success. Apart from general group or team formation there appears to be limited literature or research done on the formation of project teams as well as the processes or methods used to identify and assign team members to projects. It became clear that approaches exist for project team member assignment with no definite or agreed process in existence. The study also highlights project managers' frustration over limited authority in team member selection. Given the observations and discussions, recommendations for future research are:

- What other political/social/organizational influence can be exerted by the project manager during the team member assignment process? Does this vary with the context?
- What is the most effective process or method of team member assignment on projects?
- Does the type and phase of project have an influence on the assignment process?

It is also evident that psychometric testing to nominate the most appropriate project team members is hardly used in project situations. It is therefore recommended that organizations in which projects play a key role adopt some of the good practices used in permanent organizations to assign appropriate team members to improve the performance of their projects.

Given the differences in approach in the three participating regions, the study could be expanded to involve more countries for the developing and the developed world.

In conclusion, this article contributes to the project management literature on teams as well as to the management literature on the types of managerial influences used in project organizations. It confirms that the three influencing strategies identified in the management literature are relevant and used in project organizations, in the context of team member assignment, and proposes two new influence strategies used in project organizations that were not reported in the management literature. This article also contributes to project management practice by highlighting the need for project managers to develop political and influencing skills to help their projects to have the right resources to succeed.

## **Acknowledgement:**

This publication has been developed and reproduced with a grant from the Project Management Institute (PMI) and is copyrighted material of and owned by, PMI, Copyright (2017). Unauthorized reproduction of this material is strictly prohibited. The authors would like to acknowledge the contributions to this research from the research teams in Australia, Scandinavia and South Africa who conducted the interviews. In particular, the authors would like to acknowledge the contribution of [Professor Carl Marnewick from South Africa](#) who also [contributed to the data analysis](#).

## **References:**

- Alvesson, M. and Sköldeberg, K. (2009). *Reflexive Methodology*, 2<sup>nd</sup>. Edn., Sage Publication, London.
- Anantatmula. V. (2016). *Project Teams: A Structured Development Approach*, Business Experts Press, New York, NY.
- Archers, M.S., Bhaskar, R., Collier, A., Lawson, T. and Norries, A. (1998). *Critical Realism: Essential Readings*, Routledge, London.
- Bansal, P. and Corley, K. (2011). The coming of age for qualitative research: Embracing the diversity of qualitative methods, *Academy of Management Journal*, Vol 54 No. 2, pp 233-237.
- Baykasoglu, A., Dereli, T. & Das, S. (2017). Project team selection using fuzzy optimization approach, *Cybernetics and Systems: An International Journal*, Vol 38, pp. 155-185.
- Bhaskar, R. (2016). *Enlightened Common sense: The Philosophy of Critical Realism*, Routledge, Abingdon
- Blindenbach-Driessen, F. and van den Ende, J. (2010) Innovation management practices compared: The example of project-based firms, *Journal of Product Innovation Management*, Vol. 27, pp. 705-724.
- Bourne, L. & Walker, D.H.T. (2004). Advancing project management in learning organizations, *The Learning Organization*, Vol. 11, No. 3, pp. 226-243
- Burch, G.S. & Anderson, N. (2008). The team selection inventory: Empirical data from a New Zealand sample, *Asia Pacific Journal of Human Resources*, Vol. 46, No. 2, pp. 241-252.

Buvik, M.P. & Rolfsen, M. (2015). Prior ties and trust development in project teams: A case study from the construction industry, *International Journal of Project Management*, Vol. 33, pp. 1484-1494.

Chiocchio, F., Kelloway, E. K., & Hobbs, B. (2015). *The Psychology and Management of Project Teams*, Oxford University Press: Oxford.

Chipulu, M., Neoh, J.G. , Ojiako, U. & Williams, T. (2013). A multidimensional analysis of project manager competences, *IEEE Transactions on Engineering Management*, Vol. 60, No. 3, pp. 506-517.

Crawford, L. & Da Ros, V. (2002). Politics and the project manager, *Australian Project Manager*, Vol. 22, No. 4, pp. 20-21.

Drouin, N., Muller, R. & Sankaran, S.& Vaagaasar, A.L.V (2018). Balancing vertical and horizontal leadership in projects: Empirical studies from Australia, Canada, Norway and Sweden, *International Journal of Managing Projects in Business*, Vol. 11, No. 4, pp. 986-1006,

Dunne, E.J., Stahl, M.J. & Melhart, L.J. (1978). Influence sources of project and functional managers in matrix organizations, *Academy of Management Journal*, Vol. 21, No. 1, pp. 135-140.

Englund, R., & Graham, R. (1997). *Creating an Environment for Successful Projects: The Quest to Manage Project Management*, Jossey-Bass, San Francisco.

Engwall, M. & Jerbrant, A. (2003). The resource allocation syndrome: The prime challenge of multi-project management, *International Journal of Project Management*, Vol. 21, No. 6, pp. 403-409.

Ferris, G.R. and Davidson, S.L. (2005). *Political Skills at Work: Impact on Work Effectiveness*, Nicholas Brealey, Boston , MA.

Ford, R.C. & Randolph. (1992). Cross-functional structures: A review of the integration of matrix organization and project management, *Journal of Management*, Vol. 18, No. 2, pp. 267-293.

French, J.R.P. & Raven, B. (1959). The bases of social power in Cartwright, D. (Eds.) *Studies in Social Power*, Institute of Social Research, Ann Arbor, MI, pp. 150-167

Gorla, N., & Lam, Y.H. (2004). Who should work with whom; Building effective software project teams, *Communications of the ACM*, Vol. 47, No. 6, pp. 79-82.

Gronau, N.,Fröming, J.,Schmidt ,S.& Rüssbüldt,U. (2007), Approach for requirement-oriented team building in industrial processes, *Computers in Industry*, Vol. 58, No. 2, pp. 179-187.

- Higgins, C.A., Judge, T.A. & Ferris, G. (2003). Influence tactics and meta-analysis, *Journal of Organizational Behaviour*, Vol. 24, pp. 89-106.
- Hodgetts, R.M. (1968). Leadership techniques in project organization, *Academy of Management Journal*, Vol. 18, pp. 211-219.
- Hoegl, M., Weinkauff, K., & Gemuenden, H. G. (2004). Interteam Coordination, Project Commitment, and Teamwork in Multiteam R&D Projects: A Longitudinal Study. *Organization Science*, Vol. 15, No. 1, pp. 38-55.
- Hosseini, S.M. & Akhavan, P. (2017). A model for project team formation in complex engineering projects under uncertainty: A knowledge-sharing approach, *Kybernetes*, Vol. 46, No. 7, pp. 1131-1157.
- ICB4 (2015) *Individual Competency Baseline for Project, Programme and Portfolio Management*, Version 4, International Project Management Association, Zurich.
- Jones, E.E. & Pitman, T.S. (1982), 'Toward a general theory of strategic self-presentation', In Suls, J., (Ed.) *Psychological Perspectives on the Self*, Lawrence Erlbaum: Hillsdale, NJ, pp. 231-262.
- Katzenbach, J.R. & Smith, S.K. (2003). *The Wisdom of Teams: Creating High-performance Organization*, HBR Press, Boston, MA.
- Keys, B. & Case (1990). How to become an influential manager, *Academy Of Management Perspectives*, Vol. 4, No. 4, pp. 38-51.
- Kipnis, D., Schmidt, S.M, & Wilkinson, I. (1980). Interorganizational influence tactics: Explorations in getting one's way, *Journal of Applied Psychology*, Vol. 65, No. 4, pp. 440-452.
- Kipnis, D., Schmidt, S.M., Swaffin-Smith, C. & Wilkinson, I. (1984). Patterns of managerial influences: Shotgun managers, tacticians and bystanders, *Organisational Dynamics*, Vol. 12, No. 3, pp. 58-67.
- Lee, D.R. & Bohlen, G.A. (1997). Influence strategies of project managers in the information-technology industry, *Engineering Management Journal*, Vol 9, No. 2, pp. 7-14.
- Lee, D.R. & Sweeney, P.J. (2001). An assessment of influence tactics used by project managers, *Engineering Management Journal*, Vol. 13, No. 2, pp. 16-24.
- Leidecker, J.K. & Hall, J.L. (1974). A new justification for participative management, *Human Resource Management*, Vol. 13, No. 1, pp. 28-31.

Lovell, R.J. (1993). Power and the project manager, *International Journal of Project Management*, Vol. 11, No. 2, pp. 73-78.

Markaki, E.N., Sakas, D.P., Chadjipantelis, T. (2011). Selecting the project teams' members' members: A challenging human resources management process for laboratory research, *Key Engineering Materials*, London, Vol. 495, pp. 159-162.

Markham. S.K. (1998). A longitudinal examination of how champions influence others to support their projects, *Journal of Production and Innovation Management*, Vol 15, pp. 490-504

Mathieu, J.E., Tannenbaum, S.I., Donsbach, J.S. & Alliger, J.M. (2013). 'Achieving optimal team composition for success', In E. Salas (Ed.) *Developing and Enhancing High-performance Teams and Advice*, Jossey Bass, San Francisco, CA, 520-551.

McClough, A.C. & Rogelberg, S.G. (2003). Selection in teams: An exploration of the teamwork knowledge, skills and ability test, *International Journal of Selection and Assessment*, Vol. 11, No. 1, pp. 56-66.

Miles, M. B., and Huberman, A. M., and Saldana, J, (2014). *Qualitative Data Analysis*, 3<sup>rd</sup> edn., Sage, Publications. Thousand Oaks, CA.

Morgeson, F.P., Reider, M.H. & Campion, M.A. (2005). Selecting individuals in team settings: The importance of social skills, personality characteristics and teamwork knowledge, *Personnel Psychology*, Vol. 58, pp. 583-20.

Müller, R., Sankaran, S., Drouin, N., Nikolova, N., Vagaasaar, A, L. (2015). The socio-cognitive space for linking horizontal and vertical leadership, APROS/EGOS 2015 conference, Sydney, December, 8

Müller, R., Sankaran, S., Drouin, N., Vaagaasar, A\_L., Bekker, M.C. & Jain, K. (2018a). A theory framework for balancing vertical and horizontal leadership in projects, *International Journal of Project Management*, Vol. 36, No. 1, pp. 83-94

Müller, R., Zhu, F., Sun, X., Wang, L., & Yu, M. 2018b. The identification of temporary horizontal leaders in projects: The case of China. *International Journal of Project Management*, Vol. 36, No. 1, pp. 95–107.

Mumford, M.D., Zaccaro, S.J., Harding, F.D., Jacobs, T.O. & Fleishman, E.A. (2000). Leadership skills for a changing world: Solving complex social problems, *Leadership Quarterly*, Vol. 11. No. 1., pp. 11-35.

O'Toole, J., Galbraith, J. & Lawler III, E.E. (2003). 'The promise and pitfalls of shared leadership: When two (or more) heads are better than one', In Pearce, C.L. ( Conger, J.A. (Eds.). *Shared leadership: Reframing the how's and whys of leadership*, Sage: Thousand Oaks, CA, 250-267.

Peled, A. (2000). Politicking for success: The missing skill, *The Leadership and Organizational Development Journal*, Vol. 21, No. 1, pp. 20-29.

Petter, S. & Carter, M. (2017) In a league of their own: Exploring the impact of shared work history for distributed online project teams, *Project Management Journal*, Vol. 48, No. 1, pp. 65-80.

Pinto, J. (2017). Viewing team selection through a temporal lens, *Organizational Psychology Review*, Vol. 7, No. 2, pp. 171-194.

Pinto, J.K. (2000). Understanding the role of politics in successful project management, *International Journal of Project Management*, Vol. 18 No. 2, pp. 85-91.

Pinto, J.F. & Slevin, D.P. (1987). Critical success factors in successful project implementation, *IEEE Transactions on Engineering Management*, Vol. 34, pp. 22-27.

Sayles, L.R. (1976). Matrix management: The structure with a future, *Organizational Dynamics*, Vol. 5, No. 2. pp. 2-17.

Singh, A. (2009). Organizational power in perspective, *Journal of Management in Engineering*, Vol. 9, No. 4, pp. 165-176.

Sotirou, D. & Wittmer, D. (2001). Influence methods of project managers: Perceptions of team members and project managers, *Project Management Journal*, Vol. 32, No. 3, pp. 12-20.

Stern, T.V. (2017). *Lean and Agile Project Management: How to Make Any Project Better, Faster and More Cost-effective*, CRC Press: Boca Raton, FL.

Struber, D. C. & York, K.M. (2007). An exploratory study of the team characteristics model using organizational teams., *Small Group Research*, Vol. 38, No. 6, pp. 670-695.

Tannenbaum, S.I., Mathieu, J.I. & Cohen, D. (2012). Teams are changing; Are research and practice evolving fast enough? *Industrial and Organizational Psychology*, Vol. 5 No. 2012, pp. 2-24

Thamhain, H.J. & Gemmill, G.R. (1974). Influence styles of project managers: Some project performance correlates, *Academy of Management Journal*, Vol. 17, No. 2, pp. 216-224.

Whitehead, A.N. (2010). *Process and Reality (Corrected Edition)*, Griffin, D.R., Sherburne, D.W. (Ed.) The Free Press: New York, NY.

Wi, H., Oh, S., Mun, J. and Jung, M. (2009), A team formation model based on knowledge and collaboration, *Expert Systems with Applications*, Vol. 36, No. 5, pp. 9121-9134

Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Sage: Thousand Oaks, CA,

Yu, M., Vaagaasar, A.L., Müller, R., Wang, L., & Zhu, F. (2018). Empowerment: the key to horizontal leadership in project teams. *International Journal of Project Management*, Vol. 36, No. 7, pp 992-1006.

Yukl, F. & Falbe, C.M. (1990). Influence tactics and objectives in upward, downward and lateral influence attempts., *Journal of Applied Psychology*, Vol. 75, No. 2, pp. 132-140.

Yukl, G. & Tracey, J.B. (1992). Consequences of influence tactics used with subordinates, peers and the boss. *Journal of Applied Psychology*, Vol. 77, No. 4, pp. 525-535.