

Tilburg University

Toward a model of socializing project team members

Batistič, S.; Kenda, R.

Published in:
International Journal of Project Management

DOI:
[10.1016/j.ijproman.2018.03.003](https://doi.org/10.1016/j.ijproman.2018.03.003)

Publication date:
2018

Document Version
Peer reviewed version

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Batistič, S., & Kenda, R. (2018). Toward a model of socializing project team members: An integrative approach. *International Journal of Project Management*, 36(5), 687-700. <https://doi.org/10.1016/j.ijproman.2018.03.003>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Toward a model of socializing project team members: An integrative approach

Saša Batistič*

Tilburg University

Department of Human Resource Studies

PO Box 90153, 5000 LE, Tilburg, NL

s.batistic@uvt.nl

Renata Kenda

Tilburg University

Department of Organization Studies

PO Box 90153, 5000 LE, Tilburg, NL

r.kenda@uvt.nl

* Corresponding author

Cite as:

Batistič, S., & Kenda, R. (2018). Toward a model of socializing project team members: An integrative approach. *International Journal of Project Management*, 36(5), 687-700.

Abstract

Project work is becoming more and more important in everyday business, as is staffing the right newcomers for the project. Recognizing that not all new project team workers possess equally important specific knowledge, skills and abilities for the success of projects, we draw on project management, human resource management, and organizational socialization literature to develop a framework on how new project team members might be socialized, depending on their strategic value for the project. We specifically draw on the socialization tactics literature and propose how four categories of new employees – Internal core project team members, External expert project team members, External project team members and Internal project team members; based on two dimensions – work task complexity and employment mode, can be socialized more effectively. Implications for theory and practice are discussed as well.

Key words: projects, project teams, complexity, employment mode, organizational socialization, socialization tactics

1. Introduction

Organizations are increasingly relying on alternative work arrangements, such as telework, virtual teams, contingent and project work, to maintain their flexibility and competitive advantage (Garsten, 1999). For example, the use of projects – which can be defined as time-limited teams that produce one-time outputs (Morris, Pinto, & Söderlund, 2012) – is rising in industries such as information technology, and the transit across work projects and organizations is much more frequent than ever before (Katz, 1997). Given the increasing level of employees' mobility, is understanding the effectiveness of newly joined project team members – newcomers – important for the success of projects. Better understanding the organizational socialization process – commonly viewed as the process by which individuals acquire the knowledge, skills, attitudes and behaviours to assume a work role (Wanberg, 2012) – of project workers can mitigate the potential losses organizations may incur when socialization is ineffective, such as delays in the completion of projects, productivity, quality issues, and cost of selection and training (Kammeyer-Mueller & Wanberg, 2003).

Much of the theory and research on organization socialization in the past decades has focused on the relationship between a newcomer and his or her organization (Anderson & Thomas, 1996; Ashforth, Sluss, & Harrison, 2007), and not on a more localized context – their workgroup (Anderson, Riddle, & Martin, 1999), where most of the working interactions and socialization occur. The scant studies examining newcomers' socialization in workgroups have focused on exploring more stable work arrangements, like permanent teams. Fisher (1986, p. 105) observed that socialization research has “tended to concentrate in the same few occupations”, leaving plenty unanswered questions about nonstandard working environment like project work. Ashforth et al. (2007, p. 54) highlight this problem nicely: “As the conditions confronting organizations—and individuals' careers—become increasingly

turbulent, particular research attention will need to be paid to task/project–and group-specific socialization”.

Being a relatively new subdomain of the project management, not much is known about socialization of project team members. Few studies that have explored this issue have found that socialization could potentially influence performance in various project contexts (e.g., open source software projects) (Carillo, Huff, & Chawner, 2017; Gemino, Reich, & Sauer, 2015; Steinmacher, Silva, Gerosa, & Redmiles, 2015) and possibly enhance collaboration and cooperation between co-development projects team members (Xu, Cui, Qualls, & Zhang, 2017) effectively making project teams more homogenous (Andersen, 2016) and leading to project performance through social alignment (Gemino et al., 2015). The few studies that explored socialization and project success are more or less aligned in suggesting that socialization is a key aspect when considering knowledge dissemination (Fernie, Green, Weller, & Newcombe, 2003) or knowledge alignment (e.g., document vs people) (Gemino et al., 2015), as socialization directly influences social interactions and thus can help or hinder knowledge sharing.

However, two very relevant questions remain answered in the project literature. First, the socialization aspect of projects has been explored relatively superficially as noted by Andersen (2016). It is not clear which socialization initiatives can be used to make project teams more homogenous. There are probably combinations of such activities that have a more additive effect resulting in a better social integration which can results in various desired outcomes for the project (e.g., knowledge sharing) (Carillo et al., 2017). Second, project literature also suggest that projects might have a challenging combination of different project workers (e.g., technical vs management teams) (Gemino et al., 2015). This classification or diversification also alludes to the issue that different project members might

need a different socialization experience (Ashford & Nurmohamed, 2012; Batistič, 2017; Gemino et al., 2015). For example, technical members of a project might need socialization initiatives that can link them together so they have a better understanding of how their expertise overlap and how they can share knowledge (Gemino et al., 2015). On the opposite side, management teams might be provided with specific activities aimed at enhancing different project management perspectives, such as leadership (Andersen, 2016). Overall, this indicates there might be different newcomers with different strategic values for the project, consequently needing different socialization experiences.

To address these voids in the project management literature, our primary purpose in this paper is to develop a typology of how newcomers joining projects can be socialized based on different strategic values that they can have for the organization and projects. This goes hand in hand with the notion that not all newcomers are the same, and different socialization mechanisms should be used for different cohorts (cf. Ashford & Nurmohamed, 2012; Batistič, 2017). We propose that such grouping may be related to two important dimensions: (a) work task complexity, and (b) employment mode. The first dimension is drawn from the project literature, which suggests that project complexity, specifically work task complexity, provides organizations with suggestions how important newcomers might be for the success of the project (Baccarini, 1996; Zhu & Mostafavi, 2017). The second dimension is drawn from the human resource management (HRM) literature, which suggests that project work can be carried out by internal (insourced) or external (outsourced) newcomers (Lepak & Snell, 1999). Taking both dimensions together, we provide four cohorts of newcomers that may have different strategic value for the project and organization and might as such benefit from different tailored approaches that organization can offer for a more successful socialization. This can be realized through socialization tactics - “the ways in which the experiences of individuals in transition from one role to another are structured for them by

others in the organization” (Van Maanen & Schein, 1979, p. 230). Particularly, we propose that specific socialization tactics can help socialize newcomers joining project work in organizations more effectively by providing newcomers with relevant resources – information and support.

By providing such framework, we aim to make two contributions to the literature. First, we go beyond the notion in the organizational socialization related to permanent teams which suggests that all the newcomers are more or less the same – proposing the one-fit-all approach (cf. Ashford & Nurmohamed, 2012; Batistič, 2017). This view neglects the fact that there might be differences among individuals in regard to their knowledge, skills, and abilities – their strategic value for projects. Integrating the literature of project management (Morris et al., 2012), and human resource (HR) architecture (Lepak & Snell, 1999, 2002), we developed a comprehensive taxonomy of how new project team members might be grouped when joining projects. Specifically, we argue that such newcomers could be grouped in cohorts based on their strategic value for the project. We draw such distinction based on project complexity literature (Baccarini, 1996; Ployhart & Moliterno, 2011), which suggests how project team members can be selected, focusing on complexity of work characteristics they need to master for the success of the project, and on HR literature (Lepak & Snell, 1999), which postulates that employees can be sourced internally or externally, based on strategic and cost/benefit considerations. Grouping project workers strategically might allow us to provide specific socialization tactics which might be more beneficial for one cohort rather than for another (e.g., key project members vs peripheral project members) achieving additive effects.

Second, the proposed project members’ taxonomy suggests that there might be a more beneficial combination of socialization tactics (Andersen, 2016; Batistič, 2017) to socialize project team members. This suggestion acknowledges potentially different expectations and

goals of project newcomers and organizations (cf. Ashford & Nurmohamed, 2012) and that certain socialization tactics might have a more beneficial effects than others, leading to increased project success (Andersen, 2016; Carillo et al., 2017). Such classification is not yet present in the project literature, nor in the socialization literature pertinent time-limited work arrangements (cf. Ashford & Nurmohamed, 2012). In order to determine which socialization tactic is more useful and effective, we provide an integration and foundation with a list of specific activities for socializing different cohorts of newcomers in projects. Moreover, we explore the possibilities that certain combinations of tactics might lead to synergetic effects further improving the odds of effective socialization and making project teams more homogeneous (Andersen, 2016).

2. Theoretical background

In developing a theoretical basis for this article, we have drawn primarily from HRM literature (e.g. Lepak & Snell, 1999), project management literature (Baccarini, 1996; Zhu & Mostafavi, 2017), and socialization literature (e.g. Jones, 1986), to discuss how socialization process can occur in projects.

HRM is generally concerned with how and why organizations can achieve and maintain competitive advantage. It suggests that not all employees necessarily generate outstanding value for the organization, and that there are some “core” workers in all organizations, while some others are less critical, thus being more peripheral (Purcell, 1999). This differentiation may consequently influence the employment mode of such employees. If the “uniqueness” and “strategic value” of employees is high, firms are more prone to internalize their employment mode and employ them internally. Whereas, if the value and strategic component of their human capital is low, firms will be more willing to opt for outsourcing methods. While the HRM suggests how organizations might hire different employees, it does

not adequately addresses how organizations can manage and differentiate employees in more complex short term lived activities. Getting people on board fast is especially relevant for time constrained work arrangements like projects.

Projects' importance and adoption in businesses is increasing (Hyväri, 2006) as it helps organizations to be efficient, effective and competitive in a changing and unpredictable working environment (Ika, 2009). While projects strive towards excellence (Andersen, Birchall, Jessen, & Money, 2006) and successful completion, it is possible that they do not deliver the required performance (Bosch-Rekvelde, Jongkind, Mooi, Bakker, & Verbraeck, 2011; Kappelman, McKeeman, & Zhang, 2006) as their complexity is increasing exponentially (Bosch-Rekvelde et al., 2011; Zhu & Mostafavi, 2017). This complexity also suggests that project team members require new hard-to-master knowledge, skills and abilities (Ashforth et al., 2007). Project employees may work on various projects simultaneously and change projects frequently (Engwall & Jerbrant, 2003) and as such potentially need a more tailored approach in order to evolve into an effective part of the project team – become socialized.

We argue that the socialization of new project team members might be dependent on two dimensions – work task complexity and employment mode. The first touches upon work characteristics – attributes of the task, job, and social and organizational environment, while the latter relates on how organization can recruit and select project newcomers. The combination of these two dimensions proposes different combinations of socialization tactics that can be used to socialize project newcomers more effectively. In the next section, we present each dimension more in detail, but also provide some underpinnings for the socialization tactics.

2.1 Project complexity

Despite the rising interest in research on complexity, there is still a general lack of agreement on what project complexity is (Bakhshi, Ireland, & Gorod, 2016; Vidal, Marle, & Bocquet, 2011; Zhu & Mostafavi, 2017). Liu (1999) argues that project complexity is simply a reflection of work task difficulty, while Vidal et al. (2011, p. 719) state that: “project complexity is the property of a project which makes it difficult to understand, foresee and keep under control its overall behaviour, even when given reasonably complete information about the project system”. This definition provides a good overview of project complexity, but in order to properly explore the notion of this phenomena, we build upon Baccarini’s (1996) work, which stresses the importance to indicate the type of complexity; suggesting that organizational and technological complexity are the most prevalent in project management literature. Organizational complexity refers to organizational structure (e.g. differentiation of responsibilities and authority, division of work tasks, allocation of labour, personal specialization) and the level of operational interdependencies and interaction. On the other hand, technological complexity relates to the process of transforming inputs to outputs (e.g. amount and diversity of inputs/outputs) (Baccarini, 1996; Vidal & Marle, 2008). The majority of complexity factors are linked to organizational aspect, as opposed to technological (Vidal & Marle, 2008). An important element of organizational complexity is personal specialization, which can be attributed by a wider range of required activities performed at a single job, consequently increasing the work task complexity. This alludes to the notion that different project members might have distinct area of specialization founded upon training or education and the bigger the number of such specializations, the more complex the organizational complexity is (Baccarini, 1996). Yet, the questions of what actually is work task complexity and is there a way to select and classify project members more effectively (e.g., big construction projects can have a vast amount of personal

specializations), remains. To answer the first question, we look at the job characteristic literature and to answer the second question we draw from HRM literature.

Based on job characteristics literature (Hackman & Oldham, 1980), we argue that complex project is consecutively composed of complex work tasks. To explore the work task complexity in projects, we draw on the work characteristics framework proposed by Morgeson and Humphrey (2006), who expanded previous research on group work characteristics into three dimensions: motivational, social and contextual. The basic principle of the motivational approach is that jobs will be enriched (i.e. made more motivating) if high levels of core job characteristics (skill variety, work task identity, work task significance, autonomy and significance) are present. The social dimension looks at interdependences, feedback from, support of and interactions with others (i.e. leaders, co-workers, peers). The last category comprises contextual characteristics, which are related to the context within which work is performed, thus focusing on the physical and environmental context.

This classification suggests that work task complexity is a multilayer phenomenon, and that high work task complexity in most cases leads to an intensive workflow structure, where unit climate seems to be important (Ployhart & Moliterno, 2011). Successful member interactions require coordination and communication within co-workers, which may be influenced by the level of work task complexity. Less complex work tasks may require less coordination, communication can be asynchronous and the relationships between co-workers are mostly weak. On the other hand, more complex work tasks may require greater coordination, communication and closer connection among co-workers; as well as a wider area of expertise, which often demands expertise from outside of an organization (Bell & Kozlowski, 2002; Ployhart & Moliterno, 2011). Exploring socialization through the project complexity seems meaningful as we know that socialization provides important clues about culture,

climate, information and social support to build stronger relationships allowing better coordination among organizational members (Ashforth et al., 2007).

2.2 Employment mode

The differentiation in the content and quality of the employment relationship for different types of employees reflects the specific need of employees, and optimizes organizational cost and benefits, ultimately reflecting in better performance (Koene & van Riemsdijk, 2005; Nyberg, Moliterno, Hale, & Lepak, 2014). In line with HRM literature (e.g. Lepak & Snell, 2002), we suggest that two possible extremes of employment mode can delineate unlimited possibilities and combinations of how project team members are going to be selected – through external and internal employment mode.

External employment mode reflects the notion that employees may be considered to be peripheral workers, with low strategic value (knowledge, skills, and ability), and more or less readily available in the labour market (Lepak & Snell, 1999). Many contractual relationships stipulate that the actual work can be done off the company, for example through virtual work, where geographically dislocated highly qualified experts can be easily accessed due to the technological advancements allowing easier and cheaper communication (Bell & Kozlowski, 2002). However, it is still common that external employees also work on site. It is argued that such employees can be used rather opportunistically (Koene & van Riemsdijk, 2005), with employment relationships based on transactions (Lepak & Snell, 1999), having little association with a firm and their psychological contracts focusing on short-term economic exchange and reward (Rousseau, 1995). Yet, recent arguments go beyond such views, pointing to various attitudinal and behavioural facets of external workers that need to be taken into consideration (Lewin, 2005). For example, group identification of external or temporal workers, in-group co-operation, organizational citizenship behaviour and better

individual fit with the organization (Dutton, Dukerich, & Harquail, 1994), thus effectively mitigating the negative perception of being external employees.

Internal employment mode, which is sometimes also referred with the term “core” employees (Atkinson, 1984) or knowledge based employment (Lepak & Snell, 2002), may on the other hand, be selected when strategic value of employees is high. Theory suggests that such employees, due to their scarcity in the labour market and possession of specific knowledge, skills and abilities should be nurtured and organizations should invest in developing and further enhancing their critical organizational skills (Lepak & Snell, 2002; Lewin, 2005). In this instance, organizations are likely to rely on an internal employment mode, looking for “newcomers” from other projects or departments and therefore focus on internal development and long-term employee commitment (Lepak & Snell, 1999).

Even if these “newcomers” have mostly already been socialized when they started their tenure, the specific nature of project work suggests that a “re-socialization” phase is needed (Ashforth et al., 2007) as project work for internal mode of employment is predominantly related to changing positions in organizations (Chao, 1997). Organizations are increasingly using lateral moves that require forgetting aspects of old roles, learning new roles and schemata, speaking (new) non-native languages, and developing new working relationships (Ashforth, 2001). In changing to a new role – a later movement which is very important for knowledge dissemination across the organization (Lazarova & Tarique, 2005) – newcomer is facing new and unexperienced uncertainties, which could relate to a new project team social aspects (e.g., newcomer wonders how she/he will fit in a new team of co-workers) to more work task related uncertainties (e.g., how this project team operates when help is needed). Previous work experience might help alleviate such uncertainties but only to a certain extent as it provides limited schemata for interpreting new situations (Brett, 1984). Furthermore, in extreme situations experienced workers might have a thorough knowledge of their role, have

a secure sense of their “self”, and as a consequence they might be more prone to resisting changes in new norms and behaviours (e.g., in my previous project work things were done differently) (Feldman, 1989). Studies suggest that resocialization is important, and it might be even more important in the project work context, therefore organizations should consider paying more attention to this process (Hart, Miller, & Johnson, 2003; Ladge & Greenberg, 2015). The employment mode for project workers leads to the suggestion that organizations might use different HR configurations to manage employees and also suggests how much organizations are willing to invest in their employees (Lepak & Snell, 2002). Moreover, employment modes may also inform which socialization tactics might be used for different cohorts of newcomers in permanent teams in organizations (Batistič, 2017), which seems to be the case also in project management literature (Andersen, 2016; Gemino et al., 2015).

2.3 Organizational socialization tactics

Once newcomers join a project they need to “learn the ropes” quickly and get used to the new team as soon as possible. To achieve this, organizations can use socialization tactics to enhance newcomers’ experience of the new environment. Literature argues that the socialization tactics provide newcomers with key resources (e.g., information) or enable them to interact with other organizational members to get relevant resources (Fang, Duffy, & Shaw, 2011; Kramer, 2010). In their seminal work about organizational socialization, Van Maanen and Schein (1979) identified six tactical dimensions that describe how organizations can influence custodial, content-innovative, or role-innovative responses of newcomers. The six proposed tactics may occur on a dichotomous continuum with substantial distance between the two extreme points.

Collective (vs. individual) socialization tactics denote grouping newcomers together and placing them through a common set of practices, instead of putting them through a set of isolating and more unique sets of practices. *Formal (vs. informal)* socialization is the notion

of formal training. When formal tactics are used newcomers are separated from their co-workers and trained for a specific work task, as opposed to training them on-the-job with existing employees, which is the case of informal socialization. *Sequential (vs. random)* socialization reflects a fixed sequence of learning stages that newcomers need to master, compared to newcomers randomly learning about work tasks as and when they appear or are needed at work. *Fixed (vs. variable)* socialization offers newcomers a specific timeline for learning various work tasks. On the other hand, where variable process is used, such activities do not provide any order or time period for learning. The *serial (vs. disjunctive)* approach reflects initiation where newcomers are socialized by predominantly an experienced member. Experienced members are assigned to work with them and serve, in most cases, as a role model or mentor. Whereas, when disjunctive approach is used no formal mentor or role model is available to newcomers. Lastly, *investiture (vs. divestiture)* builds upon the premise that the identity and personal characteristics of the newcomer are important. Divestiture, on the other hand, deny, disconfirm, and strip such identity away.

In one of the first empirical investigations of socialization tactics, Jones (1986) described how the six bipolar tactics on one extreme might form, what he called *institutionalized socialization*. He suggested that, the collective, formal, sequential, fixed, serial, and investiture tactics motivate and encourage newcomers to passively accept predefined roles, reflecting the organization's status quo. Thus, institutionalized socialization provides newcomers with a more structured and formalized experience that may reduce newcomers' perceived uncertainty. At the opposite end of this false dichotomy is *individualized socialization*, comprising the individual, informal, random, variable, disjunctive, and divestiture tactics (Jones, 1986). These tactics provide newcomers with stimuli to question the status quo, rather than accept it, and develop their own unique approach to their roles and working environment. Thus, *individualized socialization* reflects an absence of structure in

the socialization process, with newcomers being socialized by their own approaches to their roles, rather than by design, which might end in greater perceived uncertainty and anxiety for the newcomers (Jones, 1986).

Empirical findings suggest that proper use of socialization tactics may enhance newcomers' adjustment which in turn leads to proximal outcomes (e.g., role clarity, person-organization fit, identification) as well as more distal outcomes (e.g., job satisfaction, organizational commitment, performance) (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Saks, Uggerslev, & Fassina, 2007). Moreover, there exist stronger evidence for the link between the tactics and outcomes for newcomers who were on the job for less than 6 months, suggesting that the structure, guidance, and formality associated with institutionalized tactics is especially beneficial to newcomers during the first 6 months (Saks et al., 2007).

3. Framework

Based on the preceding section, we present a comprehensive framework of socialization for project team members based on two dimensions – employment mode and work task complexity (see Figure 1). Building on these two dimensions, the framework acknowledges two things. First, projects need specialized members, which can be grouped based on two salient characteristics – work task complexity, and employment mode. Second, this classification leads to four key groups which might need a different socialization experience. Some project workers can be socialized for the first time (mostly external workers joining new projects), whereas others need to be resocialized as they make a lateral move in the organization (mostly internal workers joining new projects). Resocialization is especially important in a project work context, due to the necessity of 'selective forgetting' (Ashforth, 2001, p. 190). For example, forgetting of established project norms from previous projects. We elaborate on such issues in the next sections.

Insert Figure 1 about here

3.1 Quadrant 1: Internal core project team members

In Quadrant 1 (the top right part of the matrix in Figure 1), we find newcomers that are working with complex work tasks, requiring complex skills, abilities and specific knowledge, and are internally sourced by the organization. Since particular firm-specific skills are non-transferable and reflected in a way projects are managed, the value of such employee will be high (Becker, 1976). Additionally, such employees need to be trained in order to develop their knowledge, skills, abilities and embedded in the communication network of the organization, enhancing their value-creating potential for the organization (Fagan & Ployhart, 2015; Nyberg et al., 2014). This value will reflect on a long term relationship an organization wishes to maintain and nurture with such employees (Lepak & Snell, 1999).

Since the majority of key roles in projects, like project managers and other technical experts of the project fall in this category, a greater personalized socialization approach might be more beneficial. When socializing core project workers organizations could use *investiture and serial tactics* to provide newcomers with access to social capital that is embedded in the organizational social network (Fang et al., 2011). Especially, serial tactics enable more experienced insiders to act interpersonally, and become or act as role models or mentors. Complementing serial, investiture tactics provide newcomers with positive feedback and social support, which in turn help them to develop strong relationships and feelings of competence and confidence with other insiders (Allen, 2006). Moreover, these supportive interactions help newcomers develop a social network of various contacts, and more importantly build a feeling of being accepted (Cable & Parsons, 2001). Mentoring is especially effective in this regard as it allows formal and informal knowledge to be shared

among various organizational members, which supports the socialization process (e.g. Bauer & Erdogan, 2014).

To further enhance the fit between the organization and the newcomers, *individual and informal tactics* may provide newcomers with a specific tailored experience. Dealing with complex work tasks, such newcomers can be put through individual training whereby project expectations can be dealt and explained more in details. As projects are heavily time dependent (Atkinson, 1999), this will also go alongside individual tactics, which are on-the-job training, and may allow newcomers to develop innovative orientations towards job roles (Jones, 1986). To compensate for the fact that newcomers are not part of a more formal training where organization's culture, norms, and one's job are learnt (Bauer et al., 2007; Jones, 1986), employers should rely on a good selection process. It might be beneficial if organizations emphasize the recruitment and selection process to maximise values alignment (Brymer, Molloy, & Gilbert, 2014; Fisher, 1986) and newcomers' proactivity (Ellis et al., 2015).

Proactive behaviour is a form of motivated work behaviour and it can be seen as an anticipatory action that newcomers take to influence their personal comfort and environment (Bateman & Crant, 1993). As lack of formal tactics may leave newcomers with less information, newcomers might compensate this with proactivity in order to reduce their uncertainty (Wanberg & Kammeyer-Mueller, 2000). For example, it has been found that a better initial match between the values held by accounting firms and new auditors upon entry predicts faster organizational adjustment (Chatman, 1991). Moreover, less institutionalized context may motivate newcomers to be more proactive in their learning and information seeking, which can in turn be positively related to their role innovation (Ashforth & Saks, 1996; Jones, 1986). Newcomers' role innovation (e.g., change the role to shape his or her unique preference) is especially important for this category of project workers in complex

and turbulent environments, where flexibility and empowerment are essential parts of work task, and might lead to higher performance and/or project success (Evans & Davis, 2005).

Finally, as the training of the aforementioned employees tends to occur on-the-job and just-in-time (Chao, 1997), *random tactics* can ensure skills are learnt at most crucial points. At the same time random tactics create a certain degree of uncertainty, where newcomers do not know when training, which stimulates individuals' innovative responses to succeed in their environment, will be needed (Cable & Parsons, 2001). Thus, random tactics are important for newcomers to reinforce proactive behaviours, motivate newcomers to build relationships and social networks, which makes their adjustment more effective (Kramer, 2010).

Proposition 1. Project newcomers in “Internal core project team members” group will exhibit more positive adjustment outcomes when socialization tactics are individual, informal, random, serial and/or investiture.

3.2 Quadrant 2: External expert project team members

Quadrant 2 (the bottom right part of the matrix in Figure 1) represents outsourced project team members that work on work tasks where special expertise is needed. Highly complex projects might be in need of specialized knowledge, skills and abilities that can be outsourced as they are not key for the competitive advantage of the organization. Therefore, organizations may prefer to look externally for such newcomers as they do not require so thorough socialization experience and can be more easily integrated into a project.

Newcomers in this category are probably members of various alliances, where through a co-production process both parties contribute to a specific outcome (Lepak & Snell, 1999).

However, they can be sourced also based on their temporality of work arrangements as they are needed only for a specific complex work task (Garsten, 1999).

Complex projects, composed of complex work tasks and reliant on good communication network, jointly undertaken by two or more organizations or by contractual temporary workers, might provide synergistic values that exceed the values organizations could generate independently. Such complex skills might be only used occasionally, or only pay off in the long run, thus not justifying a full-time employment (Lepak & Snell, 1999). Yet, at their root, relationships of this kind require information sharing and trust to facilitate reciprocity and collaboration (Dyer, 1996). Examples of such position can be project engineers, IT developers, designers, etc. To overcome negative consequences of external employment mode, organizations need to prevent unwanted individual outcomes, such as poor organizational identification (Atkinson, 1984), and high level stressors (Lewin, 2005) like low commitment.

The main goal of socialization tactics for this cohort of newcomers is to supply them with relevant information about the project and provide any specific skills that they lack.

Individual and informal socialization tactics provide newcomers with a more individualistic approach that allows a stronger relationship between the alliance organizations and/or between the newcomer and the new organization. Providing such activities may result in two key benefits. First, it may allow newcomers to access information and resources more easily, and help them with their sense-making, especially for understanding unwritten rules and learning tacit information. Second, they further facilitate development of social and work relationships, as newcomers are introduced to more insiders (Rollag, Parise, & Cross, 2005).

A particularly beneficial form of individual tactics could be mentoring as it may provide newcomers with key information and access to already established communication network (Klein & Weaver, 2000). Complementing this, informal tactics suggest that on-the-job training for this cohort of newcomers might be very important, as training with a more experienced organizational member may enable newcomers to understand how things work,

who is really important, and how to get things done (Chao, 1997; Klein & Weaver, 2000). As these newcomers are specialists, we believe that a more formal training will not be beneficial, as the key role of such newcomers is to contribute to the project with a very specific expertise, thus they need to master only specific work tasks, rather than a broader set of knowledge, skills and abilities (Lee & Maurer, 1997).

As work task complexity is high, and project team members might prefer short term instruction and training in order to gain knowledge for a specific project (Lee & Maurer, 1997), using *random and serial tactics* might be beneficial and further enhance the effects of individual and informal tactics. When exposed to random tactics, newcomers will learn and train when facing a specific problem. As work task complexity is high, newcomers may also be challenged with more specific problems that cannot be forecast and adequately trained beforehand (Chao, 1997). It has been proposed that such on-site training may be complemented and enhanced by buddy systems, support groups, and mentors in place (Broad & Newstrom, 1992). This support is provided by serial tactics, where a more experienced organizational member is paired with the newcomer to provide greater opportunities for newcomer-focused learning (Ashforth et al., 2007). Moreover, the psychosocial support provided by mentors includes counselling, affirmation, and friendship (Thomas & Lankau, 2009), which engenders trust, guidance, and encouragement (Lankau & Scandura, 2002).

Proposition 2. Project newcomers in “External experts project team members” group will exhibit more positive adjustment outcomes when socialization tactics are individual, informal, random and/or serial.

3.3 Quadrant 3: External project team members

Quadrant three (the left bottom part of the matrix in Figure 1) represents the outsourced employees working on a low complexity work tasks. This cohort of employees provides

projects with low complexity skills, knowledge and abilities and thus have low strategic value for the organization. The limited uniqueness of these skills provides a disincentive for organization to invest significantly towards employee development (Lepak & Snell, 1999) in fact it may motivate organization to reduce costs while hiring external contractual workforce. This will reflect in low association with firm and explicit performance expectations, resulting in a more transactional psychological contacts with heavy focus on short-term economic exchanges (Rousseau, 1995). Moreover, relationships between organizations and individuals may not be aimed at building organizational commitment (Rousseau & Parks, 1993).

This category of employees includes independent external workers who are more autonomous and mobile, and more dependent workers who rely much more on organizations (e.g. contract termination upon project conclusion and rehiring for another project in the same organization) (Connelly & Gallagher, 2006). Examples of such jobs in projects can be administrative staff including administration support and other work tasks, like data entry or translations, for instance.

This suggests that the organizational socialization process might draw from socialization tactics that are more collective as more new support newcomers might join the project at the same time. *Collective and formal tactics* seem to be especially important as they are strongly related to job performance (Bauer et al., 2007; Saks et al., 2007). These tactics offer newcomers joining as a cohort with a common message about work tasks (e.g., what is right and what is wrong) and team members that they will work with (Van Maanen & Schein, 1979). Moreover, grouping newcomers and training them apart from other employees can be a cost effective saving mechanism for organizations (Riordan, Weatherly, Vandenberg, & Self, 2001). As a consequence, general activities might give newcomers bare minimum levels of most important information to speed them in their work, with other activities in place to provide more nuanced information about work tasks (Klein & Polin, 2012). Furthermore,

formal tactics have been found to be positively related to greater organizational commitment (Klein & Weaver, 2000; Saks et al., 2007). Even if the goal of socialization and HR systems is not necessarily building organizational commitment, the usage of such socialization tactics can buffer the negative effect of conformance message delivered by the HR system where compliance is sought from individuals (Lepak & Snell, 1999). Besides, it can also attenuate the negativity communicated by the short term contracts (De Cuyper et al., 2008), as individuals included in such tactics receive information to lower their role ambiguity.

Sequential tactics are often part of formal training and might be useful for supportive job roles such as support activities of the project. Newcomers cannot move on to the next work task before mastering the previous one (Kramer, 2010). Cable and Parsons (2001) found that newcomers shifted their values toward their organizations' values when they were exposed to sequential tactics. If these tactics positively influence person-organizational fit and provide work task learning, we suggest they may be suited to newcomers in supportive roles. *Fixed tactics* will provide newcomers with important clues when certain events happen (Kramer, 2010). For example, a pay rise will be related to a time period or an accomplishment of a specific work task (e.g. a milestone in a project) (Lepak & Snell, 2002). In general, the effects of sequential and fixed tactics not only reinforce the person-organization fit (Cable & Parsons, 2001), but are also related to greater performance proficiency (Hart & Miller, 2005). Both outcomes, in our opinion, are beneficial for this cohort of newcomers and for the success of project in general.

Proposition 3. Project newcomers in "External project team members" group will exhibit more positive adjustment outcomes when socialization tactics are collective, formal, sequential and/or fixed.

3.4 Quadrant 4: Internal project team members

Quadrant 4 (the top left part of the matrix in Figure 1) presents internal employees working on a low complex work task. Skills, abilities and knowledge provided by such project workers are valuable for the organization and widely available in the labour market, yet are not strategically important for the project success. This reflects in a paradox, where organizations on one hand want to internalize employment (Hamel & Prahalad, 1994), and on the other hand, may be hesitant to invest in internal development (as employees with generic skills may leave and transfer the former employer's investments to another firm) (Lepak & Snell, 1999). In this case, organizations might want to hire employees with already developed skills and hold them internally, realizing immediate benefits for the project. This might reflect in organizations saving on developmental activities while gaining instant access to a wide variety of capabilities that may result in instant benefits (Becker, 1964). In order to manage these employees, organizations may strive to use mutual beneficial relationships (Tsui, Pearce, Porter, & Hite, 1995). In essence, such relationships build on the notion that both the employees and the organizations are likely to continue the relationship as long as both continue to benefit (Lepak & Snell, 1999). These cohorts of employees are less committed to the organization and more focused on their career, as careerist do not typically seek lifelong employment within a particular firm and their specific training in a particular occupation allows them to effectively sell their talents (Lepak & Snell, 1999, 2002; Rousseau, 1995).

Typical roles involved in projects that can be considered as internal supportive workers are various day-to-day project work tasks, which may also require low level technical knowledge regarding the specific project. Yet, organizations may still need to provide some "initial training" (Kramer, 2010, p. 72), to deliver company specific knowledge learning and knowledge sharing expectations (Brymer et al., 2014), but more institutionalized tactics will

provide newcomers with this for immediate use, in a more cost effective way for the organization.

Collective and formal tactics provide newcomers with fast, relevant information about not only their work tasks, but also about their group and organization, thus providing structural opportunities for learning which are salient and relatively intense. Yet, the level of general training and development provided to the newcomer will be minor than in the quadrant 1 and 2. Collective and formal tactics provide newcomers with an understanding of where to find resources (e.g., the right individuals for the problem they face) and who to approach to get things moving within the formal organizational structure (Klein & Heuser, 2008). These tactics therefore support newcomers in developing maps of key contacts in different departments for coordination and communication that broadly suit the need of various projects, as they might work on multiple projects simultaneously. A common instrument in such tactics are orientation programs, which were found to be positively related to learning about goals and values, organizational history, people, and job satisfaction (Klein & Weaver, 2000).

Similarly to the previous quadrant, *sequential and fixed tactics* should complement the supportive role of such newcomers, allowing them to master the roles quickly and effectively, strengthening the positive alignment between them and the organization, and adjusting their values with the organizational ones (Cable & Parsons, 2001). *Investiture tactics* signal the value and importance of newcomers to the organizations, hence strengthening commitment. These newcomers might still be given discretion for various work tasks and thus provide greater person-organization fit (Cooper-Thomas, van Vianen, & Anderson, 2004). Supporting our arguments, Saks and colleagues (2007) found that investiture tactics most strongly predict both socialization outcomes, proximal (e.g. role ambiguity and role conflict) and distal (e.g. job satisfaction, organizational commitment, and intentions to quit). Therefore, we expect

that investiture tactics will effectively help newcomers receive systematic, accurate, and consistent information from various sources in the organization and also embed them effectively in organizational communication network (Fang et al., 2011).

Lastly, newcomers might benefit from a more “laissez faire” approach, where no formal guidance is provided to them. This could be due to lack of management concerns, often because the previous person occupying such position has left, or the position is newly created (Kramer, 2010). We suggest *disjunctive tactics* to be used more strategically with internal newcomers when organizations would like to enhance role innovation of such employees. The lack of formal guidance will motivate them to actively shape their jobs and search for information compensating for the negative effects that more institutionalized tactics can have on role innovation (Ashforth & Saks, 1996). We argue that, if implemented correctly, for example with the informal buddy system (Rollag et al., 2005), such tactics can provide newcomers with important social support but also motivate them to seek information from others.

Proposition 4. Project newcomers in “Internal project team members” group will exhibit more positive adjustment outcomes when socialization tactics are collective, formal, sequential, fixed, disjunctive and/or investiture.

Figure 2 provides a summary of all types of newcomers that might join a project team, as well as the socialization tactics that might be suitable in order to socialize each type more effectively.

Insert Figure 2 about here

4. Discussion

Drawing on literature from project management, HRM and organizational socialization, we theorize and explore the notion that project team members can have a different strategic value for the organization. This is based on the suggestion that newcomers might have different knowledge, skills, and abilities, and can be grouped based on two salient dimensions – employment mode and project work task complexity. Such categorization, based on the socialization literature, also suggests that newcomers in each group might need different socialization tactics to be adjusted more effectively.

4.1. Theoretical implications

Our socialization framework of project team members yields several theoretical implications. First, we attempt to explore the socialization process in a less explored context – project work. In doing so, we help to advance our understanding of the socialization process in less permanent working arrangements (Ashforth et al., 2007) which are becoming very popular in everyday businesses (Katz, 1997). Framing this in a project management context explores the notion suggested by previous literature that not all newcomers joining the organization are the same in terms of knowledge, skills, and abilities (cf. Ashford & Nurmohamed, 2012; Batistič, 2017). This complements and expands previous research in the project management literature which suggests that projects might have different combinations of workers (Gemino et al., 2015) which may need different socialization approaches to achieve organizational or project goals (Andersen, 2016). We argue that project team members, as they participate and work on time limited activities, can be categorized based on their employment mode and work task complexity.

Considering the uniqueness of project work and project management literature, we focus on one salient characteristic of project success – project complexity, which is related to work task complexity. Projects can consist of low and/or high complex work tasks – this differentiation consequently leads to a different workflow structure, where high complexity

work tasks demand greater communication, connection and behavioural synchronization; and the opposite is required for the low complex work tasks (Ployhart & Moliterno, 2011).

Following suggestions from HR literature (Atkinson, 1984; Lepak & Snell, 1999), we emphasize that project team members can be sourced internally and externally. Which source is preferred by different organizations will vary, but in general is related to the cost and benefits in recruiting and training various project workers (Snell, 2006). Internal sourcing is largely valuable when long term psychological contracts build on commitment (Rousseau, 1995) and the expected strategic value of such project team members is high (Fulmer & Ployhart, 2014). For project team members, who can be easily traced in labour market and of low strategic value for the project – external members will be sourced (Lepak & Snell, 1999), making employment relations in project more instrumental in their nature.

The combination of these two dimensions leads to four newcomers' groups – Internal core project team members, External expert project team members, External project team members and Internal project team members, which represent four distinct types of project team members that organizations need in order to complete projects successfully. Such classification has implications for the socialization and project management literature and how the socialization process can be carried out as it suggests that certain socialization activities might be more beneficial for one cohort than others (Andersen, 2016; Gemino et al., 2015). By incorporating both aforementioned dimensions, team members can be classified by their strategic value for the organization and the project. Such classification also acknowledges that some team members might need to be socialized for the first time (joining the project as external members) and internal project members need to be re-socialized again, as they are entering a new context, full of uncertainties regarding project social aspects (e.g., how to feel committed to a new team) and work task aspects (e.g., where to find help) (Kramer, 2010, Ashforth et al, 2007).

This expands the project management literature by providing a classification of project team members. Such classification goes beyond recent studies in project management literature which suggested that project newcomers need different socialization tactics (Gemino et al., 2015; Xu et al., 2017), as we argue that newcomers joining a project need to be differentiated also according to their expectations and goals (cf. Ashford & Nurmohamed, 2012). Further, this also adds to the socialization literature by providing a specific classification of newcomers that might join the organization as previous research was mostly just acknowledging the need not to see newcomers as being the same – having the same characteristics – in the socialization process (cf. Ashford & Nurmohamed, 2012; Batistič, 2017).

Second, by offering a multidimensional taxonomy of project team members, we identified which socialization tactics may yield the most promising results for each category in order for the project members to become adjusted quickly. Literature on project management allude that socialization is important for various desired outcomes, such as knowledge sharing (Fernie et al., 2003; Gemino et al., 2015), and that different newcomers might need different socialization initiatives (Andersen, 2016; Xu et al., 2017). Yet it is unclear what socialization practices can be used together to achieve synergetic effects and lead to a more homogeneous project teams (Andersen, 2016) allowing greater dissemination of knowledge and quicker adjustment (Batistič, 2017). Integrating a number of relevant literature streams, we develop a framework capturing a wide variety of usages of socialization tactics in project contexts.

Drawing on past research, we argue, that core project newcomers including internal core project team members and external expert project team members could be socialized by using more individualized approaches. As their work task complexity is high and they need a lot of communication to carry out their work task, we believe, in line with the speculation put forward by Cable and Parsons (2001), core project workers might prefer a more focused

socialization approach. Effectively building their social networks can provide them with valuable non redundant information, social support, sense of acceptance, and an enhanced perception of being valued by the organization (Fang et al., 2011), which consequently results in greater probability of project success. Organizations need to invest in these two key categories of newcomers to benefit in the long term. Such investments (e.g. training), might need to be implemented more on a personal and localized experience rather than at the institutionalized level (Chao, 1997). This reinforces the notion that these key newcomers need a more personalized approach to be more effectively adjusted in the project group, which potentially allows them to share their knowledge with others (Andersen, 2016). Initiatives such as mentoring, buddy systems, and informal meetings might be used as part of this more individualized approach.

On the contrary, when looking at the more peripheral project team members, namely external project team members and internal project team members, more institutionalized tactics could be better suited to provide guidance and maintain the socialization cost at low levels. We argue that the main objective of the socialization tactics is to provide newcomers with relevant information and support in order to allow them to get adjusted as quickly as possible. In maintaining low costs, organizations could use more group based socialization activities (Snell, 2006). In general, these group activities, where newcomers are trained together, reinforce their fit with the organization (Cable & Parsons, 2001), but also relate to lower role ambiguity, role conflict, and intention to quit, as well as higher work task mastery, job satisfaction, and organizational commitment (Saks & Ashforth, 1997). Such outcomes are not only beneficial for internally sourced project newcomers, but also help with externally contracted newcomers.

Finally, as projects are unique, time limited activities; two of the twelve forms of socialization tactics may not be as useful, namely variable tactics and divestiture tactics.

Variable tactics, in our opinion are problematic, as they do not have a time limit for the training of each skill. Complex work tasks and skills need time to train, but as time in project is crucial, organizations should rather use fixed tactics and try to help, especially core newcomers, master needed skills as soon as possible. Studies show that variable tactics can raise perception of uncertainty, and lower person-organization fit (Cable & Parsons, 2001), potentially resulting in lower fit with the organizational or project culture. Similarly, divestiture tactics might at first seem to enhance productivity, as newcomers are encouraged to align their norms and beliefs with the organization, stripping away their identity (Ashforth & Saks, 1996). Yet, we believe that the short term positive outcomes do not justify the long term potential negative ones. For example, organizational initiative in this group of tactics can cause high levels of stress, ethical conflicts, and high emotional exhaustion (Kammeyer-Mueller, Simon, & Rich, 2012), as well as resulting in lower person-organizational fit which can negatively relate to adopting organizational culture (van Vianen & De Pater, 2012).

Our taxonomy shows that the application of the different socialization tactics as equally important for every newcomer (e.g. Jones, 1986; Saks et al., 2007) may need to be modified. We are proposing a novel view that includes calls from socialization and project management literature in differentiating the newcomers joining the organization, also looking at different socialization tactics, which can be used in specific contexts (Ashforth & Saks, 1996). In doing so we are also expanding previous research in project management literature about socialization (Xu et al., 2017), since we provide a broader use of socialization tactics and list specific activities that can be used under various socialization tactics. This can help socialize new project members more effectively and also look for synergetic effects of combining different socialization tactics, ultimately making the project team more homogeneous (Andersen, 2016) and leading not only to adjustment, but also to other beneficial outcomes for the project, such as knowledge sharing (Fernie et al., 2003).

4.2. Practical implications

This paper offers several implications useful for project stakeholders in practice. Firstly, it suggests that organizations should bring into use an internal interpretation and classification of the projects' complexity levels. Various levels of work task complexity require different behavioural synchronization and coordination among team members (Ployhart & Moliterno, 2011). Moreover, project complexity is rising and highly complex projects require extraordinary level of management in order to succeed according to the predefined specifications (Bakhshi et al., 2016; Williams, 1999). Once the complexity level of the project is determined, the structure of the project team members can be addressed. This is done according to the available internal and required external employees, based on their strategic value and the uniqueness of knowledge, skills, and abilities that newcomers may possess. However, such classification of newcomers needs to be carried out in a transparent way. Procedural justice, which refers to the perceived fairness of the methods used to make organizational decisions (Folger & Greenberg, 1985), needs to be considered as it relates to attitudes towards organizations. Transparent selection process might also positively influence newcomers' procedural justice (Scott, Montes, & Irving, 2012), allowing organizations to carry out the socialization more effectively.

Secondly, following the categorization of work task complexity level and employment mode, project team members are categorized in four categories. This helps the organizations and/or project managers to apply the adequate proposed socialization tactics to the project team members in every individual category. Team members in each of the listed categories receive adequate attention and support, which results in faster socialisation of team members, and may translate to better productivity, job satisfaction and diminished turnover (e.g. Allen, 2006). However, our suggestions are not meant to be prescriptive. We based possible combinations of tactics on integrating various theoretical perspectives, yet other

combinations can be used, which depends on the organization's strategy and goals. No matter which combination is used, organizations should take into consideration the purpose of the socialization process and tactics as one of the most effective instruments at their disposal (Batistič & Kaše, 2015), that is lowering ambiguity and uncertainty that is present upon entering a new organization (Ashforth et al., 2007). Overall, independently of the tactics used in the socialization programmes, the main goal of these activities might be to reinforce the organizational culture or group climate and give newcomers a sense of purpose, in turn reflecting in higher newcomers' performance (Klein & Polin, 2012).

4.3. Limitations and future research

Our conceptualization of the socialization tactics for different groups of project team workers based on employment mode and work task complexity as a component of project complexity, makes an important next step in better understanding the organizational socialization process, but also includes limitations, which point out several directions that can be theorized about or investigated in future research.

First, our framework invokes two extremes of employment mode, yet it simplifies them and does not acknowledge more complex situations that can arise in real-life projects. For example, as literature suggests that when looking at contractual workers, HR practices from the outsourcing organization might influence not only the employee commitment towards the outsourcing organization, but also the commitment towards the client organizations (Fontinha, Chambel, & De Cuyper, 2012). Consequently, it would be interesting to look at the socialization tactics in place in the outsourcing organization and how such socialization can be reinforced or how may it hinder the experience of the client project organization. As a result, future research might employ contractual workers' views and theories to examine such countervailing situation.

Second, we mainly focused on the organizational side of the socialization in an attempt to balance comprehensiveness and parsimony. However, it is equally important to look at the individual side of socialization. For instance, the interactionist approach, which looks at the organization and at the newcomer simultaneously is gaining importance in the socialization literature (Ashford & Nurmohamed, 2012; Batistič & Kaše, 2015). We suggest that proactivity might be an important characteristic to seek in newcomers in the selection process when looking for core project workers. Yet, proactivity is not always beneficial. Being proactive is associated with various costs, such as social costs – cost of exchange of information or seeking information from others (Nebus, 2006). Moreover, proactivity might not be beneficial to the organization, but rather to the newcomers to achieve personal goals, leading to an interesting paradox (Campbell, 2000). While organizations may seek proactivity, they may want such proactivity to be focused on organizational goals. Selection process seems to be one of the mechanisms at organizations' disposal to complement socialization (Anderson, 2001) in order to recruit more aligned organization proactive newcomers.

Third, we did not acknowledge time dependency in the socialization process (Ashforth, 2012). Our framework depicts the socialization process largely as a linear time development process, without acknowledging nonlinear or other alternative socialization development patterns. Thus, one socialization tactic might turn out to be more effective later on and not at the very beginning, when newcomers join. This seems to be especially relevant for project environments. Even if we believe that our framework can be applied to all phases of the project (formation vs later stages) it could be the case that some socialization tactics or contextual variables are more important at specific phases of project life cycle. For example, informal tactics for internal core project team members might be more important later on (e.g., initiation, planning, execution and closure), when more information is needed about the

social structure of the project team. Another interesting venue would be to look at the relationship between formal initiatives in place (socialization tactics) and emerging states (like organizational culture) and how the two might be time dependent. Ashforth et al. (2007) suggested that culture can be an antecedent of socialization tactics.

Finally, by placing the groundings on socialization of newcomers in project work environment, this study encourages scholars to explore new avenues in this field. This involves empirical investigation as well as the theoretical examination of additional constructs (e.g. linking the socialization process in project teams with project performance, organizational culture, project manager etc.) (cf. Xu et al., 2017).

References

- Allen, D. G. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? *Journal of Management*, 32(2), 237-256.
- Andersen, E. S. (2016). Do project managers have different perspectives on project management? *International Journal of Project Management*, 34(1), 58-65.
- Andersen, E. S., Birchall, D., Jessen, S. A., & Money, A. H. (2006). Exploring project success. *Baltic Journal of Management*, 1(2), 127-147.
- Anderson, C. M., Riddle, B. L., & Martin, M. M. (1999). Socialization processes in groups. In L. R. Frey, D. S. Gouran & M. S. Poole (Eds.), *The handbook of group communication: Theory and research* (pp. 139-163). Thousand Oaks, CA: Sage.
- Anderson, N. (2001). Towards a Theory of Socialization Impact: Selection as Pre-Entry Socialization. *International Journal of Selection and Assessment*, 9(1-2), 84-91.
- Anderson, N., & Thomas, H. D. C. (1996). Work group socialization. In M. A. West (Ed.), *Handbook of work group psychology* (pp. 423-450). Chichester: John Wiley & Sons Ltd.
- Ashford, S., & Nurmohamed, S. (2012). From past to present and into the future: A hitchhiker's guide to the socialization literature. In C. R. Wanberg (Ed.), *The Oxford handbook of organizational socialization* (pp. 8-24). Oxford: Oxford University Press.
- Ashforth, B. E. (2001). *Role transitions in organizational life: An identity-based perspective*. Mahwah, New Jersey: Lawrence Erlbaum.
- Ashforth, B. E. (2012). The role of time in socialization dynamics. In C. R. Wanberg (Ed.), *The Oxford handbook of organizational socialization* (pp. 161-186). Oxford: Oxford University Press.
- Ashforth, B. E., & Saks, A. M. (1996). Socialization Tactics: Longitudinal Effects on Newcomer Adjustment. *The Academy of Management Journal*, 39(1), 149-178.
- Ashforth, B. E., Sluss, D. M., & Harrison, S. H. (2007). Socialization in organizational contexts. In G. P. Hodgkinson & J. K. Ford (Eds.), *International review of industrial and organizational psychology 2007* (pp. 1-70): John Wiley & Sons Ltd.

- Atkinson, J. (1984). Manpower strategies for flexible organisations. *Personnel Management*, 16(4), 28-31.
- Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management*, 17(6), 337-342.
- Baccarini, D. (1996). The concept of project complexity—a review. *International Journal of Project Management*, 14(4), 201-204.
- Bakhshi, J., Ireland, V., & Gorod, A. (2016). Clarifying the project complexity construct: Past, present and future. *International Journal of Project Management*, 34(7), 1199-1213. doi: <http://dx.doi.org/10.1016/j.ijproman.2016.06.002>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103-118.
- Batistič, S. (2017). Looking beyond - socialization tactics: The role of human resource systems in the socialization process. *Human Resource Management Review*. doi: <http://dx.doi.org/10.1016/j.hrmr.2017.06.004>
- Batistič, S., & Kaše, R. (2015). The organizational socialization field fragmentation: a bibliometric review. *Scientometrics*, 104(1), 121-146. doi: 10.1007/s11192-015-1538-1
- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007). Newcomer Adjustment During Organizational Socialization: A Meta-Analytic Review of Antecedents, Outcomes, and Methods. *Journal of Applied Psychology*, 92(3), 707-721.
- Bauer, T. N., & Erdogan, B. (2014). Delineating and Reviewing the Role of Newcomer Capital in Organizational Socialization. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 439-457.
- Becker, G. S. (1964). *Human Capital. A theoretical and empirical analysis, with special reference to education*. New York: National Bureau of Economic Research.
- Becker, G. S. (1976). *The economic approach to human behavior*. Chicago: University of Chicago Press.
- Bell, B. S., & Kozlowski, S. W. J. (2002). A typology of virtual teams implications for effective leadership. *Group & Organization Management*, 27(1), 14-49.

- Bosch-Rekvelde, M., Jongkind, Y., Mooi, H., Bakker, H., & Verbraeck, A. (2011). Grasping project complexity in large engineering projects: The TOE (Technical, Organizational and Environmental) framework. *International Journal of Project Management*, 29(6), 728-739.
- Brett, J. M. (1984). Job transitions and personal and role development. In K. M. Rowland & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 2, pp. 155-185). Greenwich, CT: JAI Press.
- Broad, M. L., & Newstrom, J. W. (1992). *Transfer of training: Action-packed strategies to ensure high payoff from training investments*. Reading, MA: Addison-Wesley.
- Brymer, R. A., Molloy, J. C., & Gilbert, B. A. (2014). Human capital pipelines: Competitive implications of repeated interorganizational hiring. *Journal of Management*, 40(2), 483-508.
- Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person–organization fit. *Personnel Psychology*, 54(1), 1-23.
- Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *The Academy of Management Executive*, 14(3), 52-66. doi: 10.5465/ame.2000.4468066
- Carillo, K., Huff, S., & Chawner, B. (2017). What makes a good contributor? Understanding contributor behavior within large Free/Open Source Software projects – A socialization perspective. *The Journal of Strategic Information Systems*. doi: <http://dx.doi.org/10.1016/j.jsis.2017.03.001>
- Chao, G. T. (1997). Unstructured training and development: The role of organizational socialization. In S. W. J. Kozlowski, K. Kraiger, E. Salas & M. S. Teachout (Eds.), *Improving training effectiveness in work organizations* (pp. 129–151). Mahwah: Erlbaum.
- Chatman, J. A. (1991). Matching People and Organizations: Selection and Socialization in Public Accounting Firms. *Administrative Science Quarterly*, 36(3), 459-484.
- Connelly, C. E., & Gallagher, D. G. (2006). Independent and dependent contracting: Meaning and implications. *Human Resource Management Review*, 16(2), 95-106. doi: <http://dx.doi.org/10.1016/j.hrmr.2006.03.008>
- Cooper-Thomas, H. D., van Vianen, A., & Anderson, N. (2004). Changes in person–organization fit: The impact of socialization tactics on perceived and actual P–O fit. *European Journal of Work and Organizational Psychology*, 13(1), 52-78.

- De Cuyper, N., de Jong, J., De Witte, H., Isaksson, K., Rigotti, T., & Schalk, R. (2008). Literature review of theory and research on the psychological impact of temporary employment: Towards a conceptual model. *International Journal of Management Reviews*, *10*(1), 25-51. doi: 10.1111/j.1468-2370.2007.00221.x
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational Images and Member Identification. *Administrative Science Quarterly*, *39*(2), 239-263. doi: 10.2307/2393235
- Dyer, J. H. (1996). Does Governance Matter? Keiretsu Alliances and Asset Specificity As Sources of Japanese Competitive Advantage. *Organization Science*, *7*(6), 649-666.
- Ellis, A. M., Bauer, T. N., Mansfield, L. R., Erdogan, B., Truxillo, D. M., & Simon, L. S. (2015). Navigating uncharted waters: Newcomer socialization through the lens of stress theory. *Journal of Management*, *41*(1), 203-235. doi: 10.1177/0149206314557525
- Engwall, M., & Jerbrant, A. (2003). The resource allocation syndrome: the prime challenge of multi-project management? *International journal of project management*, *21*(6), 403-409.
- Evans, W. R., & Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*, *31*(5), 758-775.
- Fagan, J., & Ployhart, R. E. (2015). The information processing foundations of human capital resources: Leveraging insights from information processing approaches to intelligence. *Human Resource Management Review*, *25*(1), 4-11. doi: <http://dx.doi.org/10.1016/j.hrmr.2014.09.003>
- Fang, R., Duffy, M. K., & Shaw, J. D. (2011). The organizational socialization process: Review and development of a social capital model. *Journal of Management*, *37*(1), 127-152.
- Feldman, D. C. (1989). Socialization, resocialization, and training: Reframing the research agenda. In I. L. Goldstein (Ed.), *Training and development in organizations* (pp. 376-416). San Francisco: Jossey-Bass.
- Fernie, S., Green, S. D., Weller, S. J., & Newcombe, R. (2003). Knowledge sharing: context, confusion and controversy. *International Journal of Project Management*, *21*(3), 177-187.

- Fisher, C. D. (1986). Organizational socialization: An integrative review. In K. M. Rowland & G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 4, pp. 101-145). Greenwich, CT: JAI Press.
- Folger, R., & Greenberg, J. (1985). Procedural justice: An interpretive analysis of personnel systems. In K. Rowland & G. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 3, pp. 141-183). Greenwich, CT: JAI Press.
- Fontinha, R., Chambel, M. J., & De Cuyper, N. (2012). HR attributions and the dual commitment of outsourced IT workers. *Personnel Review*, *41*(6), 832-848. doi:10.1108/00483481211263773
- Fulmer, I. S., & Ployhart, R. E. (2014). "Our Most Important Asset": A Multidisciplinary/Multilevel Review of Human Capital Valuation for Research and Practice. *Journal of Management*, *40*(1), 161-192.
- Garsten, C. (1999). Betwixt and between: Temporary employees as liminal subjects in flexible organizations. *Organization Studies*, *20*(4), 601-617.
- Gemino, A., Reich, B. H., & Sauer, C. (2015). Plans versus people: Comparing knowledge management approaches in IT-enabled business projects. *International Journal of Project Management*, *33*(2), 299-310.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston: Harvard Business School Press.
- Hart, Z. P., & Miller, V. D. (2005). Context and message content during organizational socialization. *Human Communication Research*, *31*(2), 295-309. doi: 10.1111/j.1468-2958.2005.tb00873.x
- Hart, Z. P., Miller, V. D., & Johnson, J. R. (2003). Socialization, resocialization, and communication relationships in the context of an organizational change. *Communication Studies*, *54*(4), 483-495.
- Hyväri, I. (2006). Success of projects in different organizational conditions. *Project Management Journal*, *37*(4), 31-41.
- Ika, L. A. (2009). Project success as a topic in project management journals. *Project Management Journal*, *40*(4), 6-19.

- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *The Academy of Management Journal*, 29(2), 262-279.
- Kammeyer-Mueller, J. D., Simon, L. S., & Rich, B. L. (2012). The psychic cost of doing wrong: Ethical conflict, divestiture socialization, and emotional exhaustion. *Journal of Management*, 38(3), 784-808.
- Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology*, 88(5), 779-794.
- Kappelman, L. A., McKeeman, R., & Zhang, L. (2006). Early warning signs of IT project failure: The dominant dozen. *Information systems management*, 23(4), 31-36.
- Katz, R. (1997). Organizational socialization and the reduction of uncertainty. In R. Katz (Ed.), *The human side of managing technological innovation: A collection of reading* (pp. 25-38). New York:: Oxford University Press.
- Klein, H. J., & Heuser, A. E. (2008). The learning of socialization content: A framework for researching orientating practices. *Research in Personnel and Human Resources Management*, 27, 279-336.
- Klein, H. J., & Polin, B. (2012). Are Organizations On Board with Best Practices Onboarding? In C. R. Wanberg (Ed.), *The Oxford Handbook of Organizational Socialization* (pp. 267-287). Oxford: Oxford University Press.
- Klein, H. J., & Weaver, N. A. (2000). The effectiveness of an organizational-level orientation training program in the socialization of new hires. *Personnel Psychology*, 53(1), 47-66.
- Koene, B., & van Riemsdijk, M. (2005). Managing temporary workers: work identity, diversity and operational HR choices. *Human Resource Management Journal*, 15(1), 76-92. doi: 10.1111/j.1748-8583.2005.tb00141.x
- Kramer, M. W. (2010). *Organizational Socialization: Joining and leaving organizations*. Cambridge: Polity Press.
- Ladge, J. J., & Greenberg, D. N. (2015). Becoming a working mother: Managing identity and efficacy uncertainties during resocialization. *Human Resource Management*, 54(6), 977-998.

- Lankau, M. J., & Scandura, T. A. (2002). An Investigation of Personal Learning in Mentoring Relationships: Content, Antecedents, and Consequences. *The Academy of Management Journal*, 45(4), 779-790.
- Lazarova, M., & Tarique, I. (2005). Knowledge transfer upon repatriation. *Journal of World Business*, 40(4), 361-373. doi: <http://dx.doi.org/10.1016/j.jwb.2005.08.004>
- Lee, T. W., & Maurer, S. D. (1997). The retention of knowledge workers with the unfolding model of voluntary turnover. *Human Resource Management Review*, 7(3), 247-275. doi: [http://dx.doi.org/10.1016/S1053-4822\(97\)90008-5](http://dx.doi.org/10.1016/S1053-4822(97)90008-5)
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24(1), 31-48.
- Lepak, D. P., & Snell, S. A. (2002). Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource Configurations. *Journal of Management*, 28(4), 517-543.
- Lewin, D. (2005). The dual theory of human resource management and business performance: Lessons for HR executives. In D. U. M. Losey, S. Meisinger & R. Narramore (Eds.), *The future of HR: 50 thought leaders call for change* (pp. 285-292). New York: John Wiley.
- Liu, A. M. M. (1999). A research model of project complexity and goal commitment effects on project outcome. *Engineering Construction and Architectural Management*, 6(2), 105-111. doi: 10.1046/j.1365-232x.1999.00082.x
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321-1339. doi: 10.1037/0021-9010.91.6.1321
- Morris, P., Pinto, J., & Söderlund, J. (2012). *The Oxford Handbook of Project Management*. Oxford: Oxford University Press.
- Nebus, J. (2006). Building collegial information networks: A theory of advice network generation. *Academy of Management Review*, 31(3), 615-637.
- Nyberg, A. J., Moliterno, T. P., Hale, D., & Lepak, D. P. (2014). Resource-Based Perspectives on Unit-Level Human Capital: A Review and Integration. *Journal of Management*, 40(1), 316-346.

- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, *36*(1), 127-150.
- Purcell, J. (1999). Best practice and best fit: Chimera or cul-de-sac? *Human Resource Management Journal*, *9*(3), 26-41. doi: 10.1111/j.1748-8583.1999.tb00201.x
- Riordan, C. M., Weatherly, E. W., Vandenberg, R. J., & Self, R. M. (2001). The effects of pre-entry experiences and socialization tactics on newcomer attitudes and turnover. *Journal of Managerial Issues*, *13*(2), 159-176.
- Rollag, K., Parise, S., & Cross, R. (2005). Getting new hires up to speed quickly. *MIT Sloan Management Review*, *46*(2), 35-41.
- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.
- Rousseau, D. M., & Parks, J. M. (1993). The contracts of individuals and organizations. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior*, (Vol. 15, pp. 1-43). Greenwich, CT: JAI Press.
- Saks, A. M., & Ashforth, B. E. (1997). Organizational Socialization: Making Sense of the Past and Present as a Prologue for the Future. *Journal of Vocational Behavior*, *51*, 234-279.
- Saks, A. M., Uggerslev, K. L., & Fassina, N. E. (2007). Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. *Journal of Vocational Behavior*, *70*(3), 413-446.
- Scott, K. A., Montes, S. D., & Irving, P. G. (2012). Examining the impact of socialization through trust. *Journal of Personnel Psychology*, *11*(4), 191-198.
- Snell, A. (2006). *Onboarding: Speeding the way up to productivity*. Dublin, CA: Taleo Research.
- Steinmacher, I., Silva, M. A. G., Gerosa, M. A., & Redmiles, D. F. (2015). A systematic literature review on the barriers faced by newcomers to open source software projects. *Information and Software Technology*, *59*, 67-85.
- Thomas, C. H., & Lankau, M. J. (2009). Preventing burnout: the effects of LMX and mentoring on socialization, role stress, and burnout. *Human Resource Management*, *48*(3), 417-432. doi: 10.1002/hrm.20288

- Tsui, A. S., Pearce, J. L., Porter, L. W., & Hite, J. P. (1995). Choice of employee-organization relationship: Influence of external and internal organizational factors. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 117-151). Greenwich, CT: JAI Press.
- Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), *Research in organizational behavior* (Vol. 1, pp. 209-264). Greenwich: JAI Press, Inc.
- van Vianen, A. E. M., & De Pater, I. E. (2012). Content and Development of Newcomer Person-Organization Fit: An Agenda for Future Research. In C. R. Wanberg (Ed.), *The Oxford Handbook of Organizational Socialization* (pp. 139-157). Oxford: Oxford University Press.
- Vidal, L.-A., & Marle, F. (2008). Understanding project complexity: Implications on project management. *Kybernetes*, 37(8), 1094-1110.
- Vidal, L.-A., Marle, F., & Bocquet, J.-C. (2011). Measuring project complexity using the Analytic Hierarchy Process. *International Journal of Project Management*, 29(6), 718-727.
- Wanberg, C. R. (2012). Facilitating Organizational Socialization: An Introduction. In C. R. Wanberg (Ed.), *The Oxford Handbook of Organizational Socialization* (pp. 17-21). Oxford: Oxford University Press.
- Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and Outcomes of Proactivity in the Socialization Process. *Journal of Applied Psychology*, 85(3), 373-385.
- Williams, T. M. (1999). The need for new paradigms for complex projects. *International Journal of Project Management*, 17(5), 269-273. doi: [http://dx.doi.org.idproxy.reading.ac.uk/10.1016/S0263-7863\(98\)00047-7](http://dx.doi.org.idproxy.reading.ac.uk/10.1016/S0263-7863(98)00047-7)
- Xu, L., Cui, N., Qualls, W., & Zhang, L. (2017). How socialization tactics affect supplier-buyer co-development performance in exploratory and exploitative projects: The mediating effects of cooperation and collaboration. *Journal of Business Research*.
- Zhu, J., & Mostafavi, A. (2017). Discovering complexity and emergent properties in project systems: A new approach to understanding project performance. *International Journal of Project Management*, 35(1), 1-12. doi: <http://dx.doi.org/10.1016/j.ijproman.2016.10.004>

FIGURE 1

Framework of the project team members' socialization

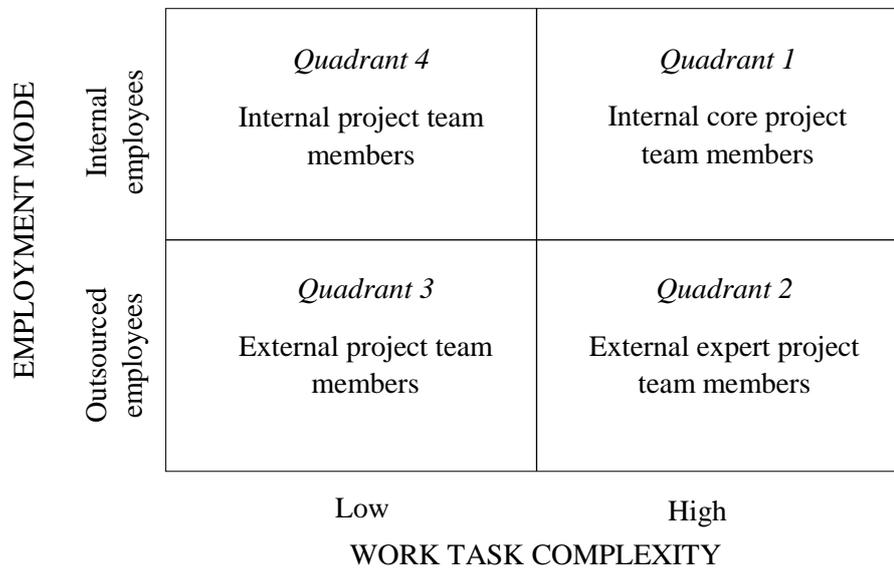


FIGURE 2

An integrative framework connecting socialization tactics, human resource systems, and project work task complexity

		Type of project team members			
		Internal core project team members	External experts project team members	External project team members	Internal project team members
Examples of jobs/roles:		<i>Project managers, other technical experts in the technical field of the project</i>	<i>Project engineers, IT developers, designers, etc.</i>	<i>Project administration support and other tasks (e.g. data entry, translations, etc.)</i>	<i>Various day-to-day project tasks with a possible requirement of low level technical knowledge regarding the specific project</i>
Socialization tactics	Collective			✓	✓
	Individual	✓	✓		
	Formal			✓	✓
	Informal	✓	✓		
	Sequential			✓	✓
	Random	✓	✓		
	Fixed			✓	✓
	Variable				
	Serial	✓	✓		
	Disjunctive				✓
	Investiture	✓			✓
	Divestiture				
Key authors:		Fang et al., 2011; Wanberg & Kammeyer-Mueller, 2000; Cable & Person, 2001	Chao, 1997; Klein & Weaver, 2000	Klein & Polin, 2012; Cable & Parsons, 2001	Klein & Heuser, 2008; Rollag et al., 2005; Cooper-Thomas et al., 2004

Note: Key authors refer to some key articles based on which we propose the relationships between specific organizational socialization tactics and the types of project team members.