**Can Senior Management Sustain Engagement and Identification to Support Learning? Designing Communities and Defining Goals**

**Introduction**

In this paper, we revisit Brown and Duguid’s (1991) thesis of organizational communities of practice (CoP), which enable learning that emerges through interaction and shared interests. Developed from Lave and Wenger’s (1991) treatise on CoP, their thesis posits that organizational CoP are self-governing, cut across organizational boundaries, and may rise or fall depending on the relevance of the problem, or issue, around which community members coalesce. During this process, Handley et al. (2007) suggest that engagement and identification emerge within the community as employees develop a sense of purpose to achieve shared goals.

Since this early work on organizational CoP, some have advocated that management can create and cultivate these communities in organizations to leverage learning and knowledge sharing. Indeed, Wenger et al. (2002) specifically advocated for senior management to take a more active role in deliberately designing such CoP in organizations. Others note how they might be institutionalized through formal governance and financial investment in their operations (McDermott and Archibald 2010; Duguid 2008a). Thus, organizationally-defined communities would reflect specific management interventions to engender groups of employees to engage in, and identify with, specific goals or tasks that management promotes (Duguid 2008a; Hemassi and Csanda, 2009; Kirkman et al. 2013). However, despite this promise, others have argued that it is not that simple to just ‘set up’ CoP and expect them to deliver (Pyrko et al., 2017).

In this paper, we extend the existing research on CoP to examine if organizationally-defined CoP can instill and sustain engagement and identification of individuals within organizationally mandated communities. While recent research by Pyrko and colleagues (2017, 2019) has built upon earlier work by Wenger-Traynor et al. (2014) and enhanced understanding of both challenges and critical aspects of CoP, we add unique value to this literature in five key ways. First, we go beyond the contribution of Pyrko et al., (2017) to provide empirical substance behind the complexities of operationalizing CoPs in practice. In particular, we show that the practices within CoP designed by top management teams have an impact on CoP members’ identification and engagement. Second, we show how organizationally-defined CoP may be part of a broader landscape of practice (LoP) (Wenger-Traynor et al., 2014), particularly if they are designed in relation to professional fields. Third, we show how engagement, objectives and practices, and not only identification and knowledgeability, are key to the functioning of CoP, and thus the connection to wider LoP. Fourth, we extend Pyrko et al.’s (2019) conceptualization of the importance of power and political tensions, but we also show that senior management’s leadership role in setting up CoP is equivocal in terms of their success. Finally, we extend the previous qualitative empirical work with a large quantitative study, thereby adding to our understanding of the complexity of CoP, and particularly to the challenge of setting them up (Pyrko et al., 2017; Harvey et al, 2013).

In our case company, which we will call ITServ, senior management created organizationally-defined CoP by establishing Professional Communities (PCs) to achieve specific organizationally-defined goals. As articulated in the PC value statement, the intention was that these communities should help build ‘a clear sense of identity’ and ‘contribute directly to [ITServ’s] business success’. This statement also defined the aim of the PCs at ITServ to develop and deliver 3 specific goals: to enhance role-based capabilities within the firm by defining structured and meaningful career paths to attract and retain talent (HRD); to support and encourage knowledge sharing to develop continuous improvement in customer engagement, productivity, service design and delivery, and customer satisfaction (knowledge sharing); and to develop strategic capabilities to differentiate ITServ from its competitors (strategic capability).

This paper contributes to and extends the communities of practice (CoP) discourse by addressing the following research question: *In organizationally defined communities, when community goals are defined and supported by senior management, does this sustain community member’s engagement and identification with the community?* Following the introduction, we elaborate on the importance of interaction, engagement and identification in the way social learning occurs. In doing so, we also present how our hypotheses have been developed. The next sections provide background to the organizationally-defined communities in ITServ, explicate the research methods for testing our research hypothesis, and present the results. Thereafter, we discuss the findings and mark our contribution recognizing also the limitations and opportunities for further research. The final section offers concluding remarks and considers implications for business practice.

**Communities of Practice: Sustaining Engagement and Identification**

Archibald et al. (2006), amongst others, observe that new forms of community-based activities are emerging in organizations that are aligned and integrated to achieve an organizations’ business goals by way of leveraging knowledge to improve performance. In this section, we explain how organizationally-defined CoP might become a means of encouraging engagement and identification.

***Engagement***

We define engagement, consistent with previous accounts, as the willingness to participate in social practices (Reckwitz 2002) within the group that contribute to achieving shared objectives (Duguid 2008a; Valentine, 2017). One of the defining characteristics of organizationally-defined communities is that engagement is encouraged through specific activities or goals defined and supported by senior management (Cox 2005; Borzillo 2009), although this is not always successful (Pryko et al. 2017), and some are content to remain in the shadows (Beane, 2019). In the CoP literature, Lave and Wenger (1991) argue that the emergence of engagement, a community commitment, depends significantly on the way that people are encouraged, or allowed, to participate by senior members of the community. This means that whether the CoP is emergent, or defined by the organizational hierarchy, the power to shape activities that support this potential engagement is generally held either within the organizational hierarchy (Borzillo 2009), or by those who hold some seniority or perceived mastery within the community (Lave and Wenger 1991; Contu and Willmott 2003; Ferlie et al. 2005; Contu, 2013). The interactions of group members can be naturally occurring, but the underlying principle is that they can still be influenced by specific configurations of practices adopted within a context (Duguid 2008b; McDermott and Archibald 2010). It is noted, for example, that these practices may be multi-level, being both local and part of a broader landscape of professional practice (Pyrko et al, 2019; Wenger-Trayner et al., 2014), meaning engagement in local CoP may be tempered by the legitimization of alternative practices through, for example, professional membership.

However, some advocate for a level of control that is clearly intended to manage community structures rather than allow them to cultivate these potentially independent practices (Borzillo 2009). They argue that even when senior management defines the goals of the community, it can facilitate and encourage engagement and help establish shared interests through specific structures. In our case company, these defined goals are human resource development, knowledge sharing, and strategic practices. This provides us with our first hypothesis:

*Hypothesis 1: PC members’ experience of how their PC supports the organizationally-defined PC goals will positively relate with their engagement with their PC.*

***Identification***

We define identification as the establishment of a relationship with and the acceptance of norms that exist within a specific community (Willem and Scarbrough 2006). One of the reasons organizations struggle to just ‘set up’ CoP (Pryko et al. 2017; Harvey et al 2013), is that their effectiveness depends on how potential participants engage with their goals (Valentine 2017). Thus, it is not just participation but becoming invested in the goals of a social network (Gherardi 2009; Handley et al. 2007; Swan et al. 2016) and accepting the explicit rules and implicit norms (Vadera, Pratt and Mishra 2013) that shapes identification as participants ‘think together’ (Pryko et al. 2017). Lave and Wenger describe the process of exclusion or inclusion in CoP as one of ‘legitimate peripheral participation’. The concept is central to their understanding of CoP (Lave 2008), although the concept is not often given the attention it deserves (Contu and Willmott 2003; Fuller et al. 2005; Macpherson and Antonacopoulou 2013). Essentially, it is a way to understand how relations between senior members of the community and activities (such as human resource development, knowledge sharing, and strategy) develop in relation to the way in which newcomers can, or choose to, belong to a CoP (Valentine 2017). Fuller et al. (2005) also argue that it is not just newcomers who have to develop this sense of belonging through involvement, but communities can resist managerial interventions (Warring and Currie 2009). They suggest that within each practice bundle, or activity system, within complex organizations even experienced members may at times have to re-negotiate their relationship with the community. The norms of accepted practice can change over time and experienced participants may have to learn how to adopt and identify with new practices and goals (Tyler and Blader 2005). Further, given that these new practices and goals are central to the establishment of competence, they go on to argue that identification depends significantly on whether the defined practice is accepted by community members as a legitimate activity, otherwise they will not actively participate (Vadera et al. 2013).

In other words, the more that they participate in, and conform with, the practices that represent the defined group norms or objectives, the deeper the level of group identification. This point is important since it is the processes, activities, and the ability for members to be involved and accept norms that engenders a sense of identification with the CoP (Handley et al. 2007). This is evident in the study by Soekijad et al. (2011), for example, where the embeddedness of community members was related to activities that supported brokering relationships. Thus, how members experience the social structures intended to support the PC goals (e.g., their relative importance, legitimacy and acceptance of practices or norms, and their subsequent depth of meaning for the community members) will influence their identification with their organizationally-defined network of actors. This provides our second hypothesis:

*Hypotheses 2: PC members’ experience of how their PC supports the organizationally-defined PC goals will positively relate to their identification with their PC.*

Investigations of traditional CoP also reveal that whilst members of such communities engage and identify with their CoP voluntarily, they also depend on having opportunities to do so (Thompson 2005). Amongst those who can influence this opportunity for engagement and identification are the managers or leaders of the CoP. We explore this next.

***Leadership Influence on Identification and Engagement***

Leaders—and by this we mean those with both the authority and responsibility according to their position within the formal hierarchy, network or community—have the power to provide opportunities to participate and to allocate resources, or to exclude certain constituents (Fuller et al. 2005; Jagasia et al. 2015). Cordery et al. (2009), for example, found that leaders could facilitate, and provide a positive environment in which participation is encouraged and supported. Soekijad et al. (2011) advocate leadership strategies for connecting individual learning to organizational capabilities. Kirkman et al. (2011) and McDermott and Archibald (2010) also argue that direct leadership involvement is important for CoP to flourish. For group practices and objectives to have any legitimacy, leaders must also role-model behaviours that support group norms (McLean-Parks, Li and Gallagher, 2010). Thus, the support by leaders can be symbolically significant, signaling to others important priorities. This also means that positive experiences by individual community members of their community leadership will likely influence whether employees are willing, or able, to invest their time in them. This provides our third and fourth hypotheses. These are all represented in Figure 1.

*Hypothesis 3: PC members’ experience of their community’s leadership effectiveness will positively relate to their engagement with their PC.*

*Hypothesis 4: PC members’ experience of their community’s leadership effectiveness will positively relate to their identification with their PC.*

<INSERT FIGURE 1 ABOUT HERE>

**Background of our Case Company**

At the time of the data collection, ITServ employed approximately 16,000 staff across Europe. The staff were primarily organized in a matrix structure, with each employee allocated to one of 4 business units depending on their area of project delivery (e.g. Government or Private). Cutting across these four business units were 16 professional communities (PCs). At the time of our research, the community concept had been established for 13 years. The PCs were organized in relation to either technical or functional competencies. This meant that every employee was allocated to both a customer-facing business unit and a PC. This also meant that they could move between projects within their own business unit and move across business units, but that they had stability in terms of their ‘professional community’ as an anchor for their functional or technical competence.

Each PC had a community sponsor (i.e. a formal PC leader) who was allocated this responsibility and was charged with ensuring that each PC had a strong sense of identity and purpose, that there were networking and communication opportunities within their community, and that the members had access to knowledge methods and tools to deliver to the highest professional standards. Each PC sponsor was also responsible for allocating resources and encouraging participation within their PC.

Personal development (HRD) activities were aligned with their PC, and any internal or external qualifications were mapped against PC competences. Thus, the first set of goals and practices incorporated into the PCs were focused around developing role-specific competences in a technical or functional specialism, such as HRM, accounting, software development, project management, business development and so on. Human Resource Development (HRD) was a community-specific set of competences, training programs, performance management systems, certification processes and assessment and development centers intended to ‘grow their own’ within the PC, as well to co-ordinate ‘core business competences’ across communities. This meant that while employees might move between business units, change projects, and get promoted, the PC provided a coherent focus for this activity.

The second distinct set of goals and practices were to develop and encourage participation in knowledge sharing activities. Those communities that were more mature (in terms of established processes), or a community that had created a particularly effective set of processes or work methods, were encouraged to share their expertise both within and across communities. Knowledge sharing practices were encouraged to speed up the dissemination of good practice throughout the organization and between isolated projects or business units. Protocols were disseminated, both virtually and through shared workshops or forums, training, webinars, or virtual cafes. For example, the process adopted for a professional development center activity created within the Sales Management Community was disseminated across all the PCs, and they were encouraged to adopt it.

Finally, the other activities were focused on encouraging engagement in developing and contributing to strategic capabilities and priorities. PCs were a mechanism through which company strategy could be both communicated and developed. Here strategic initiatives were developed in PCs and provided a forum through which members could contribute to, and engage with, the development of strategic priorities within their PC. Senior management argued that the ability of employees to contribute to strategic initiatives through their PCs was an important way employees could participate in PC development and wider strategic capability development for the firm.

In sum, there were 3 distinct ways in which community members’ goals and activities were defined within the PC framework that could impact engagement and identification: to support their career through competence development (HRD activities and goals); to share innovation and best practice between and within PCs (knowledge sharing activities and goals); and to develop the strategic direction of the organization (strategic activities and goals). In addition, since resources for these activities were allocated through each PC sponsor, the perception of the leadership of the PC sponsor is expected to be directly related to members’ experiences of identification and engagement.

**Methods**

***Participants and Procedure***

Employees of ITServ located in the United Kingdom participated in this study by answering questions as part of an organizational-wide ‘temperature survey’. This gave us the opportunity to engage survey participants but limited the scope to apply established measures. All survey items created for this study were informed by initial qualitative data collected from PC members and strategic leaders within ITServ. Prior to the creation of the survey, fifteen interviews were conducted with strategic management involved in developing and managing the PC projects. These interviews were exploratory to determine the types of practices and the strategic intention of senior management in creating the PCs.

A stratified sample (n= 3,311) of PC members received the survey, which was administered electronically. A total of 1,206 were completed and returned (36.4% response rate), and a total of 1,082 employees (32.7%) within 16 PCs provided usable data for analysis in this study. Due to company constraints, no demographic information was collected for survey respondents, except for tenure with PC. As tenure could potentially impact members’ identification and engagement, we controlled for PC tenure in our analysis. PCs varied in size from 10 to 4200, with the average size equal to 598 members. This variation in the composition and size of PC is another example of the design principles imposed on the structure of the PCs by senior management. Given that both identification and engagement are related to social embeddedness and the depth of social interactions and acceptance of group norms (Handley et al., 2007), it suggests that the larger the community, it may be more likely that it is more difficult for deeper and more meaningful relationships. Thus, we controlled for community size in our analysis.

***Measures.***

A total of sixteen items assessed PC members’ experiences of how their PC supports the three key organizational goals of human resource development, knowledge sharing, and strategic practices. Six items asked participants about how their PC supports the organizational goal of human resource development (e.g., “Our professional community structure supports career movement and progression across the company”). Six items asked participants about how their PC supports the organizational goal of knowledge sharing (e.g., “Our professional community practices and structures facilitate cross-community dialogue and collaboration”). Four items asked participants about how their PC supports the organizational goal of strategic practices (e.g., “There are effective mechanisms within our professional communities for communicating ITServ’s strategic priorities”). All items were responded to on a scale of 1 (to a great extent) to 5 (not at all). All responses were reverse-coded prior to analysis, such that higher values came to reflect a higher level of the variable.

PC members’ engagement and identification with the community, and experiences of leadership within the community, were each measured with one item. To gauge identification with the community, participants responded to the item, “How important is membership of this community to your sense of professional work identity?” on a scale of 1 (very important) to 5 (not important at all). To gauge engagement with the community, participants responded to the item, “To what extent do you participate and engage in activities that help to develop and add value to the effectiveness and/or efficiency of your professional community?” on a scale of 1 (to a great extent) to 5 (not at all). To gauge leadership experiences, participants responded to the item, “There is strong and effective leadership in my professional community.” on a scale of 1 (to a great extent) to 5 (not at all). All responses were reverse-coded prior to analysis, such that higher values came to reflect a higher level of the variable. Notably, the use of single item measures does cause some concern about the reliability of the measures and may limit the validity or interpretation of our results. However, research on other one-item measures of work-related attitudinal constructs has shown that such measures may be perfectly acceptable when situational constraints prevent multi-item measures as they did in this study (Wanous, Reichers, and Hurdy 1997). Nevertheless, this is a potential limitation of the study and provides further reason for additional quantitative work to be conducted on organizationally-defined communities.

Cronbach’s α was calculated for all the multi-item instruments, with all measures yielding acceptable Cronbach’s α (see Table 1). PC size and individual members’ tenure with their PC were controlled for in all analyses. PC size was reported by the organization and categorized as *small* (10-99 members), *medium* (100-900 members), or *large* (901 or more members). As PC size was measured categorically, two dummy variables are included to represent this variable in the Hierarchical (Multi-level) Linear Modeling (HLM) analysis. Individual members’ tenure with their PC was self-reported and measured in terms of years spent with that PC.

***Data Analysis.***

With the exception of PC size, all variables were treated as individual level variables in the analyses. This focus on the individual level of analysis aligns with the proposed hypotheses and the theoretical lens we have taken on PC. Further, the small sample of PCs (N = 16) limited any examination of group level aggregates of members’ experiences. HLM was used for data analysis in order to prevent the statistical errors inherent in regression analysis when individuals are nested in groups and also to include the group-level control variable (Raudenbush and Bryk 2002). The data analysis process followed was the one recommended in Peugh and Enders (2005).

*Model 1: null model (empty model)*

Before testing specific hypotheses, an initial null model was set for engagement and identification with one’s PC in order to estimate the proportion of between group variance and within group variance for each outcome of interest.

*Model 2: control variables*

In the second model, one individual level control variable was added (tenure with PC) and one group level control variable was added (PC size) in order to estimate the variance accounted for in each outcome of interest by the control variables.

*Model 3: perceived PC support for goals*

To identify the effect of PC support for goals on engagement and identification, three individual-level variables were added in model three: PC support for human resource management goals (HRM), PC support for knowledge sharing goals (KS), and PC support for strategic goals (strategy). While we hypothesized a consistent relationship across the three organizationally-defined goals with both engagement and identification, PC support for each goal was treated as a unique construct in our analysis. The separation of each organizationally-defined goals made sense conceptually (as one PC may emphasize support of one over others) and statistically (as PC support for each goal was assessed with a distinctive set of scale items). Post hoc analysis allowed for the examination of unique relationships between engagement or identification and each goal.

*Model 4: full model*

To estimate the added effect of leadership effectiveness on engagement and identification, this individual level variable was added in model 4, thus creating the full model.

**Results**

Results of correlation analysis showed all variables included in hypotheses to be significantly and positively related to one another. As shown in Table 1, each of the four independent variables (PC support of goals and leadership) correlated with the other independent variables and with the outcomes of interest (engagement and identification) in a moderate to moderately strong way. To check that the correlations among independent variables would not cause a multicollinearity problem in further analyses, variance inflation factors (VIFs) were calculated. Multicollinearity is considered high with VIF values at or above 10 (Kutner, Nachtsheim, and Neter 2004). VIF values for independent variables in this study ranged from 2.55 to 2.82, indicating multicollinearity does not provide a statistical concern here. The control variables were weakly (and sometimes significantly) correlated with the outcome variables, PC support of goals, and leadership. These correlation results further supported the inclusion of PC size and tenure with PC as control variables in our analyses.

Results of the first HLM model (the null, or empty model) provided an ICC of .13 for engagement (with a within-group variance of 1.10 and a between-group variance of .17) and .17 for identification (with a within-group variance of 1.58 and a between-group variance of .31). This means that while group-level factors certainly play a role in determining members’ engagement and identification, approximately 87% of variation in PC members’ engagement and 84% of variation in PC identification is more likely to be caused by individual-level factors. These results serve to support the focus of the present study on individual factors determining members’ engagement and identification.

***Predicting PC Member Engagement***

Results of the full model predicting PC member engagement are provided in Table 2. A comparison of within group variance across the models informs hypotheses 1 and 3. While the control variables accounted for only 1.27% of the within group variance in PC member engagement, perceived PC support of key goals accounted for 28.97% of within group variance in PC member engagement. The full predictive model accounted for a total of 32.79% of the within group variance in engagement, with only 2.54% uniquely accounted for by leadership perceptions. Further, the relationship between leadership perceptions and engagement was not significant (*t* = 0.53, *p* > 0.05). Ultimately, these results indicate that perceived PC support of key goals predict PC member engagement, but leadership perceptions do not (supporting hypothesis 1 but not hypothesis 3).

Post-hoc analysis allows for an examination of the specific paths between each organizationally-supported goal (HRM, knowledge sharing, and strategic practices) and member engagement. As shown in Table 2, PC members’ experience of how their PC supports key goals of knowledge sharing (*t* = 2.00, *p* < 0.05) and strategic practices (*t* = 10.96, *p* < 0.01) significantly predict engagement, while perceived PC support of HRM goals (*t* = 0.93, *p* > 0.05) does not significantly predict engagement.

<INSERT TABLE 1 & 2 ABOUT HERE>

***Predicting PC Member Identification***

Results of the full model predicting PC member identification are provided in Table 3. A comparison of within group variance across the models informs hypotheses 2 and 4. While the control variables accounted for approximately 0% of the within group variance in PC member identification, perceived PC support of key goals accounted for 27.09% of within group variance in PC member identification. The full predictive model accounted for a total of 28.67% of the within group variance in identification, with only 1.58% uniquely accounted for by leadership perceptions. Further, the relationship between leadership perceptions and identification was not significant (*t* = 0.30, *p* > 0.05). Ultimately, these results indicate that PC support of key goals predict PC member identification, but leadership perceptions do not (supporting hypothesis 2 but not hypothesis 4).

Post-hoc analysis allows for an examination of the specific paths between each organizationally-supported goal (HRM, knowledge sharing, and strategic practices) and member identification. As shown in Table 3, PC members’ experience of how their PC supports key goals of HRM (*t* = 8.16, *p* < 0.01) and strategic practices (*t* = 4.06, *p* < 0.01) significantly predict identification, while perceived PC support of knowledge sharing goals (*t* = 0.79, *p* > 0.05) does not significantly predict identification.

<INSERT TABLE 3 ABOUT HERE>

**Discussion**

The primary research question was to examine if organizationally-defined communities, with goals defined and supported by senior management, could sustain employee engagement and identification within those communities. Our results show that PC support of two goals (knowledge sharing and strategic practices) predict engagement and two of the goals (HRD and strategic practices) predict identification. However, leadership was not shown to influence individuals’ engagement or identification. In addition, the control variables of PC size and tenure were weakly associated with both identification and engagement. These results confirm previous research by Pryko et al. 2017; Warring and Currie 2009) that it is not that simple to ‘set up’ CoP. However, our results go further and suggest that management can have at least a limited effect, provided they understand the importance of practices and their multi-level and multi-faceted effects that go beyond just knowledgeability. It is encouraging to note, for example, that the support for organizational goals provides a significant link, but we also note the limited scope of practices that supported engagement and identification. It might have more to do with the type of practice (Pryko et al. 2019), rather than just the development of relationships created by the practice (Swan et al. 2016) that is noteworthy. Thus, in the following discussion we focus on why different types of practice might be important, rather than a sequential analysis of each hypothesis to draw out more clearly the contribution of our findings.

Knowledge sharing was correlated significantly with engagement, but not identification. This is not surprising because knowledge sharing activities in this organization tend to focus around good practice dissemination or innovation, either within or across the organization, and are organized around specific projects. Therefore, those members of the PC involved in developing knowledge and engaged in disseminating good practice are likely to be more engaged with a project group and may identify more with the smaller group working on innovation and dissemination activity. This is similar to findings by Brown and Duguid (1991). It may also be surmised that these activities may be seen as more interesting, because of the level of strategic significance they assume. This tentatively suggests that different types of projects, or ‘interesting’ activities might sustain engagement, but do not necessarily support identification.

Swan, Scarbrough and Robertson (2002), and Wenger-Trayner et al. (2014) had similar findings and they argued that certain activities, or ideas, become objects around which communities and networks coalesce, as they find which practices matter to them the most. Indeed, finding common interest is an essential part of becoming a CoP (Brown and Duguid 1991). Knowledge sharing projects may just not be spread wide enough through the community to support identification but could still leverage engagement of those who participate. In ITServ, it seems knowledge sharing practices create a sense of purpose that engages individual PC members.

In our study, support for HRD activities was positively related to identification, but not engagement. This suggests that HRD practices may be important for understanding to what community an employee feels they belong, as they become competent in a specific area (Wenger-Trayner et al. 2014) and can contribute to over the long-term, since career development and training activities are more generally focused on a specific skill set. This suggests that such practices may also be significant in establishing professional identity, and membership of a wider LoP (Pryko et al. 2019). Indeed, if they establish and develop a career within a specific community, it seems likely that they are more willing to accommodate or embrace the norms of that community, which can establish a multi-level identity within not only a local CoP but a professional LoP. HRD-related goals and activities will develop competence in a field. Such an investment in a set of competences is likely to develop feelings of belonging to a profession, or group with similar skills (Handley et al. 2006; Pryko et al. 2019). This finding gives further support to studies of professional identity (Slay and Smith 2011), and of modes and conditions of identification (Ashforth, Harrison and Corely 2008), and reaffirms how identity work takes place in organizations (Brown 2015) and beyond the boundaries of organizations (Pryko et al. 2019). These streams of work offer support to our findings that community members identify with the PC and activities like HRD that will enable them to develop themselves, because their self-concept is intimately connected with their work practice and professional identity. In ITServ, the HRD practices establish a sense of belonging, a professional home, even if they do not foster engagement.

The findings that strategic practices are related to both engagement and identification at ITServ suggest that this group of practices has a special significance for the individuals in their communities given that senior management consider these to be most important. This type of role modelling or signaling sends symbolic messages to employees about the organizations priorities and what are the expected behaviours (Tyler and Blader 2005). It may also be that those engaged with, or are aware of, community and organizational strategy are either considered as more central to the functioning of the PC or wish to become so.

Thus, being aware of, and participating in, strategic activities may be an explicit recognition of the individual’s role or aspirations within the PC hierarchy. Strategic activities have meaning for individuals and are important for their sense of engagement and identification, because, as previous studies have shown, they guide where to focus learning by aligning personal and organizational priorities (Antonacopoulou 2006; Macpherson and Clark 2009; Valentine 2017). They also indicate levels of responsibility commensurate with levels of professional knowledge (Abrandt Dahlgren et al. 2004). This accords with the central CoP concept of legitimate peripheral participation (Lave and Wenger 1991), which highlights how power and politics are central to the inclusion and exclusion of community participants (Pryko et al. 2019). It also highlights how, potentially at least, certain practices might act as signals to community members about where they should expend their efforts.

Although we found support for member engagement and identification in organizationally-defined PCs when certain strategic activities were supported, it remains likely that these top-down PCs have natural limitations when compared to the more informal, spontaneous communities (Roberts 2006; Amin and Roberts 2008). Our contribution thus goes beyond the work of Pryko et al. 2017 and Harvey et al. 2013), since we highlight that while they are not easy to ‘set up’, we also identify that not all activities designed by management are equal. For example, interest-based projects may engage employees for a short while, but do not sustain identification of a group in the long-term. Engagement seems to be an activity-related outcome, while identification seems to be a longer-term anchor related to accepting and embracing professional norms and building a sense of self. Strategic practices, probably because they are seen as a high priority, seem to be particularly important in developing both engagement and identification. This may also encourage community members to develop a sense of responsibility in delivering them, which may also explain why leadership does not feature prominently as a contributing factor.

In terms of PC leadership, hypotheses 3 and 4 were not supported by our findings. Experiences of leadership quality did not significantly relate to individual PC engagement and identification. It could be argued that the organization’s PCs provide a more advanced mode of organizing and managing that enables community leadership to be shared and distributed (Carson, Tesluk and Marrone 2007; Bolden 2011) as community members assume more responsibility for delivering goals. Hence, it may be possible to argue that individual community members judge their participation in strategic practices (evidence of their own mastery within their own community) as having less to do with others’ formal leadership, and more to do with the informal leadership of fellow members, or their own competence and efforts. In this sense, it highlights the role of individual self-efficacy and locus of control in terms of how an individual considers they achieve success (Judge et al. 2002), and further strengthens the argument that identification and engagement are likely to be stronger when individuals choose to become involved, rather than are directed to do so (Cerasoli, Nicklin and Ford 2014). Individuals’ engagement and identification has personal meaning, and it is likely that the community goals, therefore, must connect on a very personal level, rather than depend on the quality of leadership practice. In managed CoP leadership roles seem to be more important in designing and linking practices to goals that might sustain identification and engagement (Valentive 2017), rather than exercising traditional hierarchical leadership functions. This finding casts a fresh perspective on the power and political dimensions of CoPs and shows that it may not be a case of power and authority that shapes the contribution of leadership especially in organizational-defined CoPs. Instead, as we show, it is the quality of such leadership in its capacity to inspire and promote initiative to create and sustain the activities that connect the members of the PC, as we find in the case of ITServ.

***Limitations and future directions***

We acknowledge that the discussion of our findings, and contribution in advancing this debate, would be incomplete without our reflexive critique of the limitations in our study. The study is unusual in that, unlike many previous case studies on communities of practice (for example, Pryko et al. 2017) that have relied on only qualitative data, we use a large quantitative data set. However, that also created some limitations, since we were restricted by ITServ in terms of the data we could collect. We were unable to deploy established measures for engagement such as the Utrecht Work Engagement Scale (Schaufeli et al. 2002), or the engagement survey developed by Rich and colleagues (2010). Additionally, established scales of identification such as Bartels, Pruyn, de Jong, and Joustra’s (2007) measure or Mael and Ashforth’s (1992) measure could have been adapted to capture identification with one’s PC. However, this was not an option available to us, because of the restrictions on the number, composition and type of questions we were able to include in the ITServ company-wide survey. Future studies of organizationally-defined COP could use established scales to measure leadership, engagement and identification.

A second limitation stems from the use of cross-sectional survey research, which by nature precludes any conclusions regarding causal relationships. While our findings support a relationship between organizationally-defined goals and PC member engagement and identification, we cannot determine with certainty that management can influence engagement and identification with PCs via the establishment or support of such goals. Future studies are needed to more directly inform any conclusions of causality. This could be done through longitudinal studies, but perhaps field or lab experiments could also be possible to explore this issue.

**Conclusion**

The ongoing interest in how to leverage learning and knowledge within organizations makes initiatives like organizationally-defined CoP an important and attractive possibility. Our contribution in this paper is that we go beyond recent work (Pryko et al. 2017; Hemassi and Csanda 2009; Kirkman et al. 2013 and offer fresh insights about the process of translating the community of practice concept into a management practice (through PCs in ITServ). We do this by explicating the tensions and implications of an organizationally-driven design, showing how practices and goals have a complex relationship with the key concepts of identification and engagement. It does seem that management can influence, at least partly, engagement and identification by defining CoP and establishing goals (in this case strategy, knowledge sharing and HRD), but that this is not always successful. Engagement may be a short-term phenomenon, dependent significantly on the type of practice or project in which community members are allowed or decide to participate. Identification, on the other hand, may require practices that support longer-term individual development aims allowing and supporting the achievement of personal ambition or competence. However, strategic practices seem able to sustain both. Whilst there is this ability to influence the development of CoP through management-determined goals, there also appears to be a significant bottom-up drive within ITServ’s PCs, which is reflected in the way leadership was not a significant factor in achieving engagement or identification in our study.

Our findings suggest a need to balance design and emergence, in order to sustain those ideals that underpin the CoP principles as a promising practice. By explicating why organizationally-defined communities or networks may prove hard to sustain engagement and identification, we invite better balance in leadership practice redirecting the focus on shared responsibility instead. Our findings resonate strongly with Brown and Duguid’s (2001) assertion that the focus on operationalizing the concept of CoP should be orientated more on the notion of practice than that of community. In this respect, we invite ITServ, senior management (and indeed other executives who chose to explore organizationally-defined communities) to appreciate how such communities foster engagement and identification in pursuing practices that their members have a greater say in determining, and that they can offer management new possibilities for realizing strategic goals, rather than the other way around.

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