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Temporary Organizations

Prevalence, Logic and Effectiveness

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2 Research on temporary organizations: the state of the art and distinct approaches toward 'temporariness'*

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INTRODUCTION

Temporary organizations (TOs) exist in a vast range of economic and social activities and across a range of industries. In the commercial sector, TOs may involve a joint effort to develop a new technology or product, bring about organizational renewal or enter a new market (Goodman and Goodman, 1972, 1976; Lundin and Söderholm, 1995). They are prevalent in industries such as engineering, construction, architecture, film making and theater production (Bechky, 2006; Ekstedt *et al.*, 1992; Engwall, 2003; Goodman and Goodman, 1972, 1976; Morley and Silver, 1977). In the public and non-profit sectors, they take the form of presidential commissions, court juries, election campaigns, rescue operations and disaster relief operations among others (Goodman and Goodman, 1976; Lundin and Söderholm, 1995). Although all TOs have an *ex ante* determined termination point, many of their other characteristics, such as goals, size and structure, may vary.

Although TOs have been around for a long time in some sectors, like construction and engineering (Asheim, 2002), it is in the context of the so-called 'new' (or post-industrial) economy that they are receiving increased attention (Ekstedt *et al.*, 1999). Thus, although the phenomenon of the temporary organization is not new, the attention it has been attracting in recent years is (Grabher, 2002). This increased attention is related to the assumption that organizations with a predefined termination point, such as project teams, are a crucial form for contemporary economic organizing (Grabher, 2002; Sydow *et al.*, 2004).

More than two decades ago, Bryman and colleagues lamented that the 'exploration of so-called temporary systems or temporary organizations' was lacking (Bryman *et al.*, 1987a, p. 253). Much research has been carried out since the 1980s (Lundin and Söderholm, 1995). While some

scholars focused on defining the phenomenon and exploring the drivers of TO success, others explored the internal structure of TOs and their links with the environment, while still others focused on a myriad of organizational processes from learning and knowledge sharing in and across TOs, through trust building to decision making (see Asheim, 2002; Balachandra and Friar, 1997; Cusumano and Nobeoka, 1998; Engwall, 2003; Freeman and Beale, 1992; Grabher, 2002; Keegan and Hartog, 2004; Koppenjan, 2001; Laufer *et al.*, 1999; Meyerson *et al.*, 1996; Parkin, 1996; Pinto and Covin, 1989; Pinto and Mantel, 1990; Pinto and Slevin, 1987; Sapsed *et al.*, 2005; Shenhar *et al.*, 2001; Smith, 1993; Thamhain and Wilemon, 1987; Turner and Cochrane, 1993; Turner and Müller, 2005).

However, despite the recognition that temporary organizations differ from their non-temporary counterparts (Bryman *et al.*, 1987a) and the substantial amount of research on the nature and functioning of TOs, many important research questions have remained unaddressed. Moreover, as we will demonstrate, there is no consensus about what exactly the temporary character of TOs entails. Various authors, to a greater or lesser extent, explicitly subscribe to different definitions of temporariness, but an explicit discussion of what temporariness of TOs actually involves and implies for their functioning and performance is conspicuously absent in the existing literature. In our view, these shortcomings are the primary stumbling blocks to the development of a fully fledged theory of TOs. Yet, if temporary organizations are to be considered as a distinct organizational form, it is necessary to unequivocally define and demonstrate the relevance of temporariness, which we believe distinguishes TOs from other types of organizations.

In light of the above, the purpose of this chapter is twofold. First, we review the literature on TOs. In doing so, we strive to present an up-to-date overview of extant research on the various aspects of temporary organizations and, even more important, identify gaps in prior research which can help guide future research efforts. Second, we aim to identify and categorize the different approaches to temporariness that can be encountered in the current body of literature, and make the call for more systematic research on the role of temporariness in the functioning and performance of organizations.

A FIRST GLANCE AT THE TEMPORARY ORGANIZATION PHENOMENON

Definition

Because of the multitude of forms that TOs assume as well as the variety of arenas in which they operate, there are many definitions of TOs in

the extant literature. Some often-quoted examples of these definitions include Goodman and Goodman (1976, p. 494), who held that TOs involve 'a set of diversely skilled people working together on a complex task over a limited period of time', and Morley and Silver (1977, p. 59), who defined temporary systems as systems 'limited in duration and membership, in which people come together, interact, create something, and then disband'. Similarly, Keith (1978, p. 195) proposed that '[t]emporary systems are structures of limited duration that operate within and between permanent organizations', while Grabher (2004) viewed TOs as transient, interdisciplinary institutions focusing on the achievement of a single task. Whitley (2006, p. 78) focused on TOs which are separate legal and financial entities set up for a specific project and dissolved upon its completion, while Bechky (2006, p. 3) defined TOs as bringing 'together a group of people who are unfamiliar with one another's skills, but must work interdependently on complex tasks'.

As this small sample of definitions reveals, different authors focus on different aspects of TOs. While some emphasize the nature of the task (Goodman and Goodman, 1976; Grabher, 2004; Whitley, 2006), others grant attention to the character of the team involved (Bechky, 2006; Goodman and Goodman, 1976; Grabher, 2004). Still others tend to focus on the variety of forms that TOs can take (Keith, 1978; Whitley, 2006). Perhaps it is in light of this that Lundin and Söderholm, aiming to develop the skeleton of a theory of TOs, proposed four concepts to demarcate the concept of temporary organization: limited time, a task as a TO's raison d'être, a team that works on the task within the time available and transition reflected in the 'expectation that there should be a qualitative difference in the temporary organization "before" and "after".

In general, our literature review confirms that TOs are viewed as organizations set up to accomplish one or a very limited number of tasks, and to do so through a team of selected actors within a limited amount of time and with transition as an ultimate end (Lundin and Söderholm, 1995; Packendorf, 1995; Turner and Müller, 2003). Additionally, when compared to non-temporary organizations, it is argued that TOs tackle tasks of higher complexity and engender higher levels of uncertainty and interdependence between team members while simultaneously having more time and budget constraints (Bryman *et al.*, 1987a; Goodman and Goodman, 1976; Grabher, 2002; Meyerson *et al.*, 1996; Morley and Silver, 1977). TOs are also posited to be less bureaucratic and mechanistic and more participatory in their leadership style (Bryman *et al.*, 1987a; Meyerson *et al.*, 1996), while the selection of team members is argued to be based on their interpersonal skills and competences (Bennis and Slater, 1968; Bryman *et al.*, 1987a). Finally, an often-mentioned characteristic of TOs is that they have a certain

degree of isolation from the environment and the disturbances it may have on the TO's functioning (see Lundin and Söderholm, 1995; Miles, 1964).

While the above characteristics are the most crucial in distinguishing TOs from their non-temporary counterparts, many additional factors have been reported in the literature. However, we argue that all of these are, to a varying degree, consequences of the one true distinguishing feature of TOs that is mentioned consistently across definitions, namely their temporariness (see Goodman and Goodman, 1976; Grabher, 2004; Keith, 1978; Lundin and Söderholm, 1995; Morley and Silver, 1977). In our view, despite the great diversity of forms and activities TOs (under)take, and the resulting variety of definitions they are accompanied by, temporariness is the only factor that is unique to TOs, while others are simply consequences or correlates thereof, which need not be exclusive to TOs. Given the central significance of temporariness in understanding TOs, we were struck by the conceptual ambiguity associated with this concept, and the resulting lack of systematic research concerning its effects. Later in the chapter, we will elaborate on this lack of clarity and report on the different ways in which various authors have conceptualized temporariness.

History

The early beginnings of research on TOs can be traced back to the 1960s and early 1970s, when authors including Miles (1964), Bennis and Slater (1968) and Goodman and Goodman (1972) discussed the concept of a temporary system in the context of educational innovations, societal trends and theatre productions respectively. These authors defined the concept quite clearly and discussed in substantial detail the inputs, processes and outputs that characterize these organizations. Among the first to predict the coming advent of temporary organizations was Bennis when stating, '[o]rganizations of the future [. . .] will be adaptive, rapidly changing temporary systems, organized around [. . .] groups of relative strangers' (1969, p. 44). Although publications on the subject continued into the late 1970s (Goodman and Goodman, 1976; Morley and Silver, 1977) and throughout the 1980s (Bryman et al., 1987a; Pinto and Covin, 1989), they were few and spread over a long period. The interest in TOs reignited in 1995 with the special issue of the Scandinavian Journal of Management on TOs (Hellgren and Stjernberg, 1995; Lundin, 1995; Lundin and Söderholm, 1995; Packendorf, 1995). More recent influential contributions include those of Engwall (2003), Grabher (2004), Bechky (2006) and Turner and Müller (2003).

At first glance, literature on TOs seems quite scarce. A literature search on temporary organizations yielded few results. Upon closer scrutiny

however, the apparent scarcity of literature turns out to be incorrect. The primary reason for this is that research on TOs is often disguised under a variety of labels such as temporary systems, temporary groups and, most notably, projects and project teams that do not include the word 'temporary' in their labels. Thus, rather than being scarce, literature on TOs is dispersed. Seminal contributions have appeared in edited volumes with topics as diverse as trust in organizations (Meyerson et al., 1996) and innovation in education (Miles, 1964), rather than in outlets focusing on TOs in their own right. Recently, some focus has been provided by two special issues of general management journals, namely the Scandinavian Journal of Management (1995) and Organization Studies (2004).

Arguably, literature on project management is relatively concentrated, and thus constitutes an exception to the fragmentation described above. Although the project management literature does suffer from a number of shortcomings which have been elaborately discussed by among others Packendorff (1995) and will not be reiterated here, many useful insights can be derived from it. Although project management literature usually does not refer to TOs, we subscribe to the view of many authors who deem projects to be one of many tangible manifestations of temporary organizations (Lundin and Söderholm, 1995; Packendorf, 1995), and thus consider literature on project management to contribute to our knowledge of TOs. The practical problem with equating a project with a TO however, is that project literature deals predominantly with *intra*organizational projects and, thus, for the most part ignores interorganizational projects (see Lundin and Söderholm, 1995). Some authors, in fact, make this an explicit assumption; Shenhar (2001a, p. 395) for instance stated that projects can be seen as 'temporary organizations within organizations'. Yet, TOs as we understand them can and frequently do involve a number of different organizations. Considering the above, we suggest that TOs are a conceptual category that encompasses projects but also other forms of temporary organizing. Thus, although project management literature contributes predominantly to our understanding of merely one of the types of TOs, intraorganizational, we still consider it a valuable contribution to our understanding of TOs in general. Therefore our literature review covers both, and our discussion of temporariness applies to both inter- and intra-organizational TOs.

MAJOR THEMES IN THE TEMPORARY ORGANIZATIONS LITERATURE

In this section, we present some major themes that we have identified in the literature on TOs using a broad definition of TO that includes temporary systems, temporary organizations and temporary groups and projects among others. We then discuss eight broad categories of themes, reviewing issues that have been studied and those that, in our view, still remain to be addressed.

Types of TOs and Contingent Effects

Some researchers have focused on how TOs are likely to vary from each other. This has led to the development of various typologies and taxonomies of TOs. For example, Whitley (2006, p. 79) identified two differentiating dimensions of TOs: the singularity of goals, whether the products developed are unusual; and the distinctiveness and stability of work roles. whether 'the organization of expertise, tasks, and roles is predictable and stable over projects' (Whitley, 2006, p. 81). The intersection of these two dimensions led Whitley (2006) to define four types of TOs he refers to as organizational, precarious, craft and hollow. Similarly, Turner and Cochrane (1993) proposed classifying projects around two dimensions: how well defined the goals are and how well defined the methods are. Lundin and Söderholm (1995) pointed out that the tasks of a TO can either be unique, occurring once, or repetitive, to be repeated in the future. Other scholars, predominantly in the project management literature (see Blake, 1978; Wheelwright and Clark, 1992), classified projects both according to the level of change and/or the outcomes they intend to bring about (Dvir et al., 1998; Shenhar, 2001a, b). Still others constructed multidimensional classifications of projects, like Balachandra and Friar (1997), who focused on three different dimensions of new product development and research and development projects, namely: the nature of technology, low versus high; the type of innovation, incremental versus radical; and the market, new versus existing. While the above classifications were formulated in a deductive manner, Dvir et al. (1998) took a different approach by constructing a classification of projects empirically, thereby proposing a taxonomy rather than a typology of projects.

Another distinction proposed in extant literature is between inter- and intra-organizational TOs (Keith, 1978; Lundin and Söderholm, 1995). While project management literature deals primarily with intraorganizational TOs, there are a few interesting contributions focusing exclusively on interorganizational TOs. Examples include Jones and Lichtenstein (2008), who studied interorganizational projects, and Ness and Haugland (2005), who focused on fixed duration interfirm relationships. We find the number of studies dealing with interorganizational TOs to be quite scarce, a serious shortcoming considering the strategic importance of interorganizational collaboration in recent years (Muthusamy and White, 2005).

Many of the studies mentioned above not only propose a classification of projects, but also argue that 'different projects exhibit different sets of success factors, suggesting the need for a more contingent approach in project management theory and practice' (Dvir *et al.*, 1998, p. 915). Shenhar (2001a, b) built on the classification of Dvir *et al.* and showed that in managing a project, different approaches are appropriate for different projects. Turner and Cochrane (1993) furthered this argument by proposing that management of different kinds of projects requires unique start-up and implementation techniques. Some of the characteristics of the different kinds of TOs are also argued to have implications for their performance. Similarly, Dvir *et al.* (1998) identified sets of managerial variables affecting the success of each class of projects in their project taxonomy. Finally, Shenhar and Dvir (1996) developed a two-dimensional typology along the dimensions of technological uncertainty and system scope and argued that this is a useful tool for predicting project effectiveness.

Overall, we conclude that while some groundwork has been laid in studying the varieties of TOs, there remains much to explore. For example, while a number of differentiating dimensions have been identified, none is in any way related to the temporal aspect of TOs. This is surprising considering the proposition that time, and the limited nature thereof, is at the very core of TOs. Additionally, we find that little research has been done to further understand how the various differentiating dimensions impact the functioning and outcomes of TOs. While project management literature has made a step in this direction, the contributions we identified focus predominantly on the managerial implications of project variability. We would like to stress that before formulating managerial recommendations, there is need for both theoretical and empirical study of how the individual or group level phenomena in TOs are affected by the different variables, particularly those related to time.

Performance

As foreshadowed in the preceding discussion, there is much research interest in the performance of TOs. While performance is a topic extensively covered in the project management literature, contributions are rare in the general TO literature. In the small group literature there has been work on temporary as opposed to non-temporary teams (Bradley *et al.*, 2003; McGrath, 1984; Saunders and Ahuja, 2006). As a prominent example, Saunders and Ahuja (2006), in a conceptual contribution, formulated a large number of propositions on the differences between temporary and ongoing teams, in terms of their efficiency and effectiveness among others.

Overall, a consensus seems to emerge that compared to non-temporary settings, temporary organizations provide superior effectiveness and goal accomplishment (at the cost of a lower long-term efficiency – see Saunders and Ahuja, 2006), particularly when the goal involves change or transformation (Lundin and Söderholm, 1995). Furthermore, Lundin and Söderholm (1995) and Miles (1964) have argued that the superior effectiveness of a TO is a result of isolation from its environment. Because isolation minimizes outside disturbance, leading to greater experimentation, openness to change and higher odds of uninterrupted completion of the task, a TO can overcome the inertia normally found in non-temporary organizations (Lundin and Söderholm, 1995; Miles, 1964).

It has also been argued that greater effectiveness of TOs compared to non-temporary organizations is due to their higher productivity and task orientation. Miles (1964, p. 457) argued that 'in temporary systems [. . .] restrictions in time, goal, personnel, and space, and the protection from external stress, help to create conditions for vigorous, productive work'. The time pressure that members in TOs are sometimes believed to experience due to temporariness and the 'urgency [. . .] of delivering the desired outcomes within the desired timescales' (Turner and Müller, 2003, p. 1) is argued to lead to a strong task orientation. However, this advantage may occur at the expense of bridging cognitive distance or developing social or emotional ties (Lindkvist, 2005).

Besides effectiveness and task accomplishment, there are many other possible indicators of performance. In fact, many scholars studying TOs have acknowledged the difficulty of measuring TO success. For instance, in the context of temporary systems set up to accomplish change in people or organizations, Miles (1964) argues that the outcomes may not only be uncertain but very difficult to measure. One of the primary reasons why measuring the progress and outcomes of TOs is so difficult is because success is 'heavily dependent on the reaction of the environment' (Goodman and Goodman, 1976, p. 496). The environment of a temporary organization is likely to encompass a vast variety of stakeholders, whose assessments of a TO's performance may differ significantly. Leaders of TOs may therefore need to navigate complex and at times contradicting pressures from various sources, both external and internal, to secure the project's success (see Goodman and Goodman, 1976).

As far as the project management literature is concerned, the approach to measuring project success has evolved over the years from very technical accounts related to the efficiency of implementation processes such as timeliness, cost and functionality in the 1970s, through increased focus on the perceptions of various stakeholders and quality of planning and handover in the 1980s and 1990s, to recent approaches that take into

account aspects such as 'project product and its utilization, staff growth and development, the customer, benefits to the delivery organization, senior management, and the environment' (Turner and Müller, 2005, p. 56). Still, 'there are few topics in the field of project management that are so frequently discussed and yet so rarely agreed upon as the notion of project success' (Dvir *et al.*, 1998, p. 917). Perhaps it is this difficulty Goodman and Goodman (1976, p. 498) were experiencing in the 1970s when they concluded, 'we were unable to find even crude measures for comparing task effectiveness'.

Aside from these difficulties in measuring project success, a number of different approaches to delineating dimensions of project performance have been identified in the extant body of project management literature. For example, Shenhar et al. (2001) distinguished four dimensions for evaluating the success of a project – project efficiency, the impact on customers, direct business and organizational success, and preparation for the future. The salience of each of the dimensions, they argued, depends on the kind of project. Similarly, Pinto and Mantel (1990) identified project success as a combination of the perceived value of the project by team members and client satisfaction with the delivered project, arguing that 'perceived causes of project failure will vary, depending on [...] stage of its life cycle [...] [and] [...] type of project assessed' (Pinto and Mantel, 1990, p. 271). In 1987, Pinto and Slevin empirically identified 14 critical success factors of a project. Building on this research, in 1989 Pinto and Covin showed that the relevance of different success factors varies across the different types of projects as well as across the stages of their life cycle. All these sets of performance criteria are not only linked to the various stakeholders of a project, whose assessments of performance are likely to vary (Freeman and Beale, 1992), but reflect the contingent effects of project success as well, such as type of project or life cycle phase.

In addition to the above studies, there has been a substantial amount of research probing the driving forces of project performance. For instance, Thamhain and Wilemon (1987) identified six forces driving project performance that are related to leadership, job content, personal needs and general work environment. Kernaghan and Cooke (1990) studied how the performance of a temporary group can be improved by interventions in the rational and interpersonal group processes. Allen *et al.* (1980) took a closer look at the role of internal project communication in the performance of three types of projects (product and process development teams, research teams and technical service teams) and found that the effect of communication on project outcome depends upon the type of project. Finally, Cusumano and Nobeoka (1998) investigated the impact that different strategies for managing multiple projects have on the performance of the projects.

Based on these studies, we conclude that some inroads have been made to identify various aspects of TO performance and the factors that have an impact on performance. However, given that some of the work has been published very recently (like Saunders and Ahuja 2006), empirical tests of the propositions are yet to be conducted, and thus provide a promising direction for future research. In particular, exploration of the mechanisms underlying the differences between temporary and non-temporary teams can be very beneficial to the field. Also, we did not find any studies that investigate the effect of a particular success factor on different performance indicators. Such investigation is crucial, as a given success factor may have a different or even opposite effect on different aspects of performance. For example, Goodman and Goodman (1976) analyzed twenty theatre productions, focusing on the effectiveness, measured as task accomplishment, innovation and professional growth of their members. They found that role clarity positively affected task accomplishment but negatively affected innovation and professional growth. Understanding the effect the different variables have on various performance indicators and the underlying mechanisms could become the basis for formulating more realistic and better grounded managerial recommendations. We see this as an important direction for future research.

Learning in TOs and Knowledge Flows

Learning and knowledge transfer within a TO, as well as between the TO and its environment has been the focus of a considerable amount of research. In one such study, Brady and Davies (2004) focused on the relationship between project and organizational learning, in which they proposed two modes of learning, the bottom-up, project-driven mode and the business-led mode. In the project-driven mode, knowledge from the project is transferred to other projects and to the organization as a whole. In the business-led mode, organizational knowledge is exploited to 'perform increasingly predictable and routine project activities' (Brady and Davis, 2004, p. 1601). Another interesting issue is raised by Lindkvist (2005), who investigated the temporary organization as a learning entity. In contrast to communities of practice, which involve individuals engaging in a joint enterprise around a shared practice, he argued that most TOs 'comprise a mix of individuals with highly specialized competences, making it difficult to establish shared understandings or a common knowledge base' (Lindkvist, 2005, p. 1190). He also argued that most TOs 'consist of people, most of whom have not met before, who have to engage in swift socialization and carry out a pre-specified task within set limits as to time and costs' (p. 1190). For that reason, rather than as communities of practice, such groups should be conceived of as 'collectivities-of-practice'. These operate on decontextualized, explicit knowledge, and its members are conceived of as free agents rather than undergoing enculturation. Learning occurs primarily through problem solving (Lindkvist, 2005).

Focusing on intra-TO knowledge transfers, Sapsed *et al.* (2005) compared knowledge transfer practices between members of co-located and dispersed teams. Katz and Tushman (1981), on the other hand, studied the role of gatekeepers in the external acquisition of technical ideas in different kinds of projects. Combining both approaches, intra-TO and TO-environment knowledge transfers, Schofield and Wilson (1995) studied how project teams help organizations deal with change by stimulating individual and organizational learning. In doing this, the authors focused on the specific rules, roles and relationships that can help project team members to share their knowledge with one another and with other organizational members more effectively.

Finally, in the context of TO learning and knowledge transfers, some research attention has been attributed to TO embeddedness, the relationship between the TOs and the various organizational contexts in which they operate. In a 2004 study, Grabher (p. 1492) viewed projects as 'inextricably interwoven with an organizational and social context which provides key resources of expertise, reputation, and legitimization'. Similarly, Scarbrough et al. (2004) focused on the relationship between projects and their organizational environment in studying how organizations learn from projects. Based on a comparative analysis of two construction projects, Scarbrough and colleagues formulated propositions with respect to the transfer of knowledge generated in a project to other parts of the organization, suggesting a trade-off between the potential for knowledge integration within a TO and the sharing of knowledge with the parent organization. Finally, in analyzing project-based learning, Grabher (2004) went beyond the organizational embeddedness of a project to various other layers of the ecology in which it is embedded. He argued that creation and retention of knowledge in projects occurs at the interface between the project itself and the core team, firm, epistemic community and personal networks, that is, in the different layers of the ecology. Through a comparative case study of project ecologies, Grabher identified two learning logics, cumulative versus disruptive, and pinpointed the differences between them.

The research on TO embeddedness raises an intriguing issue, namely the relationship between the TO and its environment. While some authors argue that the superior effectiveness and goal accomplishment of TOs is due to their *isolation* from the environment (Miles, 1964), others stress the TOs' *dependence* on the environment in accomplishing their tasks

(Engwall, 2003). Because of these differences of opinion, we propose future research to explore the tension between the environmental dependence and embeddedness of TOs, as well as, among others, the impact of isolation on how TOs function, the resources available to them, and their performance on various criteria.

Human Resource Aspects

Some scholars have focused on human resource management in temporary organizations, particularly team member selection, leadership, stress and role clarity related to TO participation. Many of those studying team member selection focus on the recruitment of personnel for TOs (see Bennis and Slater, 1968; Bryman *et al.*, 1987a; Morley and Silver, 1977). These authors suggest that compared to non-temporary organizations, selection of TO members is based on their interpersonal skills and competences rather than purely on professional qualifications. In our view, this is an interesting issue that opens up possibilities for further research. Questions related to the process of team member selection for inter- and intra-organizational TOs and the impact on the TO, in particular its outcome, have not, to the best of our knowledge, been addressed thus far.

A second aspect of human resource management in TOs, covered in the extant literature but worthy of further study, is leadership. Interestingly, a literature review conducted by Turner and Müller (2005) revealed that, with few exceptions (see Thamhain and Wilemon, 1987), leadership is not typically mentioned as one of the critical success factors in project management. Nevertheless, some scholars have undertaken studies of leadership styles in TOs. They found that, compared to non-temporary organizations, the leadership in TOs tends to be more participatory in style (Bryman *et al.*, 1987a; Meyerson *et al.*, 1996). Furthermore, leaders of TOs in the construction sector were found to have higher task orientation compared to those operating within non-temporary organizations (Bryman *et al.*, 1987b).

In contrast to the above studies that aimed to identify the leadership style in TOs as opposed to non-temporary settings, Keegan and Hartog (2004) compared the relationship between different leadership styles and employee motivation, commitment and stress in project teams as opposed to teams reporting to line managers. Interestingly, they found that although project managers' leadership style was not perceived as less transformational compared to that of line managers, the relationship between transformational leadership and outcomes tends to be weaker for employees reporting to project managers than for those reporting to line

managers. This unexpected outcome suggests that temporariness of a team has an effect on the relationship between leadership style and outcomes rather than only on the type of leadership exercised. Further research should therefore investigate the moderating effect of temporariness on the relationship between leadership style and various outcome variables.

Tension and pressure resulting from involvement in a TO is a third human resource topic studied by some authors. The relationship between these two variables, however, is equivocal. While Keith (1978) found that involvement in a TO correlates positively with work-related tension and higher strain, Miles (1964, p. 457) argued that members of a TO are protected from external stress. This apparent contradiction might be rooted in the fact that Keith (1978) studied TOs that involved part-time team members who continued their work in the non-temporary setting; at the same time, the TOs had high turnover in membership. Miles (1964), on the other hand, considered TOs to be self-contained and to a certain extent isolated from their environment. This issue of partial involvement and isolation brings us back to the earlier discussion of TO embeddedness (and disembeddedness) and the effect it may have on various aspects of TO performance.

A fourth and final human resource management issue in the extant TO literature is the roles of TO members. In a previously mentioned study, Goodman and Goodman (1976) showed that role clarity had a positive effect on task accomplishment but a negative effect on innovation and professional growth. In Bechky's 2006 film project study, she reported that in this kind of TO, structured systems of roles play an important coordinating function. And in 2006, Whitley focused on the role separation and stability of TO members in and across the TOs as one of the differentiating features of project-based organizations, capturing the 'flexibility and distinctiveness of their system of work organization and control' (Whitley, 2006, p. 83). Whitley further argued that project-based organizations with low separation and stability of roles tend to learn through 'establishing and changing patterns of work organization and division of tasks and skills', while in project-based firms with high separation and stability of roles, learning 'tends to be more specific to each individual and role than collective and organizational'.

In conclusion, our review suggests that further research is needed to understand the impact that involvement in a temporary organization has on the tension and stress experienced by employees, in particular the variables that moderate this effect, like for example full- versus part-time involvement. Similarly, future research should aim to further understand the function that roles and their stability have on various aspects of the TO's performance. Thirdly and finally, a fruitful avenue for future research

is to study the extent to which theories of leadership developed for nontemporary settings hold in temporary organizations, and what leadership tools managers in temporary settings may employ to successfully lead.

Structure and Coordination

Although there are some notable exceptions, few studies' primary focus is on coordination within temporary organizations. Instead, most authors have dealt with coordination as a subtheme of inquiry. Studies of structure in temporary organizations lean toward a consensus of viewing TOs as having relatively fewer formal and normative structures than nontemporary organizations (Keith, 1978; Meyerson *et al.*, 1996). TOs are also posited to be less hierarchical (Miles, 1964; Palisi, 1970), and less bureaucratic and mechanistic than non-temporary organizations (Bryman *et al.*, 1987a; Kadefors, 1995; Meyerson *et al.*, 1996). Given the above, TOs are considered to require more interpersonal and less formal processes of coordination (Bechky, 2006).

One example of an interpersonal coordination mechanism is trust. Although its relevance has been addressed for both intra- and interorganizational TOs, the importance of trust in the context of TOs presents a paradox. While extant literature emphasizes the importance of 'long term relationships for the generation of trust' (Grabher, 2002, p. 205), in TOs there is apparently no 'time to engage in the usual form of confidencebuilding activities that contribute to development and maintenance of trust in more traditional, enduring forms of organization' (Meyerson et al., 1996, p. 167). Therefore, although for the most part TOs do not offer an opportunity for long-term relationships to develop, their members do rely heavily on trust to tackle the complex tasks for which TOs are usually set up, such as learning and innovation (see Grabher, 2002) and the problem solving these tasks require (Ness and Haugland, 2005). Ness and Haugland (2005) also investigated how governance mechanisms evolve in interorganizational relationships with fixed ex ante endpoints. They found that despite limited duration, trust and relational norms do develop in such temporally limited collaborations. While hierarchical control mechanisms can supply the necessary confidence level, the trust that is necessary to assure sufficient information sharing for problem solving does evolve despite the temporary nature of a project.

The most noteworthy contribution on the issue of trust in TOs is that by Meyerson *et al.* (1996), who analyzed trust between members of temporary groups. As a possible solution for the paradox of limited time versus trust building, Meyerson *et al.* introduced the concept of swift trust. This concept is based primarily on role-based interactions between members

of temporary groups, and emerges when people under time pressure have no way of collecting evidence on the trustworthiness of individual group members, so they resort to category-driven information processing. Thus, formation of swift trust involves the willingness to suspend doubt and import trust to a given situation rather than create it. The suspension of doubt is an inherent element of any kind of trust (Möllering, 2003), but seems to be of particular importance in swift trust. With regard to coordination, Bechky (2006) contested Meyerson et al.'s view (1996) of TOs as unstructured and unstable, requiring swift trust as a primary mode of coordination. To the contrary, Bechky argued that work in such organizations is well structured, although coordination is achieved through non-traditional means. Bechky found that role-prescribed interactions occurring within a TO both coordinate the activities of a TO and sustain the role structures across TOs. Since Bechky's film projects are repeated TOs, whereas Meyerson et al. (1996) focus on non-repeated single occurrence TOs, it is likely that under different conditions, various forms of coordination (and structure) are more or less effective. Future research should address whether certain conditions (for instance, whether the TO is unique or repetitive) call for certain forms of coordination.

After reviewing the literature on structure, we assume that there must be some degree of fit between the structure of TOs and their environment and task. As we mentioned above, non-temporary and temporary organizations alike vary in the type of tasks they are set up to handle and the contexts in which they operate, among many other factors. Each of these contingencies is likely to be of influence on what kind of structure will be most appropriate to coordinate the TO. Because the issue of variance in structural aspects across various types of TOs has received only scant attention, it appears to be a fruitful area for future research.

Decision Making

Although there is research on decision making under time pressure, a condition often attributed to temporary organizations, research on decision making in temporary organizations as such is scarce. The only contributions to the subject that we were able to identify were related to decision making within project teams, and most of these studies tended to be rather prescriptive and practitioner oriented (for example Koppenjan, 2001; Laufer *et al.*, 1999; Parkin, 1996; Smith, 1993). Some of the issues covered in these studies include: when a project manager should include others in the decision-making process (Smith, 1993); what tool a project manager can use to manage the decision-making process of his team when uncertainty and time pressure are high (Laufer *et al.*, 1999); and how involving

representatives of safety interests in the decision-making process can help to internalize safety measures into the design and implementation of a project (Koppenjan, 2001).

Because of the lack of study, the field of temporary organization decision making offers a vast scope for future research. Issues raised by prior decision-making research can serve as a stepping stone in identifying directions for such research. For example, participation in decision making may affect both the commitment of those making decisions as well as the project outcome. The study of this concept in TOs may have additional unique implications because commitment may be harder to build in a temporary context. A second area of exploration could be the question of the extent of inclusion in decision making when this process is fraught with high levels of uncertainty and time pressure. While time pressure is likely to lead to the inclusion of few stakeholders in the decision-making process in favor of an efficient centralized process, higher uncertainty may call for higher inclusiveness (see Provan and Kenis, 2008). We consider these to be but two of the many interesting areas for future research.

Dynamics

Two opposing views on the evolution of temporary organizations have emerged from the literature: a sequencing approach and a punctuated equilibrium model. In 1995, Lundin and Söderholm drew on the project life cycle model presented in *A Guide to the Project Management Body of Knowledge* (Project Management Institute, 1987) and proposed a fourphase sequencing approach to a TO's development: action-based entrepreneurialism, fragmentation for commitment building, planned isolation and institutionalized termination. In contrast to this sequential approach, in their empirical and exploratory studies Gersick (1988, 1989) and Engwall and Westling (2004) proposed a punctuated equilibrium model of group dynamics in temporary teams.

In her study Gersick (1988, 1989) analyzed how groups in TOs approached and paced their work, based on the members' awareness of deadlines. After establishing a particular approach to executing a task at the outset of its work, the group stayed with this approach until halfway through its existence. This inertia ended with a transition when the group dropped the initial approach and adopted a new approach to problem solving. This was followed by rapid and marked progress. A second period of inertia climaxed with another transition right before the deadline. A final burst of activity then catapulted the players to the completion of their work (Gersick, 1989, p. 276).

In a similar vein, Engwall and Westling (2004, p. 1557) used the concept

of *peripety*, or the moment of sudden change, to explain the dynamic evolution of a project that had started ineffectively and abruptly became highly structured and effective. While the project members did not share a common view of the organization's goals and objectives, or how to achieve them before the peripety, 'after the peripety [. . .] one conceptualization [. . .] was commonly enacted on a collective level' (Engwall and Westling, 2004, p. 1569).

Despite these studies, the question still remains: do TOs develop in a sequential manner or in the punctuated equilibrium model? We propose that the difference may lie in the management structure of the project. A team headed by a project manager is likely to proceed more sequentially than a team that is self-managed, in which more peaks and lows occur. In fact, from the project management point of view, its very purpose is to strive to equalize the exerted effort throughout the project's development (for example by means of intermediate deliverables). In the self-managed teams, peaks and valleys in exerted effort are likely to arise and lead to a higher level of project risk.

Project-based Organizations

The final strand of research that emerged from our review of temporary organization literature focuses on organizations in which operations are mainly based on projects, that is, project-based organizations (see Blindenbach-Driessen and van den Ende, 2006; Hobday, 2000; Turner and Keegan, 1999, 2001). The following three studies highlight the range of research in this area particularly well. Turner and Keegan (1999) presented the preliminary findings of a study designed to investigate how project-based organizations are managed, especially in relation to operational control and governance and human resource policy, which encompasses among others individual and organizational learning and leadership. In another study Turner and Keegan (2001) investigated the governance structures of project organizations, emphasizing the roles of 'broker' and 'steward' in managing the interface between the project and clients. The most recent contribution on project-based management is from Blindenbach-Driessen and van den Ende (2006), who compared the success factors of projects within project-based organizations to those within functionally organized firms. '[T]he application of contingent planning approaches, explicit project selection, senior management support, the availability of sufficient experts, making business cases and testing and launching the new services' appear to be more important in projectbased organizations compared to others (p. 556). In contrast, 'the use of cross-functional teams, heavyweight project managers, collaboration with customers and suppliers and performing market research' turn out to be less important (p. 558).

While these contributions make an important step toward understanding the uniqueness of project-based organizations as compared to functionally organized organizations, future research should look to further understand the challenges involved in managing this type of organization. This is particularly important considering that an increasing number of organizations adopt the project-based way of working. Understanding how project-based organizations function and what drives their success is both of high scientific as well as practical relevance.

Table 2.1 summarizes our findings with regard to the eight major themes we identified in the current body of literature on temporary organizations. In the next section, we turn our attention to the central characteristic of TOs: temporariness.

TEMPORARINESS – DEFINITIONS AND IMPLICATIONS

Although definitions of temporary organizations have proliferated, they all point to one common characteristic, their temporariness. Yet, despite the central position that temporariness receives across the range of definitions in the extant literature, the understanding of temporariness and its implications is equivocal, as we will demonstrate. If temporariness is in fact the essence of a temporary organization, then a clear understanding of this concept is crucial. In order to gain insight into the meaning of temporariness, we surveyed studies on TOs that more-or-less explicitly addressed the concept of temporariness of TOs. Aiming to identify the main themes that emerge in the extant literature with respect to understanding temporariness, we propose that there are three possible approaches: temporariness as short duration, temporariness as limited duration and temporariness as awareness of impending termination, which is a subcategory of limited duration.

Before we proceed, we wish to stress that although we see them as distinct, there is undeniably some level of conceptual overlap between the three approaches. In addition, some of the studies we classified as taking a particular approach toward temporariness do not offer an explicit definition of the concept. In such cases we relied on implicit information conveyed by the authors about what temporariness entails. Obviously a certain level of subjectivity was inherent in this process. Nevertheless, we do believe that the classification we propose has merit and is a useful heuristic to further our understanding of temporariness.

Table 2.1 Temporary organizations: major themes, publications and research opportunities

Theme	Major publications	Future research opportunities
1. Types of TOs and contingent effects	Balachandra and Friar (1997); Blake (1978); Dvir et al. (1998); Jones and Lichtenstein (2008); Shenhar (2001a, b); Shenhar and Dvir (1996); Turner and Cochrane (1993); Wheelwright and Clark (1992); Whitley (2006)	 Interorganizational TOs Classification of TOs along temporal dimensions The impact of the temporal dimensions on the functioning and performance of TOs
2. Performance	Allen <i>et al.</i> (1980); Bradley (2003); Cusumano and Nobeoka (1998); Freeman and Beale (1992); Kernaghan and Cooke (1990); McGrath (1984); Miles (1964); Pinto and Covin (1989); Pinto and Mantel (1990); Pinto and Slevin (1987); Saunders and Ahuja (2006); Shenhar <i>et al.</i> (2001); Thamhain and Wilemon (1987); Turner and Müller (2005)	 Empirical comparison of the efficiency and effectiveness of both temporary and nontemporary teams How various performance indicators are affected by one or a set of drivers of success and why
3. Learning in TOs and knowledge flows	Brady and Davies (2004); Grabher (2004); Katz and Tushman (1981); Lindkvist (2005); Sapsed et al. (2005); Scarbrough et al. (2004); Schoffeld and Wilson (1995)	 Tension between environmental dependence, isolation and embeddedness and its impact on the TO's internal and external relationships Temporal embeddedness and disembeddedness and their impact on how TOs perform and function

 How TO performance is affected by team member selection and group composition Leadership in TOs including: leadership style, the effects of style on team performance and the moderating effect temporariness has on this relationship 	Effective coordination mechanisms in TOsStructure in TOs	 Inclusiveness versus efficiency under time constraints Creating support for and commitment to decision-making processes in TOs 	 Comparison between sequential and punctuated equilibrium models of TO development to determine which model is more accurate and under what circumstances 	 Functioning of project-based organizations and the drivers of their success
Bennis and Slater (1968); Bryman et al. (1987a); Goodman and Goodman (1976); Keegan and Hartog (2004); Keith (1978); Miles (1964); Morley and Silver (1977)	Bechky (2006); Bryman et al. (1987a); Kadefors (1995); Keith (1978); Meyerson et al. (1996); Miles (1964); Ness and Haugland (2005); Palisi (1970)	Koppenjan (2001); Laufer <i>et al.</i> (1999); Parkin (1996); Smith (1993)	Engwall and Westling (2004); Gersick (1988, 1989); Lundin and Söderholm (1995)	Blindenbach-Driessen and van den Ende (2006); Hobday (2000); Turner and Keegan (1999, 2001)
4. Human resource aspects	5. Structure and coordination	6. Decision making	7. Dynamics	8. Project-based organizations

Temporariness as Short Duration

The first approach to understanding temporariness that emerges in extant literature links temporariness to duration. More specifically, the essence of temporary organization is considered to be its short-lived character. Temporary organizations are assumed to have short lifespans, extending from a few weeks to a few years. In a 2001 study, Shenhar (2001b) made this claim explicit. Referring to projects as TOs, he drew on the work of Kerzner (1994) to define TOs 'as organizational processes of planning, organizing, directing, and controlling resources for a relatively short-term objective established to complete specific goals and objectives' (Shenhar, 2001b, p. 241). Similarly, Porsander (2000) viewed temporariness as a continuum, with short-lived organizations at one extreme and long-lived ones at the other. Accordingly, Porsander argued that since the organization she studied is closer to the first extreme, it is thus of temporary character. For her, the temporariness continuum is therefore equivalent to the duration continuum.

However, duration is an equivocal criterion for distinguishing TOs from their non-temporary counterparts, as the length of duration can vary greatly. For instance, both Kerzner and Shenhar (Kerzner, 1994, as cited in Shenhar, 2001b) found that the duration of some technical projects may exceed fifteen years, suggesting that, in some cases, the lifespan of a TO can actually be longer than that of a non-temporary organization. Based on this, the length of an organization's lifespan is a relative concept, and its use for discriminating between temporary and non-temporary organizations can be problematic. Nevertheless, understanding temporariness as short duration is guite common in the literature, which either explicitly points to a short lifespan as the distinguishing feature of TOs or does so more implicitly by discussing TOs in terms of the implications that short duration has for their functioning. For example, some of the implications of short duration that the literature mentions include assumptions that there is not enough time to 'develop a "shared" task-relevant knowledge base' (Lindkvist, 2005, p. 1198), 'to plan organizational change' (Gardiner and Simmons, 1998, p. 39) or 'to develop long-term trust in interpersonal relationships' (Munns, 1995, p. 19). It is frequently argued that project members are forced to cut to the chase, or reduce the extent of socializing 'and quickly engage in "cool" cooperation based on "swift trust"" (Lindkvist, 2005, p. 1198). In sum, where temporariness is taken to imply a short lifespan, TOs are assumed to have a strong task orientation at the expense of social or emotional ties (Lindkvist, 2005).

Another argument commonly referred to within the bounds of this approach is related to communication issues. In contrast to nontemporary organizations, in which communication barriers are thought to be overcome over time through common experience, the tight schedules on which TOs operate are thought to prevent the development of common experiences that would help overcome cognitive differences (Gardiner and Simmons, 1998). Considering that the overlap in knowledge bases of its members is likely to be very limited, the short lifespan of a TO does not allow sufficient time to create a shared, task-relevant knowledge base (Gardiner and Simmons, 1998; Lindkvist, 2005). Finally, it is argued that temporariness understood as short duration prevents group members from developing superordinate goals – 'goals that transcend the self-interests of each participant' (Weick, 1993, p. 644). This is likely to contribute to groups' vulnerability to disruptions, especially in the early stages of their existence (Weick, 1993).

Besides the fact that it is problematic to define temporariness in terms of duration, what is also remarkable in this strand of literature is that rather than studying the specific implications of short duration for the functioning of TOs, duration is largely ignored. Instead the arguments focus primarily on the aspects in which TOs differ from non-temporary organizations. At the same time, it is implied that these differences may be problematic; they are based on some underlying assumptions that what is generally important in some organizations, such as social and emotional ties, a high level of communication and common goals, is also important for other forms of organizations. However, the implications of the lack or lower level of these factors for the functioning and effectiveness of TOs are not made clear.

Temporariness as Limited Duration

Compared to the understanding of temporariness as short duration, the second understanding of temporariness, which links it to limited duration, is somewhat more prevalent in the TO literature (Grabher, 2002). In this approach, TOs are characterized as being bound by a deadline, and their existence is limited in time by an institutionalized termination (Lundin and Söderholm, 1995). In contrast to the short duration approach, the emphasis in the limited duration approach is not on how long a TO exists, but rather on the fact that it will cease to exist at a foreseeable point in time. The termination point can be: a specific moment in time, for example a deadline; a particular event, like the completion of the project goals (for example Bechky, 2006; Whitley, 2006); or a specific state or condition (Miles, 1964). In other words, the limited duration concept does not stress the (short) duration of the TO but rather its ex ante established temporal limitation.

As mentioned, this approach is quite prevalent in the extant literature. Morley and Silver (1977, p. 59) defined temporary systems as those 'limited

in duration and membership, in which people come together, interact, create something, and then disband'. Their emphasis, therefore, is on the fact that the existence of a TO is limited; that is, after the completion of a TO's task, it is disbanded (Morley and Silver, 1977). Similarly, Bryman *et al.* (1987b, p. 13) focused on the 'limited period of time' in which the task of a temporary system needs to be completed. Goodman and Goodman (1972, p. 103) viewed temporary systems as 'groups which work together, only once, on a specific task with a specific end point'. In the same vein, Engwall (2003, p. 789) referred to projects as 'time-limited organizational structures'. Turner and Müller (2003, p. 1) also identified transience as one of the characteristics of projects, that is, the fact that they have 'a beginning and an end'. All the above definitions clearly emphasize the termination point of a TO and the fact that this termination point has been determined at the moment of its formation.

Interestingly, as with outcomes of studies that approach temporariness from the point of view of short duration, studies in which the temporal limitation is central to temporariness also emphasize scarcity of available time. For example, when Morley and Silver (1977) pointed out the implications temporal limitation has for the organization, they highlighted the need for getting into relationships quickly and dealing with stress. This was also true for Turner and Müller (2003, p. 1), who argued that the consequence of the temporal limitation or transience of organizations is the 'urgency [. . .] of delivering the desired outcomes within the desired time-scales'. This focus on the consequences of temporal limitation related the time pressure is somewhat puzzling because the *ex ante* defined termination point need not imply time pressure (or awareness of insufficient time for a task). An example of this would be the previously mentioned fifteen-year-long technical projects, where the termination point is very distant.

In short, although the limited duration approach defines temporariness in terms of its temporal limitation, its implications appear to be analyzed only in terms of issues related to time pressure. In general, for both approaches the explorations of the implications of temporariness on the functioning and performance of TOs have been very limited. Moreover the most common implication seems to be that a TO's temporary nature makes its functioning difficult. In summary, the limited duration approach, in contrast to the short duration approach, views organizations as entities that have a predefined termination point at the outset of their existence.

Temporariness as Awareness of Impending Termination

Besides the distinction between the short duration and limited duration approaches that have been previously identified in the literature (Grabher,

2002), based on our literature review we have defined a third approach, temporariness as awareness of impending termination, which is a subcategory of the limited duration approach. Not only does this approach emphasize the limited duration of temporary organizations, but in addition, and of particular interest here, it looks at the impact of this awareness on the individual and collective behavior of TO members. Miles (1964, p. 438, emphasis added) stressed that in temporary systems, 'members hold from the start the basic assumption that – at some more or less clearly defined point in time – they will cease to be'. Later, Keith pointed out that '[t]emporary systems are created with the understanding that they will be of limited duration' (Keith, 1978, p. 196, emphasis added). Similarly, Packendorf talked of the 'predetermined point in time or time-related conditional state when the organization and/or its mission is *collectively* expected to cease to exist' (1995, p. 327, emphasis added). Finally, Sapsed et al. called on the earlier work of Bryman et al. (1987a, p. 256) in stressing that 'it is not so much the temporary character of projects per se that is the most important feature distinguishing them from more permanent systems, but rather the "recognition and anticipation of transience" (2005, p. 832, emphasis added).

In contrast to the short and limited duration approaches to temporariness, the implications of the awareness of impending termination which we encountered in studies that adopted this approach to temporariness, did not focus on how time pressure leads to, for example, necessity for swift trust or a higher task orientation. Rather, the arguments centered on how the shared awareness of impending termination affects the social processes taking place in the TO. Miles stated this succinctly when he set out to illustrate 'phenomena which flow from the fact that all participants know from the outset that the system is not permanent, but will terminate at a specified time' (1964, p. 445). Clearly, therefore, the underlying assumption here is that the social processes taking place in TOs may be quite different from those in non-temporary organizations. Another author who clearly illustrates the importance and implications of the awareness of impending termination is Gersick (1988, 1989), whose findings were discussed earlier. Gersick's finding that 'teams did not develop in a universal sequence of activities or stages, as traditional models have predicted', but rather went through periods of inertia punctuated by drastic moments of transition (1989, p. 276), is evidence of the unique social processes that may develop in a TO as a result of member awareness of the organization's impending termination. What makes this approach to temporariness unique is that members of a temporary organization from the outset of its existence are aware of, recognize and anticipate the imminent termination or transience of the organization (Bryman et al., 1987a).

DISCUSSION

In this chapter, we have reviewed the extant literature on the concept of temporary organizations and how temporariness is conceptualized. We have discussed how the primary areas and topics related to the functioning of TOs have been addressed, identified the gaps in this work and provided a number of directions for future research.

Some promising areas for future research include the exploration of time-related differentiating variables of TOs, further investigation of TO embeddedness in and dependence on its environment, as well as examination of important variables, including TO management structure and its effect on TO dynamics and TO composition as well as member selection. As we pointed out, there is a clear need to study the effect that these variables have on the functioning of and outcomes associated with TOs. Importantly, the study of the effect of those different variables on TO performance needs to take into account various aspects of that performance, such as innovativeness, effectiveness, goal attainment and timeliness. At a more general level, we contend that there is a lack of rigorous and systematic theoretical development in the literature on TOs. A first step to amend this situation would be to assess the applicability of some well-established organization theories to temporary contexts. This exercise would assist in taking stock of those areas of theoretical development that are most needed in temporary organization research. Table 2.1 summarized the findings from the first part of this chapter.

Based on our literature review, we were able to identify three distinct approaches to understanding what is considered to be the crucial characteristic of TOs, their temporariness. In the first, temporariness is conceptualized as short duration; the second stresses the limited duration of temporary organizations; and the third looks at temporariness as TO members' collective awareness of the organization's impending termination.

While the short duration approach does not provide an objective criterion for distinguishing between temporary and non-temporary organizations, the limited duration approach does, by stressing the *ex ante* defined termination point of the organization. In contrast to these first two approaches, which limit the scope of arguments to the effects of temporariness related to time pressure, the third approach stresses the consequences that the shared awareness of the organization's imminent extinction has for social processes taking place in the temporary organization. For these reasons, we conclude that this shared awareness approach to temporariness forms the most fertile breeding ground for subsequent inquiry. In addition, we found that for all of these three conceptualizations of temporariness, a thorough examination of the implications of

temporariness for TOs' functioning, performance and relationship to the wider organizational context is lacking in the current body of literature. We thus conclude that research explicitly studying this temporariness as TO members' awareness of impending termination and the implications it has for the organization's functioning and performance, constitutes one of the most prominent avenues for future research.

NOTES

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- Much of the project management literature and some studies that focus on TOs do not address the nature of temporariness.

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