

UNDERSTANDING THE ORGANIZATIONAL ANTECEDENTS OF BOTTOM-UP UN-ENACTED PROJECTS – TOWARDS A CONCEPTUAL MODEL BASED ON DEVIANCE THEORY

Complete Research

Buchwald, Arne, University of Bayreuth, Universitätsstr. 30, 95440 Bayreuth, Germany, arne.buchwald@uni-bayreuth.de; University of Duisburg-Essen, Universitätsstr. 9, 45141 Essen, Germany, arne.buchwald@uni-due.de

Urbach, Nils, University of Bayreuth, Universitätsstr. 30, 95440 Bayreuth, Germany, nils.urbach@uni-bayreuth.de

Ahlemann, Frederik, University of Duisburg-Essen, Universitätsstr. 9, 45141 Essen, Germany, frederik.ahlemann@uni-due.de

Abstract

Un-enacted projects are those projects that have not been officially evaluated by the project portfolio management but do exist although they are not known to a company's project portfolio. As a consequence, resources thought to be available often prove to be actually unavailable and that unofficial initiatives eventually compete for scarce resources. One particular type of these un-enacted projects are bottom-up initiatives. Bottom-up un-enacted projects are unofficial initiatives on which employees spend time without order but with which they intend to benefit their organizations. While previous research highlights the great potential of bottom-up un-enacted projects, they only focus on the individual level but leave the organizational level for further research. To address this research gap, this study aims at gaining a deeper understanding of the organizational drivers of bottom-up un-enacted projects. We draw on deviance theory to develop a conceptual model for explaining the occurrence of these projects. In order to triangulate the emerging model with insights from practice, we use interview data to cross-check and refine the theory-driven model. Our results advance the theoretical discourse on the concept of un-enacted projects and enable practitioners to understand the levers with which to steer respective activities in the intended direction.

Keywords: Un-Enacted Projects, Bottom-up Projects, Deviance Theory, Constructive Workplace Behavior.

1 Introduction

Project portfolio management (PPM) has become more and more important to organizations over the last decades (Hunt and Killen, 2008). It allows organizations to better align information technology (IT) projects with their IT strategy by which an organization not only reaches a more balanced portfolio of ongoing projects (Kumar et al., 2008), but also maximizes their returns from IT spending (Cubeles-Márquez, 2008). The goal of PPM is therefore to identify the selection and sequence of proposed projects to support a firm's overall goals best. Early research on PPM concentrated on

calculative approaches (e.g., scheduling optimization or project selection algorithms) that only provided limited value to practitioners (Hunt and Killen, 2008). Killen et al. (2007) summarizes that many of the methods “have not been adopted by managers despite 40 years of development” (p. 1868). In turn, when applying and practicing PPM, organizations often face challenges of which some are resource-related (Jeffery and Leliveld, 2004). Blichfeldt and Eskerod (2008) conclude that the existence of un-enacted projects which compete with official projects for scarce resources is one of the reasons, even in more advanced PPM organizations. Despite the fact that resources were officially assigned to a project by PPM, some of the resources turn out to be unavailable in daily practice. Blichfeldt and Eskerod (2008) attribute the cause to the existence of various unofficial initiatives because project team members strive to perform equally well on both official projects and un-enacted initiatives (Dooley et al., 2005).

Un-enacted projects are defined as “unofficial projects that have never been subject to any official evaluation process but do exist, although they are not known to or are included in the project portfolio of a company” (Buchwald and Urbach, 2012, p. 2). Similar terms that describe the phenomenon are *unapproved project*, *unauthorized project*, or a project “*run under the radar*”. Even though the general phenomenon of circumventing corporate decision-making structures is well-investigated in organizational research, well-studied in research and development (R&D) project literature, and well-known in practice, there is, despite its impact on organizations, very little previous research of it for the domain of PPM (Buchwald and Urbach, 2012). It was transferred to the PPM context (described as un-enacted projects) (Blichfeldt and Eskerod, 2008), mentioned in a few articles (e.g., Eskerod and Riis, 2009; Filippov et al., 2010; Turner et al., 2008) and further discussed in only two studies (Buchwald and Urbach, 2012; Mors et al., 2010). Buchwald and Urbach (2012) further differentiate between different types of un-enacted projects. One specific type identified are the so-called *bottom-up un-enacted projects* on which employees spend time with which they intend to benefit their overall organization. By drawing on case study research, the authors take a first step in exploring these bottom-up un-enacted projects and explain preliminary characteristics and major drivers. Bottom-up un-enacted projects are found to vary significantly among the case organizations. For instance, in a financial services organization, one of such bottom-up un-enacted projects focused on the conceptual development of a new product idea. In the same organization, another initiative installed separate IT infrastructure in its own department, next to and hidden from corporate IT services. In an IT organization, a bottom-up un-enacted project consisted of two employees who perceived the need of an interface between its corporate groupware solution and a well-established third-party application. They invested a little time and developed the extension even though such task was not part of their job description.

We argue that while some types of bottom-up un-enacted projects are rather harmful from an IT governance point of view (e.g., those types which lead to department-internal, separated and hidden IT), other types of bottom-up un-enacted projects (e.g., conceptual ideas or the extension initiative) might be desired from an overall corporate point of view. We focus on the latter type of bottom-up un-enacted projects because they are found to be a very valuable source of innovation and entrepreneurship for organizations (Appelbaum et al., 2007; Galbraith, 1983; Galperin, 2002; Kanter, 1983). In these unofficial projects, employees can use their creative potential to improve work routines or to engage in innovative projects that may ultimately be very profitable to the organization (Galperin, 2002). While Buchwald and Urbach (2012) also highlight the great potential of bottom-up un-enacted projects, they only focus on the individual level, i.e., they investigate reasons why individuals engage in this type of un-enacted projects but leave the organizational level for further research.

To address this gap, we aim at gaining a deeper understanding of the organizational drivers of bottom-up un-enacted projects. Specifically, our research question is: What are the organizational antecedents of the occurrence of bottom-up un-enacted projects? To answer our research question, we derive propositions and develop a conceptual model as a basis for future empirical work. While one small

bottom-up un-enacted project may not negatively impact an organization, a large number of small bottom-up un-enacted projects may consume significant resources of an organization. The overall goal of our research is to help organizations manage the thin line between “productive nonconformists and costly troublemakers” (Hanke and Saxberg, 1985, p. 219) by providing a model that incorporates relevant levers which an organization can adjust. On the one hand, as the quote suggests, deviant behavior may result in innovative behavior that, overall, benefits the organization. On the other hand, however, deviant behavior may also lead to disruption in organizational processes, complaining, and trouble in an organization. Our research helps an organization to adjust the relevant factors that foster or inhibit the occurrence of bottom-up un-enacted projects. While investigations of individual level factors certainly provide illuminating insights into these triggers, an organization can only exercise influence on individual factors over a long period of time, as the work force of an organization cannot be changed immediately. The inability to change individual factors highlights the relevance and the potential of organizational antecedents which can be influenced by an organization. Organizational antecedents of bottom-up projects, however, have not been investigated so far.

We draw on organizational behavior literature and deviance theory in particular to take the current state of research on un-enacted projects a step further. While research on organizational deviance (or workplace deviance) has been conceptualized in a destructive manner for a long time (e.g., individuals who threaten the well-being of an organization and/or cause harm to other employees) (Galperin, 2012), recent research also begins to acknowledge the positive consequences of deviating individuals. Spreitzer and Sonenshein (2004) define positive deviance as “intentional behaviors that depart from the norms of a referent group in honorable ways” (p. 828). Positive deviants thus act in the best interest of their organizations. Appelbaum et al. (2007) conclude that “it is vital for an organization seeking long-term success to [...] encouraging positive [deviant] workplace behaviors that contribute to their organizational goals” (p. 596), because positive deviance “realizes the highest potential of organizations and their members” (Cameron and Caza, 2004, p. 732).

In order to triangulate the emerging model with insights from practice, we conducted ten expert interviews between March 2011 and November 2013. The interviewees work for five different organizations, originating in a variety of industries: management consulting, information technology, financial services, chemicals and consumer goods, and automotive. The interviewees were chosen based on convenience sampling, because only a limited number of organizations granted us permission to collect confidential data from key project staff members. The data collection entailed in-depth face-to-face interviews that lasted between one and two hours each. Interviews were recorded and transcribed, while interviewees were ensured anonymity. We used the interviews to cross-check the theory-driven model development and refined our model. Excerpts of the interviews are included next to the description of the constructs and the proposed relationships in section 3.

We organize this article as follows. Section 2 outlines the theoretical foundations of our study by presenting an introduction to organizational deviance theory which provides the theoretical frame for our research. In section 3, we describe the development of our constructs and propositions for explaining the occurrence of un-enacted projects from an organizational perspective. In section 4, we summarize the constructs and synthesize them and their propositions into a conceptual model. In section 5, we point out our main contributions after a discussion of the key results, the limitations, and the suggestions for future research.

2 Theoretical Foundations

Since our research is concerned with workplace behavior that is not approved, may be against corporate policies, yet with the organization’s best interest in mind, we use deviance theory as a theoretical lens and foundation for our work. While deviance theory has a long tradition in sociology research and is well established in other disciplines, such as marketing (Caruana et al., 2001) or health

care (Robbins and Galperin, 2010), it has – to the best of our knowledge – not been applied to the field of project portfolio management.

Deviant behavior was traditionally synonymous for negative or destructive deviant behavior, before the concept was broadened by also including positive consequences of deviant behavior (Galperin, 2012). Negative deviance has been referred to as antisocial behavior (Robinson and O'Leary-Kelly, 1998), destructive deviance (Galperin, 2002), organizational misbehavior (Vardi and Wiener, 1996), employee deviance (Robinson and Bennett, 1995), or workplace deviance (Robinson and Greenberg, 1998). The stream zeroes in on various types of negative behavior of employees, all of which directly or indirectly negatively impact an organization. Robinson and Bennett (1995) define negative workplace behavior as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization” (p. 556). Examples of such behaviors are employee theft, absenteeism, or conducting unauthorized transactions (Robinson and Bennett, 1995).

Contrary to negative deviant behavior, Dodge (1985) initially proposed the term positive deviance by contending “sociologists are overdue to acknowledge the empirical existence of positive deviance and to incorporate the positive deviance into a broader, more general study of deviance” (p. 17). The term later has also been referred to as constructive deviance (Galperin, 2002), or pro-social behavior (Appelbaum et al., 2007). The stream focuses on workplace deviant behavior of employees with which they intend to benefit their organizations. Positive deviance is defined as “intentional behaviors that depart from the norms of a referent group in honorable ways” (Spreitzer and Sonenshein, 2003, p. 209). More particularly, Spreitzer and Sonenshein (2004) further enlarge on characteristics which need to be fulfilled in order to deem a behavior positive deviant. First, the behavior needs to be intentional and voluntary instead of only occurring by chance or by being forced. Second, the behavior needs to depart from norms. Norms hereby refer to commonly expected behavior of the reference group. Accordingly, the behavior of the individual is frequently not expected by the reference group. Finally, the behavior needs to be of honorable nature. The individual perceives his actions to be in the organization's best interest. Even though the individual may bypass or violate rules of an organization, he attempts to facilitate the objectives of the organization (Robbins and Galperin, 2010). This may include, for instance, an employee who recognizes a customer's issue and deviates from dysfunctional procedures to more efficiently resolve it, or an employee who notices the usefulness of a software feature and develops it even though such development is not part of his job description. Appelbaum et al. (2007) summarize that “organizations have a vested interest in creating some types of positive deviant workplace behaviors within their walls by empowering their employees”. “Employees who voluntarily violate the organizational norms may be important sources of innovation and entrepreneurship” (Galperin and Burke, 2006, p. 331).

Previous research on workplace deviance investigated individual factors (e.g., O'Neill and Hastings, 2011; Robinson and O'Leary-Kelly, 1998; Vardi and Wiener, 1996) and organizational factors (e.g., Fagbohunge et al., 2011; Peterson, 2002). Since deviance research particularly focused on individual factors, Robinson and Greenberg (1998) highlight that deviance research needs to be expanded from the individual level to other levels in order to make meaningful predictions on workplace deviance behavior.

3 Conceptual Development

After we described previous research on un-enacted projects and deviance theory as the theoretical foundation of our work, we now focus on the derivation of propositions in order to explain the occurrence of bottom-up un-enacted projects. We focus on the organizational level, and the unit of analysis is thus the organization. We decided to pursue this path because, in contrast to individual factors, an organization can take appropriate actions in order to directly develop organizational parameters in the desired way, within which individuals may then take their own decisions.

Furthermore, drawing on Warren (2003), the reference point against which deviant behavior is compared should be made explicit. The reference point in our study is a manager's perspective as to what is regularly expected employee behavior. This perspective is distinct from behavioral expectations of other parties, such as peers or customers.

We build upon the theoretical model of Galperin (2002) who investigated both constructive and destructive deviant behaviors in Mexican and Canadian organizations. Whereas she also included destructive behavior in her research, our research zeroes in on the positive aspects of deviant behavior. Specifically, we identify nine organizational-level factors which serve as independent variables in our study. Whereas more general studies on positive deviance research draw on constructive deviance as dependent variable (e.g., Galperin, 2002; Robbins and Galperin, 2010), we include a specific adaptation, namely the occurrence of bottom-up un-enacted projects. When investigating individual and organizational-level factors, Galperin (2002) decomposed her dependent variable, the central construct constructive deviance, into three single constructs: innovative organizational constructive deviance, challenging organizational constructive deviance, and interpersonal constructive deviance. Even though we are primarily interested in investigating the occurrence of bottom-up un-enacted projects in general, we also include her decomposition in our model. Thus, our dependent variable is conceptualized as a second-order construct, which in turn comprises Galperin's (2002) three dimensions of constructive deviance. By doing so, we can not only describe the influence of the organizational factors, but also to what extent the occurrence of bottom-up un-enacted projects relates to the three types of constructive deviance.

Galperin (2002) identifies the variables job autonomy, supportive leadership, sociopolitical support, access to information, and access to resources and relates these to both destructive and constructive deviant behavior. In our model, we also include these variables, which stem from the empowerment literature (Spreitzer, 1995b), and relate them to the occurrence of bottom-up un-enacted projects. Furthermore, based on findings of Buchwald and Urbach (2012), we include three additional variables, organizational flexibility, formalization, and centralization of decision-making in our study. All three variables were identified to be important antecedents of the occurrence of un-enacted projects in their case study research. The last organizational antecedent that we include in our model is the variable entrepreneurial orientation since it is portrayed to be a precursor to organizational innovation (Howell et al., 2005).

Because the occurrence of bottom-up un-enacted projects (and, finally, the fact that resources are bound in these unofficial projects which, then, are unavailable to officially enacted projects) is investigated as the primary result, we start at the right-hand end of our model by explaining the depending variable, conceptualized as a second-order construct, and conclude with our independent variables. In the following sections, we elaborate on our constructs and their relationships based primarily on existing literature. In addition, we conducted ten interviews from which we extract supporting quotes to the constructs of our model.

3.1 Occurrence of bottom-up un-enacted projects

The dependent variable in our study is a specific adaptation of constructive deviance, the occurrence of bottom-up un-enacted projects. We define the construct as the extent to which employees spend time with working on bottom-up un-enacted projects without order but with which they intend to benefit their organizations. In previous research, bottom-up un-enacted projects are found to vary significantly among organizations, the scope ranging from specific IT implementations to conceptual ideas (Buchwald and Urbach, 2012).

We further conceptualize our dependent variable, the occurrence of bottom-up un-enacted projects, as a second-order construct. In order to derive the second-order construct, we especially draw on Galperin (2002) who develops an instrument to measure constructive deviance. Previous research on destructive

deviance suggests two separate types of deviant behavior (Galperin and Burke, 2006; Robinson and Bennett, 1995): (1) deviant behaviors that are directed toward an organization and (2) deviant behaviors that are directed toward other individuals. Analogous to destructive deviance, Galperin (2002) expects two types of constructive deviance to emerge, namely organizational constructive deviance, and interpersonal constructive deviance. Her confirmatory factor analysis (CFA) suggests, however, that there are two dimensions of organizational constructive deviance, next to interpersonal constructive deviance. The two dimensions of organizational constructive deviance comprise innovative organizational constructive deviance and challenging organizational constructive deviance. She used the comparative fit index (CFI) to evaluate the model and found that, compared to the one-factor and two-factors model, the three-factor provided the best fit (Galperin, 2002). Summarizing, the dependent variable in our study is formative (Petter et al., 2007) and a composite of the three dimensions of constructive deviance (Galperin, 2002): innovative organizational constructive deviance, challenging organizational constructive deviance, and interpersonal constructive deviance. By integrating the three dimensions of constructive deviance in our model, we can not only measure our dependent variable, but also indicate which shape of the three dimensions of constructive deviance the occurrence of bottom-up un-enacted projects has.

Innovative organizational constructive deviance is defined as “beneficial acts of an innovative or creative nature that are directed to the organization” (Galperin, 2002, p. 64) by deviating from organizational norms. Examples of this behavior comprise looking for innovative ways to conduct daily procedures and developing non-intuitive answers to problems (Galperin and Burke, 2006). Challenging organizational constructive deviance is defined as “behaviors that outwardly challenge the existing norms of the organization and break the rules in order to help the organization” (Galperin, 2002, p. 316). Examples of this behavior comprise violating or bending procedures to accomplish a job or an issue of a client (Galperin and Burke, 2006). Interpersonal constructive deviance is defined as “people who do not follow the orders of their supervisor or disobey their supervisor’s instructions to perform more efficiently” (Galperin, 2002, p. 316). Examples of such behavior are neglecting the orders or reporting a fault when such behavior is likely to lead to a positive organizational change (Galperin and Burke, 2006).

3.2 Organizational antecedents

In this section, we introduce the nine independent constructs of our model. We provide definitions for each construct and explain how each of them is related to the occurrence of bottom-up un-enacted projects.

Job autonomy

Job autonomy is defined as the extent to which “the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman and Oldham, 1976, p. 258). By granting autonomy to its employees, organizations enable their employees to perceive a sense of control over how to achieve desired work results and organizational objectives (Morrison, 2006). Previous research highlights that job autonomy stimulates the innovative potential in employees, which appeals to their intrinsic motivation (Galbraith, 1983; Tushman and Nadler, 1986). Furthermore, job autonomy leads to employee behaviour to “persist in the presence of obstacles like corporate policies” (Galbraith, 1983, p. 15). The freedom to schedule and prioritize activities, which a high degree of job autonomy enables, allows an employee to shift his task priorities and to engage in activities that are not necessarily included in his job description. We conclude:

P1: A higher level of job autonomy leads to a higher occurrence of bottom-up un-enacted projects

Supportive leadership

Supportive leadership is defined as the degree to which “leader behavior can be characterized as friendly and approachable, and considerate of the needs of subordinates” (Bearden et al., 2011, p. 528). This comprises behaviors such as leaders show interest in their subordinates, maintain close links with their subordinates, encourage them to achieve great results, and support them in problem-solving. More specifically, previous literature suggests that the leadership style influences deviant workplace behavior (Mulki et al., 2006; Tushman and Nadler, 1986). In organizations, “the leader, functioning as an agent of reinforcement and punishment, can influence subordinate behavior through the control of positive and negative stimuli” (Ashour and Johns, 1983, pp. 603-604). The provision of positive and negative stimuli and, more generally, the relationship between an employee and his supervisor can be conceptualized using the leader-member exchange (LMX) theory (Dansereau Jr et al., 1975). A leader thus has low-quality exchanges with some of his subordinates (“hired hands”) and high-quality exchanges with other employees (“trusted assistants”) (Graen and Uhl-Bien, 1995). Compared to employees having low-quality exchanges, an employee who has a high-quality exchange relationship with his leader is granted more latitude, greater status, mutual trust, reciprocal influence, obligation, and respect (Graen and Uhl-Bien, 1995; Schriesheim et al., 1999). Research on innovation suggests that these high-quality exchange attributes are important precursors for employees to generate innovative ideas in organizations. Galbraith (1983) labels these emerging ideas as “accidental innovations”, which necessitate a different type of leadership, one that is in contrast to the type of leadership in an operating organization. The realization of innovative ideas requires a departure from established systems and practices in an organization (Janssen, 2005). Thus, employees who propose innovative ideas not only deviate from commonly expected behavior but also need to violate the prevailing norms of an organization. As Janssen (2005) further summarizes, “at its core, innovation is a socio-political process that can be expected to be resisted by organizational members who are committed to the existing frameworks of thoughts and actions” (p. 573). Thus, in case of emerging bottom-up initiatives, the leader needs to guide and to champion as well as to protect the ideas of his subordinates. A project manager of the automotive organization concludes: “*The supervisor needs to support the employee’s idea. Most employees in our organization are working to their capacity and thus, the leader needs to guide and to disencumber the individual employee.*” Concluding, we propose:

P2: A higher level of supportive leadership leads to a higher occurrence of bottom-up un-enacted projects

Sociopolitical support

Sociopolitical support is defined as the degree to which employees receive “endorsement, approval, and legitimacy from various organizational constituencies and is typically gained from membership in organizational political networks” (Spreitzer, 1995a, p. 608) drawing on Kanter (1983). Employees are “socially embedded” in organizational networks (Granovetter, 1985), which form the social backbone of an organization. By drawing on this social backbone, employees connect to one another and accomplish their work efficiently (Spreitzer, 1996). Social networks may comprise, for instance, peers, subordinates, or colleagues in work groups. These social networks are not static, but constantly change with their members and due to members’ needs (Granovetter, 1985). By engaging in different social networks, employees build or expand their ties to other members in the organization and, ultimately, increase their influence (Bahrami, 1992; Kanter, 1983). Communication within these social groups is found to enhance organizational innovation (Damanpour, 1991). They find that external communication (e.g., environmental scanning) supports the emergence of innovative ideas (Jervis, 1975), whereas internal communication fosters the spread of innovative ideas across the social networks and the organization (Aiken and Hage, 1971). Finally, Peterson (2002) summarizes in her quantitative investigation that workplace deviance occurs due to the influence of work groups. Since the evaluation of project proposals is performed by PPM, a departmental supervisor cannot decide upon the enactment of an un-enacted project to an official project. Thus, we argue that supports from peers and/or superiors especially leads to

the department-internal approval of these initiatives and the fact that employees spend time working on bottom-up initiatives. One project team members of the financial services organization stresses: “*In our organization, employees are rarely pursuing bottom-up initiatives on their own, but often convince others to join their initiatives. Colleagues with whom they have good contact most likely join and advance the ideas.*” Concluding, we propose:

P3: A higher level of socio-political support leads to a higher occurrence of bottom-up un-enacted projects

Access to information

Access to information is defined as the degree to which “more information [is] more available to more people at more levels through more devices” (Spreitzer, 1996, p. 488) drawing on Kanter (1986). Previous research stresses that if information sharing in an organization is not kept to a minimum but rather openly distributed across the organization, employees are more likely to develop innovative ideas (Galperin, 2002; Kanter, 1983; Spreitzer, 1995b). Vice versa, Kouzes and Posner (1987) highlights that in the absence of information employees will not go the extra mile and use their creativity for the organization’s interest. Access to information is broadly defined and includes, for instance, data on the mission of an organization, strategic objectives, the external environment, and information about performance (Spreitzer, 1995a; Spreitzer, 1995b). In particular, Lawler (1992) stresses the importance of two types of information: (1) information on an organization’s mission as well as (2) information on organizational performance. The first type helps members of the organization to understand its sense and its determination. Based on this understanding, members can take or influence decisions that are directed towards the objectives of the organization and its mission. The second type refers to information on the performance of the department or work group in which an employee works. This information allows employees to take or influence decisions to keep or improve performance in the future. Information on performance not only appeals to the competence but also underlines the unit’s appreciation in the organization. Overall, we argue that access to information helps an employee to identify relevant organizational issues in a bottom-up way and to resolve them, potentially not aligned with organizational processes. We conclude:

P4: A higher level of access to information leads to a higher occurrence of bottom-up un-enacted projects

Access to resources

Access to resources is defined as the degree to which “[sic!] more general managers working through smaller business units; more project teams that have budgets; special resource pools of unallocated funds that people can tap to solve problems” (Spreitzer, 1996, p. 489) drawing on Kanter (1986). Resources comprise, for instance, manpower, funds, and time. From the empowerment perspective, access to resources is important for employees because it allows them to be proactive and get things done (Spreitzer, 1995a). If members in an organization perceive to have access to resources, the members’ overall perception of control over their environment is increased (Zimmerman, 1995). We argue that if employees have access to resources, they are more likely to engage in bottom-up un-enacted projects to conceptualize or implement their ideas straight away. A business division representative of the IT organization summarizes: “*Our IT employees have access to resources who can directly implement the technical ideas, whereas other employees in our organization may be limited by organizational dependencies.*” Overall, we propose:

P5: A higher level of access to resources leads to a higher occurrence of bottom-up un-enacted projects

Organizational flexibility

Organizational flexibility is defined as the degree to which an organization has the ability to change or to react to environmental changes (Golden and Powell, 2000). It is vital for organizations to continuously adapt to environmental changes in order to avoid slow extinction (March, 1995). Organizational

flexibility encompasses a set of organizational and managerial capabilities, both of which support the adaptation process (Hatun and Pettigrew, 2006). In terms of organizational capabilities, an organization needs to be able to attain a new structure, which enables it to be successful under environmental changes. In terms of managerial capabilities, a broad knowledge base and experienced managers with strong educational backgrounds are necessary and help the organization develop and determine the best response to environmental changes (Bahrami, 1992). While a more heterogeneous group of managers not only better detects the need to adapt to a changed environment, they also better develop and support innovative ideas (Bahrami, 1992). Overall, previous research posits that organizational flexibility is necessary for innovation (Quinn, 1985). Furthermore, inflexible organizational structures and processes are found to be important reasons as to why employees engaged in un-enacted projects (Buchwald and Urbach, 2012). A project manager of the IT organization points out: “For me, un-enacted projects are a consequence of the rigid and inflexible project portfolio management that is practiced in our organization. I was not able to make them change the PPM process such that it adequately addresses the needs of our bottom-up ideas. As a result, I explore promising business ideas within my larger projects.” Concluding, we propose:

P6: A lower level of organizational flexibility leads to a higher occurrence of bottom-up un-enacted projects

Entrepreneurial orientation

Entrepreneurial orientation is defined as the degree to which “the top managers are inclined to take business-related risks, to favor change and innovation in order to obtain a competitive advantage for their firm, and to compete aggressively with other firms” (Covin and Slevin, 1989, p. 77). The construct comprises three dimensions (innovation, proactiveness, and risk taking) (Kreiser et al., 2002), which taken together form “a basic, unidimensional strategic orientation” of an organization (Covin and Slevin, 1989, p. 79). Entrepreneurial initiatives are of decisive importance to an organization because they not only enhance overall performance but also serve as critical step in improving the organization’s competitive edge (Knight, 1997). Knight (1997) further highlights that “in companies with an entrepreneurial orientation, expansion of existing business and diversification through internal development are the means through which proactive opportunity-seeking and problem-solving behaviors are fulfilled” (p. 214). While entrepreneurial behavior, by definition, implies deviance from regular behavior in the social context (Mueller and Thomas, 2001), an entrepreneurially-oriented organization may take appropriate measures in order to channel the deviant innovative behavior into a structured innovation process. In this case, we argue that employees promote their innovative bottom-up ideas through the structured innovation process. In other words, employees don’t need to deviate from official processes and thus don’t need to launch their innovative ideas through a bottom-up un-enacted project. To conclude:

P7: A higher level of entrepreneurial orientation leads to less occurrence of bottom-up un-enacted projects

Formalization

Formalization is defined as the extent to which “rules define roles, authority relations, communications, norms and sanctions, and procedures” (Deshpande and Zaltman, 1982, p. 18). While highly formalized organizations enforce behavior and can well predict performance (Pierce and Delbecq, 1977), previous research stresses that a high degree of formalization is counterproductive to organizational innovations. For instance, Arad et al. (1997) investigate structural characteristics and find that formalization, among other structural characteristics, inhibits innovation. Furthermore, Bidault and Cummings (1994) conclude that formalization is a barrier to spontaneity and flexibility, both of which are required for internal innovation. Finally, Pierce and Delbecq (1977) summarize that low formalization is required for openness in an organization, which in turn is an important precursor for idea initiation. Even though a high degree of formalization often does not lead to many innovation proposals through the official

innovation process, employees identify alternative paths how to discuss, test, and potentially implement their innovative ideas. Buchwald and Urbach (2012) find that innovative employees in organizations characterized by a high degree of formalization often bypass corporate processes and initiate unofficial initiatives to achieve their desired objective. One interviewee of the IT organization describes: “*Our organization has a high degree of formalization. We have many rules in place that are quite strictly enforced. If I want to initiate a small initiative to explore a promising idea, I need to prepare a comprehensive set of documents. Especially in case of smaller bottom-up initiatives, I avoid the formal burden and pursue an unofficial initiative.*” To conclude, we propose:

P8: A higher level of formalization leads to a higher occurrence of bottom-up un-enacted projects

Centralization of decision-making

Centralization of decision-making is defined as the extent to which “power is distributed among social positions” (Hage and Aiken, 1967, p. 77) and describes the locus of authority and decision-making in an organization (Damanpour, 1991). Previous research stresses that the concentration of decision-making authority inhibits innovations. For instance, Thompson (1965) analyses bureaucratic structures and finds centralized decision-making authority not only hinders creativity, but also ultimately precludes innovation. Similarly, Arad et al. (1997) investigate structural characteristics and find that centralization of decision-making, among other structural characteristics, prevents innovation. In turn, Buchwald and Urbach (2012) stress that centralized decision-making not necessarily precludes employees’ innovative ideas, but that these employees rather bypass corporate processes. More particularly, they find that these innovative ideas emerge by means of un-enacted projects in their case organizations. In order to clearly separate this construct from job autonomy that focuses on how employees achieve given objectives, the centralization of decision-making focuses on the degree to which an organization delegates the freedom to choose on what aspects to work to their employees. We argue that in organizations which are characterized by a high degree of centralized decision-making, innovative employees will circumvent official decision-making processes and pursue their ideas as un-enacted projects. To conclude, we propose:

P9: A higher level of centralization of decision making leads to a higher occurrence of bottom-up un-enacted projects

4 Conceptual Model

After having introduced the constructs and their relationships in section 3, we now summarize the constructs, their definitions, and their theoretical support in Table 1.

Construct	Construct definition	Theoretical support
Occurrence of bottom-up un-enacted projects	The degree to which employees spend time with working on bottom-up un-enacted projects without order but with which they intend to benefit their organizations	(Buchwald and Urbach, 2012)
Innovative constructive organizational deviance	The degree to which employees conduct “beneficial acts of an innovative or creative nature that are directed to the organization” (Galperin, 2002, p. 64)	(Galperin, 2002; Galperin and Burke, 2006)
Challenging constructive organizational deviance	The degree to which employees show “behaviors that outwardly challenge the existing norms of the organization and break the rules in order to help the organization” (Galperin, 2002, p. 316)	(Galperin, 2002; Galperin and Burke, 2006)
Interpersonal constructive deviance	The degree to which employees “do not follow the orders of their supervisor or disobey their supervisor’s instructions to perform more efficiently” (Galperin, 2002, p. 316)	(Galperin, 2002; Galperin and Burke, 2006)
Job autonomy	The degree to which “the job provides substantial freedom,	(Appelbaum et al., 2007;

	independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman and Oldham, 1976, p. 258)	Galbraith, 1983; Galperin, 2002; Hackman and Oldham, 1976; Osgood et al., 1996)
Supportive leadership	The degree to which “leader behavior can be characterized as friendly and approachable, and considerate of the needs of subordinates” (Bearden et al., 2011, p. 528)	(Galperin, 2002; Janssen, 2005)
Sociopolitical support	The degree to which employees receive “endorsement, approval, and legitimacy from various organizational constituencies and is typically gained from membership in organizational political networks” (Spreitzer, 1995a, p. 608)	(Galperin, 2002; Peterson, 2002; Robinson and O’Leary-Kelly, 1998; Spreitzer, 1996)
Access to information	The degree to which “more information [is] more available to more people at more levels through more devices” (Spreitzer, 1996, p. 488)	(Galperin, 2002; Spreitzer, 1996)
Access to resources	The degree to which “[sic!] more general managers working through smaller business units; more project teams that have budgets; special resource pools of unallocated funds that people can tap to solve problems” (Spreitzer, 1996, p. 489)	(Galperin, 2002; Spreitzer, 1996)
Organizational flexibility	The degree to which an organization has the ability or capability to change or to react to environmental changes (Golden and Powell, 2000)	(Buchwald and Urbach, 2012)
Entrepreneurial orientation	The degree to which members of an organization are characterized by “a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities” (Lumpkin and Dess, 1996, p. 137)	(Howell et al., 2005)
Formalization	The degree to which “rules define roles, authority relations, communications, norms and sanctions, and procedures” (Deshpande and Zaltman, 1982, p. 18)	(Bidault and Cummings, 1994; Buchwald and Urbach, 2012)
Centralization of decision-making	The degree to which “power is distributed among social positions” (Hage and Aiken, 1967, p. 77)	(Buchwald and Urbach, 2012)

Table 1. Overview of constructs and their definition

We thus propose a theoretical model that integrates organizational antecedents which we expect to contribute to the occurrence of bottom-up un-enacted projects (Figure 1).

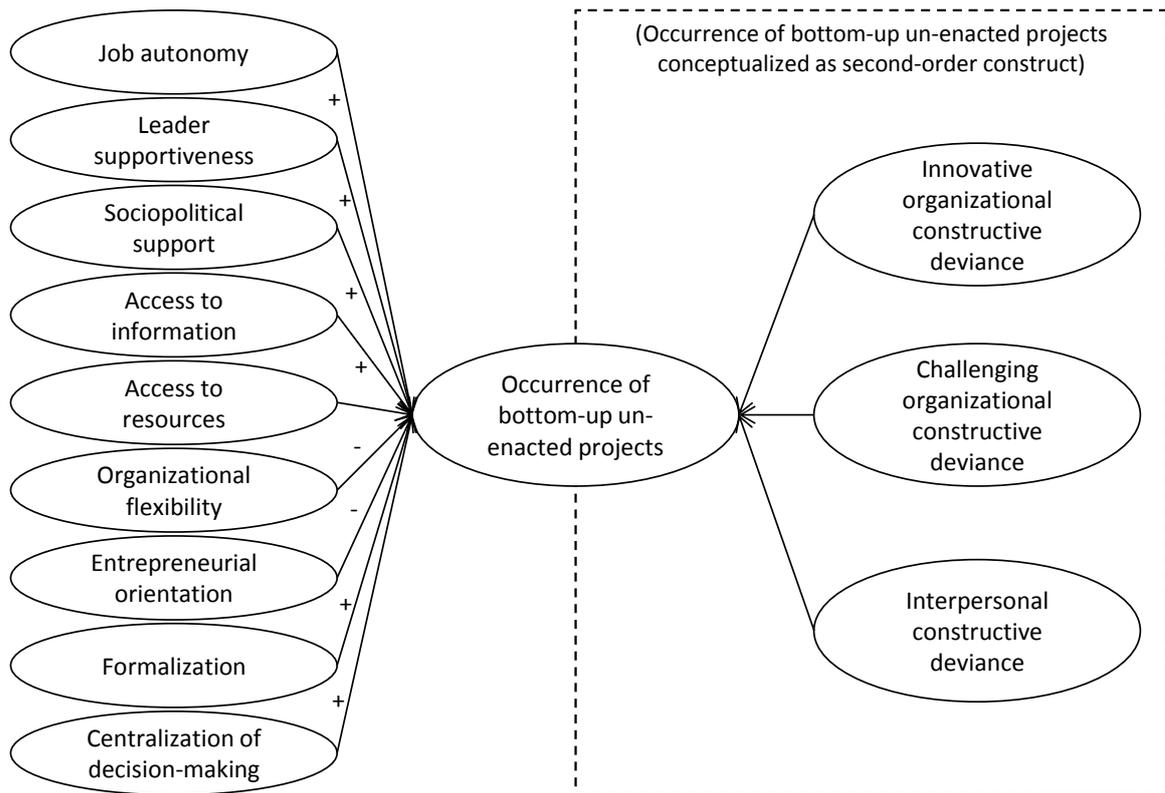


Figure 1. Model explaining the occurrence of bottom-up un-enacted projects

5 Conclusion and Outlook

In this study, we set out to develop a conceptual model that aims at explaining the occurrence of bottom-up un-enacted projects. While previous literature briefly described the existence of un-enacted projects (Blichfeldt and Eskerod, 2008) or outlined characteristics and individual-level antecedents of un-enacted projects (Buchwald and Urbach, 2012), this study investigates one particular type of un-enacted projects, namely bottom-up un-enacted projects, in more detail. The key result of this paper is a conceptual model that comprises the organizational antecedents to explain the occurrence of bottom-up un-enacted projects. Deviance theory is the theoretical framework that guided our model development. Particularly, we draw on the notion of constructive deviance to explain the occurrence of innovative bottom-up un-enacted projects. While we clearly acknowledge that not all bottom-up un-enacted projects can be subsumed as constructive deviance from an organization’s point of view, some of them are a key source of innovation and entrepreneurship and are thus important to organizations (Galperin, 2012).

Before concluding with recommendations for future research and emphasizing our contribution to both research and practice, we acknowledge some limitations of our study. First, this study only entails a conceptual model so far. While the model is derived on both theoretical accounts and complemented interviews, the validation remains for future research. Second, our model focuses on the organizational level, while additional levels of factors are likely to contribute to a more comprehensive picture of deviant behavior. In this study, however, we decided to focus on organizational-level factors because only these can be influenced by an organization. In order to tackle this limitation, future research may consider extending our model to a multi-level model that also comprises individual-level factors to more holistically explain the occurrence of bottom-up un-enacted projects. In this way, Peterson (2002)

summarizes that “deviant behavior may be best predicted based on a combination of personality variables and the nature of the workplace situation” (p. 49), i.e., organizational-level antecedents. Related to Galperin (2002), useful individual-level variables may comprise, for instance, the status, job satisfaction, or the number of reference groups of an individual in an organization. Furthermore, we suggest conducting the validation of our model in different countries because the tendency to engage in deviant behavior is shaped by cultural variables (Groves et al., 1985; Hanke and Saxberg, 1985).

In terms of specific next steps in the larger research program, both qualitative and quantitative methods are deemed appropriate to empirically validate our conceptual model. While qualitative methods would allow conducting confirmative interviews with people affected, the key challenge would be to identify those who have experience in this setting and would be willing to contribute to this research. A goal keeper, such as the project portfolio manager, does most likely not know about these projects and thus, even if he were willing to support, would not necessarily know other employees to talk to. Having considered the downsides of a qualitative endeavor, we conclude that quantitative methods are most suitable to investigate this research question. In this case, a large sample of employees is most likely to ensure that future research reaches people who have hands-on experience with bottom-up un-enacted projects. Accordingly, our specific next steps in this research project comprise the definition of measurement models, the development of a suitable survey instrument, the collection of empirical data as well as carrying out the data analysis using a structural equation modeling approach (Straub, 1989; Urbach and Ahlemann, 2010).

Keeping the limitations of the study in mind, our results contribute to both theory and practice. Our results advance the theoretical discourse on the concept of un-enacted projects by proposing a conceptual model for explaining the occurrence of a specific type of un-enacted projects, namely bottom-up initiatives, from an organizational perspective. By relying on organizational deviance theory as a theoretical lens, our study is one of the first that applies this reference theory to the field of information systems in general, and more particular to the domain of project portfolio management. From our point of view, organizational deviance theory, both with a positive and negative notion, seems to be a promising perspective to explain similar phenomena, for example also other types of un-enacted projects, or other IT governance-related issues. From a practical point of view, we expect our model after a thorough empirical evaluation to be a beneficial instrument to evaluate and predict the occurrence of bottom-up initiatives in a particular organizational setting. Having identified the levers for the emergence of such un-enacted projects, responsible practitioners (e.g., IT executives, project portfolio managers) will receive a basis for steering their organization in the intended direction.

References

- Aiken, M. and Hage, J. (1971). The Organic Organization and Innovation. *Sociology*, 5 (1), 63-82.
- Appelbaum, S.H., Iaconi, G.D. and Matousek, A. (2007). Positive and Negative Deviant Workplace Behaviors: Causes, Impacts, and Solutions. *Corporate Governance*, 7 (5), 586-598.
- Arad, S., Hanson, M.A. and Schneider, R.J. (1997). A Framework for the Study of Relationships between Organizational Characteristics and Organizational Innovation. *The Journal of Creative Behavior*, 31 (1), 42-58.
- Ashour, A.S. and Johns, G. (1983). Leader Influence through Operant Principles: A Theoretical and Methodological Framework. *Human Relations*, 36 (7), 603-626.
- Bahrami, H. (1992). The Emerging Flexible Organization: Perspectives from Silicon Valley. *California Management Review*, 34 (4), 33-52.
- Bearden, W., Netemeyer, R. and Haws, K. (2011). *Handbook of Marketing Scales: Multi-Item Measures for Marketing and Consumer Behavior Research*. SAGE, Thousand Oaks, Calif.
- Bidault, F. and Cummings, T. (1994). Innovating through Alliances: Expectations and Limitations. *R&D Management*, 24 (1), 033-045.

- Blichfeldt, B.S. and Eskerod, P. (2008). Project Portfolio Management - There's More to It Than What Management Enacts. *International Journal of Project Management*, 26 (4), 357-365.
- Buchwald, A. and Urbach, N. (2012). Exploring the Role of Un-Enacted Projects in It Project Portfolio Management, In *Proceedings of the 33rd International Conference on Information Systems (ICIS)*, Orlando, USA.
- Cameron, K.S. and Caza, A. (2004). Contributions to the Discipline of Positive Organizational Scholarship. *American Behavioral Scientist*, 47 (6), 731-739.
- Caruana, A., Ramaseshan, B. and Ewing, M.T. (2001). Anomia and Deviant Behaviour in Marketing: Some Preliminary Evidence. *Journal of Managerial Psychology*, 16 (5), 322-338.
- Covin, J.G. and Slevin, D.P. (1989). Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal*, 10 (1), 75-87.
- Cubeles-Márquez, A. (2008). It Project Portfolio Management - the Strategic Vision of It Projects. *European Journal for the Informatics Professional*, 9 (1), 31-36.
- Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *The Academy of Management Journal*, 34 (3), 555-590.
- Dansereau Jr, F., Graen, G. and Haga, W.J. (1975). A Vertical Dyad Linkage Approach to Leadership within Formal Organizations: A Longitudinal Investigation of the Role Making Process. *Organizational Behavior and Human Performance*, 13 (1), 46-78.
- Deshpande, R. and Zaltman, G. (1982). Factors Affecting the Use of Market Research Information: A Path Analysis. *Journal of Marketing Research*, 19 (1), 14-31.
- Dodge, D.L. (1985). The over-Negativized Conceptualization of Deviance: A Programmatic Exploration. *Deviant Behavior*, 6 (1), 17-37.
- Dooley, L., Lupton, G. and O'Sullivan, D. (2005). Multiple Project Management - a Modern Competitive Necessity. *Journal of Manufacturing Technology Management*, 16 (5), 466-482.
- Eskerod, P. and Riis, E. (2009). Project Management Models as Value Creators. *Project Management Journal*, 40 (1), 4-18.
- Fagbohunbe, B., Akinbode, G.A. and Ayodeji, F. (2011). Organizational Determinants of Workplace Deviant Behavior: An Ampirical Analysis in Nigeria. *International Journal of Business and Management*, 7 (5), 207-221.
- Filippov, S., Mooi, H., Aalders, F. and Van der Weg, R. (2010). Managing Innovation Project Portfolio - the Case of Philips Research, In *Proceedings of the 7th International Conference on Innovation & Management*, Wuhan, China.
- Galbraith, J.R. (1983). Designing the Innovating Organization. *Organizational dynamics*, 10 (3), 5-25.
- Galperin, B.L. 2002. "Determinants of Deviance in the Workplace: An Empirical Examination in Canada and Mexico," in: *John Molson School of Business*. Concordia University, Canada.
- Galperin, B.L. (2012). Exploring the Nomological Network of Workplace Deviance: Developing and Validating a Measure of Constructive Deviance. *Journal of Applied Social Psychology*, 42 (12), 2988-3025.
- Galperin, B.L. and Burke, R.J. (2006). Uncovering the Relationship between Workaholism and Workplace Destructive and Constructive Deviance: An Exploratory Study. *The International Journal of Human Resource Management*, 17 (2), 331-347.
- Golden, W. and Powell, P. (2000). Towards a Definition of Flexibility: In Search of the Holy Grail? *Omega*, 28 (4), 373-384.
- Graen, G.B. and Uhl-Bien, M. (1995). Relationship-Based Approach to Leadership: Development of Leader-Member Exchange (Lmx) Theory of Leadership over 25 Years: Applying a Multi-Level Multi-Domain Perspective. *The Leadership Quarterly*, 6 (2), 219-247.
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91 (3), 481-510.
- Groves, W.B., McCleary, R. and Newman, G.R. (1985). Religion, Modernization, and World Crime. *Comparative social research*, 8, 59-78.

- Hackman, J.R. and Oldham, G.R. (1976). Motivation through the Design of Work: Test of a Theory. *Organizational Behavior and Human Performance*, 16 (2), 250-279.
- Hage, J. and Aiken, M. (1967). Relationship of Centralization to Other Structural Properties. *Administrative Science Quarterly*, 12 (1), 72-92.
- Hanke, J.J. and Saxberg, B.O. (1985). Isolates and Deviants in the United States and Japan: Productive Nonconformists or Costly Troublemakers. *Comparative Social Research*, 8, 219-243.
- Hatun, A. and Pettigrew, A.M. (2006). Determinants of Organizational Flexibility: A Study in an Emerging Economy. *British Journal of Management*, 17 (2), 115-137.
- Howell, J.M., Shea, C.M. and Higgins, C.A. (2005). Champions of Product Innovations: Defining, Developing, and Validating a Measure of Champion Behavior. *Journal of Business Venturing*, 20 (5), 641-661.
- Hunt, R. and Killen, C. (2008). Best Practice Project Portfolio Management. *International Journal of Quality & Reliability Management*, 25 (1).
- Janssen, O. (2005). The Joint Impact of Perceived Influence and Supervisor Supportiveness on Employee Innovative Behaviour. *Journal of Occupational and Organizational Psychology*, 78 (4), 573-579.
- Jeffery, M. and Leliveld, I. (2004). Best Practices in It Portfolio Management. *MIT Sloan Management Review*, 45 (3), 41-49.
- Jervis, P. (1975). Innovation and Technology Transfer - the Roles and Characteristics of Individuals. *Engineering Management, IEEE Transactions on*, EM-22 (1), 19-27.
- Kanter, R. (1983). When a Thousand Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organizations. *Knowledge Management and Organisational Design*, 93-131.
- Kanter, R.M. (1986). Empowering People to Act on Ideas. *Executive Excellence*, 2, 5-6.
- Killen, C.P., Hunt, R.A. and Kleinschmidt, E.J. (2007). Managing the New Product Development Project Portfolio - a Review of the Literature and Empirical Evidence, In *Proceedings of the PICMET*, Portland, OR, USA.
- Knight, G.A. (1997). Cross-Cultural Reliability and Validity of a Scale to Measure Firm Entrepreneurial Orientation. *Journal of Business Venturing*, 12 (3), 213-225.
- Kouzes, J.M. and Posner, B.Z. (1987). *The Leadership Challenge*. Jossey-Bass, San Francisco.
- Kreiser, P.M., Marino, L.D. and Weaver, K.M. (2002). Assessing the Psychometric Properties of the Entrepreneurial Orientation Scale: A Multi-Country Analysis. *Entrepreneurship Theory and Practice*, 26 (4), 71-94.
- Kumar, R., Ajjan, H. and Niu, Y. (2008). Information Technology Portfolio Management - Literature Review, Framework, and Research Issues. *Information Resources Management Journal*, 21 (3), 64-87.
- Lawler, E.E. (1992). *The Ultimate Advantage: Creating the High Involvement Organization*. Jossey-Bass, San Francisco.
- Lumpkin, G.T. and Dess, G.G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21 (1), 135-172.
- March, J.G. (1995). The Future, Disposable Organizations and the Rigidities of Imagination. *Organization*, 2 (3-4), 427-440.
- Morrison, E.W. (2006). Doing the Job Well: An Investigation of Pro-Social Rule Breaking. *Journal of Management*, 32 (1), 5-28.
- Mors, M., Drost, R. and Harmsen, F. (2010). Project Portfolio Management in Practice, in: *Practice-Driven Research on Enterprise Transformation*, (F. Harmsen, E. Proper, F. Schalkwijk, J. Barjis and S. Overbeek eds.), Springer Berlin Heidelberg, pp. 107-126.
- Mueller, S.L. and Thomas, A.S. (2001). Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness. *Journal of Business Venturing*, 16 (1), 51-75.
- Mulki, J.P., Jaramillo, F. and Locander, W.B. (2006). Emotional Exhaustion and Organizational Deviance: Can the Right Job and a Leader's Style Make a Difference? *Journal of Business Research*, 59 (12), 1222-1230.

- O'Neill, T.A. and Hastings, S.E. (2011). Explaining Workplace Deviance Behavior with More Than Just the "Big Five". *Personality and Individual Differences*, 50, 268-273.
- Osgood, D.W., Wilson, J.K., O'Malley, P.M., Bachman, J.G. and Johnston, L.D. (1996). Routine Activities and Individual Deviant Behavior. *American Sociological Review*, 61 (4), 635-655.
- Peterson, D.K. (2002). Deviant Workplace Behavior and the Organization's Ethical Climate. *Journal of Business and Psychology*, 17 (1), 47-61.
- Petter, S., Straub, D. and Rai, A. (2007). Specifying Formative Constructs in Information Systems Research. *Mis Quarterly*, 31 (4), 623-656.
- Pierce, J.L. and Delbecq, A.L. (1977). Organization Structure, Individual Attitudes and Innovation. *The Academy of Management Review*, 2 (1), 27-37.
- Quinn, J.B. (1985). Managing Innovation: Controlled Chaos. *Harvard Business Review*, 63 (3), 73-84.
- Robbins, D. and Galperin, B. (2010). Constructive Deviance: Striving toward Organizational Change in Healthcare. *Journal of Management and Marketing Research*, 5, 1-11.
- Robinson, S.L. and Bennett, R.J. (1995). A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. *The Academy of Management Journal*, 38 (2), 555-572.
- Robinson, S.L. and Greenberg, J. (1998). Employees Behaving Badly: Dimensions, Determinants and Dilemmas in the Study of Workplace Deviance, in: *Trends in Organizational Behavior*, (C.L. Cooper and D.M. Rousseau eds.), New York, US: John Wiley & Sons Ltd, pp. 1-30; 179pp.
- Robinson, S.L. and O'Leary-Kelly, A.M. (1998). Monkey See, Monkey Do: The Influence of Work Groups on the Antisocial Behavior of Employees. *The Academy of Management Journal*, 41 (6), 658-672.
- Schriesheim, C.A., Castro, S.L. and Cogliser, C.C. (1999). Leader-Member Exchange (Lmx) Research: A Comprehensive Review of Theory, Measurement, and Data-Analytic Practices. *The Leadership Quarterly*, 10 (1), 63-113.
- Spreitzer, G. (1995a). An Empirical Test of a Comprehensive Model of Intrapersonal Empowerment in the Workplace. *American Journal of Community Psychology*, 23 (5), 601-629.
- Spreitzer, G.M. (1995b). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *The Academy of Management Journal*, 38 (5), 1442-1465.
- Spreitzer, G.M. (1996). Social Structural Characteristics of Psychological Empowerment. *The Academy of Management Journal*, 39 (2), 483-504.
- Spreitzer, G.M. and Sonenshein, S. (2003). Positive Deviance and Extraordinary Organizing, in: *Positive Organizational Scholarship*, (K. Cameron, J. Dutton and R. Quinn eds.), San Francisco, USA: Berrett-Koehler, pp. 207-224.
- Spreitzer, G.M. and Sonenshein, S. (2004). Toward the Construct Definition of Positive Deviance. *American Behavioral Scientist*, 47 (6), 828-847.
- Straub, D.W. (1989). Validating Instruments in Mis Research. *MIS Quarterly*, 13 (2), 147-169.
- Thompson, V.A. (1965). Bureaucracy and Innovation. *Administrative Science Quarterly*, 10 (1), 1-20.
- Turner, R., Huemann, M. and Keegan, A. (2008). Human Resource Management in the Project-Oriented Organization - Employee Well-Being and Ethical Treatment. *International Journal of Project Management*, 26 (5), 577-585.
- Tushman, M. and Nadler, D. (1986). Organizing for Innovation. *California Management Review*, 28 (3), 74-92.
- Urbach, N. and Ahlemann, F. (2010). Structural Equation Modeling in Information Systems Research Using Partial Least Squares. *Journal of Information Technology Theory and Application (JITTA)*, 11 (2), 5-40.
- Vardi, Y. and Wiener, Y. (1996). Misbehavior in Organizations: A Motivational Framework. *Organization Science*, 7 (2), 151-165.
- Warren, D.E. (2003). Constructive and Destructive Deviance in Organizations. *Academy of Management Review*, 28 (4), 622-632.
- Zimmerman, M. (1995). Psychological Empowerment: Issues and Illustrations. *American Journal of Community Psychology*, 23 (5), 581-599.