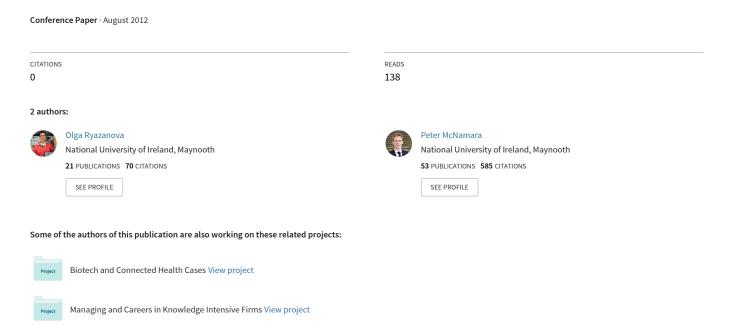
Between Symbolic and Social Capital: A Structuration Theory Approach to Academic Productivity



BETWEEN SYMBOLIC AND SOCIAL CAPITAL: A STRUCTURATION THEORY APPROACH TO ACADEMIC PRODUCTIVITY

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ABSTRACT

Our purpose in this paper is to explore the roots of individual career productivity, in particular if successful individuals can mitigate the consequences of an unfavorable initial anchoring in their industry by engaging in subsequent proactive adjustment to achieve a high level of research productivity.

INTRODUCTION

The primary goal of this paper is to explore how the "handicap of initial identification with a less prestigious department" (Bedeian, Cavazos, Hunt, & Jauch, 2010: 13) that is currently considered detrimental for research productivity of academics (Bedeian et al., 2010; Crane, 1965; Judge, Cable, Colbert, & Rynes, 2007; Long, Bowers, Barnett, & White, 1998; Long & McGinnis, 1981) can be mitigated by the accumulation of social capital at later stages of individual career development (Seibert, Kraimer, & Liden, 2001). Our dataset follows the career paths of 391 academics from 23 Financial Times ranked business schools from North America, Europe and Asia.

Success in management research is important for multiple stakeholders within a business school. For administrators, high research productivity on the part of faculty members is a way to secure accreditation from leading international bodies such as the Association to Advance Collegiate Schools of Business (AACSB) or the European Quality Improvement System (EQUIS) (Julian & Ofori-Dankwa, 2006; Zammuto, 2008) and to achieve higher positions in the industry rankings. For students, despite their reported intolerance of theory (Zell, 2001, as cited in Trank & Rynes, 2003), the engagement of educators in the creation of new and original knowledge also proves beneficial (O'Brien, Drnevich, Crook, & Armstrong, 2010). For academics themselves, research performance represents one of the core drivers of career success, where this success is understood either as promotion within their organization (Callie & Cheslock, 2008; Miller, Taylor, & Bedeian, 2011; Park & Gordon, 1996) or as an increase in salary (Gomez-Mejia & Balkin, 1992; Judge et al., 2007).

Recently the competition in academia for the ability to publish research in a prominent journal has become more intense than ever (Certo, Sirmon, & Brymer, 2010). The inability of top-tier management journals to accommodate the increased stream of submissions results in failure of a "vast majority of active research scholars" to meet established tenure-track requirements (Certo et al., 2010: 592). Understanding the main drivers of research productivity might help academics to achieve higher performance and avoid mistakes on the market where supply exceeds demand. It may also provide insights to academic administrators on how to

create a beneficial environment for knowledge production. Moreover, such understanding is core to the education of doctoral students who aspire to continue their career in academia.

Multiple studies emphasize the overarching importance of early-stage anchoring (i.e. the quality of academic origin and of the first post-PhD position) as an antecedent of research productivity and career success in academia (e.g. Bedeian et al., 2010; Boyd, Finkelstein, & Gove, 2005). According to this perspective, early-stage reputation determines the boundaries of an individual's career through the mechanisms of accumulative advantage and homosocial reproduction (D'Aveni, 1996). This results in restricted mobility between business schools with differing statuses and imposes structural limitations upon academic productivity. Such a deterministic approach puts a disproportionally strong emphasis on the choice of doctoral program; however, due to both homosocial reproduction processes (D'Aveni, 1996) and risks associated with international mobility (Richardson & Zikic, 2007) some individuals with lofty professional aspirations and high capabilities may find themselves in a low-ranking school at the beginning of their career.

In contrast with the structure-driven perspective, which tends to treat individual effort as less significant compared to the impact of the environment (Crane, 1965), social capital theory provides an alternative view of career success, emphasizing the role of agency-driven behaviors, such as networking and mobility across multiple employers (Seibert et al., 2001). In this paper we bring these two perspectives together by following the structurationist approach (Giddens, 1984; Sewell, 1992; Fligstein, 2001), which argues for the duality of structure and agency, where agency is defined as "an actor's ability to have some effect on social world - altering the rules, relational ties, or distribution of resources" (Scott, 2008: 77). We follow the research stream started by Barley (e.g. Barley & Tolbert, 1997; Dany, Louvel, & Valette, 2011; Duberley, Cohen, & Mallon, 2006), which argues that neither the structure-driven nor the agency-driven perspective alone can fully explain career dynamics and that an interaction of organizational and individual factors provides a more profound understanding of academic careers.

We capture the essence of the structure-driven research stream by introducing a *symbolic capital* construct that measures the "prestige and credentials" a person has as a result of anchoring (Vaara & Fay, 2011). In our study we acknowledge the importance of boundaries set by a deterministic environment but at the same time assume that academics act as "knowledgeable and reflexive" actors (Scott, 2008; Giddens, 1979, 1984) and thus their strategic actions are an important driver of individual productivity. We argue that agents are able to impact their research productivity by the pro-active accumulation of *social capital* and that this social capital is not wholly determined by initial symbolic capital.

Besides providing career advice for aspiring academic researchers, our study aims to contribute to a more general conversation. Recent studies have demonstrated that individuals' behavior follows the logic of calculative rationality and at the same time adheres to established social norms (e.g. Lee, Lee, & Wadhwa, 2010). Our research aims to make a contribution to the understanding of how actors in knowledge-intensive industries exercise embedded agency in their pursuit of high productivity while still following the structure-driven rules of the game. The argument of structuration theory (Giddens, 1979, 1984) that the "skilled performance" of actors is core to the interplay between individual choice and the external environment (Giddens, 1984; Fligstein, 2001) is supported by the research on business school industry characteristics that emphasizes the importance of skilled actors for maintaining the legitimacy of academia (Certo et al., 2010). However, few studies in the structurationist tradition look back at the antecedents of skilled performance. We argue that it is important to understand how academics build superior

performance that will enable them in future to "replace today's champions and successfully compete for resources with scholars from other functional areas" (Certo et al., 2010: 601).

CONCEPTUAL BACKGROUND

Structure vs. agency: tension and structuration

What leads and determines the behavior of individuals in the organization: their embeddedness in social structure or their free will? This is one of the most challenging issues in social science (Pozzebon & Pinsonneault, 2005) and the core question of the on-going debate between the "structuralist" and "agency" camps of management scientists (Heugens & Lander, 2009). An extensive body of literature within organizational theory sees individuals within organizations as passive recipients of rules and values which are taken for granted, and assumes that they will acquiesce to external pressures in their decision-making (DiMaggio & Powell, 1983; Scott, 2008). The proponents of a less deterministic approach argue for the importance of strategic choice (Child, 1972, 1997), and outline possible reasons for the emergence of strategic resistance to external pressures (Oliver, 1991).

This tension between external determinism and internal agency has been addressed by structuration theory (Barley & Tolbert, 1997; Giddens, 1979, 1984; Sewell, 1992). According to Giddens (1979: 71) "every competent member of every society knows a great deal about the institutions of that society", so individuals act as "knowledgeable and reflexive" (Scott, 2008) while "institutions both enable and constrain social actors" (Fligstein, 2001: 107). What structuration theory proposes is the "process-oriented" approach to the relationship between individuals' actions and social structures; this does not give preference to any one of the "sides", but instead emphasizes their interconnectedness (Barley & Tolbert, 1997).

The study of the interplay between the structural and individual antecedents of individual productivity undertaken in this paper applies a very particular lens to the tension between external determinism and internal agency. First, we are interested in those mundane manifestations of individual agency that aim to increase everyday efficiency through the creative use of accumulated resources. We believe that besides actors' radical expression of discontent with existing practices, which leads to organizational or institutional change (e.g. Maguire, Hardy & Lawrence, 2004), there are other less spectacular but more common manifestations of individuals' strategic behavior. Second, we focus on the agency of "subordinated actors" (Rocha & Granerud, 2011) – those professional employees who do not always have the ability to influence organizational strategy directly by being part of a top management team, but who are still responsible for their own performance and compete with other actors on an individual level.

Symbolic Capital: Anchoring and determinism in academic career

Our study follows a stream of career research instigated by Barley (e.g. Barley & Tolbert, 1997; Dany et al., 2011; Duberley et al., 2006) that implies an ongoing reciprocal relationship between individual actions and external constraints and has already delivered interesting insights into actors' interpretations of the tension between a deterministic environment and individual pro-active behavior.

We conduct our research in the business school academic setting, which is traditionally perceived as a highly deterministic environment where success is largely defined by one's

position in a social structure (e.g. Bedeian et al., 2010; Long, 1978). Deeply rooted in the sociological studies of 1950s and 1960s, which demonstrated the prevalence of organizational context over individual effort (e.g. Caplow and McGee, 1958; Crane, 1965; Long, 1978; Long and McGinnis, 1981), the traditional approach towards academic productivity emphasizes the importance of early-career anchoring in highly-reputable organizations. Among the main reasons behind the overarching importance of initial anchoring academic productivity researchers cite: different value systems or scripts (Clemente and Sturgis, 1974; Dany, Louvel and Valette, 2011; Duberley, Cohen and Mallon, 2006; Long and McGinnis, 1981), access to role models (Buchmueller, Dominitz and Hansen, 1999; Crane, 1965; Ford, Duncan, Bedeian and Ginter, 2006; Williamson and Cable, 2003), unequal facilities and funds (Crane, 1965; Long and McGinnis, 1981; Smith-Doerr, 2006), disproportional allocation of resources to top strata due to "Matthew effect" (Bedeian et al., 2010; D'Aveni, 1996; Dey, Millem and Berger, 1997; Hunt and Blair, 1987; Merton, 1968), unequal quality of students (Crane, 1965; D'Aveni, 1996), and social closure due to homosocial reproduction (Burris, 2004; D'Aveni, 1996).

If the existing view of academic performance is to be believed, "symbolic capital", defined as the status and prestige acquired by an individual as a result of her association with a particular stratum or institutional player in academia (Vaara & Fay, 2011), should be a major facilitator of scholarly publishing in peer-reviewed journals.

H1: Symbolic capital positively influences individual research performance (the number of citations accumulated by papers published in peer-reviewed journals).

Social Capital and free agency as an instrument for career adjustment

A deterministic perspective does not appear to leave much space for success to those with less favorable initial anchoring, e.g. the actors situated outside of North America, where the business school industry was traditionally concentrated (Mangematin & Baden-Fuller, 2008). As the competition for publishing space in the most prominent journals becomes increasingly intense (Certo et al., 2010), those who lack symbolic capital at the early stage of their career find it increasingly difficult to be accepted by these publications. The "publish or perish" ideology that has traditionally been core to the North American model of business education (Callie & Cheslock, 2008; De Rond & Miller, 2005; Miller et al., 2011) has recently spread its influence outside North America (Mangematin, 2004; Sousa, de Nijs, & Hendricks, 2010. This has exposed academics throughout the world to higher pressure to produce high-quality research and publish it in peer-reviewed journals in order to succeed in their careers.

Given these additional pressures, we can expect academics to exercise their agency on an everyday basis to manage the deficit of resources (i.e. symbolic capital) and to respond to external pressure to produce high-quality scholarly publications. Publishing in a high-quality journal prior to entering the labor market is one of the most well-known and pro-active ways to compensate for the lack of prestige surrounding academic origin (Bonnal & Giret, 2009).

H2: Publishing early in an academic career positively influences individual research performance.

Prior research has also demonstrated that accumulation of social capital may be used to improve individual performance in general and knowledge creation in particular (Gersick, Bartunek, & Dutton, 2000; Nahapiet & Ghoshal, 1998; McFadyen & Cannella, 2004; Seibert et al., 2001).

H3a: Social capital (the number of unique co-authors in an actor's network) positively influences individual research performance.

The creation and the maintenance of network relations however take time and require some kind of investment (Uzzi, 1997). We would expect that at some point collaboration with additional co-authors will become too hard to manage and will thus contribute less value to an academic's research activity.

H3b: There is a curvilinear (inverted U-shaped) relationship between social capital (the number of unique co-authors in an actor's network) and individual research performance.

Academic mobility is often considered to be instrumental in the accumulation of social capital (Sabatier, Carrere, & Mangematin, 2006; Zubieta, 2009). At the same time there are several significant drawbacks in full-time professional mobility in general and international mobility in particular. Thus we assume that short-term mobility will have stronger positive impact on academic productivity than full-time international mobility.

H4a: The number of different workplaces positively influences individual research performance.

H4b: Full-time international mobility negatively influences individual research performance.

H4c: Part-time mobility (the number of visiting appointments) positively influences individual research performance.

Symbolic Capital as a "Gatekeeper": Interaction Effects

The concepts of symbolic and social capital are "often closely related" (Vaara & Fay, 2011: 31) and may reinforce each other. The research on corporate networks and on status hierarchies shows that high-status actors prefer to collaborate with other high-status actors and avoid affiliation with lower-status partners as this can cast a shadow on their existing position in the hierarchy (Baden-Fuller & Ang, 2001; Sullivan, Haunschild, & Page, 2007; Podolny, 1994).

H5a: The symbolic capital of a PhD from a top-ranking PhD-granting institution positively interacts with the PhD's social capital to generate higher levels of individual research performance.

H5b: The symbolic capital of the journal rank of first publication positively interacts with social capital to generate higher levels of individual research performance.

METHODS

Sample

The final sampling frame included 1587 permanent faculty members (from the level of senior lecturers² and associate professors upward) from 23 business schools, 7 of which are in US and 16 in Europe and Asia. These faculty members were drawn from the following two sources. First, the following top business schools according to the *Financial Times* 2011 MBA ranking (1120 academics): London Business School, University of Pennsylvania, Wharton, Harvard Business School, Stanford University GSB, Insead, Columbia Business School, IE Business School, MIT Sloan School of Management, University of Chicago: Booth, Hong Kong UST Business School, IESE Business School, and New York University Stern Business School. Second, the *Financial Times* 2010 Masters in Management ranking³ (467 academics): HEC Paris,

Universität St.Gallen, EM Lyon Business School, Grenoble Graduate School of Business, London School of Economics and Political Science, Essec Business School, Rotterdam School of Management: Erasmus University, WHU: Otto Beisheim School of Management, Mannheim Business School, Edhec Business School, and ESC Toulouse.

We then used stratified random sampling to select a sample of 410 academics from the main sampling frame. We sampled the same number of academics (n=20) from each of the schools in order to eliminate any potential bias towards schools with more numerous faculty. After we excluded all academics who have not published a paper the final sample includes 391 academics. In order to gain an insight into the history of high research productivity development, we retrieved detailed information about the academics' published work, the number of citations they acquired during their academic careers, the number of co-authors they collaborated with and the number of institutions by which they had been employed. We collected CVs (where available online) for the selected academics and completed and cross-checked the information using ISI Web of Science, the ProQuest Database of Dissertations and Theses, and the websites of business schools where the academics are currently working.

RESULTS

H1 and H2 were supported, as well as H3a, which confirms that both structure and agency-driven factors contribute to academic productivity development. H3b was also supported, pointing towards the diminishing returns of expanding the network of co-authors. H4a on the benefits of moving between workplaces was confirmed, while H4b and H4c were not supported by data. Inter-country mobility had a positive impact on productivity, whilst short-term visiting assignments did not have a significant influence of research productivity. The tests for interactions between symbolic capital and social capital constructs were not significant, thus H5a and H5b were not supported. Surprisingly the interaction between PhD rank and inter-country mobility was negative and significant.

CONCLUSION

Our study of the antecedents behind individual research performance in academia supports the structuration theory perspective on the duality of structure and agency in organizations (Giddens, 1979). Although symbolic capital does have a very strong influence on research productivity, as argued by numerous researchers (Buchmueller et al, 1999; Gaugham and Robin, 2004; Williamson and Cable, 2003; Zubieta, 2009), the creation of social capital is also a powerful tool that can potentially balance the situation for those who do not enjoy the advantages of being in top academic strata.

REFERENCES AVAILABLE FROM AUTHORS

¹ Social capital here is defined as "the resources an individual gains through the network of relations" (Payne, Moore, Griffis, & Autry, 2011: 498; Nahapiet & Ghoshal, 1998; Vaara & Fay, 2011).

² Senior lecturer is a tenured position in UK academic system and is equal to associate professor in US system. In US senior lecturer is usually a non-tenured position, so senior lecturers affiliated with US business schools were not included in the sample.

³ This exact choice of business schools was defined by the availability of faculty information on the school's website and the decision of authors to exclude the schools that have composite structure and thus are hard to compare to individual business schools.