

“Systemic Managerial Constraints”: How universities influence the information behaviour of HSS early career academics

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Abstract

Purpose – The purpose of this paper is to explore the information behaviour of early career academics (ECAs) within HSS (humanities and social science) disciplines who are starting their first continuing academic position. The proposed grounded theory of Systemic Managerial Constraints is introduced as a way to understand the influence of neoliberal universities on the information behaviour of ECAs.

Design/methodology/approach – This qualitative research used constructivist grounded theory methodology. Participants were 20 Australian and Canadian ECAs from HSS. Their information practices and information behaviour were examined for a period of 5-7 months using two interviews and multiple “check-ins.” Data were analysed through two rounds of coding, where codes were iteratively compared and contrasted.

Findings – Systemic Managerial Constraints (SMC) emerged from the analysis and is proposed as a grounded theory to help better understand the context of higher education and its influence on ECAs’ information behaviour. SMC presents university managerialism, resulting from neoliberalism, as pervasive and constraining both the work ECAs do and how they perform that work. SMC helps to explain ECAs’ uncertainty and precarity in higher education and changing information needs as a result of altered work role,, which in turn leads ECAs to seek and share information with their colleagues and use information to wield their personal agency to respond to SMC.

Originality/value – The findings from this paper provide a lens through which to view universities as information environments and the influence these environments can have on ECAs’ information practices and information behaviour.

Introduction

Early career academics (ECAs) face a wide range of challenges when starting their first continuing academic position. While experts in their content areas – and often with research and teaching experience – ECAs have to learn the how to carry out a new role in a new context. Additionally, many academics move to new cities or countries to take up

positions, requiring adaptation to unfamiliar higher education sectors and university systems, as well as the personal challenges of setting up a life in a new location. The challenges of ‘being new’ are added to the current challenges in higher education, which, in recent years has seen a massification of education (i.e., the sharp increase in the number of students in higher education), increased teaching loads, increased audit and reporting requirements, decreased job stability, and increased workloads (e.g., Côté and Allahar, 2011; Gill, 2009; Ginsberg, 2011; Giroux, 2007; Hil, 2012; Kimber and Ehrich, 2015).

The challenges in higher education have frequently been attributed to the influence of neoliberalism within public universities and the treatment of institutions of higher education as corporations (e.g., Chomsky, 2015; Côté and Allahar, 2011; Ginsberg, 2011; Giroux, 2007, 2014; Hil, 2012; Kimber and Ehrich, 2015; Lorenz, 2012). While neoliberalism is a contested term (e.g., Boas and Gans-Morse, 2009; Flew, 2014; Harman, 2007; Mitrović, 2005; Thorsen, 2010), it has been described as a “series of *ideas* about socio-economic order” (Flew, 2014, p. 64) and “a theory of political economic practices that proposes that human well-being can be best advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade” (Harvey, 20015, p. 2). Neoliberalism, as the “defining political economic paradigm of our time” (McChesney, 1999, p. 7), has direct influence on the institutional conditions of academic work. Neoliberalism within universities typically entails a decrease government funding, increased pressure for external income (e.g., grants, international student tuition), increased casualisation (i.e., increasing the number of casual and adjunct contracts), and increased workloads (e.g., cutting professional staff positions, increasing academics’ administrative burden). Hil (2012) describes the move in academia toward “economic rationalism, commercialisation, managerialism, corporate governance” that shifts the mission of universities and the components that constitute academic life (p. 7). This shift towards managerialism and an audit culture brings with it increased bureaucracy and increased administrative activities to the day-to-day work of academics. It is into this context that ECAs begin their academic careers.

As the transition to their first job is a time of upheaval for most ECAs, it is important to examine how ECAs interact with information in their new university environment. While academics as a group have been the subject of much information behaviour research, much of this has been on their finding and use of formal information sources for research purposes, rather than the information they need in the performance of their day-to-day work. To explain the contextual influences of universities on the information behaviour of early career

academic in HSS disciplines, the grounded theory of Systemic Managerial Constraints (SMC) is proposed. SMC is a grounded theory about contextual factors that influence ECAs' academic work and their resulting interactions with information on a day-to-day basis. The term refers to the pervasive managerialism within universities, the increased roles of managers that shifts the focus of higher education to efficiency, effectiveness, quality assurance, accountability, and cost cutting. Managerialism is systemic in its influence, which largely acts as a constraint on academics' work. This paper will discuss ECAs' uncertainty in response to the precarity within higher education and increased information needs due to changing work roles as contextual aspects of SMC, the results of which include altered information seeking and sharing practices, and the use of information to employ agency in response to SMC.

Literature Review

Academics' information behaviour

Academics' work is complex, requiring abilities to work with information across a variety of roles. However, within the information behaviour literature, the focus has tended to be on information seeking and use of formally published information sources during research processes rather than on the performance of the everyday aspects of work. Teaching, service, and administrative work, while part of most academics' jobs, receive less attention, failing to look inclusively at academics' information behaviour. While academics seek information for writing and conducting research for publication, maintaining currency, and for lecture preparation (Rupp-Serrano and Robbins, 2013), the literature focuses on academics' information seeking for research. Much of the information behaviour research with academics is based on Ellis' (1993) categorisations of academics' information-seeking patterns (e.g., Bronstein, 2007; Chu, 1999; Ge, 2010; Meho and Tibbo, 2003; Savolainen, 2017). Some of this research examines the stages of academics' research processes (e.g., Bronstein, 2007; Chu, 1999), while other studies, in addition to examining research stages, examine academics' information-seeking behaviour more broadly (e.g., Meho and Tibbo, 2003; Foster, 2004). A focus on social aspects of academics' information behaviour, including information sharing, has become more prominent.

HSS academics' information behaviour

Much of the research on academics' information behaviour, and the models based on that research, has focused on the research process and the need for, looking for, and use of formal documentary sources. Research on academics' information needs have tended to be concerned with the identification of information that is needed for research (e.g., Chu, 1999), that which is missing from the researcher's knowledge or understanding (e.g., Foster, 2004). Information needs are viewed as the motivation for and drive behind the information seeking process. Often, these needs are discussed as the types of sources required and source preferences (e.g., Baruchson-Arbib and Bronstein, 2007; Chu, 1999; Rupp-Serrano and Robbins, 2013; Westbrook, 2003). Information needs change depending on where the researcher is in the research process (e.g., Bronstein, 2007; Meho and Tibbo, 2003). Information use and information needs are closely linked, using information to fulfil a need. Information use has been characterised as 'extracting,' entailing going through a source and identifying relevant material that is included in the research (Ellis et al., 1993; Meho and Tibbo, 2003).

The role of social information and people, as information sources, has often been absent, demonstrating a relative lack of acknowledged importance. Models are frequently taken and applied to new research, such as Ellis's (1993) model, used as a framework, validated, or adapted. However, when social information is not included in models, their replication can perpetuate the privileging of documentary sources over social sources. Despite the focus on documentary sources and formal research processes, colleagues have been identified as important sources of information for academics (Case and Given, 2016) and there appears to be a recognition of the importance of social information. Meho and Tibbo (2003) added 'Networking' as a category to Ellis' model, characterising it as activities associated with communicating and maintaining relationships with a broad range of people. Scholars create and maintain networks not only to build collections of materials and gather information, but also to share information with other network members. Networking is also a core process in Foster's (2004) nonlinear information-seeking model, a central activity in how interdisciplinary scholars find information, particularly when dealing with "limited knowledge, limited resources such as time and access, and coping with information overload" (p. 233). Westbrook's (2003) examination of women's studies scholars identified people as an important information channels, as well as building a personal network. Pilerot (2013) used an information practices approach to look at the information sharing and trust of design scholars. Pilerot describes the creation of an inter-subjective space that is required for the

meeting and sharing of information and ideas. Trust, essential to information sharing, is established through the content shared, the way it is communicated, and whether the individuals are considered to belong to the community. Miller (2015) examined ECAs' personal and career development networks, noting these networks consist of multiple mentors (typically informal and self-selected). These networks are built through mutually supportive relationships and involve ongoing interactions for learning. Pilerot and Miller's studies are examples of the shift from formal sources used in research to taking a broader view of the information that colleagues provide and examining the social interactions taking place.

Early career academics integrating into the university

The academic unit (whether department or school) tends to be the main arena for collegial interaction, being the primary place of work for academics (Mills, Bettis, Miller, and Nolan, 2005) and a main source of socialisation for early career academics (Rosch and Reich, 1996). Academic units are relatively small and typically composed of members from similar disciplinary backgrounds, likely to share beliefs, norms, and values; this can establish a culture that members use to define their identities and roles within the university (Mills et al., 2005). Through working and talking with colleagues much of the everyday understanding of departmental and institutional culture is established. In addition, many institutions orient new academics through mentorship (Mullen and Forbes, 2000; Trowler and Knight, 2000), either through informal arrangements or formal university programmes. Mentorship can promote and cultivate collegial relationships, aiding socialisation by providing a venue for new academics to ask questions and gain information. The information gained from mentors and other more senior colleagues, in contrast to generic information such as that from induction and orientation sessions, is from insiders and represents professional and personal experience. However, collegial relationships with other academics may not be established, leaving new academics without mentorship or support in their new academic environment. Establishing collegial relationships may be impeded by lack of time, opportunity, or an isolationist culture, leaving ECAs on their own to negotiate their academic identities and "make sense of the roles, responsibilities, and expectations" that are part of their new positions (Bosetti et al. 2008, p. 102).

Universities, at all levels, are made up of people with competing demands, differing ideas about the mission of the institution and how that work should be carried out. This can create competition, political struggles, power contests, and personality conflicts. It is necessary for new academics to learn about 'micro-politics' (Trowler and Knight, 2000, p.

33) and the power structures that influence work such as meetings, collaborations, and socialising (Mullen and Forbes, 2000). Within academic units, academics interact regularly on a range of topics, including struggles over contested topics such as curricula, budgets, and policies. Disciplinary politics may also play a role, both within and between academic units. Establishing relationships and integrating into an academic unit and discipline involve complex negotiations for ECAs; however these negotiations are a necessary part of ECAs socialisation process.

Research Aims and Questions

This research study took a social constructionist approach - an approach that “emphasizes the ways in which individuals construct understandings, meanings and identities through dialogue and discourse” (Case & Given, 2016, p. 206) - to examine the information behaviour and practices of ECAs in HSS disciplines as they began their first academic position. In this research, an holistic definition of information behaviour is used: a human-centred approach that examines information needs, seeking, use, sharing, and practices that occur within a particular context and are purposive, unintentional, or passive. The aim of this research was to examine informational experiences of ECAs, looking at how the new environmental context in which they work (i.e., the university) had an influence on what information they need, how they found information, and how they used and shared information.

To examine this, the following research questions were posed:

1. How does the social environment of academe influence ECAs’ information behaviour?
2. What is the information behaviour of ECAs as they transition to become a part of new social contexts?
3. What environmental factors (e.g., physical environment, political environment, social environment) enable or constrain ECAs’ information behaviour?

Methodology and Methods

This qualitative study used constructivist grounded theory (Charmaz, 2006) methodology to collect and analyse interview and “check-in” data. Ethics approval was received from the School of Information Studies Ethics Committee at Charles Sturt University.

Participants

The academics approached to participate in this study were lecturers (the title used in Australia) and assistant professors (the title used in Canada) who had moved from full-time doctoral studies to full-time continuing academic positions (which consisted of research, teaching, and service to varying degrees), and who were still in the probationary period of their appointment. Only participants from the humanities and social sciences (HSS) were recruited as a lot of current attention has been given to science, technology, engineering, and medicine (STEM) disciplines, which have unique disciplinary practices (e.g. laboratory research model) and pathways to jobs (e.g., series of post-doctoral fellowships, industrial partnerships). These disciplinary differences have the potential to increase the variation of participants' experiences to such an extent as to make it difficult to see patterns in ECAs' information behaviour. All participants had received their PhDs within four years and were within the first two years of starting their current academic position, positions that for 14 participants were permanent and for six were contracts of between one and three years. In total, 20 academics were recruited – 10 from Alberta, Canada and 10 from New South Wales, Australia – representing 10 different universities. Basic demographic details were collected from participants and each participant was given a pseudonym. Twelve participants were male, and eight were female. Participants ranged in age from 29 to early fifties. Eight of the participants were in their first year of their current position, two were in their first year of their second position, and 10 were in their second year of their first position. Participants had positions in a range of disciplines including: business (six participants), art history (two participants), education (two participants), philosophy (two participants), political science (two participants), law (one participant), psychology (one participant), sociology (one participant), criminology (one participant), information science (one participant) and history (one participant). Disciplines were grouped into the “metadisciplines” of humanities and social sciences (Case & Given, 2016, p. 279) to avoid identification of participants in small disciplines.

This research sought participants in whom the characteristics of the phenomenon under study were most obvious (Bryant and Charmaz, 2007). Potential participants, identified through public university webpages or departmental contacts, were sent recruitment emails. Participants were recruited using maximum variation sampling, which was tempered by convenience sampling introduced by participant response. Maximum variation sampling was employed in order to recruit participants with a variety of demographic backgrounds, disciplines, and experiences, to ensure that individuals included in the study “cover[ed] the spectrum of positions and perspectives” (Palys, 2008, p. 699) of the phenomenon under

examination. The maximum variation purposive sampling ensured there was variation amongst the participants – different genders, disciplines, ages, backgrounds – that could impact informational experiences.

Methodology

This research used constructivist grounded theory (CGT) methodology, which both guides systematic data collection and is the result of the data analysis – the result being the grounded theory developed (Charmaz and Bryant, 2008). Grounded theory, first used to examine academics' information behaviour by Ellis (1993), was selected for its strength in focusing on the data at hand and allowing that data to drive theory generation, rather than on a priori assumptions about participants. This makes it ideal for exploring phenomena about which little is known and in ensuring that the voices of participants are heard. In particular, CGT was used as it views researchers as part of the research process, constructing grounded theory as they interact with participants, viewpoints, and research practices (Charmaz, 2006). In this way, grounded theory is constructed, rather than 'discovered,' which is aligned with a social constructionist viewpoint. However, previous research is important in CGT as it provides 'sensitising concepts,' research interests and concepts, to take into account when designing the study. The research literature is again consulted during writing, incorporated as part of the constant comparison.

Data collection began in October 2013 and continued through September 2014. As data were collected they were transcribed and thoughts about research were recorded through writing in a research journal and memos during the transcription and analyses processes, which formed the first stage of analysis. Through initial analysis, it became clear that participants in their first year of their position had significantly different experiences than participants in the second year of their position. Participants in their first year were substantially more stressed, overwhelmed, and focused on surviving day-to-day. However, the majority of participants first recruited were in their second year. Therefore, an effort was made to recruit participants in their first year. In this way, theoretical sampling was employed; data were gathered to help fill out the properties of the categories being developed (Charmaz, 2008). During the final interviews it became clear that many participants had shared experienced and well-defined patterns were emerging within the data. A type of saturation was reached and it became a logical point to stop data collection.

Data collection methods

Data were collected through semi-structured in-depth interviews, “check-ins” (described below), and by gathering university documents. This article will focus on the interview and check-in data. Data collection began and ended with interviews lasting between 45-90 minutes, which were spaced between five and seven months apart. Interviews included questions about their experiences in doctoral studies and current jobs regarding research, teaching, and service work, including the transition to their current job, preparation for the job, expectations, and how they “figured out” academic work in their studies and job (i.e., what information they need for their work, how they find that information, and how they use it). The timing of data collection was to ensure that ECAs experiences of an entire academic semester were captured. Initial interviews took place in person and follow-up interviews were conducted over Skype. Between interviews, check-ins (a method adapted from McKenzie [2001]), which consisted of brief, modified journal entries or interviews and were used to regularly collect data on academics’ current, salient experiences and to maintain rapport. Participants were given the option of conducting check-ins over Skype, telephone, private blogs, or email. There were five points of contact (two interviews and 3 check-ins) with the majority of participants.

Data analysis

Inductive coding was used to code the data twice. The first round of coding, initial coding that focused on small amounts of data, was done line-by-line on printed transcripts. The data were coded using verbs, focusing on explication, rather than on description (Charmaz, 2008). Along with initial coding, memos were written and theoretical codes began to develop by identifying potential codes, kept in an evolving list. The codes were iteratively compared and contrasted to review their ability to explain the data and for their uniqueness. Constant comparison led to the emergence of themes, in nascent form, which were compared to the data to determine their explanatory ability and completeness. NVivo software was used for the second round of focused coding. Through this process more concrete themes and sub-themes emerged, which were, again, constantly compared to one another to determine their explanatory power, uniqueness, and grounding in the data. Major themes were repeatedly revised to fit the data in order to avoid forcing the data into pre-existing categories (Charmaz, 2006). Coding, analysis, and writing were often done iteratively and in quick succession to help integrate the major themes into a theoretical framework. Four major themes emerged from the data. After these themes emerged, focus shifted to how these themes were connected, that is, the grounded theory. The most striking, informative, and recurring themes

were further examined, looking for abstractions, relationships, and ability to explain the data. As construction of the grounded theory progressed, the research literature was consulted to contrast, compare, and relate to the developing theory. The grounded theory was checked against the data for its explanatory power.

Limitations

This research consulted only early career academics in HSS disciplines who had moved from full-time PhD studies to full-time academic positions. This could limit its transferability to academics in other disciplines or who took less traditional educational pathways. One of the strengths of CGT, the integral part the researcher plays within data collection, analysis, and interpretation, can also be a weakness, as there is room for bias or misinterpretation. However, the use of a social constructivist framework entails the researcher and participants negotiating and creating meaning together. Talking to participants multiple times and confirming with participants helped to ensure that participants' voices were represented.

Findings and Discussion

Participants discussed many aspects of their work starting in their current academic positions. The grounded theory, Systemic Managerial Constraints (SMC), that emerged from an analysis of those discussions is a way to understand the how ECAs interact with information. SMC is defined as the pervasive managerialism within universities that results from neoliberalism and constrains both what work academics do and how they do it. This section begins with an exploration of two aspects of modern universities that are features of SMC: precarity in higher education (related to uncertainty) and the alteration of the academic work roles (related to information needs). This is followed by an examination of two of the most prominent responses of ECAs to manage SMC: collegial amelioration (related to information seeking and sharing) and wielding agency (related to information use). Following this, SMC is discussed in depth and an argument is made for SMC as a way to understand the information behaviour of ECAs and the contribution SMC makes to information behaviour research.

Uncertainty - precarity in higher education

When asked about their current academic positions, many participants, in addition to their various roles and tasks, talked about a sense of uncertainty. Adam, an Australian academic in the humanities and in his first year of a two-year contract, expressed his concerns about government funding for his discipline:

I'm mindful of the general direction of politics in higher education. ... So right before the election, right? Philosophy was in the news because there are a couple of [Australian Research Council] grants which were philosophy ARC grants which were singled out by one of the coalition members of parliament as being ridiculous and a waste of taxpayers' money. And they talked about redistributing ARC funds, which kind of just signalled alarm bells for anybody in philosophy. ... So it's that mind set which makes you very nervous about what could be done, with respect to funding.

Both in Australia and Canada there has been a push for universities to focus more on degrees with a vocational aspect. This is particularly concerning for those in the humanities. Tom, a Canadian academic in the humanities and in his second year of his permanent contract, discussed the impact of government budgets on his work,

I mean it's an anxious, somewhat anxious times, I think to live in Alberta right now and to teach in the humanities. I haven't quite gotten to the point where I'm able to articulate exactly how to make a defence of the humanities in Alberta, but there's definitely a need for that. ... So in given that context, like I'm thinking about developing courses in more applied kind of fields ...

This disciplinary precarity, based on shifting government priorities and funding cuts, leaves Adam and Tom in situations of great uncertainty. Uncertainty, associated with the affective state of anxiety, can be attributed to "a lack of understanding, a gap in meaning, or a limited construct" (Kuhlthau, 1993, p. 347). However, finding that information does not necessarily reduce uncertainty and sometimes more information can increase uncertainty (Whittemore and Yovits, 1973). This can be said of Adam's situation. Adam has been monitoring disciplinary developments in the media but while more information about the situation has increased his understanding, it has also increased his uncertainty about the future. However, the uncomfortable state of uncertainty can initiate information seeking and problem solving (Kuhlthau, 1993). This can be seen in Tom's contemplation of new course development.

Looking at individual contexts, academics on short-term contracts are, by the nature of their uncertain future employment, most directly and personally influenced by precarity. This is not to say that others within academia do not experience precarity. Several participants who were starting permanent, continuing positions mentioned feelings of insecurity being on "probation" or "pre-tenure." However, participants with term contracts

had to deal more directly with precarious employment on a day-to-day basis. One way to manage precarious circumstances is to focus work on areas that have the potential to bring future stability. Tim, an Australian academic in the humanities, was starting his second one-year contract. He sought to manage the precarity of his situation through his choice of research topic.

With the broader government decisions, you really can't do much about them, you have to learn to live with them. But the part that gives me the most anxiety about those are the durations of contracts for early career academics. ... So that's why I'm publishing in an area which I know I can publish a lot of things quite soon in quite new areas for that. But with the change in government and so on, the issue really is what will I be doing next year.

Tim chose to deal with uncertainty by choosing a relatively unstudied research topic, to ensure he could publish quickly, in that hopes that this would help his search for a permanent position. This demonstrates Tim's use of information about his situation to make a strategic choice to increase his chances of making his insecure position more secure. Precarity in higher education causes uncertainty requiring ECAs to be aware of changes in their information environment. This finding relates to the third research question addressing the environmental factors that enable or constrain information behaviour.

One of the consequences of neoliberalism is a destabilisation of employment. Bourdieu (1998) presented a picture of working in which all is against all, each person clinging to her/his own job, and sustained by the "existence of a *reserve army of employees rendered docile by these social processes that make their situations precarious*, as well as by the permanent threat of unemployment" (para. 9, emphasis in original). With power shifting from academics to academic managers, the labour situation within higher education becomes increasingly unstable and insecure. Gill (2009) describes precariousness as "one of the defining experiences of contemporary academic life" (p. 234). This precarity – experienced at the sectoral, university, or personal level – leave many academics with great uncertainty, anxiety, and a need to resolve this state. Uncertainty increases information needs and can become a motivation for problem solving and information seeking.

Changing information needs – the alteration of academic work roles

When starting a new position, information needs are increased. While ECAs bring disciplinary knowledge and experience to their new jobs, they lack the information about how work is carried out in their new context. Additionally, many ECAs require information about taking on new aspects of academic work, such as writing grants, coordinating courses,

and managing budgets. This is further exacerbated by a shifting higher education sector. As demonstrated by Tom's contemplations and Tim's decision to change research topics, many academics are under pressure to change aspects of their work. Jesse and Mark, both Canadian academics in the social sciences, discussed needing to change how they approached their research, shifting to the role of manager, spending more time in meetings, writing grants, and manager research assistants. While Mark described this role in a positive light, Jesse described it in this way:

I find the biggest problem is I feel like a manager now. I've got people running studies and doing things and I just have meetings all the time. Meetings with people all the time and I feel like I have no time to write. ... I've two hours to try and hammer out a good chunk of this manuscript that I need to get out, but I'm constantly I'm coordinating people. Coordinating people and projects and money and budgeting and all these things I didn't have to do before.

Creating a team of researchers to manage can be a successful way of working within academia to increase publications and grants. However, it is a shift for academics, taking on more managerial roles and in understanding the work of academics and the purpose of higher education.

Academics have also been called on to take increasing amounts of administrative work. This was the case for Leanne, an academic in Canada in the social sciences, who discussed the administrative load related to her teaching:

But there is a fairly heavy administrative burden that comes with it because there are documents that you have to read. ... We're going to have less support with teaching now. And I think that since I'm teaching more so that administrative part of teaching increases. And there is, you know, the posting and the posting of the grades and ordering books and posting course outlines. ... You know, this whole, the expense reports and all of that stuff. I'm terrible at it. I'm terrible at it. But I guess you just, every job has this component, this administrative component.

The change in academic work, the addition of a "heavy administrative burden" is not simply more work; it is a different type of work, beyond the scope of traditional academic roles. In essence, universities are altering academic work roles. A work role is "as a system of norms and expectations structuring how a person occupying a given position in the organization is to behave" (Audunson, 1999, p. 71) and is a factor that influences information behaviour (Wilson, 1981). By changing work roles to include managerial and administrative aspects, universities not only increase ECAs information needs but also influence the kinds of work academics take on. So while ECAs are conducting work for which they have been prepared (such as research and teaching), there is an added administrative layer to their work

role, which requires learning policies and procedures to account for their activities, how to fill out forms and reports, and how to fit their academic work into university structures and systems. Changing academic work roles changes ECAs' information needs. This finding addresses the third research question about how the environmental factors that enable or constrain information behaviour.

“In many ways, the cost accounting principles of efficiency, calculability, predictability, and control of the corporate order have restructured the purpose and meaning of education” (Giroux, 2002, p. 442). Programmes, academics, and universities, at all levels, must account for the use of their time and resources, while demonstrating how their activities contribute to the economy. With the rise of the audit culture within universities (e.g., Kimber and Ehrich, 2015; Sidhu, 2008), “attending to administrative affairs – form filling, preparing reports, completing review documents, applications and so on – largely [becoming] the order of the day” (Hil, 2012, p. 32). While this managerialism is posited as a logical way to ensure quality of work and wise use of public funding, it can be a source of power and control. Increased managerialism is a technique used by the private sector; “there’s layer after layer of management — a kind of economic waste, but useful for control and domination” (Chomsky, 2015, para. 7). Accountability that increases managerial control is one process that demonstrates the “dominance of managerial values over academic (and democratic) values, thereby potentially weakening universities” (Kimber and Ehrich, 2015, p. 85). By changing work roles, dictating how to carry out academic work and, increasingly, what work should be done, academics become cogs in the machine of higher education, trying to increase the number of fee-paying students and decreasing costs. The increasing managerialism within higher education increases the information needs of academics and places an additional burden on already overwhelmed academics' shoulders.

Information seeking and sharing - collegial amelioration

Many ECAs do not have a complete picture of the university or their roles within the university; rather they have small pieces of information, from previous experience and their current situation, that they use to create a more complete picture of their environment (Bosetti, Kawalilak, and Patterson, 2008). Fredric, an academic in the social sciences in Australia, discussed the many information systems and processes in use at his university, referring to the lack of information about these systems as the “Darwinian model” – i.e., when you arrive you have to learn how to “survive.” Rather than receiving information or training on the systems, he received a list of existing systems during induction. Many of the

systems he listed were for managerial purposes to help the university to regulate and account for his activities. His description demonstrates the complicated space in which academics work:

I was talking to colleagues, it was like, “What it’s like, it’s crazy. It’s too many.” There’s teaching and learning, there’s Blackboard, there is HR, there is Intranet, there’s email, there’s email for the faculty, there’s email for the university. ... And there’s tons of other systems that I’m sure I’m not even aware of that I haven’t looked into. There’s digital measures for your publication stuff, yes, there’s a lot of things. I’m not sure that I’m aware of all of those.

Having high information needs and not being provided required information was a common occurrence for many ECAs. Because information is used to make sense of a situation (e.g., Yeoman, 2010), not having adequate – or accurate – information makes this more difficult, if not impossible. While given a list To ameliorate his situation, Fredric talked to his colleagues. Colleagues provide ECAs with a significant amount of help – particularly in the form of required information, which is a form of capital related to power. More senior colleagues, who have authority in and knowledge of their institutions, can help ameliorate ECAs’ lack of power through information they give to ECAs. Information needs are particularly high when starting a new position, as information about everything from photocopier codes to requirements for achieving tenure/probation.

Many university processes and procedures are opaque to newcomers. Experienced colleagues have gained important insider knowledge about how universities actually work. Evelyn, a Canadian academic in the social sciences, described receiving help and information from her colleagues, rather than from the university website. Not only did they provide practical information, but the collegial relationships established were also a form of acceptance and support:

And they can give me, you know, “Oh don’t bother with that, just do this,” they sort of get to the meat of it. And I would say that my colleagues actually went beyond just informational, they actually made space, and I think that was probably the best the way to sort of visualise, they made space for me in their classrooms and I think that’s something that you can’t get from a website or from theory or literature.

There is often a distinction between official policies and practice. The information universities provide tends to be official policies and procedures, often not the practical information that ECAs require for carrying out their various academic roles. The practical information imparted by Evelyn’s colleagues provided her with insight into how things work at the university. Through their information sharing, Evelyn’s colleagues provided her with that insider’s viewpoint that cannot be gained from codified knowledge or documentary

sources. Developing relationships and interacting with colleagues created opportunities to ask questions and receive offered support., a form of active scanning (McKenzie, 2003), in which individuals actively observe their environment, identify opportunities to ask questions, and actively listen. Beyond the information they provide, her colleagues “made space” for her. This space came in the form of asking her to guest lecture in their classrooms, but represented inclusion or acceptance of her and her research in the department. This confirms Miller’s (2015) finding that the colleagues of ECAs provide assistance through the building of relationships that provide information, learning, and support. This finding addresses the first and second research questions about the influence of social environments on information behaviour and information behaviour during transition. During transition, ECAs use their colleagues as information sources, sharing information as they build collegial relationships. This collegial social environment encourages information exchange.

ECAs frequently described the help offered by colleagues, including providing opportunities, giving time, and sharing information. By sharing information colleagues provide practical information and insights that help ECAs accomplish their day-to-day work. This information is critical in ECAs socialising into their new environment, thus fulfilling information needs resulting from being new. Many ECAs were acutely aware of an imbalance in their relationship; they were seeking information and receiving help that they could not necessarily reciprocate. This is typical of collegial relationships in academia, where more senior colleagues give of their time and experience. ECAs recognised the time and energy more senior colleagues spent helping. However, unless a part of a formal mentoring programme, the help senior colleagues provide remains unpaid and unrecognised labour, which is in addition to their own workloads.

Information use - wielding agency

Once ECAs have information about their new context and work roles, they begin to take action based on that information. Some ECAs simply take on these new administrative tasks as a matter of course. Leanne discussed her dislike for the bureaucracy within her work but accepted those managerial tasks as “every job has this [administrative] component.” This approach to university managerialism is what Teelken (2012) refers to as ‘professional pragmatism,’ viewing managerial developments as inevitable and dealing with them in a “critical but serious manner” (p. 278). Other ECAs choose to follow the system set up by

universities but are actively critical of institutional practices. Nicole, a Canadian academic in the humanities, was critical about the “adjudication structures” for grants, tenure and raises:

It’s about speaking to people who have no idea about your field and where everything, all the boxes are ticked and it all looks polished and pretty and good. ... [I]n some ways it’s always been the case that, but I remain convinced that the bureaucratic business model for the university ... it’s like there’s a whole new level to which it’s saturated everything and turned everything into an outcomes, productivity markers that can all be assessed immediately and clearly. Things that take time or where the value will only emerge overtime, aren’t rewarded. And so figuring out how to just manage that part of the game and spend as little time on it as possible. That’s my overall aim.

So while Nicole does not discuss actively working to change the system, she discusses ways to manage it, viewing it as a “game” to be played. Her goal is to not allow managerial activities to consume her time but to accomplish her work while being able to meet the university’s criteria. She uses information about university policies to reduce the impact of managerial activities on her work. The way Nicole carries out her work is reminiscent of what Archer (2008) calls “safety/protection through ‘playing the game’” (p. 276) and what Teelken (2012) terms symbolic compliance, in which there is the “pretension of enthusiasm, while remaining vague creates scope for autonomy” and an adaptation to “changes at a superficial or cosmetic level” (p. 278). Many academics treat managerial requirements this way, in essence ticking boxes but not compromising their academic and disciplinary values. Being critical of the system yet working within it means having to use information about the situation in a way that demonstrates compliance but does not substantially influence academic work being undertaken.

Other ECAs, fewer in number, challenged or worked to change the system, often in small but important ways. This was the case for David. He discussed a situation at his university in which administrators were advocating for a common and contractual syllabus across sections of a course, a “master syllabus.” His university had recently undergone institutional change, meaning that there were opportunities for changing practice. As David related,

So senior admin are telling us, they’re sending us signals, “We don’t care.” And although we still play the game of the master syllabus, I actually don’t care. And I think it’s normal. And so right now we’re still building master syllabus courses and my chair is still sort of overly paranoid about how [to] term things, so to give as much freedom as we can, but I think a master syllabus is just an indication of what this should be. But it will change, you know, as the course goes because it evolves, I get better, I find new research, I will throw out that section and add another one.

The way David carries out his work is reminiscent of what Archer (2008) calls “challenging/speaking out” (p. 277). While challenging managerialism can be an act of wielding agency, Archer notes that there has to be broader support for these actions if changes are to be made. For David, because the university is going through a time of institutional change, there was more opportunity to push boundaries that were changing. The situation still required David to use the information he had about the context – about what changes were happening and what amendments were possible – to use his agency to push for change. This finding addresses the second research question about ECAs’ information behaviour during transition; ECAs use the information they gather from their environment to make decisions about how to use their personal agency to work within academia.

Bourdieu (1998) describes the neoliberal workplace in which responsibilities have been delegated to employees, who then take part in “self-exploitation” and participate in their own management (para. 8). While Bourdieu may accurately depict aspects of the situation, there are different ways to react to working in a “Darwinian world” (1998, para. 9). Despite working in neoliberal universities, academics have power to act within their environment, albeit in constrained ways. ECAs actively create relationships with colleagues as one way to find and share the information they need. They also take the information they have and, as part of their agency, use it to accomplish their goals. However ECAs choose to enact their personal agency, compromise is required. Working within university managerialist structures requires academics to compromise on aspects of what work they undertake and how they perform that work. Working against managerialist structures requires academics to give up time and effort in determining ways to play the game.

“Systemic Managerial Constraints”

Through examining the data, larger forces appeared to be at work. While participants expressed a deep commitment and passion for their research and teaching work, they talked about being at odds with universities, shifting work roles, and managerial practices as constraints on their academic work. Managerial practices add an administrative layer to work roles, increasing the already heavy workload of ECAs, taking time and energy from their research, teaching, and service. This administrative layer increases their information needs, alters what information they need, changes how they gather information, and adds to feelings of instability, being overwhelmed, and frustrated. The larger forces at work have been termed Systemic Managerial Constraints (SMC). SMC is grounded theory to explain the findings

presented above. It is a way to understand how ECAs interact with information, including both contextual features and academics' responses to those features. Looking at the term, "managerial" refers to the managerialism, common in the private sector and increasingly popular in universities, that implements systems and ways of working that have increased roles for managers. "Prominent features of a managerialist approach in higher education include a focus on efficiency and effectiveness (including the efficient and effective use of time and space), on quality assurance, accountability, and cost-savings" (Anderson, 2006, p. 579). "Systemic" refers to the pervasiveness of a managerial approach. It is not isolated; rather it permeates the university and has become a part of the ways universities work on a fundamental and everyday basis. It is found in the many and various academic roles of research, teaching, and service. "Constraints" refers to restrictions, limitations, and obstructions. Though pervasive, SMC does not control what academics do. SMC explains the conditions in the higher education sector and the shifting work roles in modern universities – influenced by neoliberal policies – lead to uncertainty and increased information needs, which influence ECAs' finding, sharing, and using information to accomplish their work.

The university exists at a time when, "Increasingly, the public is calling for 'relevance' and 'accountability,' and the modernist scholar is being asked to provide compelling material justifications for his or her scholarship" (Côté and Allahar, 2011, p.17). SMC is the result of universities that privilege managerialism over the purported mission of higher education. In attempting to demonstrate quality and accountability to governments and funding bodies, universities seek to have more control over academics' work – not necessarily the content of the work but types of work and the outputs. The processes, procedures, and systems intended to help regulate academic work become an end in and of themselves (Hil, 2012), rather than a means to support the academics' work. And what is done for the university must be counted as a way to demonstrate academic work to the public. "The social responsibility of the University, its accountability to society, is solely a matter of services rendered for a fee. Accountability is a synonym for accounting in 'the academic lexicon'" (Reading, 1996, p. 32).

While the impact of neoliberalism on the university has been discussed in the academic literature, what this shift toward managerialism, accountability, and audit culture means for academics day-to-day work and information behaviour is less often discussed. This shift includes a decrease in full-time positions, an increase in precarity, an increase in funding of administrative positions, and a reduction in funding to programmes without a vocational focus. The ECAs who participated in this study faced many of these issues, but in particular

the pressure of numerous and burdensome administrative tasks, viewed as pervasive and constraints on academic work. Coupled with the administrative burden was a decrease in autonomy within aspects of academic work, with how work was to be carried out being dictated. So while much of the literature focuses on the shift to corporate culture, day-to-day neoliberalism is played out in more subtle ways that frustrate and wear down academics, particularly ECAs who are already tasked with figuring out a new work role in an unfamiliar environment. Systemic Managerial Constraints contributes a lens through which to understand ECAs' work contexts, as well as their information behaviour within these contexts.

The influence SMC has on ECAs' information behaviour is depicted in Figure 1. The figure illustrates the world of information ECAs experience, incorporating their macro environment, which includes the government and university, taking into account the precarity in higher education and academic work. The solid lines from precarity and academic work roles depict the influence exerted on ECAs. The figure also takes into account ECAs' micro environment, their individual context and experiences, disciplinary practices, physical location, and colleagues. The dotted lines to colleagues and agency depict ECAs resulting information behaviour, noting that the information sharing between ECAs and colleagues is multidirectional. ECAs come to their positions with knowledge, training, and experience from their doctoral studies and, often, casual academic work. Their experiences create expectations of what it is to work in academe. However, it is frequently the case that Systemic Managerial Constraints are not visible to those outside of full-time, continuing academic positions. The information environment in which ECAs work is complex and multi-layered. The examples provided in Figure 1 demonstrate some of the variety of constraints academics may face. For instance, the budget priorities of governments may result in less funding for certain disciplines, putting those disciplines under greater scrutiny and requiring the validation of their societal worth and increased accountability. Universities' use of information systems for the purpose of structured, annual reporting requires academics to demonstrate their work and accomplishments fit within the prescribed categories of the annual report.

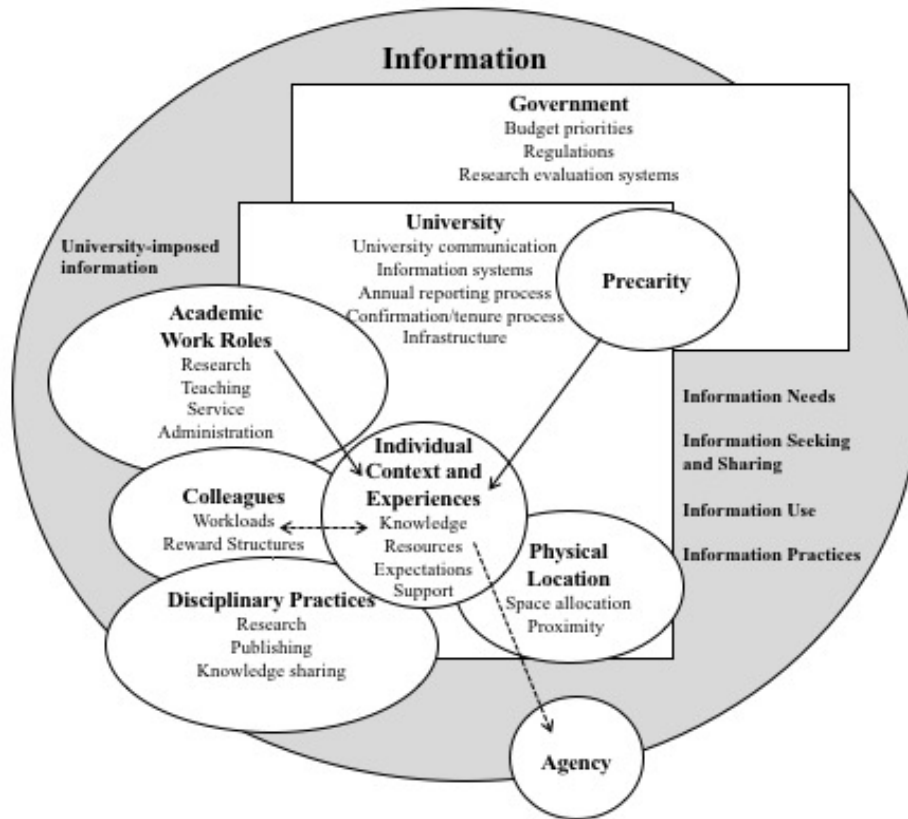


Figure 1. An examination of the influence of Systemic Managerial Constraints on the information behaviour and experiences of early career academics. Descriptions are examples, rather than exhaustive lists.

Systemic Managerial Constraints take place within the context of ECAs’ information environment and influence their information behaviour. Frequently, information needs are increased with new and multiple administrative activities to perform. These information needs are often both urgent and practical in nature, required to perform simple tasks, such as being able to post grades. Information seeking and sharing practices become important. Because academic positions have complex information environments and because universities often do not provide ECAs’ required information, many academics turn to their colleagues for information. Colleagues become a valuable source of information, often being able to provide comprehensive and practical information both quickly and conveniently. Colleagues can also provide “insider” information that formal documentary sources can rarely contain. However, colleagues are more than a source of information; collegial relationships form. These relationships are often initiated and fostered by more senior colleagues who provide practical information and support. When taking into account SMC, comparison is often used to contrast personal values and goals to the values and goals of the

university. This can help ECAs in deciding how to use their personal agency to act within their current circumstances.

Conclusions and Future Research Directions

This research presents the grounded theory of Systemic Managerial Constraints as a way to understand the information behaviour and experiences of early career academics. Neoliberal universities are places of precarity, which can cause uncertainty amongst ECAs. Changing work roles generate new information needs for ECAs, already in a situation in which they need practical information about how to carry out academic work in their new environment. Rather than turn to formalised documents, ECAs seek information from their colleagues, who not only share information but also create collegial relationships and offer support. ECAs then use the information they have to wield person agency to choose their response to their situation. By understanding SMC, the contextual factors and resulting information behaviour, those who work in higher education – heads of departments, colleagues, professional staff, HR staff, librarians – can better understand the uncertainty and anxiety with which ECAs deal, as well as increased information needs. This understanding could be used to provide information, induction, mentorship, and professional development in ways that are suited to ECAs. Future research is needed into the role, often informal but vital, that colleagues play in providing information to and supporting new employees. Participants frequently discussed the ways they interact with information by contrasting them with their experiences as adjunct lecturers. Further research is needed on the information practices and information behaviour of academics on short-term contracts – adjunct, casual, or sessional academics – paying particular attention to the influence of precarity and social exclusion experienced by employees on temporary contracts.

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