Researchers' hate-love relationship to performance measurement systems in academia – a Foucauldian perspective

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Abstract

Purpose – The purpose of this paper is to describe and theorize the type of hate-love relationship to performance measurement systems (PMSs) that individual researchers tend to develop in academia. To this end, the paper draws upon Foucault's writings on neoliberalism to analyse PMSs as neoliberal technologies holding certain qualities that can be expected to elicit such ambivalent views.

Design/methodology/approach – The paper is based on a qualitative interview study of researchers from three Swedish universities, who were asked to reflect upon questions related to three overall themes, namely, what it means to be a researcher in contemporary academia, the existence and use of PMSs at their universities and if/how such PMSs affected them and their work as researchers.

Findings – The empirical findings show that the hate-love relationship can be understood in terms of how PMSs are involved in three central moments of governmentality, where each such moment of governmentality tends to elicit feelings of ambivalence among researchers due to how PMSs rely on: a restricted centrifugal mechanism, normalization rather than normation and a view of individual academics as entrepreneurs of themselves.

Originality/value – Existing literature has provided several important insights into how the introduction and use of PMSs in academia tend to result in both negative and positive experiences and reactions. The current paper adds to this literature through theorizing how and why PMSs may be expected to elicit such ambivalent experiences and reactions among individual researchers.

Keywords Performance measurement systems, Academia, Neoliberalism, Centrifugal mechanism, Normalization, Entrepreneurial self

Paper type Research paper

1. Introduction

The use of performance measurement systems (PMSs) to govern academic life has attracted a large and sustained interest in the accounting literature over the past decades (for overviews, see Argento *et al.*, 2020; Guarini *et al.*, 2020; O'Connell *et al.*, 2020a). In one important (and large) part of this literature, such systems are typically portrayed as holding certain qualities that turn them into a clear threat to academic practices (Agyemang and Broadbent, 2015; Martin-Sardesai *et al.*, 2017; Parker, 2011). For example, one such threatening quality is that they help to increase the power of managers, administrators, publishers, funders, etcetera, at the expense of researcher autonomy (Argento *et al.*, 2020; Gebreiter and Hidayah, 2019; Guthrie *et al.*, 2019; Martin-Sardesai *et al.*, 2017; Mingers and Willmott, 2013; Parker, 2002). Another quality refers to their "reductive" nature, which is typically seen as having a largely narrowing, homogenizing and stagnating effect on research (Gendron, 2008; Hopwood, 2008; O'Connell *et al.*, 2020a). Finally, they are often seen as replacing the intrinsic motivation of researchers with extrinsic incentives, which has proven to have largely demoralizing and demotivating effects on (at least some) researchers (Kallio and Kallio, 2014; Martin-Sardesai *et al.*, 2020; Narayan, 2016; Lewis, 2014).

Interestingly though, and despite that the literature is replete with examples of how PMSs are associated with such negative qualities in academia, another part of this literature points to how PMSs are also associated with *other qualities* that make them considerably more appealing. One such quality relates to how PMSs function as concrete tools that allow universities to work with and achieve what is considered important goals for them (Söderlind and Geschwind, 2019). From such a perspective, PMSs are believed to contribute towards a number of "generally desirable effects" (O'Connell *et al.*, 2020a, p. 1181), such as increasing the overall research productivity (Guarini *et al.*, 2020, p. 113), ensuring that "academics produce something with the time they are given" (Alvesson and Spicer, 2016, p. 33) and propelling them to focus on quality improvements (O'Connell *et al.*, 2020a). In fact, and as suggested by Argento *et al.* (2020, p. 2), PMSs provide academics with a form of rules for what to do, and when such rules "are explicitly communicated and enforced, academics know how to behave and what to prioritize" (see also Aguinis *et al.*, 2020). Another reason is related to the individual benefits that are (at least sometimes) associated with PMSs. For example, Argento *et al.* (2020, p. 2) point to how "[s]ome academics may feel oppressed by the duty to be accountable, while others may have become more independent and entrepreneurial, and specifically welcome pressures to produce research outputs". In a similar manner, Chatterjee *et al.* (2020, p. 1221) stress that "[f]or some, assessment may provide an opportunity to demonstrate that they can achieve something others find important" (see also van Helden and Argento, 2020).

Notwithstanding the many different insights made with regard to how some qualities of PMSs seem to trigger negative reactions towards them in academia, while other qualities seem to result in the opposite, the potential ability of PMSs to concurrently provoke both negative and positive reactions has attracted rather scant attention in the literature. Indeed, a few scholars have started to talk about how PMSs trigger a form of *bittersweet* or *hate-love* relationship among individual academics (Gendron, 2008; Knights and Clarke, 2014; Parker, 2012; van Helden and Argento, 2020). For example, Knights and Clarke (2014) talked about the bittersweet experiences of life in academia in times of new public management, while Parker (2012) and others (Gendron, 2008; van Helden and Argento, 2020) have pointed to researchers' hate-love relationship with journal lists and rankings. However, we lack more systematic and thoroughgoing theoretical analyses of what it is about PMSs that allow them to foster this type of ambivalent relationship to them. Arguably, this is surprising given that

such analyses could further our understanding of what it is about PMSs that make them so powerful in academia, despite all the criticism that has been raised against them.

The overall ambition with this paper is to provide such an analysis. More specifically, the purpose is to describe and theorize the type of hate-love relationship to PMSs that individual researchers tend to develop in academia. To this end, we draw upon Foucault's (2007, 2008) writings on neoliberal forms of government to theorize *three central moments of governmentality* – i.e. specific instances or arenas through which neoliberal forms of government are played out (Michael, 2009; Walker *et al.*, 2008) – that PMSs are involved in, and which help explain how and why individual academics tend to develop this type of hate-love relationship to them. In short, we analyse how PMSs help (re)construct:

- the relationship between individual researchers and their governing parties by means of a restricted centrifugal mechanism;
- the relationship between individual researchers and their peers by means of normalization rather than normation; and
- individual researchers' relationships to themselves by means of the entrepreneurial self as an ideal.

Using empirical evidence from a qualitative study of researchers at three Swedish universities, we demonstrate how these three central moments of governmentality are key for understanding the type of hate-love relationship to PMSs that has been identified in extant literature. In so doing, this paper arguably contributes to extant literature in several ways. Overall, it contributes to the small but growing literature that has drawn attention to the hate-love relationship as such (Knights and Clarke, 2014; Parker, 2012; van Helden and Argento, 2020). Moreover, and related, such a focus allows us to go beyond the notion that some aspects or qualities of PMSs are seen as triggering negative views and reactions while *other* qualities are seen as triggering positive views and reactions. In contrast, we explore how the very same qualities of PMSs can feed and form highly ambivalent views on them. Finally, in so doing, we draw upon a hitherto largely unexplored facet of neoliberal technologies in the accounting literature, namely, the ways in which the technologies as such are premised on a number of contradictory terms – such as governing without governing, the concurrent production and consumption of freedom etcetera (Foucault, 2008) – which can in and of themselves be expected to feed and form a hate-love relationship.

In the remaining parts of the paper, we first provide a more detailed discussion of how and why PMSs, when seen as neoliberal technologies, can be expected to trigger ambivalent views among individual researchers (Section 2). Based on this theoretical backdrop, we then outline how the empirical study was designed and conducted (Section 3), followed by a presentation of the empirical findings (Section 4). In the final section, we draw conclusions and discuss some important implications of our study (Section 5).

2. Performance measurement systems as neoliberal technologies of government

As suggested above, we draw upon Foucault's writings on neoliberalism to theorize PMSs as neoliberal technologies of government. Based on this, we first outline the historical background to, and general features of, neoliberal governmentality (Section 2.1). In an ensuing section, we elaborate on how PMSs can be seen as deeply involved in three central moments of this type of governmentality (Section 2.2).

2.1 Neoliberalism as a form of governmentality
Issues of how neoliberal ideas were (and still are) mobilized as a way of organizing social life were attended to by Foucault in a series of lectures during the late 1970s[1]. During these lectures, Foucault immersed himself (among other things) in the notion of "Governmentality"[2]. In fact, based on a genealogy of the different types of "mentalities" that had been used historically for governing human behaviour, he identified the emergence of a new one in the mid-18th century. One that largely differed from previously ruling forms such as the sovereign and disciplinary ones, in that it focused neither on the protection of a geographical territory nor on the disciplining of individual bodies, but on the security of a whole *population* (see also Burchell *et al.*, 1991; Chiapello, 2017). As many times before, Foucault paid attention to how such a shift in focus – in the sense that one now tried to understand the workings of a "collectivity" of living beings rather than the individuals *per se* – required a particular form of *knowledge*. One that would allow those who governed to not only understand the population as a "field of relations between people and people, people and things, people and events" (Rose *et al.*, 2006, p. 6) but also how to govern such relations.

As has been discussed many times before in the accounting literature (Chiapello, 2017; Cooper, 2015), Foucault identified the political economic ideas of neoliberalism as forming the basis of this new type of governmentality. As part of a liberal doctrine, these ideas were grounded in the somewhat paradoxical notion of "freedom" as a rationale for governing (Foucault, 2008; Rose *et al.*, 2006). That is, there was a general belief that to be effective, the governing of a population needed to allow (and indeed require) people to behave as "free individuals", where freedom meant the ability to act autonomously, to make one's own choices, to be self-reliant, etc. This rested on the assumption that it was only through unleashing the power of the "liberal subject" that the interests and benefits of the individual could be aligned with those of the population as a whole. Importantly though, according to these ideas, freedom (and acting in the name of freedom) was no longer seen as something "given by nature" (which had been the case in classical liberalism). Rather, if one wanted to bring "together the mass effects characteristic of a population", making sure that they reached a form of equilibrium and that the security of the "whole" was protected from its internal dangers (Foucault, 2003, p. 249), one was convinced that such effects had to be arranged, orchestrated or regulated into being (see also Hopwood, 1992).

The neoliberal way of adhering to this problem of governing the freedom of individuals – i.e. to govern without governing (Miller and Rose, 1990) – was to find ways of acting on the *conditions* of individuals. That is, rather than intervening directly on the individuals – i.e. through marking or disciplining them – the idea was to act on the "milieu" within which they exercised their freedom (Foucault, 2007; see also Munro, 2012; Rose and Miller, 1992). To create a "realm of action" within (and through) which individuals could, on the one hand, be allowed to act freely – e.g. through being innovative, to incorporate new ideas, to expand and to develop ever-wider circuits (Foucault, 2007). On the other hand, though, such a realm had to allow for the freedom to be controlled – e.g. through "sifting the good and the bad, ensuring that things [were] always in movement, constantly moving around, continually going from one point to another, but in such a way that the inherent dangers of this circulation [were] cancelled out" (Foucault, 2007, p. 93). And importantly, this "double-edged" solution was found in the notion of a market. Or, more precisely, in the setting up of individuals in competitive relations to each other, as such relations would not only allow the individuals a certain form of freedom, but it would also require them to take care of themselves and their self-interests if they wanted to stay competitive and survive on the market.

As will be argued below, this notion of *the market* as a superior mode of organizing social life (Harvey, 2006; Hopwood, 1992; Mennicken and Miller, 2012; Mudge, 2008) is particularly useful for theorizing how and why individual academics develop a hate-love-relationship to PMSs. The line of reasoning is as follows. Firstly, through transforming and recoding academic practices into calculable terms, PMSs contribute to provide a particular form of knowledge (cf. Miller, 2008; Rose and Miller, 1992) that makes comparisons of different practices possible, which, in turn, allows competition to emerge (Miller, 2001, 2008; Townley, 1995; Wickramasinghe *et al.*, 2021). Hence, from such a perspective, PMSs can be seen as important technologies through which the abstract neoliberal ideal of the market is articulated and manifested in an empirical setting such as academia (Kallio *et al.*, 2017; Mennicken and Miller, 2012; Miller, 2008). Secondly, in producing and displaying performance numbers in the name of comparison and competition, PMSs "mediate" (Miller and Power, 2013) and help (re)construct individual researchers' relationships to their governing parties, to their peers and to themselves in ways that produce positive and in the same stance negative effects for them. Below, we discuss each such (re)construction as a central moment of governmentality that PMSs are involved in.

2.2 Performance measurement systems and three central moments of governmentality
2.2.1 Performance measurement systems and the (restricted) centrifugal mechanism. The first moment of governmentality relates to how competitively oriented technologies help (re)-construct the relationship between the governing and the governed based on what Foucault (2007) refers to as a *centrifugal mechanism* of control. That is, a mechanism designed to allow for the colonisation of ever wider areas of social life by a form of market coordination. Again, the underlying assumption of this is that human activities in general, and educational ones in particular, are best orchestrated when left to the rationality of the market (Foucault, 2007; Hamann, 2009; Mudge, 2008). That is, rather than allowing any overall orientation or logic of such activities to be established a priori by, for example, a strong political governance, it is assumed that the outcomes of such activities will be optimized when individuals are truly "liberated" so that they may use their rational and calculative abilities to compete with each other (Lynch, 2006). In this sense, then, the centrifugal mechanism can be seen as one that allows things to "take their course" (Foucault, 2007, p. 64), yet ensuring that people always do what they can to develop themselves and their competitive abilities. When those who govern academic practices use PMSs in this sense, the latter ones are expected to work as a form of market mechanism. That is, and largely in contrast to a disciplinary form of power – which can be seen as "'centripetal' in the sense that it 'concentrates, focuses, and encloses' to regulate and 'prevent everything'" – PMSs are expected to work as a centrifugal force "in that they continuously expand and integrate new elements and 'let things happen'" (Moisander *et al.*, 2018, pp. 379-380).

In the accounting literature, the notion of how a centrifugal mechanism can incite positive feelings among researchers has received rather limited attention (but see e.g. Jones, 1992; Wickramasinghe *et al.*, 2021). However, in a few cases, it has been emphasized how PMSs can contribute towards feelings of an increased freedom or autonomy among individual academics. For example, Argento *et al.* (2020) suggested that although the effects may vary between researchers, some may indeed become more independent. In a similar manner, Lewis (2014) found that although many researchers felt that their professional autonomy was reduced by the PMS, this was not true for everybody. On the contrary, a substantial number of researchers suggested that the system did have a positive impact on their autonomy.

In line with this, we propose that individual academics can be expected to appreciate the ways in which PMSs can work as such a "centrifugal force", in the sense that they contribute towards the setting up of markets in academia. And importantly, in doing so, they do not coerce or pressure academics into particular forms of behaviour. They do not decide a priori, for example, how research should be conducted or how individual researchers should become competitive. On the contrary, they provide them with a certain form of freedom or autonomy to do research without constraints or the interference from others, as long as they are prepared to take responsibility for the outcomes of their "free" acts (Chiapello, 2017; Cooper, 2015). The reason being, as suggested by Rose and Miller (1992, p. 174), that from such a perspective, "[p]ower is not so much a matter of imposing constraints upon citizens as of 'making up' citizens capable of bearing a kind of regulated freedom".

However, we also propose that individual academics can be expected to form considerably more negative feelings related to the centrifugal character of PMSs, due to how the setting up of quasi-markets in academia requires that some "rules of the game" or "criteria for competition" have to be instituted. That is, since markets constitute *non-natural phenomena* (in the eyes of the neoliberals), they must be actively instituted and maintained by means of various forms of interventions – including the very criteria by which they are brought into being in the first place (Foucault, 2007; Rose and Miller, 1992). And importantly, such criteria – regardless of whether they refer to the number of publications, citations, the amount of external funding etcetera – inevitably *constrain* or *consume* the type of freedom that they aim to produce. Or, as suggested by Foucault (2008), they help construct a productive/destructive relationship with freedom, as they not only provide the battleground on which competition is to be played out but also inevitably establish its limitations. As a result, the type of freedom or autonomy that the centrifugal mechanism aims to produce – and which can be expected to be associated with positive feelings among academics – constitutes somewhat of an illusion (Beime *et al.*, 2021; Morrissey, 2015) or a cultural myth (Grealy and Laurie, 2017).

As suggested in the introduction, this particular theme – i.e. how PMSs can provoke negative reactions because of how they narrow down and constrain academic practices – has received considerable attention in the accounting literature. In fact, when experiencing that one needs to conduct research in line with the heteronomous criteria set up by PMSs (just to be able to publish, attract research funding or be promoted), academics typically experience that their autonomy is circumscribed (Argento *et al.*, 2020; Guarini *et al.*, 2020; Martin-Sardesai *et al.*, 2017; Tourish and Willmott, 2015). In fact, a well-rehearsed argument in the critically oriented accounting literature is that PMSs reduce (Kenny, 2017), diminish (Grossi *et al.*, 2020) or undermine (Parker, 2011) academic autonomy. The premise is, as suggested by Parker (2011, p. 445), that out of "fear of offending key stakeholders and present or potential funding sources, or by fear of impact on their own performance evaluation, job contracts, tenure and career prospects within the university", academics feel that they have to sacrifice their autonomy and adapt to that which evidently works (Englund and Gerdin, 2019; Kallio *et al.*, 2021).

Taken together then, we suggest that the ways in which PMSs work as a restricted form of centrifugal force – i.e. one that both produces and consumes the autonomy of individual researchers – constitutes a first argument for why individual academics can be expected to develop a hate-love-relationship to such technologies.

2.2.2 Performance measurement systems and the principle of normalization. The second central moment of governmentality is related to how PMSs help (re)construct the relationships between individual researchers and their peers by means of a principle of *normalization* rather than one of normation (Foucault, 2007). That is, rather than departing

from any pre-existing or pre-defined norm (as disciplinary apparatuses would), they regulate such relationships through an ongoing construction of the (ab)normal by means of transforming individual performances into numbers, aggregating these into a "population" and establishing what is (ab)normal for such a population (e.g. through calculating its statistical average and variance).

Two aspects of such a normalizing principle are arguably important for understanding the type of hate-love-relationship between individual academics and PMSs that we are interested in. One aspect relates to the ways in which normalization takes "the empirical norm as a starting point, which serves as a regulative norm and allows for further differentiations and variations". (Lemke, 2011, p. 47). That is, it starts out in the domain of the empirical (e.g. in the actual performances of researchers) in the sense that quantified knowledge of what is normal in this domain (e.g. in terms of the average number of publications for a certain type of research/er), serves as the basis for the formation of a norm (Foucault, 2007). A norm that, instead of stating a priori that a researcher should publish a certain number of articles or attract a certain amount of funding, departs from what is "normally occurring" and what can be considered acceptable spans of variation around this normal (Foucault, 2007). Another aspect relates to the ways in which the principle of normalization brings the individual into a particular form of relation to the "population" (i.e. to one's peers). The premise is that what is (ab)normal – and whether oneself is considered (ab)normal – is no longer decided by the government or the "central office". On the contrary, it is constantly being reproduced by each and everyone involved in the game of competition (including oneself). As a result, one can always see oneself in relation to one's peers, and one knows that all the dots in the diagram or all the numbers in the spreadsheet (showing, e.g. the distribution of publications or citations among researchers), are made up of actual performances.

In the accounting literature, it has been pointed to how this type of establishment of how an individual's performances relate to those of others can work as an important source of motivation and inspiration, not least through visualizing the performances of those in the top; the highly successful ones; the academic stars; those who will function as heroes or idealized others (Knights and Clarke, 2014; Tucker and Tilt, 2019). The premise is that such visualizations help to "make up people" (Hacking, 2007) as important role models or ideals. Or, as suggested by Knights and Clarke (2014, p. 343), the highly successful "star" can function as an idealized other, a revered intellectual. In line with this, and the writings on normalization in general, we suggest that individual academics can be expected to appreciate the ways in which this type of normalization means that it is the actual academic practices that form the ground for what becomes the norm. Moreover, they can be expected to react positively on the ways in which PMSs help construct a form of "empirically based role-model".

In contrast to such writings, though, we also propose that the ways in which PMSs work to normalize academic practices can be expected to provoke negative reactions. One important reason for this is that normalization turns the norm into something continuously unfolding and relative, in the sense that it is constantly being reproduced. As a result, the notion of "good research" or a "good researcher" is transformed from something essential (i.e. from something that has an inherent character or something that you may be) to something performative (i.e. to something that you continually do). Or, as suggested by Bauman (2000, p. 29), it transforms the norm into something that "can exist only as an unfulfilled project".

In the existing literature, it has been pointed to how such a relativization of the norm not only increases the work-intensification and stress among individual researchers (Parker, 2011) but also that it can lead to jealousy (Tucker and Tilt, 2019), rivalry (Gendron, 2015)

and cynicism (Kallio and Kallio, 2014). Guthrie *et al.* (2019, p. 13) pointed to how this type of relativization tends to intensify processes of social comparisons, and when people have a "fundamental need for status recognition" in and through such processes, it can lead to rivalry. Or, as suggested by Chatterjee *et al.* (2020), it can lead to that research staff, and even whole universities are torn apart (see also ter Bogt and Scapens, 2012).

Taken together then, we suggest that also this second moment of governmentality can be expected to provoke both positive and negative reactions among individual researchers. The premise is that they help construct an empirically based relationship between the individual and the population – in this case, between individual researchers and their peers – that can be expected to work both as a motivator (e.g. through providing empirically based role-models) and as a demotivator (e.g. through intensifying feelings of envy and rivalry).

2.2.3 Performance measurement systems and the entrepreneurial self. Third and finally, PMSs not only help construct the relationships that researchers form to their governing parties (cf. the centrifugal force) and their peers (cf. the normalizing principle) but also to themselves. In fact, when theorized as neoliberal technologies, PMSs both presume and help "make up" (Hacking, 2007) a particular form of subject, namely, an entrepreneurial self (Chiapello, 2017; Cooper, 2015). On the one hand, this is premised on the fact that the market mechanism relies upon individuals working as "the instrument, relay, or condition for obtaining something at the level of the population" (Foucault, 2007, p. 65). On the other hand, though, and more specifically, it also relies on the individuals conducting themselves in a very particular way, namely, as active economic agents driven by their (self-)interests. That is, it relies upon individuals who are prepared to invest in themselves, who are committed to competition and who are prepared to live their lives as an enterprise – a true Homo economicus (Foucault, 2008; see also Cannizzo, 2015; Cooper, 2015). Or, as suggested by Foucault, a subject who is prepared to be an "entrepreneur, an entrepreneur of himself" (Foucault, 2008, p. 226; see also Wickramasinghe *et al.*, 2021). In fact, unless people are prepared to dress themselves in such an entrepreneurial armour, and contribute towards the ongoing circulation of capital, the inherent dangers of the population cannot be cancelled out (Foucault, 2007).

Arguably, individual academics can be expected to appreciate the ways in which the image of such an entrepreneurial self carries a number of highly seductive virtues and values (cf. Davies, 2003; Morrissey, 2015). One aspect of this relates, of course, to the ways in which PMSs presuppose and help cultivate the type of autonomy, freedom and choice referred to above (cf. the "centrifugal mechanism"). However, apart from offering a form of market space within which individuals can exercise their freedom, they also offer a promise of control (Cooper, 2015), the fulfilment of desires (Cannizzo, 2015) and success (Clarke and Knights, 2015), when manoeuvring within such a space. The premise is that rather than working only as centrifugal and normalizing mechanisms at the level of the population, PMSs also function as tools for working with, and improving, one's skills and abilities at the level of the individual (so that one can become and stay competitive in the market space). Or, as suggested by Foucault (1994, p. 146; Mennicken and Miller, 2012), they become important "technologies of the self" that people can mobilize to "effect, by their own means, a certain number of operations on their own bodies, their own souls, their own thoughts, their own conduct, and this in a manner so as to transform themselves, modify themselves, and to attain a certain state of perfection, happiness, purity, supernatural power".

In the accounting literature, several scholars have pointed to how PMSs function as such tools that allow individual researchers to work with and achieve what was above referred to as a number of "generally desirable effects" (O'Connell *et al.*, 2020a, p. 1181). As suggested in the introduction, such effects then can relate to the overall research productivity (Guarini

et al., 2020, p. 113), ensuring that "academics produce something with the time they are given" (Alvesson and Spicer, 2016, p. 33) and propelling them to focus on quality improvements (O'Connell *et al.*, 2020a; Parker, 2013). Along these lines, for example, Northcott and Linacre (2010, p. 44) pointed to how at least some of their respondents saw merits in the formal research assessment exercise, as it had helped them to get "'going as a research community', 'encouraged publishing', been 'very important to encourage quality' and provided 'advice regarding publication outlets [that is] likely to be clearer and possibly more honest and helpful for junior academics'".

However, it also seems reasonable to suggest that some of the qualities associated with, and constitutive of, the entrepreneurial self will be less well received among individual academics. Again, one reason for this relates to the ways in which aspects of the centrifugal mechanism and processes of normalization tend to reduce the autonomy of researchers. However, it can also be expected that individual researchers will react more negatively to certain qualities of the neoliberal subjectivity *per se*. The premise is that the neoliberal self is preconceived as a highly self-interested creature (Cannizzo, 2015; Lynch, 2006) that is incentivized by one thing and one thing only, namely competition. Moreover, and related to the ways in which quasi-markets require certain criteria by which competition is to be played out, the type of subject that PMSs try to hail into existence is seen as consisting of a number of measurable and definable attributes that can be calculated with, improved and even optimized (cf. Cannizzo, 2015). While such qualities of the subject can be expected to be met with scepticism in and of themselves, it is perhaps the effects that they tend to bring with them that can be expected to result in most disapproval, namely, the tendency of the entrepreneurial self to become strongly focused on, for example, the numbers as such rather than the substance.

This is something that has been extensively discussed in the accounting literature (Guarini *et al.*, 2020; Hopwood, 2008; Messner, 2015; Northcott and Linacre, 2010; O'Connell *et al.*, 2020a). For example, several scholars point to how such a focus on the measurable and definable attributes results in a view on academic work as a "hyper-individualized exercise" (Chatterjee *et al.*, 2020, p. 1221), as a game that is, and has to be, played based on the "selfinterest of academics in securing and accumulating capitals" (Pianezzi *et al.*, 2020, p. 574) and as being about reaching certain performance targets so as to maximize individual benefits and career progression (Parker, 2011). A type of focus that is not only seen as "narrowing the types of research undertaken and the types of methods chosen" (O'Connell *et al.*, 2020b, p. 1297; see also Guthrie *et al.*, 2019; Martin-Sardesai *et al.*, 2019; van Helden and Argento, 2020), but also as a form of "outsourcing of meaning" (Alvesson and Spicer, 2016, p. 38), whereby many researchers end up doing things which they do not necessarily identify or sympathize with. As a result, they tend to experience internal moral conflicts (Pianezzi *et al.*, 2020, p. 579), anxiety (Argento *et al.*, 2020) and doubts whether they are doing the right things (Berg *et al.*, 2016).

Based on this, we suggest that the ways in which PMSs contribute to construct individual academics as entrepreneurial selves can also be expected to provoke a hate-love relationship to such systems. The premise is that the entrepreneurial self carries not only a number of seductive virtuous and values but also ones that threaten more traditional academic ideals.

All in all, we argue that a theorization of how PMSs are involved in the three central moments of governmentality referred to above – whereby the help (re)construct individual researchers' relationships to their governing parties, their peers and to themselves – can further our understanding of how it may be that individual academics develop a hate-love relationship

towards such systems. Before empirically substantiating these theoretical arguments, we will provide further details on how we designed and carried out the empirical study.

3. Methods

3.1 Research context and data collection

The empirical material presented in this study relies on interview data collected in a Swedish context, and as all qualitative data, they primarily reflect the contextual conditions in which they emerged. However, when comparing the Swedish context with findings from studies conducted in other countries, it seems that Swedish universities are increasingly governed in ways that resemble a more general neoliberalisation of academic settings around the world. In fact, just like many other countries (Dobija *et al.*, 2019; Krücken *et al.*, 2018; Raudla *et al.*, 2015), Sweden has experienced major reforms over the past decades, with the introduction of various forms of market-based forms of control. For example, there has been a substantial increase in external and competition-based research funding, where resources to an increasing extent are allocated based on the performance (as in number of publications, citations and amounts of external funding received) of universities and its researchers in relation to the performance of other universities and researchers (Hammarfelt *et al.*, 2016). Moreover, this type of competition-based funding of Swedish academia has typically trickled down to the internal PMS of individual universities, where the measurement of external research grants won, number of publications etcetera, work as important competition-based incentive systems, when it comes to such things as position appointments, salary trends, publication bonuses and the allocation of funding within the universities (Englund and Gerdin, 2020; for similar developments in other countries, see Agyemang and Broadbent, 2015; Dobija *et al.*, 2019; Guarini *et al.*, 2020; Raudla *et al.*, 2015).

Within the Swedish context, three universities were selected; one of the top five, one of the top 10 and one of the top 20 universities in Sweden according to the Times Higher Education World University Ranking (which is based on performance indicators such as those mentioned above). The reason for selecting universities based on their ranking was that it enabled us to capture a broader picture of the phenomenon under study in the sense that relative positional status in terms of rank may influence how universities and individual researchers alike relate to and feel about the quantitative developments which are taking place (Gendron, 2015; Guarini *et al.*, 2020; Kallio *et al.*, 2021).

In the selected universities, we conducted a total of 20 interviews during the fall of 2018 and the spring of 2019[3]. In more detail, respondents were selected from either of three different faculties: Business, Science and Engineering, Law, Psychology and Social work or Humanities, Education and Social Sciences. Also, in terms of seniority, they were selected based on varying levels of tenure, ranging from assistant to full professors. The reason for this particular design was that extant literature gave us reason to believe that how individual academics experience PMSs can vary depending on, for example, aspects in the local context, the faculty to which they belong and their academic position (Archer, 2008; Chatelain-Ponroy *et al.*, 2018; Guarini *et al.*, 2020; Lewis, 2014)[4]. Table 1 below illustrates the number of respondents divided by faculty and seniority.

The interviewees were asked to reflect upon questions related to three overall themes, namely, what it means to be a researcher, the existence and use of PMSs in academia and if/how such PMSs affected them and their work as researchers. Linked to each such overall theme, the interview guide consisted of a number of general and rather "open-ended" questions. For example, we asked them questions such as "What does it mean to be successful as a researcher in your view?", "What kind of research is prioritized in your department?" and "How does your own research fit with the expectations from others, such

as external funders?". And importantly, depending on where the interviewee would turn the conversation related to such questions, we would raise a number of related issues, ask her or him to elaborate and ask for concrete examples. While studying our own practices and "colleagues" may have affected the interviews negatively (e.g. through making us "blind" to certain issues), we believe our personal experiences and understandings of the field as researchers were advantageous in this case. For example, such pre-understandings arguably enabled us to have deeper discussions with the interviewees and to ask relevant follow-up questions (Ahrens and Chapman, 2006; Gendron, 2008; Agyemang and Broadbent, 2015). All interviews were recorded and subsequently transcribed verbatim.

3.2 Data analysis

As we began to analyse the empirical material, we drew upon rather broad categories from extant literature to identify various ways in which PMSs triggered negative reactions among researchers (Argento *et al.*, 2020; Gebreiter and Hidayah, 2019; Guthrie *et al.*, 2019; Parker, 2002; Mingers and Willmott, 2013; Kallio and Kallio, 2014; Martin-Sardesai *et al.*, 2017, 2020; Narayan, 2016; Lewis, 2014). This resulted in a large number of quotations where the interviewees felt that they had to comply with the criteria set up by the PMSs in different ways to receive funding, to secure an individual career or to manage their own self-esteem.

However, as we organized and coded these quotations in NVivo (a software for qualitative analysis), we made two important observations. Firstly, we noted that while our respondents certainly had their doubts about, and gave voice to a number of concerns with, the PMSs, the material was also replete with examples where they expressed a more positive view on such systems. Secondly, there were no marked differences between respondents depending on academic position, discipline or the university they came from, at least not to the extent that such classifications could "explain" how and why individual researchers perceived the PMS in a particular way. Based on these two observations, we decided to redirect our analytical focus somewhat, and focus on the concurrent occurrence of negative and positive sentiments towards PMSs among the researchers, regardless of where they came from or their degree of seniority.

With such an emerging focus, we (re)read all transcripts and attempted to abstract a number of categories (from the empirical material) that could help explain why our interviewees seemed to have these *ambivalent* views on the PMS. This work resulted in several emerging categories, most of which were related to the PMS as such. That is, they pointed to aspects or qualities of the system as such that seemed to trigger both negative and positive reactions. For example, it seemed that our interviewees referred to the system in negative ways because of how it was perceived to *restrict* or *narrow down* the type of research they conducted. However, such narrowing down also had clear positive connotations because of how it provided them with a form of *guidance*. In a similar manner, the material suggested that the system was associated with negative feelings because of

| Discipline | Business, Science | Law, Psychology | Humanities, Education | |
Academic title	and Engineering	and Social work	and Social Sciences	Sum
Professor	2	2	2	6
Associate professor		3	2	5
Assistant professor	4	3	2	9
Sum	6	8	6	20

Table 1.
Overview of interview respondents

how it created a form of *demotivating external pressure* on them, at the same time as such a pressure was seen as positive because of how it *ensured progress* and *prevented laziness*.

To further elaborate on and theorize these empirically generated categories, we consulted the literature once more in search for a framework that could offer further theoretical guidance. In doing so, our attention was drawn to Foucault (2007, 2008) and his writings on neoliberal forms of government, as these writings not only offered a conceptual apparatus through which our preliminary categories could be further developed and theorized but also a way of talking about the categories as different, yet interrelated, facets of PMSs as neoliberal technologies (depending on whether they related to the restricted centrifugal mechanism, the principle of normalization or the entrepreneurial self). During this work, we also went back to extant accounting literature on PMS in academia to be able to relate (and differentiate) our emerging findings to previous insights.

All in all, therefore, the analytical work underlying the current paper can best be characterized as an iterative process, where we have gone back and forth between the empirical material, the emerging findings and the extant literature (Ahrens and Chapman, 2006; Bazeley, 2013). This has enabled an in-depth analysis of what it is about PMSs that make them so powerful in academia and the development of a number of concepts describing the character as well as the effects of the different moments of governmentality that PMSs are involved in. In the following section, we present the results of these analyses. Two things should be noted regarding this presentation. Firstly, as we present quotes from our interviewees, we will denote the interviewees as I1–I20, for reasons of anonymity. Secondly, to allow each researcher to have a voice within the text, without losing sight of the overall empirical story, we have built the story based on a combination of quotes from individual interviews. While this certainly risks leading to a form of decontextualizing of the individual quotes, the large number of quotes presented means that, when taken together, several different facets of the different interviews are indeed reflected in the story.

4. Empirical findings

As suggested in the methods section, Swedish universities have, in similarity with universities in many other countries, experienced major reforms when it comes to their governing. While variously referred to as the marketization of universities, the spread of new public management-ideas or a new managerial era (Martin-Sardesai *et al.*, 2017; O'Connell *et al.*, 2020b), such reforms have resulted in an increased importance of various forms of performance measures, both at a national and local level. In the universities under study here, such performance measures mainly covered three areas, namely, how individual researchers performed when it came to the *number of publications*, the *number of citations* and *the amount of external research funding* attracted. Or, as suggested by some of our respondents, "the measurement systems we have today, they focus on the number of publications, international publications and to be cited" (I13), "over the last five years there has become this enormous pressure, that you're measured on the number of citations you have and the number of publications" (I6), "you need to publish [...] and above all you should attract funding from these bigger funders" (I3) and that "publication indexes, the number of publications and funding are growing more and more important" (I5).

Although the relative importance of the individual measures seemed to vary somewhat between universities and scientific disciplines, they were all reported and followed up systematically. For example, our respondents explained how individual researchers or research leaders would "collect everything that we have done this year" (I4), "sometimes during the autumn you report on your publications, your conferences, presentations, applications for funding" (I13), "you account for everything the research group has done

once a year [. . .] It's external funding, publications and so on" (I17) and then "we talk about it in our different meetings, we follow up on [. . .] like the last time, it was individual researchers and how much we publish, the number of research applications we have submitted [. . .] and in the yearly activity report of course, where we report the number of citations, publications and so on" (I9).

Apart from allowing internal follow-ups and discussions, the reported numbers also served as an important ground for both material and non-material rewards. In fact, and as suggested above, the universities as such "get funding based on what we publish, the number of citations, bibliometrics and so on" (I18), and this performance-based logic then trickles down and forms the ground for a performance-based logic within each university. For example, such a logic included publication bonuses, in the sense, that "we get a publication bonus" (I9), where "you get a certain amount of money based on what you've written, and the amount of money also depends on which journal it is" (I18). Apart from such bonuses, the performance measures also constituted an important basis for the salary revisions. For example, it was referred to how "those who have published more get more paid, so of course it's a salary incentive" (I3) or that "the more I have [in terms of publications], the better my negotiating position is when discussing salary" (I10).

Moreover, it was clear that this type of measures where highly important not only when it came to such things as positions (e.g. when ranking candidates for a position, "articles are valued the most", I20) and individual career development ("to become an associate professor you have to publish articles, that's the only thing that counts", I4) but also when it came to who would get attention and be celebrated within the universities: "there are these informal structures [that guide] what should be celebrated" in this sense, so that "when someone has received external funding or released a publication, it is noted in the internal newsletter" or by "the head of department [. . .], where she can say that 'this year, it is gratifying to see that [the department] has been successful', and then she mentions those who have attracted external funding" (I2).

From these, and other examples, two things stood out as important. Firstly, it was clear that the performance measures worked to operationalize and articulate the neoliberal ideal of competition (Mennicken and Miller, 2012). That is, it was through this type of measures and the ways in which they were used to draw attention to, and reward, certain performances that competition was set in motion. Secondly, in doing so, it was clear that competition is not played out on the basis of who you are as an 'individual', but rather on the basis of the numbers you are able to provide. You do not enter the competitive arena as a whole individual. Instead, you throw in your numbers. Or, as suggested by our respondents, "we have a system in our 'world of research' that presumes that you are successful in a very particular way. It's implicit in the system that you should have a certain type of funding, you should publish in certain journals, you should have a certain number of publications" (I18). "It's very seldom that we talk about qualitative objectives. Instead, it's often 'the number of [. . .]'" (I9), which means that you "through numbers try to establish how good or bad something is" (I14).

When we talked to our respondents about how they experienced the fact that their numbers seemed so important for how they were made up as researchers, we received somewhat *ambivalent* reactions. That is, while they would oftentimes vindicate a common finding in the extant literature, namely that the introduction and use of performance measures in academia tend to provoke various forms of negative reactions among researchers, we also found evidence of considerably more *positive views* among the *same* respondents. In fact, while they often started out by means of a critical stance on the PMS – e.g. because they felt that "you can't measure quality in this way, with this type of

indicators" (I1) and that you cannot compare different types of research "and say which one is best" (I4) – their reasoning would often include also more positive elements – e.g. in terms "I think it's important that we follow up on what we do" (I9) and that, generally speaking, I think that "competition is good for us" (I19).

While such positive and negative sentiments were sometimes expressed by different individuals and sometimes in different parts of the interview with one and the same individual, they were also often expressed as truly ambivalent views. When it came to the numbers as such, for example, one of the respondents talked about how he had "a somewhat ambivalent view. I'm not all critical, as some are [. . .] Of course there is something positive about this quantitative. We can't stop producing statistics [on how people perform], but you need to have a more problematizing view [on the numbers]" (I14). One important reason for this felt "need for numbers", is that "we need to measure quality in some way" (I10) and "it's important that we know what we are doing, and that we feel that it's transparent so that we can see what others are doing [through the numbers]" (I9). Yet, the same respondents added that "I'm not sure whether this is the right way or not" (I10) and that it is important that "the documents do not only serve the purpose to compare and say that 'you have four, and you have five'" (I9). On the contrary, it was stressed that "you need to be cautious when you use it [i.e. the statistics[. . .], comparing apples with apples and pears with pears, realizing that this is just one out of many ways to measure quality, but then I think it's okay" (I14). Another important reason for such a felt need for numbers, as suggested previously, is that they allow for competition to be played out, and as suggested by many respondents, "competition is good" (I19, I15), "a certain amount of competition works just fine" (I16) because it ensures that we get the best research, the type of research that is best for our society" (I19). At the same time, though, the very same researchers added that "the way it works today [with a strict focus on the numbers] is not good" (I19) because "competition is not always good for the development of new ideas and new knowledge" (I16).

As suggested by these (and other) quotations, there were clearly some mixed emotions, where pure criticism was mixed up with ideas like "to ensure that research contributes [to something], we must have a system of control" (I4) or that "if there was no competition, one would still have to measure and evaluate quality in some way" (I10). Drawing upon Foucault's writings on neoliberal governmentality, we will below describe and discuss how such ambivalent views may be understood in terms of how PMSs function as neoliberal technologies that rely on a restricted centrifugal mechanism (Section 4.1), a principle of normalization rather than normation (Section 4.2) and a view of individual academics as entrepreneurs of themselves (Section 4.3).

4.1 Performance measurement systems and the (restricted) centrifugal mechanism
A first aspect of PMSs that seems to provoke the type of ambivalent reactions referred to above relates to how they work through a centrifugal market mechanism (Foucault, 2007). As suggested in the theory section, this constitutes a central moment of governmentality that is interesting because of how it constitutes the relationship between the governing and the governed in terms of freedom.

Largely in line with our theorization (see Section 2.2.1), we find that our interviewees appreciate the ways in which such a mechanism does not coerce or pressure people into particular forms of behaviour. On the contrary, it seems to foster feelings of the often sought-for, and appreciated, notion of academic freedom or researcher autonomy. At the same time, though, we see that due to the ways in which the setting up of neoliberal (quasi-) markets in academia requires that some "rules of the game" or "criteria for competition" are instituted, such feelings of freedom or autonomy are largely circumscribed. The premise is that such criteria – regardless of whether they refer to the number of publications, citations

or the amount of external funding – inevitably constrain or "consume" the feelings of freedom that markets are expected to elicit (Foucault, 2008).

To illustrate their ambivalent reactions, one of the respondents concluded that "you can talk about these conditions [of the competitively oriented system] endlessly, and there are a lot of aspects that I'm critical of, and many aspects that are good" (I1), while another one emphasized the individual freedom underlying the logic of the system, although in an ambivalent way: "On the one hand, you can say that everyone has the same chance to apply for money, which points to a form of democratization. At the same time though [. . .], it results in that a lot of those who apply do not get any funding, so [there is a line somewhere] and when you cross that line, then it turns into a form of collective irrationality" (I14). Below, we elaborate in more detail on the reasons for such ambivalent views.

4.1.1 Performance measures create a zone of protection that produces freedom. One way of understanding researchers' more positive views on the centrifugal mechanism is that it is associated with the creation of a "zone of protection" (Alston and Malherbe, 2009). The premise is that through rendering visible only some aspects of what researchers do but not others, the performance measures (and their users) do not "reach into" and "grab hold of" every aspect of the research process. On the contrary, performance measures typically work as a form of "results control" that only points out *what* to aim for, but not *how* to do it. As suggested by one of the respondents, this produces a (however illusionary) feeling of freedom: "they just set the targets [. . .] this and that amount is what you should do, but they never say *how*; that's up to us" (I1). In a similar manner, other respondents emphasized that "they are only interested in the CVs and the list of publications" (I5), "I mean, it's not like the boss asks you *during* the year how you're doing when it comes to funding and publications" (I3), it is more that "in December every year, we're asked to report our publications, conferences, presentations, funding applications etcetera" (I13).

As a result, the measurement system leaves plenty of room for manoeuvring or self-regulation when it comes to how, when and why to achieve such aims. In the interviews, this room for manoeuvring was stressed as important, in the sense "that you need to give people some space" (I4). In fact, one of the respondents talked about how "it's quite nice that I'm left alone, and that I can do my own thing" (I14), which was related to the fact that although the numbers are there for the governing to see, nobody knows in detail what they do as researchers:

> My feeling is that these [numbers or indicators] are mostly for the dean and the head of department, so that they can see what we do. [. . .] We don't have a lot of interaction with the management, so nobody really knows [what I do], for good and for bad. [. . .] But I'm quite grateful that no one interferes that much, because that's what research is like. (I14)

This feeling of being able to design and conduct research as they deem fit, without the interference of their superiors was seen as particularly prominent for those who could provide strong numbers (typically more senior researchers). For example, it was stressed how the zone of protection became stronger for those who had proved that they were able to publish their results or attract research funding. In a general sense, this was referred to in terms like "I think you have to prove yourself. It's always like that, if you prove yourself, then you get the freedom to do more" (I19). However, sometimes it was linked more specifically to the ability to publish articles, in the sense that "the more articles you get published, the better you're off, not least as a professor, but also as an associated professor" (I7), and sometimes it was linked to the ability to attract external funding (or both). The premise is, as suggested by one of the respondents, that "funding depends on measurable success. So those who show that they can publish will get funding" (I5) and "when you're good at attracting money to the university and to research, it almost gives you free reins to do whatever you like

[...]. I mean, the vice chancellor and the central [administration], then they say that 'if you're good, we won't interfere that much'" (I19). Or, as summarized by one of those who had recently managed to secure a large research grant:

> It felt good, everyone gave me a pat on the back and told me how good I was. It gives you a sense of independence because it gives you freedom. If you don't have money, you become dependent on every penny that you can get from somewhere [... but] when you get a large amount of money you get the chance to do something, to realize your ideas. That's a lovely feeling. (I12).

4.1.2 Performance measures create a zone of protection that consumes freedom. While the focus of PMSs on particular "outcomes" or "results" can create feelings of freedom among researchers, as suggested in the previous section, the particular measures included in such a system inevitably mean that some "rules of the game" are instituted. And importantly, regardless of whether such rules refer to the number of publications, citations, the amount of external funding or some other measure, they inevitably constrain or "consume" the type of freedom that they aim to produce.

When giving voice to how performance measures consumed their freedom in this sense, several respondents referred to how a relationship to the governing party that is based on performance measures inevitably results in various forms of constraints. As nicely summarized by one of the respondents: "If we were self-governing, it might have been different, but this type of reporting [based on certain performance measures] is done by all units at the university, and all units want to look good [in the eyes of their superiors[...] so it becomes a treadmill that you can't get off" (I2). This treadmill, then, typically results in that you feel free in one sense, but in another sense, you do not:

> You have a number of degrees of freedom, but you are always aware that it [i.e. your work] has to result in something. So, it's like you're free to do what you want, but it should result in something specific. And it's like, I don't know how to explain it, but it's like in the end, you tend to do that which results in something [e.g. a journal publication] (I15).

In line with this last quote, we could see how such constraints on their freedom resulted in feelings that "research isn't free" (I7), that "you're incredibly constrained by what you think that they [e.g. funders and editors] want to see" (I10), resulting in that they variously referred to researchers as "chess players" who try to anticipate every move of the governing party (I10), as individuals who "only make safe bets" (I11), who "go for the low-hanging fruits" (I1) and as "small fish swimming in shoals" (I12). Regardless of the particular metaphor used, though, it seemed to imply that performance measures have a tendency to "streamline the thinking of researchers" (I3), regardless of whether they talked about "a form of opportunism when applying for money [...where] you turn to where the money is" (I1) and that "we adapt ourselves to get money" (I2) or whether they talked about investing (only) in projects and studies where you know beforehand that you "can produce several articles" (I9). Or, as nicely summarized by one of the respondents:

> You know that, okay, these articles need to have a certain format, so then I have to do research in a certain way. I must reach a result in a certain time frame, I must wrap it up in a certain way, which means that I need to study something that is doable within that time frame and that can be wrapped up in that way. In the end, this means that I must think twice about the kind of research that I do, and that has affected my choices in research tremendously. I don't feel free as a bird in my choices of research". (I10).

This feeling of having your wings clipped, or of not being "free as a bird", was particularly noticeable among more junior researchers, who had not yet been able to provide the protecting numbers referred to above. In fact, for those who end up on the wrong side of the

empirically established norm, such numbers can have the very opposite effect. That is, rather than protecting researchers from the interference from their superiors, they can attract the attention of the governing parties, open up for problematization and even hinder individual researchers from exercising their "freedom". In the material, we could see this in the sense that those who had not yet reached, for example, a sufficient number of publications or a senior position, were clearly pressured by the need to perform. Then you know that to take the next step on the academic ladder, to win another research grant or strengthen your position in the next follow-up, you need the numbers: "That's what it takes [to become an associate professor]. If you haven't published enough articles, you don't have a chance. That's how it is!" (I4). "You can't put forward an article every third year and say, 'now I'm published'" (I2) because then they "would start to wonder: 'what is that person doing?'". Or, as summarized by yet another respondent: "Still, if I just sat for four years and didn't [. . .] if nothing came out, if I just had a lot of high-risk projects and didn't receive any research grants, then I think they would have a discussion with me about what I do as a researcher and how I contribute to the research environment" (I9).

This risk of not being able to enjoy the type of freedom that outcome-oriented performance measures offer, was even further accentuated by the fact that when you enter the competitive arena and you are unable to provide good numbers, then you run the risk of ending up in a negative spiral. That is, without good numbers in the first place, it is very hard to improve your numbers since you need funding to improve your numbers, but to get the money, you need to have good numbers. Or, in the words of our respondents: you need "funding, because then you're a bit more independent in a way" (I10), and then you can "strengthen your CV" (I9). However, and again, "funding depends on measurable success", which means that it is only "those who show that they can publish [who] will get funding" (I5). The result seems to be an increased risk of ending up in "a negative spiral [. . .]. Being a good researcher isn't just about measuring publications and that, but that's what we often do, and that can be negative for certain persons, because it makes it tough for them to get into research at all [after getting their PhD]" (I8). And importantly, when you end up in such a negative spiral, it is easy to get caught in an endless struggle to improve your numbers. As suggested by one of the respondents, this means that you do not have the luxury to choose, but rather that:

> You have to get along with people and create your own small network so that you become invited as a co-author and get half a point for the publication so that you can apply for a lectureship. That's not possible if you don't have a lot of publications. So yes, publish or die! If you don't publish, you're out! (I20).

Or, as reflected upon by another respondent:

> I need to specialize a bit more [. . .] in an area where I can strengthen my CV, so that it becomes easier to apply [for money] and build networks and relationships [. . .] so that I can apply for money [with other people]. It's about making time for research. [. . .] I know that I have to qualify myself in my area so that I can receive further funding, and then I can't run on this ball over here, or try to develop this, because that's too risky and those applications will probably not be granted [. . .] so you need to think strategically (I9).

Again though, this was a situation that clearly differed between those who could provide good numbers and those who could not. This became evident when, for example, more junior researchers were compared with more senior ones: "For a young researcher it is crucial [to attract external funding], but for an old owl like me it doesn't matter. Those who have become part of this system [and become full professors], they get more freedom to choose the kind of questions [that they see as relevant]" (I16). "However, if you're early in

your career it can be necessary [to adapt] just to get published, maybe to become an associate professor, but I can drop that now [since I'm a full professor]. But of course, if I didn't get anything published, then it would be better to publish something with lower quality [than publishing nothing at all]" (I14).

4.2 Performance measurement systems and the principle of normalization

A second central moment of governmentality that helps to provoke the type of ambivalent reactions referred to above relates to the ways in which PMSs help (re)construct the relationship between individual researchers and their peers through a principle of normalization rather than normation (Foucault, 2007). That is, rather than working through any pre-existing or pre-defined norm around the particular outcomes that they draw attention to, such systems normalize their "inhabitants" through an ongoing "empirical" construction of the (ab)normal by means of bringing the individual researcher into a particular form of relation to the "population" (i.e. to one's peers).

An overall effect of this type of normalization is that you tend to know, and value, your peers through their numbers – at least those who appear a bit distant to you. In fact, through measuring how people perform on a number of performance criteria (such as the "number of publications", "publications in certain outlets", "the amount of research grants won" and "the number of PhDs supervised") and combining these into a "neoliberal spreadsheet" (McRobbie, 2015), the technologies help to "make up" (Hacking, 2007) one's peers as different types of performance-oriented subjectivities. That is, rather than being colleagues or peers, they become competitors and rivals, high- and low-performers, heroes and warning examples etcetera. Or, as nicely summarized by one of the respondents: "I think that we do focus on content [i.e. on the research done], but sometimes it easily becomes a focus on 'okay, one article here, four there, two there, the amount of external funding' [...] and it says something that I know more about their [i.e. the colleagues'] numbers than I know about their research questions" (I9).

When talking to our respondents about their views on how PMSs contribute to construct the relationship between individual researchers and their peers in this sense, there were clearly some mixed emotions. On the positive side, it was referred to how it allows "performances" rather than rumour or cronyism to determine, for example, who gets a position or who is rewarded a research grant. "As an underdog, it's an advantage that the numbers are there, because they ensure that you don't just focus on the rumour that someone has, but rather on what you have done [i.e. how you have performed]. So, they bring some good things with them [i.e. the numbers] and not just bad things" (I6). In a similar manner, it was referred to how a performance-based principle is "both good and bad. [However] If the person that brings in a lot of money starts to 'give himself airs', thinking that he can behave however he likes, then it's not good" (I1), or when people start to manipulate their numbers just to reach fame and fortune:

> They [i.e., the numbers] are manipulable. But at the same time, they are the best we've got. [For example] your impact can be manipulated by self-citations or hidden self-citations [...] or through publishing controversial statements that everyone must refer to. But still, they are the best we've got. I can't imagine another way to measure success than this type of measures (I6).

Below, we elaborate in more detail on the underlying reasons for why PMSs provoke this type of ambivalent reaction when it comes to how they help (re)construct the relationship between individual researchers and their peers.

4.2.1 Performance numbers constitute peers as role-models. When closing in on the more positive aspects of the principle of normalization, our respondents pointed to how it helped

to construct an environment where some researchers (and types of research) become clear "role models" for others. Again, this is largely premised on the fact that when individuals are constructed and compared based on how they perform according to particular criteria, there will always be those who come out better/worse than others. And, when looking at how our respondents constructed such a "distribution according to ranks" (Foucault, 1977, p. 181), it was clear that they were not only occupied with their own "ranking position" but also with how the ranks *per se* visualized a number of "heroes" or "research stars" (Tucker and Tilt, 2019) who could work as "role models" for those who had not yet reached "the top". Those who have good numbers are "looked up to [. . .] [because] it is important" (I19). "When you sit at a meeting and you can see: 'look at that, oh gosh, five publications last year, that was amazing [. . .] although you can of course view that in different ways'" (I9). Or, as suggested when it came to external funding: "You may not be able to say something about the quality or outcome [of the applied for project], but to get money [from one of the large funders], that gives you a different status I would say" (I3).

The premise is that when your numbers are displayed in this sense – signifying that you have, for example, won a research grant or managed to publish a large number of articles – others can see that "this is a skilled researcher" (I8). "That person might not be God or so, but you realize that that person is really good. It's not like I fall on the floor when he passes by, but you do notice when people are successful and that's good for them and it's good for us" (I5). Or as exemplified by another respondent: "We have [Name of a researcher] working with us. She is in a really hot area, and we're lucky that she moved here, she's really good, she has publications in [the high-esteemed journal] Science and so on" (I12). As suggested by these and other quotations, the numbers are seen to signify success, skills and quality in the sense that "when you [for example] receive funding in competition with others, then you are seen as more successful" (I18).

When single researchers get this status through the numbers that they are able to provide, it can be highly motivating for others. "When you see others succeed you think that: 'Yes', you get stoked" (I18). "It's inspiring for all of us, even though it can be tough for those who don't get, of course. So, it's mixed feelings" (I17). Or, as summarized by yet another respondent:

> That person (who gets funding) gets status. It can't be ignored because it's encouraged by the management. It's in the culture, and it's in the incentives. You succeed and you get a good reputation, and that's how it works. It's not a bad thing since it serves as a 'carrot' for others to make the effort. (I1)

4.2.2 Performance numbers constitute peers as rivals. Again though, the ways in which PMSs contributed to construct the relationship between individual researchers and their peers in this sense, was also reflected upon in a considerably more critical manner. One aspect of this critique related to a questioning of *the particular ways in which the systems constitute heroes.* For example, it was referred to how "I don't think you can judge whether someone is successful or not, depending on how much they've published [. . .]. The measure doesn't say anything except that you're good at getting articles out" (I8), "Basically, the larger the number of articles you publish, the better you are off [. . .]. This is, simply put, pure stupidity and it doesn't benefit the quality of research at all" (I7), and that "Many of us agree that people publish too much and with too poor quality. [. . .] they do so because that's what counts, you have to do it because your career depends on it. Unless you join the race, you can't become associate or full professor and you can't get more research funding" (I11). Or, as nicely summarized by one of the respondents:

The risk is that those persons [i.e. the 'heroes'] are seen as successful regardless of how important or relevant their research actually is. But, they stand out! If they really are successful, then it's fantastic, but if it's just that they are there to be seen [. . .] or if they just build up a facade, then it's not good at all. (I5).

Interestingly though, it was not just this type of questioning of what the numbers did, or did not, signify, that surfaced in their reasonings. On the contrary, and despite such critique, it was clear that the PMSs did affect how they constructed their peers. The premise is, as suggested by some of the respondents, that if and when you accept that the system works according to the principle of normalization, "where it's all about putting your best foot forward and have as many publications as possible, then you end up in a competitive situation where you start to worry about how good others are compared to you" (I1), and then you easily end up in a situation where you know, deep down, that "it is important to be happy when things go well for someone", but due to the competitive climate, you become "quite bad at confirming each other" (I14) and "you get like [. . .] cynical" (I15).

From such a perspective, we could see how at least some researchers questioned both other people's motives, such as where they are seen as "alpha males" who become "all narcissistic: 'look at me, look at what I've done' [. . .] I'm quite sure that there are many [researchers] who find it important to be portrayed as successful researchers, based on different metrics and stuff" (I5) and the type of research they do. For example, one of the respondents referred to that:

There are some [researchers], where you wonder: 'what are they doing during the days?' [. . .] I mean, I have to work really hard to reach the next level and then you see someone already on that level who underperforms according to me, and then you [. . .] it's not good, but you start to see that person, thinking 'well, you never do anything, you just talk and talk'. So, you easily find yourself holding a grudge against people (I15).

4.3 Performance measurement systems and the entrepreneurial self

Third and finally, our analyses suggest that the ambivalent reactions can also be understood in terms of another central moment of governmentality, namely, how PMSs help (re)construct the relationship that the individual forms to herself. In fact, the type of competitive milieus and normalization practices that were referred to above both produce and presume a particular form of subject; an *entrepreneurial self*. That is, a subject who invests in herself so as to be able to participate in, and contribute towards, the ongoing circulation of capital (Foucault, 2007, 2008); one that is defined by, and articulated through, the idea(l)s of economic rationality and efficiency. Or, as one of the respondents put it: "also when it comes to research you must be an entrepreneur, know what gives the highest return in the form of publications, but also the time that it takes to conduct the research and publish it within a certain time. [. . .] You feel this pressure; publications must come out and external funding must be brought in" (I12).

On the one hand, such an "image" of the neoliberal researcher clearly attracted several positive reactions among our respondents. For example, several of them stressed the benefits of people investing in themselves so as to ensure a form of continuous improvement at the individual level and a continuous development of research at the aggregate level (or the other way around, to prevent laziness and stagnation among individual researchers). On the other hand, though, it was also emphasized that this type of relationship to yourself – i.e. where you feel that you constantly have to invest in and continuously improve yourself – can nurture various forms self-doubt. Based on these two largely conflicting sides of the same coin, the reactions among our respondents could best be described as one of mixed emotions. When emphasizing the more positive side of the coin, it was stressed that competition is good:

"because when there is competition you have to think through your projects" (I18). However, when considering the type of inner stress and self-doubt that were also associated with competitive milieus, they emphasized instead that competition "could be a bit lower [. . .] It is a bit too extreme now" (I18). Or, as reflected upon by another respondent:

> I think [research] is both fun and challenging [in a positive sense [. . .]] but a tough, pressuring part can be that you're supposed to build your reputation in this world, create the right connections, build your networks [. . .]. It's an important part if you want to become one of these really successful researchers. It doesn't have to be, I mean you could do good research anyhow, but it's an important part as I see it, that you should [. . .] [invest in yourself] (I9).

4.3.1 Performance measures trigger self-investment. When emphasising the more positive aspects of how PMSs encourage and require that you invest in yourself as a researcher, many of our interviewees pointed to how the systems keep them on their toes, keep them alert and make them move "forward":

> [Competition] forces you to look in different directions, looking for those topics that are really 'hot' and going for that money. [. . .]. It's more demanding of course [to apply for research funding in competition], but if you had more time for research included in your position as such, you would probably need other mechanisms to make sure that people reach an acceptable level [of quality in their research], otherwise it's a risk that people become too comfortable. (I12).

Or, when it comes to publications, it makes you think about:

> [. . .] publication strategies and your publications. What's our view on quality? How do we think in terms of where we want to publish, where should we publish, and where can we publish? [. . .] What do I have to do strategically? What choices do I have to [. . .] to look the best or to come as far as possible? (I10).

When justifying this type of strategic, self-oriented, considerations, several respondents referred to how it could be seen as a natural "counter-performance" in relation to the position you have or the type of funding that you have been granted. For example, it was referred to that "if I do research, then of course I should publish. You could of course discuss how it should be done and where to publish, but of course it should result in a form of output" (I1) or that "you can't receive funding for just anything, there has to be a counter performance. If you're going to a conference, you should write an article [. . .] [and that is important] because an article in the next follow-up will result in points for us and our research group" (I17).

Above all, though, this type of strategic orientation towards yourself, was seen as a natural ingredient in the type of competitive milieus set up by the PMSs. That is, when one is measured, and the resulting measurement is set up in relation to those of others (e.g. through counting and comparing the number of publications or citations), it becomes in the interest of the individual researcher to provide good numbers. Put differently, it becomes in the interest of each and every one who wants to reach tenure, secure research funding or to climb on the academic ladder, to manage her performances so that she is able to compete with her colleagues. As put by our respondents, it makes you aware that "you must work with yourself. It's part of the structure. The need to perform pervades the whole university" (I2), not least because "you don't want to have that paper that has three citations, or no citations at all. You want to get to a point where you start to become relevant [i.e. where people start to cite you]" (I10). And again, this was seen as important because it "helps people keep the quality [in what they do]" (I12); "It's good that things are put in a larger context so that you do research on relevant things and don't get stuck in your tracks for 20 years because you yourself find it interesting" (I19).

4.3.2 Performance measures trigger self-doubt. As suggested above, though, the perceived "positive pressure" to invest in yourself as academic capital, also had another side, namely, that it triggered feelings of *uncertainty*, *insufficiency* and *self-doubt*. In the material, such feelings were typically associated with the continuity with which they were compared and evaluated and the ways in which their "workable self" only existed as "an unfulfilled project" (Bauman, 2000, p. 29). To illustrate the former, it was referred to how "you're evaluated all the time [. . .] you compete against each other when it comes to funding and everything" (I15), "you always compare yourself with others [. . .] I know that it isn't fair to compare myself [with more senior colleagues], but that's what you do" (I19). As a result, several respondents pointed to how you end up in a situation where you feel that "it's never enough" (I14), "we're always supposed to improve ourselves" (I2), because "we know that everything is connected. If you don't publish a lot then it affects your chances of getting funding the next time, and if we don't get any money, then you won't publish anything. It's a never-ending story" (I20). Such a constant pressure to perform, in turn, seemed to result in feelings that "you always need to look ahead, you always need to think about the future; how should I formulate my next project? You need to start with that halfway into your current project" (I6). Or, as expressed in frustration by another respondent:

> You know, as soon as you have defended your thesis, they start to talk about, what is your plan, how are you going to become an associate professor. And you just, oh my god, give me a minute, like that. [. . .]. It is always like that and it's a lot. I think that [this kind of pressure] comes from everywhere. (I2)

Moreover, several respondents pointed to how this perceived endless pressure to invest in yourself risks resulting in that you as a researcher adopt a form of performer orientation – i.e. where you become highly focused on, and try to deliver, what the system wants from you. Based on this, they expressed serious doubts whether this was the right way to go and whether they were doing the right things. Such doubts concerned, for example, how far they could and should stretch themselves when it came to publishing or applying for funding. "Since it is a meritocracy, you really want to look good when you compare yourself [with others], but that's no good for your psyche. It results in that you do overhasty things and that you take shortcuts, just to move on" (I15). You risk ending up with "the wrong focus" (I13), where you "only think of your career" (I1), where you feel that "you have to join the race, because otherwise you can't become associate professor, professor, or get funding" (I11), where "you avoid high-risk projects" (I9), where you "don't tell your whole story, but cut it into small pieces [to get many publications out of one]" (I4) or where you start thinking "how much can I deviate from mainstream and still be considered popular? How much can I deviate, where do I cross the line and deviate too much so that it becomes too weird, to twisted, too unconventional?" (I10). The reason being that "when you have a short list of publications, then it's like, then you take whatever you can to make the list a bit longer" (I2), you want "to get on the train and move fast-forward" (I10); a type of instrumental focus that typically "raises ethical issues. I mean in terms of, like, is it okay to go for a salami-slicing tactic? [. . .] Is it okay for a good researcher to behave in that way?" (I10).

Apart from provoking doubts regarding the direction in which the PMSs were guiding them, it was clear that this type of pressure to invest in yourself also resulted in a form of *inner stress* and more *personal doubts*. Generally speaking, such feelings were associated with the fact that "you're evaluated and exposed to competition all the time" (I20), "that there aren't any real rest periods during the year anymore" (I17) and that it is "stressful to be around [high-performers] because they're breathing down my neck" (I15). As a result, several respondents emphasized that "the level of stress among academics in general, is very

high" (I7), "you become stressed" (I20), "of course you feel a form of stress" (I1) and that "it leads to a lot of stress when you have this focus on what is measurable. I think a lot of people get ill" (I9). Or, as vividly explained by one of the respondents, it becomes like a "honey trap, and when you look too deep in the jar, when you push yourself too hard, then it's not unusual to get burn-out syndromes in academia" (I1). Interestingly though, despite that many respondents pointed to the risk of such serious and far-reaching consequences, it was clearly a sensitive issue to talk about. One important reason for this, as explained by one of the respondents, is that when you find yourself in a competitive situation, you are supposed to address such issues mainly by yourself. It is always a "balancing act to open up to someone and talk about these things without touching upon the most inner things, namely 'self'. . . issues like: 'doubts' whether I'm good enough" (I10).

4.4 Summary
To summarize, our empirical study of how researchers from three Swedish universities made sense of the increased reliance on PMSs for governing academic affairs draws attention to how PMSs are involved in three central moments of governmentality. As such, they help (re) construct: the relationship between the governing and the governed as one that revolves around the (restricted) centrifugal mechanism, the relationship between individual researchers and their peers as one that builds on the principle of normalization and the relationship that individual researchers form to themselves as one that builds on the notion of an entrepreneurial self. Elaborating empirically on how PMSs help reconstruct these three different, yet interrelated, relationships, we show how and why PMSs can be expected to provoke highly ambivalent feelings among researchers. Table 2 summarizes these empirical findings.

5. Conclusions and implications
A more and more common empirical finding when studying the use of PMSs in academia seems to be that individual researchers develop a form of hate-love relationship to such control systems (Gendron, 2008; Knights and Clarke, 2014; Parker, 2012; van Helden and Argento, 2020). In extant literature, this hate-love relationship has primarily been understood as an effect of PMSs having different qualities, where some qualities tend to provoke feelings of "hate" while other qualities underly feelings of "love". In the former case, for example, PMSs are depicted as "evil forces" that help increase the power of the governing parties at the expense of researchers (Argento *et al.*, 2020; Parker, 2002; Mingers and Willmott, 2013), and as such, they tend to have largely narrowing and homogenizing effects on research (Gendron, 2008; Hopwood, 2008; O'Connell *et al.*, 2020a). In the latter case, in contrast, PMSs are often depicted as useful tools that allow universities to reach a number of important goals (Söderlind and Geschwind, 2019), such as increasing the productivity (Guarini *et al.*, 2020, p. 113) and quality of research (O'Connell *et al.*, 2020a).

While the existing literature oftentimes departs from an either/or view on these qualities – whereby they are typically analysed separately and as different parts of the control system – this paper set out to analyse the ability of PMSs to concurrently provoke both negative and positive reactions. To this end, we argued theoretically and then showed empirically how PMSs are involved in three central moments of governmentality (Michael, 2009; Walker *et al.*, 2008), where each such moment contributes towards a (re)construction of the relationships that individual researchers form to their *governing superiors*, to their *peers* and to *themselves*. Moreover, and importantly, they help (re)construct these relationships in largely contradictory terms, in the sense that they: produce feelings of freedom at the same time as they consume such freedoms, construct peers as role models at the same time as they construct them as rivals and provide tools for self-improvement at the same time as they cultivate feelings of self-doubt.

Central moments of governmentality	Main character	Perceived positive effects	Perceived negative effects
1. How PMSs constitute the relationship between the governing and the governed	Restricted centrifugal force of the market	a) A restricted centrifugal force produces feelings of freedom through creating a "zone of protection", especially for those who can provide good numbers	b) A restricted centrifugal force produces feelings of constraints, especially for those who are unable to provide good numbers, through setting the criteria by which competition is played out
2. How PMSs constitute the relationship between individual researchers and their peers	A principle of normalization	a) A principle of normalization helps constitute peers as high-performing role models who can motivate and guide others	b) A principle of normalization helps constitute peers as rivals who trigger feelings of jealousy, injustice and cynicism
3. How PMSs constitute individual researchers' relationship to themselves	Individuals as entrepreneurs of themselves	a) An entrepreneurial self is associated with self-investment and self-improvement, which helps to prevent laziness and stagnation	b) An entrepreneurial self is associated with feelings of inner stress and self-doubt

Table 2.
Summary of empirical findings

A *main conclusion of this paper is that it is these contradictory terms that underly the hate-love relationship that individual researchers form to PMSs in academia*. Hence, we suggest the highly ambivalent feelings and mixed emotions that our interviewees gave voice to when talking about the control systems can be understood neither through focusing separately on the "negative" qualities of PMSs nor on their "positive" qualities but rather on *how such largely different aspects of PMSs presuppose, and work through, one another*. Put differently, it is through working as a system that integrates "what is cold, impassive, calculating, rational, and mechanical in the strictly economic game of competition" with values that are seen as "warm", and where the latter ones "are presented precisely as antithetical to the 'cold' mechanism of competition" (Foucault, 2008, p. 242), that PMSs trigger highly ambivalent reactions.

In fact, as neoliberal technologies, PMSs are not designed to work *either* as negative *or* positive forces; they are not designed to motivate *either* as a stick *or* as a carrot. Instead, they integrate these into one and the same quality, which is precisely what the centrifugal market force, the principle of normalization and the notion of an entrepreneurial self, do. For example, the centrifugal market force governs through the "warm" value of freedom at the same time as there can be no such thing as governing without governing. As a result, it consumes freedom at the very moment it produces it. In a similar manner, the principle of normalization offers the "warm" values of success, winners and role models. However, such notions have no existence without the very opposites that constitute them. As a result, this principle produces failure, losers and warning examples at the very moment that it makes up individuals and their performances as part of a larger whole. Finally, the notion of an

entrepreneurial self offers "warm" values such as self-investment and self-improvement which, in and of themselves, presume the insufficiency of the existing. As a result, it produces aspects of inadequacy and imperfection at the very moment that it makes up individuals as human capital.

Based on this – i.e. because of how the warm and cold values are an inherent part of, and presuppose each other in, all three central moments of governmentality – we suggest the most reasonable to expect is that individual researchers will form a hate-love relationship to PMSs. In fact, no more than we can expect individual researchers to enjoy every single aspect of how PMSs help (re)construct the relationships that they form to their *governing superiors*, to their *peers* and to *themselves*, no more can we expect them to comply with such systems completely against their will. Instead, what we can expect and what our empirical findings strongly suggest, is that they develop ambivalent feelings towards them, where they can be highly critical of some aspects of the systems at the same time as they defend, and even find merit, in other aspects of the systems. Arguably, our findings related to such a hate-love relationship to PMSs and the underlying reasons for this, suggest several implications for the longstanding and largely polarized debate on PMSs in academia.

5.1 Implications

A *first implication* of our findings of a hate-love relationship to PMSs relates to our understanding of the ongoing neoliberalization of academia. Arguably, the perceived positive effects of PMSs explored above (see Items 1–3a in Table 2), point in the direction of a form of successful neoliberalization of academia, in the sense that various aspects of the systems were clearly accepted or appreciated among our respondents. For example, and again, there seemed to be a widespread acceptance of how PMSs contribute towards an academic climate where you can earn your freedom through performing well according to the performance criteria set up by such systems. Moreover, there also seemed to be a widespread acceptance of the fact that such criteria helped constitute academic role models and functioned as tools for self-investment and self-improvement. Arguably, such perceived positive effects can be seen as a successful neoliberalization in the sense that the interviewees have come to appreciate, and want, what the system wants from them.

Perhaps even more interestingly, though, we suggest that also the perceived *negative* effects point in the direction of a form of successful neoliberalization of academia (see Items 1–3b in Table 2). The reason for this is that a control system that not only relies upon the type of "warm" values referred to above but also several "cold" values can indeed be expected to attract negative attitudes among those who are being governed. In fact, the very point about the type of cold mechanism of competition discussed above, is that we are expected to feel that we must keep within the confines and boundaries of the playing ground, that our colleagues constitute rivals that we have to compete with and that the current version of ourselves is always inadequate and incomplete. The premise is that – together with the warm values that are expected to provoke feelings of there being a space of manoeuvring within which one can strive towards progress and success – such feelings are expected to further "push" individual researchers in this very direction. That is, to make sure that they mobilize their freedom in a calculated and regulated way, that they are spurred to become better than others and that they are compelled never to rest.

From such a perspective, we suggest the powerfulness and success of PMSs should neither be "measured" by the number of people who fully accept their underlying ideals nor by the number of people who ideologically resist them. Rather, it should be evaluated by the number of people who subject themselves to the technologies (See Butler and Spoelstra, 2012, for a similar argument). That is, the number of people who engage with the

technologies as a means to improve and become better than others, regardless of whether it is out of *love*, out of *hate* or out of an intermingled combination of both. In fact, you do not have to be a believer of, identify with, or cherish the systems to contribute to their success. The only thing that really matters is whether your actions contribute to the upholding of the systems, and they do so at the very moment that you engage in the numbers, even if it is in a hate-love form.

This is arguably an important difference between the logic underlying neoliberal governmentality and the one underlying, for example, disciplinary power (Foucault, 2007; see also Wickramasinghe *et al.*, 2021). According to the latter, it is important that each and every one of us learns how to act in accordance with a norm that is stated a priori. Or, as Foucault (2007) suggests, "A good discipline tells you what you must do at every moment" (p. 68), thereby working in a highly normative fashion that takes as its main point of departure "a sphere complementary to reality" (p. 69). In contrast, the neoliberal form of governmentality "tries to work within reality, by getting the components of reality to work in relation to each other, thanks to and through a series of analyses and specific arrangements" (p. 69). And importantly, in doing so, *it accepts and even embraces the notion of difference*. In fact, and to use the wordings of Foucault (2008, p. 259), the neoliberal form of governmentality tries to optimize a "system of differences". That is, a system that is constituted by, and feeds from, differences or variations in the sense that it leaves the academic playing ground open "to fluctuating processes", for "minority individuals and practices" to exist (p. 259) and for different ideas and attitudes to grow. As a result, positive and negative reactions to PMSs in academia is what can be expected. In fact, we cannot expect, and we probably will not ultimately find, a big army of cheerleaders supporting every aspect of the use of PMSs in academia. However, as long as individuals subject themselves to the systems in their actions, this is arguably of less importance when evaluating the powerfulness and success of PMSs as control systems. The premise is, we suggest, that it is the effects at the level of the population that constitute the ultimate proof of success when it comes to neoliberalism, and such effects are not dependent on everyone being completely mesmerized by the systems as such all the time. On the contrary, such effects are equally dependent on individuals feeling pressured, and forced to act in certain ways, by the systems.

Our findings also suggest a *second implication*, namely, that when individual researchers develop a hate-love relationship to PMSs, this poses *a serious threat to research quality*. Indeed, such potential negative effects of PMSs on research quality are hardly new as such. On the contrary, and when focusing on the negative sentiments among our respondents, our findings largely corroborate previous findings in the sense that when individual researchers' relationships to their surroundings and to themselves become characterized by endless attempts to improve the performative image of themselves, it risks diverting attention away from what research is really about (Gendron, 2008; Hopwood, 2008; O'Connell *et al.*, 2020a). Not only because they become strongly focused on the very criteria by which competition is played out (see Item 1b in Table 2) or that they become instrumentally oriented towards beating their rivals (see Item 2b in Table 2) but also because it can diminish or take away the passion from conducting research at all (see Item 3b in Table 2).

Importantly though, we suggest that the other side of the coin constitutes an equally serious threat to research quality. That is, also those aspects that individual researchers appreciate when it comes to PMSs – including the "zone of protection" that such systems are perceived to produce, the type of role models they make up and the means for self-improvement they offer (see Items 1–3a in Table 2) – contribute to this threat. The underlying argument for this is that a common denominator of all these positive perceptions

is that they are grounded in an acceptance of competition as a (superior) mechanism for organizing social life. And importantly, with this comes an acceptance of the very premises based on which "the rationality of the market, the schemas of analysis it offers and the decision-making criteria it suggests" is extended into the academic domain (Foucault, 2008, p. 323; Mennicken and Miller, 2012). That is, an acceptance of the very building blocks through which markets are instituted and maintained in academia and the type of *reductiveness and instrumentality* that are typically associated with such building blocks.

The reason for this, as has been argued many times before (Rose and Miller, 1992), is that from a neoliberal perspective, the market does not have an existence that is independent of its own constitutive criteria (Foucault, 2008). On the contrary, it constitutes a non-natural phenomenon that must be brought into being and maintained by means of various forms of interventions, including the transformation of research and researchers into performance numbers (Rose and Miller, 1992). In the current study, it was quite striking that our respondents often voiced their concerns regarding the reductive and highly instrumental character of such performance numbers, and the ways in which the more "technical" aspects of PMSs were felt to lead them astray. Regardless of this type of critique, though, it was clear that in accepting the notion of competition as a governing mechanism, they struggled to articulate a viable option to "the numbers" (For similar findings, see Butler and Spoelstra, 2012). The reason for this is, of course, that it is hard to imagine how you can have one without the other. From a research quality perspective, though, this tiny little detail – i.e. that you cannot have competition without instituting the very criteria based on which competition is to be played out – is pivotal. As we see it, it seriously increases *the risk for the final triumph of form over substance* in the sense that it not only makes researchers more focused on the "criteria" *per se* but also inevitably leads to an "emptying" of those contextual aspects that make research meaningful. A risk that is typically articulated and reinforced through examples such as where researchers come to see funding as a lottery (where submitting several applications for such funding are seen to increase your chances of winning), where publication is seen as a matter of being at the right place at the right time or where they are just two articles short of becoming professor, having an annual bonus or being a 4×4 researcher (Alvesson and Spicer, 2016; Butler and Spoelstra, 2012). From such a perspective, both the perceived negative *and* positive effects of PMSs thus constitute a serious threat to our notion of quality in research.

Finally, we suggest the hate-love relationship to PMSs found in this study should also have *a third type of implication*, namely, an increased risk of *ill health* among individual researchers. As argued above, this is a type of risk that has been associated with PMSs many times before, including the risk for stress (Parker, 2011), jealousy (Tucker and Tilt, 2019), rivalry (Gendron, 2015) and cynicism (Kallio and Kallio, 2014).

When considering the perceived negative effects of PMSs that our respondents gave voice to, our findings largely confirm such previous insights. For example, our findings point to how feelings of stress and self-doubt can be grounded in the fact that freedom is not for everyone (but rather that you need to prove yourself according to the criteria set up by the PMS to potentially earn your freedom), that your colleagues are constructed as potential threats to your own progress and success and that you always have to turn yourself into something which you are not to prove the value of your academic self (see Items 1–3b in Table 2). Arguably, the underlying mechanism, and common denominator, of all these negative perceptions can be traced to how the main impetus of competitively oriented control systems is *inequality*. That is, as stressed by Cooper (2015, p. 15), the point of departure of such systems is that inequality, rather than equality, functions as "the medium and relation of competing capitals. When we are configured as human capital, equality ceases to be our presumed natural relation with one another". Instead, it is assumed that

through being kept in a state of "equal inequality" (Foucault, 2008), our instincts and minds will be sharpened towards competition (Lazzarato, 2009). Apart from constituting an important breeding ground for rivalry, jealousy and cynicism among peers, such an underlying logic of inequality can be expected to increase the level of stress that at least some researchers experience. The reason being that it produces feelings of uncertainty and of impossibility, as we constantly must improve to stand the competition.

Importantly though, we suggest the perceived positive effects are equally (or even more) important for understanding *why PMSs can be expected to increase the risk for or strengthen the level of stress and ill health* among individual researchers. That is, regardless of whether one directs attention to the type of freedom that individual researchers associate PMSs with, their positive views on having clear role models or their positive views on progress and self-improvement (see Items 1–3a in Table 2), there is another side of such positive perceptions in the sense that they all rely on a form of acceptance of the responsibility for constituting yourself as an entrepreneurial self. That is, an acceptance of yourself as a subject that is both *capable* of, and *responsible* for, caring for yourself as human capital (McNay, 2009; Wickramasinghe *et al.*, 2021). A shouldering of the responsibility to prove yourself in performative terms; to compete for your own freedom, to always strive towards the unachievable and to never be satisfied with the current version of yourself.

Arguably, this is one of the most deceptive qualities of PMSs as neoliberal technologies since one of the most appreciated aspects of such systems is the type of freedom and autonomy that they allegedly offer (cf. Item 1a in Table 2). Importantly though, with this type of freedom and autonomy follows a responsibility to care for your own interests and to make sure that you can stand the competition (cf. Items 2–3a in Table 2). Moreover, because individuals are constituted as free and autonomous, they (as individuals) are the only ones who can shoulder this responsibility. Any contextual aspects (such as the particularities or traditions associated with doing research in a specific discipline) or structural constraints (such as the different conditions that may be related to gender, degree of seniority or non-permanent positions) must be suppressed in order for this type of subject to make sense. Hence, if you succeed, you do so as an individual. However, if you fail, there is no one else to blame than yourself. The reason being that from the perspective of autonomous and free individuals, failure can only be understood as an inability to care for yourself as an entrepreneurial self – i.e. the very opposite of a responsible and autonomous self (McNay, 2009). Moreover, and importantly, when you start to accept and see merits in certain aspects of PMSs, this should increase the propensity of individuals to both accept and actively assume this type of responsibility. A responsibility that fosters feelings that you must invest in yourself as human capital, regardless of whether you find it meaningful or not. And importantly, it seems to us that a more willing and enthusiastic shouldering of this type of responsibility should, generally speaking, increase the level of stress due to how it places the subject more in the future than in the past or the present, and more in what it is not than what it is. That is, rather than accepting individuals on their own premises, this type of control systems assumes that the value and desirability of individuals are increased when they take a form other than their own (cf. Cooper, 2015).

Taken together, our findings thus suggest that the effects that PMSs produce in academia are best understood in terms of *difference* and *concomitance*. As control systems, PMSs should neither be seen as sometimes producing positive feelings and sometimes negative feelings nor should they be seen as producing positive feelings among some researchers and negative feelings among others. Instead, we suggest they produce ambivalence, mixed emotions and feelings of hate and love at the same time. The reason for this, as addressed in this study, is that the main characters of PMSs are premised on contradictory terms. In fact, that is the very point

about the systems, to feed and form ambiguities, double messages and illusions. They provide a form of freedom, but that freedom is always constrained in various ways. They provide images of individuals to look up to, yet those very individuals are constituted as threats to your own success. They provide tools for self-improvement, but no matter how much work you do on yourself, there is always room for more. This type of multifaceted ambivalence is, we suggest, what makes PMSs so powerful in academia.

5.2 Whence and whither

The findings presented in this paper are based on a qualitative study of a few individual researchers at three Swedish universities. As is often the case in qualitative research, the ambition has been to address and reflect upon some of the contextual specificities of these particular settings. Aspects that help render the settings meaningful both for the interviewees *per se* and for us as researchers. On the one hand, such an approach could, of course, be seen as a potential limitation of our study, as the results typically reflect only the actual conditions and experiences of an infinitesimal part of the overall academic community. On the other hand, though, the central moments of governmentality identified and elaborated upon here are not tied to, or unique for, the particular settings under study. On the contrary, they should be useful as a conceptual apparatus for analysing and understanding other contexts as well. In fact, the centrifugal force, the principle of normalization and the notion of an entrepreneurial self, constitute general qualities that can be used to analyse both the design and use of different types of control systems, both inside and outside academia.

To further explore the interplay between such general concepts and the contextual specificities of various settings, we suggest the following topics for future research. A first important topic should be to mobilize the concepts drawn upon, and suggested here, to study other (academic) settings. Apart from adding to the list of empirical settings that could potentially be understood by means of these concepts, such studies could fruitfully involve further conceptual refinement, not least when it comes to those very aspects of PMSs that produce positive and negative effects. Moreover, it could be asked whether there are important similarities/differences in the hate-love relationships that individuals form to PMSs in different contexts and in the different relationships (i.e. in relations that individuals have to their governing bodies, to their peers and to themselves). A second topic that could be interesting to further explore is to address the potential interplay between the negatives and positives, the "hates" and the "loves", as identified in the current study. For example, is it so that the positive connotations that certain aspects of PMSs have, affect or "compensate" for other aspects that have considerably more negative connotations? If so, this could, for example, be important for understanding the lack of, or will to, genuine resistance towards PMSs in academia. Third and finally, it could be interesting to explore whether, and if so, how the (re)constructed relationships addressed in this study interplay. For example, is it so that the relationship that one forms to the governing party based on a centrifugal mechanism affects one's views on peers and oneself? Moreover, is it so that the construction of one's peers as rivals affects the relationship that one forms to oneself or the governing party?

Notes

1. Lectures which have been translated and published in several books, including "Security, Territory, Population: Lectures at the Collège de France 1977-1978 (see Foucault, 2007) and "The birth of biopolitics: Lectures at the Collège de France 1978-1979" (see Foucault, 2008).

2. Governmentality was "understood in the broad sense of techniques and procedures for directing human behavior" (Foucault, 1997, p. 82), or put differently, as "an activity that undertakes to

conduct individuals throughout their lives by placing them under the authority of a guide responsible for what they do and for what happens to them" (Foucault, 2007, p. 471; see also Burchell *et al.*, 1991).

3. These interviews were collected as part of a larger research programme with the aim of exploring the effects of an increased reliance upon various forms of PMSs in academia. Within the project, some 50 interviews were conducted in total, 20 of which were conducted with university administrators and 10 of which were conducted with researchers following a different interview guide than the interviews drawn upon in this paper.

4. It could be argued that the expected differences would have been even greater had we included respondents from, for example, the medical faculty or the faculty of arts. However, such faculties were not part of all universities under study.

References

Aguinis, H., Cummings, C., Ramani, R.S. and Cummings, T.G. (2020), "An A is an A": the new bottom line for valuing academic research", *Academy of Management Perspectives*, Vol. 34 No. 1, pp. 135-154.

Agyemang, G. and Broadbent, J. (2015), "Management control systems and research management in universities: an empirical and conceptual exploration", *Accounting, Auditing and Accountability Journal*, Vol. 28 No. 7, pp. 1018-1046.

Ahrens, T. and Chapman, C.S. (2006), "Doing qualitative field research in management accounting: positioning data to contribute to theory", *Accounting, Organizations and Society*, Vol. 31 No. 8, pp. 819-841.

Alston, K. and Malherbe, R. (2009), "The constitutional right to academic freedom: an exploration into definition, scope and threats", *Journal of South African Law*, Vol. 2009 No. 1, pp. 102-123.

Alvesson, M. and Spicer, A. (2016), ("Un)conditional surrender?: why do professionals willingly comply with managerialism?", *Journal of Organizational Change Management*, Vol. 29 No. 1, pp. 29-45.

Archer, L. (2008), "The new neoliberal subjects? Young/er academics' constructions of professional identity", *Journal of Education Policy*, Vol. 23 No. 3.

Argento, D., Dobija, D. and Grossi, G. (2020), "The disillusion of calculative practices in academia", *Qualitative Research in Accounting and Management*, Vol. 17 No. 1, pp. 1-17.

Bauman, Z. (2000), *Liquid Modernity*, Polity Press, Cambridge.

Bazeley, P. (2013), *Qualitative Data Analysis: Practical Strategies*, Sage, London.

Beime, K.S., Englund, H. and Gerdin, J. (2021), "Giving the invisible hand a helping hand: How 'grants offices' work to nourish neoliberal researchers", *British Educational Research Journal*, Vol. 47 No. 1, pp. 1-22.

Berg, L.D., Huijbens, E.H. and Larsen, H.G. (2016), "Producing anxiety in the neoliberal university", *The Canadian Geographer/Le Géographe Canadien*, Vol. 60 No. 2, pp. 168-180.

Burchell, G., Gordon, C. and Miller, P. (Eds) (1991), *The Foucault Effect: Studies in Governmentality: With Two Lectures by and an Interview with Michel Foucault*, University of Chicago Press, Chicago.

Butler, N. and Spoelstra, S. (2012), "Your excellency", *Organization*, Vol. 19 No. 6, pp. 891-903.

Cannizzo, F. (2015), "Academic subjectivities: Governmentality and self-development in higher education", *Foucault Studies*, Vol. 20, pp. 199-217.

Chatelain-Ponroy, S., Mignot-Gérard, S., Musselin, C. and Sponem, S. (2018), "Is commitment to performance-based management compatible with commitment to university "publicness"? Academics' values in french universities", *Organization Studies*, Vol. 39 No. 10, pp. 1377-1401.

Chatterjee, B., Cordery, C.J., De Loo, I. and Letiche, H. (2020), "The spectacle of research assessment systems: insights from New Zealand and the United Kingdom", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 6, pp. 1219-1246.

Chiapello, E. (2017), "Critical accounting research and neoliberalism", *Critical Perspectives on Accounting*, Vol. 43, pp. 47-64.

Clarke, C.A. and Knights, D. (2015), "Careering through academia: securing identities or engaging ethical subjectivities?", *Human Relations*, Vol. 68 No. 12, pp. 1865-1888.

Cooper, C. (2015), "Entrepreneurs of the self: the development of management control since 1976", *Accounting, Organizations and Society*, Vol. 47, pp. 14-24.

Davies, B. (2003), "Death to critique and dissent? The policies and practices of new managerialism and of evidence-based practice", *Gender and Education*, Vol. 15 No. 1, pp. 91-103.

Dobija, D., Górska, A.M., Grossi, G. and Strzelczyk, W. (2019), "Rational and symbolic uses of performance measurement: experiences from polish universities", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 3.

Englund, H. and Gerdin, J. (2019), "Performative technologies and teacher subjectivities: a conceptual framework", *British Educational Research Journal*, Vol. 45 No. 3, pp. 502-517.

Englund, H. and Gerdin, J. (2020), "Contesting conformity: how and why academics may oppose the conforming influences of intra-organizational performance evaluations", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 5, pp. 913-938.

Foucault, M. (1977), *Discipline and Punish: The Birth of the Prison*, Vintage Books, New York, NY.

Foucault, M. (1994), "Technologies of the self", in Rabinow, P. and Rose, N. (Eds), *The Essential Foucault: selections from Essential Works of Foucault, 1954-1984*, New Press, New York, NY, pp. 145-169.

Foucault, M. (1997), "Ethics: subjectivity and truth", *Essential Works of Michel Foucault, 1954-1984*, New Press, New York, NY, Vol. 1.

Foucault, M. (2003), *Society Must Be Defended: Lectures at the Collège de France, 1975-1976*, Macmillan, New York, NY, Vol. 1.

Foucault, M. (2007), *Security, Territory, Population: lectures at the Collège de France, 1977-78*, Springer, New York, NY.

Foucault, M. (2008), *The Birth of Biopolitics, Lectures at the Collège du France 1978-1979*, Palgrave Macmillan, New York, NY.

Gebreiter, F. and Hidayah, N.N. (2019), "Individual responses to competing accountability pressures in hybrid organisations", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 3, pp. 727-749.

Gendron, Y. (2008), "Constituting the academic performer: the spectre of superficiality and stagnation in academia", *European Accounting Review*, Vol. 17 No. 1, pp. 97-127.

Gendron, Y. (2015), "Accounting academia and the threat of the paying-off mentality", *Critical Perspectives on Accounting*, Vol. 26, pp. 168-176.

Grealy, L. and Laurie, T. (2017), "Higher degree research by numbers: beyond the critiques of neo-liberalism", *Higher Education Research and Development*, Vol. 36 No. 3, pp. 458-471.

Grossi, G., Kallio, K.M., Sargiacomo, M. and Skoog, M. (2020), "Accounting, performance management systems and accountability changes in knowledge-intensive public organizations: a literature review and research agenda", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 1.

Guarini, E., Magli, F. and Francesconi, A. (2020), "Academic logics in changing performance measurement systems", *Qualitative Research in Accounting and Management*, Vol. 17 No. 1, pp. 109-142.

Guthrie, J., Parker, L.D., Dumay, J. and Milne, M.J. (2019), "What counts for quality in interdisciplinary accounting research in the next decade", *Accounting, Auditing and Accountability Journal*, Vol. 32 No. 1, pp. 2-25.

Hacking, I. (2007), "Kinds of people: Moving targets", *Proceedings-British Academy*, Vol. 151, pp. 285-317.

Hamann, T.H. (2009), "Neoliberalism, governmentality, and ethics", *Foucault Studies*, Vol. 1, pp. 37-59.

Hammarfelt, B., Nelhans, G., Eklund, P. and Åström, F. (2016), "The heterogeneous landscape of bibliometric indicators: evaluating models for allocating resources at Swedish universities", *Research Evaluation*, Vol. 25 No. 3, pp. 292-305.

Harvey, D. (2006), "Neo-liberalism as creative destruction", *Geografiska Annaler: Series B, Human Geography*, Vol. 88 No. 2, pp. 145-158.

Hopwood, A.G. (1992), "Accounting calculation and the shifting sphere of the economic", *European Accounting Review*, Vol. 1 No. 1, pp. 125-143.

Hopwood, A. (2008), "Changing pressures on the research process: on trying to research in an age when curiosity is not enough", *European Accounting Review*, Vol. 17 No. 1, pp. 87-96.

Jones, T.C. (1992), "Understanding management accountants: the rationality of social action", *Critical Perspectives on Accounting*, Vol. 3 No. 3, pp. 225-257.

Kallio, K.M. and Kallio, T.J. (2014), "Management-by-results and performance measurement in universities – implications for work motivation", *Studies in Higher Education*, Vol. 39 No. 4, pp. 574-589.

Kallio, K.M., Kallio, T.J. and Grossi, G. (2017), "Performance measurement in universities: Ambiguities in the use of quality versus quantity in performance indicators", *Public Money and Management*, Vol. 37 No. 4, pp. 293-300.

Kallio, K.M., Kallio, T.J., Grossi, G. and Engblom, J. (2021), "Institutional logic and scholars' reactions to performance measurement in universities", *Accounting, Auditing and Accountability Journal*, Vol. 34 No. 9.

Kenny, J. (2017), "Academic work and performativity", *Higher Education*, Vol. 74 No. 5, pp. 897-913.

Knights, D. and Clarke, C.A. (2014), "It's a bittersweet symphony, this life: fragile academic selves and insecure identities at work", *Organization Studies*, Vol. 35 No. 3, pp. 335-357.

Krücken, G., Engwall, L. and De Corte, E. (2018), "Introduction to the special issue on 'university governance and creativity", *European Review*, Vol. 26 No. S1, pp. S1-S5.

Lazzarato, M. (2009), "Neoliberalism in action: Inequality, insecurity and the reconstitution of the social", *Theory, Culture and Society*, Vol. 26 No. 6, pp. 109-133.

Lemke, T. (2011), *Biopolitics: An Advanced Introduction*, New York, NY University Press. *New York, NY*.

Lewis, J.M. (2014), "Individual and institutional accountability: the case of research assessment", *Australian Journal of Public Administration*, Vol. 73 No. 4, pp. 408-416.

Lynch, K. (2006), "Neo-liberalism and marketisation: the implications for higher education", *European Educational Research Journal*, Vol. 5 No. 1, pp. 1-17.

McNay, L. (2009), "Self as enterprise: Dilemmas of control and resistance in Foucault's The birth of biopolitics", *Theory, Culture and Society*, Vol. 26 No. 6, pp. 55-77.

McRobbie, A. (2015), "Notes on the perfect: competitive femininity in neoliberal times", *Australian Feminist Studies*, Vol. 30 No. 83, pp. 3-20.

Martin-Sardesai, A., Guthrie, J. and Tucker, B.P. (2020), "What you see depends on where you look: performance measurement of Australian accounting academics", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 6, pp. 1193-1218.

Martin-Sardesai, A., Guthrie, J., Tooley, S. and Chaplin, S. (2019), "History of research performance measurement systems in the Australian higher education sector", *Accounting History*, Vol. 24 No. 1, pp. 40-61.

Martin-Sardesai, A., Irvine, H., Tooley, S. and Guthrie, J. (2017), "Government research evaluations and academic freedom: a UK and Australian comparison", *Higher Education Research and Development*, Vol. 36 No. 2, pp. 372-385.

Mennicken, A. and Miller, P. (2012), "Accounting, territorialization and power", *Foucault Studies*, Vol. 1, pp. 4-24.

Messner, M. (2015), "Research orientation without regrets", *Critical Perspectives on Accounting*, Vol. 26, pp. 76-83.

Michael, M. (2009), "Publics performing publics: of PiGs, PiPs and politics", *Public Understanding of Science*, Vol. 18 No. 5, pp. 617-631.

Miller, P. (2001), "Governing by numbers: Why calculative practices matter", *Social Research*, Vol. 68, pp. 379-396.

Miller, P. (2008), "Calculating economic life", *Journal of Cultural Economy*, Vol. 1 No. 1, pp. 51-64.

Miller, P. and Power, M. (2013), "Accounting, organizing, and economizing: Connecting accounting research and organization theory", *Academy of Management Annals*, Vol. 7 No. 1, pp. 557-605.

Miller, P. and Rose, N. (1990), "Governing economic life", *Economy and Society*, Vol. 19 No. 1, pp. 75-104.

Mingers, J. and Willmott, H. (2013), "Taylorizing business school research: on the 'one best way' performative effects of journal ranking lists", *Human Relations*, Vol. 66 No. 8, pp. 1051-1073.

Moisander, J., Groß, C. and Eräranta, K. (2018), "Mechanisms of biopower and neoliberal governmentality in precarious work: mobilizing the dependent self-employed as independent business owners", *Human Relations*, Vol. 71 No. 3, pp. 375-398.

Morrissey, J. (2015), "Regimes of performance: practices of the normalised self in the neoliberal university", *British Journal of Sociology of Education*, Vol. 36 No. 4, pp. 614-634.

Mudge, S.L. (2008), "What is neo-liberalism?", *Socio-Economic Review*, Vol. 6 No. 4, pp. 703-731.

Munro, I. (2012), "The management of circulations: biopolitical variations after Foucault", *International Journal of Management Reviews*, Vol. 14 No. 3, pp. 345-362.

Narayan, A.K. (2016), "An ethical perspective on performance measurement in the public sector", *Pacific Accounting Review*, Vol. 28 No. 4, pp. 364-372.

Northcott, D. and Linacre, S. (2010), "Producing spaces for academic discourse: the impact of research assessment exercises and journal quality rankings", *Australian Accounting Review*, Vol. 20 No. 1, pp. 38-54.

O'Connell, B.T., De Lange, P., Martin-Sardesai, A. and Agyemang, G. (2020a), "Measurement and assessment of accounting research, impact and engagement", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 6, pp. 1177-1192.

O'Connell, B.T., De Lange, P., Stoner, G. and Sangster, A. (2020b), "Impact of research assessment exercises on research approaches and foci of accounting disciplines in Australia", *Accounting, Auditing and Accountability Journal*, Vol. 33 No. 6, pp. 1277-1302.

Parker, L.D. (2002), "It's been a pleasure doing business with you: a strategic analysis and critique of university change management", *Critical Perspectives on Accounting*, Vol. 13 Nos 5/6, pp. 603-619.

Parker, L.D. (2011), "University corporatisation: driving redefinition", *Critical Perspectives on Accounting*, Vol. 22 No. 4, pp. 434-450.

Parker, L.D. (2012), "Beyond the ticket and the Brand: imagining an accounting research future", *Accounting and Finance*, Vol. 52 No. 4, pp. 1153-1182.

Parker, L.D. (2013), "Contemporary university strategising: the financial imperative", *Financial Accountability and Management*, Vol. 29 No. 1, pp. 1-25.

Pianezzi, D., Nørreklit, H. and Cinquini, L. (2020), "Academia after virtue? An inquiry into the moral character (s) of academics", *Journal of Business Ethics*, Vol. 167 No. 3, pp. 571-588.

Raudla, R., Karo, E., Valdmaa, K. and Kattel, R. (2015), "Implications of project-based funding of research on budgeting and financial management in public universities", *Higher Education*, Vol. 70 No. 6, pp. 957-971.

Rose, N. and Miller, P. (1992), "Political power beyond the state: problematics of government", *The British Journal of Sociology*, Vol. 43 No. 2, pp. 173-205.

Rose, N., O'Malley, P. and Valverde, M. (2006), "Governmentality", *Annual Review of Law and Social Science*, Vol. 2 No. 1, pp. 83-104.

Söderlind, J. and Geschwind, L. (2019), "Making sense of academic work: the influence of performance measurement in Swedish universities", *Policy Reviews in Higher Education*, Vol. 3 No. 1, pp. 75-93.

Ter Bogt, H.J. and Scapens, R.W. (2012), "Performance management in universities: effects of the transition to more quantitative measurement systems", *European Accounting Review*, Vol. 21 No. 3, pp. 451-497.

Tourish, D. and Willmott, H. (2015), "In defiance of folly: journal rankings, mindless measures and the ABS guide", *Critical Perspectives on Accounting*, Vol. 26, pp. 37-46.

Townley, B. (1995), "Managing by numbers: accounting, personnel management and the creation of a mathesis", *Critical Perspectives on Accounting*, Vol. 6 No. 6, pp. 555-575.

Tucker, B.P. and Tilt, C.A. (2019), "'You know it when you see it': in search of 'the ideal' research culture in university accounting faculties", *Critical Perspectives on Accounting*, Vol. 64.

van Helden, J. and Argento, D. (2020), "New development: our hate–love relationship with publication metrics", *Public Money and Management*, Vol. 40 No. 2, pp. 174-177.

Walker, M., Roberts, S.M., Jones III, J.P. and Fröhling, O. (2008), "Neoliberal development through technical assistance: constructing communities of entrepreneurial subjects in Oaxaca, Mexico", *Geoforum*, Vol. 39 No. 1, pp. 527-542.

Wickramasinghe, D., Cooper, C. and Alawattage, C. (2021), "Neoliberalism and management accounting: reconfiguring governmentality and extending territories", *Accounting, Auditing and Accountability Journal*, Vol. 34 No. 3.

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