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What can the university sector teach us about strategy? Support for strategy versus individual motivations to perform

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ABSTRACT

Much is known about marketing strategy effectiveness and its impact on financial returns. Minimal research though has been conducted on what type of conditions encourage employees to perform according to the implementation of a strategy. This paper seeks to answer this question by examining the implementation of marketing strategies for research and teaching in the university sector. We find that individual motivation, especially persistence and in some cases public service motivation, is linked to performance. This, along with the role of experience and academic level, suggests that a resource-based view of strategy may be more appropriate for managing human assets and building capabilities, rather than an implementation of a grand plan. Furthermore, we find evidence that several strategies may be more effective than one approach in complex service organizations like universities.

1. Introduction

Between 2014 and 2017, the global higher education market grew from an estimated 1.33 to 2.33 trillion dollars (Reuters, 2018). It is also estimated that by 2022, this will become one of the leading world markets with a forecast value of 5.688 trillion dollars. The promise of a broader world market in higher education though is not without its challenges. There is evidence of increased competition for students and a higher demand for reputation based on research outcomes to increase student enrolments, especially among universities in the USA, UK, Australia and New Zealand (Marginson, 2006). It is therefore vital for universities to set and implement strategies that provide them with a competitive advantage and put them on a sustainable funding basis in times when government funding to the sector is under review in many parts of the world (OECD, 2018a, 2018b, 2018b, 2018d).

How universities as organizations with considerable impact and commercial presence can successfully implement strategies with the support of their employees is of great interest to marketing scholars (Cadwallader, Jarvis, Bitner, & Ostrom, 2010; Chng, Shih, Rodgers, & Song, 2015; Maltz & Kohli, 2000). While there has been considerable research on what is the most effective strategy to select (Arens & Hamilton, 2018; Cronin, 1985; Dekimpe & Deleersnyder, 2018; Grinstein, 2008; Grönroos, 1995; Homburg, Fürst, Ehrmann, & Scheinker, 2013; Kumar & Petersen, 2005; McKee, Varadarajan, & Vassar, 1990), there has been scant research into how this can be done (Vorhies, Orr, & Bush, 2011; Ye, Marinova, & Singh, 2012). As universities are service organizations, it would also seem to be vital to understand if at all, the support of academic staff is vital for the university to achieve its mission and objectives. Indeed, there is a growing stream of research which suggests the most important means to increase research performance, for example, is to merely provide greater autonomy for academics, rather than implement any grand plan (Sutton & Brown, 2016; Wood, 1990; Zhang, 2014), though this research has not examined university performance and strategy support in-depth or across significant parts of the sector. This paper, therefore, examines how important staff support of university strategies is in predicting performance (in this case teaching as well as research outcomes) against the motivations of staff, such as their motivation to the broader society (called public service motivation) and their persistence to excel in the long term. As many organizations in professional services rely very much on the abilities and motivations of their staff for performance outcomes and also want to match the motivations of their employees to the organization's strategy, it seems to the authors that there are broad implications from such research which focuses on one sector. The other significant contribution of our research is that it seems that factors of strategic support and individual motivation differ remarkably across academic disciplines, suggesting that in service organizations with different divisions or business units, a 'one size fits all' strategy is

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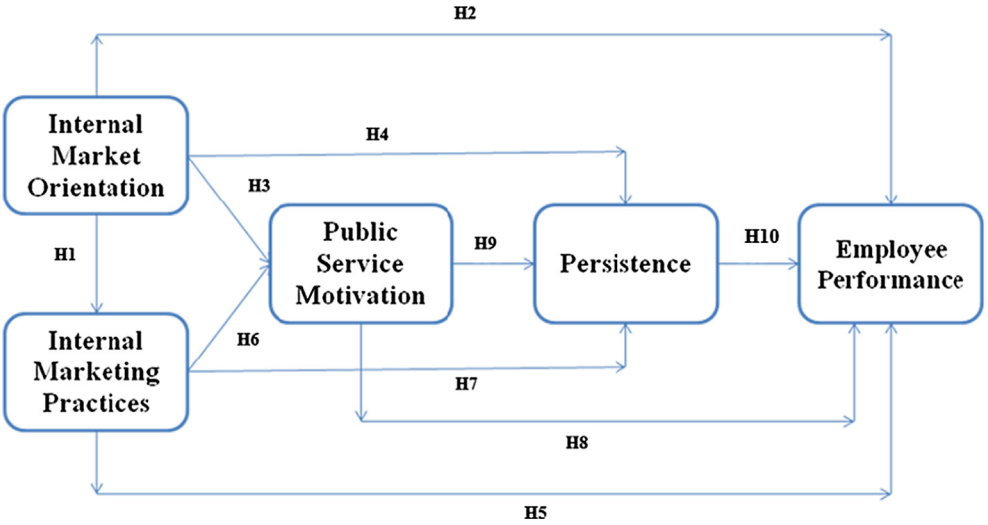

Fig. 1. Conceptual model.

not the most effective for that part of the organization concerned.

In this paper, we examine some important factors of strategy support (internal marketing orientation and internal marketing practices) and contrast the effect of this support on performance, with that persistence and public service motivation of Australian and New Zealand academics, across disciplines. Our research suggests that the use of corporate strategies in universities must be carefully considered with individual motivation and that different parts of universities may require entirely different strategies to be most effective.

2. Literature review and conceptual development

2.1. Prior research

2.1.1. Service dominant logic, resource theory and strategy implementation

Organizations in the service sector rely on employees' actions rather than goods as their product offering. As a result, customer satisfaction for these organizations relies almost entirely on the customer's experience with front-line employees, such as academics (Bettencourt & Gwinner, 1996; Lewis & Entwistle, 1990). The importance of offering quality service is further highlighted in publications on service dominant logic (Arnould, 2008; Karpen, Bove, & Lukas, 2012; Lusch & Vargo, 2011; Vargo & Lusch, 2008), which suggest that focus is shifting from tangible to intangible resources as the cornerstone for organizational success, with employees and customers co-creating value. This may well be the case with teaching and the production of research outcomes in the tertiary sector. It can be argued, for example, that higher degree students as customers also help co-create research outputs as part of research teams or centers. A related area of strategy implementation is that of resource-based theory (RBT), which considers the impact of resources and capabilities on the choice and effectiveness of a strategy.

RBT (Barney, 2001; Kozlenkova, Samaha, & Palmatier, 2014), otherwise known as the Resource-Based View (RBV) of the firm, posits that resources and capabilities are essential for creating competitive advantage and improving organizational performance (Barney, 1991; Hunt, 1997, 2011). RBT considers resources to be a source of organizational competitive advantage, a relationship that is empirically confirmed (Hitt, Biermant, Shimizu, & Kochhar, 2001; Huselid, Jackson, & Schuler, 1997; Robins & Wiersema, 1995; Wernerfelt, 1995). Although an organization can be considered as a collection of physical, human and organizational resources (Barney, 1991), RBT suggests only strategic resources lead to competitive advantage. For a resource to be strategic, it must be valuable, rare, non-imitable and non-substitutable (Barney, 1991). It would seem reasonable for many universities that this would be the quality and motivation of its staff.

The other important aspect of RBT theory is capabilities, which are particularly relevant in facilitating the use of resources in the marketplace or universities (Day, 1994; Hooley, Broderick, & Möller, 1998). Capabilities are a "complex bundle of skills and accumulated knowledge that enable firms to coordinate activities and make use of their assets" (Day, 1994, p. 38). Developing competencies requires an extended learning curve in understanding the market and developing managerial skills (Hooley, Greenley, Fahy, & Cadogan, 2001; Ye et al., 2012). Organizational change, such as altering an organizational culture, may also be necessary for the development of competencies and the alignment of an organization with market requirements (Hooley et al., 1999). Taken as a whole, previous research would suggest that for service organizations like universities, value is co-created by employees, making them a valuable resource and how well do they do so a capability. Other than hiring new staff, changing capabilities would seem to require that employees support and implement strategies that are designed to maximize return on assets. Balancing this is that the employees' resources may perhaps be better utilized if they are motivated to perform.

2.2. Conceptual development

To understand how strategies in universities or not-for-profits are implemented, it is necessary to map the proposed relationships as suggested by previous research. This is shown in Fig. 1, which provides a basis of discussion and the framework by which hypotheses are developed and tested in this paper. The next sections of this paper discuss each part of the model in turn.

Ueno (2010) considered internal marketing in a broad sense and identified seven primary internal marketing activities: recruitment and selection, training, teamwork, empowerment, performance appraisals and reward, communication, and the culture of the organization. These factors can be split into two subcategories; internal market orientation and internal marketing practices. Each of these will be discussed below.

2.2.1. Internal Market Orientation

Internal market orientation (IMO) takes the market orientation concept and shifts its focus to an organization's internal 'customers'; its employees, through a set of managerial behaviors that aim to improve the employee experience with management (Piercy, Harris, & Lane, 2002) and the attraction, development, motivation and retention of qualified employees (Berry & Parasuraman, 1994). It "involves the

generation and dissemination of intelligence about the wants and needs of employees and the design and implementation of appropriate responses to meet these wants and needs" (Lings & Greenley, 2005 p291).

IMO is derived from research by Kohli and Jaworski (1990) on marketing orientation. It consisted originally of five factors: informal information generation, formal face-to-face information generation, formal written information generation, information dissemination and information responsiveness (Lings & Greenley, 2005).

The scale formed by Gounaris (2006) offers a potentially more rigorous measure of IMO than that of Lings and Greenley (2005). It has been designed to survey employees at various levels within the organizational 'hierarchy' providing a complete and more accurate picture of an organization's IMO than Lings and Greenley's managerial perspective. Gounaris' scale incorporates not only communication between management and employees but also communication between managers, job description, remuneration, management concern and training. Their conceptualization and measurement consist of three broad factors: internal market intelligence generation, internal intelligence dissemination and response to internal intelligence. The measure is a second order construct with each factor measuring a set of behaviors about employee and management relations and how they exchange information and intelligence. Their measure, while exhaustive, is not without issues as there are many sub-dimensions and items which make it a less practicable instrument. The factors derived in their research are also open to conjecture given less than an adequate model to data fit. For this reason, the five factor Lings and Greenley (2005) model, is preferred.

Research suggests that by satisfying the needs and wants of employees, IMO then leads to better performance outcomes, particularly for service (Lings & Greenley, 2009; Sahi, Lonial, Gupta, & Seli, 2013; Yanfeng, Chao, & Guang, 2011) and not-for-profit organizations (Modi & Sahi, 2018; Sefora & Mihaela, 2016). IMO is seen in this study as an essential starting point for implementing any corporate strategy, particularly in universities. It is believed that when an IMO is adopted, there is an increased chance of internal marketing practices taking place and that IMO encourages more exceptional employee performance because employees feel that the organization is meeting their welfare and interests. This then means employee performance is increased as they are also likely to follow and accept corporate strategies (see discussion in Internal Marketing Practices or IMP). Thus, our first two hypotheses:

H1: IMO is positively related to Internal Marketing Practices (IMP) and
H2: IMO positively predicts Employee Performance.

As we will later discuss, public sector motivation (PSM) and persistence motivation are also considered to affect performance, and it is argued the IMO significantly facilitates these states. That is because IMO is also considered to motivate employees, encouraging greater persistence and may instill in employees a greater sense of purpose, especially in not-for-profit organizations like universities.

Therefore:

H3: IMO positively predicts Public Service Motivation (PSM) and
H4: IMO positively predicts Persistence.

2.2.2. Internal Marketing Practices

Internal marketing practices (IMP) are the organizational behaviors that assist in making use of the information collected as a result of an Internal Market Orientation. Rafiq and Ahmed (2000, p. 453) define IMP as "the planned effort using marketing as an approach to overcome organizational resistance to change and to alight, motivate and interfunctionally coordinate and integrate employees towards the effective implementation of corporate and functional strategies in order to deliver customer satisfaction through a process of creating motivated and customer oriented employees".

IMP include formality of communication, participative decision-making and employee empowerment (Gounaris, 2006, 2008; Pitt & Foreman, 1999) and are often discussed in both the human resources and organizational behavior literature (Muskat, 2011; Sparks, Bradley, & Callan, 1997; Sukirno & Siengthai, 2011).

The formality of communication refers to the style of communication between managerial staff and their employees (Gounaris, 2008). The measures of IMO: information generation, information dissemination and responsiveness to information are centered on communication (Gounaris, 2006, 2008; Lings & Greenley, 2005) and assist in the creation of a workplace culture in which bidirectional communication is valued and encouraged. This should foster communication between employees not only within their own departments but also on an interdepartmental and cross-functional level.

Participative decision-making refers to the inclusion of both managerial and non-managerial staff in the decision-making process (Bowen & Lawler, 1995; Gounaris, 2008; Macy, Peterson, & Norton, 1989). Through the generation and dissemination of information, both of which are elements of IMO, employees are able to make more informed decisions (Pfeffer, 2005), and a participative decision-making environment is encouraged.

Empowerment occurs when managerial staff allow their employees the discretion to make decisions regarding job-related activities (Gounaris, 2008; Sparks et al., 1997). It has been found to have a positive effect on employee performance and customer satisfaction and, as a result, organizational performance (Bowen & Lawler, 1995). As with participative decision-making, as employees become better-informed, management may be more likely to engage in employee empowerment as there is an expectation that better decisions will be made.

Overall the nature of communication, participative decision-making empowerment means that IMP is very similar to inter-functional coordination in marketing strategy, which is seen as an essential part of any implementation of a strategy. It is not surprising that collectively these conditions of IMP are linked to higher employee and organizational performance (Grissom, 2012; Ionuț, Gheorghe, & Iulia, 2015; Quester & Kelly, 1999; Yafang & Ta-Wei, 2008). IMP also provides the framework for motivation (persistence) for employees and for a state of belonging that they are working for a worthy cause (PSM). Thus, our next set of hypotheses:

H5: IMP positively predicts Employee Performance
H6: IMP positively predicts PSM and
H7: IMP positively predicts Persistence.

2.2.3. Public service motivation

Public Service Motivation (PSM) can be defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry & Wise, 1990, p. 368). Or more widely, "General, altruistic motivation to serve the interests of a community of people, a state, a nation or humankind" (Rainey & Steinbauer, 1999, p.20). Or, "the motivational force that induces individuals to perform meaningful…public, community and social service" (Brewer & Selden, 1998, p. 417). PSM has been linked to prosocial behavior (Perry, Hondeghem, & Wise, 2010) and more culturally to Confucianism, or civic responsibility (Yung, 2014). In terms of motivation, PSM is very much about self-concern and an 'other' orientation, with the pro-social element of this construct being focused on meaning and purpose as drivers of effort, rather than pleasure or enjoyment (Perry et al., 2010). There is also evidence that PSM is much higher with Millennial workers, explaining their attraction to seek employment in the not-for-profit sector (Breitsohl & Ruhle, 2016).

PSM within an organization though does not occur in a vacuum. It is dependent on human relations policies such as the recruitment of civic-minded people (Asseburg, Homberg, & Vogel, 2018), the type of organizational culture (Austen & Zacny, 2015) and the use of autonomous

work practices (Lee, 2019), as influenced by IMO and IMP. There is mixed evidence though as to how PSM is associated with higher employee performance.

The relationship between PSM and employee performance, in terms of organizational commitment, has been found in several countries (Homberg, McCarthy, & Tabvuma, 2015; HyoJoo, Min, & Park, 2017; Taylor, 2008; Tsai, Stritch, & Christensen, 2017; van Loon, Leisink, & Vandenabeele, 2017). The evidence for other measures of performance has rarely been studied, but a large-scale study of US postal workers did find PSM was significantly related to productivity (Brewer & Selden, 2000), and more recently with Danish doctors and their propensity for home visits (Jensen & Vestergaard, 2017).

Some studies report a negative relationship for some outcomes such as research productivity in universities, and a positive relationship for more service orientated activities (Jin, McDonald, & Park, 2018), though these results were found to be dependent on the fit between the individual and the organization. Some suggested reasons for this are the belief in the organizational mission (van Loon, Kjeldsen, Andersen, Vandenabeele, & Leisink, 2018), and confidence in the organization (Cooper & Reinagel, 2017; Miao, Eva, Newman, & Schwarz, 2019). We would argue that these factors are very much captured by the measures of IMO and IMP. We would assert that significant evidence remains to examine the link between PSM and performance. Thus, the next hypothesis:

H8: PSM positively predicts Employee Performance.

To the authors' knowledge, the link between PSM and persistence has not been studied. Given the self-sacrificing nature of PSM, we would expect that those with high levels of PSM would be more determined and tenacious. Hence, our next hypothesis:

H9: PSM positively predicts Persistence.

2.2.4. Persistence

Persistence can be defined as "the individual's determination and willingness to perform a task before and during the performance of the task" (Yildir, 2005, p.113). Persistence, as measured by the GRIT scale, consists of two dimensions: consistency of effort and perseverance of effort (Duckworth & Quinn, 2009). Persistence is associated with graduating from West Point (Duckworth & Quinn, 2009), more persistent (or grittier) people are more likely to keep their jobs, to graduate from high school, and persistent men are more likely to stay married (Eskreis-Winkler, Duckworth, Shulman, & Beal, 2014).

Wu, Matthews, and Dagher (2007) state that there are two crucial elements required for an individual to be persistent: time and adversity. It has been linked with individual success for well over 100 years. Galton (1892) and Cox (1926) both identified persistence, in some form, as being a factor contributing to the success of individuals achieving above-average success in their pursuits. McLaren (2004) and Ericsson and Charness (1994) cite persistence as being a significant contributing factor for performance on an individual level. Of interest to this study is that there is some evidence that persistence is linked with academic performance (Strayhorn, 2014) and teacher performance (Duckworth, Quinn, & Seligman, 2009).

Persistence may be particularly important for academic staff at universities, especially with regards to research activities, which can span considerable timeframes from the start of the research until its publication. It has also been argued, however, that persisting in situations where success is unlikely or impossible can have more significant long-term harm than benefits (Lench & Levine, 2008; Wrosch, Scheier, Miller, Schulz, & Carver, 2003) and that extremely high and low levels of persistence both cause more moderate levels of performance than mid-range persistence levels (Carrier & Williams, 1988). Thus, our last hypothesis:

H10: Persistence predicts Employee Performance.

2.2.5. Employee performance

Employee performance is essential for the success of all organizations (Andersen, Cooper, & Zhu, 2007; Den Hartog & Verburg, 2004). This is particularly true for service-sector organizations (Gounaris, 2008; Lings & Greenley, 2005), which rely on staff rather than goods as their product offering and as a means of creating value for the customer. In the case of universities, employee performance has been found to have a significant impact on the reputation and performance of universities, as well as their ability to attract research funding (Rowley, 1996).

Numerous variables can be used to measure the performance of an individual employee. These measures include job satisfaction and staff attitudes (Hartline & Ferrell, 1996; Lings & Greenley, 2005; Yanfeng et al., 2011), retention (Lings & Greenley, 2005; Modi & Sahi, 2018), and commitment (Joung, Goh, Huffman, Yuan, & Surles, 2015; Yanfeng et al., 2011), all of which are applicable to a wide variety of organizations, including universities.

Relying solely on the measures of employee performance stated above may not necessarily give a complete picture of employee performance. In addition to the variables mentioned above, context-specific performance measures are also of interest. Context-specific performance measures for university academic staff may include teacher ratings (Ramsden, 1991), research output (Edgar & Geare, 2013), and community service (Winefield, Boyd, & Saebel, 2008).

This paper is unique in that the measure of research performance includes quality measures such as the top impact factor from journal publications, total citations and research grants (in Australian dollars) as well as quantity of publications, all in the last five years. It also includes a measure of teaching performance based on evaluations and higher degree completions.

As noted in several studies, trying to predict performance or outcomes on a finite set of independent variables may be problematic due to endogeneity (Hult et al., 2018; McAlister, 2016). That is, the relationships found in research studies may be due to third variables not accounted for in the research design. To account for this, we used a three-step procedure. First, we included several control variables known to impact employee performance in universities. These included, for example, gender and teaching loads, where we included a measure which averages class sizes and hours spent on teaching. We also included a measure of experience, years in academia, and to account for differences in the prestige of universities, we used a dummy variable of the top nine universities in Australia and New Zealand (often called the Go8, group of eight in Australia, and the University of Auckland). Second, to account for disciplinary differences and to examine the robustness of the findings, we conducted group analysis across the broad discipline groups of Science, Social Science and Arts and Law. Third, we conducted single stochastic variation sharing with the latent constructs of academic levels (lecturer, senior lecturer, associate professor and professor) as an instrumental variable, which addresses reciprocal relationships, e.g., professors publish more because of higher expectations of the position, and of course, higher publications is why they are professors.

3. Method

3.1. The sample

Data was collected by online self-completion of a survey emailed to 6000 academics in Australia and New Zealand. This resulted in 492 useable responses, a response rate of 8.2%. As suggested by Nulty (2008), reminder emails were sent, and a small incentive was offered to complete the survey. While this response rate seems low it is in line what would be expected from similar research in mail surveys, which have a 20% higher response rate (Shih & Fan, 2009).

Most respondents were employed in Australian universities (82%); 58% of respondents were women, around 52% were aged between 35 and 64 and most had families with dependent children (67%). Most disciplines were represented in the sample with Commerce and Management studies making up 29% of the responses followed by Medical and Health Sciences (22%), being the most highly represented. Seventeen percent of respondents were professors, and 29% were employed as lecturers (or assistant professors). The respondents were quite experienced academics with an average time in the profession of 15 years. They reported that they spent about 31% of their workload on research. Average hours worked per week was about 46 (with the standard deviation being about 12 h).

3.2. Measurement

All scales were based on previous research. The IMO measure was based on research by Lings and Greenley (2005) and included items covering the five dimensions of the construct. The first being Informal Information Generation, for example, “When at work, my head of department/school tries to find out what employees want from the university”. The second, Formal Face-to-Face Information Generation, e.g., “In this department/school, we have regular staff appraisals in which we discuss what employees want”. The third dimension was Formal Written Information Generation, for example, “In this department/school we survey our employees at least once a year to assess the quality of employment”. The fourth dimension of measurement was Information Dissemination, and this consisted, for example, of items such as, “My head of department/school regularly meets with all staff to report about issues relating to the whole department/school”. Finally, the fifth factor measured Information Responsiveness. A sample item under this dimension was, “In this department/school when employee feedback indicates that they are dissatisfied with the status quo we change what we are doing”.

The measurement of IMP was based on research by Gounaris (2008) and Gounaris, Vassilikopoulou, and Chatzipanagiotou (2010). This consisted of three dimensions: Participative Decision Making, e.g., “Professors, Deans and Heads of Departments tend to hammer out issues together in this university”; Empowerment, “My head of department/school allows me a high degree of initiative”; and Communication Formality, “Contact with management and my head of department/school is on a formal, pre-planned basis”.

PSM was measured according to research by Perry and Wise (1990) and Kim (2006) and consisted of four dimensions: Attraction to the Public Service, Commitment to Public Values, Compassion, and Self-Sacrifice. The measure of persistence was based on the Short Grit Scale, developed by Duckworth and Quinn (2009), which consists of the two dimensions of Consistency of Effort and Perseverance of Effort.

To measure research performance, we used log transformations of research activity in the last five years. This included the highest impact factor for a journal publication in the previous five years, citations in the last five years, total publications and research grants, in Australian dollars. A log transformation of research performance was considered appropriate as the data were skewed and had evidence of kurtosis. Teaching performance was measured by self-evaluation of teaching performance and the number of higher degree completions in the last five years. Table 1 shows the measurement properties of the original scales.

4. Results

Partial Least Squares (PLS) path modeling was used to simultaneously estimate both the measurement and structural components of the model. PLS is a component-based structural equation modeling technique that has advantages over covariance modeling (Slotegraaf & Dickinson, 2004). There are many precedents for the use of PLS in recent marketing studies (Anderson & Swaminathan, 2011; Hair, Sarstedt, Ringle, & Mena, 2012; Hennig-Thurau, Henning, & Sattler, 2007). PLS is a variance-based technique, which can deal well with issues of formative versus reflective measures and moderation effects and can include categorical variables. PLS is not constrained by identification issues, even in complex models (Hair et al., 2012, p. 415). Maximization of variance explained (or R^2 values), in all dependent variables is the primary objective of PLS (Gefen & Straub, 2005; Hulland, 1999).

The analysis consisted of a three-stage process. First, the measurement model was derived, second, the overall path model was investigated and third, differences in the model were examined across academic disciplines, and analysis of endogeneity due to academic level was conducted.

4.1. Measurement model

To facilitate greater ease of interpretation of the results, a three-stage measurement process was undertaken to reduce the number of factors. As recommended by Kock (2011), after the initial analysis of factors as shown in Table 1, using Warp PLS, factor scores for each dimension were saved and then inputted into the second analysis of higher order factors. This allowed the measurement properties of all the original measures to be retained and provided greater ease of examination of the hypotheses of the study. Table 2 shows the results of the analysis of factor scores for each dimension.

Overall, the results showed that most constructs had proper levels of reliability with an average $\alpha = 0.69$. All constructs have a Cronbach alpha greater than 0.70, except Persistence, which has a Cronbach alpha of 0.49, though the composite reliability of 0.79 and the high average variance explained, of 0.65, along with the high factor loadings (both at 0.81) provide evidence of Persistence as a unidimensional variable.

All measures met the cut-off of 0.50 on the average variance extracted (AVE) as recommended by (Fornell & Larcker, 1981; Gefen, Straub, & Boudreau, 2000, p. 43), for convergent validity. To confirm that the different latent variables extracted a higher share of variance from their own indicators than from other latent variables, we tested for discriminant validity among the various constructs. The square root of the average variance extracted (AVE) by each of the latent variables as shown in the diagonal of Table 3 is higher than the correlation between the latent variable and all the other latent variables. The average variance inflation (VIF) factor was 1.345, which was well within the suggested acceptable range of 3.3 or lower to discount multicollinearity and no common bias method (Knock & Lynn, 2012). Once the measurement model was found to be satisfactory (Hair, Ringle, & Sarstedt, 2014, p. 144), we proceeded to evaluate the structural model.

4.2. Overall path analysis

4.2.1. Research performance

Data were analyzed using Warp PLS 6.0 (Knock, 2017). Two sets of results were obtained; one for research and the other for teaching performance (which also includes research as an independent variable). Table 4 shows the results for research performance and Table 5 shows the results for teaching performance. As shown in Table 4, across all disciplines, support was found for H1 (IMO → IMP, $\beta = 0.72$, $p < 0.01$), H3 (IMO → PSM, $\beta = 0.10$, $p < 0.05$), H6 (IMP → PSM, $\beta = 0.13$, $p < 0.01$) and *H*10 (Persistence → Research, $\beta = 0.14$, $p < 0.01$). Research performance was also positively influenced by being male ($\beta = 0.14$, $p < 0.01$), working in an elite university ($\beta = 0.15$, $p < 0.01$), and greater experience ($\beta = 0.23$, $p < 0.01$) and was reduced by higher teaching loads ($\beta = -0.27$, $p < 0.01$).

Support across the sample was not found for H2 (IMO → Research), H5 (IMP → Research), H7 (IMP → Persistence), H8 (PSM → Research, though there are some essential disciplinary differences) and H9 (PSM → Persistence). Overall research performance was reasonably well explained by cross-sectional research with an R^2 of 0.21, which

Table 1
Details of original measures used in this study.

Variables			
Scale and items: weights (w) and loadings (L) of latent constructs	Measurement Statistics		
	Std. Factor Loading	Weight	Mean (SD)
Persistence			
Consistency of Interest (4 items, Cronbach α = 0.74; AVE = 0.56).			
I often set a goal but later choose to pursue a different one.	0.75	0.34	3.41 (0.99)
I have been obsessed with a certain idea or project for a short time but later lost interest.	0.79	0.35	3.50 (1.09)
I have difficulty maintaining my focus on projects that take more than a few months to complete.	0.75	0.33	3.93 (1.06)
New ideas and projects sometimes distract me from previous ones.	0.70	0.31	2.55 (1.01)
Perseverance of Effort (4 items, Cronbach α = 0.70; AVE = 0.54).			
I finish whatever I begin.	*0.68*	*0.32*	*3.61 (1.06)*
Setbacks don't discourage me.	*0.46*	*0.21*	*3.27 (1.09)*
I am diligent.	0.87	0.40	4.32 (0.72)
I am a hard worker.	0.85	0.40	4.47 (0.68)
Public Service Motivation			
Attraction to Public Service (4 items, Cronbach α = 0.74; AVE = 0.58).			
I admire people who initiate or are involved in activities to aid my community.	*0.41*	*0.18*	*4.78 (0.48)*
It is important that citizens can rely on the continuous provision of public services.	0.87	0.38	4.52 (0.61)
Meaningful public service is important to me.	0.87	0.38	4.41 (0.64)
It is important for me to contribute to the common good.	0.80	0.34	4.48 (0.71)
Commitment to Public Values (4 items, Cronbach α = 0.83; AVE = 0.66).			
I think equal opportunities for citizens are very important.	*0.68*	*0.26*	*4.50 (0.59)*
It is important that citizens can rely on the continuous provision of public services.	0.88	0.33	4.10 (0.75)
It is fundamental that the interests of future generations are taken into account when developing public policies.	0.86	0.33	3.60 (0.91)
To act ethically is essential for public servants.	0.82	0.31	3.44 (0.97)
Compassion (4 items, Cronbach α = 0.74; AVE = 0.57).			
I feel sympathetic to the plight of the underprivileged.	*0.65*	*0.29*	*4.05 (0.79)*
I empathize with other people who face difficulties.	0.73	0.32	4.41 (0.63)
I get very upset when I see other people being treated unfairly.	0.82	0.36	4.53 (0.66)
Considering the welfare of others is very important.	0.80	0.35	4.35 (0.72)
Self-Sacrifice (4 items, Cronbach α = 0.79; AVE = 0.61).			
I am prepared to make sacrifices for the good of society.	0.76	0.31	4.44 (0.65)
I believe in putting civic duty before self.	0.78	0.32	4.58 (0.64)
I am willing to risk personal loss to help society.	0.81	0.33	4.51 (0.68)
I would agree to a good plan to make a better life for the poor, even if it costs me money.	0.78	0.32	4.67 (0.55)
Internal Market Orientation			
Informal Information Generation (4 items, Cronbach α = 0.79; AVE = 0.65).			
When at work, my immediate supervisor tries to find out what employees want from the university.	0.89	0.35	2.82 (1.21)
When at work, if my immediate supervisor notices one of my colleagues is acting differently to normal, they will try to find out if there is a problem that is causing a change in behavior.	0.89	0.35	3.02 (1.22)
When at work, my immediate supervisor tries to find out my colleagues' real feelings about their jobs.	0.91	0.35	2.75 (1.20)
Formal Face-to-Face Information Generation (3 items, Cronbach α = 0.81; AVE = 0.72).			
In my work unit, we have regular staff appraisals in which we discuss what employees want.	0.84	0.39	2.78 (1.23)
In my work unit, management meets with employees at least once a year to find out what expectations they have of their jobs for the future.	0.84	0.39	3.54 (1.23)
In my work unit, management interacts directly with employees to find out how to make them more satisfied.	0.87	0.40	2.75 (1.26)
Formal Written Information Generation (3 items, Cronbach α = 0 0.78; AVE = 0.69).			
In my work unit, we do a lot of work-related employee surveys.	0.82	0.39	2.36 (1.05)
In my work unit, we survey our employees at least once a year to assess the quality of employment.	0.83	0.40	2.79 (1.29)
In my work unit, we often talk with or survey people to identify influences on employees' behavior (e.g., unions, students, workloads, management styles).	0.85	0.41	2.28 (1.13)
Information Dissemination (3 items, Cronbach α = 0.86; AVE = 0.79).			
My immediate supervisor regularly meets with all staff to report about issues relating to the whole work unit.	0.92	0.39	3.30 (1.25)
My immediate supervisor regularly reports back to staff about issues that affect their working environment.	0.91	0.39	3.27 (1.28)
In my work unit, we have regular staff meetings with employees at all levels attending.	0.82	0.35	3.57 (1.24)
Information Responsiveness (3 items, Cronbach α = 0.89; AVE = 0.82).			
When my immediate supervisor finds out that employees are unhappy with their supervision or management, they take corrective action.	0.91	0.37	2.95 (1.20)
When my immediate supervisor finds that employees would like to modify their conditions of employment, they make concerted efforts to do so.	0.91	0.37	3.09 (1.15)
In my work unit, when employee feedback indicates that they are dissatisfied with the status quo, we change what we are doing.	0.89	0.36	2.60 (1.13)
Internal Marketing Practices			
Participative Decision-Making (4 items, Cronbach α = 0.41; AVE = 0.45).			
Decisions are made at the top around here.	0.70	0.39	1.74 (0.86)
Professors, Deans and other managerial staff tend to hammer out issues together in this university.	*−0.26*	*−0.14*	*3.59 (1.12)*
My immediate supervisor actively seeks my ideas all the time.	0.81	0.45	2.74 (1.28)
My immediate supervisor makes decisions without much regard for what their staff think.	0.78	0.43	3.26 (1.22)
Empowerment (4 items, Cronbach α = 0.94; AVE = 0.84).			
My immediate supervisor allows me to use my own judgment in solving problems.	0.91	0.27	3.84 (1.04)

(*continued on next page*)

Table 1 (*continued*)

Variables			
Scale and items: weights (w) and loadings (L) of latent constructs	Measurement Statistics		
	Std. Factor Loading	Weight	Mean (SD)
My immediate supervisor encourages me to take initiatives.	0.91	0.27	3.75 (1.17)
My immediate supervisor allows me a high degree of initiative.	0.93	0.28	3.87 (1.15)
My immediate supervisor trusts me to exercise good judgment.	0.91	0.27	3.98 (1.05)
Communication Formality (6 items, Cronbach α = 0.41; AVE = 0.26).			
If a rule does not cover some situation, we make up informal rules for doing things as we go along.	*0.60*	*0.38*	*2.59 (0.94)*
There are many things in my university that are not covered by some formal procedure for doing it.	*0.65*	*0.41*	*3.01 (1.09)*
Usually, my contact with my university involves doing things "by the book".	*0.54*	*0.34*	*3.46 (0.93)*
Contact with management and my immediate supervisor is on a formal, pre-planned basis.	*0.12*	*0.08*	*2.89 (1.11)*
I ignore the rules and reach informal agreements to handle some situations.	*0.57*	*0.36*	*2.92 (1.13)*
When rules and procedures exist in my organization, they are usually in written format.	*0.41*	*0.26*	*4.02 (0.84)*
Research (4 items, Cronbach α = 0.86; AVE = 0.48).			
Log of grants in the last five years.	0.73	0.38	12.10 (2.40)
Log of highest impact factor in the last five years.	0.61	0.32	1.66 (0.96)
Log of citations in the last five years.	0.74	0.38	5.19 (1.64)
Log of publications in the last five years.	0.70	0.36	2.75 (1.02)
Teaching (3 items, Cronbach α = 0.86; AVE = 0.51).			
Self-evaluation of teaching.	0.71	0.70	4.15 (0.72)
Higher degree completions in the last five years.	0.71	0.70	3.50 (7.03)
Average class size this semester.	*−0.03*	*−0.02*	*75.88 (254.77)*

Note: S.D. = Standard Deviation; AVE = Average Variance Extracted.
Items removed for the calculation of factor scores are shown in italics

Table 2
Final measurement model after factor scores are inputted.

Factor loading	
Internal Marketing Orientation 5 items. Cronbach α = 0.78; AVE = 0.67.	
Informal information generation	0.82
Formal face-to-face information generation	0.87
Formal written information generation	0.66
Information dissemination	0.84
Information responsiveness	0.87
Internal Marketing Practices 2 items. Cronbach α = 0.78; AVE = 0.82.	
Participative decision making	0.91
Empowerment	0.91
Public Service Motivation 4 items. Cronbach α = 0.84; AVE = 0.67	
Attraction to public service	0.80
Commitment to public values	0.73
Compassion	0.86
Self-sacrifice	0.89
Persistence 2 items. Cronbach α = 0.49; AVE = 0.65 (composite reliability = 0.79)	
Consistency of effort	0.81
Perseverance of effort	0.81
Research Performance 3 items. Cronbach α = 0.70; AVE = 0.65	
Log of grant money in last five years	0.72
Log of citations last five years	0.74
Log of publications in last five years	0.70
Teaching performance 2 items. Cronbach α = 0.86; AVE = 0.51	
Self-evaluation of teaching	0.71
Number of Higher degree completions in the last five years	0.71

was highest at 0.31 for Social Sciences. The goodness of fit (GOF) index of 0.412 suggested a robust measurement and predictive model (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). Generally, the models with a GOF less than 0.1 have a poor model fit, equal to or above 0.25, show a medium or acceptable fit, while a good model fit is a GOF equal to or above 0.36 (Wetzels, Odekerken-Schröder, & van Oppen, 2009, p. 187). The standardized root mean residual was 0.079, which was below the recommended cut-off figure 0.10 (Knock, 2018, p. 10), or the more conservative figure of 0.08 (Henseler, Hubona, & Ray, 2016, p. 12). Additionally the standardized Chi-square with d.f of 209 of 0.90, $p < 0.001$, was in the range of expected range of good model fit for PLS (Knock, 2018, p. 26).

4.2.2. Teaching performance

With the inclusion of teaching performance as a dependent variable, the results did not differ substantially. Support was again found for H1 (IMO → IMP, $\beta = 0.72$, $p < 0.01$), H3 (IMO → PSM, $\beta = 0.11$, $p < 0.01$, though the results differ across academic disciplines) and H4 (IMO → Persistence, $\beta = 0.14$, $p < 0.01$, again differences were found across academic groupings), H6 (IMP → PSM, $\beta = 0.13$, $p < 0.01$), and H9 (Persistence → Teaching, $\beta = 0.14$, $p < 0.01$).

Support was again not found for H2 (IMO → Teaching, $\beta = 0.08$, n.s, though differences occurred across disciplines), H5 (IMP → Teaching, $\beta = -0.03$, n.s, again differences occurred across academic disciplines), H7 (IMP → Persistence, $\beta = 0.05$, n.s, with some differences occurring across academic disciplines), H8 (PSM → Teaching, $\beta = 0.04$, n.s, though this relationship is positive for Arts and Law academics, $\beta = 0.21$, $p < 0.01$), and H9 (PSM → Persistence, $\beta = 0.06$, n.s, with some interesting differences across disciplines shown in the results).

Unlike the results for research, gender was not a factor in teaching performance, though there is a much bigger role played by experience ($\beta = 0.43$, $p < 0.1$), being in an elite university had a significant but less impact on teaching performance ($\beta = 0.10$, $p < 0.05$) and evidence was found for a teaching and research nexus ($\beta = 0.09$, $p < 0.05$), suggesting that excellence in performance in one area translates somewhat into the other. Overall the results provided a better prediction of teaching, R^2 being 0.28. Again, the highest level of prediction occurred in the Social Sciences ($R^2 = 0.39$), closely followed by Arts and Law ($R^2 = 0.38$). The GOF index of 0.386 was slightly less than the results for research, but still suggested a large, or strong measurement and predictive model.

4.3. Path results for academic disciplines

4.3.1. Research performance

A multi-group analysis across disciplines showed significant path differences ($p < 0.01$ for H4 and $p < 0.05$ for H8) occurred between Science and Social Science for H4, IMO → Persistence (Science $\beta = -0.21$, $p < 0.01$ and Social Science $\beta = 0.10$, $p < 0.05$) and also H8, PSM → Research (Science $\beta = -0.10$, $p < 0.01$ and Social Science

Table 3
Correlations between constructs.

	Internal Marketing Orientation	Internal Market Practices	Public Service Motivation	Persistence	Teaching	Elite	Gender	Experience	Research
Internal Marketing Orientation	**0.82**	0.72**	0.10*	−0.05	−0.14**	0.02	0.01	−0.09*	0.02
Internal Market Practices	0.72**	**0.91**	0.09*	0.03	−0.10*	0.13*	−0.03	−0.09	0.07
Public Service Motivation	0.10*	0.09*	**0.82**	0.06	0.02	0.00	−0.15**	0.01	−0.02
Persistence	−0.05	0.03	0.06	**0.81**	0.17**	0.06	−0.13	0.10*	0.14
Teaching	−0.14**	−0.10*	0.02	0.17	**1**	0.06	0.11*	0.43**	0.20**
Elite	0.02	0.13	0.00	0.06	0.06	**1**	−0.08	−0.04	0.20**
Gender	0.01	−0.03	−0.15**	−0.13*	0.11	−0.08	**1**	0.14	0.10*
Experience	−0.09*	−0.09	0.01	0.10*	0.43**	−0.04	0.14	**0.89**	0.21**
Research	0.02	0.07	−0.02	0.14*	0.20**	0.20**	0.10*	0.21**	**1**

Note: Square roots of average variances extracted (AVEs) are shown on diagonals in bold. Elite: Member of an elite university. Experience, years of academic experience. Research: (log of grant income, citations and publications in the last 5 years). Teaching performance (HDR completion, self-assessment and hours taught per week).

$\beta = 0.12$, $p < 0.01$). This is not the case with academics in Arts and Law, where the relationship is not significant ($\beta = 0.06$, n.s). This indicates that PSM is only a positive motivation for research performance in the Social Sciences.

As with Social Science and Science, between Science and Arts and Law, there were significant path differences ($p < 0.01$) for H4, IMO → Persistence (Science $\beta = -0.21$, $p < 0.01$ and Arts and Law $\beta = 0.04$, n.s). Significant path differences were also found for the relationship for Persistence to Research, where for Arts and Law the relationship is negative ($\beta = -0.14$, $p < 0.01$), compared to that in Science ($\beta = 0.15$, $p < 0.1$) or Social Science ($\beta = 0.17$, $p < 0.01$, the difference with Arts and Law is also significant at $p < 0.01$). This result is surprising and suggests that Arts and Law academics may tend to shift focus rapidly in research rather than persist with more lengthy and complicated projects, as is the case with their colleagues.

4.3.2. Teaching performance

Given the structural similarity of the model, significant differences in paths were again found between Science and Social Science for H4, and Science and Arts and Law. Surprisingly, for Science, the relationship of IMP → Teaching is negatively significant ($\beta = -0.14$, $p < 0.01$), unlike in Social Science, where there is no relationship ($\beta = 0.05$, n.s), both paths being significantly different ($p < 0.05$). This is also the case for Arts and Law, where there is a negative relationship ($\beta = -0.10$, $p < 0.05$), which does not statistically differ from that in Science ($p < 0.58$, n.s). Unlike the results for research performance, there were no significant differences in the paths of Persistence → Teaching performance across the disciplines.

4.4. Tests for the endogeneity of academic level

A single stochastic variation sharing showed that academic level does have an essential or significant effect on the overall results for research performance ($\beta = 0.43$, $p < 0.01$), higher academic levels being associated with more exceptional research outcomes, this relationship is also the case with teaching performance ($\beta = 0.33$, $p < 0.01$). Academic level as an endogenous variable was found to not significantly affect other constructs in the model, nor change the nature of the results. Its only other effect is to be correlated, as expected, with experience ($r = 0.17$, $p < 0.01$).

5. Discussion and conclusions

Our results found no support for a positive relationship between IMO and performance (Lings & Greenley, 2009; Sahi et al., 2013; Yanfeng et al., 2011) and for this in not-for-profit organizations, such as universities (Modi & Sahi, 2018; Sefora & Mihaela, 2016). A possible explanation is that these previous studies did not consider the diversity of employee roles and sub-cultures that exist in complex organizations like universities or professional services or creative firms. People in these types of organizations may resent being guided by management or contributing directly to the mission of the organization. The results for IMP and performance, also mirror this result, where unlike in previous studies (Grissom, 2012; Ionuţ et al., 2015; Quester & Kelly, 1999; Yafang & Ta-Wei, 2008) we found that IMP, in the case of teaching, had a negative effect on performance. It would seem also that academics in particular disciplines (Science, and Arts and Law) resent outside

Table 4
Results for research performance across disciplines.

Hypothesis	Path	All (N = 492)	Science (N = 172)	Social Sciences (N = 158)	Arts and Law N = 88)
H1	Internal Marketing Orientation → Internal Market Practices	0.72**	0.67**	0.73**	0.80**
H2	Internal Marketing Orientation → Research	−0.04	−0.06	−0.06	−0.12**
H3	Internal Marketing Orientation → Public Service Motivation	0.11**	−0.13**	0.10*	−0.17**
H4	Internal Marketing Orientation → Persistence	0.14**	−0.21**	0.20**	−0.04
H5	Internal Market Practices → Research	0.00	0.01	0.09*	0.07
H6	Internal Market Practices → Public Service Motivation	0.13**	0.16**	0.13**	0.15**
H7	Internal Market Practices → Persistence	0.05	0.06	0.09*	0.10*
H8	Public Service Motivation → Research	−0.02	−0.10**	0.12**	0.03
H9	Public Service Motivation → Persistence	0.06	0.10**	0.11**	−0.12**
H10	Persistence → Research	0.14**	0.15**	0.17**	−0.14**
Gender	Gender → Research	0.12**	0.10*	0.22**	0.03
Elite	Elite → Research	0.15**	0.14**	0.20**	0.29**
Load	Load → Research	−0.27**	−0.21**	−0.35**	−0.22**
Experience	Experience → Research	0.23**	0.28**	0.20**	0.22**
Prediction	R^2 Research	0.21	0.25	0.31	0.27

Note: *p < 0.05, **p < 0.01. Elite: Member of elite university. Experience, years of academic experience. Research: (log of grant income, citations and publications in the last 5 years). 74 respondents did not nominate an academic discipline.

Table 5
Results for teaching performance across disciplines.

Hypothesis	Path	All (N = 492)	Science (N = 172)	Social Sciences (N = 158)	Arts and Law (N = 88)
H1	Internal Marketing Orientation → Internal Market Practices	0.72**	0.67**	0.73**	0.80**
H2	Internal Marketing Orientation → Teaching	0.08	−0.00	−0.17**	−0.12**
H3	Internal Marketing Orientation → Public Service Motivation	0.11**	−0.13**	0.10*	−0.17**
H4	Internal Marketing Orientation → Persistence	0.14**	−0.21**	0.20**	−0.04
H5	Internal Marketing Practices → Teaching	− 0.03	−0.14**	0.05	−0.10*
H6	Internal Marketing Practices → Public Service Motivation	0.13**	0.16**	0.14**	0.15**
H7	Internal Marketing Practices → Persistence	0.05	0.06	0.09*	0.10*
H8	Public Service Motivation → Teaching	0.04	0.06	0.00	0.21**
H9	Public Service Motivation → Persistence	0.06	0.10**	0.11**	−0.12**
H10	Persistence → Teaching	0.14**	0.15**	0.13**	0.20**
Gender	Gender → Teaching	0.05	0.14**	0.16**	0.02
Elite	Elite → Teaching	0.10**	0.14**	−0.02	0.46**
Research	Research → Teaching	0.09*	0.04	0.16**	−0.01
Experience	Experience → Teaching	0.43**	0.41**	0.50**	0.46**
Prediction	R^2 Teaching	0.28	0.29	0.39	0.38

Note: *p < 0.05, **p < 0.01. Elite: Member of an elite university. Experience, years of academic experience. Research: (log of grant income, citations and publications in the last 5 years). Teaching performance (HDR completion, self-assessment and hours taught per week). 74 respondents did not nominate an academic discipline.

managerial influence, while with Social Science academics, with a better understanding of management theory, this may at least be tolerated.

IMO though, is not without benefits. Both sets of results suggest IMO helps build persistence with academics, which in turn benefits performance. This very much fits the view of strategy within a university as more about building capabilities than encouraging a direction. It may be simpler and more effective to build capabilities in complex service organizations, where people have diverse roles and jobs than to encourage them to follow a set strategy.

Appealing to the overall sense of purpose through the PSM of staff, unlike previous research (Brewer & Selden, 2000; Jensen & Vestergaard, 2017) was also not found to increase their performance. These results though do show that like past studies in higher education, the link between PSM and performance is problematic (Jin et al., 2018) and depends very much on the fit between the individual and organization in terms of belief in the organizational mission (van Loon et al., 2018) and confidence in the organization (Cooper & Reinagel, 2017; Miao et al., 2019). We would argue that the current stresses faced by universities at the time of this research, and the effects of this on their staff may well reduce both the belief in the mission and the confidence of the future of the organization. That is not to say that PSM does not matter; for some academic disciplines, notably social sciences, it is a significant predictor of performance.

The results thus show that across the board that broad marketing strategies for research and teaching performance are problematic. Instead, it is the persistence of staff and as mentioned for disciplines in the Social Sciences, a sense of a higher purpose or PSM which motivates performance in research for social scientists and in teaching for academics in Arts and Law. Any marketing strategy in a university must also consider the capabilities of its staff, rather than just the direction it wishes to take. The research shows the importance of experience and academic level as overall determinants of performance in teaching and research. Different strategies rather than one overall approach are best used in universities. Advocating persistence, for example, is best used in all disciplines other than Arts and Law. PSM seems only to be effective with social scientists in terms of research performance but can be used as an enabler for Arts and Law academics with respect to teaching. Building capabilities (Day, 1994; Hooley et al., 1998), or a complex set of skills such as persistence, may be more critical than any implementation of a grand plan in universities. Related to RBV are the academic resources of seniority (level and experience), which play an essential role in and are an asset for performance. The future strategy therefore in many universities may best be a combination of acquiring talent (assets) and building capabilities (encouraging persistence and where appropriate promoting a public service motivation).

The results also suggest that the role of strategy is to build capability (Barney, 2001; Kozlenkova et al., 2014), for competitive advantage, rather than having the right strategy implemented correctly. This very much supports the importance of RBT/RBV in complex service organizations. Though not hypothesized in this study, there is some evidence that Internal Market Practices, in the Social Sciences, may help encourage Persistence ($\beta = 0.09$, $p < 0.05$), which then encourages more considerable research ($\beta = 0.12$, $p < 0.05$), and teaching performance ($\beta = 0.11$, $p < 0.05$).

No research study is without its limitations, and this is no exception. First, we have relied on self-reported data for employee performance. This is understandable since privacy regulations in Australia and New Zealand make this data very difficult if not impossible for researchers to obtain. The results are, of course, limited to one sector and two countries. We do feel though that there is an essential contribution of the findings of this research in an under studied area of strategy implementation. This is the importance of motivating and involving the people who work within the organization.

The response rate in our survey was low at 8.2%, which suggests much needs to be done to improve in this area. We did try institutional support for our research but found that there were significant barriers from university management. Follow up emails and a small incentive (a prize) were also used. It may also be that in many universities academics are being over-surveyed and may be reluctant to complete yet another one. Nevertheless we found that those who did responded provided very detailed insights into their working lives as academics, including quite detailed comments at the end of the survey.

Future research may wish to extend these findings by examining how marketing strategies are implemented in other organizations and other industries. The focus though is likely to be other service organizations where the role of people in the successful implementation of strategy and their motivations to perform are more likely to be more salient. More significant investments in raising response rates may also be called for, particularly in areas involving employee research.

Research on marketing strategy has come a long way, and the links to marketing strategy and financial performance are well understood. That is, scholars are addressing the effectiveness argument. What is needed now in future research is to answer the how question in strategy implementation. This is something that involves people within the organization; something research on strategy implementation in the university sector can point to.

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