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Survival skills: the impact of change and the ERA on Australian researchers

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Survival skills: the impact of change and the ERA on Australian researchers

This paper reports findings from a study that focused on the experiences of research-intensive academics in relation to the Excellence in Research for Australia Framework. Interviews with academic staff at different career stages and across all academic faculties followed completion of a short survey in which respondents compared their publishing behaviour before and since implementation of the new Framework. Respondents were highly conscious that ERA had prompted a shift in publishing behaviour to meet often-competing demands of individual research interests, institution, discipline, and the international research community. Indeed, the study revealed academics to be positioned in contradictory ways in relation to their research and publishing, heightened by the instability of the Framework's assessment mechanisms. The experience of researchers up to and including the decision to abandon journal ranking provides valuable insights into the precarious and reactionary nature of academic research careers, and the ability of both individuals and institutions to negotiate the rapid rate of change.

Keywords: *Research careers; Excellence for research in Australia (ERA); research frameworks; research assessment*

Introduction

This paper focuses on the personal experiences of research-intensive academics in relation to the Excellence in Research for Australia (ERA) Framework. Developed by the Australian Research Council (ARC), ERA is part of a drive to produce greater accountability in the Australian research environment. From 2008 until May 2011, two linked mechanisms provided the framework for Australian-authored journal articles to be assessed in relation to quality and discipline. Their use was unique in the context of a national research assessment exercise (Bennett, Genoni & Haddow, in press, 2011). The first mechanism involved 1,238 Fields of Research (FoR) codes derived from the *Australian and New Zealand Standard Research Classification* (Australian Bureau of Statistics, 2008) and used to identify the field and sub-field of each research output. The second and perhaps most contentious element of ERA involved the quality ranking of scholarly journals.

As a significant component of the ERA framework, the ARC ranked almost 21,000 scholarly journals into four tiers (A*, A, B or C). The tier rankings reflected the perceived quality of journals as defined by the ARC and, by extension, the quality of the individual articles they contain. For example, an article published in a C-ranked journal was assessed as a low quality piece of academic work; whereas the same article in an A* journal would have been assessed as world-class academic work. The journal rankings process attracted much attention and criticism, particularly because of perceived opacity and inconsistency in some of the ranking decisions (Howard, 2008; Abelson, 2009; Genoni & Haddow, 2009; Smith & Middleton, 2009). However, the impact of assessment and change on individual researchers has received little attention.

The ERA framework is one of several research evaluation frameworks internationally, including the New Zealand *Performance-Based Research Fund (PBRF)* and the United Kingdom's *Research Assessment Exercise (RAE)*. These frameworks were designed with the intent of measuring the quality of research outputs and to place universities on a rating scale according to international research standing, linked explicitly to funding.

Redden's (2008) critique of the UK's RAE pointed to the gap between intended purpose and the actual effects of the framework on the university sector. The intended purpose was to create 'quality profiles' for research in various discipline areas within universities. Funding would then be allocated based on the level of measured quality in proportion to the number of

research active staff within a discipline area and the relative cost of research within each area (Dnes & Seaton, 2001; Redden, 2008). This was part of a broader effort to apply ‘market forces’ based on financial rewards as a means for encouraging improved quality and performance within the public sector (Thornton, 2008; Bennett, 2010). Despite its rationalist ideology, the RAE was criticised as a subjective assessment of quality that included loopholes and inconsistencies based on a non-transparent process (Williams, 1998). The overall effect was seen to concentrate funding within the small number of ‘world class’ institutions while there was a general decline in per capita funding for the rest of the UK university sector (Williams, 1998; Redden, 2008). This included the demise of individual academic careers for some who did not fit the model of ‘world class researcher’, and the demise of some university research units whose focus was deemed low priority or who lost high-performing researchers to universities seeking to improve their RAE return.

The New Zealand PBRF was based to some extent on the UK model. It replaced funding allocation based on student enrolments with funding allocation based on research quality and output (Smart, 2009). Hazledine and Kurniawan’s (2005) analysis of the effect on New Zealand University research performance revealed a range of subjective and “arbitrary” (p. 157) components in the assessment exercise that raised questions as to its representativeness and purpose. The authors also found little clear reasoning behind the need to replace the existing university funding model with the PBRF and the ‘problem’ it intended to solve. In fact, it has been argued that there may not have been a problem in the first place. Hazledine & Kurniawan (2005) suggested that the PBRF had little impact on research output and quality in terms of return on investment in the New Zealand university sector. In response to the altered funding allocation arrangements, they noted that universities altered their research priorities and actively sought out high performing researchers in order to maximise their PBRF result in subsequent assessment rounds. Both the UK and New Zealand examples indicate significant tradeoffs and a skewing of research activity and culture as a result of the frameworks. This resulted in universities adjusting their research priorities to maximise institutional gain from the process, essentially a shift toward a more inward looking university research culture.

As with the UK and New Zealand examples, much of the discourse relating to the Australian Framework has focused on sector-wide or discipline-specific issues including the assessment of research output (including creative research); the merits or failings of assessment processes including peer review, impact and esteem (Gorman, 2008; Howard, 2008; Vanclay, 2011); the impact of journal ranking on academic journals (Cameron, 2005; Redden, 2008; Genoni & Haddow, 2009; Rowbotham, 2010); and consequences for universities and/or particular disciplines (Smith & Middleton, 2009; Healy, 2010). This discourse has most often generalised the impact of the Framework across a wide variety of researchers with varying experience, status and perspectives. Taking a different stance, this study sought to bring increased awareness of the individual experiences and reactions of researchers at different career stages and in various disciplines. In this sense, our study presents a picture of the processes and strategies employed by individual researchers as they seek to negotiate a fickle research climate.

Approach

This study was undertaken at an Australian urban university, formerly an institute of technology, with approximately 42,000 students and 3,400 academic staff. The approach consisted of two components: completion of an email survey followed by an in-depth semi-structured interview.

A purposive sampling method was used to obtain representation across five university areas: Humanities, Science and Engineering, Business, Health Sciences, and Aboriginal

Studies. The sample targeted three research-intensive academics, from each area representing three career stages. The sample included academics with at least a 50% research employment allocation through research-only or research-intensive appointments or research funding that enabled the ‘buy out’ of duties such as teaching. The sample was identified from lists of research-intensive academic staff provided by research administrators and university heads of area on request from the research team. To minimise bias, a third party external to the university sector was employed to conduct the survey and interviews.

The focus on research-intensive academics was deliberate. Although the ARC has strongly maintained that the ERA framework is not designed to rate individual performance, institutions expect academics to achieve ‘high level’ outputs as defined by the framework and often within FoR codes identified as institutional priorities. The expectations for research-intensive academics are exacerbated in this regard. In addition, research-intensive academics are more likely to be employed on short-term contracts funded by competitive grants and fellowship programs, positioning them as particularly vulnerable. The team set a target of fifteen responses from the five university areas. Within this, the sample design targeted academics at different stages of their research careers. This included, from each area, one academic at the early career research stage (ECR, <5 years post-PhD), one mid-career (MCR, 5-15 years post-PhD), and one at the advanced career stage (ACR, >15 years post-PhD).

Potential respondents were approached by email and phone with an invitation to participate in the survey. Researchers who agreed to participate were sent a questionnaire to read and complete prior to their scheduled interview. The questionnaire included a range of questions relating to the individual researchers’ experience of ERA (see Appendix 1).

Both qualitative and quantitative data were gathered. Qualitative components included open-ended questions regarding qualifications, career stage and other demographics; support and information sought and received in relation to ERA; and preferred publication outlets for research. The survey also gathered individual perspectives regarding the ERA process and how it related to the respondent’s research and publication. Quantitative questions rated the factors that researchers may consider when deciding where to publish their work before ERA and currently. Respondents’ voices are integral to this paper. We present their voices within the flow of the article; aligning quotes to academic level or university area where this information is pertinent to the text.

Identification and rating of publication choice factors

Publication decision-making factors were devised using a pilot study based on a discrete convenience sample of ten academic researchers at the institution, separate and prior to the main study presented here. An initial list of possible factors, generated by the research team, was shown to a range of research academics with a request to add or change items in the list. These academics were excluded from the final sample. The research team collated the responses and identified a list of eleven key factors that researchers may consider when deciding where to submit their work, shown as follows in alphabetical order:

- Author’s citation potential
- Average time between submission and publication of manuscript
- Blind review process present
- Esteem / profile of the publication
- Internal (institutional) rewards and recognition (e.g. promotion, awards)
- Publication acceptance rate
- Publication impact factor
- Rank of journals (A* and A) – *for journal publications only*
- Ranked conference – *for conference publications only*

- Relevance of the audience (targeted readership)
- Relevance of the research to the publication

This list was incorporated into the final survey. Respondents were asked to distribute 100 points between the eleven factors, repeated for each of eight publication types. The number of points allocated to each factor indicated the importance of that factor to the respondent. Respondents were requested to conduct this exercise firstly in terms of their decision making prior to the implementation of ERA and then in terms of how they selected publications within the context of ERA. Differences in the summed group points allocation between the pre-ERA and ERA contexts were analysed, as were differences in points allocation according to career stage.

Qualitative responses were analysed using NVivo 8.0 (QSR International, 2009). Interview data were coded independently by the third party and by the research team, then compared and discussed before forming the final codebook for analysis. Quantitative rating based responses were analysed using the SPSS 17 analysis package (IBM, 2008).

Following the announcement in May 2011 to abolish journal rankings as a component of the ERA framework, survey respondents were invited by email to comment on this decision and its impact on their future research activities. The qualitative responses were manually collated and coded by the research team for inclusion in this paper.

With a purposive target sample of fifteen, a total of 42 research-intensive academics were initially approached across the five university areas. Thirteen academics agreed to participate and completed both the survey and interview process. The distribution of respondents across areas is indicated in Table 1. The remaining 29 researchers did not participate for various reasons including no longer having more than a 50% research component to their employment; being too busy to participate; being on leave; or simply not responding to requests. Table 2 outlines some general demographic characteristics of the sample. While the sample had a higher proportion of females, there was a fairly even spread of tenure types in the sample. Less than 40% of respondents held tenured positions, consistent with the high number of research-intensive academics on short-term, grant-based funding.

Table 1: Sample by university area and career stage (*n*)

University Area	Academic career stage (<i>n</i>)			TOTAL
	Early	Mid	Advanced	
Aboriginal Studies	2	*	*	2
Business	1	1	1	3
Health Sciences	1	1	1	3
Humanities	1	1	*	2
Science and Engineering	1	1	1	3
TOTAL	6	4	3	13

*Nobody available at the time of the survey

Table 2: Sample demographics (*n* = 13)

Gender	n	%	Age (yrs)	n	%
Male	5	38.5%	18-25	-	-
Female	8	61.5%	26-35	2	15.5%
			36-45	3	23 %
Tenure	n	%	46-55	5	38.5%
Continuing	5	38.5%	56-65	3	23%
Fixed term	4	30.75%			

Contract	4	30.75%	
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Findings and discussion

Findings are reported in three broad sections. We focus first on ‘information gathering’ in which researchers engage as they negotiate changes in the research climate. We move next to responses that relay the individual experience of research-intensive academics, providing a picture of individual understandings and behaviours. Finally, we report the views of respondents in relation to the abolition of journal rankings and the projected impact of ERA on future decision-making.

The individual experience of research-intensive academics

Information gathering: negotiating change

The survey included several open-ended questions relating to ‘information gathering’ in relation to the ERA (Appendix 1). Respondents indicated a wide range of information with the most common being the need for up-to-date information on journal rankings ($n=7$). Other information needs included clarification of the relationship (in terms of strategy) between ERA assessments and competitive grants; research directions and collaborations in terms of enhancing ERA status; and plain language examples of ERA processes, statements and outcomes. In relation to where they expected to find the information they needed, twelve of the respondents identified their institution, mostly through their university areas. Six respondents also expected to be able to locate information at external sources such as the ARC website.

After indicating the type of information they needed and where they expected to locate it, respondents were asked to identify what information had been provided and its source. Of the eleven who responded to these questions, nine indicated that most of the information provided related to journal rankings and FoR codes. All ($n=11$) indicated that the major source of information was their institution. This was a combination of the university research office and area-specific heads of research. Some academics ($n=4$) also received information directly from external sources such as the ARC and other university websites and contacts. Two reported receiving information from their relevant discipline bodies and networks. While the information provided had met some needs, survey responses identified crucial gaps relating to implications of research collaboration, implications of ERA assessment especially in relation to the early career researchers, practical ‘how to’ advice, and the status of competitive grants within the Framework.

Overall the survey respondents reported frustration with inconsistent and patchy ERA information from otherwise reliable sources. This was seen to be a function of the rapidity of change in the Framework between 2008 and 2011, which included changes to and the eventual demise of journal rankings, changes to ERA assessment timeframes, and changes in the FoR codes allocated to individual researchers. Respondents reported that constant change made it difficult to grasp the situation at a given point in time, and difficult to plan ahead with any certainty. As a consequence, it was difficult to develop a clear strategy in relation to research activities. This experience aligns with that reported elsewhere (Rowbotham, 2011; Thomas, 2011). The comments and concerns of the survey respondents are reminiscent of problems associated with the RAE and PBRF frameworks (Hazledine and Kreniawan, 2005; Redden, 2008).

Where to publish?

Respondents were asked to note the outlets they considered important in relation to publication of their research. Responses included books, book chapters, refereed and non-refereed conference papers, journal articles, conference abstracts and reports. All thirteen respondents identified refereed journals as the principal outlet for their scholarly work. A few also considered books ($n=3$) and book chapters ($n=2$) to be important, while one academic indicated the importance of articles in industry magazines.

After indicating their preferred research publication outlets, respondents were requested to allocate a total of 100 points across a range of eleven factors they may take into account when deciding where to publish their research before ERA and in the 2010 ERA context. The total points allocated to each factor by all respondents provided an indication of group consensus for each factor.

As the dominant outlet, journals provided a barometer for how ERA has influenced research publication. Figure 1 details the summed points independently allocated to each factor by the total sample group for the pre-ERA and ERA journal publication contexts. The pre-ERA context indicates that the factors considered most important for selecting a journal were 'publication relevance' (relevance of the research to the journal), 'audience relevance' (relevance of the research to the journal's audience), publication impact factor, and author citation potential. Figure 2 illustrates the percent change in point allocation between the two journal publication selection contexts. For journal articles it is clear that between the pre-ERA and ERA contexts the importance of 'relevance to the audience' is considerably reduced (from 209 to 124 points). The points allocated to 'ranked journals' increased almost five-fold (44 - 249), reflecting the institutional focus on this factor. The esteem of the journal also increased in importance (84 - 134) as a decision factor. This allocation of points was in contrast with interview comments on the same topic. During interviews, respondents were much more likely to report that they would rather ignore the journal rankings and considered them to be flawed.

The importance of the acceptance rate of the target journal was reduced between pre-ERA and ERA (from 50 - 20), perhaps reflecting the emphasis on targeting highly ranked journals over the likelihood of gaining timely publication. The relevance of the research to the selected journal remains relatively unchanged, possibly because this is a key determinant of whether the research paper will be accepted for review and potential publication.

Surprisingly, both the importance of journal impact factor (from 180 - 140) and the potential to be cited as an author (129 - 49) were considerably reduced between the pre-ERA and ERA contexts. This is a counter-intuitive response given the ERA framework's intent to measure quality and esteem of published research. Though they have their own foibles (Cameron, 2005; Calver, Wardell-Johnson, Bradley, & Taplin, 2010), journal impact factors and author citation rates are commonly used, international measures of quality and esteem. The reduction in point allocation to these factors may be an artefact of a want to allocate more weighting to journal ranking. The significant reduction in 'relevance of the audience' rating may also relate to this shift in focus to journal rank.

Overall, the exercise appears to have prompted respondents to rationalise their decision-making processes for the selection of journals for their research. Respondent comments confirm that drivers for publication have shifted away from dissemination to a relevant audience and towards maximising externally assessed performance. The findings add an individual dimension to the observations of Williams (1998), Redden (2008) and Thornton (2008) regarding a change in academic research culture from outward-focussed social good

towards an inward-looking, rationalist model. This arguably encourages (or necessitates) research and publication for individual gain irrespective of its broader relevance and independent of the traditional university mission.

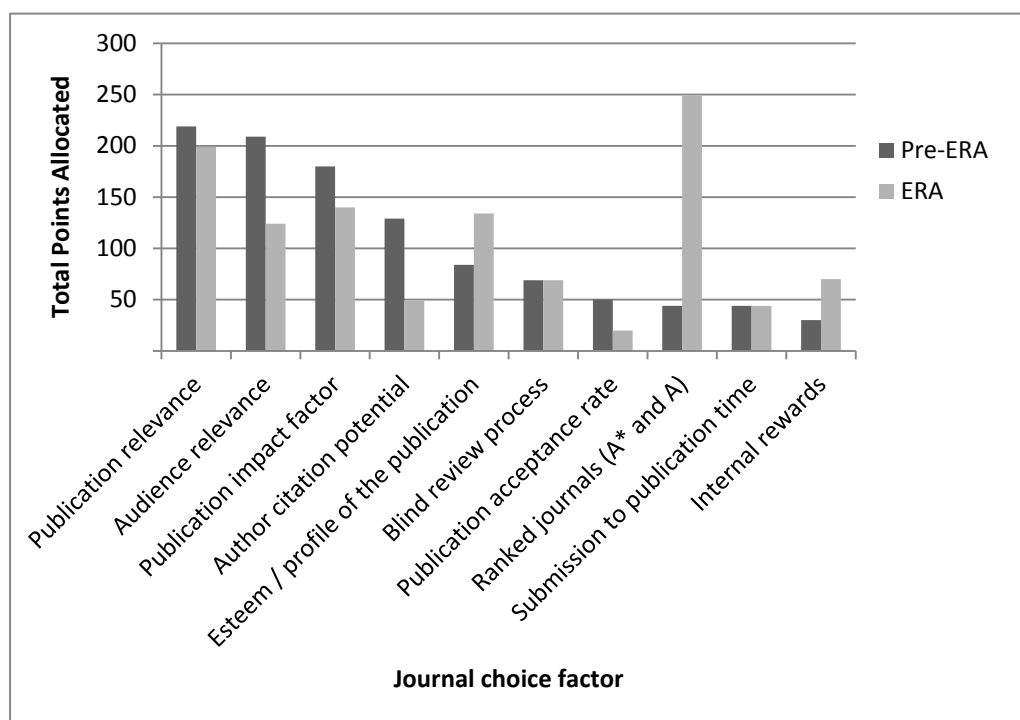


Figure 1: Rating of factors influencing journal choice for the pre-ERA and ERA contexts

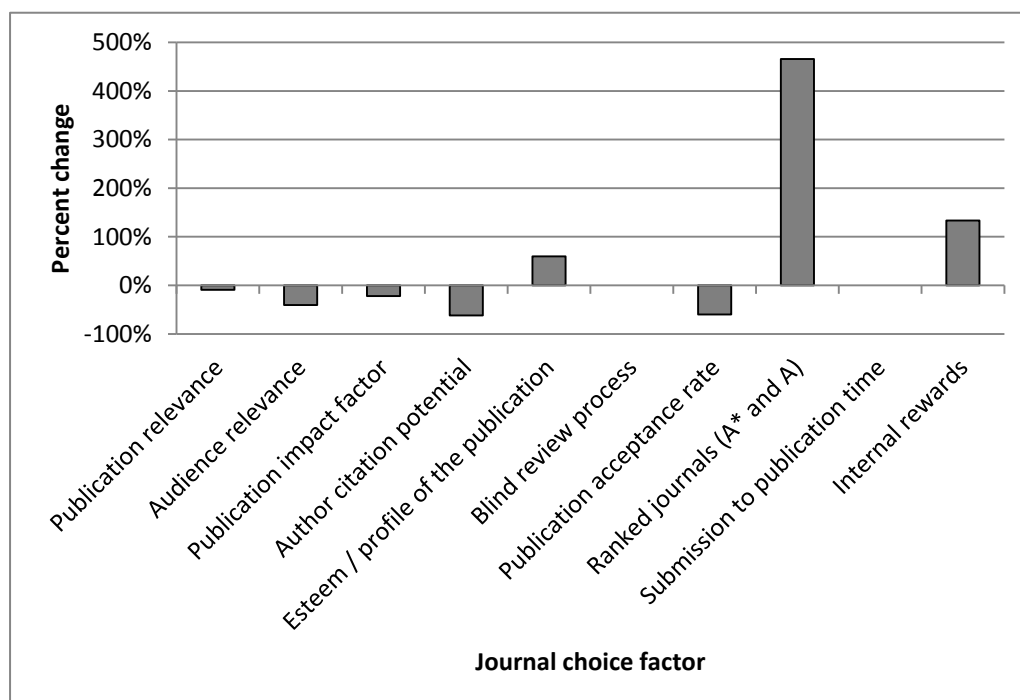


Figure 2: Change in rating of factors influencing journal choice between pre-ERA and ERA contexts

Figure 3 illustrates the mean change in rating of the eleven journal choice factors between pre-ERA and ERA rankings categorised by academic career stage. Although less representative of group consensus, means were used to manage the different sample sizes within each group. Figure 3 suggests that ECRs focus on journal rankings, publication time frames and internal rewards more so than their academically senior counterparts. The results suggest a trade-off, with ECRs allocating less importance to journal impact factor, author citation potential, and blind review process and audience relevance. The ECR response appears reactionary and inconsistent. It is reactionary in the overwhelming shift to ERA journal ranking as central to journal choice, influenced by the ‘journal rankings’ focus of information provided by the university. It is inconsistent because impact factor, blind review and author citation are commonly accepted, international and long-standing measures of academic quality and esteem for both journals and authors. In contrast, MCRs and ACRs allocated more points to journal impact factor and blind review process, perhaps indicating a more confident and more informed approach. The reactionary response of ECRs was further illustrated during the interviews, where ECR respondents talked of stress and uncertainty, and the fear that journal rankings would be used to assess individual performance.

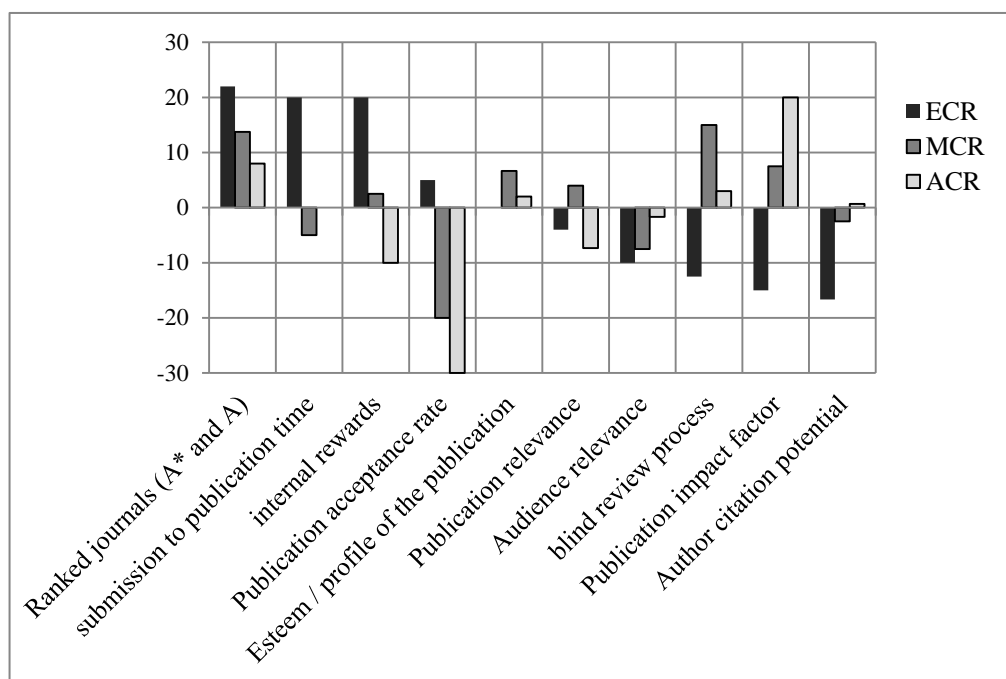


Figure 3: Average change in journal choice factor: importance point allocation by career stage

Publish or perish: Individual perceptions and career stages

Despite assurances that the ERA Framework was not designed to measure or rank individual performance, CEO of the Australian Research Council, Margaret Sheil, warned that it would come “to have bearing on research assessments of your work very quickly and very directly” (Howard, 2008, p. 4). In line with Sheil’s observation, our study revealed widespread concern about the use of ERA data to rank individual performance with “league tables [which provide] a quantitative measure of an academic, and do not necessarily reflect the quality of research” (ACR). This concern was expressed at all academic levels: “it is a very individualised system

and as a researcher it feels like you are being personally ranked” (ECR); “It’s how we are measured in a serious academic career” (MCR); “I’m worried about what ERA will be used for” (ACR).

Particularly vulnerable were respondents at the start of their careers. One ECR reported feeling simply “quite confronted”, and more senior colleagues agreed that “depending on where you are in the [academic] hierarchy, ERA could have a severe impact” (ACR); academics “without a good publication record will be made redundant” (MCR). Two respondents talked openly about their own vulnerability, one of them focusing on the impact of ERA in relation to “building a research profile for promotions” (ECR), and another basing all publication decisions on impact factor and/or rank: “If the output is not recognised, there is no point in doing it. I cannot afford to double handle research” (MCR). This comment reflects a shift toward commodification of research as part of a wider trend toward university corporatisation based on what many consider to be unreliable metrics (Cameron, 2005; Howard, 2008; Thornton, 2008; Bennett, 2010) These concerns are similar to those played out as a result of the RAE in the United Kingdom (Redden, 2008).

Most of the respondents in our study reported a significant shift in their publishing behaviour, described by one respondent as an “A* addiction”. This was particularly prevalent among academics whose disciplines do not have a strong citations culture. For some Humanities academics, for example, the decision was simple: “journal rankings determine my choice of journals” (ECR). Other disciplines had more than one point of reference, and researchers were attempting to balance these: for example, “I look at impact factor first, then, if I’m having difficulty publishing in a high impact factor journal, I look at ERA rankings for other journals” (ECR, health sciences); I place “less emphasis on citation potential, because now the emphasis is on what is expected for ERA” (ECR, science and engineering). There was also comment, particularly among the ACR cohort, that journal rankings were simply part of the latest raft of research measures and would change. None of the respondents predicted the abolition of the rankings.

One of the potential impacts of a quality measure such as journal ranking is to prompt self-selection (or de-selection). Several respondents commented that they felt overwhelmed by the prospect of publishing in A and A* journals, knowing that they would be competing with much more senior colleagues for limited opportunities. One respondent described a process of self-review before deciding where to publish: “Depending on the quality of my output, I choose journals that are as highly ranked as possible” (MCR). Competition aside, respondents were well aware of the need for student and new researchers to be strategic. As one ACR academic in health surmised: “I make sure to submit to A and A* journals [and] I encourage my students to submit papers to A and A* journals”.

Despite general acknowledgement that there was “a lot more pressure to publish and produce in A* journals” (MCR), there was also a sense of rebellion. The “enormous queues to sit in wait” for publication and “the status of being published in a high-ranking journal” were countered by acknowledgement of the discrepancies between Australian and other (often discipline-based) rankings, and the logistics of a veritable stampede of academics racing towards a small number of journals ranked as being the best: “the fixation with A and A* journals is stupid. We can’t all publish in these journals!” (ACR).

Influence on future research practices

In this final section we report the views on research in relation to journal rankings, the abolition of journal rankings and the projected impact of ERA on future decision-making. The overriding theme to emerge from this component of the study was academic freedom, which was raised at the individual, institutional and sectoral levels.

When asked about whether and how ERA might influence their future research practices, two of the thirteen respondents said they were already performing to a high standard, with research published in esteemed journals, and had no need to change their research activities. However, eight respondents reported that ERA would have a significant influence. Many comments from the more senior academics focused on concerns for the institution or the higher education sector, including inter-university competition. Voicing “a danger that ERA will distort the whole research culture” (ACR, business), respondents were concerned that university rankings would “put pressure on universities to specialise” (MCR, business) or to “merge research areas” (ECR, Aboriginal studies); and another voiced concerns that rankings may “make it difficult for universities to retain what is distinctive about them and their research ... a narrowing of the scope of research” (ECR, Aboriginal studies). Some respondents were concerned that teaching academics would be disadvantaged, while others were concerned that non-productive colleagues in research would be ‘bad’ for the institution, raising the spectre of the less savoury, career-destroying effects of the UK’s RAE (Redden, 2008). This was also reflected in comments expressing particular concern among the ACR cohort regarding “intense” competition between researchers and universities, and “bidding wars” for researchers “who have good CVs”, all of which may lessen the ability of universities to build their research capacity and standing, particularly in new research areas.

Respondents also felt that ERA discourages collaboration, multidisciplinary and applied research, and certain types of publication; and that ERA will narrow the focus of future research funding. Respondents noted an increase in institutionally focussed research strategies that target goals such as a respectable rank in the various university ‘league tables’, similar to the response documented in the UK and New Zealand (Hazledine & Kreniawan, 2005). These strategies were thought to run counter to the notion of a university as an entity that exists for the benefit of the wider community.

Community and audience emerged as a common theme, with respondents stressing the importance of communicating their work outside of the academic readership: “our work should be measured by the quality of what we do and what our research is used for in terms of how we engage with the real world” (ACR, business). Many respondents felt that the increased focus on journal outputs limits dissemination of their work, as a result of which “non-standard audiences are marginalised”. Despite their concerns, most respondents reported adjusting their research in line with each change. The ACR quoted above conceded that since implementation of the ERA, “I am more likely to concentrate on publishing in ‘quality’ journals, whereas in the past I was more concerned with my audience”. This reflects the survey results discussed earlier and shown at Figures 2 and 3. Respondents stressed concern that “academics will be driven by outputs”. More than half of those interviewed commented that their research activities would continue to change in line with new expectations.

Academic freedom was much talked about within the sample, with one respondent describing the Framework as “a narrowing process that impedes on academic freedom”. The “narrowing process” aligns with previous discussion about distinctiveness and institutionally focussed research strategies (Thornton, 2008; Bennett, 2010), but it was also felt on a personal level as a “political process” and “an insult to academic freedom”. The passion that drives much quality research is certainly impacted by rapid and unforeseen change, as researchers are torn between dislike of the assessment process and the need to continually adjust their activities to ensure positive assessment results. As one respondent explained, external measurement “takes the quality out of research and leads to less creative thinking” (ECR, Aboriginal studies).

Responses to the question of the potential impact of ERA were also often personalised and again included notions of rebellion. Of particular concern was the potential impact on early career researchers, who “will find the ERA process excruciating. If they don’t reach the

expected standard, they will be out” (ACR). One ECR noted, “If ERA was to influence my research I would look towards getting out of the academy”. The majority of the rebels were among the ACR cohort, and this may in part reflect less precarious employment as well as academic standing and confidence. As one ACR respondent explained, “I am not seeking a promotion! I publish in journals that are specific to the area of research” (science and engineering). Others were equally defiant: “I refuse for my research to be driven by ERA” (business); “I don’t want the ERA ‘push to publish’ to influence my integrity. The research comes first” (science and engineering).

Response to the demise of journal rankings

The demise of journal ranking as a component of the ERA framework was formally announced on May 30, 2011 (Commonwealth Government, 2011). This prompted us to contact each respondent by email the same day, sending a copy of the media release and inviting responses to a single question: ‘In terms of your research and publication, briefly state what this decision means to you’. Eight responses were received and are summarised to follow.

The abolition of journal rankings was received with a sense of relief, with frustration at the financial and emotional cost associated with the exercise, and with suspicion and confusion as to what would come next. A commonly expressed view was epitomised by an ACR from science and engineering, who wrote simply: “I am pleased to hear that sense has prevailed”. The sense of relief was commonly linked with the ability to write for a relevant audience: “Researchers were encouraged to publish in A/A* journals even though these may not be the appropriate journals to publish in for a particular discipline” (ACR, health sciences). Similarly, a humanities MCR reported: “now I can target a journal that is relevant to my work ... and not massage my research to fit the journal ranking system”. ECR respondents were also pleased that they could now submit research “to the most relevant journal for consideration without feeling the pressure to submit to highly ranked journals” (science and engineering). An ECR in the area of business similarly felt “more confident that decisions on manuscript submission can be made on the basis of the suitability of a particular outlet and the potential readership”. Some respondents indicated that there would be little change to their research and publication because there had been little journal choice within their discipline anyway, and in some cases no A or A* journals.

Respondents revealed tension between research and knowledge dissemination priorities and ERA requirements. As one MCR respondent pledged, “As usual, I will continue to do the best work I can, and publish in the best journals I can...”. How the ‘best journals’ are identified as a measure of quality remains unclear. The changes announced in May 30 suggest that the new evaluation process may be significantly more subjective for the next ERA exercise in 2012. Research Evaluation Committees (RECs) will be presented with tables that indicate, for a particular FoR and in descending order of frequency, the list of journals in which people at each institution have published. The Committees will subsequently make “expert judgments” to determine each journal’s esteem and quality. Institutions will also have more flexibility, with the ability to code an article differently to the journal in which it is published if the journal’s fields of research codes do not represent 66% or more of the content. This will be vital for institutions as they seek to maximize their results in the next exercise, and there was broad recognition among respondents that the negotiation would occur at every level, with one MCR predicting “... major haggling between ... individual schools over (former) A and A* papers”. There was also a distinct sense of fatigue from many of the respondents. As one MCR in health sciences commented, “Given the instability in how ERA rank outputs what guarantee do we have that they won’t change their mind again?”

Ultimately, the use of a volatile and non-transparent framework appears to have caused significant stress and concern amongst individual researchers, particularly those at the start of their careers and those whose employment is also unstable.

Closing comments

Research quality mechanisms have changed considerably in recent times and look set to continue an uncertain evolutionary path as the corporatised higher education sectors of many countries attempt to quantify research quality. This comes as governments and institutions respond to the internationalisation of higher education and its place as a source of export earnings that must be managed, monitored and marketed just as any other commodity. However, as Blackmore and Sachs warned over a decade ago, “the dynamic between markets and the new managerialism narrows what constitutes success to that which has monetary value and which also can be quantified” (2000, p. 2). The results of this are seen in processes that enable institutions to be ranked and research quantified without assessing social impact. Several past authors have noted that the time and expense required to conduct such an assessment may not be justified, especially if it takes time and money away from research, skews research away from the greater public good, generates unfair prejudice against individual researchers within the system, and is significantly flawed (Hazledine & Kurniawan, 2005; Redden, 2008; Thornton, 2008).

Minister Carr commented that his decision to abolish the journal rankings was partly due to the fact that “their existence was [causing] ill-informed, undesirable behaviour in the management of research” (Rowbotham, 2011), and there can be no doubt about the impact of this ‘undesirable’ behaviour at the individual level. More than this, the findings of this study demonstrate that individuals are keenly impacted by the change and uncertainty that characterises research in the higher education sector. Amidst widespread concern about the principles underlying research assessment, researchers find themselves in conflict between their beliefs and actions, constantly changing their research and publication activities to meet new demands. More than a decade ago Smith and Webster (1997) suggested that the qualities to survive in the modern university might need to include the traits of ironical, instantaneous and intuitive. Blackmore and Sachs (2000) later suggested that these qualities “need to be supplanted with the extra dimensions of being irreverent and inventive” (p. 15). Based on the findings of this paper, survival as an academic researcher in Australia might now necessitate a thick skin, entrepreneurial mindset, and the adoption of multiple selves. It is possible that these survival skills will need to be offered as an integral component of research training and professional development.

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Appendix 1: Summary of survey questionnaire

Questionnaire Section	Questions and information gathered
Section 1: Demographic information (fixed item)	<ul style="list-style-type: none"> –Title, gender, age, tenure type, –years since PhD completion, –years at institution
Section 2: ERA information and support	<ul style="list-style-type: none"> –Have you actively sought information about the ERA process? (yes, no) –If yes, what sort of information ...? (open) –If no, why.... (open) <hr/> <ul style="list-style-type: none"> –What sort of information (content) and/ or support about the ERA process has been provided to you so far? (open) –Where did this information and/or support come from? (open) <hr/> <ul style="list-style-type: none"> –What types of information and/ or support for the ERA process do you need (open) <hr/> <ul style="list-style-type: none"> –Where do you expect to find information and / or support about the ERA process? (open)
Section 3: Publication and decision making	<ul style="list-style-type: none"> –What type of publications do you most value in terms of publishing your research? Why? (open) <hr/> <ul style="list-style-type: none"> –Pre-ERA Publication choice factor rating exercise. Allocate 100 points across 11 factors, repeat for 8 publication types. (fixed item) <hr/> <ul style="list-style-type: none"> –ERA Publication choice factor rating exercise. Allocate 100 points across 11 factors, repeat for 8 publication types. (fixed item) <hr/> <ul style="list-style-type: none"> –Can you summarise the reasons for similarities and differences between previous and current factors that influence your decision about where to publish your work? <hr/> <ul style="list-style-type: none"> –Do you think ERA will influence your future research practices? –(yes, no) –If yes, how? (open) –If no, why not? (open) –How do you feel about that? (open) <hr/> <ul style="list-style-type: none"> –When you think about the ERA, do you consider there to be any significant challenges for the university sector as a whole? (yes, no)

	- If so, what are they? (open)
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