

## **DEVELOPING RESEARCH WILLPOWER AT ONE SOUTH AFRICAN UNIVERSITY AS A STRATEGY TO TRANSFORM HIGHER EDUCATION INSTITUTIONS: EXPERIENCES OF THE MENTEES**

Kariyana Israel\* & Marongwe Newlin

### **ABSTRACT**

Universities are mandated to be institutes thriving on three pillars namely teaching and learning, research and community engagement. Higher education institutions (HEIs), however, value and prioritise these pillars differently and consequently implement them on different scales in their day-to-day operations. HEIs also engage postdoctoral research fellows to partly drive their research operations while developing these fellows to be fully-fledged independent researchers. The objective of this study was to ascertain the extent to which developing research willpower at one South African university was a strategy to transform higher education institutions based on the experiences of two fellows. A case study research design within a mixed method approach was utilised. Stratified random sampling was used to identify the 37 participants for the study. Data was gathered using questionnaires, individual face-to-face interviews, focus group discussions and document analysis. It emerged that developing research willpower in HEIs is a daunting but possible process which is masked by environmental, socio-economic and technological factors. Participants pointed out to existing constraints and possible opportunities to curtail the prevailing negative institutional research culture.

**Keywords:** Higher education institutions, research culture, research willpower, teaching and learning, transformation, universities

### **INTRODUCTION**

Self-control is at the root of much that is good in people and society. It fosters the ability to stay on task when our minds would rather wander. It allows people to restrain momentary desires to reach cherished long-term goals. It allows people to overcome selfish impulses and for groups of people to work together. It is thus no surprise that it relates to such desirable things as health, happiness, academic achievement, financial stability, and low levels of drug dependence and criminality (Baumeister, Heatherton & Tice, 1994; Duckworth & Seligman, 2005; Moffitt et al., 2011). Self-control enables a person to restrain or override one response, thereby making a different response possible (Baumeister, Vohs & Tice, 2007). A major purpose of the self is to exert control over responses, ranging from overt behavior to inner processes. As the agent or executive function, the self is responsible for acts of volition, including making choices, overriding incipient responses, being active instead of passive, and replacing one response with another (Duckworth, 2011; Schmeichel, Vohs & Baumeister, 2003). Considering that ‘none of South Africa’s universities can confidently say that they have transformed or have engaged with the challenges of transformation in an open, robust

and self-critical manner' (Soudien et al., 2008, p.117), it then becomes a reality that it is through stakeholder self-control that acceptable transformation standards become achievable.

Self-control refers to the capacity for altering one's own responses, especially to bring them into line with standards such as ideals, values, morals, and social expectations, and to support the pursuit of long-term goals (Baumeister et al., 2007). It may also be linked to emotional problems, school underachievement, lack of persistence, various failures at task performance, relationship problems and dissolution, and more (Baumeister et al., 2007). Some findings have suggested that active self-control can be costly in the sense that it depletes some inner resource, akin to energy or strength. When this resource is depleted, the self's performance of its functions is often impaired (Schmeichel et al., 2003). With university staff having multi-tasks that range from being academic-oriented to research oriented, it would only become possible to successfully attain both or all based on one's ability to balance themselves in terms of controlling their energy expenditure.

Many writers use the terms self-control and self-regulation interchangeably, but those who make a distinction typically consider self-control to be the deliberate, conscious, effortful subset of self-regulation (Duckworth, 2011; Baumeister et al., 2007). Folk discussions of self-control have long invoked the idea of willpower, which implies a kind of strength or energy (Baumeister et al., 2007). Some complex thinking requires active guidance by the self, but simpler mental activities do not. Depletion of the self's regulatory resources should therefore impair the former and not the latter (Schmeichel et al., 2003). By the way, mastering the research process is truly an intimidating task which many people tend to avoid. In higher education institutions' (HEIs) settings, it demands massive strides towards self-control for many staff who would be willing to engage in research while fulfilling other responsibilities.

We argue that universities are mandated to be institutes thriving on three pillars namely teaching and learning, research and community engagement. Higher education institutions (HEIs), however, value and prioritise these pillars differently and consequently implement them on different scales in their day-to-day operations. Globally, deliberations about transforming HEIs dominate contemporary literature. Considering that human drive is the epicentre of everything, we sought to deliberate on the feasibility of transforming a traditionally non-intensive research institute that was 'located in under-developed, impoverished rural areas with little economic infrastructure for supporting local development and university expansion' (Jansen, 2003, p.5) premised on participants' preparedness to exert the required levels of self-control to successfully embark on this personal and institutional developmental journey. This study, therefore, was two-fold: Firstly, it sought to establish the implications of the intervention strategies that were undertaken to turnaround a non-research-intensive campus and, secondly, ascertain the manner research willpower could be developed as a strategy to transform historically disadvantaged higher education institutions in South Africa.

## **LITERATURE REVIEW**

Self-control – known colloquially as willpower and related to self-regulation (Robinson, Schmeichel & Inzlicht, 2010) – refers to the set of mental processes that allow people to override thoughts, emotions, or behaviors that compete with their central goals (Inzlicht & Berkman, 2015). When people expect to have to exert self-control later, they will curtail

current performance more severely than if no such demands are anticipated (Muraven, Shmueli & Burkley, 2006). Crucially, the same resource is used for many different tasks, including regulating thoughts, controlling emotions, inhibiting impulses, sustaining physical stamina, and persisting in the face of frustration or failure. If that is correct, then this resource is a general-purpose asset that functions broadly in widely assorted acts of self-control and executive functioning, as opposed to being specifically earmarked for a particular response (Schmeichel et al., 2003).

At its heart, self-control is instigated when two competing desires or response tendencies compete for behavioral enactment (Inzlicht & Berkman, 2015). People can exert self-control despite ego depletion if the stakes are high enough. Offering cash incentives or other motives for good performance counteracts the effects of ego depletion (Muraven & Slessareva, 2003). Evidence for the limited resource model takes the form of decrements in self-regulatory performance as a function of prior exertion (Schmeichel et al., 2003). Thus, inducing attractive incentives towards research might motivate staff to go the extra mile and work towards acquainting themselves with the crux of research.

Muraven and Slessareva (2003) found that participants could maintain high levels of control if they were offered incentives to do so. Similarly, incentivizing control by re-framing temptations as tests of willpower cancels depletion (Magen & Gross, 2007). Rewarding effort or linking it to a valued aspect of identity, then, undoes the reductions in control due to previous task exertion. Adding an unrelated reward in the period between self-control challenges can also knock out effects of depletion. Thus, receiving a surprise gift (Tice, Baumeister, Shmueli & Muraven, 2007), or affirming some core value (Schmeichel & Vohs, 2009) similarly prevent the reductions in self-control thought to be produced by the depletion of some limited resource. Understanding self-control has potential applications across a broad spectrum of human behavior. At the positive end, self-control is associated with good adjustment, secure attachment, and other favorable psychological states (Tangney et al., 2004). Intelligent thought is one of the most important and adaptive activities of the human psyche (Schmeichel et al., 2003).

Naturally, when people believe that self-control wanes over time, they show typical depletion effects; however, when they believe that self-control is renewable, they show no noticeable drops in self-control over time (Inzlicht & Berkman, 2015). At the negative end, poor self-control is associated with elevated rates of psychopathological complaints and symptoms, as well as increased vulnerability to various substance-abuse and eating disorders (Tangney et al., 2004). Logical reasoning, extrapolation, and other controlled processes depend on control by the self, and performance on these tasks dips sharply when people are depleted (Schmeichel et al., 2003). When people construe an effortful activity as work, they tend to show subsequent failures in control; when they construe the same task as fun and enjoyable, they tend not to show these deficits (Werle, Wansink & Payne, 2014). Finding a reliable way to improve self-control would not only shed light on how the self-functions but would also have practical value for therapists, coaches, educators, parents, and many others (Baumeister et al., 2007). Research as a discipline calls for controlled thought processes when dealing with information to suffice an argument. As such, human performance when compiling research information depletes with increased concentration. It, therefore, depends on one's perception of research either as work or an enjoyable that determines the rate of one's adjustment in research-related activities.

## CONCEPTUALISING THE ADOPTED STRATEGY

Strategy is the intangible element that drives organisations yet is so hard to put into words. Strategy is and remains difficult to define because its very nature is constantly changing (Altmann, 2000). Mintzberg, Ahlstrand and Lampel (1998, p.8) succinctly summarise the situation when they say, “At the limit, strategy formation is not just about values and vision, competencies and capabilities, but also about military and the Moonies, crisis and commitment, organisational learning and punctuated equilibrium, industrial organisation and social revolution”. In this study, the adopted strategy intended to shift the dominantly negative thinking faculties of participants towards research and rather view it as a positive possibility.

Research affords the generation of new knowledge critical to promote societal and economic development. It is further a source of third-stream income for many higher education institutions (HEIs). Depending on individual institutional scales, HEIs also engage postdoctoral research fellows to partly drive their research operations while developing these fellows to be fully-fledged independent researchers. Globally, however, striking a balance between personal growth of postdoctoral research fellows (PRFs) and institutional growth is an intricate matter. The situation is compounded by the absence of a rich policy which dictates what it means to groom competent PRFs for first-time PRF mentors with little or no such experience in especially previously non-research universities on the one hand; and how the PRFs ought to engage themselves to become really competent and independent scholars. The lack of balance emanates largely from the absence of policy direction that sets clear benchmarks to be followed either by PRFs or their mentors in terms of quantifying competency. Given that most PRF appointments mostly quantify the minimum number of publications and possibly minimum number of conference attendances annually; coupled with generic other responsibilities to be especially determined by the mentor, we hereby present two different and possible ways available to the development of two hypothetical PRFs A and B assigned to two different mentors within the same institution:

*Suppose PRF A exceeds or doubles the minimum number of publications; attends to all possible conferences and faculty and campus meetings; provides minimum supervision services to colleagues and postgraduate students, minimum research development workshops while further downplaying other collegial research development initiatives.*

*Contrary to PRF A, suppose PRF B attains the minimum number of publications required; attends the minimum number of conferences and all faculty and campus meetings; provides maximum supervision services to colleagues and postgraduate students, maximum workshops while climaxing other collegial research development initiatives.*

It is evident from the above that with the guidance of their mentors, both fellows adopted different strategies towards their professional research development. However, PRF A might have adopted what we may refer to as a “narrow, less collegial-inclusive, personally sustainable and highly-individualised approach” which is rather more self-centred. On the other hand, PRF B’s approach could be viewed as “wide, more collegial-inclusive, collegially sustainable and campus-focused”, thus is mass-wide focused. Regrettably, in the short-term PRF B may be regarded as less competent than PRF A especially in terms of publication pace due to significant amount of time which PRF B would invest towards developing colleagues

and postgraduate students. The above scenario presented our dilemma, and, in our view, it still remains unclear of the existence of a single flawless criteria that can be used to rank or rate competence of postdoctoral research fellowship development.

In this study, the first mentee author and his mentor discussed the developmental strategy that was to be adopted in line with the mandates of the institutional postdoctoral development programme. During the first meeting, the mentor gave a detailed account of the background of the institution and specifically the campus. He then let the ball in the mentee's court to formulate ways through which the issue of research was to be availed to the university community and the available supporting professional communication channels. Part of the programme involved working towards fulfilling the key performance indicators (KPIs) that were outlined in the contractual agreement. Despite the two parties being an esteemed professor and a qualified doctor, a close analysis of the situation, however, revealed two glaring challenges:

Firstly, it was the mentor's first experience as an advisor to a postdoctoral research fellow yet there were no specific professional development programmes provided to equip mentors with knowledge of fulfilling competent advisory roles; and secondly, this was the first mentee's first appointment as a fellow yet there were no comprehensive referral documents or programmes to act as guides and targets for newly appointed fellows. While this lack of benchmarks that could have been used as yardsticks to evaluate our performance was a blow to our strategy formulation; it did not stop us from formulating and implementing our ideal strategy. Our guiding key objective was the need to promote research capacity and competence of the campus. All our workshops were communicated through the university campus' Helpdesk; thus, we believed it reached all staff having university emails.

The second mentee author had also a poignant PRF experience. Having started on an off note, she did not know what it meant to be a research fellow. She was like someone thrown into the jungle and left to look for a way out on their own. Her mentor and all her line managers were all inexperienced about mentoring PRF, thus she could not do anything meaningful for the first 3 months. Fortunately, after 3 months she attended a re-curriculation programme where she met a seasoned and highly esteemed Professor whom she approached for guidance on expectations of a PRF; and the Prof acceded. She also had to outsource for information from a sister university. For her, such ignorance and knowledge gap depleted her professional development pace as her work lacked focus; had no niche area and ended up haphazardly collaborating with colleagues from different niche areas. Consequentially, research development at her campus was at risk. That was typical PRF mentoring dearth.

## **METHODOLOGY**

A mixed method approach which followed a case study research design was adopted for this study. Data was gathered mainly in two phases: Firstly, questionnaires were administered to the 12 participants who had attended the first ever Postdoctoral Research Office (PRO)-organised workshop at the first mentee's campus in August 2015. Secondly, the same questionnaire was administered to 20 participants selected after a considerable analysis of the attendance registers in June 2017. The participants had attended at least two of the 16 PRO-organised research workshops besides other faculty or institutional research workshops. Individual interviews were conducted with the only three participants who had repeatedly participated in both phases. A single eight-member focus group provided data during the first

semester of 2017. Stratified random sampling was used to identify the 37 participants for the study. Document analysis also provided valuable data. Qualitative data was thematically analysed whereas SPSS version 24 was used for quantitative data analysis. Permission to conduct the study was granted by the Campus Rector's office as well as the participants.

## FINDINGS AND DISCUSSION

Quantitative and qualitative findings for the study are presented in this section.

### Findings from Document Analysis

Table 1 is a summary of the activities undertaken by the first mentee from June 2015 to June 2017 for which the focus was to serve research interests of the campus in terms of facilitating the development of the research capacity and competence of the campus.

Table 1: A summary of the activities undertaken by the first mentee for two years

Period/Activity	Jun-Sep 2015	Sept-Dec 2015	Jan-Mar 2016	Apr-Jun 2016	Jul-Sep 2016	Oct-Dec 2016	Jan-Mar 2017	Apr-Jun 2017	Total	% contribution
Workshops/Seminars held for Campus	3	3	0	9	0	1	0	0	16	3,4
WSU Workshops attended	1	2	1	1	0	1	2	3	11	2,3
Proposals reviewed	1	16	4	4	9	14	2	2	52	10,9
Dissertations/Theses reviewed	2	15	0	1	3	4	3	4	32	6,7
Articles reviewed	1	6	3	1	2	13	3	2	31	6,5
Abstracts reviewed	1	0	1	1	1	0	2	2	8	1,7
Publications	0	0	1	0	0	2	0	1	4	0,8
Under journal consideration	0	1	0	1	1	3	0	2	8	1,7
Under internal review	0	0	0	0	2	0	0	1	3	0,6
Work-in-progress	0	0	3	0	1	0	2	1	7	1,5
Face-to-face discussions	10	54	25	57	21	61	24	21	273	57,2
As a Masters dissertation critical reader	0	1	1	1	1	1	0	0	5	1,0
Internal Conference Presentations	0	0	1	1	0	0	0	0	2	0,4
National Conference Presentations	1	0	0	0	1	0	0	0	2	0,4
International Conference Presentations	0	0	0	0	0	0	0	1	1	0,2
Doctoral (Co)Supervision	0	1	0	0	0	0	1	0	2	0,4
Masters supervision	0	0	1	0	0	0	3	0	4	0,8

Hons BEd Honours	0	2	0	5	2	0	0	0	9	1,9
Campus External Research Workshops	0	0	0	0	1	0	0	0	1	0,2
Faculty/departmental staff motivation meetings	0	1	1	2	1	0	0	1	6	1,3
Aggregate activities	20	102	42	84	46	100	42	41	<b>477</b>	<b>100</b>
% contribution	4,2	21,4	8,8	17,6	9,6	21,0	8,8	8,6	<b>100</b>	

Table 1 represents an indiscriminate picture of the major activities that were pursued by the PRO over the period under review. In terms of contribution per quarter, Table 1 shows that significant activities both occurred during the second quarters (21,4% and 21%) respectively for the first and second years. There were coincidental consistencies for three of the quarters. Differences in frequencies of individual activities could be explained in terms of the amount of time it took to engage in each of the activities, the type of demand requested by the recipients and what the office felt were the preferential activities at a given time. On average, activities with higher frequencies included reviewing of documents and supervision. All the activities were allowed in such a way that they promoted the growth and development of the almost all novice researchers at the campus. The table shows the significance of face-to-face discussions and its dominance over all other activities. Having conducted such discussions 273 times up to June 2017, sometimes in multiples with some participants, the activity had the highest frequency and overshadowed the rest of the activities. If the overshadowing effect of face-to-face discussions over the other 19 activities is considered, it was clear that this single activity (5%) accounted for 57,2% of the overall percentage contribution. It reflects that, however, the strategy to provide one-on-one discussions was viewed as and proved to be one of the most effective approaches to developing research interest and resilience. Such progress was mainly due to overwhelming enthusiasm. In separate studies, self-control was found to be at the root of much that is good in people and society as it fosters the ability to stay on task when our minds would rather wander or allows people to restrain momentary desires to reach cherished long-term goals (Duckworth & Seligman, 2005; Moffitt et al., 2005).

### Findings from Blended Sources

Details about the workshops are presented in Table 2. The office delivered 16 interrelated research workshops out of which the first 15 were 2-hour long while the 16<sup>th</sup> was a three-day intensive off-campus workshop.

Table 2: Summary of attendance to PRO-organised workshops

Workshop	Description	Presenter	Attendance
1	Writing for Publication (Theory)	First Mentee	12
2	Introduction to scientific research methods	Campus Rector	16
3	SPSS Introduction	First Mentee	9
4	Developing an Argument and Plagiarism	First Mentee	8
5	Engagement of Postgraduate Students and Developing a Databank	First Mentee	7
6	Research Methodology	First Mentee	9

7	Preparing a Research Proposal and Overview of the Study	First Mentee	16
8	Part 11 and Part 111 of a Research Proposal	First Mentee	8
9	Quantitative vs Qualitative research	First Mentee	10
10	Assumptions, Limitations and Delimitations	First Mentee	10
11	Population, Sample an Sampling	First Mentee	10
12	Reliability and Validity	First Mentee	7
13	Research Instruments and Data Collection	First Mentee	7
14	Qualitative data analysis	First Mentee	12
15	Quantitative data analysis	First Mentee	9
16	Writing for publication: Off-campus Workshop (Practical)	First Mentee/ his Mentor	15

The on-campus workshops were structured to prepare participants for the final off-campus workshop. Concepts developed were to be vertically and horizontally integrated and thus enabled participants' progress with their further studies or publication needs. It emerged that 46% of the participants had attended at least 50% of the first 15 PRO-organised workshops. The participants in the 16<sup>th</sup> off-campus workshop were therefore, selected mainly from those who used to attend the on-campus research workshops.

### **First Mentee's Off-Campus Workshop Affordance**

The essence of that workshop was to bring the practicality of writing manuscripts.

### ***Biographic characteristics of the off-campus workshop participants***

Female participants were 43% while 59% of the participants were academics aged between 31 and 40. Most participants (51%) were pursuing masters qualifications while 11% and 27% were respectively working towards doctorate and honours degrees. Only 5% had published with 24% working on their articles from studies they had conducted or had presented at a conference. Notably 27% had neither carried a study nor presented at a conference. After presentation of the writing for publication workshop, participants were requested to evaluate it. Table 3 is a summary of the off-campus research workshop evaluation.

Table 3: Evaluation of the off-campus 2016 workshop (N=14)

Statement	Response									
	Strongly agree		Agree		Uncertain		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
I will recommend this workshop to others	13	93	1	7	0	0	0	0	0	0
The programme was well paced within the allotted time	8	57	5	36	1	7	0	0	0	0
The facilitators were good communicators	13	93	0	0	1	7	0	0	0	0
The material was presented in an organised manner	11	79	2	14	1	7	0	0	0	0
The facilitators were knowledgeable on the topic	12	86	2	14	0	0	0	0	0	0
I would be interested in attending a follow-up, more advanced workshop on this same subject	12	86	2	14	0	0	0	0	0	0
<b>Rating Statement</b>	<b>Excellent</b>		<b>Very</b>		<b>Good</b>		<b>Fair</b>		<b>Poor</b>	



			Good							
	N	%	N	%	N	%	N	%	N	%
Presentation	11	79	3	21	0	0	0	0	0	0
Meeting space	1	7	1	7	3	21	9	64	0	0
Handouts	4	29	6	43	4	29	0	0	0	0
Review assistance	6	43	5	36	2	14	1	7	0	0
The program overall	8	57	5	36	1	7	0	0	0	0
Presentation speaking quality	10	71	3	21	1	7	0	0	0	0
Presentation programme content	10	71	4	29	0	0	0	0	0	0
Catering service	7	50	2	14	5	36	0	0	0	0

Table 3 depicts that overall, most participants held positive views about the off-campus workshop in terms of programme and presentation qualities and content quality and pacing. They were also positive about the quality of review assistance received during the workshop. On a different scale, 93% of participants felt that the provided workshop was of the right length. There were inconsistent responses regarding the level of advancement as 50% viewing it as advanced. 29% said it was intermediate and only 21% said it was introductory. 100% said the programme presentation was beneficial to them and that they had received the information they expected, and 93% (N=13) also indicated that sufficient time was provided for the presentation with only 7% disagreeing.

All participants felt there was need to publish their work though 95% had never published. 70% were unsatisfied with their research development pace while 24% were content. Concerning relevance of offered research workshops, 92% felt the workshops were critical to kick-start or accelerate their research development pace. On myths or realities, only 60% indicated that it was a myth that one has to attend research workshops when they were about to engage in research activities. All participants agreed that one has to attend research workshops if the opportunity to do so is availed in preparation for future research engagements, and that the journey towards publication demands real time sacrifice and a great deal of personal commitment.

### **The Zenith of The Research Development Strategy**

This section presents the several outcomes noted from the direct and indirect postdoctoral research fellowship intervention at the first mentee’s campus.

#### ***Increase in further education graduates/ admissions***

Available data indicated that there was a gradual increase in the number of individuals who managed to complete their further studies or admitted for further studies. It was confirmed in the various faculty/unit meetings that the Postdoctoral Research Office (PRO) had benefited some of the staff members who had sought various individual research needs.

#### ***Publications***

Document analysis revealed a positive relationship between attendance to PRO-organised workshops and individuals’ research growth. High attendance frequencies were associated with much research progress. An outstanding reference is that of one staff member who never

missed any workshop. He had two publications in 2016 while he was admitted for doctoral studies. To date, his assistance in the many faculty-based and campus-based research-related activities continues to grow appreciatively.

### ***Establishment of a campus-based research movement***

The brainchild of the PRO strategy was the establishment of the Super Research Group (SRG), which was a uniquely new, energetic and growing research movement at the campus. The first mentee mentored the SRG with his mentor's gratified assistance till June 2018. Established in November 2016, the main objective and resolution of the group was to publish at least 16 articles by end of 2017. The SRG held two meetings which rejuvenated the spirit of the members during the first semester of 2017. Due to various constraints, attendance to both meetings were inconsistent at 79% and 50% for first and second meetings, respectively. The inconsistent attendance to the two meetings was the first indication that such a target would be impossible to achieve emanating largely from the novice nature of the participants, inconsistent commitment and as well as the opinions presented in the next section.

Drivers and pointers to developing research willpower as a strategy to transform HEIs were also sought qualitatively. Data obtained revealed that participants had differing views regarding their attitude and factors that influenced their existing beliefs about research. In each case, participants were named after gender and the highest qualification which they were pursuing to assist comparison of the suggestions across gender and different education levels. Those without a level prefix were not pursuing any further studies by then. For instance, Masters Male Academic-MMA, Honours Female Non-Academic-HFNA, Doctorate Female Academic-DFA.

### ***Committing towards becoming a learning institution***

Most participants confirmed to having undergone learning experiences that had very little or no research components. Despite that, though, it was apparent that most (97%) participants were prepared to engage and commit towards understanding research through implementing tenets of learning organisations. Written responses confirmed:

*Yes, for most of us our learning backgrounds did not emphasise research. Now that research is so important, all I can do is to try to understand it (MMA 8). Our biggest enemy is the apartheid education system which segregated and afforded us a poor education quality. But we cannot always focus on the past, so what we should do is to go back to the basics of this research and take it upwards (HFNA 7).*

### ***Develop and implement faculty research policy***

Participants bemoaned the lack of a clear and strict policy on research at faculty levels and viewed that as a step backwards. They argued that such a scenario promoted complacency. Responses included:

*It will be a good idea for the academics to be involved in research and that be a requirement as part of job description of an academic to at least in every two years or so one must produce a paper that will be published in an accredited journal (MNA 1). The faculty needs*

*to organise more workshops so that we get used with research. Again, academics need to be forced to publish at least one paper per year (DFA 1). We have the APIs (Annual Performance Indicators) where targets are set so that we indicate how many we are going to publish (DMA 2). A culture of research has to be inculcated and also enforced among the staff, especially the academics as it constitutes one of the three key pillars of the University (HMA 3). Management needs to inculcate a culture of research amongst staff and also set realistic targets for research output (DMA 1).*

### ***Attractive publication incentives***

The existing nature of incentives towards effort to publish was noted as a threat to research motivation. Despite their lack of experience, participants indicated that there was even no need for them to indulge in this time-consuming research process. It was for example, noted:

*Introduction of attractive incentives to become a researcher. Incentives should be both academic recognition and monetary incentives (MNA 1). My work has kept me going up to this day. Now we are being told that we can earn extra funds through research activities but when I look at it, I am just discouraged by the amount of time required to engage in that process. The money also does not come immediately for my personal use, so I don't see myself ever seriously involved (FMA 4). People are hesitant to get involved in research because the rewards of such a commitment are not encouraging (DMA 1).*

### ***Provision of more focused attention***

As composed of dominantly novice researchers, participants felt there was need to really provide tailor-made sessions as that would help them become more acquainted with the required levels of rigour in research.

*The more we are having sessions which are conducted on a one-to-one basis then we can have an approach of paving a way to publish in the next coming years (MMA 3). They [novice researchers] need to be provided with specific attention.... This will likely encourage them to continue (HMA 2). One on one supervision and step by step [guidance] on how to write articles for publication (MMNA 5). Constant guide towards publishing in a step-by-step manner (MFA 3).*

### ***Pre-conference presentations***

Campus-based mini-conference presentations where researchers come together and make presentations on their various papers could boost confidence. Participants noted the need to allow even novice researchers opportunities to have the kind of questions or comments expected at main conferences.

*There should be a research office or research coordinator to monitor novice researchers and also workshops/ seminars where the novice researchers are trained on how to present a paper in a conference (MFNA 1). Do more often presentations so that people may be motivated and encouraged (MMA 6).*

### ***Access to research funding information***

Progress in research is mostly hampered if information that would assist researchers is not easily accessible. It was noted that existing communication channels should enhance the provision of relevant information to potential beneficiaries.

*Information should be better distributed to academic staff and postgraduate students with regard to research opportunities, funding and process for publications and other research-related issues (DMA 2). Provide advice on how to go about costs regarding publication. How we can be funded. Which additional journals have recently been accredited? Need to target certain journals. Starting our own in-house journal (DFA 1). Availability of assistance and money for transportation when collecting the work related to your project (HMA 3). More efforts and resources need to be allocated for assistance of novice researchers. There is also a need to reduce the red tape around funding. (DMA 1).*

### ***Strengthen on-going research workshops, monitoring and evaluation***

Participants during the first phase of data gathering pointed to the need to offer research workshops and seminars. During the second phase they appreciated the on-going workshops but suggested the need to frequently conduct such workshops in order to cater for a lot of novice researchers who are at various levels of their research activities. They also pointed to the dire need for continuous monitoring and providing quick feedback on ongoing research efforts. It was highlighted of the need for:

*Seminars to discuss ideas on how to do research (Professor Male Academic 1). More research writing workshops where basics of research concepts are explained. (MFA 5). Conducting seminars on research writing and publication (MMA 7). Material resources, workshops and inductions (HMA 2). Encouragement and motivation of scholars to attend and also participate in these research sessions (HMNA 4). Continuous workshops and research tracking (MMNA 1).*

### ***Invite experts in research***

The need to be developed with specialists in different fields emerged as a strong suggestion to help develop research interest of new researchers as some participants felt their problems could be addressed through gaining access to other individuals' research experiences. For instance:

*I think personally writing is not a problem. What we need more is to build confidence in publishing. For example, if we could have people who have published and presented in conferences to come and share their journeys (HMNA 1).*

### ***Temporal academic workload reduction***

Participants complained that inconsistent and poor attendance to the workshops were mainly due to heavy workloads and clashing time with mainstream responsibilities. Engagement in research is seen as a real time-consuming exercise which also requires a significant amount of

focus, effort and commitment. It was a challenge to balance researching and effectively carrying out the other academic responsibilities.

*I personally feel that as academics we have a lot on our plates in terms of the number of subjects we are offering and that to a large extent leaves us with very little time to accelerate research development pace (HMA 2). Once one [a lecturer] has started to study means the need to reduce the workload, for example, tutors to be the go-between students and lecturer (MFA 2).*

### ***Establish a permanent campus research office***

Participants felt the need for an office establishment to permanently cater for them. It was argued that the deprivation of the campus in terms of having such a structure would consistently weigh in against efforts to establish a research culture at that particular campus. Such expressions included:

*We need a research office (DMA 2). We have been always requesting the main campus to provide us with someone who can assist this campus with research matters. We feel all researchers are concentrated at only the main campus. Sometimes it is not always good that when you need some information you should call the main office. It is better if an office here gets equipped with all necessary requirements to serve us efficiently then reports to the main institutional office (MMNA 4).*

### ***Establish and promote strong collaborative platforms***

Attempting to handle research issues individually can be taxing. A number of participants recognised the need to have organised collaborations among the established and the emerging researchers to help the novice researchers with required guidance. It emerged:

*We always work as silos but without proper guidance and motivation, we barely make any meaningful progress. I think strong partnerships between experienced and non-experienced researchers in our different areas of specialisation could much assist with the progress (Doctorate Female Academic xx). Teamwork- some universities have up to 10 people working on one publication (Professor Male Academic 1). Researchers from our campus/university can work with others on joint inter-university research initiatives on different projects to gain more exposure in research. The collaborating universities or individuals could be at national or international scale (DFA 3).*

## **CONCLUSION**

The study concludes that there is no homogeneous “white or blue” referral document which serves as a yardstick to measure effectiveness of postdoctoral research fellowship development across HEIs.

Despite the campus communication to all staff of our workshops and seminars, there remained poor and inconsistent research workshop attendance by most potential researchers. As such, developing research willpower in HEIs is a daunting but possible process which is masked by environmental, socio-economic and technological factors.

Participants acknowledged the prevailing negative institutional research culture and made strong suggestions of the need to become a learning institution, among other strategies, to promote development of a strong campus research willpower.

The view that some participants felt satisfied with their research progress when they were still to achieve higher qualifications let alone publish was disturbing and problematic. In some way that promoted complacency.

Lastly, there were tremendous steps being made towards creating a positive research culture at the campus despite that there are, however, still serious challenges that need to be addressed in order to improve the status quo.

## **RECOMMENDATIONS**

There is need to at least provide objective and quantifiable measures to assess effectiveness of postdoctoral research development programmes that afford moulding holistically effective independent researchers.

Campus staff needs to change their research culture and start controlling self to master the research process and promote campus research transformation. This should be coupled with the need for campus management to have professional development workshops to be acquainted with a minimum firm grip of research if they would have to become effective leaders who will practically promote research development.

The main research office for the university ought to decentralise research functions to effectively provide financial and material resources to all researchers as a means to enhance accelerated institutional research development.

There is need to promote competent undergraduate research modules in order to produce postgraduate students capable of conducting substantial research projects that would have the potential to positively impact the society. Lastly, there is need to learn from the success stories of the research-intensive institutions.

## **REFERENCES**

- Altmann, G. (2000). The Changing Nature of Strategy Development – Supporting Management Thinking. In G. Altmann, J. Lamp, P.E.D. Love, P. Mandal, R. Smith and M.J. Warren, eds., *Proceedings of the International Conference on Systems Thinking in Management*. Deakin University, Geelong, Victoria, 8 – 10 November, 44– 48.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1994). *Losing control: How and why people fail at self-regulation*. San Diego: Academic Press.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The Strength Model of Self-Control. *Current Directions in Psychological Science*, 16(6), 351-355.
- Duckworth, A. L. (2011). The significance of self-control. Article in Proceedings of the National Academy of Sciences. *PubMed*, 108(7), 2639-2640.
- Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*, 16(12), 939–944.
- Hofmann, W., Schmeichel, B. J., & Baddeley, A. D. (2012). Executive functions and self-regulation. *Trends in Cognitive Sciences*, 16(3), 174–180.
- Inzlicht, M., & Berkman, E. (2015). Six Questions for the Resource Model of Control (and Some Answers). *Social and Personality Psychology Compass*, 1–14.
- Jansen, J. (2003). Mergers in South African Higher Education: Theorising Change in Transitional

- Contexts. *Politikon*, 30(1), 27–50.
- Magen, E., & Gross, J. J. (2007). Harnessing the need for immediate gratification: Cognitive reconstrual modulates the reward value of temptations. *Emotion (Washington, D.C.)*, 7(2), 415–428.
- Mintzberg, H., Ahlstrand, B., & Lampel, J., (1998). *Strategy Safari*. London: Prentice Hall.
- Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., Howerter, A., & Wager, T. D. (2000). The unity and diversity of executive functions and their contributions to complex “frontal lobe” tasks: A latent variable analysis. *Cognitive Psychology*, 41(1), 49–100.
- Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences of the United States of America*, 108(7), 2693–2698.
- Muraven, M., Shmueli, D., & Burkley, E. (2006). Conserving self-control strength. *Journal of Personality and Social Psychology*, 91(3), 524–537.
- Muraven, M., & Slessareva, E. (2003). Mechanisms of self-control failure: Motivation and limited resources. *Personality and Social Psychology Bulletin*, 29(7), 894–906.
- Robinson, M. D., Schmeichel, B. J., & Inzlicht, M. (2010). A cognitive control perspective of self-control strength and its depletion. *Social and Personality Psychology Compass*, 4(3), 189–200.
- Schmeichel, B. J., Vohs, K. D., & Baumeister, R.F. (2003). Intellectual performance and ego depletion: Role of the self in logical reasoning and other information processing. *Journal of Personality and Social Psychology*, 85(1), 33–46.
- Schmeichel, B. J., & Vohs, K. (2009). Self-affirmation and self-control: Affirming core values counteracts ego depletion. *Journal of Personality and Social Psychology*, 96(4), 770–782.
- Soudien, C., W., Michaels, S., Mthembu-Mahanyele, M., Nkomo, G., Nyanda, N., Nyoka, S., Seepe, et al. (2008). *Report of the Ministerial Committee on Transformation and Social Cohesion and the Elimination of Discrimination in Public Higher Education Institutions*. Pretoria, South Africa: Department of Education.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271–322.
- Tice, D. M., Baumeister, R. F., Shmueli, D., & Muraven, M. (2007). Restoring the self: Positive affect helps improve self-regulation following ego depletion. *Journal of Experimental Social Psychology*, 43(3), 379–384.

## **ABOUT THE AUTHORS**

### **DR ISRAEL KARIYANA**

Faculty of Educational Sciences  
Department of Continuing and Professional Teacher Development  
Walter Sisulu University, NMD Campus, South Africa  
ikariyana@wsu.ac.za

### **DR NEWLIN MARONGWE**

Faculty of Education and School Department  
Department of School Improvement Programmes  
Walter Sisulu University, Queenstown Campus, South Africa  
nmarongwe@wsu.ac.za