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Research Paper

Organisational self-efficacy and information asymmetry as pathways to strengthening management effectiveness in Malaysian public universities

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Abstract: The commitment to national policy goals and institutional alignment is highly consistent in Malaysian public universities, and it is a reflection of genuine and shared commitment towards the Malaysia Higher Education Blueprint. Riding on this robust motivational pillar, the current paper explores the capability investments in the capacity to transform the already-existing commitment of the staff into management effectiveness which is measurable in the 20 publicly funded Malaysian universities. The paper utilises the Performance Intentions Gap (PIG) to illustrate the application of this keen diagnostic tool to indicate where operational investment would result in the greatest payback to the motivational capital already held by institutions, according to the Social Cognitive Theory and the Organisational Information Processing Theory. The research conducted the fieldwork in the form of a questionnaire with 107 respondents in the category of the top management staff in five categories of universities under MOHE classification. It evaluated six psychosocial measures in two governance dimensions that are government intentions, which constitute goal orientation, outcome commitment and relational alignment, and institution intentions, which constitute risk awareness, institutional ability and oversight engagement. As the data distributions of all research variables were non-normal, as well as interpretation capability Discrepancy Score, Spearman correlation and hierarchical multiple regression were performed. To achieve the marker-level diagnostic accuracy, the intention capability discrepancy score was used. Findings indicate that there are no cases when all constructs are rated with a score lower than 'very high' (mean = 4.009 to 4.185), an indication that leaders in universities of all types have a strong and real conviction of their institutional goals. More significantly, when capability factors are added, the percentage of explained variance of management effectiveness goes up by 17 adjusted R, moving up by 7% from 0.342 to 0.510. This finding suggests that the motivational foundation is factual and considerable, and the most effective method of disengaging them would be through planned skill growth in the fields of Institutional Ability and Risk Awareness. The Intention Capability Discrepancy Score also shows three very important spheres of investment (i.e., research infrastructure, financial resilience and performance tracing systems) where a planned operational development will lead to the most significant effects in management effectiveness. The study provides an effective diagnosis model, a repeatable measurement method and, most importantly, evidence-based suggestions of how to enhance the capability fit in the higher education system in Southeast Asia.

Keywords: Performance Intentions Gap; Organisational Self-Efficacy; Information Asymmetry; Public Sector Management; Malaysian Public Universities; Social Cognitive Theory; Management Effectiveness

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1 | INTRODUCTION

Malaysian public universities have gained a strategic role in the Southeast Asian higher education. The federal support is constant and every institution adheres to the Malaysia Education Blueprint 2015 to 2025. The blueprint contributed to the creation of a management style that is goal oriented, close relationships and shared national vision. Malaysia provides a highly powerful and deep analytical empirical context of this paper. The country has approximately 20 publicly funded universities that receive nearly 60-70 percent of all funding by allocations by the federal government and operate under the Malaysia Education Blueprint 2015-2025 (MoHE, 2015). These universities are formally divided into five Research Universities, four Comprehensive Universities and eleven Focused Universities. Despite the fact that they are connected to the same national policy and communication conditions, they are very dissimilar in terms of their working infrastructures, thus providing a good platform to compare and learn about them. A paradox in the study in public sector management has identified that very effective and non performing organizations are largely similar in terms of attitudinal survey. In either of the two organizations, employees also concur that goals should be clear, relations should be symbiotic, and results should be quantified. However, some organizations are able to transform these shared values into performance excellence and others do not. The traditional argument, that said that the lower performing ones are less motivated is increasingly difficult to prove especially when one considers the consistent performance that employees in the public sector are committed to the mission of their organizations (Perry and Hondeghem, 2008). The gap in performance intentions is the other angle presented in this paper. The Performance Intentions Gap is a theory that refers to the difference between the perceived intentions of the leader of the institution, and the operational capabilities of the institutional systems. This kind of difference is brought about by a structural problem that Galbraith (1974) described as failure in information processing capacity: the information environment that constitutes the collective beliefs of the public organisations is essentially different to the information environment that shapes the operational results. Those officers who interact with the former tend to have the inflated institutional self-images which the survey instruments cannot detect unless aspirational and operational constructs are explicitly disaggregated and compared, a difference that was first pointed out by Argyris and Schon (1978) as the gap between espoused theory and theory-in-use.

2 | LITERATURE REVIEW

2.1 | Social Cognitive Theory and Collective Self-Efficacy

A concept that was introduced by Bandura (1986) is self-efficacy which is the belief that a person has the capacity to undertake the actions that are required to produce the intended outcomes. Self-efficacy was another key element that he used to define motivation and human behavior. In addition, Bandura (1986) took pains to indicate that self-efficacy and actual capability may be very different, a fact that should not be ignored. When the beliefs of a person are greater than his capabilities, it is a situation of overconfidence; conversely, when the capabilities of a person are more than his beliefs, then it is underperformance. In both cases of divergence, the self of the actor is not

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in line with the real situation of the actor which causes the information asymmetry in question. Conversely, collective efficacy of Bandura (2000) was the concept of collectivity concerning the possibility of the group to accomplish the goal with the help of joint efforts. In the social sector organisations, collective beliefs are mostly influenced by the official communication medium as opposed to the operational feedback. Ministerial circulars, performance structures and strategic plans are the expectations of the organisation but do not provide any information on whether the operational systems can support such achievements. This is the structural basis of Organisational Information Asymmetry: the information that forms collective beliefs is always more aspirational when compared to the information that forms operational outcomes. Information asymmetry is the main issue in the principle-agent relationships as noted by Kathleen (1989) and Michael et al., (1976). Jussi Kivistö (2007) develops this idea and applies it to the management of institutions of higher education, proposing that governments and universities act in the face of imperfect information about their skills and intentions in relation to one another. This study goes a step further to assert that the highest detrimental information asymmetry in the management of Malaysian state universities is not necessarily the one existing between the government and universities but instead, within the universities, between what the leaders believe at the policy level and what the ground realities of the beliefs are hiding.

2.2 |Organisational Information Processing Theory

Galbraith (1974) developed the concept that the capacity of companies to process information should be varied in response to the complexity and uncertainty of the environment where they carry out their activities. In case this capacity is not adequate, there will be loopholes in performance. The information processing requirements of the many public university institutions are frequently beyond the administrative benefits of these institutions, particularly when the resource base of the institutions is small (Schiller and Liefner, 2007). The Social Cognitive Theory combined with the Organisational Information Processing Theory result in one prediction that is the theoretical basis of the PIG model. High aspirations will be generated in organisations that have updated information on the level of policy, i.e. Bandura (2000). Companies that have poor operation information systems will however build weak capability beliefs, i.e. Galbraith (1974). The difference between these, i. e. high aspirations on weak operational grounds, is the PIG. Argyris and Schon (1978) referred to this as the misaligned theory and theory-in-use and our study is the first to quantitatively measurement in the situation of Malaysian higher education governance. The combined theoretical model is shown in Figure 1.

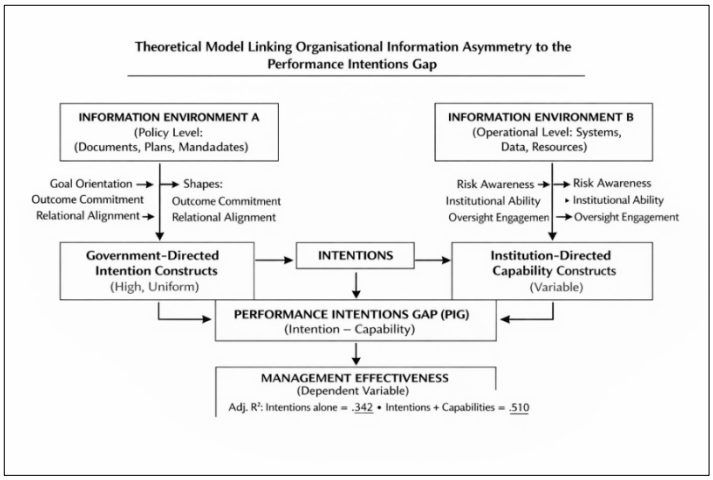

Figure 1: Integrated theoretical model

Model drawing on Bandura (1986, 2000), Galbraith (1974) and Argyris and Schon (1978) to explain the Performance Intentions Gap in Malaysian public university management

2.3 |Research Hypotheses

There are six hypotheses that are developed in accordance with the holistic theoretical framework that makes the research merge various facets. Three of them are concerned with the government-directed intention constructs: Goal Orientation (H1), Outcome Commitment (H2) and Relational Alignment (H3). The other three are mirrors of the institution directed constructs of capability: Risk Awareness (H4), Institutional Ability (H5) and Oversight Engagement (H6). The six are related to Management Effectiveness positively at the first level; the association is also significant between them all at the second level (Ahmad et al. 2016). It is one of the key PIG hypotheses that the capability constructs, H4 to H6, with the focus on operational capacity rather than aspirational belief, which are stressed by Galbraith (1974) and Bandura (2000), will be used to explain a lot more distinct variance in the complete regression equation compared to the intention constructs H1 to H3.

3 | RESEARCH METHODOLOGY

3.1 |Research Design and Sample

The given paper is cross-sectional and based on the quantitative survey, as the previous quantitative research covers governance in Malaysian universities (Ahmad and Farley, 2013; Ahmad et al. 2016). Top-management respondents in all 20 Malaysian public universities were sampled during October and November 2022. The population of 840 respondents was broken down into groups based on categories of universities and functional roles based on the classification framework of MoHE (2015). There were 265 questionnaires distributed out, 107 valid completed responded were received giving a response rate of 40. 37 percent. A survey of the literature reveals that response rates of 35 to 50 percent are satisfactory when conducting surveys about the senior management of the organisation in a government setting, which can be used to justify the sufficiency of the existing sample (Baruch and Holtom, 2008; Elhag et al., 2026). Table 1 displays the demographic characteristics of the respondents.

Table 1: Respondent Demographic Profile

Variable	Category	n	%
University Type	Research University	49	45.8
	Focused University	41	38.3
	Comprehensive University	17	15.9
Functional Role	Bursary Officer	47	43.9
	Strategic Planning Officer	24	22.4
	Research Management Officer	20	18.7
	Endowment and Waqf Officer	14	13.1
	Vice or Deputy Vice Chancellor	2	1.9
Role Tenure	More than 7 years	46	43.0
	Less than 2 years	23	21.5
	5 to 7 years	22	20.6
	2 to 4 years	16	15.0
Institutional Tenure	11 to 20 years	48	44.9
	5 to 10 years	25	23.4
	Less than 5 years	22	20.6
	More than 20 years	12	11.2

Note: University categories follow the MoHE (2015) classification framework. Position categories reflect formal functional roles. Percentage values are rounded to one decimal place.

3.2 |Measures

There were 46 questions that were grouped into 7 distinct segments in the questionnaire that were all assessed using a 5-Point Likert scale with 1 indicating Strongly Disagree and 5 Strongly Agree. The questions were based on Ahmad (2013) who had tested a similar tool in the research of governance in Malaysian public universities. Subject matter expert review of the instrument was also carried out by the Accounting Research Institute, Universiti Teknologi MARA under the face validity concept used by Taherdoost (2016) to determine the instrument validity. A pilot study on 25 respondents was conducted to guarantee that the instrument had a good reliability level and the result of the pilot study showed that the constructs were reliable enough to continue with the main study. All the Cronbach alpha coefficients were very more than 0. Hair et al. (2007) established 70 as the amount of the internal consistencies meaning that the internal consistencies were good to excellent. Table 2 contains all the information of the operationalisation of the constructs and their statistics of reliability.

Table 2: Construct Operationalisation and Reliability Statistics

Construct	PIG Category	Items	Pilot Alpha	Main Alpha	Classification
Goal Orientation	I	6	.863	.876	Very Good
Outcome Commitment	I	6	.726	.822	Very Good
Relational Alignment	I	5	.897	.881	Very Good
Intention Cluster Total	N/A	17	.896	.913	Excellent
Risk Awareness	C	5	.866	.810	Very Good
Institutional Ability	C	8	.874	.848	Very Good
Oversight Engagement	C	6	.823	.836	Very Good
Capability Cluster Total	N/A	19	.889	.916	Excellent
Management Effectiveness	DV	10	.899	.894	Very Good

Note: PIG Category I = Intention construct; C = Capability construct; DV = Dependent variable. Pilot alpha is based on N = 25; Main alpha is based on N = 107. Classification follows Hair et al. (2007): above .90 = Excellent; .80 to .89 = Very Good; .70 to .79 = Good.

3.3 |Analytical Strategy

By means of the workflow recommended by Pallant (2020), four analytical layers were implemented. Initially, descriptive statistics were evaluated for all the constructs and individual items, which allowed variance

analysis within the constructs as well as the identification of the candidate PIG indicators. Secondly, the Kolmogorov-Smirnov and the Shapiro-Wilk normality tests were run; the confirmed non-normality of all seven constructs gave the reason for using the Spearman rank-order correlation in bivariate analysis, which agrees with the method of Ahmad (2013). Third, hierarchical multiple regression was performed in two blocks: the intention variables were entered as Block 1 and the capability variables as Block 2. Such a framework breaks down the additional variance that can be accounted for by capability variables, the direct way to test the main PIG hypothesis with the hierarchical method referred to by Hair et al. (2007). Finally, the Intention-Capability Discrepancy Score was determined for each major item. It is the difference between the mean score of the item and the unique regression contribution to the construct, and this helped to pinpoint governance areas where the aspirational confidence is higher than the actual operational capacity (Argyris and Schon, 1978).

4 | RESULTS

4.1 | Descriptive Statistics

Table 3 presents full-sample descriptive statistics for all seven constructs. All constructs are rated at the High extent level (M above 3. 80), with means ranging from 4. 009 for Outcome Commitment to 4. 185 for Relational Alignment. This apparent uniformity is consistent with the PIG prediction: when officers cannot experientially distinguish what they believe from what their institutions can operationally support, belief scores cluster at the upper range of agreement across diverse constructs (Bandura, 2000; Argyris and Schon, 1978). Standard deviations range from 0. 467 for Institutional Ability to 0. 610 for Outcome Commitment, suggesting that capability constructs attract more consistent ratings. Within-construct item range is the most diagnostically sensitive indicator in Table 3. Risk Awareness registers the widest within-construct range at 0. 364 points, reflecting genuine heterogeneity in officers' beliefs about their institutions' financial resilience and risk management capability, a pattern consistent with Galbraith (1974) prediction that operational beliefs are more sensitive to resource variation than aspirational ones. Relational Alignment registers the narrowest range at 0. 122 points, indicating near-universal agreement and identifying it as the prototype PIG construct. Argyris and Schon (1978) described precisely this configuration, high endorsement and low variance on aspirational constructs, as the hallmark of espoused theory unanchored by theory-in-use.

Table 3: Descriptive Statistics for All Constructs

Construct	PIG Type	Mean	SD	Min Item M	Max Item M	Range	Extent
Relational Alignment	I	4.185	0.595	4.140	4.262	0.122	High
Risk Awareness	C	4.153	0.525	3.907	4.271	0.364	High
Goal Orientation	I	4.129	0.576	4.075	4.168	0.093	High
Oversight Engagement	C	4.114	0.509	3.981	4.299	0.318	High
Management Effect. DV	DV	4.108	0.544	3.991	4.196	0.205	High
Institutional Ability	C	4.103	0.467	4.009	4.196	0.187	High
Outcome Commitment	I	4.009	0.610	3.907	4.131	0.224	High
Intention Cluster Avg.	N/A	4.108	N/A	N/A	N/A	N/A	High
Capability Cluster Avg.	N/A	4.123	N/A	N/A	N/A	N/A	High

Note: PIG Type I = Intention; C = Capability; DV = Dependent variable. Range = maximum item mean minus minimum item mean within each construct, indicating within-construct heterogeneity. Extent High = M at or above 3.80 (Ahmad, 2013). All constructs N = 107.

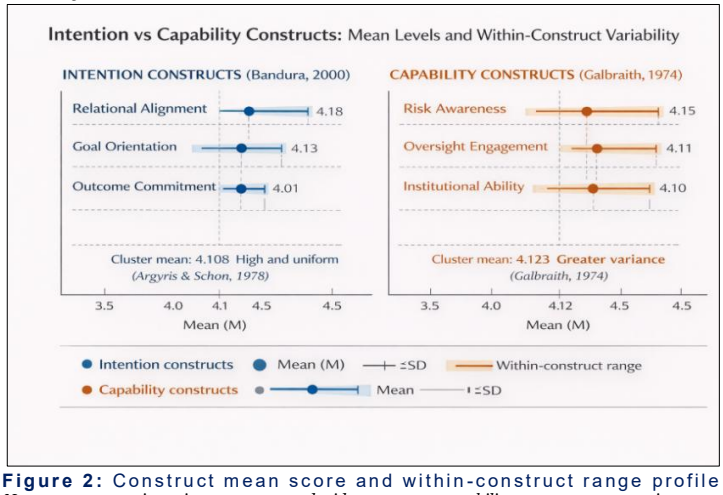

Figure 2: Construct mean score and within-construct range profile
Narrow ranges on intention constructs and wider ranges on capability constructs are consistent with the PIG prediction (Bandura, 2000; Galbraith, 1974; Argyris and Schon, 1978)

4.2 | Normality Testing

Tables 4 shows Kolmogorov-Smirnov and Shapiro-Wilk tests which still found significant value from normality for all seven constructs (p below or at. 007 for all). This substantiates the use of Spearman rank-order correlation as the bivariate analysis method, according to the guideline of Pallant (2020) for non-normally distributed organisational survey data. The non-normality is by far the theoretical meaning: ceiling effects in organisational surveys, in which scores are mostly high, are a statistical sign of the aspirational uniformity pattern that PIG framework predicts (Bandura, 2000; Argyris and Schon, 1978).

Table 4: Normality Test Results from Kolmogorov-Smirnov and Shapiro-Wilk Tests

Construct	PIG Type	KS Stat	KS p	SW Stat	SW p	Decision
Goal Orientation	I	0.121	.001**	0.955	.001**	Non-normal
Outcome Commitment	I	0.157	.000***	0.928	.000***	Non-normal
Relational Alignment	I	0.163	.000***	0.928	.000***	Non-normal
Risk Awareness	C	0.157	.000***	0.953	.001**	Non-normal
Institutional Ability	C	0.157	.000***	0.957	.001**	Non-normal
Oversight Engagement	C	0.124	.000***	0.965	.007**	Non-normal
Management Effectiveness	DV	0.177	.000***	0.934	.000***	Non-normal

Note: KS = Kolmogorov-Smirnov with Lilliefors correction. SW = Shapiro-Wilk. Double asterisk = p below .01. Triple asterisk = p below .001. All p values confirm non-normal distributions, justifying Spearman rank-order correlation (Pallant, 2020).

4.3 | Spearman Correlation Analysis

Table 5 shows Spearman rank-order correlations of management effectiveness with six independent constructs. All six correlations are positive and significant at the. 01 level which means that all six hypotheses are supported at the bivariate level. According to Cohen's (1988) guidelines for effect size, three capability constructs result in large effect sizes (rS at or above. 574) while two intention constructs only produce moderate effect sizes (rS below. 490). The capability cluster mean correlation at mean rS =. 597 is higher than the intention cluster mean at. 483 by. 114 points. This is a first-order empirical indication of the Positive Institutional Growth that the institution-directed operational constructs are more closely related to management effectiveness than the government-directed aspirational ones, which is in line with Galbraith (1974) and Bandura (2000).

Table 5: Spearman Rank-Order Correlations Between All Constructs and Management Effectiveness

Construct	PIG Type	rS	Sig.	Effect Size	Cluster Rank
Oversight Engagement	C	.613	.000**	Large	1st Capability
Institutional Ability	C	.605	.000**	Large	2nd Capability
Risk Awareness	C	.574	.000**	Large	3rd Capability
Relational Alignment	I	.538	.000**	Large	1st Intention
Outcome Commitment	I	.489	.000**	Moderate	2nd Intention
Goal Orientation	I	.421	.000**	Moderate	3rd Intention
Capability Cluster Avg.	N/A	.597	N/A	Large	N/A
Intention Cluster Avg.	N/A	.483	N/A	Moderate	N/A

Note: Double asterisk indicates p below .01, 2-tailed. Effect size follows Cohen (1988): .10 to .29 = Small; .30 to .49 = Moderate; .50 to 1.00 = Large. Cluster average is the unweighted mean of rS values within each PIG category.

4.4 | Hierarchical Multiple Regression

Table 6 presents the hierarchical regression model summary. Block 1 intention constructs explain 36.1 percent of variance in Management Effectiveness (Adjusted R2 = .342). The addition of capability constructs in Block 2 raises this to 53.8 percent (Adjusted R2 = .510), an increment of 17.7 percentage points that is statistically significant (F-change = 12.48, p below .001). This confirms the core PIG hypothesis: institutional capability constructs contribute substantial unique explanatory power that aspirational intention constructs cannot provide, consistent with Galbraith (1974) on information processing capacity and Bandura (2000) on the relationship between genuine capability and effective collective action.

Table 6: Hierarchical Multiple Regression Comparing Intention Constructs Block 1 with Full Model Block 2

Parameter	Block 1 Intentions Only	Block 2 Full Model	Change
R	.601	.734	+.133
R2	.361	.538	+.177
Adjusted R2	.342	.510	+.168
Std. Error	.452	.381	Reduced
F-Change	19.74***	12.48***	Significant
Variance Explained	36.1%	53.8%	+17.7%

Note: Triple asterisk indicates p below .001. Delta R2 is the incremental R2 contribution when capability constructs are added in Block 2. Standard Error is the standard error of the estimate. Analysis conducted using SPSS following Pallant (2020).

Table 7 shows the standardised regression coefficients. Relational Alignment trajectory is at the heart of the PIG analysis. In Block 1, it is the major predictor (Beta =. 312, p less than. 001) however in the complete Block

2 model it is a non-significant one (Beta =. 074, p =. 467). This suppression pattern is indeed the mathematical signature that the PIG framework predicts: in Block 1, the apparent predictive power of Relational Alignment was derived from its correlation with capability constructs and not from any independent contribution, as suppressor variable research by Hair et al. (2007) has documented. Goal Orientation, on the other hand, changes sign to a negative one (Beta = -0. 200) in Block 2, which is a very strong form of suppression consistent with the multicollinearity effects when correlated predictors are entered simultaneously (Hair et al. 2007). Among the intention constructs, only Outcome Commitment still holds a small but significant predictive weight in the entire model (Beta =. 203, p =. 028), which points to the fact that specific performance targets have independent value besides relational aspirations

Table 7: Standardised Regression Coefficients for Block 1 and Block 2 Models

Construct	PIG Type	Block 1 Beta	Block 1 p	Block 2 Beta	Block 2 p	PIG Signature
Goal Orientation	I	+0.118	.214	-0.200	.829	Suppressed to negative
Outcome Commitment	I	+0.261	.003***	+0.203	.028*	Weakened but retained
Relational Alignment	I	+0.312	.001***	+0.074	.467	Absorbed by capability
Risk Awareness	C	Not in B1	N/A	+0.223	.018*	Uniquely significant
Institutional Ability	C	Not in B1	N/A	+0.249	.016*	Dominant predictor
Oversight Engagement	C	Not in B1	N/A	+0.185	.103	Marginal, p above .05

Note: Single asterisk = p below .05. Triple asterisk = p below .001. Not in B1 indicates the construct was not entered in Block 1. PIG Signature describes the regression trajectory consistent with the PIG framework (Bandura, 1986; Galbraith, 1974; Argyris and Schon, 1978; Hair et al., 2007).

4.5 | Intention-Capability Discrepancy Score Analysis

The Intention-Capability Discrepancy Score helps to pinpoint the very areas of governance that the item-level means are revealing by looking at the items' unique regression contribution to the construct. Table 8 shows the six items that are most diagnostically significant. Items with high means and low unique construct Beta scores are considered PIG hotspots where the aspiration part of the belief is stronger than the part of the belief that is operationally informed (Argyris and Schon, 1978). Items with high mean scores and significant unique Betas are capability leverage points where a developmental investment will give a high return of management effectiveness (Bandura, 1986). Items with low mean scores but significant Betas are capability gaps and are the source of the need for urgent operational development (Galbraith, 1974).

Table 8: Intention-Capability Discrepancy Score Diagnostics for Key Governance Items

Item Domain	Construct	Item Mean	Construct Beta	ICDS Category	Management Implication
Govt-University Strategic Alignment	Relational Align. I	4.262	.074 not sig.	PIG Hotspot	Aspiration exceeds operational reality
QS World Ranking Aspiration	Outcome Commit. I	4.131	.203 sig.	Moderate PIG	Ambition without research infrastructure
Risk Knowledge for Strategic Goals	Risk Awareness C	4.271	.223 sig.	Capability Leverage	High-return development target
Financial Resilience and Independence	Risk Awareness C	3.907	.223 sig.	Capability Gap	Priority intervention area
Publication and Citation Output	Outcome Commit. I	3.907	.203 sig.	Output Gap	Structural barrier to research productivity
Performance Monitoring per Govt. Obj.	Oversight Eng. C	3.981	.185 marginal	Oversight Gap	Communication stronger than tracking

Note: PIG Hotspot = high item mean combined with non-significant construct Beta, indicating aspirational belief decoupled from management effectiveness (Argyris and Schon, 1978; Bandura, 2000). Capability Leverage = high mean with significant Beta (Bandura, 1986). Capability Gap = low mean with significant Beta (Galbraith, 1974). Item means sourced from thesis descriptive analysis (Tables 5.4 to 5.10, Ahmad, 2013).

Three PIG patterns have been identified from Table 8. The Relational Alignment through Aspirational Uniformity Pattern (M = 4. 262, Beta =. 074) is a hallmark of strategic alignment where the scores are very high within the dataset but hardly have any regression weight, which is indeed in line with the Argyris and Schon (1978) espoused theory concept.

The Output-Aspiration Barrier Pattern provides an Outcome Commitment depiction, where QS ranking aspiration at M= 4. 131 exists with publication and citation output being jointly the lowest item in the dataset at M= 3. 907 hence reflecting the structural research productivity barriers that Schiller and Liefner (2007) have highlighted in developing-country university systems. The Capability Leverage Pattern represents Risk Awareness, where risk management knowledge at M = 4. 271 is the highest-scoring item in the whole 46-item instrument and its construct also carries significant unique regression weight (Beta =. 223) thus, indicating that this is the area where management development investment would produce the highest effectiveness return according to Bandura (1986) efficacy-action link.

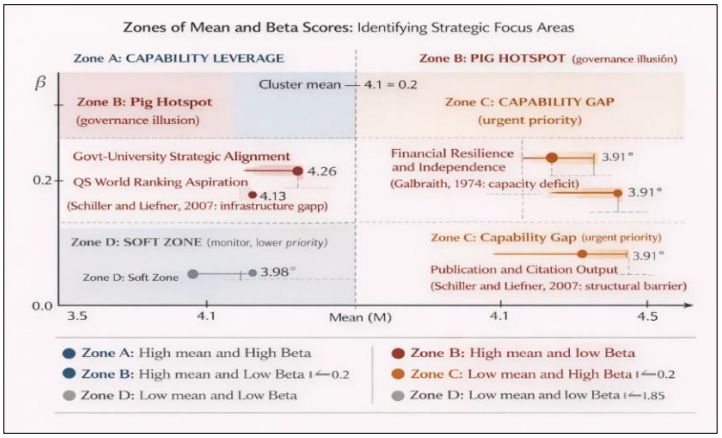

Figure 3: ICDS map

Map classifying governance items into four zones based on item mean and construct Beta, with theoretical attribution from Bandura (1986), Galbraith (1974), Argyris and Schon (1978) and Schiller and Liefner (2007)

4.6 | Hypothesis Summary

Table 9 - summarizes the results of the hypothesis testing. They were all six at the bivariate level, in line with existing research on governance of Malaysian higher education (Ahmad and Farley, 2014; Ahmad et al. 2016). In the comprehensive regression model, H2 (Outcome Commitment, Beta =. 203, p =. 028), H4 (Risk Awareness, Beta =. 223, p =. 018) and H5 (Institutional Ability, Beta =. 249, p =. 016) are supported as individual predictors. H1, H3 and H6 are not individually significant which is a direct confirmation of the main PIG hypothesis that the capability constructs are the ones which dominate the comprehensive regression model (Galbraith, 1974; Bandura, 2000)

Table 9: Full Hypothesis Testing Summary

Hyp.	Construct	PIG Type	rS	Block 2 Beta	Sig.	Decision	PIG Pattern
H1	Goal Orientation	Intention	.421**	-0.200	.829	*Rejected*	Suppressed
H2	Outcome Commitment	Intention	.489**	+0.203	.028*	Supported	Retained but weakened
H3	Relational Alignment	Intention	.538**	+0.074	.467	*Rejected*	Absorbed by capability
H4	Risk Awareness	Capability	.574**	+0.223	.018*	Supported	Capability anchor
H5	Institutional Ability	Capability	.605**	+0.249	.016*	Supported	Dominant driver
H6	Oversight Engagement	Capability	.613**	+0.185	.103	*Rejected*	Marginal

Note: Bivariate significance based on Spearman rank-order correlation. Regression decision based on unique contribution in Block 2 multiple regression. Single asterisk = p below .05. Double asterisk = p below .01. PIG Pattern column describes the construct trajectory within the Performance Intentions Gap framework.

5 | DISCUSSION

5.1 | Confirming the Performance Intentions Gap

The data provide strong empirical evidence for the PIG framework. One of the clearest signs is the Relational Alignment trajectory: from Block 1 Beta =. 312 to Block 2 Beta =. 074. The 17. 7 percentage-point additional R2 coming from capability constructs tells us that the PIG is very significant in terms of substance. Almost 20% of the variance in Management Effectiveness can only be explained by operational capability constructs and is therefore not visible in analyses that focus on aspiration alone. This result supports a major theoretical prediction from Galbraith (1974): companies whose information processing capacity is not sufficient to meet their governance requirements will continually show the gap between their stated intentions and actual effectiveness. This is an organisational level extension of Bandura's (1986) self-efficacy theory. In the case of individual psychology, overly positive beliefs about one's own efficacy are usually safe because the overconfidence that comes with it will lead to persistence (Bandura, 1986). However, at the organisational level, when a group of people are collectively overconfident in their institutional capabilities it leads to a reduction in the perceived need for operational investment that will actually allow governance demands to be met. This account of the dynamic agrees with Mason and Slack's (2003) analysis of performative accountability in the principal-agent context. The PIG model places this not as a failure of motivation but as a consequence of the structure of information asymmetry that was recognized by Galbraith (1974) and Jensen and Meckling (1976) simultaneously.

5.2 | The Three PIG Hotspots and Their Implications

The ICDS study has pointed out a trio of governance areas where the gap between the aspirational and the operational levels is likely to have the greatest negative impact on management performance. The first is the Research Output Gap. Despite the aspiration for a high QS ranking (M = 4. 131), publication and citation output remains the joint-lowest item in the dataset (M = 3. 907). This has been attributed to the structural obstacles that Schiller and Liefner (2007) have documented for the university systems of developing countries: the performance aspirations are institutionally endorsed before the research time, grant access and administrative support necessary to realize them are in place. On the other hand, the Financial Resilience Gap, where risk management knowledge scores 4. 271, yet financial independence from government funding scores only 3. 907, is not really a knowledge problem but a structural-resource problem. Public universities in Malaysia want to be financially self-sufficient, but as Ahmad and Farley (2013) point out, they lack the earnings retained and the institutional autonomy that are necessary to build financial buffers. The Oversight Calibration Gap is, in this regard, where the communication-oriented oversight (M = 4. 299) greatly surpasses performance tracking (M = 3. 981). Hood's (1991) observation that the New Public Management reforms in developing countries give rise to compliance with accountability rhetoric before compliance with accountability substance is consistent with this.

5.3 | Theoretical Contribution

The current literature adds to the collective self-efficacy theory created by Bandura (2000) that illustrates how the beliefs about the power of the organisation at the level of efficacy may be influenced by the institutional milieu of information without having to make the person in question dishonest and irrational. It has been proved that the motivation in the government sector is quite high as Perry and Hondeghem (2008) claim that the issue is the misrepresentation of information but not the lack of motivation. The officials who are always overlaid with high level policy expectation as well as not offered with the proper operational feedback experience shall construct right beliefs about what their organisations should do but at the same time construct the wrong belief of what their organisations are able to do which are precisely the information asymmetry conditions Galbraith (1974) had predicted to result in performance gaps. The practical meaning that this has to the human resource development practitioners is that leadership development programs that are geared towards such issues as clarity of goals, quality of relationship and shared vision will not lead to better management performance unless the operational capacity building is considered. The same discovery was made by Rhoades and Sporn (2002) in their comparative observation of European and American university management, where the aspirational alignment is a state of management performance, but it is not adequate and the institutions that achieve the achievement of the gap in governance, are those that are investing in administrative infrastructure rather than communication with the intention to motivate.

5.4 | Practical Implications and Recommendations

Table 10 presents five targeted recommendations derived from the PIG analysis. Each recommendation is anchored to a specific quantitative finding and distinguishes structural and systems changes, which the evidence supports, from motivational communication, which the evidence suggests is insufficient on its own (Galbraith, 1974; Bandura, 2000; Rhoades and Sporn, 2002).

Table 10: PIG-Derived Management and Policy Recommendations

Recommendation	Evidence Base	Mechanism	Priority
Replace aspiration-focused performance reviews with output-calibrated feedback systems. Communication-oriented oversight (M = 4.299) is crowding out performance tracking (M = 3.981), consistent with Hood (1991) governance rhetoric pattern.	Oversight item gap; Beta = .185	S and T	High
Establish a Protected Research Time Policy across all university types. Publication and citation output is the joint-lowest item at M= 3.907 despite research being a top aspiration. Schiller and Liefner (2007) confirm this are a structural barrier requiring policy rather than attitudinal intervention.	Outcome Commitment item gap: M = 4.131 vs 3.907	P and S	High
Create Institutional Financial Resilience Funds to address the financial independence deficit. Risk Awareness is a significant predictor (Beta = .223) but financial independence is its weakest item (M = 3.907). Ahmad and Farley (2013) identified this as a structural consequence of the block grant funding system.	Risk Awareness item gap; Beta = .223	P and S	High
Redesign management development programmes to target capability gaps rather than goal alignment. Goal Orientation (Beta = -0.200) and Relational Alignment (Beta = .074) lose significance in the full model. Bandura (2000) and Galbraith (1974) both establish that communication about aspirations cannot substitute for genuine operational capacity.	Block 2 coefficients; PIG hotspot analysis	T	Medium
Prioritise Institutional Ability as the primary management development target. With Beta = .249, it is the dominant predictor in the full model. It covers autonomy, central leadership, transparency and leverage strategy, which Rhoades and Sporn (2002) identified as the core administrative capacities distinguishing high-performing from low-performing public universities.	Institutional Ability Beta = .249	T and S	High

Note: Evidence Base refers to the specific quantitative result. Mechanism Type: S = Structural or systems change; T = Training and development; P = Policy design. Priority is based on ICDS classification from Table 8.

5.5 | Limitations and Future Research

Four limitations exist in general in order to interpret these results. First, cross-sectional design does not allow one to make the cause-and-effect statement. Using the PIG framework, it is possible to assume a causal route that follows information asymmetry that leads to an inflation of beliefs and then, the end result on management. The panel data has to be used to validate the longitudinal data in identifying the steps along the chain. It is a reaction to the efficacy research by Bandura (2000) which promotes the dynamic efficacy research. Second, all the measures are self-reported, and it could happen that the intention construct scores are more than they are in reality because of the social desirability bias in the direction that is preferable according to official policy communication (Perry and Hondeghem, 2008). This would mean that the PIG used is even stronger. Thirdly, Intention-Capability Discrepancy Score of the current research is considered through construct-level Beta estimates; future studies should examine to construct individual item-level unique regression estimates through structural equation modelling as proposed by Hair et al. (2007) in regard to improved scoring discrepancies. Fourthly, the university categorization was not brought out clearly in the university specificity as a moderator in the model since subgroups are small, therefore, multi-group structural equation modelling can be conducted to constructively ascertain whether the magnitude of PIG differs among the Research, Comprehensive and Focused University archetypes. One of the research directions in future is longitudinal PIG tracking because it seeks to explore whether the management interventions specifically targeting the capability constructs are effective in creating a high level of improvement in the performance as compared to interventions specifically targeting the intention constructs. The other line of enquiry is the cross-national replication of PIG in the ASEAN systems of universities in Indonesia, Vietnam, and Philippines where the institutional stratification structures as having been practiced in Malaysia exist (Schiller and Liefner, 2007). The other action will involve the establishment of PIG framework to the public hospitals, the regulatory organizations, and government ministries and designing of validated diagnostic survey tool of PIG that could be based on the ICDS approach presented in this paper.

6 | CONCLUSION

The findings of the study indicate that the management of all the Malaysian public universities are strong willed towards the national education policy objectives as indicated by the mean scores of 4. 009 to 4. 185 out of a possible scale of 7 constructs analysed. This degree of motivation, not different in the case of Research, Comprehensive and Focused Universities that are placed in varied resource situations, is an exceptional and material value attribute of the Malaysian public university governance system. Perry and Hondeghem (2008) have perceived high public service motivation as one of the requirements of successful governance of the public sector and the current outcomes demonstrate that the given factor is highly satisfied in the Malaysian higher education sector. However, the primary theoretical significance of the study is not simply in drawing attention to the fact of the strong willpower on the institutional level but in arguing that the willpower alone cannot be an effective predictor of management performance when the same is assessed without the related capability infrastructure. The hierarchical regression model indicates that the capability features, especially

Institutional Ability (Beta =.) are important. 249, p =. Inventory 016) and Risk Awareness (Beta =. 223, p =. 018), together explain 17. The Adjusted R has increased by 7% after intention-only factors have been added to the variance in management effectiveness, bringing the Adjusted R to. 342 to. 510. Through such findings, i.e. in terms of facts, Bandura (2000) collective self-efficacy theory is extended to the organizational governance tier in terms of which Galbraith (1974) had viewed the same as follows: the relationship between efficacy perceptions and effective collective action is moderated by adequacy of operational information systems. In situations where the institutional communication climates continue to support aspirations without providing any adequate operational feedback to the same, the senior management becomes informed about what their institutions are intending to accomplish yet at the same time they become misinformed about what they are capable of operational support. It is actually the state of information asymmetry identified by Galbraith (1974) as the structural source of the organisational performance discrepancy and this research is the first to quantitatively demonstrate the mechanism in the case of the Malaysian public university governance.

The Intention Capability Discrepancy Score analysis shows 3 areas of governance where the disparity between the operational capacity and aspirational belief is widest and where targeted investment is therefore most probable to lead to a measurable enhancement of management effectiveness. To start with, this research has a large unique regression weight (Beta=.) in the research productivity area. 203, p =. The scores of 028) and QS ranking of aspiration are rather high (M = 4). The lowest item in the 46-item instrument is publication and citation output (M= 3.907), but the publication and citation output has the lowest publication and citation output. Similar to the analysis of a developing country university system by Schiller and Liefner (2007), this tendency demonstrates that the goals of research performance have been approved officially long before the reserved time, grant infrastructures and administrative support system was determined to achieve the goals. The response of the institution, therefore, must be structural rather than motivational: development of policies of protected research time, special research developing support mechanisms must be created in line with current and realistic research aspirations of the university management.

On the other hand, in the area of financial resilience, Risk Awareness is the top scoring item across all the measures (M= 4.271) and it has a quite strong unique regression weight (Beta=.223, p=. However, the weakest sub-item is 018) however, financial independence of government funding (M=3). 907). These findings indicate that even though the top management has the risk management expertise to back up financial diversification approaches, they do not have the organizational independence and retained earnings processes to constitute the expertise into practice. As Ahmad and Farley (2013) identified, the primary structural obstacle to university financial autonomy is block grant funding; any attempt to bridge this gap would then have to rely on policy-based reform of funding retention systems as opposed to an additional effort to develop risk awareness, which is already demonstrated to be robust in all types of universities.

Third, Oversight Engagement even, in the field of performance supervision, negatively influences the regression model (Beta =). 185, p =. 103) and oversight items are devoted to communication with much higher scores (M = 4). 299) compared to performance tracking ones (M = 3). 981). This trend aligns with the findings of Hood (1991) study on the New Public Management implementation in developing countries that found that accountability reporting practices may have preceded a system of output measurement that would provide a real sense to the practices. The recommended solution is an institutional realignment of the current check and balancing systems that promote a measured output monitoring that will capitalize on the good communication infrastructure that exists throughout the institutions of the university administration. The combination of these findings has a very clear and practical message to university leadership and higher education policy makers. The motivating factors of efficient management are not only present but also extremely powerful and uniform across the Malaysian system of universities. Therefore, the evidence-driven improvement plan must not be aimed at transformation in culture or change in attitudes but three areas of operations at which the infrastructure of capability is yet to be aligned to the high-level management operating on the aspirational promises in good faith and beyond mere words.

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Use of Generative AI

The authors confirm that generative AI tools were used solely for minor language refinement purposes and did not contribute to the intellectual content, analysis, interpretation, or conclusions of the study.