TRANSFORMING PUBLIC HIGHER EDUCATION THROUGH FINANCIAL BEHAVIOURAL DRIVERS MODELS

ABSTRACT

The purpose of this research is to investigate the correlation and causation of theories of planned behaviour, present bias, iNcentives, Understanding mappings, Defaults, Giving feedback, Expecting error, and Structuring complex choices (NUDGES), and financial literacy for the university financial staff. This research investigates the staff's behaviours and outcomes and observes any changes over time. We make use of a survey questionnaire as well as data acquired from 285 financial staff at 28 public universities. The authors developed the warp partial least squares structural equation modeling (PLS-SEM) technique, which was used to analyze the data and test the proposed model.The results of this study indicate that financial management behavioural intention can be controlled by various psychological variables such as the theory of planned behaviour, present bias, financial literacy, and NUDGES as the strongest predictor. The research findings underscore the importance of the system strength factor (shown by NUDGES) in monitoring and shaping financial management behaviour. This research contributes to the current literature by investigating the relationship between financial management behaviour intention and the theory of planned behaviour, present bias, NUDGES, and financial literacy. In addition, this research has become an enrichment in the conversations of stakeholders at public universities to demonstrate the findings of this study as a basis for strengthening the financial management system through the six elements of the NUDGES factor.

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Keywords: Financial Management Behaviour; Theory of Planned Behaviour; Financial Knowledge; Present Bias; NUDGES

1. INTRODUCTION

The dynamics of higher education management necessitate modifications in order to adapt to changing circumstances. One of the most important considerations is the university's governance. In Indonesia, public universities are currently managed in at least three ways, one of which is a university with Public Service Agency (PSA) status (hereafter referred to as a public university), which provides financial management flexibility. In certain ways, public universities are public-sector organisations with economic imperatives: they are effectively hybrid businesses [1]. Public universities are given various forms of flexibility in their management in the form of tariffs, planning and budgeting, budget execution documents, revenue expenditure, cash management, receivables and debt management, investment, goods management, accounting system, reporting and accountability, performance accountability, surplus and deficit, institutions, coaching and supervision, and remuneration. These university enterprises rely on accounting and management-related performance control and reporting systems [2]. In this context, excellent financial management by all university financial staff is essential.

Financial behaviour has become an interesting topic of research today. According to Novianti (2019), someone who has financial management behaviour tends to make a

budget, save money, and control spending. However, financial management is not only for individuals but also private and public organisations. They require good financial management for their businesses to continue to operate and generate profits or advantages that are utilised to meet the organisation's demands and commitments. Financial managers' or financial staff's numerous problems with poor financial knowledge and attitudes are likely to impair financial management behaviour in the agencies they supervise. If this occurs in the management of state universities, it is extremely concerning. As public universities have more freedom and autonomy in carrying out operations, specifically in terms of financial management, human resource management, and asset/goods management and procurement [4]. It is worth investigating as to why and how financial behaviour impact financial system and management dan sebaliknya A

Several studies on financial management have also been conducted, one of which by Laily (2016) indicated that financial literacy, which is defined as a person's knowledge and capacity to manage funds, is one of the drivers of financial behaviour. Saving, investing, and credit behaviour are all examples of financial knowledge being used to assess the need for financial education [6]. Research has shown that having financial education promotes people to be more financially responsible, examining the link between these two factors (Robb & Woodyard, 2011). Meanwhile, according to Musdalifa (2016), there is a strong influence where locus of control, financial expertise, and income all have a beneficial effect on investment decisions. Then, according to Widyaningrum (2018), financial attitudes, knowledge, and experience all play a role in financial management. A lot of research has applied the notion of planned behaviour to financial services clients' decisions, including investing, mortgages, and credit counseling. Some research on personal financial management have focused on demographic, sociological, and economic aspects of financial resource management. There has been gaps in the literature, particularly research at universities, only few studies have looked at the cognitive, psychological, and system contribution components of financial management.

In doing so, this study's purpose is to discover the primary elements that impact financial management behaviour at public universities, particularly the effect of present bias and iNcentives, understanding mappings, defaults, giving feedback, expecting error, and structuring complex choices (NUDGES) factors. Previous studies examined how present bias influences consumer and financial choices. Present bias, in particular, may influence spending choices. Bias in the present might affect borrowing. With a present bias, people utilise credit cards more than others [10]. Because financial staff may not always act rationally or make long-term decisions in their best interests, universities should conduct research utilising behavioural economic principles to improve financial staff decision-making. "Nudging" is one approach that will be implemented in this study as it is considered unique. The uniqueness of NUDGES as a determining factor puts forward the power of the financial management system shaping the behaviour of financial staff instead of personal psychological factors.

The rest of this study is devided into parts. Behavioural Finance and its theoretical evolution are addressed in Section 2. Section 3 discusses the technique, while Section 4 reports the findings. Section 5 discusses the results, and Section 6 discusses the consequences for universities and theory.

2. LITERATURE REVIEW

2.1 Financial Management Behaviour

Any human action that has a relationship to money management in any manner qualifies as financial management behaviour [11]. Cash, credit, saving, and investment are all common financial activities. According to Dew and Xiao (2011), cash management emerges first, followed by credit, savings, and finally investment management. This behavioural hierarchy may evolve as a result of disparities in financial resources among individuals.

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The ability to learn about financial planning, use it by managing one's own actions, assessing the initial intended action that did not materialize, and addressing financial problems [13]. Previous research on personal financial management has focused on demographic, sociological, and economic aspects of financial resource management. Only a few studies, particularly at universities, have looked at the cognitive, psychological, or personality components of personal financial management.

2.2 Theory of Planned Behaviour

The theory of planned behaviour is an extension of rational behaviour [14]. According to this theory, subjective norms and perceived behavioural limits impact behaviour intentions. As a result, one's behaviour patterns are impacted by one's behavioural objectives. It is defined as a person's positive or negative evaluation of a relevant action, and it is made up of basic beliefs about the expected outcomes. Perception of the referent's approval or disapproval is a subjective norm.

The theory of planned behaviour adds a variable called perceived behavioural control to reflect nonvolitional components of behaviour like anger and frustration that aren't often connected with attitude–behavioural models (e.g., Fishbein & Ajzen, 1977). Perceived behavioural control: the perceived level of difficulty in performing the behaviour is described by perceived behavioural control, which takes into account both previous experience and predicted impediments. According to research, stronger behavioural intentions lead to more positive attitudes about carrying out actions, higher levels of perceived social approval, and more reported ease in carrying out behaviours. The consequence of this is that the greater the level of behavioural intention, the more probable it is that the activity will actually be performed. Furthermore, the illusion of control may have a direct influence on one's own behaviour and actions.

Several studies have used planned behaviour to better understand customer behaviour in financial services, such as investment selection, mortgage use, and credit counseling. Based on the theory of planned behaviour, according to Fortin (2000), a theoretical framework for explaining coupon and e-coupon behaviour has been developed. A comparison of rational and planned behaviour theories for e-coupon use intentions revealed that the theory of planned behaviour best reflected the intention (Kang, Hahn, Fortin, Hyun, & Eom, 2006). Another study looked at how college students manage their money using the theory of planned behaviour. Their early results link the intention to the theory's three antecedents, and the intention contributes to the behaviour. This study hypothesizes the following based on these concepts:

H1: Attitudes toward financial management behaviour have a positive influence on financial management behaviour.
H2: Financial management's subjective norm has a positive influence on financial management behaviour
H3: Financial Management Behaviour as Perceived has a positive influence on financial management behaviour.

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2.3 Present Bias, NUDGES, and Financial Knowledge

The trait of seeking current pleasure at the cost of future rewards is known as present bias. It is defined as overvaluing current advantages at the expense of future returns [18]. Those who are more present-biased are more prone to consuming rather than saving and investing their money in terms of current and future expenditures. Borrowing is more common among those who are more focused on the now since loans are generally utilised to support current expenditures [10]. People who are more concerned with current spending and rapid gratification may be less diligent with their money management.

Previous studies looked into the impact of present bias on consumer and financial decisions. A person's spending behaviour might be influenced by their present bias in particular. For example, tourists with strong loss aversion and present bias are more inclined

to splurge [19]. People who have a longer time horizon and are less focused on the here and now are more likely to purchase energy-efficient products [20]. There is also the possibility that present bias has an impact on borrowing behaviour. Those with a present bias are more prone than non-biased people to borrowing money using credit cards [10]. In light of these considerations, the following hypotheses are advanced:

H4: Present bias has a negative influence on financial management behaviour.

Because finance staff may not always behave logically and make judgments in their best interests, universities should consider incorporating behavioural economic principles into their decision-making processes to increase the likelihood that staff will make favorable decisions. "Nudging" is one example of such a method. The abbreviation "NUDGES" was coined by Thaler (2009) and stands for iNcentives, Understanding mappings, Defaults, Giving feedback, Expecting Error, and Structuring Complex Choices. Each notion is explained and applied to financial management behaviour in the following sections.

Choosing incentives that are important to the staff is referred to as "iNcentives." This may be more motivating for some people than traditional promotional products. "Mapping is the process by which universities interpret information about a choice into what it implies for financial staff. The term "defaults" refers to the options available to financial staff if they do nothing. Giving feedback entails offering critical information to the staff that can be used to influence future decisions. The concept of "expected error" implies that the staff will not be faultless. Make a contingency plan. Changing behaviour is challenging, and employees must be reminded that mistakes are inevitable and part of the process. Last but not least, structuring complex choices refers to how options are presented to the staff and their consequences. When possibilities are pooled, the decision paradox is decreased. This study hypothesizes the following based on these concepts:

H5: NUDGES has a positive influence on financial management behaviour.

Several studies have been conducted to investigate the relationship between personal financial management behaviour and individual characteristics such as financial knowledge (Ibrahim & Alqaydi, 2013; Mien & Thao, 2015). Financial knowledge, as described by Garman & Forgue (2014), is sufficient understanding of facts regarding personal finance and is the cornerstone of personal financial management behaviours. Inputs to a model that assesses the need for financial education include financial understanding, saving, investing, and credit knowledge [6]. Research has shown that having financial knowledge promotes people to make more financially responsible decisions, suggesting that the link between these two factors cannot be ignored (Robb & Woodyard, 2011). Financially knowledgeable consumers are more likely to make sensible financial decisions [25]. As a result, the following hypothesis is proposed by this research:

H_6: Financial knowledge has a positive influence on financial management behaviour.

Figure 1 depicts the proposed research model based on prior research and assumptions.

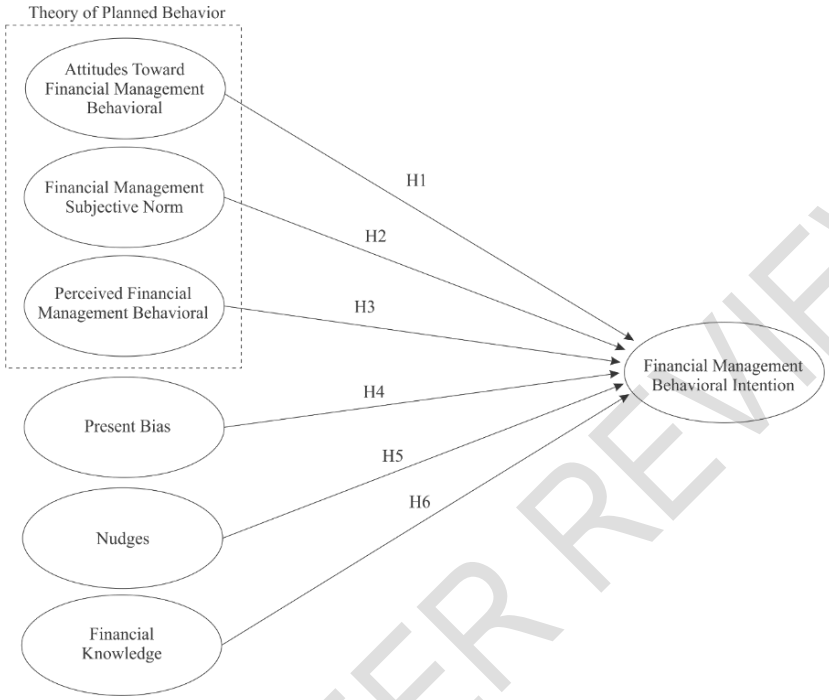

Figure 1. Research Model

3. METHODOLOGY

A quantitative survey was conducted in order to put the research model that had been developed to the test. Pilot testing of the instruments was conducted with 30 respondents from the university's finance department, who were recruited from previous research. Based on the results of the pilot study, the inconsistencies in the wording of the questionnaire and questions that were confusing or ambiguous were revised. This pilot questionnaire has a validity score of 0.86 and a reliability score of 0.77. Financial management behaviour is measured in four aspects, including spending, borrowing, saving, and money management [18]. Variables were evaluated on a 5-point scale to determine their impact on behaviour. Consider the variable of whether or not something is affordable when shopping. The following questions were used to assess the variable of considering whether or not something is affordable when shopping: "When I go shopping, I will think about my financial situation:" 1—Totally inapplicable, 2—Slightly inapplicable, 3—Generally applicable, 4—Slightly applicable, 5—Totally applicable." The instruments that were utilised are listed in Table 1.

Table 1. Instruments for Descriptive Study

Variables	Items	References
Attitudes Toward Financial Management Behaviour (ATB)	When I go shopping, I will think about my financial situation. I'd want to apply for a number of additional credit cards. Before signing a financial contract or taking out a loan, I thoroughly review the terms and conditions. My family will invest in riskier options. I like to speculate on investments in financial products that may not provide a guarantee of capital or money back. I am punctual in making my payments. I have the habit of keeping track of all of my income and spending.	(Ajzen, 1991; Kennedy, 2013; Xiao & Porto, 2019; Stella, Filotto, Cervellati, & Graziano, 2020; Chamid & Salisa, 2020)
Financial Management Subjective Norm (SN)	My relatives meet their daily requirements and consume in accordance with their means of subsistence. As a result of my current financial circumstances, my family is prepared to take on further debt. Credit cards are used by my relatives. If some relatives present me with an investment opportunity that offers a 50% annual rate of return, I will consider it. If I see an advertisement for a 50% yearly return on investment, I will invest my money and watch it increase. When it comes to selecting a financial product, I will gather product information and compare several options.	(Ajzen, 1991; Kennedy, 2013; Xiao & Porto, 2019; Stella, Filotto, Cervellati, & Graziano, 2020; Chamid & Salisa, 2020)
Financial Management Behaviour as Perceived (PFB)	Conserving money gives me greater satisfaction than spending money. I intend to use a loan to keep my financial situation in balance. Despite the fact that I am well aware of how difficult it is to obtain a credit card, I continually attempt to obtain another one. I have the knowledge and ability to invest. My spouse and I have calculated the amount of money we will need to support our living	(Ajzen, 1991; Kennedy, 2013; (Hoa & Dzung, 2018; Xiao & Porto, 2019; Stella, Filotto, Cervellati, & Graziano, 2020; Chamid & Salisa, 2020)

	expenses in the future.	
	My financial status is something I pay great attention to (e.g., regular checks of bank accounts and balances).	
Present Bias (PB)	I want to spend more time in the now and less time thinking about the future.	[18]
NUDGES (NU)	The university provided adequate staff incentives and rewards.	
	The university has provided simple and meaningful information about the consequences of the work you do.	
	The university has used an automation/application system for university financial management in accordance with the provisions of PSA financial management.	
	University leaders have designed a system to notify employees when they do a good job and when they make a mistake in order to improve performance.	[21]
	The university has a well-designed financial system so that it is not difficult for the user and can be easily corrected if the user makes a mistake.	
	The university has implemented the processes required to enhance the quality of decision-making in the area of financial management.	
Financial Knowledge (FK)	Assume you have 10 million IDR in a 2% savings account. You'd have had how much in 5 years if you hadn't taken the savings?	(Idris et al., 2017; Robb & Woodyard, 2011)
	If your savings account earns 1% annually while inflation is at 2%, you have a problem. How much money can you spend after a year with this account?	
	Is it true or false that "buying a firm's stock typically provides safer returns than stock mutual funds"?	
	Is this statement true or false in your opinion? Is PSA's income reported as non-tax revenue?	
	What do you think about whether this statement is true or false? Payment for the purchase of goods made with the money supply mechanism is subject to Article 22 Income Tax of 1.5%.	
	You relocate to a city where the cost of living is	

	one-third more than it was in your previous location. How can you keep a steady savings percentage while earning the same salary? You're a new parent. What if you wanted to discover a way to provide your family with additional financial security in case you died? You've made the decision to put IDR 100 million into financial assets to grow your wealth. Which of the three funds will you select if you are presented with the option? You have the option to make a financial investment of IDR 200 million. You are a risk-averse individual who has made long-term financial commitments. Which investment, in your opinion, is the most suitable for your requirements? You're 42 years old, and your university is struggling financially. So, you got IDR 2 million from the lottery. How do you utilise it?	
Behavioural Intentions in Financial Management (BI)	Money, in my opinion, should be spent, and we should spend it whenever we have the opportunity to do so. I want to try all kinds of credit cards. I am willing to borrow to meet consumption needs. I will invest in the near future. I will encourage friends and family to invest. I will make a long-term financial plan.	(Ajzen, 1991; Kennedy, 2013; [18]; Stella, Filotto, Cervellati, & Graziano, 2020; Chamid & Salisa, 2020)

To enable us to measure the relationship between the theory of planned behaviour, financial knowledge, NUDGES, and present bias with financial management behavioural intention, the researcher collected questionnaire data from financial staff at public universities in Indonesia with AA (excellent), A (very good), and C (poor) accreditation for financial management from the Indonesian Ministry of Finance (Indonesian public service agency ranking 2012). The population in this study are respondents who are treasurers and financial staff who are responsible for financial management at universities with PSA status and have a minimum income of Rp. 2.500.000 per month. We identified that 28 public universities with PSA status have received accreditation from the Ministry of Finance. After obtaining participant agreement, the questions were delivered by internet survey. A total of 285 out of 314 questionnaires issued were returned, a 90.7% response rate. Table 2 shows the respondents' demographics.

Table 2. Demographic Characteristics of Respondents' Profiles

Demographic Variable	Category	Frequencies	Percentage (%)

Gender	Male	114	40
	Female	171	60
Age	17-25 years old	2	1
	26-35 years old	100	35
	36-45 years old	111	39
	46-55 years old	54	19
	>55 years old	18	6
Education	High School	14	5
	Diploma	8	3
	Bachelor	208	73
	Master	55	19
Working Period	< 3 years	28	10
	3-6 years	99	35
	7-10 years	96	34
	> 10 years	62	21
Marital Status	Married	256	90
	Single	29	10

Table 2 shows that respondents are dominated by staff aged 36–45 years (39%), have a bachelor's background (73%), and are married (90%). Thirty-five percent of respondents have worked for 3-6 years, and 21% have worked for more than ten years.

3. RESULTS AND DISCUSSION

3.1 Analysis of the Measurement Model

The dataset was analyzed using SEM and SmartPLS 3.0 software. PLS regression was used for this investigation because it is frequently used for complicated causal–predictive analysis and does not require a multivariate normal distribution or a large sample size [30]. In the beginning, the data was examined for convergent and discriminant validity, respectively. Convergent validity refers to the degree of agreement between the measuring instrument's properties and the theoretical assumptions that explain their existence. The validity indicator items provided by the loading factor value are used to assess convergent validity. An indicator construct's indicator score correlates with the question item's score. A legitimate indication has a loading factor greater than 0.5 [31] as shown in Table 3.

Table 3. Resume for Convergent Validity

Items	Loadings	AVE	Cronbach's Alpha	Composite Reliability

Attitudes Toward Financial Management Behaviour		0.661	0.912	0.931
ATB1	0.646			
ATB2	0.716			
ATB3	0.896			
ATB4	0.901			
ATB5	0.869			
ATB6	0.806			
ATB7	0.825			
Financial Management Subjective Norm		0.578	0.852	0.891
SN1	0.800			
SN2	0.833			
SN3	0.656			
SN4	0.743			
SN5	0.828			
SN6	0.683			
Financial Management Behaviour as Perceived (PFB)		0.556	0.838	0.882
PFB1	0.683			
PFB2	0.798			
PFB3	0.746			
PFB4	0.607			
PFB5	0.846			
PFB6	0.771			
Present Bias		1.000	1.000	1.000
PB1	1.000			
NUDGES		0.517	0.813	0.865
NU1	0.679			
NU2	0.758			
NU3	0.675			
NU4	0.774			
NU5	0.721			
NU6	0.700			

Financial Knowledge		0.542	0.905	0.921
FK1	0.721			
FK2	0.879			
FK3	0.698			
FK4	0.734			
FK5	0.733			
FK6	0.640			
FK7	0.734			
FK8	0.631			
FK9	0.787			
FK10	0.771			
Behavioural Intentions in Financial Management (BI)		0.643	0.887	0.915
BI1	0.864			
BI2	0.764			
BI3	0.840			
BI4	0.676			
BI5	0.835			
BI6	0.817			

Next is discriminant validity. The contrast between traits that should not be assessed by instruments and theoretical conceptions regarding these variables is called discriminant validity. The model has superior discriminant validity if the square root of each construct's AVE is larger than the correlation between them. A good AVE value is greater than 0.50 [31].Cronbach's alpha and composite reliability are used to measure dependability. Cronbach's alpha evaluates a construct's lower limit of reliability, whereas composite reliability measures the construct's actual dependability. However, composite dependability is preferred for assessing a construct's internal consistency. The construct is reliable if the composite reliability is greater than 0.7.

3.2 Structural Model and Hypothesis Testing

We ran a structural model analysis to assess the hypotheses created after the measurement model passed the convergent and validity tests. The inner model's reliability is assessed by the dependent construct's r-square score and the path coefficient test's t-statistical value. The larger the r-square, the better the research model prediction. Path coefficients represent the statistical significance of hypothesis testing. In table 4, the value of R square and the path coefficient can be seen.

Table 4. Hypothesis testing

Hypotheses		Original Sample (O)	T-Stat	P Values	R Square Adjusted	f Square	Result
H_1	ATB ⟶ BI	0.305	2.801	0.005	0.931	0.109	accepted
H_2	SN ⟶ BI	0.515	2.701	0.007		0.130	accepted
H_3	PFB ⟶ BI	0.304	3.116	0.002		0.108	accepted
H_4	PB ⟶ BI	-0.198	2.118	0.035		0.136	accepted
H_5	NU ⟶ BI	0.790	6.581	0.000		1.375	accepted
H_6	FK ⟶ BI	0.613	4.381	0.002		0.105	accepted

Based on the r-square value in Table 4, it shows that ATB, SN, PFB, PB, NU, and FK are able to explain the variability of the Financial Management Behavioural Intention (BI) construct by 93.1%, and the remaining 6.9% is explained by other constructs other than those studied in this study. Table 4 also provides evidence that all antecedent constructs have a statistically significant impact on the intention to engage in financial management behaviour. Attitudes, subjective norms, perceived behaviour, present bias, NUDGES, and financial literacy contribute significantly to construct intention to financial management behaviour since those constructs have t-values of 2.801, 2.701, 3.116, 2.118, 6.581, and 4.381 (greater than 1,66). The value of the i-original sample estimate between attitudes and subjective norms with the intention was positive, the opposite applies. These results show that there is a positive direction in the relationship between attitudes, subjective norms, perceived behaviour, present bias, NUDGES, and financial literacy with the intention. It means the intention of financial management behaviour will be higher with the addition of them.

The results of this study indicate that financial management behavioural intention can be controlled by various psychological variables (such as the theory of planned behaviour and present bias), organisational variables (NUDGES), and financial literacy. The Theory of Planned Behaviour states that intention influences behaviour. Subjective standards, attitudes, and perceived behavioural control all impact intention. Norms are a person's impression of other people's financial conduct. The degree to which a person values the outcome of his or her financial behaviour determines his or her attitude toward it. Behavioural views, on the other hand, are a person's beliefs about the results of a particular financial conduct and their appraisal of prospective outcomes. As a result, behavioural attitudes may assist individuals in changing their financial behaviour [32].

In addition, we emphasize the beneficial effects of NUDGES (understanding mappings, defaults, giving feedback, expecting errors, and structuring complex choices) on the financial behaviour of the staff with the highest predictive scores. Nodges linked to the financial governance system seem to influence the financial behaviour of staff. Because financial staff will not always act rationally and make decisions that are in their best interests in the long run, universities should consider incorporating behavioural economic principles into their decision-making processes to increase the likelihood that staff will make favorable decisions. The NUDGES idea is in line with the Community Organisation Theory (COT) (Ross & Lappin, 1955; Gozdz, 2000). The need for community engagement in resolving problem behaviour is emphasized in this approach. COT is a network of human interactions that may be used for financial behaviour transformation and can be used to understand any behaviour by looking at cause and effect. It breeds uniformity and rigidity, suffocating innovation, personal development, and financial behaviour change incentives. By characterizing organisation as a system, he established one of the earliest contemporary theories of organisation by stating that human needs are addressed by actively coordinating actions.

Nudging is the process of persuading financial staff to make a behavioural adjustment without limiting their freedom of choice. To consider nudging a benefit, we must assume that

the nudging goal reflects some common good (e.g., financial accountability) and that NUDGES are developed by a well-meaning university with the best interests of the staff in mind. This, however, cannot always be assumed. The setting in which staff make decisions is referred to as "choice architecture." To prevent involvement, it must be simple and inexpensive. Nudges do not impose any requirements.

In the context of changing the behaviour of university financial management staff through a robust system, university leaders can implement NUDGES strategies such as (1) providing adequate staff incentives and rewards; (2) providing simple and meaningful information about the consequences of the work staff do; (3) using an automation/application system for university financial management in accordance with PSA financial management provisions; and (4) designing a system that (5) has a well-designed financial system that is easy to use and can be readily adjusted if the user makes a mistake; and (6) has implemented the processes necessary to improve the quality of financial management decision-making.

According to Table 4, NUDGES have a stronger effect than financial knowledge in predicting financial behaviour. This conclusion is similar to Tasneem (2018) research, which indicated that the significant nudge raised savings rates, though not to the optimal level. Literacy training had no effect on the savings rate, although it did seem to reduce the volatility in consumption. For the nudge treatments, they automatically put 0%, 20%, or 30% of salary into savings (equal to cash-in-hand) at the start of each phase of the retirement savings game. The 0% contribution is intended to represent the therapy without nudging. Literacy training results in a significant boost in retirement savings in the zero and 20 percent nudge treatments: more than $3. Retirement savings in the 30% nudge interventions are on par with the other treatments with training.

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Nugding is also beneficial for changing spending habits as well as saving habits. Chen and Geng (2021) discovered that MOOC providers who undertake nudging attempts are more likely to attract new customers to their services. Nudging the learners not only has educational advantages, but it also has a significant financial impact; either raising the quality of the verified track or decreasing the unit cost of nudging the learners always results in more demand for nudge and higher profit. Nugding has been shown to be helpful in increasing spending behaviour in this scenario.

In terms of social class, NUDGES is seen to be more accurate in forecasting financial behaviour change in the lower to medium economic classes than in the upper class. This result is supported by Can and Erdem (2013, p.3), which shows that low-income people require more "nudge" than high-income people to maintain a sustainable level of aggregate saving and financial investment for time-inconsistent people. Because the financial staff included in our research are from the middle economic class, the use of NUDGES, or system strengthening, has a larger role in influencing behaviour, particularly in spending, borrowing, saving, and money management.

In essence, this study contradicts the behaviour change and culture/system change approaches. They each have various strengths and limitations in terms of background, major elements, and usual implementation tactics. In contrast to behaviour change, culture change approaches to financial behaviour are more "top-down." The emphasis is on understanding and, in many cases, influencing the core values and beliefs of the organisation, which nearly always entails collaboration with university leadership. Important policies and programs typically begin within the levels of management, and even if they do not, management cooperation is required to shift priorities, finance and staff new initiatives, or otherwise modify how things are done inside the firm.

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4. CONCLUSION

These data lend some credence to theoretical expectations, although they are not without limitations. Attitudes, subjective norms, and perceived behaviour have significantly

influenced the intention of financial management behaviour. This means that staff who have good attitudes, noble subjective norms, and complete perceptions of financial management tend to have good behavioural intentions in financial management. Results also show that present bias has a negative influence on financial management behaviour. Therefore, present-biased staff are more likely to spend their money now and less likely to invest for the future [38], as well as borrow excessively [10]. Financial knowledge leads to more financially responsible behaviour among employees [7]. Consumers who are financially knowledgeable are more likely to make sound financial decisions [25].

Conversations in the behavioural study of financial management may benefit from the results of this research, according to the authors. The implementation of a constructive system of oversight, reward, and threat may enable the institution to effectively influence the financial behaviour of its staff. The findings also have implications for assisting staff in avoiding present bias and making sound financial decisions in the future. Attitudes, subjective norms, perceived behaviour, present bias, NUDGES, and financial literacy are important in behavioural finance. In addition, this research has become an enrichment in the conversations of stakeholders at public universities to demonstrate the findings of this study as a basis for strengthening the financial management system through the six elements of the NUDGES factor.

It is necessary to recognize the limitations of this study. First and foremost, the behaviours investigated in this study were those that participants reported. It would be beneficial to include information derived from real-world observations of behaviours, such as administrative data, in this area of investigation. Second, this study used data from all public universities with PSA status, in one nation Indonesia, in its analysis. Research in the future should include data from a greater number of nations in order to evaluate the similarities and variations in probable effects on financial management practices across different countries.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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