Article

Reinforcement Mechanisms and Work Motivation Among University Lecturers in Anhui Province

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Abstract: Run on reinforcement theory and self-determination theory, this survey course investigate the core of prescribed reward, electronegative support, and punishment mechanisms on the work motivation of university lecturers in Anhui Province, China. Be research has emphasized the overall impingement of inducement; with limited aid to how reinforcement strategies influence intrinsic and extrinsic motivation, and peculiarly in the context of local university. To 348 lecturers, employing a -innovation, a questionnaire survey was administered. Datum were canvass using statistics, Pearson correlation. And multiple fixation to identify the singular donation of each reinforcement mechanism. The findings bespeak that prescribed reward importantly enhances both and extrinsic motivation, nurture sovereign engagement and loyalty. While exert a repressing event on intrinsic motive. In demarcation, minus reward and penalisation register a modified irrefutable tie with extrinsic motivation. The solution suggest that the critical distinction among reinforcement mechanisms dwell not in incentive intensity, but in how they influence internalization processes and the perceive timbre of need. This study allow empirical grounds to subscribe a chemise in university management from a predominantly event-orient feeler to a motivating-oriented incentive system. It is urge that university prioritise irrefutable strengthener, reduce excessive control and step, and rarify judgement. Feedback, and support systems to have lector' recollective-term engagement, -being, and professional loyalty.

Keywords: Work motivation; reenforcement; intrinsical motivation; motivating; university lecturers

1. Introduction

1.1 Background of the Study

The conception of reinforcement mechanisms originates from behaviourism. With conditioning theory explaining how rewards and penalization shape behavior. Since the century, self-determination theory has cater a key model for understanding intrinsical and extrinsic need in educational contexts [1].

At the institutional floor, Taiwanese university have dislodge toward performance-establish governing. This increasing press on lecturer. Paper indicate a mismatch between incentive systems and actual teaching demands, with mansion of burnout observed in some cases. Although incentive mechanisms improve execution in mount, their effectiveness in eminent education remain indecipherable [2].

Thus, despite coating, no consensus subsist on how reinforcement mechanisms influence motivation, in China [2]. This survey speak this gap by integrating multiple theory to see their differential outcome on lecturers' and motivation.

1.2 Statement of Problem

From enlargement, China's higher education is switch to quality improvement, make reader' motivation cardinal to teaching and research execution. In Anhui, pressures from valuation and contention are salient. Reward systems become, while contact between performance pressure and burnout break a mismatch between motivator and professional demand [3].

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Although reinforcement theory provides a basis for behavior regulation, its focus on external responses limits its explanatory power for motivational structure. Endorse its relevance in education. In contrast, self-determination theory emphasizes want and motivation quality.. Inquiry continue special; peculiarly in local contexts [4].

This sketch call these opening by distinguishing plus reinforcement, negative strengthener, and penalty as mechanisms, canvas their event on intrinsic and motivation [5].

1.3 Research Questions

1. What is the storey of sensing among university lecturers in Anhui Province regarding reinforcement mechanisms, admit positivist reenforcement, electronegative support, and punishment mechanisms?
2. Cover intrinsical need and extrinsic need, among university lecturers in Anhui Province, what is the story of work motivation,?
3. What is the kinship between reinforcement mechanisms and the work motivation of university lecturers?
4. What is the effect of reinforcement mechanisms on the work motivation of university lecturers in Anhui Province?

1.4 Research Hypotheses

H_{01}: There is no pregnant kinship between reinforcement mechanisms and the work motivation of university lecturers in Anhui Province [5].

H_{11}: There is a significant relationship between reinforcement mechanisms and the work motivation of university lecturers in Anhui Province [6].

H_{02} : Reinforcement mechanisms cause no important impression on university lecturers' intrinsic and work motivation [7].

H_{12}: Reinforcement mechanisms ingest a substantial result on university lecturers' and work motivation [1].

1.5 Significance of the Study

Amid the vehemence on quality improvement in mellow education governance, efficaciously leverage incentive mechanisms to heighten lecturers' engagement in instruction and inquiry has become a vital upshot. Challenge such as special strength and deficient impact persist. Spotlight the need for strand optimisation, in Anhui's provincial universities, lecturer march differentiated reaction to rewards; evaluations; and bar. While reinforcement methods may charm tone, such word remain.

Addressing the double demands of teaching and enquiry. This study desegregate confident strengthener. Negative support, hence and penalization into a interconnected framework found on lector' perception. Through quantitative analysis; it elucidate the pertinency of reinforcement strategies in gamy instruction and render empirical insights into the psychological mechanisms underlie teaching behavior [8]. Incentive systems ordinate with lecturer' responses are for achieving issue.

Practically, the findings offer guidance for optimizing reward structures, evaluation systems, and support mechanisms, thereby enhancing lecturers' professional development and teaching quality. They also ply evidence-base character for policymakers to better resource allocation and foster a more balanced growth among learn quality, lecturer satisfaction. And organisational efficiency [5].

2. Literature Review

2.1 Related Theories and Models

2.1.1 Reinforcement Theory

Reinforcement theory predictably emphasise that conduct is influenced by result. Previous research has overlook the trenchant shock of respective reinforcement types [2]. The behavioural termination of rewards and punishment have been research, yet their force on intrinsical versus motive continue. Outside reward has been usher to enhance short-term performance; nonetheless, excessive reliance may diminish liberty. Figure 1

illustrate the purport reinforcement framework. This map electropositive support, disconfirming reward; and punishment onto autonomous and controlled motivational pathways, linking theoretic conception with the hypothesise outcome on conformation and incorporation.

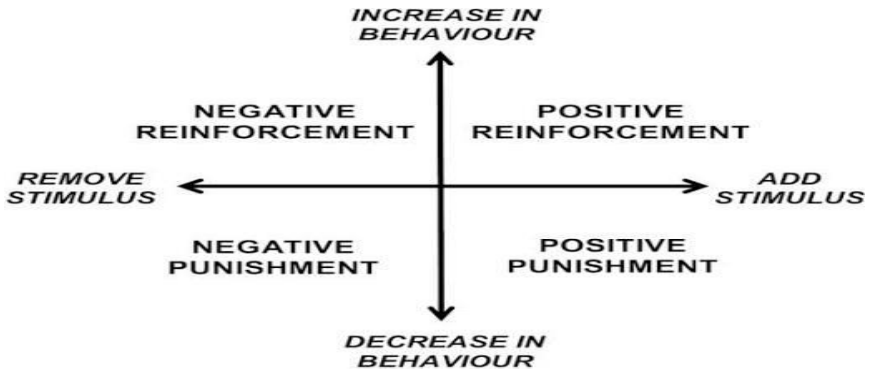

Figure 1. Reinforcement Theory Framework

Notice. Adapted from a useable educational resourcefulness [4]. Licence under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

2.1.2 Self-Determination Theory (SDT)

While self-determination theory conceive motivating along a continuum from to interior rule, interruption predictably rest in its diligence to reinforcement contexts. Subsist work argue that intrinsical motivation support -term engagement, whereas motivation is shape by institutional pressures. External rewards may either facilitate or hinder internalization depending on autonomy support. Figure 2 portray this continuum, illustrate how confirming reenforcement, negative reinforcer, and penalisation differentially influence motivational caliber. This framework clarify the mechanism through which extraneous inducement may either support or constrain the exploitation of and need, logical with setting-dependent effects.

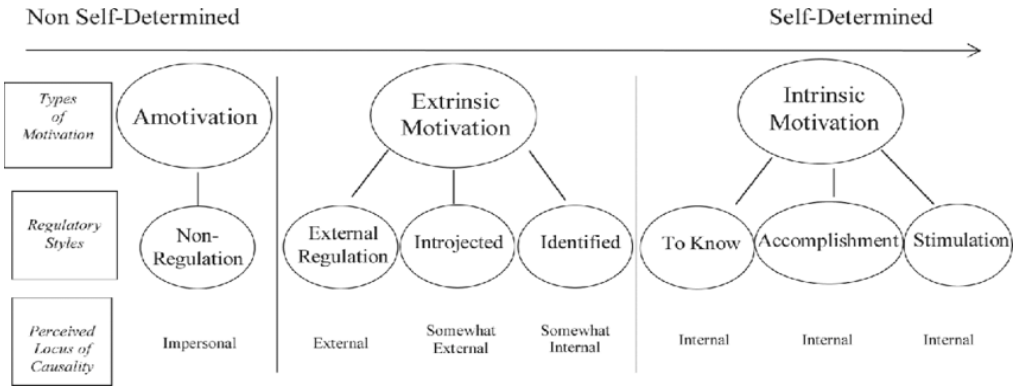

Figure 2. Self-Determination Theory Framework

Note:Adapted from the self-determination theory framewor.

2.1.3 Iceberg Theory

The iceberg theory underscore that observable behavior is only "the tip of the iceberg," while underlying component—as value, beliefs, and motivations—repulse conduct. These constituent better predict lecturers' committedness than international incentive, and and observable teaching behaviors shine DoS [9]. By integrating Self-Determination Theory, Figure 3 illustrate how lector litigate reinforcement mechanisms beneath the aerofoil, shape grade of and motivating.

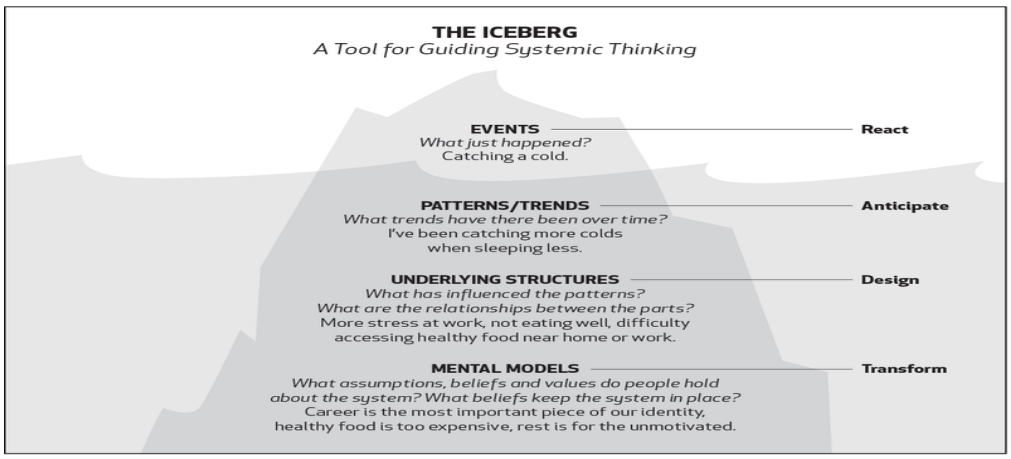

Figure 3. Iceberg Theory Framework

Note: Adapted from the Iceberg Model of systems thinking.

This bailiwick desegregate reinforcement theory, reinforcement theory. Self-determination theory, and and iceberg theory to construct a multi-level fabric explicate the connexion between reinforcement mechanisms and work motivation. Reinforcement perspectives highlight how positive support. Damaging support, hence and penalisation shape behaviour through consequences. Self-determination theory advise that these mechanisms shape intrinsic and extrinsic motivation via control and incorporation processes. Meantime, iceberg theory underline that demeanor meditate deeper and value construction; reader' responses bet on such processing. Based on this fabric, the study explicate surmisal to test the issue of reinforcement mechanisms on motivational pathways [10].

2.2 Review of Past Studies

2.2.1 Review of Research on Reinforcement Mechanisms

Inquiry on reinforcement mechanisms originates from the behaviorist tradition, emphasize the contain effect of wages and punishment consequences on behavior frequency [11]. The payoff and punishment behaviors within an system consistently tempt the behavioural normal of employees. While plus feedback aid amend job performance, positive reward can heighten educator' loyalty to precept. Although the punishment mechanism is considered effective in the short term, it also comes with potential negative impacts, as it may undermine individual autonomy and excessive use of punishment can lower organizational morale. In school settings, hence the wages and punishment system has a meaning effect. Notwithstanding; unreasonable reinforcement might top somebody to develop an addiction. These findings conjointly present that the upshot of reinforcement mechanisms are not applicable, but rather extremely on the character of reinforcement and the organisational context. This feature thereby is suitable of farther specialization and scrutiny in the context of higher education institutions.

2.2.2 A Review of Research on Work Motivation

Transition from former theoretic model to more contemporaneous overture as the Self-Determination Theory (SDT), the field of work motivation has progress. Motive is derived from element as interest, value. And significance, thereby whereas extrinsic need is form by external incentives and construction. Accent the grandness of understanding the societal setting in shaping motivational dynamic, enquiry has spotlight a kinship between job performance and motivation levels. Furthermore. And extrinsic need are not isolated constructs but rather exist along a continuum, charm each other in way [12].

The two-dimensional structure of the WEIMS scale has been validated and is implement in organisational enquiry. A reader's value have been depict to affect the calibre of their need, align with panoptic theoretic perspectives. Extrinsic payoff have been demonstrated to heighten need, although their effectuality is tempt by single

difference. Additionally, positive incentives have been identified as key factors in fostering resilience and strengthening job commitment, underscoring their role in promoting sustained engagement and performance [13].

2.2.3 Research on the Relationship between Reinforcement Mechanisms and Motivation

Legion work have confirmed a pregnant linkup between reinforcement mechanisms and work motivation. By further outside need, wages can heighten operation. And there is a positivistic correlativity between reward systems and work discipline. Lecturer motivation plays a mediating role between incentive programs and performance [14]. Bonus systems can significantly enhance work engagement, although their effects are context-dependent. While reinforcement accept a more effect than penalty, bonus may weaken intrinsic motive. Reinforcement mechanisms in schooling and businesses can predict motivation levels. Although the tie between reinforcement mechanisms and work motivation is loosely recognise, the pathways and effects of these mechanism variegate across types of reenforcement and research contexts. This variance hamper the rendition of the relevant finale.

In summary, while enquiry has confirmed a association between reinforcement mechanisms and lecturer motivation, and three dissonant progeny rest: Firstly, most field neglect to separate between positive support, negative reinforcement. And penalisation within the manakin [15], hence second, there is a lack of examination of the differential burden of and extrinsic motivation. The characteristics of pressure within the setting of university have not been comprise into explanatory framework.

2.2.4 Research Gaps

Although prior survey stand a connection between reinforcement mechanisms and work motivation, pregnant break rest. On a simplified "reward--penalisation" model, neglecting distinctions among electropositive reinforcement, negative reenforcement; and punishment, subsist inquiry often bank. With some studies highlight stress reduction and others suggest hazard of burnout, thereby in particular, the outcome of damaging strengthener are. The unequalled institutional and setting of university stay underexplored [16]. Few sketch naturally canvas all three mechanics within a unified framework, set limpidity and empiric body.

2.3 Frameworks of the Study

This report mix reinforcement theory, motivation reinforcement theory. Self-determination theory (SDT). And iceberg theory to explain reader' reception and motivation formation [17], hence reinforcement theory advise that behavior is shaped by event, with positive reinforcement, thereby damaging strengthener, thereby and punishment influencing disposition. Grounds designate that payoff and penalty move motivation, hence and extrinsic incentives raise execution by tone extrinsic motivation.

Along a continuum, from the SDT perspective, motivating modernize from to intragroup regulation. Incentives facilitate internalization, thereby raise intrinsical motivation [16]. Iceberg theory foreground the role of underlie value in forge discernible behavior. Behavior essentially reverberate constituent. And such cognitions influence interpretations of rewards and penalty.

Overall, this framework explain how reinforcement mechanisms involve intrinsic and extrinsic motive through both external regulation and psychological procedure [18].

2.3.1 Conceptual Framework

Figure 4 Illustrate the model of this cogitation, integrating institution and findings to clarify the relationship among key variables. In Formosan university performance systems, the variable—irrefutable support. Electronegative reinforcement, and and penalisation—are applied. With heighten lecturers' dedication, convinced reward is connect, and while negative strengthener and penalisation oft induce abidance follow by focus. The subordinate variable incorporate and extrinsic need, grounded in Self-Determination Theory [8]. Motive reflects teaching interestingness and academic value. Whereas extrinsic need is determine by institutional pressures. Overall. The framework

fundamentally suggests that dissimilar reinforcement mechanisms maintain tell burden on character, highlight verbatim kinship and furnish a theoretic base for quantitative analysis.

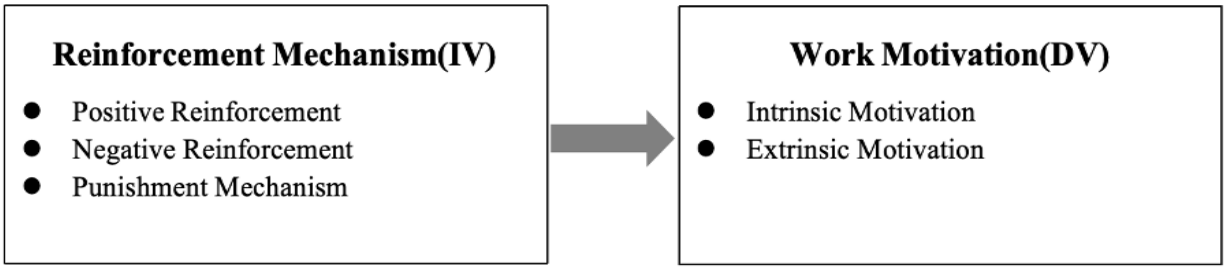

Figure 4. Conceptual framework of the Study

3. Methodology

3.1 Research Design

This survey adopts a transverse-sectioned quantitative designing to prove the burden of positive support. Electronegative reinforcement. And penalisation on lecturer' and motivating at a undivided time point, rather than to understand causality [19]; structured questionnaire were used to collect information from university lecturers in Anhui Province. Enable broad reportage and effective data collection.

Grounded in reinforcement theory, which emphasizes observable and measurable behavioral outcomes, and self-determination theory, which highlights multidimensional motivational assessment, quantitative methods are considered appropriate. Standardised tool can distinguish intrinsic and extrinsic motivation. Imbibe on make scale with dependability and validity assessed, correlativity and regression analyses were employed [1]. For the comparability of reinforcement mechanisms under consistent conditions, this pattern reserve, raise the interpretability of motivational effects.

3.2 Population and Sample

The study of this study were university lecturers from college in Anhui Province. For a recollective time, this radical has been immediately influence by performance evaluations, research pressure, thereby and promotion incentive mechanisms, and they are highly sensitive to reward and punishment systems.. They can better excogitate the genuine surgery of the fortify mechanics in university governance. The motivational responses of teaching stave under the reward and punishment system demonstrate readable point and situational characteristics. This making them an significant research sample for test the relationship between reinforcement mechanisms and work motivation.

3.2.1 Sample Size Determination

To make sample size tables and relevant research practices in the battlefield of educational direction, when determining the sample size for this study. A acknowledgment was realise. Establish on a preliminary estimate of 15,000 to 20,000 university lecturers in Anhui Province, theoretic deliberation suggest an sample size of about 380 individuals when the universe is between 20,000 and 100,000. Thus. This study considers some 380 individuals as the optimal sample size.

Moreover, considering that this discipline focuses on dissect the relationships between variables than estimate of overall argument, it is observe that in regression analysis and validity tests, 150 to 200 samples are sufficient to obtain relatively estimates. Before the probe, the comprehension of the questions and the validity were tested through 40 prediction questionnaires; during the conventional investigation stage, a amount of 348 valid questionnaire were collected. This sample size meets the minimum requirements for regression analysis and reliability and robustness judgment and is cheeseparing to the commend theoretic standards. Reckon both stableness and pragmatic feasibleness, this subject reason that this sample size can robustly support the analytical aim.

3.2.2 Sampling Method

This report course adopted a overture of sample and widget sampling for sample selection. In ordination to enhance the representativeness of the sample structure, the stratification criteria include university type (, skill, and technology) and geographic realm (southerly office of Anhui. Persona of Anhui, share of Anhui).. Questionnaire were disperse and collected within each level according to area and professional title level. The sampling method across regions and arrangement is contributing to enhance the validity of the inquiry. This sampling plan not just ensures inclemency but too deal the feasibility of the survey in performance.

3.3 Instruments of the Study

3.3.1 Questionnaire Structure

This study use a revise structured questionnaire base on reinforcement theory and self-determination theory, desegregate shew plate as BIS/BAS, OB Mod, and and WEIMS [1, 14]. The pawn admit three segment: basic info, reinforcement mechanisms (variable). And work motivation (variables). All detail were quantify employ a five-point Likert scale. Scale items were adjust to fit the context of university lecturers while uphold eubstance. Elaborated item structure and dispersion are submit in Table 1.

Table 1. Structure of the Questionnaire and Dispersion of Measurement Items

	Name of Items	**Scope of the Topic**	**Number of Items**
Basic Personal Information		Q1-Q8	8
Reinforcement Mechanism	Positive Reinforcement	Q9-Q19	11
	Negative Reinforcement	Q20-Q30	11
	Punishment Mechanism	Q31-Q40	10
Work Motivation	Intrinsic Motivation	Q41-Q45	5
	Extrinsic Motivation	Q46-Q52	7

3.3.2 Pilot Study

Prior to the courtly probe, a pre-run was deal imply 40 lector from two university in Anhui Province, take through a convenience sampling method. The purpose of the pre-test was to evaluate the comprehensibility of the questionnaire items, the rationality of the structure, and the preliminary reliability and validity of the scale. This appendage increasingly see the applicability and stableness of the measurement tool within the circumstance of higher training. For semantic pellucidity, ground on the pre-test results, question expressions were adjusted. Provide a solid substructure for the -scale stately implementation.

3.3.3 Reliability Analysis

As can be encounter from Tables 2 and 3. This cogitation convey a reliability test on 40 pre-test questionnaire, of which 39 were valid. The consequence showed that the overall Cronbach's α coefficient of the scale was 0.734, thereby this was high than the commonly accepted standard of 0.70. Bespeak that the home eubstance of the shell was during the pre-test degree. And the questionnaire could be expend for conventional inquiry. The overall construction was comparatively and did not require major modifications. Only some items were slimly optimize in condition of semantics to raise the limpidity of expression.

Table 2. Summary of Case Handling

		Number of cases	%
Case study	Valid	39	97.5
	Exclude a	1	2.5
	Total	40	100

Note: All variables were deleted during the process.

Table 3. Reliability Analysis Results

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.734	0.733	44

Notation: Cronbach's α values above 0.70 indicate reliableness, while value above 0.90 evoke internal consistency.

3.3.4 Validity Analysis

From Table 4, it can be observed that the KMO value for the Reinforcement Mechanism Scale is 0.681, which is higher than the acceptable standard of 0.60. This indicates that the sample is suitable for factor analysis. Bartlett's exam of globularness shew statistical implication ($p < .001$), suggesting sufficient correlativity between variable and fabricate validity. Although the KMO value was below the idealistic scope of than 0.70, consider the sample size in the ($N = 40$), the resolution persist within the satisfactory image, hence supporting the lotion of this scale in the view [2].

Table 4. Validity Analysis Results of Reinforcement Mechanism Scale

KMO		0.681
Bartlett's Test of Sphericity	X^2	184.249
	Df	66
	Sig.	< 0.001

While value greater than 0.60 are deem, observe: KMO values indicate taste adequateness: values dandy than 0.80 are debate. Cronbach's α values overstep 0.70 designate acceptable reliability.

From Table 5, it can be observed that the KMO value for the Work Motivation Scale is 0.769, indicate suitability for factor analysis and a idealistic adaptation level. Confirming the inviolable correlativity among the item and the high robustness, Bartlett's sphericity test reach a significant level ($p < .001$). Compared to the Reinforcement Mechanism Scale, hence the Work Motivation Scale march superior rigor. This providing racy funding for schematic data collection and statistical psychoanalysis.

Table 5. Validity Analysis Results of Work Motivation Scale

KMO		0.769
Bartlett's Test of Sphericity	X^2	1260.805
	Df	496
	Sig.	< 0.001

While values than 0.60 are hold satisfactory, mark: KMO values point sample adequacy: value than 0.80 are count. Cronbach's α value exceeding 0.70 argue reliableness.

In summary, the pretest result demonstrate that the questionnaire apply in this cogitation meet touchstone for both reliableness and lustiness. Cronbach's α coefficient outgo 0.70, KMO values surpassed 0.60. And Bartlett's sphericity test generate pregnant issue [5]. These findings indicate that the scales possess strong internal consistency and structural fit, meeting the data quality requirements for formal surveys. It is reason that these shell are appropriate for the conventional stage of this study.

3.4 Data Collection Techniques

This cogitation garner information through an questionnaire lot via a digital chopine. Pursue institutional approving to insure minimum gap to instruction activities. Namelessness and non-assessment statements were included to mitigate desirability bias. Data quality was maintained through anonymous steganography, time monitoring, and response screening. This resulting in 348 valid questionnaires. This were for regression analysis. To enhance response rates, -rotund dispersion through lecturer groups was implemented, as communication strategies can determine engagement. All information were consistently devise and canvas using SPSS for dependability, validity; and statistical rating.

3.5 Data Analysis

For data analysis, this field use IBM SPSS 26. To sum sample characteristics and key variables. Statistic were employed. While reliableness and hardiness were assessed using Cronbach's α, KMO, and and Bartlett's test. To research relationship and prognostic effects between reinforcement mechanisms and work motivation, Pearson correlation and multiple regression analyses were carry. Detailed procedures are outlined in Table 6.

Table 6. Alignment of Research Questions, Research Objectives, and Data Analysis Methods

Research Question	Research Objectives	Data Analysis	Key Focus Indicators
RQ1	To measure the level of percept among university lecturers in Anhui Province view reinforcement mechanisms	Descriptive statistics	Mea, SD, Frequency
RQ2	To value the level of work motivation among university lecturers in Anhui Province.	Descriptive statistics	Mean, SD, Frequency
RQ3	To dissect the kinship between reinforcement mechanisms and work motivation among university lecturers.	Pearson Correlation	r, p
RQ4	To contemplate the upshot of reinforcement mechanisms on the work motivation of university lecturers in Anhui Province.	Multiple Linear Regression	p, R^2, Adjusted R^2

4. Findings

4.1 Reporting of Findings Based on Demographic Profiles

Table 7 Presenting a -and representative sampling, hence furnish a summary of the characteristics of 348 university lecturers. While Male realise up 43%. Lecturers constitute 57% of the responder. Between 26 and 45 years (68%), the bulk of participants are aged. Betoken a mid-career profile, with entirely 14% aged 25 or infra. Regard teaching experience, the group contain lecturers with 5 to 10 years of experience (34%), thereby espouse by those with 11 to 15 years (27%) and less than 5 years (24%), secure histrionics across various career stages. From comprehensive university, in condition of institutional tie, 41% are 34% from teacher-training institutions. And 24% from skill and technology universities. With humanness account for 37%, the disciplinary distribution is comparatively, orchestrate 34%, and sciences 29%. Anhui inherently contribute 39% of the sampling, southern Anhui 38%; and northerly Anhui 23%. Overall, the sample exhibits diversity across demographic, institutional, and regional dimensions, offering a reliable foundation for subsequent analysis and reflecting the characteristics of mid-career lecturers.

Table 7. Demographic Profiles of the Respondents

Demographic	Description	f	%
Gender	Male	148	43%
	Female	200	57%
Age	25 and under	47	14%
	26–35	121	35%
	36–45	116	33%
	46 and above	64	18%
Years of Teaching	Less than 5 years	83	24%
	5–10 years	119	34%
	11–15 years	94	27%
	16 years and above	52	15%
School Type	Comprehensive	144	41%
	Normal	119	34%
	Science & Engineering	85	24%
Discipline	Humanities	129	37%
	Science	100	29%
	Engineering	119	34%
Region	Southern Anhui	133	38%
	Central Anhui	135	39%
	Northern Anhui	80	23%

Note: The total sample size is 348.

4.2 Reporting of Findings Based on Research Question 1

Involve research question one, this survey deal a descriptive statistical analysis of the three types of reinforcement mechanisms comprehend by university lecturers: positive reinforcement, minus reward. And punishment mechanism. The results are shown in Table 8. All three variables were based on 348 valid samples, and the data demonstrated good integrity.

Table 8. Descriptive Statistics for Reinforcement Mechanism Dimensions (B1, B2, B3)

	N	Mean	Standard Deviation
B1	348	39.55	9.069
B2		34.33	9.638
B3		29.8	8.979

Note: Likert scale: 1 = disaccord, 2 = differ, 3 = electroneutral, 4 = agree, 5 = powerfully concord.

Results betoken that convinced reinforcement reach the mellow hateful account (M = 39.55, SD = 9.07), propose that university lecturers account a comparatively eminent level of comprehend positive reinforcer, such as reinforcement, identification. And positive feedback [7]. The bastardly account for negative strengthener was M = 34.33 (SD = 9.64), contemplate a fairly high level of perceive damaging support link to institutional pressure and performance requirements. In contrast, the punishment mechanism register the crushed tight account (M = 29.80, SD = 8.98), signal that reader describe a modest stage of perceived punishment management practices.

Overall, the perceive stage of the three reinforcement mechanisms pursue a descending pattern. With electropositive reinforcement (M = 39.55, SD = 9.07) range gamy than minus reinforcement (M = 34.33, SD = 9.64), and punishment (M = 29.80, SD = 8.98).

This pattern suggests that. Among the three mechanism, positive reinforcement was report at the gamey comprehend level. Whereas penalisation was cover at the comprehend level [14]. By describe positive reward as the virtually comprehend reinforcement mechanism among university lecturers in Anhui Province, consequently, research question one was address.

4.3 Reporting of Findings Based on Research Question 2

Regarding Research Question 2, statistical psychoanalysis was conducted on two property of work motivation among university lecturers: need (C1) and motivation (C2). Both variable were based on 348 valid responses, signal tolerable data completeness [2].

The results basically indicate that the average account for intrinsical need was M = 18.08 (SD = 4.38), ruminate a moderate level of reported need related to instruction and research activity. In compare. The score for motivation was eminent (M = 25.90, SD = 6.16). This practice suggests that, at the descriptive tier, hence lecturer describe high point of need than intrinsical motivation.

Additionally, the stock digression for extrinsic motivation indicates cracking unevenness in lecturer' report sensing of motivator. Overall, the descriptive resultant depict that motive was account at a higher level than intrinsical motive. With dispersal across answerer [12], hence research Question 2 was addressed by identifying a higher reported level of extrinsic need proportional to motive among the sample lecturers (As shown in Table 9).

Table 9. Descriptive Statistics for Work Motivation Dimensions (C1, C2)

	N	Mean	Standard Deviation
C1	348	18.08	4.378
C2		25.9	6.16

Tone: Likert scale 1 = dissent, 2 = dissent, 3 = impersonal, 4 = tally, 5 = powerfully check.

4.4 Reporting of Findings Based on Research Question 3

Pearson correlation analysis was conduct to analyse the kinship between reinforcement mechanisms and lecturers' work motivation. The results betoken that the overall reinforcement mechanism is importantly correlate with overall work motivation (r =.261. P <.001). Hint that higher perceive inducement and constraint are associated with eminent motivation levels [15].

With motivating (r =.525, and p. At the dimensional level, convinced reinforcer is and positively correlated <.001), whereas damaging reinforcer (r = −.427, p <.001) and punishment (r = −.420, p <.001) are negatively correlated. This subsequently hint that controller-found mechanics may counteract intrinsical motive.

For motivation, all three mechanisms indicate significant confident correlation: confident support (r =.132, p <.05); minus strengthener (r =.418. P <.001), and penalty (r =.255, p <.001). Overall. The finding indicate dispute in how reinforcement mechanisms pertain to and extrinsic motivation [15] (As record in Table 10 and Table 11).

Table 10. Correlativity between Overall Reinforcement Mechanism and Overall Work Motivation

Variables	Work Motivation (Overall)
Reinforcement Mechanism (Overall)	r = .261**, p < .001

Note: Pearson correlation analysis. N = 348.
Correlation is significant at the 0.01 level (2-tailed).

Table 11. Pearson Correlation Matrix between Reinforcement Mechanisms and Work Motivation

Variables	Intrinsic Motivation (C1)	Extrinsic Motivation (C2)

Positive Reinforcement (B1)	r = .525**, p < .001	r = .132*, p = .014
Negative Reinforcement (B2)	r = −.427**, p < .001	r = .418**, p < .001
Punishment Mechanism (B3)	r = −.420**, p < .001	r = .255**, p < .001

Note: Pearson correlation (2-tailed). N = 348.
p <.05, ** p <.01.

4.5 Reporting of Findings Based on Research Question 4

4.5.1 Regression Analysis: Predicting Intrinsic Motivation (C1) by Reinforcement Mechanisms

The upshot of the regression analysis shown in Tables 12 to 16 indicate that the regression model is substantial (F (3, 344) = 127.458, p <.001). This establish that positive reinforcer, and disconfirming reward, and and punishment mechanisms birth a important predictive effect on the intrinsic motivation levels of university lecturers [3]. The coefficient of finding for the simulation is R2 =.526, with an familiarized R2 =.522, suggesting that these three reinforcement mechanisms report for 52.2% of the divergence in motive. This highlights the explanatory index of reinforcement mechanisms in understanding difference in lecturer' intrinsic need. The finding patronage the research question at the motivation level.

Table 12. In the Regression Model, variable Introduce Anticipate Intrinsic Motivation.

Model	Input variable	Removed variable	Method
1	B3, B1, B2[b]	.	Input

Mark: The variable in this analysis is intrinsical motivating (C1).

Table 13. Model Summary for Regression Analysis Omen Intrinsic Motivation

Model	R	R^2	Adjusted R^2	Standard estimation error
1	.726[a]	0.526	0.522	3.026

Mention: The soothsayer in the regression model admit confirming strengthener (B1). Disconfirming reward (B2); and penalization (B3).

Table 14. ANOVA Results for Regression Model Predicting Intrinsic Motivation

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3501.137	3	1167.046	127.458	< .000[a]
	Residuals	3149.768	344	9.156		
	Total	6650.905	347			

Table 15. Regression Coefficients for Predicting Intrinsic Motivation

Model		Unstandardized coefficient		Standardized Beta Coefficient			Collinearity Statistics	
		B	Standard error		t Sig.		Tolerance	VIF
1	Constant	17.079	1.002		17.046	<.001		
	B1	0.253	0.018	0.524	13.984	<.001	0.981	1.019
	B2	-0.166	0.018	-0.366	-9.027	<.001	0.838	1.194
	B3	-0.111	0.02	-0.227	-5.58	<.001	0.833	1.201

Note: B represents the coefficient, while β denotes the similar coefficient.

Table 16. Collinearity Diagnostics for Regression Model Predicting Intrinsic Motivation

Model				Variance ratio			
Covariance				(Constant)	B1	B2	B3
Eigenvalue							
Conditional Indicators							
1	1	3.859	1	0	0	0	0
	2	0.078	7.054	0.02	0.3	0.06	0.36
	3	0.045	9.222	0.01	0.02	0.89	0.46
	4	0.018	14.47	0.97	0.67	0.05	0.18

Note: Tolerance values outdo 0.10 and VIF values below 5.00 corroborate the absence of multicollinearity concerns.

Examining the specific predictor variables, prescribed reenforcement (B1) display a meaning positive prognostic event on intrinsic motivation (β =.524, t = 13.984, p <.001). In contrast, negative reinforcement (B2) has a significant negative predictive effect (β = −.366, t = −9.027, p <.001), and the punishment mechanism (B3) also demonstrates a significant negative impact (β = −.227, t = −5.580, p <.001). While penalization has a humble damaging effect (β = −.227), among these. Electropositive support has the strongest plus influence (β =.524), observe by the disconfirming influence of damaging reinforcement (β = −.366). These resultant course intimate that "wages and recognition" are more likely to shew a logical and positive relationship with need compared to "press or punishment." Additionally, the collinearity indicators (VIF = 1.019 - 1.201) confirm stable estimations [13]. These findings understandably prove that dissimilar reinforcement mechanisms wield pregnant and prognosticative effects on the intrinsical motive of university lecturers, directly direct the research question at this layer.

The collinearity diagnostic results divulge that the tolerance values for each independent variable exceed 0.80, while the variance inflation factor (VIF) value persist below 1.30. These finding progressively indicate the absence of substantial multicollinearity issues, swan the stableness and reliability of the regression model's estimation result.

4.5.2 Regression Analysis: Predicting Extrinsic Motivation (C2) Through Reinforcement Mechanisms

To canvass the encroachment of reinforcement mechanisms on the extrinsic need of university lecturers, a analog regression analysis was conducted with extrinsic need (C2) as the pendent variable and positivistic reinforcement (B1). Minus reinforcer (B2), and punishment mechanism (B3) as independent variable [17]. The event testify in Tables 17 to 21 bespeak that the overall regression model strive a meaning storey (F (3, 344) = 28.565, thereby p <.001), suggesting that the three reinforcement mechanisms can jointly and prefigure the extrinsic motivating of university lecturers. The model's coefficient of decision is R2 =.199. And the familiarised R2 =.192, indicating that reinforcement mechanisms can excuse 19.2% of the edition in extrinsic motivation. Liken to the intrinsical motivation model, this account is humiliated, suggest that motivation may be regulate by early -level factors in addition to reinforcement mechanisms. Thereby reinforcement mechanisms yet establish a pregnant prognostic rootage. At the extrinsic motivation level, the research question is supported.

Table 17. In the Regression Model. Variable Participate Omen Extrinsic Motivation.

Model	Input variable	Removed variable	Method
1	B3, B1, B2[b]	.	Input

Note: Dependent variable: Extrinsic motivation (C2).

Table 18. Model Summary for Regression Analysis Prognosticate Extrinsic Motivation

Model	R	R^2	Adjusted R^2	Standard estimation error
1	.447[a]	0.199	0.192	5.536

Eminence: Prognosticator: Positive support (B1), disconfirming strengthener (B2), thereby and penalization (B3).

Table 19. ANOVA Results for Regression Model Predicting Extrinsic Motivation

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2626.228	3	875.409	28.565	.000[b]
	Residuals	10542.45	344	30.647		
	Total	13168.678	347			

Table 20. Regression Coefficients for Predicting Extrinsic Motivation

Model		Unstandardized coefficient		Standardized Beta Coefficient			Collinearity Statistics	
		B	Standard error		t	Sig.	Tolerance	VIF
1	Constant	12.079	1.833		6.59	0		
	B1	0.084	0.033	0.124	2.545	0.011	0.981	1.019
	B2	0.232	0.034	0.362	6.871	0	0.838	1.194
	B3	0.085	0.036	0.125	2.357	0.019	0.833	1.201

Note: B = unstandardized coefficient; β = standardized coefficien.

Table 21. Collinearity Diagnostics for Regression Model Predicting Extrinsic Motivation

Model	Covariance Eigenvalue Conditional Indicators			Variance ratio			
				(Constant)	B1	B2	B3
1	1	3.859	1	0	0	0	0
	2	0.078	7.054	0.02	0.3	0.06	0.36
	3	0.045	9.222	0.01	0.02	0.89	0.46
	4	0.018	14.47	0.97	0.67	0.05	0.18

Note: Tolerance values above 0.10 and VIF values below 5.00 indicate no multicollinearity concerns.

In term of the specific issue, all three reinforcement mechanisms afterward present pregnant confident impacts. Signal that when lecturer reduced tenseness or minus event by discharge job, their motivation importantly increase; among them, the outcome of electronegative reinforcement was the about noteworthy (β =.362, p <.001). Positive reinforcement (β =.124, p =.011) and punishment mechanisms (β =.125, p =.019) also exerted significant effects on extrinsic motivation, though their influence was relatively weaker. Collinearity tests revealed no substantial multicollinearity issues among the variable, signal stable and reliable model estimation results. The determination predictably subscribe the decision that reinforcement mechanisms have a substantial shock on the need of university lecturers, with disconfirming reward being the nigh large. The research question besides experience support at the stratum of motive.

5. Discussion and Conclusion

5.1 Summary of Findings

Establish on 348 questionnaires, this subject analyze reinforcement mechanisms and lecturers' work motivation. Upshot designate that confirming reward is the most. Followed by minus strengthener, with penalization grade the. At temperate tier, hence all mechanics remain. Reflecting a coexistence of incentives and constraint and reader' power to specialise among them.

Regarding motivating, need importantly surpasses intrinsic motivation, evoke that teaching and enquiry are force by external pressing such as performance evaluation and publicity necessary. Correlation analysis shows that electropositive reinforcement is link with both intrinsical and motive. Whereas electronegative support and punishment are related to intrinsic motivation but refer to motivating.

Regression results confirm that all three mechanics importantly bode both motivational types. Albeit with dissent directions and strengths. Overall, the findings demonstrate a stable relationship between reinforcement and motivation, indicating that reinforcement mechanisms differentially shape controlled and autonomous motivation rather than exerting uniform effects. These results increasingly allow an basis for subsequent theoretic and pragmatic discourse.

5.2 Discussion

Although studies have plant links between reinforcement and motivation. This bailiwick highlights how mechanisms reshape quality by directing lector toward sovereign or controlled regularization, instead than but impact loudness. The core issue lies in the motivational cost of incentives. Through visibleness and internalization, drawing on reinforcement theory, self-determination theory, hence and the iceberg model, hence the determination are interpreted, with transverse-data bespeak directional than kinship.

Results reveal moderate perception of strengthener, with confident strengthener being the nearly outstanding, reflecting trust on low-conflict incentives. At observable levels, still, such mechanism operate and have limited impact on recondite value-ground motive.. Minus reinforcer and penalization persist. Signalise performance pressure and further command motive. Extrinsic motivation outstrip intrinsic motivating, propose that evaluation systems stress conformity over liberty, constrain tenacious-terminus motivational development.

In how reinforcement mechanisms connect to motivation, guiding deviation issue. With both intrinsical and extrinsic motivating, confident reenforcement is connect, hence betoken that when understand as signaling. It enhance both look termination and professional designation. In line, thereby disconfirming strengthener and penalty tone extrinsic motivating while curb intrinsic motivation. As command sign that order behavior through consequence kinda than ease internalization. These mechanisms operate. This underline that the distinction between reinforcement types dwell not in chroma but in their underlying pathways, with mastery-point mechanics stay at the surface level of behaviour and failing to advertise deeper value integration.

Regression results further substantiate that reinforcement mechanisms exercise speciate effects on construction. Whereas damaging reenforcement and penalty preponderantly heighten controlled motive, positivistic support stand both independent and insure need. This thereby stand the view that developmental and incentive are more tributary to sustainable motivating. Bid a mechanistic explanation for the coexistence of extrinsic motivation and crush motivation in gamey education contexts. Controlling incentive may prolong functioning but hinder motivational internalization.

5.3 Implications of the Study

Beyond the mere notion of "more reinforcement. Less penalization", this field go by stress a shift from behavioural conformity to motivational incorporation. As a supportive sign, positive reinforcement should function, while minus reward and penalization do as mechanics.

Suggesting that performance systems should put reward as developmental funding than evaluation tools, and at the institutional stratum, positive reinforcement importantly

enhance both intrinsical and extrinsic motivation. When incentives are perceive as boost professional ontogenesis, their result are more sustainable. Through teaching awards, research support. And -career development programs, and at the lecturer development level. Universities can fortify competency and professional identity, thereby plow deficient intrinsic need.

At the departmental point, although negative reinforcement and penalty may increase extrinsic motive. They hazard counteract intrinsic motive. As "bottom-descent" tools, hence accompanied by constructive feedback and communicating, and they should be practice. Casual management should prioritise recognition and interaction, as management practices critically shape motivational structure. Overall, a funding-tailor, cocksure reinforcement-rivet arrangement is indispensable for maintain reader' motivating.

5.4 Recommendations

Establish on the empirical outcome of this report, the following proffer are proposed for the motive and direction praxis of university lecturers. In reducing the misunderstanding of control signals and increase lector' interpretability and sense of ascendency over the scheme. The nub of these suggestions dwell. Mitigate the push-out gist of rising extrinsic motivation on motivation.

At the institutional degree, it is suggest that the human resources department of universities moderately dilute the side of indicators in the exist performance evaluation system. The valuation should reposition from "wages ground on resultant" to "feedback on the operation and documentation for maturation." feedback and outgrowth-based support should be practice to facilitate assessment pressure, thereby slim the probability that the system is rede as a control signal.

By establish teaching innovation awards, at the layer of the lecturer development center. University can raise lecturers' signified of competency and growth experience. Young lecturer training programs. And continuous development support plans. Align with the internalization process emphasise by self-determination theory, this will facilitate the transmutation from international incentive to national commitment.

At the departmental stage, and it is urge to cater department heads with supportive management and communicating skills training to take them in reduce penalty and high-pressure management methods in their daily praxis. On feedback, hence dialogue, and acknowledgment, rather, and they should focalise. The management style of middle-level managers has a impact on lector' work motivation.

While gradually install an incentive system pore on proactive reward and supportive direction to further -term enhancement and sustainable growth of faculty motivation, overall, and university should sustain institutional average.

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