Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-050 Volume 07 Issue 06 June 2024 Article DOI: 10.47191/jefms/v7-i6-36, Impact Factor: 8.044 Page No: 3412-3424

Leveraging the SCARF Model For Employee Engagement: An In-Depth Analysis With Special Reference To Government Organisations.



Neenet Baby Manjaly¹, Vipin Francis², Dilna Francis³

¹Faculty-Chief Manager, Union Leadership Academy, Union Bank Knowledge Centre- Bengaluru, India.
 ²Research Scholar, Dept. of Humanities and Social Sciences, Indian Institute of Technology Madras, Chennai, India.
 ³MBA Student- Adi Shankara Institute of Engineering and Technology, Kochi, Ernakulam, Kerala, India.
 Orcid ID: ¹0000-0002-9500-4965, ²0000-0001-9386-0197

ABSTRACT: This research examines the effectiveness of the SCARF model (Status, Certainty, Autonomy, Relatedness, Fairness) in enhancing motivation and increasing employee engagement within government organizations. We have conducted multistage sampling with a descriptive and analytical design and collected primary data through Likert scale questionnaires. Extensive statistical analysis using SPSS, including regression and correlation analyses, uncovered noteworthy outcomes. The findings demonstrate a significant positive relationship between the overall SCARF model and employee engagement. Furthermore, all dimensions except Fairness exhibited a strong positive association with engagement, suggesting the importance of fostering feelings of respect, security, control, and connection for a more engaged government workforce.

KEYWORDS: SCARF, Employee Engagement, Motivation, Government Organisation, Public Sector, Workplace

I. INTRODUCTION

In today's fiercely competitive business landscape, organizations are increasingly recognizing the pivotal role of employee engagement in achieving sustainable success (Gallup, 2022). Government entities, too, acknowledge the significance of employee engagement and its impact on overall organizational performance (Saks, 2006). As government organizations strive to enhance productivity, quality, and profitability, bolstering employee engagement becomes imperative.

This research centre's on leveraging the SCARF model as a motivational tool to bolster employee engagement. Developed by David Rock, the SCARF model identifies five critical domains: Status, Certainty, Autonomy, Relatedness, and Fairness (Rock, 2008). These domains, when fulfilled, foster a sense of respect, predictability, control, connection, and fairness among employees, thereby enhancing their engagement.

The purpose of this study is to examine the impact of the Status, Certainty, Autonomy, Relatedness and Fairness, which falls as the 5 dimensions of SCARF model on employee engagement. The study aims to identify the extent to which the five domains of the SCARF model are present in the organization and how they motivate & contribute to employee engagement. The findings will serve as a valuable resource for organizations aspiring to enhance employee engagement and will contribute to the expanding body of research on the SCARF model.

Furthermore, the study will offer insights into the specific factors influencing employee engagement in government organisations. By elucidating how the SCARF model can be applied to boost engagement levels, organizations can identify areas for improvement and devise targeted strategies. Ultimately, the research is expected to enrich the understanding of employee engagement dynamics and provide actionable insights for organizations keen on leveraging the SCARF model to optimize engagement levels.

II. REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

SCARF is referred to as a brain-based model for collaborating with and influencing others. This model is based on the idea that our brains perceive social interactions in the same way they perceive threats and rewards. The model identifies five domains that

impact social behaviour: Status, Certainty, Autonomy, Relatedness, and Fairness. Positive experiences in each of these domains can increase motivation and productivity, while negative experiences can lead to stress and disengagement. The SCARF model can help leaders and managers create more positive social experiences for their employees, ultimately leading to better performance and well-being (Rock, D. (2008)). This Model is having the potential to support change management in organisations (Campbell, S. J., Walsh, K., Prior, S. J., Doherty, D., Bramble, M., Marlow, A., & Maxwell, H. (2022)). Recent findings from the SCARF model have prompted re-examination of the need theory (Basetoli Mishkat, M. M. (2015)). The SCARF model assumes that in most of the areas where interpersonal relationships are required, we can improve the impact of shaping others by controlling these five factors namely Status, Certainty, Autonomy, Relatedness and Fairness (Kolemba, M. (2016).

This SCARF model (status, certainty, autonomy, relatedness, and fairness) examines how it can be used to enhance employee's motivation and performance. Each element of SCARF is related to increased intrinsic motivation and ultimately, improved performance (Javadizadeh, B., Aplin-Houtz, M., & Casile, M. (2022)).

The SCARF model can be used in predicting, explaining, and mitigating conflicts. The SCARF model explains how social stimuli influence behaviour in professional settings (Freedman, B. D. (2019)).

Employee engagement is a widely discussed topic, particularly in the current uncertain and evolving work environment. It refers to the emotional connection and commitment displayed by an employee, resulting in increased effort and performance at work. This can be seen when an employee enjoys their job and consistently exceeds expectations (Emde, M. J. (2012)). The employee engagement is better predictor of organisational performance because it involves employees' emotions going beyond the job agreement (Markos, S., & Sridevi, M. (2010)).

Exploring the relationship between Social Cognitive Neuroscience (SCN) frameworks, such as SCARF model into everyday social interactions in the workplace helps in determining whether such practices can enhance prosocial behaviours and improve leader's influence. Practicing SCARF model increased the interviewees' awareness of themselves and others. It led to the development of emotional intelligence, skill-building, behaviour modification and increased leadership influence. (Forbes-Zeller, L. (2020)). SCARF model helps to exploring the quality of organizational practices and the quality of work-life (Behery, M., & Abdallah, S. (2019)).

SCARF model helped to explore how the principles of neuroscience, leadership practices, and intelligence theories could elucidate the significance of an individual's overall effectiveness (Pope, S. N. (2019)).

All the elements of SCARF, namely perceived status, certainty, autonomy, relatedness, and fairness are investigated in the context of their impact on the perception, evaluation, and engagement at workplace environment for B2B employees. The researcher provided specific managerial implications, illustrating how companies can make improved decisions regarding crucial market crisis situations by adopting a growth mindset based on these five experience elements (Hansen, J. M., Hansen, J. W., & Madsen, S. R. (2022)).

The researchers had found a positive association between status inequality and cynical attitudes about work. Experimental studies with working adults found that exposure to status inequality led to increased cynicism towards work, which subsequently resulted in disengagement and lower performance quality in an idea generation task.

They provide empirical evidence of the detrimental effects of status inequality on work engagement and performance quality. Organizations and leaders should be aware of the potential negative consequences of status inequality and work towards creating more equitable environments to foster employee engagement and enhance overall performance. By addressing status disparities and promoting a fair and inclusive workplace, organizations can cultivate a positive work culture that supports employee engagement and improves performance outcomes. The SCARF model clearly explores various practises in the organisations and quality of work-life of the employees in the organisation (Behery, M., & Abdallah, S. (2019) helping to study about their engagement.

Drawing insights from self-determination theory, Gagné, M., & Bhave, D. (2010), researchers have evaluated the influence of autonomy which is an important dimension of SCARF on employees and organisational dynamics.

Self-determination theory (SDT) is a theory of human behavior and personality development that is based on empirical research. It focuses on differentiating types of motivation on a continuum from controlled to autonomous, and it emphasizes the role of social-contextual factors in supporting or hindering people's thriving by satisfying their basic psychological needs for competence, relatedness, and autonomy. Although the theory is primarily psychological, it also considers the biological underpinnings of these processes and places them in an evolutionary context.

Both SDT and the SCARF model emphasize the importance of autonomy, relatedness, and control in human behavior and motivation. For example, the SCARF model highlights the social domains of autonomy, relatedness, and fairness, while SDT focuses on the basic psychological needs of autonomy, competence, and relatedness. Moreover, both frameworks recognize that threats

to autonomy, such as the feeling of being controlled or coerced, can undermine motivation and well-being. The SCARF model also identifies other social domains that can affect behavior, such as status and certainty, which are not directly addressed in SDT.

Despite these similarities, the two frameworks differ in some ways. For example, the SCARF model is primarily focused on social neuroscience and how the brain responds to social situations. In contrast, SDT is a broader theory of human motivation that encompasses various contexts and domains of life.

In summary, while there is some overlap between SDT and the SCARF model, they are distinct frameworks with different emphases and scopes. Both frameworks can provide useful insights into human behavior and motivation, and researchers and practitioners may find it helpful to draw on both approaches to better understand and address the complex dynamics of human behavior. The SCARF model gets to explain and surfaces how a person's neurological responses to various stimuli in their workplaces influence their level of workplace engagement Freedman, B. (2019).

So based on all these premises we proposed:

HI: SCARF model has a positive impact on Employee Engagement in organisations.

H2: Status have a positive impact on Employee Engagement

Status refers to the perception of a person about their own importance when compared to people around them (Rock, D., & Ringleb, A. (2013)). Perception about Employee status positively influences their extra role job performance or organizational citizenship behaviours Liu, Y., Yin, X., Li, S., Zhou, X., Zhu, R., & Zhang, F. (2021). Hence, the researcher proposes the hypothesis studying the impact of status on Employee Engagement.

H3: Certainty have a positive impact on Employee Engagement

Emotions related to certainty raises heuristic processing (Tiedens, L., & Linton, S. (2001)). Emotions associated with Certainty, such as anger and happiness, lead to more safe decisions than emotions associated with uncertainty, such as fear (Bagneux, V., Bollon, T., & Dantzer, C. (2012)). Hence, the hypothesis proposes to study about the impact of certainty on engagement. Workplace uncertainty affects their engagement at workplace (McCormack et al, 2002)

H4: Autonomy have a positive impact on Employee Engagement

Self-determination theory says that autonomy supports and provides satisfaction of psychological needs which helps in being more productive (Jang, H., Reeve, J., Ryan, R., & Kim, A. (2009). This theory explains well the importance of autonomy and job autonomy indirectly improves work engagement (Dorssen-Boog, P., Jong, J., Veld, M., & Vuuren, T. (2020)). Reduced autonomy at workplaces and decision-making impact their engagement level (McCormack et al, 2002).

H5: Relatedness have a positive impact on Employee Engagement

SCARF model effectively describes, forecasts, and mitigates conflicts in the workplaces (Freedman, B. (2019)). Alderfer's ERG (Existence, Relatedness, Growth) theory also well states the importance of interrelationships in motivating employees at workplaces. Hence the researcher proposes the hypothesis.

H6: Fairness have a positive impact on Employee Engagement

Fairness in the organisation refers to a transparent workplace (Tillott, S., Walsh, K., & Moxham, L. (2013), (rock, 2008)). SCARF model helps to understand what happens to the employee's engagement when he or she perceives there is a threat to the fairness expected at workplace. The fairness perception by the employees of the organizations influences their attitudes as well as behaviours (Rutte, C., & Messick, D. (1995) and hence their impact on engagement at workplace is examined through this hypothesis.

Based on the propositions given, a conceptual model (FIGURE 1) was framed, and it was empirically tested.

III. METHODOLOGY

Multistage sampling technique was employed to collect the data. The primary data for this study was collected using questionnaires. A standardized structured questionnaire was distributed to 200 government officers of which 120 useful completed responses were received. The questionnaire included questions related to the SCARF model and employee engagement. The population included only permanent employees working in government organizations. This would include employees who are working as HR officer's cadre in these organizations. This population would exclude any temporary or contract employees who are not considered permanent staff at the company. The study will use a convenience sampling method to select 120 employees from the population. Data was collected using a structured standardized questionnaire with 49 items related to employee engagement and SCARF model. Responses were collected using the Likert scale.



Figure 1 Conceptual model of the research work

a. Participants

Data were collected from 120 officers working in various departments of government organizations in Kerala, India during the period March 2023 to June 2023. Multistage sampling technique was used to collect data. The state of Kerala was divided into North, Centre, and South regions. From each region 5 government organizations were chosen by simple random method. HR officers in these 15 government organizations form the sampling frame. From here respondents were chosen by a simple random method. Data was collected in person. A covering letter was attached showing the purpose of the study. Confidentiality of the responses was assured to the participants. A total of 200 questionnaires were filled and received of which 120 useful datasets were received. Regarding the respondents, there were 104 males and 16 females.

b. Instrument

Five constructs of SCARF model were investigated, namely, Status, Certainty, Autonomy, Relatedness, Fairness along with the construct Employee Engagement. The construct Status was studied using a 5 items scale. Sample items include I feel my position is respected and valued in the organization, I feel that I am recognized for my contributions in the organization, etc. The construct Certainty was measured using 5 items scale and its sample items include I feel I have a clear understanding of what is expected out of me in my job, I feel that I can plan and prioritize my job effectively, etc. The construct Autonomy was measured using another 5 items and its Sample items include I feel that I can work in a way that suits my personal preference and strengths, I feel that I have a sense of control over my work and how I do it, I feel that I am trusted to make decisions and act independently. The construct relatedness was studied with another 5 items including samples like I feel that I have a positive and supportive relationships with my colleagues, I feel that I can collaborate effectively with others in my department. Finally, the last dimension, Fairness was measured using another 5 items and its sample includes items like I feel there is transparency in how performance is evaluated, I feel that I am compensated fairly for my work. The construct employee engagement was studied using 19 items and some of the sample items are My supervisor values my work and contributions, I receive recognition for my hard work.

All items were measured using a 5- point Likert scale (1= strongly agreeing to 5= strongly disagreeing). Questions were in English and the demographics details relating to their age, gender and place of residence were also collected.

a. Analysis and Discussions

IBM SPSS 23.0 was used to perform data analysis. The statistical methods employed mainly involve descriptive analysis, Structural Equational Modelling and Confirmatory factor Analysis.

HI: SCARF model has a positive impact on Employee Engagement in organizations.

Table 1 provides descriptive statistics for the variables SCARF and EMPLOYEE ENGAGEMENT. The mean value for SCARF is 3.7050, and the standard deviation is 0.35683, which suggests that the responses are relatively close to the mean, indicating less variability. The sample size (N) is 120. Mean value for the variable EMPLOYEE ENGAGEMENT is 3.6719, and the standard deviation is 0.52262, which suggests that the responses are relatively spread out from the mean, indicating more variability compared to SCARF.

The correlation table shows the positive relationship between the SCARF and Employee Engagement variables. The correlation coefficient is a measure of the strength and direction of the relationship between two variables. The Pearson correlation coefficient

Descriptive Statistics				
	Mean		Std. Deviation	N
SCARF	3.7050		.35683	120
Employee	3.6719		.52262	120
Engagement				
Correlations				
			rf	Employee Engagement
SCARF	Pearson Correlation	1		.689**
	Sig. (2-Tailed)			.000
	Ν	120)	120
Employee	Pearson Correlation	.68	9**	1
Engagement				
	Sig. (2-Tailed)	.000		
	Ν	120)	120
**. Correlation Is Sign	ificant at the 0.01 Level	(2-Ta	iled).	

Table 1. Correlation between SCARF and Employee Engagement

Between SCARF and Employee Engagement is 0.689, which indicates a positive correlation. The correlation coefficient value of 0.689 suggests a moderately strong relationship between these variables. The significance (Sig.) values indicate the probability of obtaining the observed correlation coefficient. Here, the Sig. value is 0.000, which is less than the significance level of 0.01. Therefore, the correlation between SCARF and Employee Engagement is statistically significant at the 0.01 level. In summary, based on the provided data, there is a statistically significant positive relationship between SCARF and Employee Engagement.

The model summary indicates that the regression model has an R-squared value of .475, which means that approximately 47.5% of the variability in the dependent variable can be explained by the independent variable. This value suggests a moderate relationship between the variables. The adjusted R-squared value of .470 considers the number of predictors in the model and adjusts the R-squared value accordingly. It is slightly lower than the R-squared value, indicating that the addition of the independent variable "SCARF" did not significantly improve the overall explanatory power of the model. The standard error of the estimate (.38044) represents the average distance between the observed values of the dependent variable and the predicted values based on the regression model. Lower values indicate a better fit of the model to the data.

Moving on to the coefficients, the table provides information on the unstandardized coefficients (B), the standard error of the coefficients, the standardized coefficients (Beta), t-values, and significance levels (Sig.) for each predictor. The t-value of 10.323 associated with "SCARF" indicates that the coefficient is statistically significant. Additionally, the p-value (Sig.) of .000 confirms this significance. Therefore, we can conclude that there is a significant positive relationship between SCARF and Employee Engagement.

In condense, the analysis reveals a strong positive correlation (r = 0.689, p < 0.01) between SCARF (Status, Certainty, Autonomy, Relatedness, Fairness) scores and employee engagement scores, indicating that as perceptions of SCARF factors increase, so does employee engagement.

Table 2

SCARF – Employee Engagement Regression

H2: Status have a positive impact on Employee Engagement

Table 3 shows the descriptive statistics for the variables Status and Employee Engagement. The mean value of the variable status is calculated as 3.631 and the standard deviation is .578. Similarly, for the variable Employee Engagement, the mean value is computed as 3.6719, and standard deviation .52262.

Descriptive Statistics						
	Mean	Std. Deviati	on	Ν		
Status	3.6317	.57861	.57861		120	
Employee	3.6719	.52262	.52262			
Engagement						
Correlations						
			Status		Employee	
					Engagement	
Status	Pearson Cor	Pearson Correlation			.648**	
	Sig. (2-Tailed	Sig. (2-Tailed)			.000	
	Ν	Ν			120	
Employee Engagement	Pearson Cor	relation	.648**		1	
	Sig. (2-Tailed	Sig. (2-Tailed)				
					120	

Table 3 Correlation between Status and Employee Engagement

The correlation table presents the correlation between Status and Employee Engagement is given as .648**. The correlation coefficient of .648 suggests a positive relationship between the two variables. The significance level (Sig.) associated with the correlation coefficient is reported as .000, which indicates a highly significant relationship between Status and Employee Engagement.

Table 4. Status - Employee Engagement Regression

Мос	Model Summary												
Moo	del	R	R	Square	Ad Squ	justed uare	R	Std. Error of the Estimate					
1		.689ª	.4	75	.47	0		.3	8044				
a. Pi	redict	ors: (Cons	tant	t), SCARF									
Coe	fficien	nts											
Model Unstan		Unstanda	rdized Coefficients			Standardized Coefficients	t	Sig.					
				В		Std. Erro	or		Beta				
1	(C	onstant)		066		.364			-	182	.856		
	SC	CARF		1.009		.098			.689	10.323	.000		
a. D	epend	dent Varia	ble:	Employee I	Enga	agement					•		
I	Mode	el Summar	y										
1	Mode	el R		R Square	A	djusted	R	R Std. Error of the Estimate					
					So	quare							
	1	.648ª		.420	.4	15		.39970					
1	a. Pre	dictors: (C	ons	tant), Statu	S								

Coefficients

Model		Unstandardized Coefficients		Standardized	t	Sig.
				Coefficients		
		В	Std. Error	Beta		
1	(Constant)	1.546	.233	-	6.640	.000
	Status .585 .063		.648	9.244	.000	
a. Dependent Variable: Employee Engagement						

The summary of the model indicates that the regression model has an R-squared value of .420, which means that approximately 42% of the variability in the dependent variable can be explained by the independent variable. This value suggests a moderate relationship between the variables.

The adjusted R-squared value of .415 considers the number of predictors in the model and adjusts the R-squared value accordingly. It is slightly lower than the R-squared value, indicating that the addition of the independent variable Status did not significantly improve the overall explanatory power of the model. The standard error of the estimate (.39970) represents the average distance between the observed values of the dependent variable and the predicted values based on the regression model. Lower values indicate a better fit of the model to the data.

Moving on to the coefficients, the table provides information on the unstandardized coefficients (B), the standard error of the coefficients, the standardized coefficients (Beta), t-values, and significance levels (Sig.) for each predictor. In this case, the constant term has a coefficient of 1.546 with a standard error of .233. This indicates that when the independent variable status is zero, the predicted value of employee engagement is approximately 1.546. The coefficient for the variable Status is .585, with a standard error of .063. The standardized coefficient (Beta) is .648. The t-value of 9.244 associated with status indicates that the coefficient is statistically significant. Additionally, the p-value (Sig.) of .000 confirms this significance. Therefore, we can conclude that there is a significant positive relationship between status and employee engagement. The regression analysis reveals a significant positive relationship between the independent variable status and the dependent variable employee engagement.

H3: Certainty have a positive impact on Employee Engagement

Descriptive statistics for the variables Certainty and Employee Engagement show that for the variable Certainty the mean is calculated as 3.7617, and the standard deviation as 0.535. Similarly, for the variable Employee Engagement, the mean is computed as 3.6719, and the standard deviation as 0.522 indicates the amount of variability in employee engagement scores. The Pearson correlation coefficients gives the correlation between Certainty and Employee Engagement as .587**. The correlation coefficient of 0.587 suggests a positive relationship between the two variables at the significance level 0.000, which indicates a highly significant relationship between them. This suggests that higher levels of Certainty are associated with higher levels of Employee Engagement.

Descriptive Statistics						
	Mean	Std. Deviati	on	Ν		
Certainty	3.7617	.53596	.53596			
Employee Engagement	3.6719	.52262	.52262			
Correlations	I					
			Certai	nty	Employee Engagement	
Certainty	Pearson Co	Pearson Correlation			.587**	
	Sig. (2-Taile	Sig. (2-Tailed)			.000	
	Ν		120		120	
Employee Engagement	Pearson Co	rrelation	.587**		1	
	Sig. (2-Taile	Sig. (2-Tailed)			-	
	Ν		120		120	
**. Correlation Is Significant a	t the 0.01 Level (2-	Tailed).	-			

Table 5. Correlation between Certainty and Employee Engagement

Model Summary									
Model R R Square Adjusted R Square Std. Error of the Estimate									
1	.587ª	.345	.339	.42491					
A. Pred	lictors: (Constar	nt), Certainty							
Coefficients									
Model		Unstandardiz	Unstandardized Coefficients		Т	Sig.			
				Coefficients					
		В	Std. Error	Beta					
1	(Constant)	1.519	.276		5.501	.000			
	Certainty	.572	.073	.587	7.875	.000			
A. Depe	endent Variable	: Employee Engage	ement						

Table 6. Certainty - Employee Engagement Regression

The model summary indicates that the regression model has an R-squared value of 0.345, which means that approximately 34.5% of the variability in the dependent variable can be explained by the independent variable. This value suggests there exists a moderate relationship between the variables. Also, the constant term has a coefficient of 1.519 with a standard error of .276. This indicates that when the independent variable Certainty is zero, the predicted value of Employee Engagement is approximately 1.519. The coefficient for the independent variable is 0.572, with a standard error of .073 and standardized coefficient (Beta) is 0.587. The t-value of 7.875 associated with Certainty indicates that the coefficient is statistically significant. Additionally, the p-value (Sig.) of .000 confirms this significance. Therefore, we can conclude that there is a significant positive relationship between the variables Certainty and Employee Engagement.

H4: Autonomy have a positive impact on Employee Engagement

Table 7. Correlation between Autonomy and Employee Engagement

Descriptive Statistics								
	Mean	Std. Deviation		Ν				
Autonomy	3.5750	.53236		120				
Employee Engagement	3.6719	.52262		120				
Correlations	Correlations							
	Autonomy	Em	oloyee Engagement					
Autonomy	Pearson Correlation	1	.47	5**				
	Sig. (2-Tailed)		.00)				
	Ν	120	120					
Employee	Pearson Correlation	.475**	1					
Engagement	Sig. (2-Tailed)	.000						
	Ν	120	120					
**. Correlation is Significan	t at the 0.01 Level (2-Tailed).		•					

Table 7 presents the descriptive statistics for the variables Autonomy and Employee Engagement. The mean for the variable Autonomy is 3.5750 and the standard deviation for this variable is 0.532. The mean value for Employee Engagement is 3.6719 and the standard deviation for this variable is 0.522.

Table 7 presents the correlation matrix for the two variables Autonomy and Employee Engagement which shows the correlation coefficient between these two variables is 0.475, which indicates a positive correlation between the two variables. The correlation coefficient suggests that there is a greater tendency for those with higher levels of autonomy for higher levels of employee

engagement, and vice versa. The p-value of 0.000 indicates that this correlation is statistically significant at the 0.01 level. In short, there is a significant relationship between autonomy and employee engagement.

Мос	del Su	mmary									
Moc	del	R	R Square	Adjusted F	d R Std. Error of the Estimate						
				Square							
1		.475ª	.226	.220	.46171						
a. Pr	redict	ors: (Constant	t), Autonomy								
Coef	fficien	its									
Moc	del		Unstandardiz	ed Coefficients	Standardized	t	Sig.				
					Coefficients						
			В	Std. Error	Beta						
1	(Co	nstant)	2.003	.287		6.972	.000				
	AUT	FONOMY	.467	.080	.475	5.871	.000				
a. De	epend	ent Variable:	Employee Eng	agement	•		•				

Table 8. Autonomy - Employee	Engagement Regression
------------------------------	-----------------------

The R Squared value which is the coefficient of determination is 0.226, indicating that 22.6% of the variance in employee engagement can be accounted for by autonomy. In the regression analysis the coefficient for Autonomy is 0.467. The standardized coefficient (B) for Autonomy is 0.475. It represents the strength and direction of the relationship between Autonomy and Employee Engagement, considering the standard deviation of both variables. The t-value (5.871) indicates how many standard errors the coefficient estimate is from zero. In this case, it suggests that the coefficient for Autonomy is significantly different from zero. The p-value (0.000) is very small, indicating that the relationship between autonomy and employee engagement is statistically significant.

H5: Relatedness have a positive impact on Employee Engagement

Descriptive Statistics show that the variable Relatedness has a mean of 3.6100 and a standard deviation of 0.575 and the variable Employee Engagement has a mean of 3.6719 and a standard deviation of 0.522.

The correlation table shows the Pearson correlation coefficient between Relatedness and Employee Engagement. The coefficient is 0.595, indicating a moderate positive correlation between the variables. The p-value associated with the correlation coefficient is 0.000 which indicates that the correlation between Relatedness and Employee engagement is statistically significant. In short, the analysis reveals a significant correlation (r = 0.595) between Relatedness and Employee Engagement.

Descriptive Statistics								
	Mean	Std. Devia	Std. Deviation					
Relatedness	3.6100	.57561		120				
Employee	3.6719	.52262		120	120			
Engagement								
Correlations	Correlations							
			Rela	tedness	Employee Engagement			
Relatedness	Pearson Correlation				.595**			
	Sig. (2-Tailed)				.000			
	N		120		120			
Employee	Pearson Correlation		.595**		1			
Lingagement	Sig. (2-Tailed	1)	.000)				
	Ν		120		120			
**. Correlation Is Signifi	cant at the 0.0)1 Level (2-T	ailed)	•				

Table 9. Relatedness- Employee Engagement Correlation

The linear relationship between the variables Relatedness and Employee Engagement with R 0.595 indicates a positive correlation. The coefficient of determination, R-Squared, is 0.354, meaning that 35.4% of the variance in employee engagement can be accounted by relatedness. In the regression analysis the coefficient for Relatedness is 0.540

The standardized coefficient for Relatedness is 0.595. It represents the strength and direction of the relationship between Relatedness and Employee Engagement, considering the standard deviation of both variables. The t-value (8.047) suggests that the coefficient for Relatedness is significantly different from zero. In this analysis, the p-value is very small (less than 0.001), indicating that the relationship between relatedness and employee engagement is statistically significant. In summary, the analysis indicates that there is a significant positive relationship between relatedness and employee engagement.

Model S	ummary									
Model	R	R Square	Adjusted	d R	R Std. Error of the Estimate					
			Square							
1	.595ª	.354	.349		.42172	<u>.</u>				
a. Predic	ctors: (Consta	ant), Related	ness							
Coefficie	ents									
Model			Unstandard	dized		Standardized	t	Sig.		
			Coefficients	s		Coefficients				
			В	Std. Er	ror	Beta				
1	(Constant)		1.721	.245			7.010	.000		
	Relatedness	5	.540	.067		.595	8.047	.000		
a. Deper	ndent Variab	le: Employee	Engageme	nt		•				

Table 10. Relatedness – Employee Engagement Regression

H6: Fairness have a positive impact on Employee Engagement

Table 11. Fairness-Employee Engagement Correlation

Descriptive Statistics								
	Mean	Std. Deviation	Ν					
Fairness	3.9467	.57554	120					
Employee Engagement	3.6719	.52262	120					
Correlations								
		Fairness	Employee					
			Engagement					
Fairness	Pearson Corr	elation	1	098				
	Sig. (2-Tailed)		-	.288				
	Ν		120	120				
Employee	Pearson Corr	elation	098	1				
Engagement								
	Sig. (2-Tailed)		.288					
	Ν		120	120				

The descriptive statistics show that the variable Fairness has a mean of 3.9467 and a standard deviation of 0.57554. The variable Employee Engagement has a mean of 3.6719 and a standard deviation of 0.52262. The Pearson Correlation coefficient between Fairness and Employee Engagement is -0.098. This value suggests a very weak negative correlation between the two variables. Here, the p-value associated with the correlation coefficient is 0.288. It indicates that the observed correlation between Fairness and Employee Engagement is not statistically significant. In short, the analysis does not show a significant relationship between Fairness and Employee engagement.

Mode	el R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.098ª	.010	.001	.52232		
A. Pro	edictors: (Consta	int), Fairness				
Coeff	ficients					
Model		Unstandardized Coefficients		Standardized	Т	Sig.
widu						
widu				Coefficients		
Widd		В	Std. Error	Coefficients Beta		
1	(Constant)	B 4.022	Std. Error .332	Coefficients Beta	12.124	.000

Table 12. Fairness – Employee Engagement Regression

The correlation coefficient (R) represents the strength and direction of the linear relationship between Fairness and Employee Engagement. Here, R is 0.098, indicating a very weak positive correlation. The coefficient of determination (R Square) is 0.010, meaning that only 1% of the variance in employee engagement can be accounted for by fairness.

In the regression analysis, the coefficient for Fairness is -0.089 and the standardized coefficients (Beta) for Fairness is -0.098. It represents the strength and direction of the relationship between Fairness and Employee engagement, considering the standard deviation of both variables.

The t-value (-1.067) indicates that the coefficient for Fairness is not significantly different from zero. The p-value (0.288) represents that it is not statistically significant (greater than 0.05), suggesting that the relationship between fairness and employee engagement is not significant.

IV. FINDINGS, IMPLICATIONS AND CONCLUSION

The findings of the study reveal that SCARF acts as a significant predictor of Employee Engagement (B = 0.689, P < 0.01). There exists a significant positive correlation between Status and Employee engagement (r = 0.648, p < 0.01). This suggests that higher levels of perceived status are associated with increased employee engagement. This implicates that holding the status as government employee play a key role in their employee engagement at workplace. There also exists a significant positive correlation between Certainty and Employee Engagement (r = 0.587, p < 0.01), indicating that higher levels of perceived certainty are associated with increased employee engagement. Higher levels of perceived autonomy are associated with increased employee engagement. Higher levels of perceived autonomy are associated with increased employee engagement, as significant predictor of Employee Engagement (β = 0.475, p < 0.01). The higher level of perceived relatedness is associated with increased employee engagement (β = 0.595, p < 0.01). Results of this study show that employee engagement is independent of the factor fairness. This may be because data is collected from government organizations where a lot of bureaucracy and red tape may occur. Government organizations may struggle with issues of inequality and discrimination because of casteism or ethnicity or any other criteria or even lack of equitable distribution of resources can significantly undermine perceptions of fairness and negatively impact employee engagement. By addressing the fairness issue government organizations can foster a more engaged and inclusive workforce, leading to improved organizational performance and success.

Here, perception of fairness do not play much important role in their employee engagement. This may be due to the impact of organizational politics in government institutions. Employees may not perceive the organization's policies, procedures, and decision-making processes as fair. Despite efforts to ensure fairness, if employees feel that certain practices are biased or unjust, they may not be motivated to engage fully in their work. Hence, we can conclude that, from the findings of the study that factors like status (relatively when compared to co-workers), certainty (ability to forecast the future), autonomy, feelings of relatedness (safety feeling due to good relationships), fairness (being treated fairly) triggers a feeling of appreciation and reward, which in turn improves the employee engagement at workplaces.

REFERENCES

- 1) Markos, S., & Sridevi, M. (2010). Employee Engagement: The Key to Improving Performance. International Journal of Biometrics, 5, 89. https://doi.org/10.5539/IJBM.V5N12P89.
- 2) Liu, Y., Yin, X., Li, S., Zhou, X., Zhu, R., & Zhang, F. (2021). The Relationship Between Employee's Status Perception and Organizational Citizenship Behaviors: A Psychological Path of Work Vitality. Psychology Research and Behavior Management, 14, 743 - 757. https://doi.org/10.2147/PRBM.S307664.
- 3) Bagneux, V., Bollon, T., & Dantzer, C. (2012). Do (un)certainty appraisal tendencies reverse the influence of emotions on risk taking in sequential tasks? Cognition and Emotion, 26, 568 576. https://doi.org/10.1080/02699931.2011.602237.
- 4) Tillott, S., Walsh, K., & Moxham, L. (2013). Encouraging engagement at work to improve retention. Nursing management, 19 10, 27-31. https://doi.org/10.7748/NM2013.03.19.10.27.E697.
- 5) Dorssen-Boog, P., Jong, J., Veld, M., & Vuuren, T. (2020). Self-Leadership Among Healthcare Workers: A Mediator for the Effects of Job Autonomy on Work Engagement and Health. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.01420.
- 6) Tiedens, L., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: the effects of specific emotions on information processing.. Journal of personality and social psychology, 81 6, 973-88. https://doi.org/10.1037/0022-3514.81.6.973.
- 7) Rutte, C., & Messick, D. (1995). An integrated model of perceived unfairness in organizations. Social Justice Research, 8, 239-261. https://doi.org/10.1007/BF02334810.
- 8) Kolemba, M. (2016). Brain as a social organ. Practical application of social awards and threats SCARF model in management and building customer relationships training. General and Professional Education, 2016, 17-23.
- 9) Behery, M., & Abdallah, S. (2019). Organizational climate best practices: Empirical evidence from the UAE. Journal of Research in Emerging Markets. https://doi.org/10.30585/jrems.v1i3.343.
- 10) Rock, D., & Ringleb, A. (2013). Handbook of neuro leadership. California: Neuro Leadership Institute.
- 11) Jang, H., Reeve, J., Ryan, R., & Kim, A. (2009). Can self-determination theory explain what underlies the productive, satisfying learning experiences of collectivistically oriented Korean students?. Journal of Educational Psychology, 101, 644-661. https://doi.org/10.1037/A0014241.
- 12) Freedman, B. (2019). Risk factors and causes of interpersonal conflict in nursing workplaces: Understandings from neuroscience. Collegian. https://doi.org/10.1016/J.COLEGN.2019.02.001.
- 13) Rock D (2008) scArF: a brain-based model for collaborating with and influencing others. Neuroleadership Journal. 1, 1, 1 5.
- 14) Campbell, S. J., Walsh, K., Prior, S. J., Doherty, D., Bramble, M., Marlow, A., & Maxwell, H. (2022). Examining the engagement of health services staff in change management: modifying the SCARF assessment model. International Practice Development Journal, 12(1).
- 15) Gagné, M., & Bhave, D. (2010). Autonomy in the workplace: An essential ingredient to employee engagement and wellbeing in every culture. In Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being (pp. 163-187). Dordrecht: Springer Netherlands.
- 16) Rock, D. (2008). SCARF: A brain-based model for collaborating with and influencing others. Neuro Leadership journal, 1(1), 44-52.
- 17) Basetoli Mishkat, M. M. (2015). Maslow's Hierarchy of Needs and SCARF Model: Arecompatible or contradictory in contemporary management practice. International Journal in Management & Social Science, 3(11), 579-590.
- 18) Javadizadeh, B., Aplin-Houtz, M., & Casile, M. (2022). Using SCARF as a motivational tool to enhance students' class performance. The International Journal of Management Education, 20(1), 100594.
- 19) Freedman, B. D. (2019). Risk factors and causes of interpersonal conflict in nursing workplaces: Understandings from neuroscience. Collegian, 26(5), 594-604.
- 20) Emde, M. J. (2012). Engagement in the workplace from a NeuroScience perspective. Management Today, 30(1), 8-11.
- 21) Forbes-Zeller, L. (2020). What role can social cognitive neuroscience play in promoting prosocial behaviours in organizations. Pepperdine University
- 22) Behery, M., & Abdallah, S. (2019). Organizational environment best practices: Empirical evidence from the UAE. Journal of Research in Emerging Markets, 1(3), 27-39.
- 23) Pope, S. N. (2019). A systematic literature review of school leadership intelligences for the development of neuroeducational leadership.

- 24) Hansen, J. M., Hansen, J. W., & Madsen, S. R. (2022). Improving how we lead and manage in business marketing during and after a market crisis: the importance of perceived status, certainty, autonomy, relatedness, and fairness. Journal of Business & Industrial Marketing, (ahead-of-print).
- 25) Marr, J. C., Steed, L. B., & Bianchi, E. (2017). How Status Inequality Undermines Work Engagement: The Role of Cynical Attitudes about Work. In Academy of Management Proceedings (Vol. 2017, No. 1, p. 13038). Briarcliff Manor, NY 10510: Academy of Management.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.