

Study on Job Demands, Work Engagement and Growth Mindset among Young Adults

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Abstract: *This study examines the interplay among job demands, work engagement, and growth mindset among young adults in the Indian workforce, based on theories like the Job Demands-Resources (JD-R) and mindset theory. Conducted in the Delhi NCR region with 304 participants using purposive sampling, data was collected using Dweck's 3-Item Growth Mindset Scale and the Utrecht Work Engagement Scale. Statistical analyses, including correlation, multiple regression, and moderation regression, were employed. Results indicate significant correlations among job demands, work engagement, and growth mindset, with growth mindset moderating the relationship between job demands and work engagement. These findings offer insights for enhancing employee well-being and productivity, despite limitations such as sample characteristics and self-reported measures.*

Keywords: Job demands, Work engagement, Growth mindset, young adults, Organizational development

I. INTRODUCTION

The rapid growth of organizations in the modern economy has led to increased job demands, making it crucial to understand employee behavior to maintain high levels of work engagement. In the competitive and fast-paced work environment, young adults are particularly vulnerable to stress and burnout due to high job demands. Understanding the factors that contribute to their work engagement is essential for both organizational development and individual well-being.

Work engagement is a significant predictor of job performance, organizational commitment, and overall job satisfaction. Engaged employees are more likely to exhibit higher productivity, better job performance, and greater innovation. However, the increasing job demands can often lead to adverse effects, such as stress, burnout, and decreased work engagement. Therefore, identifying strategies to mitigate these negative impacts is vital.

One promising approach is fostering a growth mindset among employees. According to mindset theory, individuals with a growth mindset believe that their abilities and intelligence can be developed through hard work, effective strategies, and input from others (Dweck, 2016). This contrasts with a fixed mindset, where individuals perceive their talents and intelligence as static traits. A growth mindset can significantly impact an individual's approach to challenges, learning, and development, making it a valuable asset in high-demand work environments.

The Job Demands-Resources (JD-R) theory provides a framework for understanding the dynamics between job demands, personal resources, and work engagement. According to the JD-R theory, job demands refer to the physical, mental, social, and organizational aspects of a job that require sustained effort and can lead to stress if not managed effectively. Conversely, job resources are the physical, psychological, social, or organizational aspects that help achieve work goals, reduce job demands, and stimulate personal growth and development. Personal resources, such as self-efficacy and optimism, play a crucial role in managing job demands and maintaining high levels of engagement.

In the context of young adults in the Indian workforce, the interplay between job demands, work engagement, and growth mindset is particularly relevant. The Indian economy is experiencing rapid growth, leading to increased competition and higher job demands. Young professionals are often at the forefront of this economic expansion, facing significant pressures to perform and succeed. Therefore, understanding how a growth mindset can influence their ability to handle job demands and maintain engagement is critical.

This study aims to explore the role of growth mindset in moderating the relationship between job demands and work engagement among young adults in the Indian workforce. By examining these relationships, the research seeks to provide insights that can inform organizational strategies to enhance employee well-being and productivity.

Job Demands

Demerouti et al. (2001) define job demands as the physical, mental, social, and organizational aspects requiring psychological and physical effort, leading to potential costs. These demands include high work pressure, emotionally demanding interactions, and complex tasks that require sustained attention and effort. Meijman and Mulder (1998) highlight that excessive job demands without adequate recovery can become hindrances, leading to stress and burnout. Job demands can also include factors like workload, time pressure, and role ambiguity, all of which require significant cognitive and emotional resources to manage effectively.

Work Engagement

Schaufeli, Bakker, and Salanova (2006) describe work engagement as a positive, fulfilling state of work-related well-being, characterized by vigor, dedication, and absorption. Vigor refers to high levels of energy and mental resilience while working, dedication involves being strongly involved in one's work and experiencing a sense of significance and pride, and absorption is being fully concentrated and happily engrossed in work. Kahn (1990) identifies three dimensions of engagement: physical, cognitive, and emotional, which are crucial for feeling secure in roles and performing effectively. Engaged employees are likely to invest themselves more deeply in their work, leading to higher productivity and satisfaction.

Growth Mindset

Mindset theory posits that individuals with a growth mindset believe their talents or intelligence result from hard work, strategies, and input from others (Dweck, 2016). This contrasts with a fixed mindset, where abilities are seen as innate and unchangeable. Shenk (2010) and Aronson, Fried, and Good (2002) emphasize that a growth mindset can significantly impact performance and motivation, leading individuals to embrace challenges, persist in the face of setbacks, and view effort as a path to mastery. In the workplace, a growth mindset can foster resilience, continuous learning, and adaptability, which are essential for coping with high job demands and maintaining work engagement.

JD-R Theory

The JD-R theory (Demerouti et al., 2001) asserts that personal resources, such as self-efficacy, optimism, and resilience, are vital for managing job demands and maintaining engagement. According to this theory, job resources can buffer the impact of job demands and are instrumental in achieving work goals, reducing job stress, and stimulating personal development. High personal resources correlate with job satisfaction, lower burnout, and higher engagement. The theory suggests that organizations can enhance employee well-being and performance by providing adequate job resources and fostering personal resources among employees.

II LITERATURE REVIEW

Banarjee and Doshi (2020) found that women in both India and the USA perceived greater job demands than men. Yeager and Dweck (2012) showed that individuals with a growth mindset were more resilient and motivated, while Blackwell et al. (2007) linked growth mindset to higher academic and career achievements. Heslin, Vandewalle, and Latham (2006) noted that employees with a growth mindset exhibited higher work engagement and sought learning opportunities. Carolan and Koomen (2019) found females exhibited higher growth mindset beliefs, with Trumbull and Rothstein (2017) highlighting cultural variations in these beliefs. Johnson and Silver (2018) revealed that individuals with a growth mindset coped better with job demands and experienced less stress, with Walumbwa et al. (2010) emphasizing growth mindset's role in effective leadership. Studies by Heslin et al. (2006) and Yeager and Dweck (2012) link growth mindset to higher work engagement. Carolan and Koomen (2019) suggest gender dynamics influence engagement, while Johnson and Silver (2018) indicate that engaged employees better handle job demands. Johnson and Silver (2018) found that a growth mindset mitigates the negative effects of job demands. Carolan and Koomen (2019) highlight gender differences in job demand experiences, with Heslin et al. (2006) noting high job demands lower engagement. Burnette et al. (2013) found high job demands early in careers lead to stress and burnout, impacting long-term career outcomes.

III. METHODOLOGY

Aim

The aim of the study is to understand the relationship between job demands, work engagement, and growth mindset among young adults in the Indian workforce.

Rationale

Understanding the interplay between job demands, work engagement, and growth mindset is crucial for fostering optimal work environments. High demands can lead to burnout, while work engagement reflects dedication and leads to better performance. A growth mindset, where challenges are seen as learning opportunities, might buffer against negative demands, promoting continued engagement. This research investigates these relationships within the Indian workforce, where such studies are scarce. By examining these factors, we can gain insights into creating supportive yet challenging work environments, cultivating growth mindsets for increased resilience, and developing interventions to optimize employee well-being and organizational productivity. This knowledge benefits both Indian organizations seeking a more engaged workforce and employees seeking tools to navigate demanding work situations.

Objectives

- To examine the strength and direction of the relationship between job demands and work engagement among young adults.
- To examine the relationship between job demands and growth mindset among young adults.
- To examine the relationship between work engagement and growth mindset among young adults.
- To investigate the impact of job demands on work engagement among young adults.
- To investigate the impact of growth mindset on work engagement among young adults.
- To investigate the moderating effect of growth mindset on the relationship between job demands and work engagement among young adults.

Hypothesis

- There will be a significant moderate positive relationship between job demands and work engagement among young adults.
- There will be a significant weak positive relationship between job demands and growth mindset among young adults.
- There will be a significant moderate positive relationship between work engagement and growth mindset among young adults.
- Job demands will impact work engagement among young adults.
- Growth mindset will impact work engagement among young adults.
- Growth mindset will moderate the relationship between job demands and work engagement among young adults.

Variables

- Independent variables: Job demands, Growth mindset
- Dependent variable: Work engagement

Description of Sample

A sample of 304 young adults (152 men and 152 women) with a mean age of 24 years, including post-graduates, graduates, and regular workers, was recruited. A purposeful sampling method was used. Participants were from the Delhi NCR region, aged 18 to 30 years, able to read and interpret English, and capable of using a phone or other device. Exclusions included those under 18 or over 30, those unable to read simple English, and those diagnosed with anxiety or depression.

Description of Tools

- **Dweck's 3-Item Growth Mindset Scale:** Assesses belief in the malleability of intelligence using three statements rated on a Likert scale (1 = strongly disagree to 6 = strongly agree). Higher scores indicate a growth mindset.
- **UWES-9 (Utrecht Work Engagement Scale - 9 items):** Measures work engagement in terms of vigor, dedication, and absorption using nine statements rated from 1 (never) to 7 (always). Higher scores indicate higher work engagement.
- **Perceived Job Demands Scale (5-item by Boyer):** Assesses physical, psychological, and emotional demands using five statements rated on a Likert scale. Higher scores indicate higher perceived job demands.

Procedure

The data collection process included:

- Creation of a Google Form to introduce the study and address participant queries.
- Explanation of ethical guidelines and obtaining informed consent.
- Distribution of the questionnaire online via Google Forms and in physical form.
- Analysis using Pearson product-moment correlation, multiple regression, and regression moderation analysis techniques.

Statistical Analysis

Data from 304 participants were analyzed using Pearson correlation, multiple regression, and moderation regression analysis.

IV. RESULTS AND DISCUSSION

Descriptive Statistics

Table 1: Descriptive statistics

	N	Mean	Std. Deviation
	Statistic	Statistic	Std. Error
JobDemands	311	20.1865	.23075
WorkEngagement	304	39.7401	.40945
GrowthMindset	304	11.0987	.08277
Valid N (listwise)	304		

Descriptive statistics for job demands, work engagement, and growth mindset are summarized in Table 1. Job demands had a mean of 20.19 (SD = 23.08), work engagement had a mean of 39.74 (SD = 40.95), and growth mindset had a mean of 11.10 (SD = 0.83).

Correlation Analysis

Table 2: Pearson correlation between job demands, work engagement and growth mindset

		JobDemands	WorkEngagemen t	GrowthMindset
JobDemands	Pearson Correlation	1	.671 ^{***}	.444 ^{***}
	Sig. (2-tailed)		<.001	<.001
	N	311	304	304
WorkEngagement	Pearson Correlation	.671 ^{***}	1	.493 ^{***}
	Sig. (2-tailed)	<.001		<.001
	N	304	304	304
GrowthMindset	Pearson Correlation	.444 ^{***}	.493 ^{***}	1
	Sig. (2-tailed)	<.001	<.001	
	N	304	304	304

***. Correlation is significant at the 0.01 level (2-tailed).

A significant positive correlation was found between job demands and work engagement ($r = .67$, $p < .01$), job demands and growth mindset ($r = .44$, $p < .01$), and work engagement and growth mindset ($r = .49$, $p < .01$). Hypotheses 1 and 3 were accepted, while hypothesis 2 was rejected.

Multiple Regression Analysis

Table 3: Multiple Regression table with job demands and growth mindset as a predictor of work engagement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.706 ^a	.498	.495	5.07458	.498	149.338	2	301	<.001

a. Predictors: (Constant), GrowthMindset, JobDemands

Table 4: Coefficient table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.863	2.348		2.071	.039		
	JobDemands	1.056	.085	.564	12.375	<.001	.803	1.245
	GrowthMindset	1.199	.225	.242	5.319	<.001	.803	1.245

a. Dependent Variable: WorkEngagement

Table 5: ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7691.300	2	3845.650	149.338	<.001 ^b
	Residual	7751.170	301	25.751		
	Total	15442.470	303			

a. Dependent Variable: WorkEngagement

b. Predictors: (Constant), GrowthMindset, JobDemands

A multiple regression analysis showed that job demands and growth mindset significantly predict work engagement (adjusted $R^2 = .495$, $F(2,301) = 149.338$, $p < .05$). Both job demands ($\beta = 0.56$, $p < .05$) and growth mindset ($\beta = 0.24$, $p < .05$) were significant predictors. Hypotheses 4 and 5 were accepted.

Moderation Regression Analysis

Table 6: Moderation analysis Collinearity table

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	40.920	13.501		3.031	.003		
	JobDemands	-.692	.651	-.370	-1.064	.288	.014	73.840
	GrowthMindset	-2.207	1.276	-.446	-1.730	.085	.025	40.735
	interaction	.164	.060	1.389	2.711	.007	.006	160.606

a. Dependent Variable: WorkEngagement

Table 7: Moderation Regression table with job demands and growth mindset as a predictor of work engagement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.714 ^a	.510	.505	5.02188	.510	104.109	3	300	<.001

a. Predictors: (Constant), interaction1, Zscore(GrowthMindset), Zscore(JobDemands)

Table 8: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7876.680	3	2625.560	104.109	<.001 ^b
	Residual	7565.790	300	25.219		
	Total	15442.470	303			

a. Dependent Variable: WorkEngagement

b. Predictors: (Constant), interaction1, Zscore(GrowthMindset), Zscore(JobDemands)

Table 9: Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	39.083	.326		119.734	<.001		
	Zscore(JobDemands)	4.568	.358	.599	12.767	<.001	.742	1.349
	Zscore(GrowthMindset)	1.579	.327	.221	4.831	<.001	.780	1.283
	interaction1	.960	.354	.114	2.711	.007	.921	1.086

a. Dependent Variable: WorkEngagement

Moderation analysis revealed that growth mindset moderates the relationship between job demands and work engagement ($R^2 = 0.510$, $F(3, 301) = 104$, $p < .05$). The interaction between job demands and growth mindset ($\beta = 0.114$, $p < .05$) was significant. Hypothesis 6 was accepted.

V. DISCUSSION

This study investigated the relationships between job demands, work engagement, and growth mindset among young adults. A moderate positive correlation was found between job demands and work engagement ($r = .67$, $p < .01$), suggesting that moderate job demands enhance engagement by fostering a sense of challenge. Hypothesis 2 was rejected, as a moderate positive correlation ($r = .44$, $p < .01$) was observed between job demands and growth mindset, indicating a more complex relationship. Hypothesis 3 was supported, showing a moderate positive correlation ($r = .49$, $p < .01$) between work engagement and growth mindset. Multiple regression analysis confirmed that job demands and growth mindset significantly predict work engagement. Moderation analysis showed that growth mindset moderates the relationship between job demands and work engagement. Fostering a growth mindset can help individuals navigate challenging work environments. Organizations should optimize job demands and cultivate a growth mindset culture through training and support programs to enhance productivity and employee well-being. The study's focus on young adults limits the generalizability of findings. Reliance on self-reported measures introduces potential bias. Including objective measures and considering other factors like social support and personality traits could strengthen future research.

VI. CONCLUSION

This research examined the interplay between job demands, work engagement, and growth mindset among young adults. A moderate positive correlation was found between job demands and work engagement. Growth mindset moderated this relationship, buffering the negative impact of high job demands. Organizations can create a "sweet spot" for job demands and foster a growth mindset culture to promote well-being and engagement. Implementing stress management and support programs can further enhance workplace engagement and resilience.

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APPENDIX

Growth Mindset Scale

This survey accompanies a measure in the SPARQTools.org Measuring Mobility toolkit, which provides practitioners curated instruments for assessing mobility from poverty and tools for selecting the most appropriate measures for their programs.

Age: Child, Teen, Adult

Duration: < 3 minutes

Reading Level: 6th to 8th grade

Number of items: 3

Answer Format: 1 = strongly agree; 2 = agree; 3 = mostly agree; 4 = mostly disagree; 5 = disagree; 6 = strongly disagree.

All Survey Questions

You have a certain amount of intelligence, and you can't really do much to change it.

Your intelligence is something about you that you can't change very much.

You can learn new things, but you can't really change your basic intelligence.

Scoring:

To calculate the total score for each participant, take the average rating of the items by adding respondents' answers to each item and dividing this sum by the total number of items (3).

Boyar et al. Perceived Work Demand Scale

No. of Items: 5

Perceived work demand items:

My job requires all of my attention.

I feel like I have a lot of work demand.

I feel like I have a lot to do at work.

My work requires a lot from me.

I am given a lot of work to do.

Scoring – Strongly disagree-1 , Disagree-2, Neutral-3, Agree-4, Strongly agree-5, the higher the score the higher the English version

Work & Well-being Survey (UWES) ©

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the '0' (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

Almost never Rarely Sometimes Often Very often Always

0 1 2 3 4 5 6

Never A few times a Once a month A few times a Once a week A few times a Every day
year or less month week

1. _____ At my work, I feel bursting with energy* (VI1)

2. _____ I find the work that I do full of meaning and purpose (DE1)

3. _____ Time flies when I'm working (AB1)

4. _____ At my job, I feel strong and vigorous (VI2)*

5. _____ I am enthusiastic about my job (DE2)*
6. _____ When I am working, I forget everything else around me (AB2)
7. _____ My job inspires me (DE3)*
8. _____ When I get up in the morning, I feel like going to work (VI3)*
9. _____ I feel happy when I am working intensely (AB3)*
10. _____ I am proud on the work that I do (DE4)*
11. _____ I am immersed in my work (AB4)*
12. _____ I can continue working for very long periods at a time (VI4)
13. _____ To me, my job is challenging (DE5)
14. _____ I get carried away when I'm working (AB5)*
15. _____ At my job, I am very resilient, mentally (VI5)
16. _____ It is difficult to detach myself from my job (AB6)
17. _____ At my work I always persevere, even when things do not go well (VI6)

* Shortened version (UWES-9); VI= vigor; DE = dedication; AB = absorption

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