Exploring the Effects of Green Transformational Leadership on Job Satisfaction in Pakistan's Pharmaceutical Industry: The Mediating Role of Intention

Hamad Ul Haq Ansari¹ and Sajjad Nawaz Khan²

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Abstract

This study investigates the relationship between green transformational leadership (GTL), job satisfaction (JS), and the mediating role of 'intention' in Pakistan's pharmaceutical industry within the framework of the resource-based view (RBV) theory. The research uncovers that GTL, encompassing environmental consciousness, ethical conduct, and innovation, is a unique organizational resource that shapes employees' intentions toward embracing sustainable practices. A quantitative methodology was adopted to achieve the aims of the study. Data were collected through an online survey to manage the data (418 valid responses), and Smart-PLS structural equation modeling (PLS-SEM) was employed to hypothesize a model. The results demonstrate that GTL had little significant direct effect on JS. This study also found that intention has a full mediation effect between GTL and JS. Additionally, the study found that the correlation among GTL is affected by JS and intention. This study contributes to the literature and body of knowledge on green human resource management and organizational behavior through the lens of RBV theory.

Keywords: Green Transformational Leadership, Intention, Job Satisfaction.

Introduction

The integration of environmental sustainability into management and organizational philosophies has reaped more attention from academia and industry in recent times. The goal is to minimize the adverse impacts of industrial waste and hazards connected to conventional manufacturing. Academics and interested parties have forced organizations to develop strategic plans that simultaneously tackle social, economic, and environmental goals. Research papers demonstrate how environmentally conscious information technologies may significantly reduce energy use, carbon waste, and disposal procedures in organizations (Sikder, 2023). Consequently, the academic focus is shifting from a broad discussion of green business to a more functional discussion of green finance (Akomea, 2022), green leadership (Arici, 2022), and green human resources (Sabokro, 2021).

Organizations are gradually incorporating sustainable practices into their operational procedures in response to the growing environmental concern. Leaders are essential change agents who can help companies adopt and encourage these ethical behaviors (Chams, 2019; Lashitew, 2020). In particular, a necessary strategy for attaining environmental sustainability is green transformational leadership (GTL), which is defined by the promotion of sustainability-oriented norms and

²Department of Business Administration, Iqra University, Karachi.



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¹Department of Business Administration, Iqra University, Karachi. Email: hamad.ansari37@yahoo.com

behaviors. In this study, GTL represents leaders who not only encourage and inspire those who work for them but also inculcate an environmental ethic in their choices and behaviors (Begum, 2022). These leaders encourage ecological responsibility, include environmental issues in the organization's overall aims, and provide an example of sustainability through their behavior.

Given the importance of GTL in influencing organizational results, it is critical to look into the various ways in which GTL affects workplace dynamics in the pharmaceutical sector of Pakistan. In light of this, the goal of this research is to determine how GTL influences employee job satisfaction. A key measure of employees' well-being, job satisfaction is frequently associated with dedication, productivity, and plans to leave the organization. However, miniature research has been done on the mechanism by which GTL influences job satisfaction. According to this research, "intention" plays a mediating role in this relationship (Conner, 2016). According to our research, GTL may have an impact on employees' intent to participate in and support the organization's green activities, which may have a significant effect on the job satisfaction of employees in the pharmaceutical industry.

Previous research has shown an elevated relationship between leadership styles and job satisfaction. Additionally, studies pertaining to behavior have shown that intention plays a mediating role in these relationships (Lu, 2019). However, comparatively few research that examine the mediating role of intention in a sustainable environment. To bridge this gap and contribute to the expanding research on sustainability and leadership, this study will examine how GTL enhances job satisfaction while considering intention as a mediating factor (Akram, 2023; Tafvelin, 2019). Comprehending this correlation is anticipated to yield significant perspectives for establishments aiming to elevate employee contentment, therefore augmenting their output, efficiency, and, eventually, their ecological endeavors.

Several scholarly studies have examined the connection between transformative leadership and job satisfaction. However, little is currently known about how green transformational leadership (GTL) is specifically used and how it impacts job satisfaction, particularly in the pharmaceutical industry of Pakistan. Moreover, not much is known about how "intention" functions as a mediating element in this relationship. Furthermore, the applicability of the resource-based view (RBV) theory in this context needs to be sufficiently addressed in the provided content. With a clearer understanding of the ways in which various organizational and cultural factors interact with GTL to affect job satisfaction, this study aims to close these knowledge gaps.

Literature Review Role of GTL and JS

Scholars who have an interest in investigating the connection between job satisfaction and leadership have primarily concentrated on the transformational leadership approach (Al-edenat, 2018; Pathak, 2023). Leaders who motivate and enable their followers to put the organization's or community's interests ahead of their own are known as transformational leaders (Tintoré, 2019; Kumar, 2020). Few studies emphasize that historically, transformational leaders have put the needs and values of citizenship ahead of their own. Thus, because it is other-centric, this leadership style offers a suitable foundation for investigation in an environmental setting (Dhiman, 2022; Uchida, 2023).

Scholars recognize that behaviors within organizations contribute significantly to environmental degradation (Mensah, 2019). The effectiveness of environmental programs depends on the actions of leaders and staff members of organizations. Leaders who understand how to incorporate environmental management into their operational plans recognize the need for an adaptable

leadership approach (Tembo, 2021; Sajjad, 2023; Cho & Yoo, 2021). Researchers have studied how transformational leadership could change behaviors to become more environmentally conscious in order to cause such behavioral changes (Suwanto, 2022). Previous studies support the idea that green transformational leadership (GTL) can improve environmental performance (Priyadarshini, 2023; Mailto, 2022).

According to a recent study, "green transformational leadership" (GTL) refers to the behavioral patterns that leaders display in encouraging their subordinates to achieve environmental goals and exceed predetermined standards of environmental performance (Johnson, 2020). GTL works to create a compelling vision that will motivate followers and enhance their capacity to encourage eco-friendly behavior within the organization (Chaturvedi, 2022). With the specific goal of strengthening pro-environmental performance, GTL combines the four pillars of transformational leadership: idealized influence, inspiring motivation, intellectual stimulation, and individualized consideration (Robertson, 2018).

Initially, leaders who display idealized impact act as role models for environmentally conscious behavior, which encourages followers to act similarly. A compelling environmental vision that appeals to followers is crafted by them (Dey, 2022; Robertson, 2018). By doing this, leaders present the company as a responsible operational entity and articulate a vision that sets standards (Krasodomska, 2021; Robertson, 2018). This creates a favorable mental framework in the workers' minds, eliciting their commitment and allegiance. Second, via their zeal and idealism, followers of inspiring motivators are able to surmount psychological and physical obstacles (Allal-Chérif, 2021; Robertson, 2018). They inspire people to engage in pro-environmental actions that go beyond pursuing their interests (Schiuma, 2022). This gives followers a sense of direction and strengthens their dedication to group objectives (Puni, 2021).

Thirdly, intellectually stimulating leaders encourage their followers to reevaluate current organizational procedures, present creative alternatives, and engage critically with environmental concerns (Singh, 2020). These leaders encourage their followers to challenge preconceived notions and accept and value their differing viewpoints. This encourages followers to feel safe and valued cognitively, which motivates them to go above and beyond their position (Schiuma, 2022). Subsequently, by taking individual care into account, leaders develop strong bonds with employees while promoting environmental principles and demonstrating concern for the well-being of followers. They also help them improve their competencies (Sergey, 2020). Followers who exhibit this behavior feel empowered and proud of themselves, which has a beneficial impact on their performance (Zia & Siddiqui, 2023).

GTL has become a significant element for organizations aiming to sustain a competitive edge over time by integrating the compelling features of transformational leadership with an environmental mandate. Research investigations have shown that one significant result altered by GTL is job satisfaction. Job satisfaction, or positive emotional responses to one's job and its aspects, is a crucial sign of organizational dedication, productivity, and even staff retention (Hanaysha, 2016). The effect of GTL on job satisfaction can be interpreted through the use of both its inherent characteristics and a more thorough theoretical framework, such as the Resource-Based View (RBV) (Chen, 2022). GTL was proven to have a positive effect on employees' job satisfaction levels because of their increased involvement and dedication to environmental initiatives (Suliman, 2023). A recent study discovered that GTL promoted employees' commitment to the environment, which in turn encouraged job satisfaction (Farooq, 2022). For instance, GTL entails establishing high standards for conducting business in an environmentally conscious approach and recognizing and rewarding employees who accomplish this.

A recent study found that GTL—which is exemplified by traits like setting high standards for environmental performance and leading by example—had a significant impact on employees' satisfaction with their jobs. The study found that GTL leaders' enthusiasm for ecological sustainability had a favorable effect on employees' interest in their work and commitment to the organization's green goals, which in turn raised the employees' job satisfaction (Suliman, 2023). According to the study, employees' eco-initiatives were favorably correlated with GTL. When their green leaders acknowledged and valued such activities, the staff members felt that their roles had more significant value and fulfillment. They felt that receiving this acknowledgment really increased their level of job satisfaction overall (Robertson, 2013).

GTL leaders inspire and engage their followers by providing a framework of intellectual encouragement, vision, and commitment. They provide work environments where individual ambitions are in line with environmental objectives by endorsing and encouraging sustainable behaviors and raising environmental awareness among their followers (Suliman, 2023). These value-aligned work settings frequently result in higher job satisfaction. Job satisfaction was found to be highly correlated with green human resource management, a process driven by GTL (Agrawal, 2023). In a different study, workers' job satisfaction increased in a green workplace where environmental stewardship was demonstrated by transformational leaders (Singh, 2020).

A recent study draws attention to the possibility of organizations engaging in "green washing," a practice in which leadership-level environmental pledges may not materialize into actual greening initiatives. Employee confidence may be eroded as a result of this perceived deception, which would lower JS (Farooq, 2022). Furthermore, GTL's initiatives would at first raise JS; the organization's concentration on environmental sustainability might put employees under undue pressure, which would lower their level of satisfaction. Employees may become frustrated or unsatisfied with the green initiative if they believe it is a diversion from their primary job responsibilities (Fernet, 2015).

GTL may encourage employees to be more environmentally conscious, but it only sometimes affects how satisfied they are with their jobs (Chen, 2022). Authors suggested that GTL might not have significant effects by arguing that a variety of factors, including the work environment, rewards, and social ties, drive job satisfaction. It's important to remember that these reported insignificances and possible drawbacks are typically the exception rather than the standard. A large quantity of academic research generally indicates that GTL has a beneficial effect on JS (Farooq, 2022). Whereas GTL generally improves JS, some academic research raises the prospect of modest or even adverse effects. Examining these unfavorable situations can be essential to deepening our comprehension of the complexity of GTL and its complicated impacts on JS.

H1: The GTL significantly affects JS

Mediating Role of Intention

A significant finding from the research is that GTL influences workers' intentions and attitudes toward the environment. Employees intend to behave in an environmentally conscious manner when their leaders model this behavior, and when their actions align with their goals, their level of job satisfaction increases (Begum, 2022).

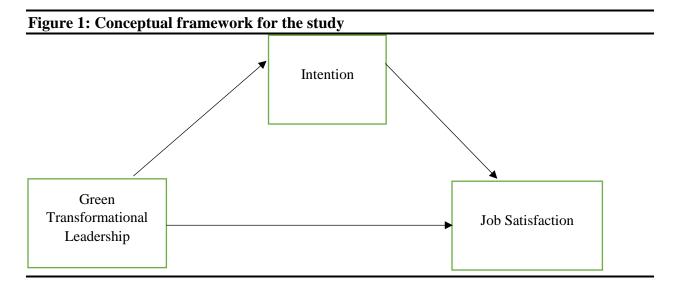
When GTL and job satisfaction were examined, Jabbour et al. (2012) discovered that employees who were affected by GTL had greater job satisfaction levels because they were more involved in and committed to environmental projects. This is consistent with the proposed mediation concept, which holds that GTL shapes employee intentions to engage in environmentally friendly behaviors, hence influencing job satisfaction. The study findings about the meditational impact of

employees' intentions showed that leaders might influence environmental intents by integrating sustainability into daily operations and organizational culture. Employees felt more fulfilled and had a sense of purpose because of the leaders' actions and their objectives aligning, which improved job satisfaction.

The RBV theory is used, and the indirect relationship that exists between GTL and job satisfaction through intention becomes more complex. Intention, as an internal human resource, is essential to converting GTL impact into satisfaction with work (Begum, 2023). Through influencing employee goals to encourage environmentally conscious behavior, GTL leaders indirectly contribute to a more satisfied workforce. In a similar vein, workers' intentions are greatly influenced by their impression of a leader's environmental policies, which in turn raises job satisfaction. Because of the leaders' eco-friendly actions, norms and standards were defined, which influenced employees' intentions to behave similarly and increased workplace satisfaction (Kim, 2017).

Intention is a critical mediating factor in the relationship between GTL and job satisfaction, according to the study. GTL promotes positive attitudes towards environmentally sustainable behavior, which in turn influences job satisfaction. This demonstrates how crucial it is to encourage GTL in the workplace in order to foster attitudes and goals that support environmental sustainability and raise employee satisfaction (Priyadarshini, 2023).

H2: The intention mediates the relationship between GTL and JS



Materials and Methods

Sampling Design and Data Collection

The present study employs a survey approach and is grounded in positivist theory. A framework for explanatory research to investigate causal links between variables has been created by Creswell (2017). Additionally, a study model and hypotheses were developed using deductive reasoning, which is consistent with the positivist viewpoint.

A framework involving 418 employees from pharmaceutical organizations operating in Pakistan is developed using a quantitative methodology in the current research. The objective was to investigate how green transformational leadership (GTL) affects job satisfaction. The technique of non-random convenience sampling was used to select participants. To assess the structural and measurement models, Smart-PLS (version 3) was utilized for partial least squares (PLS) analysis.

The theoretical model was validated through the collection of samples from various pharmaceutical organizations in Pakistan.

The survey questionnaire was given to employees at Martin Dow Pharma, Amarant Pharma, Getz Pharma, NabiQasim Pharma, and Merck Pharma, which are prominent players in the pharmaceutical industry. Data was collected using a convenient sampling technique between August 2023 and December 2023. To determine the appropriate sample size, power analysis was used to follow Hair et al. (2017) recommendation for Partial Least Squares-Structural Equation Modeling. According to Hair et al. (2019), the sample size should be determined by examining the constructs in the model with the most predictors.

Demographic Profile of the Sample

The object of this study was to examine the relationship between GTL, JS, and the role of the intention of employees as a mediator. The data was collected from pharmaceutical organizations working in Pakistan. Questionnaires were distributed among 418 respondents. A convenience sampling technique was adopted to collect the data from employees of the Pharma industry. 5-point Likert-type scales used as 1 represented "Strongly Disagree" and 5 described "Strongly Agree." The respondents consisted of 69.90% of males, 28.20% of females and 1.90 others. Agewise, 93.10% of the respondents range in the age group of 18-40, and 6.90% belong to the age group of 41-60. The majority of the responses were received from Getz Pharma (24.60%), and most of the responses were submitted by the Senior / Assistant manager level (29.90%). Most respondents have a bachelor's level qualification (60.80%), and the majority of respondents fell in the experience bracket of 2-5 years (32.80) and more than 10 years (15.40%). The detailed demographic analysis is as follows:

Γable 1: Demogra	aphic Details		
Variables	Responses	Frequency (n=428)	Percentage (%)
Gender	Male	292	69.90%
	Female	118	28.20%
	Others	8	1.90%
Age	18-30	229	54.80%
-80	31-40	160	38.30%
	41-50	24	5.70%
	51-60	5	1.20%
	Above 60	0	0%
Organization	Martin Dow	70	16.70%
	Amarant	99	23.70%
	Getz Pharma	103	24.60%
	Nabi Qasim	62	14.80%
	Merck	84	20.10%
Position	Associate	209	50.00%
	Senior / AM	125	29.90%
	Manager	66	15.80%
	Senior Manager	11	2.60%
	Director / DGM	4	1.00%

	GM / HoD	3	0.70%	
Education	Matric	10	2.40%	
	Intermediate	79	18.90%	
	Bachelor	254	60.80%	
	Masters	75	17.90%	
Experience with	Less 2	96	23.00%	
current	2-5	137	32.80%	
organization	6-10	121	28.90%	
	11-15	43	10.30%	
	16-20	12	2.90%	
	Above 20	9	2.20%	

Measures

The selection of measurement scales in this study was based on established literature. To improve clarity, a five-point Likert scale was utilized, which ranged from 1 (strongly disagree) to 5 (strongly agree). All measurement items were phrased positively. The green transformational leadership scale was adapted from Robertson (2018). The job satisfaction constructs originated from Crow (2012), and the intention scale was sourced from Conner (2016).

Data Analysis

This study utilized structural equation modeling (SEM) with partial least squares (PLS) in Smart PLS 3 to analyze our data (Ringle, 2012). The analysis was done through the two-stage approach, i.e., measurement model assessment and structural model assessment, as this approach has advantages over the one-step approach. The measurement model indicates how each construct measures; in order to explain the relationship among variables, the structural model will show how each of the constructs is related to each other (Hair et al., 2019).

Empirical Results

Measurement Model

This study used the PLS-SEM technique with the Smart-PLS algorithm to evaluate the quality of the measurement model in order to determine the validity and reliability of the analysis. The convergent validity of the measurement model was initially assessed using everyday reliability and validity measures in PLS-SEM, including Factor loading, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (Hair et al., 2017). Table 2 shows Outer Loadings, Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) in order to confirm the constructs' internal consistency.

Table 2: Measurement model item loadings, Composite Reliability (CR) & Average Variance Extracted (AVE)

Construct	Items	Loading	Cronbach's alpha	CR	AVE
Green	GTL1	0.781	0.959	0.964	0.691
Transformational	GTL2	0.801	_		
Leadership	GTL3	0.825	_		
	GTL4	0.841	_		
	GTL5	0.819	_		
	GTL6	0.828	_		
	GTL7	0.861	_		
	GTL8	0.855	_		
	GTL9	0.836	=		
	GTL10	0.860	_		
	GTL11	0.839	_		
	GTL12	0.824	_		
Intention	INT1	0.775	0.877	0.884	0.669
	INT2	0.794			
	INT3	0.844	_		
	INT4	0.850	_		
	INT5	0.825	_		
Job Satisfaction	JS1	0.754	0.808	0.832	0.515
	JS2	0.773	_		
	JS3	0.822	_		
	JS4	0.704	_		
	JS5	0.684	_		
	JS6	0.533	_		

Fornell-Larcker Criterion

Using the Fornell-Larcker criterion, the square root of Average Variance Extracted (AVE) for every latent variable was assessed in order to assess discriminant validity. According to this criterion, the square root of AVE for every latent variable must be higher than the correlation it has with other latent variables. Table 3 confirms discriminant validity by demonstrating that each latent variable's square root of AVE actually exceeds its correlation with other latent variables.

 Table 3: Discriminant validity using Fornell and Larcker's (1981) criterion

 Construct
 GTL
 INT
 JS

 GTL
 0.831
 INT
 0.758
 0.818

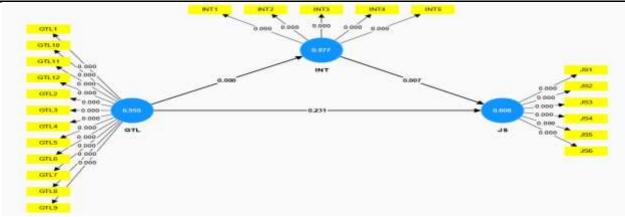
 JS
 0.367
 0.425
 0.718

Evaluation of Structural/Inner Model

This shows the relationships between constructs and related theories based on existing literature (Hair et al., 2019), our model had direct effects and mediation hypotheses. We utilized 5000

samples of bias corrected bootstrapping 95% confidence intervals to test out direct effect, mediation hypotheses.





Hypothesis Testing

H1 GTL had an insignificant impact on JS (β = .098, t = 1.199, p = .0231), GTL had a small effect size on JS (F^2 = .006), so H1 was supported.

Table 4: Direct and indirect effect – hypothesis results					
Relationship	Estimate	Std Dev	T	P	F2
GTL -> JS	0.098	0.078	1.199	0.231	0.006
GTL -> INT	0.775	0.027	28.920	0.000	-
INT -> JS	0.348	0.128	2.707	0.007	0.062
Mediation effect					
GTL -> INT -> JS	0.269	0.098	2.739	0.006	-

We performed the bootstrapping method for examining the quantitative indirect effects of intention, along with potential mediating influence. Considering the recommendations of Preacher (2004), this required performing 5000 iterations and modifying confidence intervals for bias at a 95% level. GTL was having a positive and significant impact on JS through INT (β = .269, t = 2.739, p = .006), so H2 was supported indicating the INT mediation was successful. Sobel's (1982) test revealed that the indirect effect of GTL on JS via INT was significant, therefore H2 was further supported.

Quality of the Structural Model

The predictive quality of the structural model was measured by the means of Q2. Positive value of Q2 (> 0) is an indication of acceptable / good quality or predictive relevance of the structural model. Chin (1998) marked Q2 as 0.02, 0.15, and 0.35 to be poor, average, and strong respectively, see table 5.

R2 measures the predictive power of the model by indicating the amount of variance explained by the predictors in the outcome variables. Cohen (1988) ranked the R2 values as small (R2 = .2), medium (R2 = .5) and large (R2 = .8). GTL explained a variance of 77.5% (R2 = .775) in INT. INT explained a variance of 47.5% (R2 = .475) in JS.

VIF values beyond 5 are not only indication of pathological collinearity but also an indication of model contamination with common method bias (Hair et al., 2019), as shown in table 5 that all VIF values were less than 5, so pathological contamination was ruled out indicating further quality of the structural model.

Table 5: Quality assessment of the structural model				
Outcome Variable	Q Square	R Square	VIF	
INT	0.506	0.775	3.478	
JS	0.233	0.475	2.185	

Conclusion and Discussion

This study's theoretical approach enhances our knowledge of environmental management by clarifying the relationship using a novel theoretical premise that includes intention as an intermediate. Our findings demonstrate that integrating GTL and intention has a significant impact on an employee's job satisfaction. The purpose of this research is to make a substantial contribution to the existing body of literature by demonstrating the significance of GTL in intention. This involves developing environmentally friendly processes and improving ecologically friendly culture, with a focus on Pakistan's pharmaceutical industry.

The overall statistical findings of our study support the conclusions of Tosun (2022) and Al-Swidi (2021) that H1 for green transformational leadership has little or no effect on job satisfaction. Using the resource-based view (RBV) theory framework to examine the relationship between green transformational leadership (GTL) and job satisfaction (JS) in Pakistan's pharmaceutical industry may help clarify the ways in which organizational resources and leadership behaviors interact to influence worker satisfaction.

Based on the RBV theory, leveraging valuable and distinctive internal resources may provide an organization with a sustained competitive advantage (Shan, 2019). In the framework of GTL, these internal resources can be interpreted as the leadership's cognizance of environmental issues, their expertise in sustainable practices, and their capacity to inspire employees to follow in their footsteps.

The impact of GTL on JS, however, could be considered reasonable given the characteristics of the pharmaceutical industry and Pakistan's distinct cultural context. Any potential benefits that GTL may have on JS may be countered by stress due to higher expectations regarding environmentally friendly methods, given the high standards of the pharmaceutical sector. From a similar direction, the empirical investigation found that the association between green transformative leadership and JS can be lowered in an atmosphere of job stress (Öğretmenoğlu, 2022; Singh, 2020).

The H2 result showed that the indirect effects of green transformational leadership on job satisfaction are significantly mediated by intention (Hameed, 2022; Tosun, 2022). However, it has been shown that GTL positively affects employees' intentions, attitudes, and behaviors with regard to ecological responsibility. This argument suggests that leaders in the pharmaceutical industry who aggressively promote eco-friendly practices should encourage employees to follow the trend, thus leading to increased JS. Here, strong GTL traits in leaders enable them to influence both organizational as well as personal intentions, which can boost job satisfaction by encouraging a sense of shared accountability for accomplishing organizational goals and advancing societal welfare.

In the case of Pakistan's pharmaceutical industry, the effect of GTL on employee objectives related to environmental sustainability may have a significant impact on JS. To fully comprehend this relationship, it is necessary to take into account complex processes, such as incentive structures, corporate cultures, and personal traits.

Theoretical Implication

Considering the research findings, the GTL significantly impacted the employees' JS in pharmaceutical organizations of Pakistan when the mediation of intention and RBV theory was utilized. To understand the situation, detailed dynamics, different behaviors of employees, and organizational facets have significant theoretical implications. From an RBV standpoint, it underlines how crucial GTL is as a unique and valuable corporate resource that develops a moral, creative, and ecologically conscious culture. This demonstrates how the capacity of leaders to impart sustainable values can influence employees' "intentional" behavior.

Practical Implications

In the pharmaceutical industry, the relationship between GTL, JS, and intention has important implications for practice. This has illustrated that GTL is playing a crucial role in adjusting the behaviors of employees at the workplace through increasing job satisfaction of employees. This could be through mediating the intentional behavior of employees. The organizations could initiate leadership development programs that will build a more sustainable organizational culture for longer and will contribute to suitability principles.

Organizations must recognize the value of fostering employees' good intentions in order to increase job satisfaction and overall productivity. This can include setting an example of consistent behavior and having open conversations about the value of eco-friendly practices. Due to Pakistan's unique industrial constraints and cultural milieu, customized tactics are even more necessary. In order to ensure the successful execution and favorable outcomes of GTL approaches, leaders must consider the unique demands of the pharmaceutical sector in addition to the customs that are common in Pakistan.

Limitations and Future Research Directions

Our research study still has some limitations that need to be addressed in future research. However, we extensively investigated the relationship between GTL, JS, and intention in the pharmaceutical industry of Pakistan. First, the resource-based view (RBV) framework has been the main focus of study up to this point, which has limited our comprehension of the relationships between possible other organizational processes. Future studies might incorporate a variety of theoretical perspectives that provide a more thorough evaluation.

Furthermore, it could be more thought-provoking to generalize the outcomes due to the cultural and industrial quirks of Pakistan's pharmaceutical sector. Comparative research between industries or cultures may, therefore, provide more thorough insights. Finally, even if "intention" is only considered as one mediator, a more complex narrative may be revealed by including many spanning mediators. In order to gain a deeper comprehension of the complex connections between GTL and JS, future studies could investigate other plausible mediators, including role ambiguity, work autonomy, and motivation.

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