

# Managing intellectuals: Reaping the most and the best of knowledge workers in the post-COVID world

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**Abstract:** The COVID-19 crisis forced massive changes in work practices, channeling most of the activities to digital/remote work paradigms almost overnight. In this post-COVID locked-in world, traditional top-down control and command mechanisms simply ceased to exist. Profoundly different approaches and understandings became necessary to reap the most and the best outcomes from workers. In this new paradigm, cultivating organisational citizenship behaviors might be the most – if not only – viable way to ensure comprehensive results and sustained success. That necessitates a highly rooted insight into the influences of leadership styles. This article discusses the constructs of transactional leadership and transformational leadership styles. Contextualisation of the data patterns investigates the interrelationships between these two styles by comparing and contradicting their effects on organisational citizenship behaviors. It explains how these two approaches work in tandem for better results, mutually enabling each other, like the two legs of an athlete, where the lack of one profoundly cripples the outcomes, making the other ineffective as well. Using a survey inquiring about the perceptions of online knowledge workers, a three-step analysis was conducted and, as a result, established a robust argument that these two leadership styles are not paradoxical; they need not be mutually exclusive or contradicting can enable and complement each other. This finding is crucial for managing knowledge workers and knowledge workers as managers.

**Keywords:** Management, organisational citizenship behaviors, transformational leadership, transactional leadership, knowledge workers, complementary.

**JEL Classification:** D23, D89, J29, M12, M19, M54.

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## Introduction

Literature abounds with leadership theories. This is far from surprising. A common mantra is that leadership is the most critical component of an organisation's success (Bass & Stogdill, 1990). Hence, due diligence, researchers tried operationalising it by conducting various rigorous scientific inquiries. There are as many leadership theories as researchers on the subject (Stogdill, 1974),

rapidly multiplying over time (Owings & Kaplan, 2012). Among these, behavioral approaches emerged as contemporary and practical approaches. Burns's (1978) conception of transactional and transformational leadership styles welcomed extensive attention and became the subject of a well-established research base.

This research appetite for leadership extends well beyond the classical domain

of social scientists. Researchers scrutinise knowledge workers as managers; they consider their leadership styles and competencies as crucial success factors for business performance (Anantatmula, 2010). A growing number of knowledge workers are assuming leadership roles in academia, industry, government, and even non-profit organisations in addition to providing technical expertise in their fields (Perry et al., 2017). In today's globally competitive environment, complex, risky, unknown, and uncertain situations make it necessary for them to combine technical innovation with business acumen (Farr & Brasil, 2009). Thus, the impetus for knowledge workers to learn leadership skills (Perry et al., 2017) in motivating people and creating an effective working environment (Anantatmula, 2010) by exerting an optimum mixture of technical and non-technical skills needed to be an essential success factor (Farr & Brasil, 2009).

Valuable research on knowledge workers also visited transactional and transformational leadership styles (Issahaka & Lines, 2021). Anantatmula (2010) cites Thamhain (1999), listing the criteria for success as: understanding the tasks and roles of the project team members; defining each team member's responsibilities, position, and level of accountability; creating an environment of trust and support in problem-solving without using a power differential (Yang et al., 2020); encouraging open, effective communication to clarify the desired outcomes and facilitate the free flow of information and ideas for maximum efficiency. On the transformational leadership side, they are learning how to speak the language of their collaborators, thereby demonstrating through word and action that they are trusted partners in those endeavors (Perry et al., 2017). Sharing and spreading the passion for successfully achieving objectives is emphasised as vital (Yang et al., 2020), as well as establishing a common identity, comradery, and brotherhood of mutual respect (Marnewick & Marnewick, 2020), which is to realign attitudes, force collegiality and secure a solid team spirit among members (Ammeter & Dukerich, 2002).

Although there is little argument that transactional and transformational leadership constructs are the two prominent and highly noticeable approaches, to date, they have predominantly been considered contradicting rather than complimenting. Commonly encountered

watchwords are "contrasting," "contradicting," "two opposing ends of a continuum," and "two different" (Hartog et al., 1997). The predicament is that these two styles are perceived as a dichotomy. Either you choose one, rejecting the other, or vice versa. Indeed, this approach is merit, especially from a pedagogical point of view. Yet, this kind of compartmentalisation of research efforts and cross-cutting investigations, in turn, dominates the daily discourse and leverages proposed executive postures. Although a search engine query for any of these terms immediately results in the emergence of the other, the documents returned almost always shun a genuinely integrated approach. Contrarily, this study claims that they can be complementary and mutually enabling with extraordinary results (Bass, 1985).

Sparse studies claim that the two are not alternatives to each other and that one can build the latter on top of the former for extraordinary results, implicitly reinforcing the understanding that they are different constructs (Bass, 1985; Seltzer & Bass, 1990). The effect is additive instead of synergistic. The influencing, enhancing, and complementing effects might be little understood and easily overlooked.

The great lockdown of the COVID-19 pandemic transformed conventional workers into knowledge workers over a few short weeks, voluntarily or not. Although compulsory transformation by crises is not the best circumstance for a company to be forced into new ways of doing business, a wide range of workers confronted it and made giant strides. Now, most see the possibility of remote work and are readily growing accustomed to ways of doing business-not-as-usual. In this way, increased autonomy based on this work model considerably widened the knowledge worker base population and made their contributions ever more critical for organisations. How long will the recovery take is highly uncertain, but the more fundamental insight is that these work models are here to stay.

On the other hand, from the administration perspective, there simply is not ample time to dig deeper, contemplate, rehearse and experiment with new administrative approaches. The point is not to delay but to structure the ways of doing business with a heavy emphasis on effective leadership styles to allow organisations to reap even higher profits during and post COVID-19 world, for the benefit of both the workers and

the organisations. Indeed, the sharpened asymmetric standings of the knowledge workers during the locked-in pandemic necessitates deeper inquiry about their leadership styles. The good news is that we possess a considerable amount of insights on how to lead knowledge workers who might be readily used. Yet, some important nuances and intricacies should be understood concerning broader awareness of the knowledge workers' need for specific leader-follower relationships experienced during the great lockdown. The expected economic spillover of the pandemic and dreaded measures of the organisations focused the workers' attention primarily on pay-related issues, i.e., to maintain their income for their everyday lives, necessitating a clear and robust transactional approach. Yet, what they deliver may not result from the simple this-for-that method. Knowledge workers may create value if they are genuinely committed to what they produce, feel a sense of belonging, and give that extra concentration, which can result from transformational approaches (Issahaka & Lines, 2021). Hence, the consequential necessity of employing these seemingly contradictory leadership approaches together is ever more crucial since the emergence of the COVID-19 pandemic.

This paper shall briefly visit the basics of transactional leadership, transformational leadership, and organizational citizenship behavior constructs for numerous researchers intensely scrutinising them, and there are abundant declarations about them. After reviewing the basic understandings of transactional and transformational leadership constructs, the aim is to inquire about their (multiplicative) interaction effect in a 3 step process, based on data collected, measuring their reflection on organisational citizenship behaviors among knowledge workers. A deeper understanding of this multiplicative effect – researchers hope – reconcile them and create a substantial impact on leadership behavior praxis in organisational settings.

## 1. Theoretical background

### 1.1 Transactional leadership

A transactional approach to leadership is based on a simple and straightforward this-for-that approach (Owings & Kaplan, 2012). It is an exchange between the follower and the leader based on performance (Burns, 1978). Bass's (1985) description of transactional leadership covers two critical approaches, contingent

reward and management by exception clarifying the standard behavioral and performance metrics constitutes the former. The latter approach comprises intervening and conveying negative feedback only when there is an unexpected shortcoming in the performance. Transactional leadership is unexpectedly welcomed by followers who like to know the structure (i.e., who are the superiors and who are the subordinates) (Northouse, 1997), the performance metrics, and negative results (what is not wanted in the organisation during the operations), a stable environment with little competition (Tichy & Devanna, 1986), predetermined clear goals, allocated tasks (Perrow, 1973), and punishment for non-performers vs. rewarding performers (Zaleznik, 1977).

### 1.2 Transformational leadership

Transformational leadership, positioned at the other end of the continuum (Burns, 1978), is based on influencing followers above and beyond the superficial exchange level (Owings & Kaplan, 2012). Transactional leadership is constructed on four essential components (Bass, 1985): idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration. Through these, transformational leaders direct their followers to overcome their self-imposed limitations and secure their commitment to do more aligned with the goals. Both organisational and follower needs are involved (Cho et al., 2019). Transformational leaders create a nurturing climate (Owings & Kaplan, 2012), where the leaders and other followers and peers help each other to advance a higher level of motivation.

### 1.3 Organisational citizenship behavior (OCB)

On the other hand, OCB in organisations is recognised as an intrinsic quality of the associates' behaviors that collectively promotes the extremely effective functioning of any particular organisation. According to Knez et al. (2019) and Khan et al. (2012), most scholars define the phenomenon of OCB as comprising five dimensions: conscientiousness, civic virtue, courtesy, sportsmanship, and altruism. Conscientiousness, as the most substantial source of successful results, indicates the strength, will, energy, and resistance to overcome hardships. Civic virtue points to the improvement of a company. Courtesy refers to the regard that

employees have for their coworkers. Sportsmanship indicates that employees are willing to accept less-than-ideal working conditions and have a good attitude without complaining. Altruism refers to employees' eagerness to assist their colleagues in their organisational activities (Ozyilmaz et al., 2018).

#### 1.4 Connecting the leadership style with OCB

If not impossible, sustaining performance seems extremely tough for organisations in a fast-changing environment. Empirical analyses demonstrate compelling evidence that the interplay of OCB and leadership has a powerful effect on organisational performance (Ogbonna & Harris, 2000) by increasing the responsiveness of employees (Asree et al., 2010) it enormously facilitates effective change management (Kavanagh & Ashkanasy, 2006). For these reasons, organisational development now emphasises improvements such as organisational environments, innovations, and adaptability, which necessitate voluntary action from organisational members. The great lockdown starkly exposed the necessity of OCB to get results against the detrimental and obsolete top-down control measures (Bennis, 1999). This implies that organisations should be able to change the attitudes and behaviors of their members, such as loyalty, altruism, and organisational compliance (Podsakoff et al., 2000).

OCB has been an important topic studied from different perspectives and approaches (e.g., Podsakoff et al., 2000). By investigating the direct and indirect factors affecting OCB, researchers have examined various factors such as organisational justice, organisational procedures, support systems, organisational structure, leader characteristics, and leadership styles (Abdullahi et al., 2020; Azam & Kumar, 2019; Romzek, 1990). Given that these characteristics lead to a good work attitude in employees (Aryee et al., 2002), the impact of transformational and transactional leadership styles on OCB has been of great interest (Barling et al., 1996; Podsakoff et al., 1990; Rai & Sinha, 2000). In this context, a research question arises to understand the effects of transactional and transformational leadership styles on organisational citizenship behaviors in post-COVID remote working paradigms. Focusing on how these leadership styles can enable and complement each other to achieve better results and sustainable success among

online knowledge workers without being mutually exclusive, this study highlights the importance of OCB in business. Therefore, the fact that Organ (2015) argues that OCB has high potential for performance suggests that this research can make a significant contribution to the fields of business leadership and citizenship behavior in the post-COVID era (Bateman & Organ, 1983; Smith et al., 1983).

#### 1.5 Leading knowledge workers

Knowledge workers are accepted as the most significant contextual element contributing to the success of an organisation (Drucker, 1999). Yet, leading them is complicated at best (Ledford, 1995). Doving et al. (2016) compare managing knowledge workers to herding cats. For a good reason, knowledge is intangible, invisible, implicit, tacit, and ingrained within knowledge workers' brains, making it extremely hard to define, measure, and adequately compensate. One cannot easily direct knowledge workers, for they commonly know more about their work than their supervisors. They are deeply vested, often ideologically, in their trade, typically highly educated, specialised, and prone to changing workplaces, autonomous and off to seek new adventures (Hislop, 2013). Hence, observing, controlling, and managing them is extremely difficult (Mladkova, 2012). A transactional approach would be the best conduct, clarifying the goals, stating time limits, performance and success metrics, and finally conveying the pre-determined reward indicators (Davenport, 2005). The demand for space of knowledge workers labeled as autonomous (Bridgman, 2007), does not imply laissez-faire leadership. Rather than control, this is genuine involvement with employees, acknowledging their existence and recognition of their skills (Klev & Levin, 2009; Quinn, 1996), always with respect and a commitment to cooperate based on trust (Laroche & Weick, 1996). Still, compensation remains the top item on the agenda as a reason for work, whether knowledge work or manual labor. The necessity of meeting the material needs of individuals is accepted as a definite corollary (Badawy, 1988). Thus organisational reward is a factor that cannot be ignored or trivialised. That is as true for knowledge workers as any. As a result, confirming the original work of Herzberg et al. (1959), competitive compensation and removing the money issue (Pink, 2009) may be a definite approach to improve performance

in high-skill employment (Lawler 1995; Ledford, 1995). Hence transactional leadership practices for knowledge workers are an essential and challenging task (Ledford, 1995).

On the other hand, the essential characteristics of the knowledge workers made them ideal subjects for transformational leadership practices. This would involve providing satisfying work and opportunities for learning and growth by using individual consideration, intellectual stimulation, inspiration, and idealised influence (Bass, 1985), as mentioned. Within this approach, challenging job assignments, allocating time and resources, supportive management practices, and a team atmosphere based on a firm belief in cooperation can be listed readily. Central to this is the issue of building trust and encouraging commitment.

These seemingly contradictory modalities necessitate a sceptical look into the effects of leadership styles on OCB among knowledge workers and see how combining the two types work.

## 2. Research methodology

### 2.1 Present study

Positioning the OCB as a critical factor for success, leadership styles come afore as a decisive factor. Accordingly, the hypotheses were proposed as below, and the research model of the study was created as shown in Fig. 1.

*H1: Transactional leadership and transformational leadership styles are not mutually exclusive and can work together to positively influence organisational citizenship behaviors among online knowledge workers in a post-COVID locked-in world.*

Multifactor leadership questionnaire based on the works of Avolio and Bass (2004) and the OCB questionnaire based on the results of Podsakoff et al. (1990) constitute the primary measurement tools. In Northern Cyprus, The Union of the Chambers of Engineers and Architects declared 3,216 registered and active members. The sample size necessary to estimate the effect of leadership styles on OCB, with 95% confidence, a margin of error of 5%, assuming a population proportion of 0.5, and a population size of 4,569, determined as 343. The 380 self-administered questionnaires, which included demographic questions and the 52 items from the TLS, TRS, and OCB on a 5-point Likert scale, were given to the organisations whose employees (engineers) agreed to fill them out and send them back. The companies are selected based on convenience sampling in the order of the Chamber's alphabetical list. Out of the questionnaires returned, 355 turned out as valid after data screening, which represents 93.42% of the distributed questionnaires.

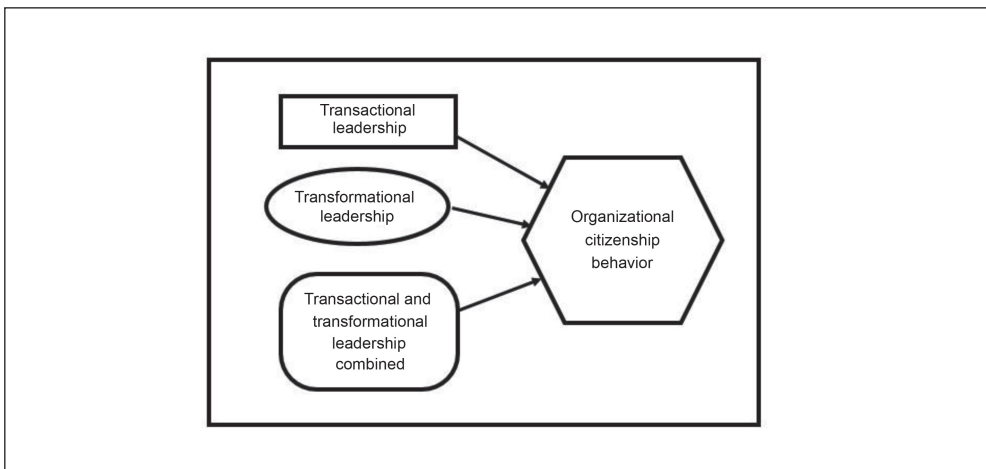


Fig. 1: Research model

Source: own

Tab. 1: Model fit indicators in AMOS

	CMIN/DF	GFI	AGFI	CFI	RMSEA	IFI
<b>Model 1</b>	2.12	0.843	0.911	0.923	0.054	0.946
<b>Threshold values</b>	<5.00	>0.85	>0.90	>0.90	<0.08	>0.90

Note: CMIN/DF – minimum discrepancy function by degrees of freedom divided; GFI – goodness of fit index; AGFI – adjusted goodness of fit index; CFI – comparative fit index; RMSEA – root mean square error of approximation; IFI – incremental fit index.

Source: own

The overall model indicates a good fit (Tab. 1).

## 2.2 Inquiring about the interaction effect

To be able to recognise and explicitly present the data patterns, a 3 step analysis was conducted.

### 1st Step

The data is first listed in three columns representing the overall scores for transactional leadership, transformational leadership, and OCB. Then the set is divided into four equal counted groups (Tab. 2).

Positioning this data to a grid [resembling the managerial grid of Blake and Mouton (1964)], we observe a sudden surge in OCB scores on the high-high area (top-right quadrant) (Fig. 2).

As seen in Fig. 2, four separate regression analyses were conducted for each quadrant to inquire about the statistical significance of this observation.

1st quadrant (bottom-left) regression analysis turned out to be non-significant, 2nd quadrant (top-left) regression analysis turned out to be non-significant, 3rd quadrant (bottom-right) regression analysis turned out to be non-significant, 4th quadrant (top-right) regression analysis was significant, with a  $p < 0.004$  and coefficients of 0.666, 0.675, and 0.987 for constant, transactional leadership, and transformational leadership, respectively.

This result confirms our insights that in the top-left quadrant, an increase solely in transactional leadership does not make a statistically significant difference in OCB scores. And on the bottom-right quadrant, an increase solely in transformational leadership does not make a statistically significant difference in OCB scores either.

But there is a statistically significant effect in 4th quadrant where both transactional and transformational leadership scores increase together, which indicates an interaction

Tab. 2: Leadership and organisational behavior scores

Quadrant	Leadership styles	Mean leadership scores	Mean OCB scores
1 <sup>st</sup> (n = 89)	Transactional leadership (low)	3.28	3.52
	Transformational leadership (low)	3.29	
2 <sup>nd</sup> (n = 89)	Transactional leadership (low)	3.63	3.61
	Transformational leadership (high)	4.33	
3 <sup>rd</sup> (n = 89)	Transactional leadership (high)	4.28	3.64
	Transformational leadership (low)	3.72	
4 <sup>th</sup> (n = 88)	Transactional leadership (high)	4.39	3.91
	Transformational leadership (high)	4.53	

Source: own



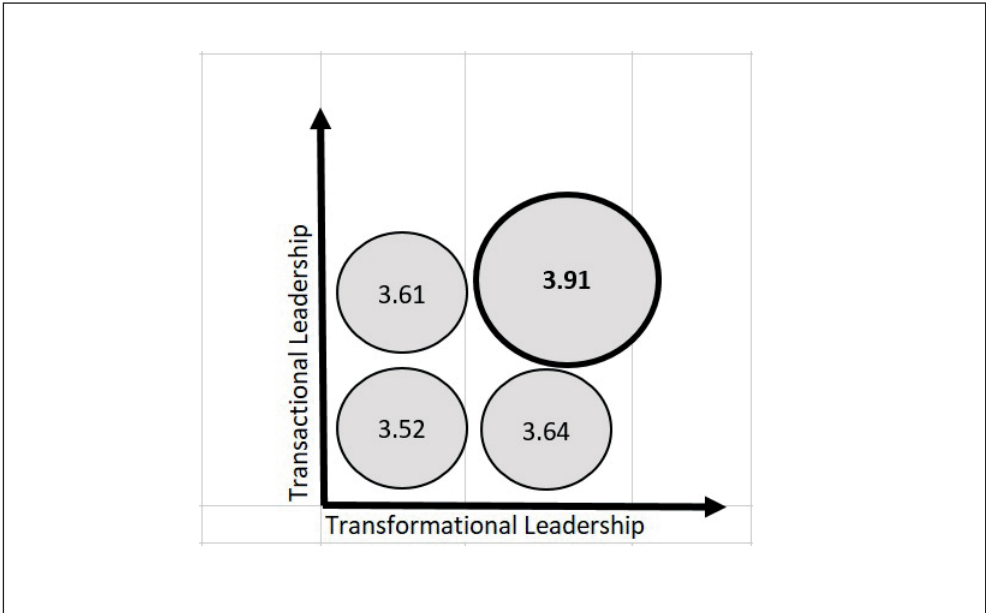


Fig. 2: Leadership and organisational behavior scores in a two-dimensional grid

Source: own

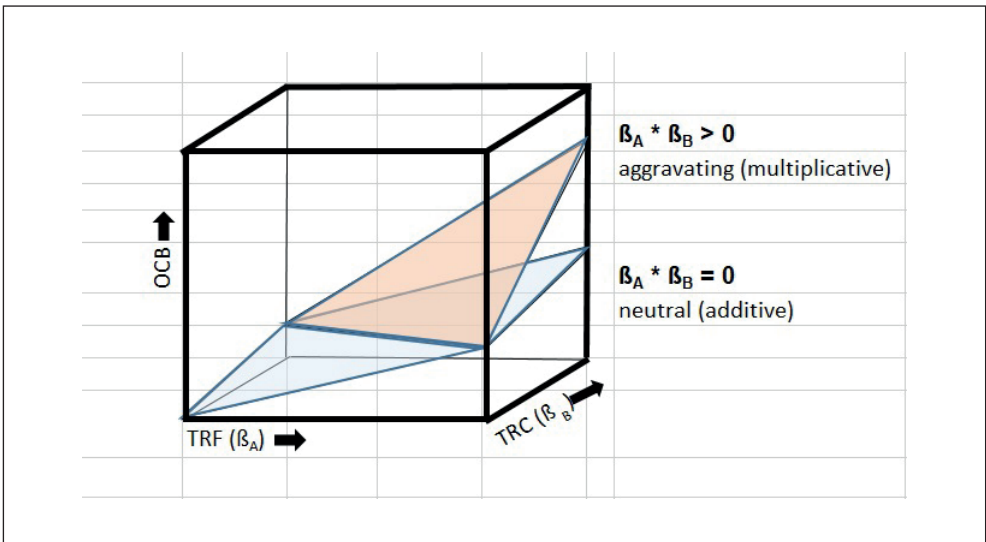


Fig. 3: Schematic representation of the aggravating effect of two leadership styles

Source: own (based on Costa et al. (2014))

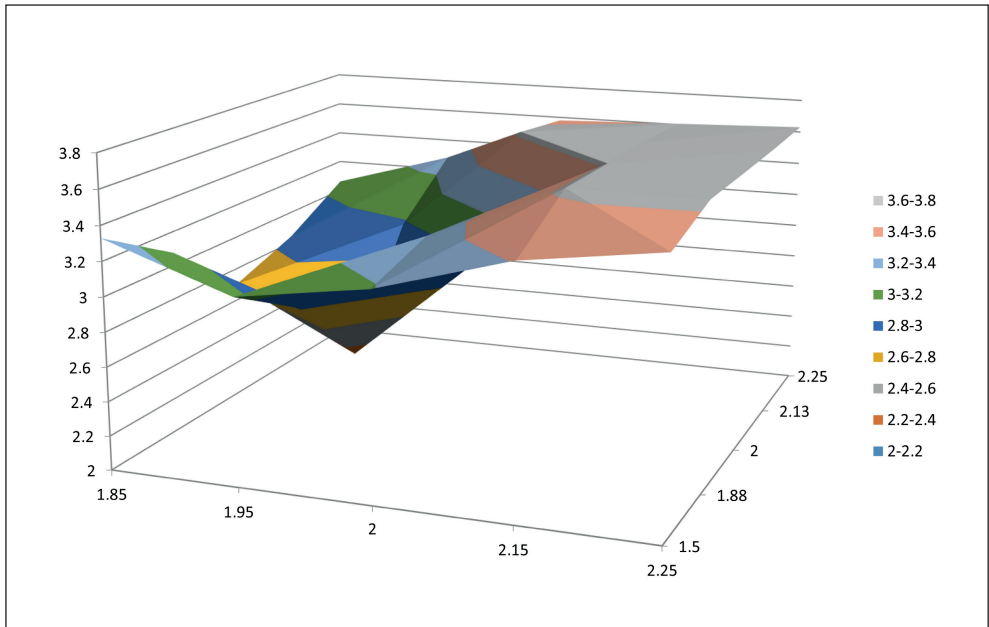
between them. This interaction effect emerges in the character of aggravating instead of simple addition (Fig. 3).

**2nd Step**

In the light of these observations first a response surface plot is conducted using ON YZ MESH2,

transferring the data into a mesh form in Excel and plotting them in 3 dimensions to inquire about the yield of the OCB as a function of the leadership styles combined (Fig. 4).

Although not in a perfect form, the resulting plot provides a good approximation that visually confirms the rise of the response surface where



**Fig. 4:** Three-dimensional surface plot – surface plot of OCB versus TRA and TRF leadership styles

Note: Base represents the two leadership styles while OCB scores as a surface plot mean the third dimension.

Source: own

**Tab. 3:** Hierarchical regression result

Variables	OCB	
	Model 1	Model 2
TRAC	0.406***	-0.322
TRFM	-0.017	-0.699**
TRAC × TRFM		1.328***
R <sup>2</sup>	0.390	0.420
F	32.162***	25.394***

Note: The entries in the table are standardised  $\beta_s$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Source: own



it is at the peak where both transactional and transformational styles are maximum, demonstrating the interaction effect.

### 3rd Step

A stepwise regression analysis was conducted to confirm this effect, including a new variable by multiplying the transactional and transformational leadership scores. The findings verify the claim that the interaction variable was statistically significant with a highly effective beta coefficient (Tab. 3).

## Conclusions and discussion

Organisations are struggling to remain relevant in a global marketplace due to globalisation, fierce competition, and technological advancements. Inevitably, organisations have shifted their focus on their inimitable resources, namely, their human capital. The tectonic shifts from personnel management to human resource management to talent management reveal the pivotal role of knowledge workers as the key factor for success. Knowledge workers are seen as the major resources that contribute to sustained competitive advantages and noticeable performance. Being placed in the proper place at the right time is crucial to the growth and success of any firm. Knowledge workers are best positioned to achieve organisational goals effectively and efficiently with remarkable performance thanks to their talents, experience, knowledge, intelligence, qualifications, and capacity for learning and growth (Al Aina & Atan, 2020).

Because of the attributes of the task of knowledge workers, their full commitment to the organisation and extreme levels of motivation is a definitive necessity, here comes the leadership. It is difficult to maintain performance while performing activities because a variety of factors lead to irregular work behavior and emotions. Since the presence of the leader is regarded as essential to successfully completing tasks, it follows that the presence of the leader is one of the components of self-control. Moral principles like honesty, justice, commitment, and accountability are particularly important to leaders. As a result, leadership enables individuals to reach clear, sincere, and compassionate agreements regarding the needs and rights of others.

According to Purwanto et al. (2020), a leadership style is a person's method of motivating

others by inspiring, directing, and persuading others to take action to produce the desired results. It is still necessary to map the current understanding of leadership styles and their effectiveness on outcomes framework given that they have the potential to lessen the impact of the biggest issues related to the extremely turbulent and rapidly changing business landscape and facilitate the need for sustainable innovation in the sectors (Elkhwesky et al., 2022). The relationship between leadership and performance is highly dependent on the style and the quality of leadership in the organisation concerned (Qomariah et al., 2022).

The study results show that transactional and transformational leadership styles are not mutually exclusive and can collaborate to positively influence OCB among online knowledge workers in a post-COVID-locked world (*H1*). This supports the main thesis of the study, which is based on a model in which leadership styles are identified as the core theme of OCB.

The study's findings also show that increases in transactional leadership alone or transformational leadership alone do not create statistically significant differences in OCB scores. Instead, it states a statistically significant increase in OCB scores in the fourth quarter when these leadership styles were used together. This indicates that transactional and transformational leadership styles influence each other, and a combined effect significantly increases OCB scores. This highlights that there is a more effective approach than using leadership styles alone.

Based on various research, debates, and discussions, the dual search for transactional and transformational leadership constructs seems well established and bestows robust results. Yet it seems to carry a fundamental flaw as this dichotomous approach to leadership and the literature on daily discourse usually view these two approaches as separate, antithetical, and paradoxical. Indeed this approach has merit; dichotomies make distinctions possible and comparing and contrasting make understanding easier. They are powerful tools for scientific progress. The predicament here is that antinomies become habituated norms, and dichotomous understanding becomes a well-established, unshakable approach with an oversimplification that precludes the richness and complexity of actual utilisation (Abbott, 2001). Although this criticism can be generalised to all

theoretical systems, awareness of it can make a difference. Rethinking the complementary character between transactional and transformational leadership styles is therefore essential. Subsequently, this dichotomous approach will blind us to the nuances of leadership styles, their effects, and the possibilities of various combinations and situational and contextual contributions (e.g., Cohen, 2007). This paper attempts to inquire about some of this rethinking and presents the necessity of a complementary approach. It establishes that transactional and transformational leadership styles are not paradoxical; they need not be mutually exclusive or interfering but can enable each other. This study also argues the potential fruits of this reconceptualisation: providing opportunities to transcend the paradoxical models to explore new intertwined combinations and harness possible new and highly fertile interactive combinations. Some permanent understanding must be established to thwart the status quo ante.

Knowledge workers have always been the key asset for organisations, to be retained even in challenging times characterised by downsizing and layoffs. Failure might mean diminishing intellectual capital and competitive capability. Yet, meeting the motivation needs of the knowledge workers presents formidable challenges (Ledford, 1995). On the one hand, they are costly; they know their worth, their skills are in demand, and they are well connected to a well-developed knowledge network, making them readily expeditious to walk away. This bends the balance of power in their convenience to request and get much higher pay structures.

On the other hand, management simply has no absolute control over them. It is tough to manage them based on classical command structures, for they know their job better than their superiors. Administrative authority no longer has absolute control (Zhan et al., 2013). Instead, knowledge replaces executive authority as the only judgment standard of merits. The sound practice emerges as treating knowledge workers as de facto partners, based on a solid base of trust, resulting from practicing both the transactional and transformational components of leadership (Drucker, 1993). Keeping these leadership approaches implicitly contradictory paradigms results in fixed underlying perception flaws that lead to poor choices and misguided actions. Failure

to develop a holistic approach based on a combined leadership model through practicing solid elements of both leadership styles will result in underutilising and mis-utilizing expected OCB from knowledge workers. This incompatibility between them and the leadership, or lack of leadership in both dimensions, will readily reflect their intention to leave the organisation.

On the one hand, if they are not engaged intellectually or inspired with organisational purpose, and on the other hand, if they are not convinced that they are competitively paid, they exit. Then, expect your company to be a revolving door for highly skilled knowledge workers – if you can get them to work for you. A sure recipe to bid goodbye to your quest for competitive superiority in this knowledge economy (Muo, 2013).

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