

Impact of Toxic Leadership, Marginalization, Favouritism, Ergonomics, and Servant Leadership on Human Capital Sustainability

M. N. Saeed^{1,2,*}

¹Business Administration, Applied College, King Faisal University, P. Code 31982, Saudi Arabia

²Business Administration, Faculty of Commerce, Benha University, P. Code 13511, Egypt

Received: 2 Apr. 2023, Revised: 2 May 2023, Accepted: 12 May 2023.

Published online: 1 Jun. 2023.

Abstract: The issue of toxic leadership, marginalization, and favoritism-(nepotism-cronyism) one of the important issues that represent risky phenomena and real problem that impact and results in many negative effects on the sustainability of human capital. But the question remains, which of these managerial and psychological variables affects the sustainability of human capital most? Is toxic leadership or marginalization or favoritism or ergonomics or servant leadership are the most or least impact on the sustainability of human capital? The research focused on a puzzling subject in managerial thought philosophy and studied six variables: toxic leadership, marginalization, favouritism-(nepotism-cronyism), ergonomics, and servant leadership and their impact on the sustainability of human capital. a sample of (371) Cairo international airport (CIA) employees. Finally, the study measured and determined the six most important variables that impacted the sustainability of human capital and tested the ten research hypotheses. Additionally, suggested some recommendations and implementation mechanisms that raise the efficiency of the airline sector and contribute to moderating the effects of toxic leadership, favoritism-(nepotism-cronyism) (FNC), and marginalization on employee performance and enhancing the role of servant leadership (SL), providing and improving ergonomics (workplace conditions and environment), which contributes to the sustainability of human capital (SHC).

Keywords: Toxic leadership, human capital, sustainability, servant leadership, favouritism, nepotism, cronyism, marginalization, ergonomics, bibliometric analysis.

JEL Classification: M41– I23 – Q56 – L26 – L31.

1 Introduction

Spread of the phenomenon of (in-to-out) internal marginalization (IM) and (out-to-in) external marginalization (EM) and favouritism-(nepotism-cronyism) has become one of the negative phenomena that have a risky impact on employees psychologically and socially, whether it is internal marginalization or external marginalization and whether it is (favouritism-(nepotism-kinship) or favouritism-(cronyism-friends) [1,2]. Therefore, studying the side effects of internal marginalization within the organization [3,4,5,6]. The deliberate marginalization from the leader has become an urgent necessity in behavioral psychology and human resource management to know the impact of these side effects on sustainability of human capital due to its importance as an intellectual investment asset in any contemporary organization. The research also focuses on toxic leadership (TL) and its risky effects on sustainability of human capital (SHC). In addition to discussing the issue of ergonomics as one of the important and risky issues related to the safety, health and safety of employees. The research also discusses the issue of servant leadership and its importance in moderate the riskiness of favouritism and marginalization and its relationships with issues of toxic leadership. Therefore, the research focuses on studying the impact of toxic leadership (TL) as an (independent variable-(IV)) on the human capital sustainability as a (dependent variable-(DV)). And the study of the effect of favouritism-(nepotism-cronyism) (FNC) as a (1st mediator variable-(MeV)) and internal marginalization as a (2nd mediator variable-(MeV)) on the relationship between toxic leadership and human capital sustainability? The research also studies the effect of ergonomics as a (1st moderator variable-(MoV)) and (servant leadership) as a (2nd moderator variable-(MoV)) on relationship between toxic leadership and human capital sustainability-(HCS) at Cairo International Airport (CIA) as a field of applied study.

*Corresponding author e-mail: mnmsaid@kfu.edu.sa

2 Toxic Leadership (TL)

Sustainable Toxic leadership is a leader's abusive, authoritarian, narcissistic, self-promoting, and unexpected behaviors and leads to increased intent of employees to quit, as leaders with toxic behaviors can harm the well-being of employees and increase their dissatisfaction [7,8,9]. Toxic leaders behave destructive behaviors and act with egoistic attitudes, they lack the ability to motivate their subordinates and even destroy their ambition, vision [10,11,12]. Toxic leadership (TL) displaying the dark side (negative aspects) of leadership [13,14]. Additionally, Toxic leadership may have destructive workplace behaviors exhibited by employees, and these behaviors are harmful to both organizations and their members [15,16]. It has a detrimental effect on employee performance and Toxic leadership creates a toxic and destructive climate and [17,18,19], Employees may act ineffectively as retaliation against their leaders, and they are trying to take revenge and destroy their leaders in all possible ways [20]. Additionally, Toxic leadership is the (toxic silent killing) of the ambition of the workers, the organization and (toxic leaders) are (toxic drug) and the deadly poisonous medicine to see their followers they are deceitful and destroy their subordinates with administrative cunning and exploit the regulations and loopholes to destroy them, destroy them and marginalize them psychologically and morally [21,22,23]. Additionally, Toxic leadership destroys the relationship between followers and their leader, loses confidence in the actions and actions of their leader, and loses them a sense of justice and trust, which leads to organizational silence leaving the job and hating the job and employees' performance thus may affect the sustainability of human capital [24,25, 26,27].

3 Internal-(in-to-out) Marginalization (IM)

The internal-(in-to-out) marginalization is a risky interactive organizational and managerial practice that have risky impact on the employees' co-work and workplace [28,29,30], the organization and the leaders as a leadership pattern that targets employees and affects them psychologically and practically, which may affect their psychological contract, and even the deliberate reduction of employees, which may affect their loyalty and organizational commitment, which may affect the sustainability of their performance as intellectual and human capital invested in the organization. Additionally, internal-(in-to-out) marginalization is a social issue and managerial phenomenon that occurs due to social culture, behavior and personality traits among individuals. In addition, marginalization is based on the isolation of subordinates managerially, organizationally and society. Interactive marginalization also occurs due to the gap in values, ethics, customs and traditions, and educational and cultural qualifications between leaders and workers. It represents the deprivation of individuals from expressing their opinions and participating in organizational and managerial decisions. It is also represented in the deliberate non-participation of workers in making decisions, which affects the psychological contract, organizational unity and organizational loyalty, behaviorally and morally, which affects individual and institutional performance [31,32]. Additionally, increasing internal marginalization degrees reduces organizational effectiveness, weakens trust and reduces respect and appreciation at the personal, professional and family levels, as it causes a state of psychological and functional un-equilibrium for the individual at the individual, psychological or organizational level, which may actually affect the sustainability of human capital [33,5].

4 Favouritism (Nepotism-Cronyism) (FNC)

Favouritism (Nepotism-Cronyism) (FCN): (Nepotism-cronyism) are two categories of favouritism: Nepotism means favouritism based on kinship, relatives and interpersonal family relations. Favoritism is defined as the practice of giving preference to employees based on kinship rather than skill or merit. It is a partiality for kin without standards or established guidelines. It entails giving family members and close friends promotions or high-level jobs, as well as giving them some positions' relevant rights and responsibilities [34,35,36]. while, Cronyism including favouritism, which is based on connections to friends or relatives of friends, promotions to higher positions, or giving of authority and privileges to friends in exchange for stifling the advancement of others who merit such promotions and authority without any set rules or criteria. Nepotism-cronyism, then, is favouritism based on kinship or friendship rather than competence or efficiency, and it involves recruiting and terminating employees while marginalizing others. [37,36,38,39,40]. Additionally, favoritism and cronyism are widespread social problems that can occur either vertically or horizontally. In contrast, vertical cronyism refers to favouritism setup interactions between managers and subordinates, horizontal cronyism refers to relationships' setup favouritism between subordinates at the same level. Accordingly, favoritism is considered a harmful variable for the organization and the HRM system, and it results in many unhelpful and harmful side effects that harm the organization and its employees and limit the sustainability of human resources and reduce the sustainability of intellectual and social capital, which poses a threat to organizational human sustainability [41,42,43,44].

5 Ergonomics (Ergo)

The idea of ergonomics is connected to the employees' health and safety at the workplace. Organizations must therefore develop the appropriate ergonomic tools and strategies for effective performance on the job because ergonomics plays a significant influence in employee performance [45,46,47,48,49]. Additionally, the performance of the employees has affected the job due to transfer in ergonomics [50]. ergonomics is the field of study to make people and their workplaces perfectly compatible and fit between employees and workplace environments [51]. Ergonomics is a term used to describe the study of space and workplace behavior. Understanding people's requirements and giving them space to engage with coworkers as well as physical space to work is ergonomics' fundamental focus. Based on this knowledge and previous research, the following constructs are relevant to the study: (1) workstation comfort (Ergo1), (2) work environment (Ergo2), (3) lighting at the workplace (Ergo3), (4) sufficient rest periods at work (Ergo4) and (5) social distancing (Ergo5). [52,53]. Additionally, ergonomics plays an important role in employee and institutional performance, enhances the quality of operations, improves working conditions, enhances quality and continuous improvement of operations, reduces turnover and sustains human and intellectual capital [54,55].

6 Servant Leadership (SL)

Servant leadership (SL) is a pioneering leadership style which refers to the leader who prefers his followers and their desires and priorities over his own desires and priorities and eager to put his followers before himself-(priority for followers' needs) [56,57,58,59,60], and prioritizes their interests and priorities over his own interest and personal priorities, and high interest in following him, meeting their needs, helping them achieve their organizational goals, and increasing and developing their technical, intellectual and cognitive skills in line with the interest of workers and the interest of the organization [61,62,63,64]. The leader of the followers is their servant, Seven dimensions of servant leadership, based on early concepts, have previously been identified as follow: developing employees, emotional recovery, empowering, adding value for community, followers' needs priority, interactions conceptual skills, and behaving ethically [65,66]. Servant leadership (SL) provides confidence for followers, develops and encourages them, demonstrates humility and genuine leadership to subordinates, and empowers them, inspires them and encourages building a second, authentic leadership row that has a profound impact on workplace, institutional performance and the sustainability of human capital [67,68,69,70,71]. Servant leadership (SL) enhances confidence, bearing responsibility, engaging in work, aware response to environmental changes, flexible handling of crises, interactive transactions, and social leadership support for behavioral and ethical creativity, which supports leadership care and creative psychological intellectual behavior, which increases opportunities for the sustainability of intellectual and human capital. Additionally, Servant leadership (SL) enhances commitment and loyalty to employees [72,73,74,75] and motivates them towards effective performance and appropriate critical thinking with intellectual capital that enhances their ethical behavior and appreciation of the leader, self-esteem and development, and enhances the psychological state, optimism and psychological confidence resulting from psychological empowerment and stimulates their participation in workplace, career development and effective organizational performance, which enhances the sustainability of capital human [76,77,78].

7 Human capital sustainability (HCS)

Human capital sustainability (HCS) refers to Increasing people's capacity and willingness to work both now and in the future. This concerns their education, experience, health, as well as other qualities like loyalty and commitment. Additionally, (HCS) refers to effectively expressing organizational continuity. (HCS)-refers to (employable) It refers to necessary skill, knowledge and attitudes and personal and psychological ability that is constantly required to carry out organizational tasks, duties and responsibilities efficiently and effectively inside and outside the organization [79,80,81]. Co-work and workplace engagement is a healthy, contented mental state linking with vitality, loyalty, and engagement. Employee attitudes can be divided to three axes: affective commitment (i.e., emotional obligation and employees' psychological contract which developing with their organization), normative commitment (i.e., perceptions of employees as ethically obligated to remain with his company) [82,83], and continuity commitment (i.e., employees' attachment as a result of the human and intellectual capital investment). Organizational commitment (OC) refers to the level of an employee's involvement with their organization [84,85,86]. There are three aspects of human capital sustainability (HCS) were considered: Employability (long-term employment, growth of employee knowledge, competencies, and skills): (efficiency, training, continuous learning, organizational development, technological development, digital transforming skills, organizational flexibility, continuous improvement, career advancement, promotion, experience, quality Career life, knowledge worker, e-learning, professionalism, Tech IQ). Work Engagement: (increasing involvement, strategic contribution, security and job stability, employee satisfaction, mental flexibility, organizational effectiveness, fairness of rewards, teamwork skills, empowerment, psychological contract, self-management, and employees' inventiveness). Employees' Attitudes: (organizational commitment, emotional

commitment, affective commitment, continuity commitment, discipline, non-absence, low turnover, belonging, loyalty, organizational citizenship behaviors, social responsibility, ethical attitudes, servant attitudes, mindful attitudes, emotional intelligence, self-managed teams).

8 Research problem

The exploratory study conducted by the researcher at Cairo International Airport (CIA) showed that the airline sector in general and Cairo International Airport (CIA) in particular suffers from some problems related to favouritism to friends or relatives and problems related to the issue of internal marginalization between co-workers or between employees and their leaders inside the airport. There is a complaint by many employees about marginalization both internally and externally, which causes psychological exhaustion and emotional stress for employees and distorts social relations and causes a lack of internal peace between employees and leaders. The employees also suffer from the risky effects of toxic leadership in the workplace. Additionally, the exploratory study showed that there is a deficiency in realizing the risky psychological effects of internal marginalization and its negative role if it is studied as a potentially influential variable in the issue of toxic leadership. In addition to some problems related to the issue of ergonomics and servant leadership (SL) because of its significant and potential rate role and may affect the relationship between toxic leadership and human capital sustainability-(HCS) The exploratory study also found that there is a deficiency in the employees' awareness of their importance as a human and social capital that requires sustainability and unification of good social relations between each other and between them and their leaders and between them and the travelers who are served at airports. All of the above constitutes a real problem and causes distortion of social relations between employees and leaders inside the airport, which limits and restricts (HCS). All the above showed that the research problem is centered on several important questions: What is the impact of toxic leadership on (HCS)? What is the impact of (FCN) as a (1st mediator variable) in the relationship of toxic leadership and (HCS)? What is the effect of internal marginalization as a (2nd mediator variable) in the relationship of toxic leadership and (HCS)? What is the role of ergonomics as a (1st moderator variable) in the relationship between toxic leadership and (HCS)? What is the effect of servant leadership as a (2nd moderator variable) that moderates the relationship of toxic leadership and (HCS)? Additionally, the researcher's reliance on the exploratory study at the airport and verifying the existence of a real problem related to the phenomenon of nepotism and toxic leadership, which is likely to affect human capital, the researcher analyzed previous studies related to the subject and variables of the study, and found the following: (three studies link marginalization and (HCS)), (six researches link ergonomics and (HCS) (five researches link favouritism and sustainability) and (no any researches link between toxic leadership and (HCS)). Consequently, the researcher discovered the scarcity of research that links the variables of the study, which reinforced the idea of the study and its importance scientifically and practically, and encouraged the researcher to study these variables, which may contribute to providing a treatment for the study problem. The researcher used (Bibliometric analysis) analysis as it appears in three Figures (Fig.1; Fig.2; Fig.3):

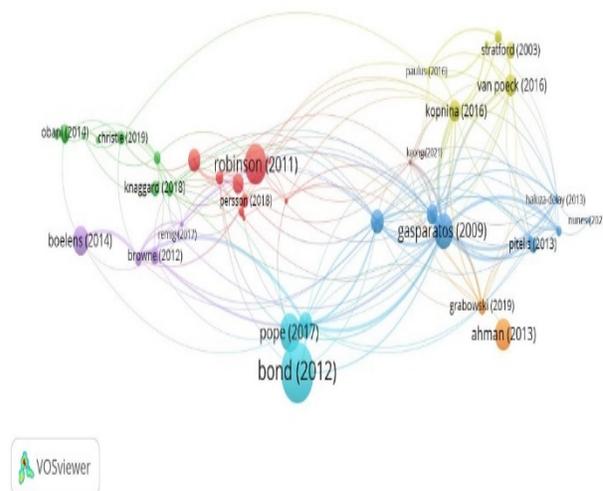


Fig. 1: Bibliometric VOSviewer TL and HCS

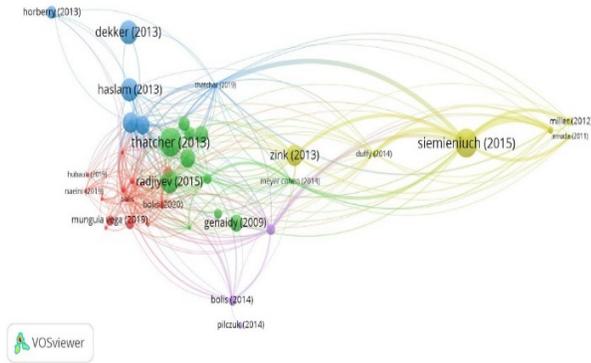


Fig. 2: Bibliometric VOSviewer Ergo and HCS

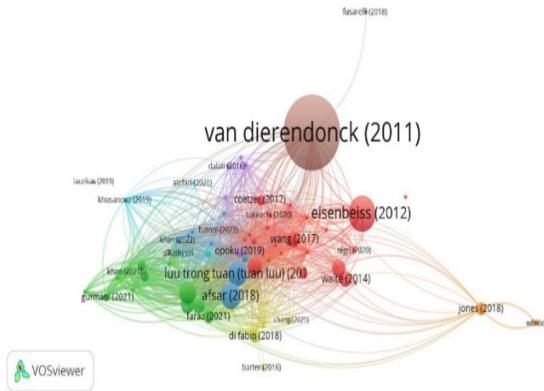


Fig. 3: Bibliometric VOSviewer SL and HCS

9 Formulating a Research Framework and Hypotheses

In order to study the impact of (favouritism–Nepotism–Cronyism) (FNC), Ergonomics (Ergo), and servant leadership (SL) as well as the relationship between internal marginalization (IM) and Human Capital Sustainability (HCS), a study methodology was developed (Fig.4). displays the model for the proposed research framework.

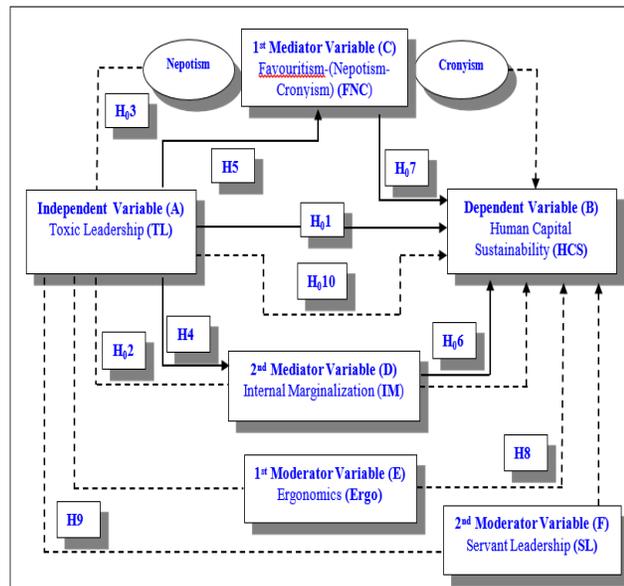


Fig. 4: Proposed Research Framework

Six research variables were studied by tested the following ten hypotheses toxic leadership (TL), (favouritism-nepotism-cronyism) (FNC), Ergonomics (Ergo), servant leadership (SL) and internal marginalization (IM) affect Human Capital Sustainability (HCS):

- ▶ (H₀1): (TL) has a direct negative effect on (HCS).
- ▶ (H₀2): (TL) was an indirect and negative effect on (HCS) through (IM).
- ▶ (H₀3): (TL) was an indirect and negative effect on (HCS) through (FNC).
- ▶ (H₄): (TL) has a direct positive effect on (IM)
- ▶ (H₅): (TL) has a direct positive effect on (FNC).
- ▶ (H₀6): (IM) has a direct negative effect on (HCS).
- ▶ (H₀7): (FNC) has a direct negative effect on (HCS).
- ▶ (H₈): (Ergo) moderated the relationship between (TL) and (HCS).
- ▶ (H₉): (SL) moderated the relationship between (TL) and (HCS).
- ▶ (H₀10): The effect of (TL) is less than the effect of (FNC) and (IM) as mediator variables and (Ergo) and (SL) as moderator variables on (HCS).

10 Methodologies

10.1 Research Design

Analyzing data to find links between research variables and hypotheses, according to [87], including any direct or indirect effects. AMOS statistical program's quantitative analysis approach and the structure equation modelling (SEM) method were used to create a questionnaire to evaluate (TL), (FNC), (Ergo), (SL), (IM), and (HCS).

10.2 Data Collection and Questionnaire Development

Employed questionnaire tool as a viable strategy for gathering data on the opinions of the research population. The research community (385) employees of Cairo International Airport (CIA). And (14) forms rejected because to missing data. And (371) valid forms, a completion percentage of 96.36% was attained for the purposes of data analysis. Relied on the questionnaire as a tool for data collection, and questionnaire was built and designed on six axes as follows: internal marginalization (IM) (2nd mediator variable) the measurement is based on [88], [89], and [4], and uses a scale with 20 items to assess internal (in-to-out) marginalization (Cronbach alpha (α) = 0.942). Ergonomics scale (ES) (1st moderator variable) dimensions based on [45,52,53], the constructs related to the study are as follows: (1)-workplace comfort (Ergo1), (2)-workplace environment (Ergo2), (3)-lighting at the workplace (Ergo3), (4)-suitable rest periods at workplace (Ergo4), (5)-social distancing (Ergo5), Additionally, the researcher added two dimensions: (6)-workplace physical conditions (Ergo6), (7)-Personal safety and healthy tools (Ergo7) with (Cronbach alpha (α) = 0.976). Servant leadership (SL) (2nd moderator variable) was measured by using the servant leadership scale (SLS-7) developed by [65,66,90,60] which included seven axes: developing employees, empowering, emotional recovery, followers' needs priority, interactions conceptual skills, adding value for community and behaving ethically. Cronbach's alpha (α) = 0.927). favouritism-(Nepotism-Cronyism) (FNC) (1st mediator variable) is assessed using a 15-item scale created by [36]. with some phrase adjustments to fit the context of airline sector (Cronbach alpha (α) = 0.943). Scale of [10] was used to measure toxic leadership (TL) as (independent variable) (IV) [11]. (TL) measures Employees' perceptions of their immediate leader's destructive behaviors. (TL) includes (30 objects) distributed over five dimensions (Authoritarian Leadership, Narcissism, Abusive supervision, Self-Promotion and Unpredictability) (every dimension has six items). Compared to other similar measures [91,13,92,11] This scale was chosen because it reflected several types of disruptive leader behavior and reflected actual behavior. Using 5-point Likert scale. (Cronbach alpha (α) = 0.928). Human capital sustainability (HCS)-(dependent variable) (DV) measured by three scales axes: Employees Attitudes (14-items) [93] Work Engagement (12-items) [94] and Employability (16-items) [82] (a 42-item questionnaire) with Cronbach's alpha (α) = (0.938).

10.3 Pre-test Analysis

To ensure accurate data collection, the questionnaire underwent two rounds of double-verification: (1) six researchers examined and assessed the content validity of the questions to confirm their relevance and validity while accounting for latent factors. (IOC)-index [95] suggests (IOC)-values between [0.67-1.00] [96] for questions to be considered acceptable. (2) The Cronbach's alpha (α), a metric of survey reliability, according [97], values for each factor ranging

11 Results

11.1 Statistics analysis of Measurement Model

(SEM) and (CFA) used to validate overall data, practical relationships, and overall accuracy of the proposed model (AMOS). The study examined the structural model to look into our study hypotheses using a 2-steps method suggested to evaluate the measurement model's validity, reliability, and discriminating validity [98]. validity, reliability, and convergent and discriminate validity of the system were all evaluated (CFA). The proposed methodological approach considers of human capital sustainability (HCS), favouritism-(nepotism-cronyism) (FNC), internal marginalization (IM), ergonomics (Ergo), toxic leadership (TL) and servant leadership (SL). according to [99] all of the constructions' results (CR), as displayed in (Table.1) are within the permitted range of 0.69. This indicates that the data's fundamental logic satisfies a high standard. It is advised to use a 2nd order model when doing the initial inspection. The initial step is to construct and validate a 2nd order model. The outcomes of 2nd order analysis are as follows: (GFI is 0.897), (RMSEA is 0.097), (CFI is 0.884), (df is 62), (CMIN/df is 1.872), and (NFI is 0.913). (Chi²) value = (93.97). The (CFA) (USC) (relational, structural and cognitive) axes used to evaluate were loaded into the pertinent factors. Results closely matched the model since each item was assigned to exactly one component. The suggested value was higher when compared to all adequate indices: approximate root means (square)² error (RMSEA) = 0.64; standardized root means square residual (SRMR) = 0.058; 2 (df) = 258.15 (76); 2/(df) = 3.78; comparative fit index (CFI) = 0.95; incremental adequate index (IFI) = 0.89. This shows the model, and the data are both reliable. Each value must adequate the following criteria: BA= 0.865, BS= 0.902, PQ= 0.774, and BL= 0.622. It implies that the four reflecting factors' analysis of each of the four 1st order impacts (BA, BS, PQ, and BL) was supported by a specific explanation (BE). The measurement model was further validated using convergent and discriminate validities. (Table.1) displays the AMOS-outcomes and validity of measuring model's constructs, which is supported by composite reliability (CR).

Table 1: Use factor analysis to validate the survey's instrument

CFA Model	AVE	CR	CMIN/df	CFI	TLI	GFI	AGFI	NFI	RMSEA
			< 3	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90
TL	0.73	0.87	2.766	0.913	0.944	0.927	0.910	0.942	0.017
FNC	0.78	0.89	2.812	0.922	0.956	0.944	0.961	0.954	0.023
IM	0.68	0.79	1.678	0.987	0.928	0.951	0.978	0.910	0.001
Ergo	0.66	0.86	2.891	0.924	0.919	0.976	0.905	0.933	0.004
SL	0.76	0.92	2.875	0.981	0.967	0.919	0.928	0.926	0.001
HCS	0.73	0.82	2.623	0.932	0.947	0.973	0.946	0.941	0.015

Source: Produced by the researcher and based on results of the statistical analysis AMOS

First, according to (AVE), one index benefits from factor loading, differentiated validity, and convergent validity [100,101]. The (AVE) value must bigger than standard cut-off of 0.50 if the value is bigger than > 0.5 and equal to or higher than (0.7), or conversely if value is higher than (0.5) but less than (0.7). (0.7). This principle accounts for the vast majority of variation. Given that the (AVE) is higher than the permissible range of values, the survey instrument's validity can be demonstrated by this (0.581 to 0.775).

Table 2: The factor correlation coefficients and the squared root calculation of AVE

Study variables	TL	FNC-(N)	FNC-(C)	IM	Ergo	SL	HCS
TL	0.928						
FNC-(N)	0.911	0.875					
FNC-(C)	0.932	0.808	0.851				
IM	0.965	0.826	0.870	0.910			
Ergo	0.894	0.817	0.857	0.869	0.884		
SL	0.905	0.811	0.860	0.876	0.841	0.872	
HCS	0.922	0.837	0.893	0.848	0.830	0.810	0.893

Note: The squared root of the estimated AVE is represented by the diagonal values

The (CFA model) met the criteria for discriminating validity, proving that the measurement scales are adequate. For each item, the cross-loading on other factors was greater than the loading on the linked factor. The CFA model was used to test (SEM) with implicit variables. Finally, the observed variables' (square)² multiple correlation (R²) values, which were not greater than > 0.9, demonstrated that multicollinearity was not a problem.

11.2 The Structural Path Model's Analysis

The structural models' path coefficients were established. A path analysis and model assumption testing were done using AMOS. Accordingly, when utilizing SEM, a study sample of at least 1000 samples, or at minimum 5 or 10 cases per parameter, is needed [102]. This study had an appropriate sample size of (371) participants, which clearly shows the outcome. The model fit indices' actual and recommended values are shown in (Table.3). The evaluation of the study model was done using the following goodness-of-adequate metrics: The table shows that $df = 142$, $GFI = 0.954$, $CMIN/df = 2.453$, $NFI = 0.963$, $RMSEA = 0.0723$, and $CFI = 0.928$. (Chi^2) value = 289.76. This indicated the good adequate between the model and the data. For the dependent constructs, hypotheses, t-values, and path coefficients are displayed in (Table.3).

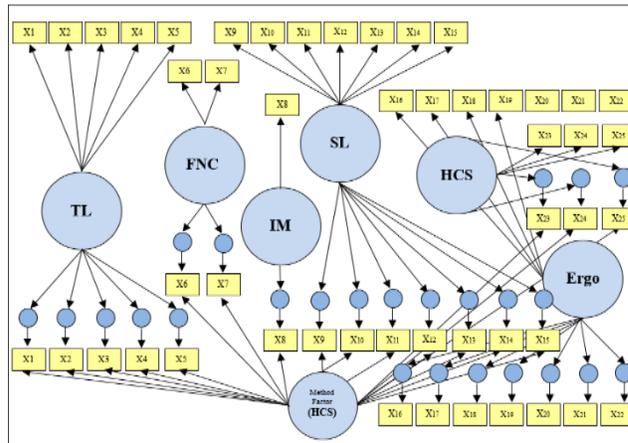


Fig. 5: Common-method bias evaluation using the PLS model

Table 3: Suggested and actual match indices values

Appropriate Indicator	CMIN/df	GFI/ Path	NFI/ Path	RMSEA	TLI	AGFI	CFI/ Path	P-V
Suggested Value	< 3.847	> 0.945	> 0.814	< 0.657	≥ 0.901	> 0.889	> 0.889	0.0 sig
Reality Value	2.691	0.960	0.953	0.546	0.966	0.954	0.937	0.0 sig
Dependent Variables (DV)	Independent Variables (IV)							-
	R ²	TL	FNC	IM	Ergo	SL	S. Es/ Path	P-V
FNC	0.938	0.891	-	0.826	0.651	0.654	0.876	0.00 sig
IM	0.966	0.906	0.789	-	0.670	0.711	0.898	0.0 sig
Ergo	0.915	0.879	0.745	0.808	-	0.810	0.753	0.0 sig
SL	0.942	0.827	0.832	0.669	0.739	-	0.819	0.0 sig
HCS	0.898	0.924	0.813	0.885	0.434	0.526	0.834	0.0 sig
Hypotheses					β	T-v	Conclusion	P-V
(H01): (TL) has a direct negative effect on (HCS).					0.973	16.4**	Approved	0.0 sig
(H02): (TL) was an indirect and negative effect on (HCS) through (IM).					0.972	18.5**	Approved	0.0 sig
(H03): (TL) was an indirect and negative effect on (HCS) through (FNC).					0.956	22.7**	Approved	0.0 sig
(H4): (TL) has a direct positive effect on (IM).					0.926	12.5**	Approved	0.0 sig
(H5): (TL) has a direct positive effect on (FNC).					0.865	17.5**	Approved	0.0 sig
(H06): (IM) has a direct negative effect on (HCS).					0.964	19.6**	Approved	0.0

(H07): (FNC) has a direct negative effect on (HCS).	0.910	14.7**	Approved	sig 0.0
(H8): (Ergo) was moderated the relationship between (TL) and (HCS).	0.875	23.5**	Approved	sig 0.0
(H9): (SL) was moderated the relationship between (TL) and (HCS).	0.932	11.8**	Approved	sig 0.0
(H010): The effect of (TL) is less than the effect of (FNC) and (IM) as mediator variables and (Ergo) and (SL) as moderator variables on (HCS).	0.836	12.4**	Rejected	0.24 insig

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; *Fit indices:* Chi-square-(Chi^2) = 264.15; $df = 147$; $GFI = 0.931$; $CMIN/df = 2.278$; $NFI = 0.927$; $RMSEA = 0.0785$; $CFI = 0.965$.

AMOS factorial analysis (AFA) displays the value of (R^2) for research variables (toxic leadership (TL), favouritism (nepotism-cronyism) (FNC), internal marginalization (IM), ergonomics (Ergo) servant leadership (SL) and human capital sustainability (HCS), respectively: ($R^2=0.973, 0.938, 0.966, 0.915, 0.942$ and 0.898), which, means how the variables are linked, how each one influences the others, and how changes in the research's variables occur in a significant and acceptable percentage. The importance and validity of each hypothesis tested through (t-value) and (β) value in (Table.3), which indicate the models' accurate and predict human capital sustainability (HCS) as dependent variable through others variables as (toxic leadership (TL) as independent variables (IV), favouritism (nepotism-cronyism) (FNC) as 1st the mediator variable (1stMEV), internal marginalization (IM) as the 2nd mediator variable (2ndMEV), ergonomics (Ergo) as 1st moderator variable (1stMOV) and servant leadership (SL) as 2nd moderator variable (2ndMOV)) with great accuracy. According to results of (AMOS) analysis and path analysis from (Table.3), it becomes clear that ($\beta = 0.973, t\text{-value} = 16.421, sig < 0.01$) of the two variables related to the 1st hypothesis (toxic leadership (TL) has a direct negative effect on sustainability of human capital (HCS).) and which approved the validity of the 1st hypothesis (H01), which presupposes a direct negative impact between (TL) and (HCS). Additionally, (Table.3), show that ($\beta = 0.972, t\text{-value} = 18.568 sig < 0.01$) of the three variables related to the 2nd hypothesis (toxic leadership (TL) was an indirect and negative effect on (HCS) through (IM)) which approved the validity of the 2nd hypothesis (H02), which presume indirect negative impact between (TL) and (HCS) through (IM). In addition to (Table.3), display that ($\beta = 0.956, t\text{-value} = 22.719, sig < 0.01$) of two variables linked to the 3rd hypothesis (TL) was an indirect and negative effect on (HCS) through (FNC). favouritism-(FNC) as (1stMEV) variable which approved 3rd hypothesis (H03), which assumes an indirect negative influence between (TL) and (HCS) through (FNC). Additionally, (Table.3), show ($\beta = 0.926, t\text{-value} = 12.509, sig < 0.01$) of the two variables linked to the 4th hypothesis (TL) has a direct positive effect on (IM). which approved the 4th hypothesis (H4), which suppose direct positive effect between (TL) and (HCS). Additionally, (Table.3), offer that ($\beta = 0.865, t\text{-value} = 17.567, sig < 0.00$) of the three variables of the 5th hypothesis (TL) has a direct positive impact on favouritism-(FNC) as (1stMEV). which approved the 5th hypothesis (H5), which assume favouritism-(FNC) as (1stMEV) mediate the linking between (TL) and (HCS). Additionally, to (Table.3), display that ($\beta = 0.964, t\text{-value} = 19.652, sig < 0.01$) of the 6th hypothesis (IM) has a direct negative impact on (HCS) which approved the 6th hypothesis (H06), which suppose direct negative impact linking between (IM) and (HCS) which means (IM) as (2ndMEV) mediate the linking between [(TL) and (HCS)]. Additionally, to (Table.3), display that ($\beta = 0.910, t\text{-value} = 14.711, sig < 0.01$) of the 7th hypothesis that the favouritism-(FNC) has a direct negative effect on (HCS). which approved the 7th hypothesis (H07), which suppose direct negative effect impact linking between favouritism-(FNC) and (HCS). Add to, (Table.3), display that ($\beta = 0.875, t\text{-value} = 23.509, sig < 0.01$) of the three variables related to the 8th hypothesis (Ergo) was moderated the relationship between (TL) and (HCS). which approved 8th hypothesis (H8), which assumes (Ergo) as (1stMOV) which has indirect positive influence moderated the impact influence between (TL) and (HCS) through (Ergo) as (1stMOV). Additionally, (Table.3), display that ($\beta = 0.932, t\text{-value} = 11.830, sig < 0.01$) of the three variables related to the 9th hypothesis (SL) was moderated the relationship between (TL) and (HCS). which approved 9th hypothesis (H9), which assumes (SL) as (2ndMOV) which has indirect positive influence moderated the impact influence between (TL) and (HCS) through (SL) as (2ndMOV). Additionally, (Table.3), display that ($\beta = 0.836, t\text{-value} = 12.446, sig > 0.24$) of the six variables related to the 10th hypothesis the effect of (TL) is less than the effect of (FNC) and (IM) as mediator variables and (Ergo) and (SL) as moderator variables on (HCS). which rejected 10th hypothesis (H10), because results display that (TL) has higher impact on (HCS) more than the other variables. Consequently, it is evident from the examination of the earlier data that (TL) was an effect of (0.924) on (HCS) which proves a direct negative impact on (HCS), (TL) has an impact (0.0.891) on (FNC) and (FNC) was indirect negative effect on (HCS) which means a direct negative effect on (FNC), and a direct negative effect on (HCS) through (FNC). Additionally, (IM) impact by (0.885) on (HCS) which confirm that a direct negative effect on (HCS), Additionally, (Ergo) impact by (0.434) on (HCS) proves that Ergonomics (Ergo) has moderated and modify linking between toxic leadership (TL) and (HCS) and servant leadership (SL) impact by (0.526) on (HCS) proves that (Ergo) and (SL) moderating and modify linking between (TL) and (HCS).

12 Conclusion

Results of study and analysis showed that toxic leadership (TL) has a direct and negative impact on the human capital sustainability (HCS), which is partially consistent with some of other studies results [25,24,26]. It also became clear that favouritism-(FNC) as a (1stMEV) and internal marginalization (IM) as a (2ndMEV) have a direct and negative impact on the (HCS). Rather, it became clear that the entry of favouritism-(FNC) as a (1stMEV) and (IM) as a (2ndMEV) affect the relationship of [(TL) and (HCS)], as there is an indirect and negative impact of (TL) on the (HCS) through [(FNC) and (IM)] as two intermediate variables. It also became clear from the results and analysis that the effect of (FNC)-Nepotism is greater than that of (FNC)-Cronyism in the airline sector and Cairo airport under study. In addition to the presence of ergonomics (Ergo) as a (1stMOV) in the relationship between (TL) and (HCS), when entering ergonomics (Ergo) as a (1stMOV) it modified the negative impact on the relationship between (TL) and (HCS) by (0.434). which means that it has a moderator role in the relationship between (TL) and (HCS), that is, the more (TL) as a problem and a real phenomenon in organizations, the more this requires solving the problem through the speed of use ergonomics (Ergo) in its seven dimensions [45,53,52,51,25]: ((Ergo1)-workplace comfort, (Ergo2)-workplace environment, (Ergo3)-lighting at the workplace, (Ergo4)-suitable rest periods at workplace, (Ergo5)-social distancing, (Ergo6)-workplace physical conditions,(Ergo7)-Personal safety and healthy tools), comforting and being concerned about the wellbeing and safety of employees, and focus and attention to ergonomics (Ergo) approach and providing all its methods and applying the ergonomics' 7th dimensions (Ergo1 to Ergo7) to modified the linking between (TL) on (HCS). Additionally, that there is an effect of (SL) as a (2ndMOV) in the relationship between (TL) and the (HCS) when entering (SL) as a (2ndMOV) it moderates the negative impact on the relationship between (TL) and (HCS) by (0.526) Which means it has a modified role in the linking between (TL) and (HCS), which is partially consistent with some of previous studies findings [103,69,70,68,72,71]. Which, meaning that whenever (TL) appears and it becomes clear that it represents a real problem and phenomenon in organizations, the problems of (TL) can be solved or at least moderate its risky impact through fast shifting to (SL) in its seven dimensions (developing employees, empowering, followers' needs priority, adding value for community, emotional recovery, interactions conceptual skills and behaving ethically) to modified the linking between (TL) and (HCS). Finally, results display that the impact of toxic leadership (TL) is the most variable influential on (HCS), followed by internal marginalization (IM) in the 2nd position as the most influential variable in the (HCS). There is an effect of (IM) as a (2ndMEV) in the relationship between (TL) and (HCS). This confirms the fact that leaders' practices of internal marginalization (IM) of employees is one of the most factors that confirm the existence of (toxic-leadership and toxic-leaders), which has a profound psychological and emotional impact on workers and helps in their dislike of work and leaving their jobs, increasing turnover, absenteeism, and all organizational negative phenomena that affect workers on their organizational performance, and even on the institutional performance as a whole. In order to solve the problems and to moderate risky impact of [toxic leadership (TL), favouritism-(FNC) and internal marginalization (IM), it is necessary to solve these problems by turning to servant leadership (SL) and leaders should avoid marginalization practices, avoid favoritism practices, focus on employee participation, and adopt servant leadership practices and employees should not be adopting organizationally silent on toxic leaders and always try to expose them. and adopting the ergonomics approach through Providing occupational health and safety programs for employees, Additionally, changing toxic leadership practices to servant leadership practices through (either toxic leaders change their practices to real servant leadership) or (change toxic leaders with servant leaders) to eliminate all negative phenomena, solve workers' problems, and increase the efficiency and effectiveness of workers' performance and organizational performance within organizations or airline sector in general or inside Cairo airport in particular.

Future Research Suggestions

The six variables that the study concentrated (toxic leadership, marginalization, favouritism-(nepotism-cronyism), servant leadership, ergonomics and human capital sustainability) are a unique field of management study and research in the field of (HRM) and (OB). These variables are important because they are managerial practices and real problems in organizations and societies and are important phenomena that deserve study and research and can be applied in other areas and finding unique answers and solutions to toxic leadership, favouritism-(nepotism-cronyism) and marginalization, and solving these risky phenomena and problems contributes to enhancing the performance and efficiency of employees and institutional performance and human capital sustainability.

Acknowledgements: This project was supported by the Deanship of Scientific Research, King Faisal University, Saudi Arabia, project No. GRANT3607

Conflict of interest :The authors declare that there is no conflict regarding the publication of this paper.

References

- [1] Grineski, S. E. (2009). Marginalization and health: children's asthma on the Texas-Mexico border. *International Journal of Sociology and Social Policy*, 29(5/6), 287-304.
- [2] Barber, C. and Vega, D. (2011). Conflict, cultural marginalization, and personal costs of filial caregiving, *Journal of cultural diversity*, 18(1):20-8.
- [3] Ma, Z., & Yang, Z. (2012). Risk of marginalization in the process of internationalization: A case study of emerging Chinese multinationals. *Nankai Business Review International*.3(1):52-64.
- [4] Omara, Amgad Hamed. (2016). The out-to-in employees' marginalization: Does it really affect the core organization's non-structural aspects? *Journal of American Science*, 12 (10), 116-135.
- [5] Saeed, Mohamed Nasr (2020). The interactive Marginalization vs. Psychological Empowerment and Psychological Capital: Does it really affect the Psychological Commitment of newcomers and/or young doctors? *Journal of American Science*, 16 (12), 1-32. <https://doi.org/10.7537/marsjas161220.01>
- [6] Jawahar, I. M., Bilal, A. R., Fatima, T., & Mohammed, Z. J. (2021). Does organizational cronyism undermine social capital? Testing the mediating role of workplace ostracism and the moderating role of workplace incivility. *Career Development International*, Vol. 26 No. 5, 2021, pp. 657-677. DOI: <https://doi.org/10.1108/CDI-09-2020-0228>
- [7] Meyer, J.P., Tett, R.P. and Meyer, J.P. (1993), Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytical findings, *Personnel Psychology*, Vol. 46 No. 2, pp. 259-293, doi: 10.1111/j.1744 6570.1993.tb00874.x
- [8] Mehta, S. and Maheshwari, G.C. (2013), Consequence of toxic leadership on employee job satisfaction and organizational commitment, *The Journal Contemporary Management Research*, Vol. 8 No. 2, pp. 1-23.
- [9] Reyhanoglu, M. and Akin, O. (2022), Impact of toxic leadership on the intention to leave: research on permanent and contracted hospital employees, *Journal of Economic and Administrative Sciences*, Vol. 38 No. 1, pp. 156-177. <https://0810bi6gw-1106-y-https-doi-org.mplbci.ekb.org/10.1108/JEAS-05-2020-0076>
- [10] Schmidt, A.A. (2008), Development and validation of the toxic leadership scale, Unpublished Master Theses, Faculty of the Graduate School of the University of Maryland, College Park, MD, doi: <https://drum.lib.umd.edu/handle/1903/8176>.
- [11] Hattab, S., Wirawan, H., Salam, R., Daswati, D. and Niswaty, R. (2022), The effect of toxic leadership on turnover intention and counterproductive work behaviour in Indonesia public organisations, *International Journal of Public Sector Management*, Vol. 35 No. 3, pp. 317-333. <https://0810bi6gw-1106-y-https-doi-org.mplbci.ekb.org/10.1108/IJPSM-06-2021-0142>
- [12] Hogan, R. and Kaiser, R.B. (2005), What we know about leadership, *Review of General Psychology*, Vol. 9 No. 2, pp. 169-180.
- [13] Tepper, B.J. (2000), Consequences of abusive supervision, *The Academy of Management Journal*, Vol. 43 No. 2, pp. 178-190.
- [14] Ashforth, B.E. (1994), Petty tyranny in organizations, *Human Relations*, Vol. 47 No. 7, pp. 755-778.
- [15] Milosevic, I., Maric, S. and Loncar, D. (2020), Defeating the toxic boss: the nature of toxic leadership and the role of followers, *Journal of Leadership and Organizational Studies*, Vol. 27 No. 2, pp. 117-137.
- [16] Sackett, P.R. and DeVore, C.J. (2002), Counterproductive behaviors at work, in Anderson, N., Ones, D.S., Sinangil, H.K. and Viswesvaran, C. (Eds), *Handbook of Industrial, Work and Organizational Psychology*, Sage Publications, pp. 145-164, doi: <https://psycnet.apa.org/record/2003-00437-008>.
- [17] Behery, M., Al-Nasser, A.D., Jabeen, F. and El Rawas, A.S. (2018), Toxic leadership and organizational citizenship behavior: a mediation effect of followers' trust and commitment in the middle east, *International Journal of Business and Society*, Vol. 19 No. 3, pp. 793-815, doi: <https://dspace.adu.ac.ac/handle/1/1643>.
- [18] Fosse, T.H., Skogstad, A., Einarsen, S.V. and Martinussen, M. (2019), Active and passive forms of destructive leadership in a military context: a systematic review and meta-analysis, *European Journal of Work and Organizational Psychology*, Vol. 28 No. 5, pp. 708-722, doi: 10.1080/1359432X.2019.1634550.
- [19] Mackey, J.D., Parker Ellen, B., McAllister, C.P. and Alexander, K.C. (2021), The dark side of leadership: a

- systematic literature review and meta-analysis of destructive leadership research, *Journal of Business Research*, Vol. 132 No. 8, pp. 705-718, doi: 10.1016/j.jbusres.2020.10.037.
- [20] Zaabi, H.H. Al, Elanain, H.M.A., Ajmal, M.M., Al Zaabi, H.H., Abu Elanain, H.M. and Ajmal, M.M. (2018), Impact of toxic leadership on work outcomes: an empirical study of public banks in the UAE, *International Journal of Public Sector Performance Management*, Vol. 4 No. 3, pp. 373-392, doi: 10.1504/IJSPM.2018.093470.
- [21] Kim, T.Y. and Shapiro, D.L. (2008), Retaliation against supervisory mistreatment: negative emotion, group membership, and cross-cultural difference, *International Journal of Conflict Management*, Vol. 19 No. 4, pp. 339-358, doi: 10.1108/10444060810909293.
- [22] Lian, H., Brown, D.J., Ferris, D.L., Liang, L.H., Keeping, L.M. and Morrison, R. (2014), Abusive supervision and retaliation: a self-control framework, *Academy of Management Journal*, Vol. 57 No. 1, pp. 116-139, doi: 10.5465/amj.2011.0977.
- [23] Richard, O.C., Boncoeur, O.D., Chen, H. and Ford, D.L. (2020), Supervisor abuse effects on subordinate turnover intentions and subsequent interpersonal aggression: the role of power-distance orientation and perceived human resource support climate", *Journal of Business Ethics*, Vol. 164 No. 3, pp. 549-563, doi:10.1007/s10551-018-4019-7.
- [24] Igbokwe, N., Smith, S., Hart, C., Hergert, E., Reter, E., Wildermuth, M., Bouda, R., Phillips, T. and Wildermuth, C. (2021), *Monsters, Inc.: Toxic Leadership and Engagement*, Morris, L.R. and Edmonds, W.M. (Ed.) *When Leadership Fails: Individual, Group and Organizational Lessons from the Worst Workplace Experiences*, Emerald Publishing Limited, Bingley, pp. 3-15. <https://0810birid-1106-y-https-doi-org.mplbci.ekb.org/10.1108/978-1-80043-766-120211001>
- [25] Longoni, A., Pagell, M., Shevchenko, A. and Klassen, R. (2019), Human capital routines and sustainability trade-offs: The influence of conflicting schemas for operations and safety managers, *International Journal of Operations & Production Management*, Vol. 39 No. 5, pp. 690-713. <https://0810birid-1106-y-https-doi-org.mplbci.ekb.org/10.1108/IJOPM-05-2018-0247>
- [26] Zaman, U., Florez-Perez, L., Anjam, M., Ghani Khwaja, M. and Ul-Huda, N. (2022), At the end of the world, turn left: examining toxic leadership, team silence and success in mega construction projects, *Engineering, Construction and Architectural Management*, Vol. ahead-of-print No. ahead-of-print. <https://0810birid-1106-y-https-doi-org.mplbci.ekb.org/10.1108/ECAM-08-2021-0755>
- [27] Laguda, E. (2020), Toxic leadership: managing its poisonous effects on employees and organizational outcomes, in Dhiman, S. (Ed.), *The Palgrave Handbook of Workplace Well-Being*, Palgrave Macmillan, Cham, pp. 1-31, doi: 10.1007/978-3-030-02470-3_71-1
- [28] Horback, S., & Rothery-Jackson, C. (2007). Cultural Marginality: Exploration of Self-Esteem and Cross-Cultural Adaptation of the Marginalized Individual: An investigation of the second-generation Hare Krishnas. *Journal of Intercultural Communication*, (14).
- [29] Huston, A. and Bentley, A. (2010). Human development in societal context. *Annual Review of Psychology*, 61(4), 411-437.
- [30] Tilstra, E. (2012). 'Working from Within: Observations of Non-Governmental Efforts to Decrease Social Marginalization in Buenos Aires'. *The Journal of Undergraduate Research at the University of Tennessee*, 4(1), 109-112.
- [31] Dalton, R. (2004). *Democratic Challenges, Democratic Choices. The Erosion of Political Support in Advanced Industrial Democracies*, Oxford, Oxford University Press.
- [32] Burchardt, T., Le Grand, J., Piachaud, D., Hills, J., & Grand, L. (2002). *Understanding social exclusion*. London School of Economics, London.
- [33] Wilson, A., & Beresford, P. (2000). Anti-oppressive practice: emancipation or appropriation? *British Journal of Social Work*, 30(5), 553-573.
- [34] Zhang, J. and Gill, C. (2019), Leader-follower guanxi: an invisible hand of cronyism in Chinese management, *Asia Pacific Journal of Human Resources*, Vol. 57 No. 3, pp. 322-344.
- [35] Khatri, N. (2017), Indian brand od crony capitalism: the cultural underpinnings, IIMA Institutional Repository, doi: <http://hdl.handle.net/11718/19109>

- [36] Turhan, M. (2014). Organizational cronyism: A scale development and validation from the perspective of teachers. *Journal of Business Ethics*, 123(2), 295–308. <https://doi.org/10.1007/s10551-013-1839-3>
- [37] Khatri, N. and Tsang, E.W. (2003), Antecedents and consequences of cronyism in organizations, *Journal of Business Ethics*, Vol. 43, pp. 289-303.
- [38] Vithana, K., Soobaroyen, T., & Ntim, C. G. (2021). Human resource disclosures in UK corporate annual reports: to what extent do these reflect organisational priorities towards labour? *Journal of Business Ethics*, 169(3), 475-497.
- [39] Nguyen, A., & Cragg, W. (2012). Interorganizational favour exchange and the relationship between doing well and doing good. *Journal of Business Ethics*, 105(1), 53-68.
- [40] He, Q., Wu, M., Wu, W., & Fu, J. (2021). The effect of abusive supervision on employees' work procrastination behavior. *Frontiers in psychology*, 12, 596704.
- [41] Brandts, J., & Sola, C. (2010). Personal relations and their effect on behaviour in an organisational setting: An experimental study. *Journal of Economic Behaviour and Organisation*, 73, 246–253.
- [42] Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of financial economics*, 67(2), 351-382.
- [43] Horak, S. (2017). The informal dimension of Human Resource Management in Korea—Yongo, recruiting practices and career progression. *International Journal of Human Resource Management*, 28(10), 1409–1432.
- [44] Yang, I., Horak, S., & Kakabadse, N. K. (2021). An integrative ethical approach to leader favoritism. *Business Ethics, the Environment & Responsibility*, 30(1), 90-101. Doi: <https://doi.org/10.1111/beer.12309>
- [45] Kulkarni, P., Appasaba, L.V. and Nishchitha, G.C.G. (2022), The influence of COVID-19 on employee ergonomics and employee engagement of banking employees, *Management Matters*, Vol. 19 No. 1, pp. 13-29. <https://doi.org/10.1108/MANM-12-2021-0009>
- [46] Law, R., Dollard, M.F., Tuckey, M.R. and Dormann, C. (2011), Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement, *Accident Analysis and Prevention*, Vol. 43 No. 5, pp. 1782-1793.
- [47] Parsons, K.C. (2000), Environmental ergonomics: a review of principles, methods and models, *Applied ergonomics*, Vol. 31 No. 6, pp. 581-594.
- [48] Dul, J. and Neumann, W.P. (2009), Ergonomics contributions to company strategies, *Applied Ergonomics*, Vol. 40 No. 4, pp. 745-752.
- [49] Meyer, A. and Fourie, I. (2015), Collaborative information seeking environments benefiting from holistic ergonomics, *Library Hi Tech*, Vol. 33 No. 3, pp. 439-459. <https://doi.org/10.1108/LHT-06-2015-0062>
- [50] Prasad, D.K., Mangipudi, D.M.R., Vaidya, D.R. and Muralidhar, B (2020), Organizational climate, opportunities, challenges and psychological wellbeing of the remote working employees during COVID-19 pandemic: a general linear model approach with reference to information technology industry in Hyderabad, *International Journal of Advanced Research in Engineering and Technology (IJARET)*, Vol. 11 No. 4, pp. 372-389.
- [51] Brown, C. and Legg, S. (2011), Chapter 3 Human Factors and Ergonomics for Business Sustainability, Eweje, G. and Perry, M. (Ed.) *Business and Sustainability: Concepts, Strategies and Changes (Critical Studies on Corporate Responsibility, Governance and Sustainability, Vol. 3)*, Emerald Group Publishing Limited, Bingley, pp. 59-79. [https://0810birid-1106-y-https-doi-org.mplbci.ekb.org/10.1108/S2043-9059\(2011\)0000003011](https://0810birid-1106-y-https-doi-org.mplbci.ekb.org/10.1108/S2043-9059(2011)0000003011)
- [52] Schulte, P.A., Streit, J.M., Sheriff, F., Delclos, G., Felknor, S.A., Tamers, S.L. and Sala, R. (2020), Potential scenarios and hazards in the work of the future: a systematic review of the peerreviewed and gray literature, *Annals of Work Exposures and Health*, Vol. 64 No. 8, pp. 786-816.
- [53] Kaushik, M. and Guleria, N. (2020), The impact of pandemic COVID 19 in workplace, *European Journal of Business and Management*, Vol. 12 No. 15, pp. 1-10.
- [54] Chao, S.J., Chang, C. and Chiang, B. (2001), Planning and implementing a library ergonomics program: case study at Queens College Library, the City University of New York, *The Electronic Library*, Vol. 19 No. 5, pp. 327-341. <https://0810bht96-1106-y-https-doi-org.mplbci.ekb.org/10.1108/EUM000000006097>
- [55] Hadidi, L.A., Kolus, A. and AlKhamis, M. (2019), Quality improvement through ergonomics intervention at

- [76] Hanaysha, J.R., Kumar, V.V.A., In'airat, M. and Paramaiah, C. (2022), Direct and indirect effects of servant and ethical leadership styles on employee creativity: mediating role of organizational citizenship behavior, Arab Gulf Journal of Scientific Research, Vol. ahead-of-print No. ahead-of-print. <https://0810bi0w8-1106-y-https-doi-org.mplbci.ekb.org/10.1108/AGJSR-04-2022-0033>
- [77] Cai, D., Wang, H., Yao, L., Li, M. and Men, C. (2022), A relational identification perspective on why and when servant leadership foster employees' extra-role customer service, Leadership & Organization Development Journal, Vol. 43 No. 5, pp. 705-718. <https://0810bi0w8-1106-y-https-doi-org.mplbci.ekb.org/10.1108/LODJ-10-2021-0450>
- [78] Jang, S., Yoo, S., Lee, J. and Lee, Y. (2022), Serving for thriving: a moderated mediation analysis of the relationship between servant leadership and thriving at work, Personnel Review, Vol. ahead-of-print No. ahead-of-print. <https://0810bi0w8-1106-y-https-doi-org.mplbci.ekb.org/10.1108/PR-08-2021-0602>
- [79] Tooranloo, H. S., Azadi, M. H., & Sayyahpoor, A. (2017). Analyzing factors affecting implementation success of sustainable human resource management (SHRM) using a hybrid approach of FAHP and Type-2 fuzzy DEMATEL. Journal of cleaner production, 162, 1252-1265.
- [80] Van Dam, K., Van Vuuren, T., & Kemps, S. (2017). Sustainable employment: the importance of intrinsically valuable work and an age-supportive climate. The International Journal of Human Resource Management, 28(17), 2449-2472.
- [81] Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. Journal of Vocational behavior, 65(1), 14-38.
- [82] Berntson, E., Sverke, M., & Marklund, S. (2006). Predicting perceived employability: Human capital or labour market opportunities? Economic and Industrial Democracy, 27, 223–244.
- [83] Kenton, W. (2019). Human capital, doi: <https://www.investopedia.com/terms/h/humancapital.asp>
- [84] Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, 14, 224–247.
- [85] Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. Journal of Occupational Psychology, 63, 1–18.
- [86] Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. Journal of Managerial Psychology, 22, 309–328.
- [87] Byrne, B.M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Routledge.
- [88] Lehmiller, J. J., & Agnew, C. R. (2006). Marginalized relationships: The impact of social disapproval on romantic relationship commitment. Personality and Social Psychology Bulletin, 32(1), 40-51.
- [89] Lehmiller, J. J. (2012). Perceived marginalization and its association with physical and psychological health. Journal of Social and Personal Relationships, 29(4), 451-469.
- [90] Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. The Leadership Quarterly, 30(1), 111–132.
- [91] Cortina, L.M., Magley, V.J., Williams, J.H. and Langhout, R.D. (2001), Incivility in the workplace: incidence and impact, Journal of Occupational Health Psychology, Vol. 6 No. 1, pp. 64-80, doi: 10.1037/1076-8998.6.1.64.
- [92] Paulhus, D.L. and Williams, K.M. (2002), The dark triad of personality: narcissism, machiavellianism, and psychopathy, Journal of Research in Personality, Vol. 36 No. 6, pp. 556-563, doi:10.1016/S0092-6566(02)00505-6.
- [93] De Gilder, D., Van den Heuvel, H., & Ellemers, N. (1997). The three-component model of commitment. Gedrag an Organisatie, 10, 95–105.
- [94] Schaufeli, W. B., & Bakker, A. B. (2004). Measuring work engagement. Gedrag & Organisatie, 12, 89–112.
- [95] Rovinelli, R. J., & Hambleton, R. K. (1977). The use of content specialists in the assessment of criterion-referenced test item validity: 1977. Dutch J Edu Res.
- [96] Turner, R. C., & Carlson, L. (2003). Indexes of item-objective congruence for multidimensional items. International journal of testing, 3(2), 163-171.

-
- [97] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- [98] Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411-423.
- [99] Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- [100] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Canonical correlation: A supplement to multivariate data analysis. Multivariate data analysis: a global perspective*. 7th ed. Pearson Prentice Hall Publishing, Upper Saddle River.
- [101] Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.
- [102] Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford publications.
- [103] Alina M. Waite (2014), Leadership's influence on innovation and sustainability: A review of the literature and implications for HRD, *European Journal of Training and Development*, Vol. 38 No. 1/2, pp. 15-39. <https://0810birid-1106-y-https-doi-org.mplbci.ekb.eg/10.1108/EJTD-09-2013-0094>