

Does Strategic Agility and Organizational Ambidexterity Affect the Relationship Between Talents Management and Human Capital Sustainability?

By

Mohamed Nasr Saeed

Assist. Prof. in Business Administration Dept., Faculty of Commerce, Benha University, Egypt

Corresponding Author Email: mohamed.said@fcom.bu.edu.eg dr.mo7amed.n@gmail.com

Abstract

Will strategic agility, organizational ambidexterity, human capital sustainability, environmental sustainability and talents management alter the competitive landscape and reconfigure the opportunities and dangers that multinational pharmaceuticals manufacturing companies in Egypt to facing COVID-19? How do managers discover, exploit, and maintain talents and manage them to take advantage of those talents and turn them into a positive element? Is human capital sustainability enhanced by talent management? Is talents management linked to organizational ambidexterity and /or strategic agility? In other words, is there a role of strategic agility practices and the organizational ambidexterity (exploration and exploitation) talents and sustainability of human capital? a sample of (382) managers and employees from multi-pharmaceuticals manufacturing companies in Egypt which surveyed. Research investigates impacts of talents management on the sustainability of human capital from the perspective of organizational ambidexterity through its two dimensions (exploration and exploitation) - as a mediator variable, The five hypotheses of the study were accepted. Results show that talent management (TM) has a positive impact on human capital sustainability (HCS) and strategic agility (SA) moderate linking between talent management (TM) and human capital sustainability (HCS). which includes ingenious solutions in creative ways by exploring and exploiting those talents and formulating and analyzing the nature of those talents to reach ingenious solutions from perspective of strategic agility as a moderator variable which consisting of: (decision-making agility, sensing agility and acting agility).

Keywords: strategic agility, organizational ambidexterity, talents management, human capital, sustainability, leadership unity, strategic sensitivity, Organizational excellence, Employability, work engagement, employees' attitudes, bibliometric analysis.

Introduction

Pharmaceutical's manufacturing companies face many challenges like COVID-19 and complexities in the changing environment, such as human capital sustainability (HCS), talents management (TM), organizational ambidexterity (OA), and strategic agility (SA), which express agility, flexibility, and balanced progress to respond to complex environmental variables. Thus, as a managerial philosophy, strategic agility is equilibrium tendency between hardness and softness. It is a model of smart simplicity in contemporary managerial thought. organizational ambidexterity and strategic agility require re-engineering and re-designing human resource systems, policies and practices to reach the efficiency of human resources, develop their skills and adopt their distinguished talents to achieve human capital sustainability (HCS) through (SHRM). strategic agility is the art of climbing the ladder of organizational

ambidexterity. It is the art of exploiting skills and talents and the ability to explore and manage those talents efficiently. Strategic agility can help to reach organizational ambidexterity. And organizational ambidexterity requires agility in exploration and exploitation. Therefore, the sustainability of human resources requires organizational ambidexterity and strategic agility in managing talents, exploring and exploiting skills, improving direction and knowledge in analyzing the environment, seizing opportunities, avoiding threats to human resources, enhancing strengths and treating weaknesses of human resources. Thus, organizational ambidexterity, talents management and strategic agility are all challenges based on managing human resource systems efficiently and effectively with the aim of achieving a positive, agile and clever direction in managing the leadership strategy to promote sustained development of human resources. This poses an important question: How do strategic agility affect organizational ambidexterity and enhance human capital sustainability (HCS)?

Literature Review

Strategic Agility

The strategic agility (SA) is the organization's rapid and innovative response in achieving the desired results from the development of its human resources, the extent of the organization's flexibility in dealing with the ever-changing and changing environment and its ability to respond quickly to meet the different needs, desires and expectations of its customers, make quick and effective decisions, and sustained changes that improve organizational performance. Focus on the idea of change, flexibility, dependence on information, creativity, awareness, focus on activities, successful response to changes, and efficiency. Strategic agility refers to how responsive, agile, and adaptable an organization is in carrying out tasks and operations in order to achieve goals at the lowest cost, with the most efficiency, and with the most creativity (e.g., Clauss et al., 2021; Lu & Ramamurthy, 2011). Organizational Agility consists of three dimensions: Sensing Agility (Awareness): refers to an organization's ability to predict variables and occurrences ahead of time, as well as examine, discover opportunities and threats, evaluate, and control events and changes in the surrounding environment in real time, before they happen (e.g., Ojha, 2008; Nibedita et al., 2017; Dutton & Duncan, 1987; Overby et al., 2006; Phuong et al., 2012). Decision-making Agility (Responsiveness): refers to the organization's ability to collect, analyze and store information, restructure resources, systems and action plans, develop new innovative develop new competitive procedures for resources, as well as new competitive methods for identifying and seizing chances and avoiding the impact of threats on the organization's existence. (e.g., Nibedita et al., 2017; Ojha, 2008). Acting Agility/Practicing (Promptness): a set of purposeful and necessary activities to collect, exploit, modify and redistribute organizational resources and re-engineer operations in accordance with work principles as a result of the organizational structure's re-design and the agility of decision-making and organizational resources to address the surrounding environmental variables (e.g., Nibedita et al., 2017; Dutton & Duncan, 1987; Ojha, 2008). Strategic Agility (SA): the ability of organizations to operate profitably in a competitive environment. And consists of three dimensions: (1) Strategic Sensitivity (SS)-(Awareness): the ability of perception, the sensing of awareness, and the intensity of focus on strategic scenarios as they emerge, identifying opportunities and threats (e.g., Doz, 2020; Debellis et al, 2021; Doz & Kosonen, 2010; Mavengere, 2013; Santala, 2009). (2) Leadership Unity (LU) (Responsiveness): Collective Commitment (CC): Decision-making Agility: The ability "meta-capability" of the top team and the organizational leadership to make and implement bold joint strategic decisions fast, Acting Agility (AA)-(Promptness) to carry out implementation with vigor and to avoid getting caught down in "win-lose" politics (e.g., Doz, 2020; Doz & Kosonen, 2010; Mavengere, 2013). (3) Resource Fluidity (RF): (Promptness and efficiently):

Redeploying Resources (RR)-redeploying resources rapidly and efficiently toward new growth opportunities (e.g., Doz, 2020; Mavengere, 2013).

Organizational Ambidexterity

Organizational excellence which refers to (Organizational ambidexterity, Organizational ingenuity or organizational prowess). Organizational (ambidexterity – ingenuity – prowess) which means organization's ability to excel in exploiting available skills and competencies and seizing available opportunities in addition to exploring new skills, competencies and opportunities. Organizational ambidexterity the Latin word *ambos*, which means both or both express the power of utilizing two hands or a person who is able to use both hands simultaneously with the same proficiency, is where the phrase ambidexterity originates. The Oxford Dictionary also uses the term "ambidextrous" to refer to the ability to utilize both hands equally. which focus on studying Organizational ambidexterity for its direct role in achieving balance between exploring and exploiting opportunities. which refers to the balance between the two dimensions: exploring opportunities (talents) and exploiting opportunities (talents) in Work (Latukha et al., 2022; He & Wong, 2004; Menguc & Auh, 2008; Kadim et al., 2021). Thus, it is the ability of leaders and work teams to use skills, achieve innovations and continue learning by exploiting available resources and discovering skills that achieve competitive excellence through integrated work teams. Moreover, it is the organization's ability to exploit current skills, capabilities and opportunities, in addition to searching for new skills, capabilities and opportunities, which means that ingenuity aims to improve and exploit existing skills in addition to exploring new innovative skills, processes and opportunities (e.g., Taylor & Helfat, 2009; Andriopoulos & Lewis, 2010; Li & Huang, 2012). Organizational ambidexterity includes two main aspects: Exploitation: exploiting current skills, talents and opportunities. Exploration: exploring new skills, talents, and opportunities (e.g., He & Wong, 2004; Bodwell & Chermack, 2010; Bodwell, 2011; Hahn et al., 2015; Chermack et al., 2010). Organizational excellence has truly been attained by some organizations which have a successful equilibrium in both exploiting the present and exploring the future, these "ambidextrous organizations," have identified as cross-functional teams as the secret to generating novel breakthroughs, a majority of ambidextrous organizations-more than 90% achieved their goals and have organizational and managerial innovations (e.g., O'Reilly & Tushman, 2004; 2013).

Talents Management

Talent is the combination of skills, experience, attitudes, habits, culture, and knowledge needed to carry out a specific work successfully. A talented person: is a knowledge worker who possesses many skills, attributes, real abilities, knowledge, experience, attitudes, ability to learn, culture, technology and operational flexibility. Talent management: is an organized and planned effort through a set of wise and effective practices in recruiting, retaining, developing and motivating highly skilled talents to benefit from their talents and skills in light of the available resources and in light of the surrounding variables to achieve the planned goals and achieve competitive success. Therefore, talent management is systemic, comprehensive and organized approach to the optimal use of human capital by providing a package of policies that achieve the desired goals. Thus, it is to attract and select the best talents from human resources that possess a distinct intellectual and cognitive power, and then employ them, empower them, retain them, train them, develop them, evaluate their performance, and motivate them to achieve organizational goals through effective and efficient performance. Talents management helps in the lack of job turnover, reduce costs and manage human resource needs by attracting distinguished talents, and thus the ability to succeed and competitive excellence. Talents management was emerged to eliminate the old belief about the bubble theory. (e.g., Beechler

& Woodward, 2009; Noe et al., 2016; O'Bryan & Casey, 2017; Brewster & Sharma, 2017; Borisova et al., 2017). Talents management has three dimensions: (1) Talent's recruitment (Latukha et al., 2022; Glenn, 2012; Krishnan, 2015), (2) Talent's development (e.g., Gennaoui & Kretschmer, 1996; Davies Brent, & Davies Barbara, 2010; Engelbrecht et al., 2001), (3) Talent's retention (e.g., Horvathova, 2011; Evans & Chun, 2012; Khilji et al., 2015), under the umbrella of motivation (Bersin, 2006; Armstrong & Stephens, 2007).

Human Capital Sustainability

human capital sustainability (HCS) is defined as expanding the capacity and willingness of people to work today and in the future (Van Dam et al., 2016). This pertains to their training, expertise, health, as well as additional values like drive and loyalty (Kenton, 2019). Employability refers to a person's capacity to do tasks successfully in present and future positions, both inside and outside of their current organization (e.g., Berntson et al., 2006; Fugate et al., 2004; Van Dam, 2004; 2016). Work engagement is a positive, satisfied mental condition that is related with energy, commitment, and engagement (Bakker & Demerouti, 2007). Employee attitudes can be defined as organizational commitment as the degree of an employee's engagement with, involvement with, and engagement to an organization (Tooranloo et al., 2017; Mowday et al., 1979), Organizational commitment was classified into three categories: affective commitment (i.e., the emotional bond employees have formed with the company), continuity commitment (i.e., employees' attachment as a result of the investment opportunities and expenses involved with leaving the organization), and normative commitment (i.e., employees' perceptions of being morally obliged to stay with the organization) (Mowday et al., 1979; Allen & Meyer, 1990). Human capital sustainability (HCS) included three dimensions: **Employability- (sustainable employment, employee knowledge, competencies and skills development)**: (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**: (enhancing participation, strategic contribution, security and job stability, employees' satisfaction, minded flexibility, organizational effectiveness, fairness of incentives, team work skills, empowerment, psychological contract, self-management, employees' creativity). **Employees Attitudes**: (organizational commitment, affective commitment, discipline, non-absence, low turnover, belonging, loyalty, organizational citizenship behaviors, social responsibility, ethical attitudes, servant attitudes, mindful attitudes, emotional intelligence, self-managed teams).

Research Problem

Multi-Pharmaceutical's manufacturing companies face serious competitive challenges such as COVID-19 and represented in the orientation towards human capital sustainability which requires reshaping opportunities and risks, many multi-Pharmaceutical's manufacturing companies suffer from a weakness in the organizational ambidexterity represented in the inability to exploitation opportunities, the talents and exploration opportunities, skills of the employees. which means not employing the capabilities and talents of employee's appropriate recruitment. as a result, the skills and talents are not being used properly. multi-Pharmaceutical's manufacturing companies also suffer from stagnation, lack of flexibility, a lack of sensing agility to variables, a lack of flexibility in decision-making agility, and a lack of acting agility, which means a Lack of genius solutions and a lack of strategic agility. All of this is negatively reflected on the sustainability of human resources in multi-Pharmaceutical's manufacturing companies. Through Bibliometric analysis-exporting data from Web of Science

database (WOSD) into VOS-Viewer, it becomes clear how important the research problem is, the novelty of the research topic, and the novelty of the four variables under study, within the limits of the researcher’s knowledge. Before, there is only one research linking talent management and organizational agility (Latukha et al., 2022) and only one research linking Organizational ambidexterity and strategic agility (Clauss et al., 2021), shows in (Fig.1; Fig.2; Fig.3; Fig.4) as follows:

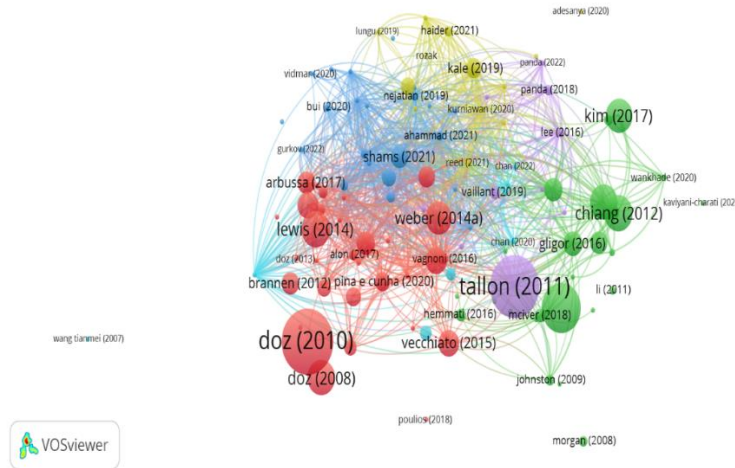


Fig. 1. Bibliometric analysis VOS viewer Strategic Agility (SA).

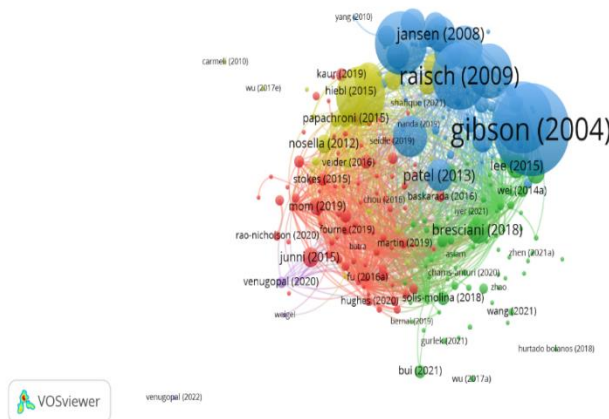


Fig. 2. Bibliometric analysis VOS viewer Organizational Ambidexterity (OA).

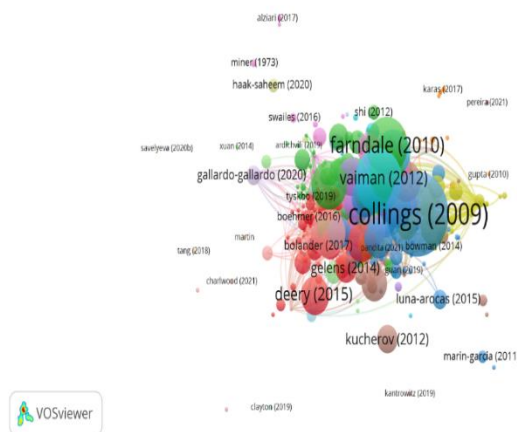


Fig. 3. Bibliometric analysis VOS viewer Talents Managements (TM).

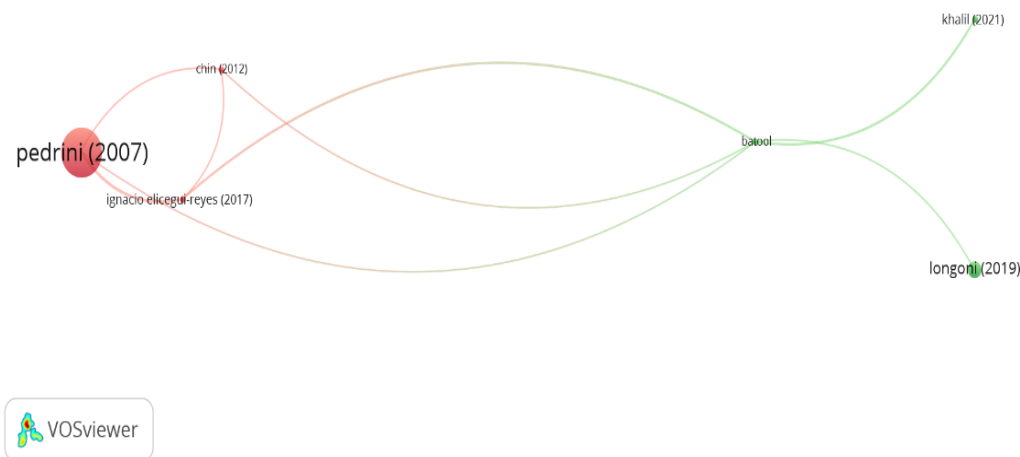


Fig. 4. Bibliometric analysis VOS viewer Human Capital Sustainability (HCS).

Formulating a Research Framework and Hypotheses

A research methodology was designed based on previous related literature evaluations to investigate the effect of strategic agility and talents management on organizational ambidexterity and human resource sustainability. (Fig.5). depicts the suggested research structure model.

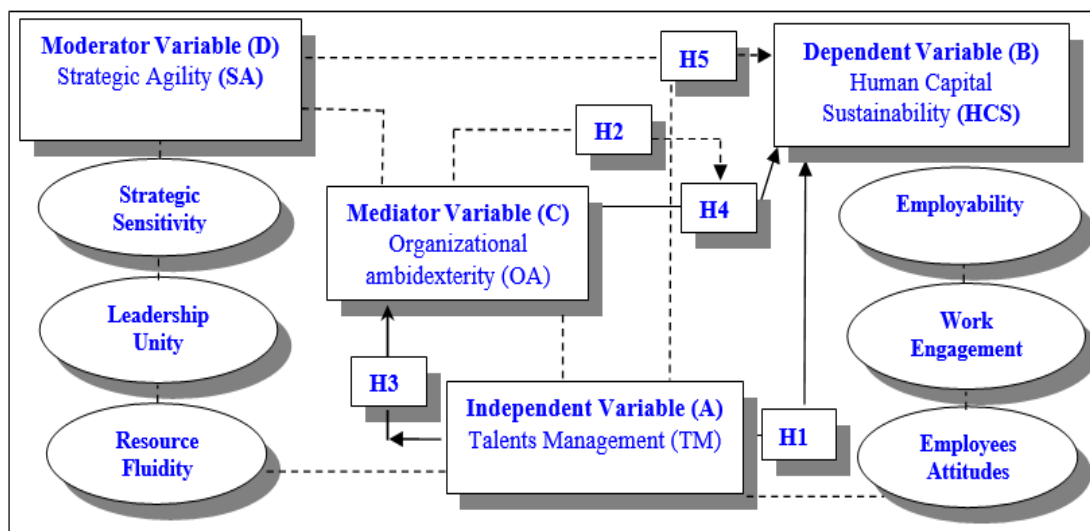


Fig. 5 Proposed Research Framework

The following five hypotheses were developed in order to examine how the four research variables—strategic agility (SA), organizational ambidexterity (OA), and talents management (TM)-affect human capital sustainability (HCS):

- ▶ (H1): (TM) has a direct positive effect on (HCS).
- ▶ (H2): (TM) has an indirect and positive effect on (HCS) through (OA).
- ▶ (H3): (TM) has a direct positive effect on (OA).
- ▶ (H4): (OA) has a direct positive effect on (HCS).
- ▶ (H5): (SA) has moderated the relationship between (TM) and (HCS).

Research Methodology

Research Design

To examine the data and determine the impact and direct/indirect link between the study's variables and hypotheses (Byrne, 2016). Using the AMOS statistical program's quantitative analysis method and the Structure equation modeling (SEM) method, a questionnaire was developed to assess talents management (TM), organizational ambidexterity (OA), Strategic Agility (SA), and human capital sustainability (HCS).

Data Collection

To collect data, we relied on Questionnaire tool, as it an appropriate tool to measuring the opinions of the research population, The target population totally of (382) managers from Multinational Pharmaceuticals manufacturing companies in Egypt (EIPICO Pharmaceuticals, AMOUN Pharmaceuticals, Pfizer Pharmaceuticals, GlaxoSmithKline Pharmaceuticals, Sanofi Pharmaceuticals, NOVARTIS Pharmaceuticals), were surveyed and (43) subjects were rejected based on the completion of data. Overall, (339) responses were usable for the data analysis for a completion rate of 88.74% per cent.

Questionnaire Development

The survey was split into three sections: identifying details, demographic data on the respondents, and evaluations of the four research variables given below. To measure the TM (independent variable), using (a 21-item questionnaire) (7-point Likert scale) survey scale adoption of (Latukha, 2015; Latukha & Veselova, 2019; Tarique & Schuler, 2010; Prieto & Pilar Santana, 2012), and taking into consideration (a 24-item) questionnaire (5-point Likert) to measure (TM) scale was developed by (Oehley, 2007; 2013; Miiro et al., 2016; Annakis et al., 2014). which depends on three dimensions: (1) talent attraction (seven items, Cronbach alpha (α) = 0.898), (2) talent development (seven items, Cronbach alpha (α) = 0.896), (3) talent retention (seven items, Cronbach alpha (α) = 0.882). these three dimensions included and covers many others elements such as talents recruitment, selection, planned-specialized training, talents development, talents retention, talents empowerment and all of these dimensions are under the umbrella of talents motivation. The value of this measure's Cronbach's alpha totally was (α =0.892). Organizational ambidexterity (OA) is (mediator variable) that is considered as a two-dimensional variable based on a scale established by (He & Wong, 2004). The scale consists of (14 statements): The survey list's sentences (1–8) stand in for exploitation. The survey list's phrases (9–14) represent exploration. (He & Wong, 2004), and taking into consideration the (a 10-item with 7-point Likert scale) of (Latukha et al., 2022; Gibson & Birkinshaw, 2004), the Cronbach's alpha (α =0.89) for this measurement. Strategic agility (SA) is (a moderator variable) that is considered as a three-dimensional variable: questionnaire by (Al kurtany et al., 2020; Doz, 2020; Ojha, 2008) represented by the dimensions of strategic agility with (15) questions, this scale had a Cronbach's alpha (α =0.87) and taking into consideration the scale of strategic agility and its three dimensions from (Hock et al., 2016). Human Capital Sustainable (HCS)-(dependent variable) measured by three scales dimensions (a 42-item questionnaire), Employability (16-items), Work Engagement (12-items) and Employees Attitudes (14-items). Employability was measured with (Berntson et al., 2006), Work Engagement was measured using (Schaufeli & Bakker, 2004), Employees Attitudes was measured with five items of the Dutch translation (De Gilder et al.,1997) of (Meyer & Allen, 2001), Cronbach's alpha (α =0.94) for this measure.

Pre-test Analysis

To improve the quality of the data collection, the questionnaire was verified twice: (1) Four researchers examined the content validity of the questions, taking into account latent characteristics, to ascertain their relevance and validity. The Item-Objective Congruence-(IOC) index (Rovinelli & Hambleton, 1977) recommended (IOC)-values ranging from [0.67-1.00] for acceptable questions, according to (Turner & Carlson, 2003). (2) Cronbach's alpha (α), a measure of survey reliability, yielded scores for individual variables ranging from [0.7 to 0.902] (Cronbach, 1951).

Results

Analysis of Measurement Model

Structural equation modelling was used to conduct the (CFA) in order to evaluate the proposed model's overall data, fit and identify the overall correlations between these components (AMOS). We examined the structural model to evaluate our study hypotheses after evaluating the measurement model to determine the instrument's dependability, convergent validity, and discriminate validity using the two-step process suggested by (Anderson & Gerbing, 1988). The system's convergent and discriminate validity, as well as its validity and reliability, were assessed (CFA). The following concepts are included in the research framework that has been proposed: organizational ambidexterity, talents management, strategic agility, and human capital sustainability. The results of all structures (CR) are within the allowed range of 0.69, as shown in (Table.1). (Bagozzi & Yi, 1988). This suggests that the data's internal consistency is very high. Make the first test model, a second-order model. First, a second-order model should be developed and evaluated. The results of second order analysis were (Chi-square = 87.02; df = 46; CMIN/df = 1.844; GFI = 0.861); (RMSEA = 0.0497); (CFI = 0.893); and (NFI = 0.886). The suggested value was greater than all fit indices. This suggests that the model and the data fit each other well. The factor loadings are (BA= 0.795), (BS= 0.801), (PQ= 0.571), and (BL= 0.489). These results demonstrate that the four first-order effects (BA, BS, PQ, and BL), each of which was measured by four reflecting items, were introduced as causes by (BE). Another way to see the four elements was via the lens of (BE). The measurement model was further verified using convergent and discriminate validities. (Table.1) shows the AMOS output results for the measurement model's internal consistency, as determined by composite reliability (CR).

Table.1 Utilize factor analysis to validate the survey's instrument.

CFA Model	CR	AVE	CMIN/df	GFI	AGFI	CFI	TLI	NFI	RMSEA
			< 3	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	< 0.08
Strategic Sensitivity	0.871	0.581	2.701	0.972	0.930	0.998	0.991	0.996	0.000
Leadership Unity	0.894	0.712	1.668	0.954	0.912	0.961	0.935	0.920	0.036
Resource Fluidity	0.850	0.690	2.421	0.936	0.981	0.933	0.972	0.982	0.048
Exploration	0.793	0.589	2.428	0.977	0.920	0.909	0.940	0.987	0.062
Exploitation	0.899	0.767	0.930	0.931	0.983	0.958	0.963	0.944	0.059
Talents Recruitment	0.845	0.686	1.132	0.959	0.928	0.932	0.960	0.939	0.073
Talents Development	0.881	0.594	2.717	0.980	0.954	0.973	0.964	0.906	0.068
Talents Retention	0.809	0.671	0.989	0.968	0.927	0.957	0.938	0.930	0.030
Employability	0.774	0.775	2.011	0.919	0.973	0.981	0.952	0.949	0.079
Work Engagement	0.827	0.653	2.246	0.924	0.918	0.929	0.947	0.933	0.053
Employee Attitudes	0.830	0.748	2.568	0.945	0.936	0.971	0.890	0.898	0.038

Source: Prepared by the researcher based on the results of the statistical analysis program AMOS

First, factor loading, differentiated validity, and convergent validity are all acknowledged and beneficial for one index, according to (AVE) (e.g., Hair et al., 2010; Fornell & Larcker, 1981). if it is more than $> (0.5)$ but less than $< (0.7)$, When the (AVE) value is greater than > 0.5 and equal to or greater than $\geq (0.7)$, it should be higher than the normal cut-off of ≥ 0.50 . This principle accounts for the majority of the variation. The (AVE) is greater than \geq the range of (0.581 to 0.775), which is the maximum value allowed, demonstrating the validity of the survey instrument.

Table.2 The factor correlation coefficients and the squared root estimation of AVE

	SS	LU	RF	Explor.	Exploi.	T.Rec.	T.Dev.	T.Ret.	Emp.	WE	EA
SS	0.873										
LU	0.741	0.751									
RF	0.662	0.770	0.890								
Explor.	0.698	0.871	0.625	0.827							
Exploi.	0.523	0.699	0.608	0.598	0.799						
T.Rec.	0.826	0.787	0.617	0.643	0.720	0.825					
T.Dev.	0.711	0.665	0.770	0.781	0.824	0.601	0.762				
T.Ret.	0.690	0.594	0.801	0.509	0.861	0.618	0.810	0.846			
Emp.	0.711	0.707	0.604	0.656	0.544	0.727	0.794	0.882	0.778		
WE	0.674	0.672	0.598	0.588	0.780	0.809	0.607	0.754	0.640	0.801	
EA	0.809	0.533	0.693	0.629	0.583	0.622	0.662	0.699	0.718	0.753	0.834

Note: the diagonal values indicate the squared root estimate of AVE.

As a result, the (CFA model) satisfied the condition for discriminating validity, proving that the measurement scales are sufficient. For each item, the cross-loading on other factors was greater than $>$ the loading on the factor that was related to it. Therefore, a structural equation model (SEM) with implicit variables was tested using the CFA model. Finally, the observed variables' square multiple correlation (R^2) values were not greater than > 0.9 , indicating that multicollinearity was not a problem.

The Structural Path Model's Analysis

The structural models' route coefficients were calculated. To do a path analysis and test model hypotheses, AMOS was employed. When applying SEM, a sample size of approximately 200 instances or at least 5 or 10 cases per parameter is necessary, according to (Kline, 2015). This study had a sufficient sample size of 382 participants. depicts the outcome. (Table.3) shows the actual and recommended values of model fit indices. The study model's goodness-of-fit metrics were as follows: Chi-square = 281.45; df = 136; GFI = 0.923; CMIN/df = 2.384; NFI = 0.980; RMSEA = 0.0632; CFI = 0.948, as shown in the table. This demonstrated a good fit between the model and the data. In the constructs that are reliant, (Table.3) displays the hypotheses, t-values and path coefficients.

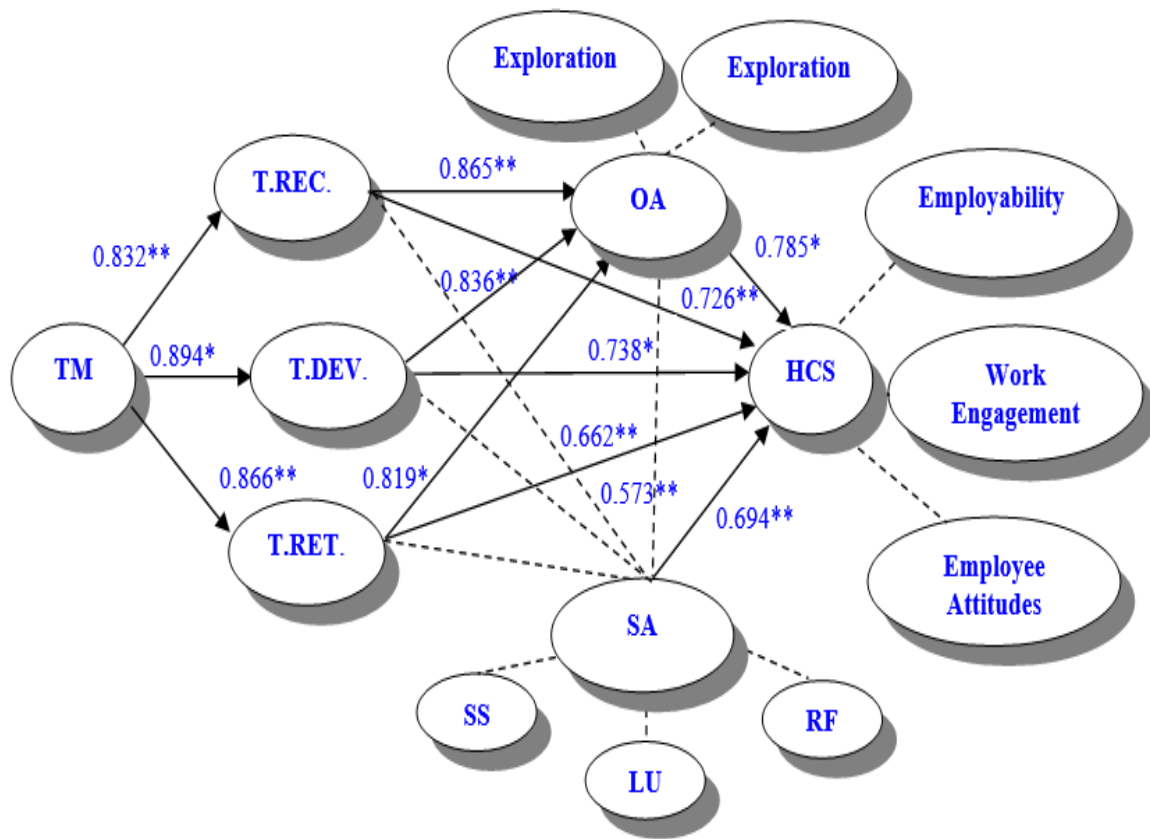


Figure 6. The structural model's findings

Notes: *p < 0.05; **p < 0.01; ***p < 0.001; Fit indices: Chi-square = 281.45; df = 136; GFI = 0.923; CMIN/df = 2.384; NFI = 0.980; RMSEA = 0.0632; CFI = 0.948.

Table. 3 Suggested and actual values for fit indices

Appropriate Indicator	CMIN/df	GFI/Path	NFI/Path	RMSEA	CFI/Path	P-value
Suggested Value	< 3.991	> 0.872	> 0.783	< 0.234	> 0.872	0.0 sig
Reality Value	2.429	0.897	0.971	0.0429	0.909	0.0 sig

Dependent Variables (DV)	Independent Variables (IV)					P-value
	R ²	TM	OA	SA	S. Es/Path	
OA	0.864	0.621	-	0.528	0.409	0.0 sig
SA	0.859	0.761	0.582	-	0.717	0.0 sig
HCS	0.827	0.610	0.633	0.511	0.674	0.0 sig

Hypotheses	β	t-value	Conclusion	P-value
H1: (TM) has a direct positive effect on (HCS).	0.894	17.676**	Approved	0.0 sig
H2: (TM) has an indirect and positive effect on (HCS) through (OA).	0.435	9.267**	Approved	0.0 sig
H3: (TM) has a direct positive effect on (OA).	0.828	17.311**	Approved	0.0 sig
H4: (OA) has a direct positive effect on (HCS).	0.572	9.887**	Approved	0.0 sig
H5: (SA) has moderated the relationship between (TM) and (HCS).	0.679	18.544**	Approved	0.0 sig

Organizational ambidexterity (OA), strategic agility (SA), and (HCS) variations were each squared multiple correlated with 0.864, 0.859, and 0.827, respectively, to explain their respective variations. The t-statistical value can be used to calculate each hypothesis' significance. As demonstrated, the model is capable of accurately predicting the majority of

the dependent variables. 82.7 percent of the variation in HCS is accounted for by the entire research model. Both the (TM and OA) exhibit a significant positive association with (HCS), according to the results of the path analysis ($b = 0.894$, $t\text{-value} = 17.676$ and $b = 0.572$, $t\text{-value} = 9.887$, $\text{sig} 0.001$ for the (TM to HCS) and (OA) to (HCS), respectively). H1 and H4 are therefore accepted. The findings also confirm the H3 hypothesis, which states that (TM) directly improves (OA) (H3: $b = 0.828$, $t\text{-value} = 17.311$, $\text{sig} 0.001$). Additionally, as previously shown in (Table.3)'s results of the direct, indirect, and total effect tests, the (TM) indirectly and favorably affects preparedness through (OA) (H2). So, (H2) is therefore accepted. Both (TM and OA) had effects totaling 0.610 and 0.633 on HCS, respectively. The results show that talent management (TM) indirectly and favorably influences (HCS via OA). Consequently, TM is one of the keys to raising (OA and overall HCS). Because of this, as previously shown in (Table.3) by the results of the direct, indirect, and total effect tests, Talents Management (TM) has a favorable indirect effect on (SA) through organizational ambidexterity (OA). (H5). therefore (H5) is accepted. Both (TM and SA) were impact by (0.671 and 0.582) on HCS, respectively. The results show that strategic agility (SA), a component of talent management (TM), has a positive indirect impact on (HCS). Therefore, is strategic agility (SA) one of the keys to moderate (TM) and human capital sustainability (HCS).

Discussion and Conclusion

As a result, this study looks at the connections between organizational ambidexterity, talent management, and the sustainability of human capital in multi-pharmaceuticals manufacturing sector in Egypt. The relationship between (TM and OA) has been the subject of past research, but the impact of strategic agility on the (OA and HCS) business platform has received far less attention. This study is one of the first to examine how strategic agility affects the sustainability of human capital, adding to the field of study. The outcomes demonstrate how well the (TM) has impacted the (OA) and (HCS) context. The results are consistent with previous field surveys (e.g., Latukha et al., 2022; Tarique & Schuler, 2010; Davies Brent, & Davies Barbara, 2010; Engelbrecht et al., 2001; Borisova et al., 2017; Glenn, 2012; O'Bryan & Casey, 2017; Noe et al., 2016). The results of this study also support the idea that SA and OA have a positive impact on TM and HCS in Egyptian multi-pharmaceuticals manufacturing workforce. Positive strategic agility helps staff at multi-pharmaceuticals manufacturing to talents exploration and talents exploitation. (TM) and HCS, whereas organizational ambidexterity enhances the impact of (TM on HCS). This necessitates raising strategic agility (strategic sensitivity, leadership unity and resource fluidity) with supporting the (OA) because of their clear impact on talents managements (TM) and HCS. Positive strategic agility helps staff in multi-pharmaceuticals manufacturing to managing talents and HCS, in addition to organizational ambidexterity (OA) (talents exploration & talents exploitation) were enhances human capital sustainability (HCS). This calls for raising strategic agility and enhancing the (OA) as a result of their effect on talents managements and HCS. the (TM) has directly positive impact on (HCS). The (OA) has directly positive impact on (HCS). The (TM) has directly positive impact on (OA). the (TM) an indirect and positive impact on (HCS) through (OA). the (SA) has moderate the relationship between (TM) and (HCS). the impact of (SA) on (HCS) is greater than the impact of (SA) on (OA), and the impact of (TM) is greater than the impact of (OA) on the (HCS).

Future Research Directions

The four variables adopted by the study (SA; OA; TM; HCS) are considered a fertile field for future research, especially in light of the scarcity of research and field studies that

linked the variables of the study as mentioned previously in the problem of the study, which provides an opportunity for researchers for many future research, especially the link between strategic agility (SA) or organizational agility (OA) and human capital sustainability (HCS) or the sustainability of human resources and applied in universities or airports or any other vital sectors.

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