

Impact of Self-Management Theory as an Epistemologically Approach and the Directing Methods: Pedagogy, Andragogy, Cybergogy, and Heutagogy on Meta-Human Resource Management (Meta-HRM)

Mohamed Nasr Saeed

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

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ABSTRACT: *Why do some managers fail to direct their subordinates correctly while some may succeed? Why subordinates may respond to the permanent-orientations and/or daily-directions while others do not? How learning approaches effect on managers' behavior and self-management theory? Are all these challenges considered meta-management? This research is empirical research which methodically providing an answer to these questions. The answer presenting in a diagnostic and an epistemologically analytical method about Antropogogy (Pedagogy to Andragogy) with Cybergogy directing and Heutagogy-Self-determined). The managers' failure in practicing the function of direction and the failure of subordinates to respond to permanent-orientations and/or daily-directions is due to the lack of awareness of self-management theory, adult personality theory, the deficiency in adopting Cybergogy-social media directing and anthropogogy (Andragogy and Heutagogy) self-directed based learning approaches, and the lack of awareness of what is Meta-HRM.*

KEYWORDS: anthropogogy, pedagogy-based directing, andragogy-self-directed, cybergogy-social media directing, heutagogy-self-determined, self-management theory, Meta-HRM, bibliometric analysis.

INTRODUCTION

Does the ideologies of human resource management-(HRM) change? Does this change transform and change the ideologies of meta-human resource management (Meta-HRM)? Is there a real and vital role for learning, and does adult-personality influence self-management theory? Does self-management theory and achieving societal goals for workers have a role in changing ideologies of Meta-HRM? So, the question that arises here is how managers will deal with these dynamic ideologies of learning approaches.

LITERATURE REVIEW

Pedagogical-based directing Approach

According to Pedagogy-based directing Approach, the manager is regarded as (the teacher) or (trainer), and his subordinates are (the learners) or (trainees). Just like a teaching process. And directing through the manager, such as the trainer or the teacher, who teaches his students a specific curriculum and adheres to the contents of this curriculum and the specific principles and

fundamentals of this curriculum (Freire 1972, Knowles, 1984; Hales, 1986; Hassard & Parker, 1994; Alexander, 2001, Mumford & Gold 2004; Little, et al. 2008; Vavrus & Bartlett, 2012).

Pedagogy-based directing approach is where the manager assumes the responsibility for decision-making, and/or decision-taking and directing and evaluation issues through a diagnostic, an-Epistemologically, educational-cultural approach that reinforce complete dependence on the manager who acts as the trainer or (the teacher). This approach only looks at the subordinates as trainees or non-adult students and they do not need independence (e.g., Freire, 1972; Knowles, 1984; Haiplik, 2002; Horn, et al., 2009; Ginsburg, 2010; and Kuchah & Smith, 2011).

Andragogical- self-directed approach

It is an epistemologically approach that support subordinate-adults to become (trainer) to learn as they tend toward self-direction. Andragogy is (Self-directed)-Single-loop learning Adult-subordinates are aware of the need for learning and training based on their practical experiences and their desire to apply knowledge, use their expertise and the expertise of others, and take responsibility for their choices and their capacity to be autonomous and self-directed through objectives based on mutual respect and reasonable practical knowledge that enables trainees (subordinates) to self-evaluate themselves, enabling them to solve problems and take objective decisions based on self-confidence and self-actualization. (e.g., Knowles, 1950, 1989; Tough, 1979; Pratt, 1984, 88, 93, Krajinc, 1998; Knowles, 2003; and Knowles, et al., 2014).

Heutagogical-based self-management theory

Heutagogical-based-(self-determined)-Double-loop learning concept as it is an advanced epistemologically approach based on self-management theory and integrated self-direction related to epistemologically-effectively and efficiency. It is a meta-epistemologically approach. It is differentiated from the Heutagogical depends on increasing the subjective capacity for systematic-conceptual, self-reflection, and the development of self-epistemologically-ability. it increases their ability to fully empower, to be able to bear the result of their decisions and lead themselves effectively and proactive process it also satisfies their needs to make-and/ take-decisions and solve problems in a dynamic and rapidly changing environment (e.g., Stephenson, 1994; Schon & Argyris, 1996; Hase & Kenyon, 2000; 2007 Hase, 2009; Bhoryrub, et al., 2010; Canning, 2010; Canning & Callan, 2010). Heutagogy-based Self-determined is a double-loop learning program concentrating on self-determined and epistemological competencies and capabilities, outcome-based role of the subordinates. It helps them to acquire knowledge to develop intellectual and mental skills based on effective, and personal experiences, self-efficacy and self-determined. In addition, it is a proactive epistemologically response to critical issues in the dynamic work environment that changes the ideology of work behaviors and the HR-oriented towards self-management theory (e.g., Argyris & Schon, 1978; Cairns, 2000; Bangura, 2005; Ashton & Newman, 2006; Gardner, et al., 2007; Bhoryrub, et al., 2010; Jazeel & Saravanakumar, 2013).

Cybergogical-based social media directing approach

Cybergogy is based on e-Content-practices the base of e-Learning and encourage learning engagement through the online environment, There is no doubt that the philosophy of human resources is currently linked to the (ideological-technological) technological part, as the manager now communicates with his subordinates through social media, and at the same time, the

subordinates manage themselves because of the speed of success of these technologies by relying on (ideological-technological) practices-collaborative-learning. And the achievement and the wide scope to cover the largest number of subordinates at one time and reduce costs and presence all day long, which saves time and effort and maintains the guarantee of reaching the meaning and the message and meets the needs and aspirations of everyone as a manager and subordinate because it allows time for thinking and response, which creates opportunities to make better decisions, which reduces conflicts and increases chances of organizational' Internal Peace among individuals and reducing conflicts. The existence of organizational' Internal Peace would increase emotional balance, reduce emotional stress, and give an opportunity for learning and training, which provides opportunities for self-management (e.g., Carrier & Moulds, 2003; Hofstede, 2004; Wang & Kang, 2005; 2006; Wang, 2008).

Anthropogogy (Pedagogy and Andragogy) as an epistemologically approach of meta-HRM

A philosophical approach to creative thinking for the ideology of meta-management (MM) based on involvement and Double-loop learning, in addition to focusing on a deep realization of the importance of ideological factors that include the internal and external behavioral and social aspects, whether societal or organizational, of meta-(HRM). Focusing on the epistemologically and technological aspect (ideology of technological-epistemologically) and focusing on the (intellectual-perceptual) aspects of the societal aspects of the subordinates and viewing them as members of an open-society (e.g., Minsky, 1987; Van Gigch, 1991; Dennett, 1996; Karapetrovic & Willborn, 1998; Holdsworth, 2003; Foley, 2005). The ideology of learning techniques contributes to shift the ideological map of meta-management (MM) and to contribute to the use of values-prevailing human capital in an open society and to analyze quality improvement effectively, (sustainability-intellectual-epistemological) philosophy, which provides learning and innovative thinking opportunities for the ideology of meta management (e.g., Oskarsson & Malmborg, 2005; Karapetrovic, 2008; Sloman, 2010; Omara, 2016).

Research problem

Empirical study aimed (35) managers in various administrative units in different city councils of the Sharqia Governorate geographical areas. the study presented some questions have been formulated that help to crystallize this effect as follows: Do their followers respond positively / negatively to permanent-orientations and job-instructions? Do their subordinates want to learn and training? Do their subordinates tend to be involvement and self-directing? Would their subordinates welcome be linking daily-directions Permanent-Orientations through social media? How many subordinates have enough confidence to manage themselves? The results of the interviews and the exploratory study was summarized in statistician's results shows in (Table.1) as follows:

Table 1 - Identify the research problem in actuality.

Types of Responding	Sub-dimes. Of directing	No. of int.	The responding for Communicating by Permanent-Orientations					Weighted average	The responding for Communicating by Daily-directions					Weighted average	G. Weighted average	Mean	Standard deviation				
			Positive ly responding		Partial respond ing (positiv ely/neg atively)		Negativ ely respond ing		Positive ly respond ing		Partial respond ing (positiv ely/neg atively)		Negativ ely respond ing								
Instructing		35	5	14 %	3	9%	2	77 %	7	3	3	9%	5	14 %	2	77 %	7	2.7	2.7	3	.078
Motivating			7	20 %	2	6%	2	74 %	6	2	2	6%	4	11 %	2	83 %	9	2.8	2.8	6	.081
Leadership			5	14 %	5	14 %	2	72 %	5	4	4	11 %	6	17 %	2	72 %	5	2.7	2.7	7	.079
Communicati ng			3	9%	7	20 %	2	71 %	4	5	5	14 %	2	6%	2	80 %	8	2.6	2.6	8	.088
Discipline			6	17 %	8	23 %	2	60 %	1	1	3	3%	2	6%	3	91 %	2	2.7	2.7	1	.076
Overall average			5	14 %	5	15 %	2	71 %	5	4	4	10 %	4	10 %	2	81 %	8	2.7	2.7	6	.081

(Table.1) offers that the minimum value of frequencies is (21 and 25) in order for interviewed managers about their subordinates and the negatively responding to permanent-orientations and every day-directions, which is equal to (60% and 72%) which both > the equivalent comparison of permanent-orientations and daily-directions values, which reflects a real problem in responding to permanent-orientations and/or daily-directions with the lower value of discipline positively and partially responding to permanent-orientations is (6 and 8) equal (17% and 23%) in order, while the lower value of discipline positively and partially responding to daily-directions is (1 and 2) equal (3% and 6%) in order. As shown from (Fig.1) shows the bibliographic analysis (e.g., Vallaster, et al., 2019; Mulet, et al., 2019), bibliography data and the Web of Science (WoS) and linking between (Pedagogy-Andragogy) from 1900 up to 2021, it is clear that there is a research gap through the absence of studies linking the four variables (Pedagogy-Andragogy, Cybergogy and Heutagogy).

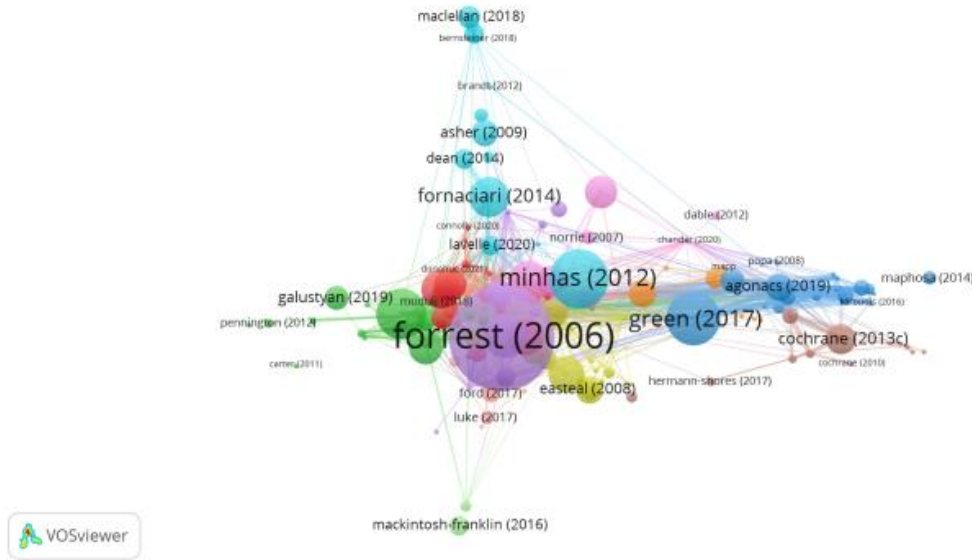


Fig. 1 - Bibliographic coupling map linking between Anthropology (Pedagogy and Andragogy). Source: VOSviewer.

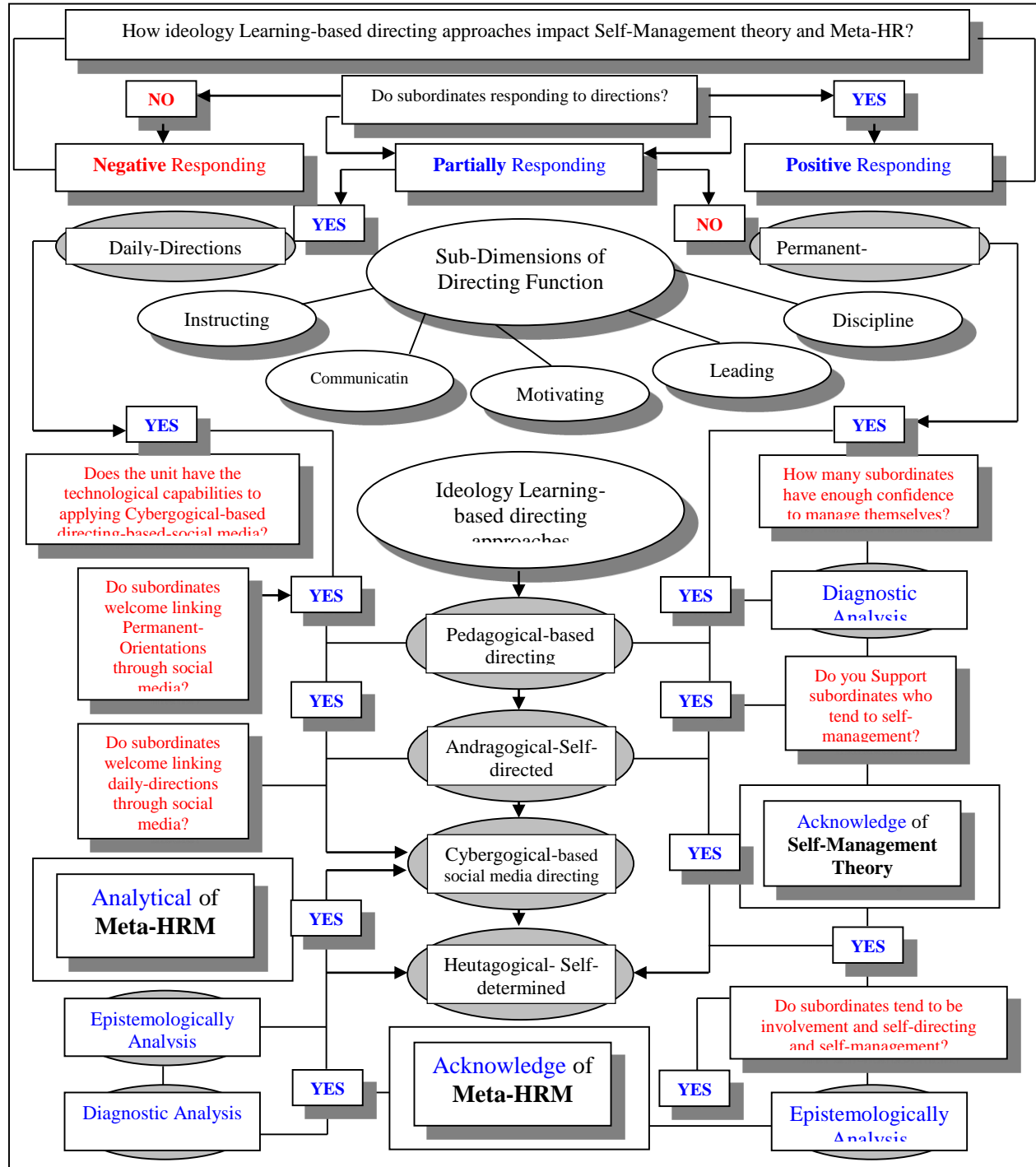
Research Objectives

Here, in light of the literature related to the conceptual framework and the problem, the research aims at the following:

- ▶ Presenting a conceptual theoretical framework for the five dimensions of the study (Pedagogy, Andragogy Cybergogy and Heutagogy)-based directing, Self-Management theory.
- ▶ Ensure that the problem exists in reality through an exploratory study of local councils in Sharqia Governorate.
- ▶ Examine the potential role of mediation and moderation of the mediating variable (Heutagogy-based directing) and the moderate variable (Cybergogy-based directing).
- ▶ Interrelationship test and factor analysis of the five study variables (Pedagogical, Andragogical, Cybergogical and Heutagogical)-based directing, Self-Management theory.

Research Conceptual Framework

Study the conceptual framework examining and analyzing the epistemologically role and the analytical diagnosis of the ideology of the way of thinking related to human resources. Will the use of this philosophy help to change self-management principles, As shown in the following (Fig.2).

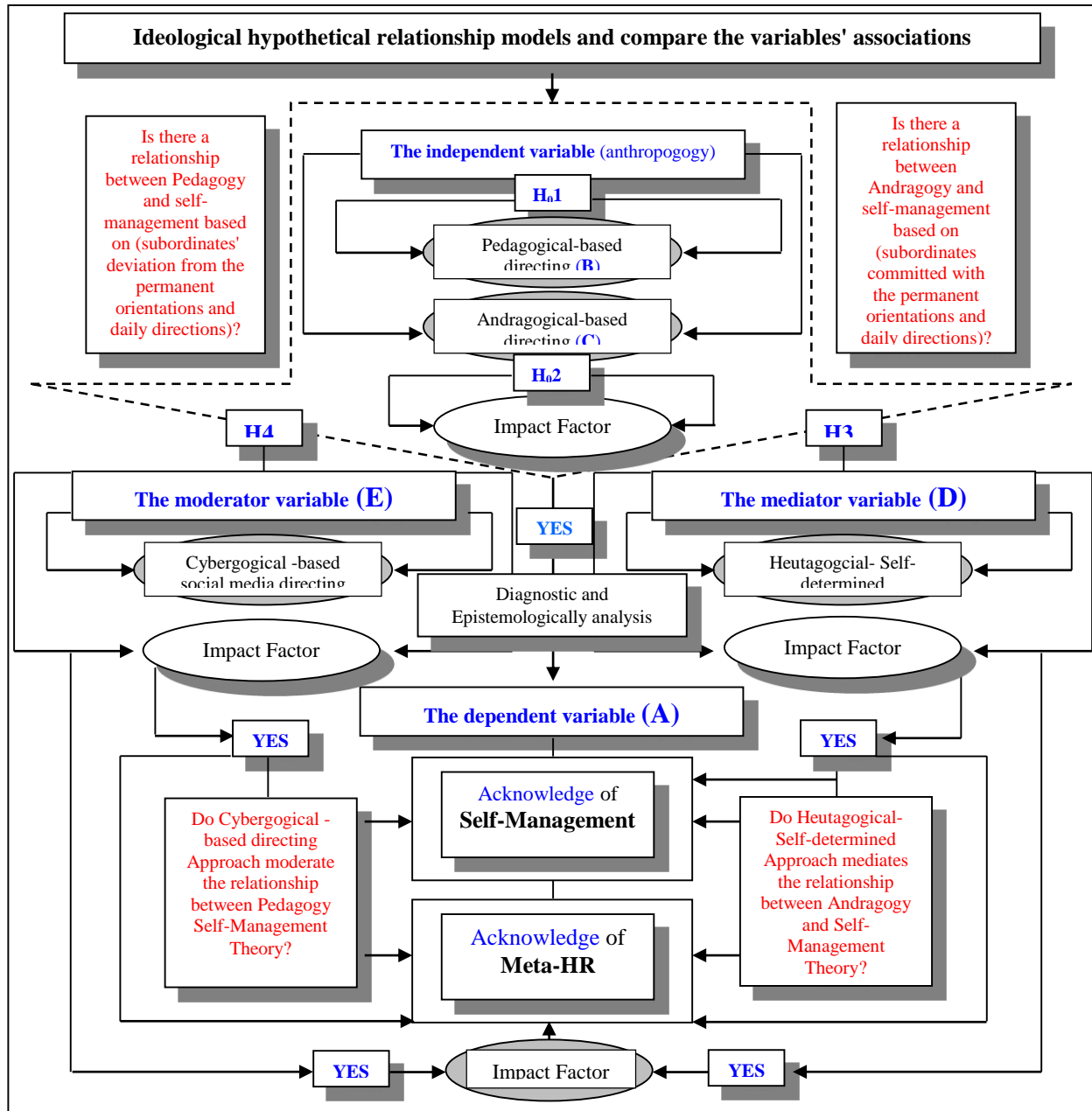


Source: Firstly, prepared for the study's goal.

Fig. 2 -Ideology Learning-based directing approaches impact Self-Management theory and Meta-HR

Research Theo-Hypothetical Model

As shown here in (Fig.3) this part focuses on presenting the potential hypothetical model for research, including the effect of independent search variables on dependent variables, and the effect and overlap of intermediate and modified variables on the relationship.



Source: firstly, prepared for the research Fig. 3 -Research potential hypothetical relationships model and overlap the relationship between variables.

Research Hypotheses

- ▶ There is no statistically indicative significant relationship between; on the one hand, Pedagogical-based directing and self-management-based on (subordinates' deviation from the permanent orientations), and on the other hand, Pedagogical-based directing and self-management-based on (subordinates' deviation from the daily-directions). (H01)
- ▶ There is no statistically indicative significant relationship between; on the one hand, Andragogical-Self-directed and subordinates committed with the (permanent orientations), and on the other hand, Andragogical-Self-directed and subordinates committed with the (daily-directions). (H02)
- ▶ Heutagogical- Self-determined Approach mediates the relationship between; on the one hand, Andragogical-based directed and self-management-based on (subordinates committed with the permanent orientations), and on the other hand, Andragogical-Self-directed and self-management-based on (subordinates committed with the daily-directions). (H3)
- ▶ Cybergogical-based social media directing Approach moderates the relationship between; on the one hand, Pedagogical-based directing and subordinates committed with (the permanent orientations), and on the other hand, Pedagogical-based directing and subordinates committed with (the daily-directions). (H4)

Population and sample

The target population totally were (364) manager of the local-councils in the top and middle levels who work in municipal councils across the Sharqia Governorate's ten cities. Due to the possibility of reaching to the target research population specifically with names, addresses and positions, the Complete Census method was used to gives complete data and accurate results better than relying on a small sample.

Reliability and validity

The researcher reviews in the following table (Table.2) the reliability (Alpha) and Validity as follows:

Table 2 - Reliability and validity f or the study variables.

Variables	Pedagogy	Andragogy	Cybergogy	Heutagogy	Self-management	Lack of meta-M.
Reliability (Alpha)	.842	.871	.753	.886	.827	.839
Validity	.917	.933	.867	.941	.909	.915

Source: Based upon SPSS analysis

(Table.2), which offers that the maximum value of (Alpha) is (.886), which is related to the third variable (Heutagogy), while the smallest value of (Alpha) is (.753) which linked to Cybergogy-based social media directing. On the other hand, the value of (Validity) is (.941) and

(.867) for the tow variables in order. furthermore, all (Alpha)-rate values for all the variables are great than > (75%) by (0.092; 0.121; 0.003; 0.136; 0.077; and 0.089) in order. The (Alpha)-values (validity and reliability) are adequate for testing study's variable, the real problem and the hypotheses.

Research Field Study

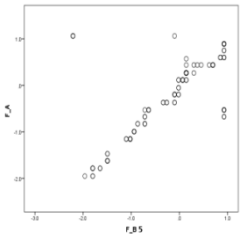
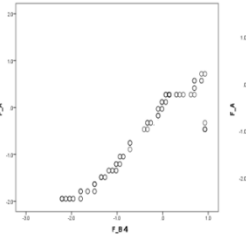
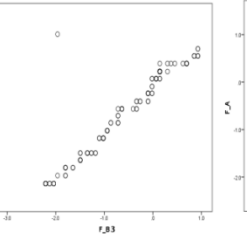
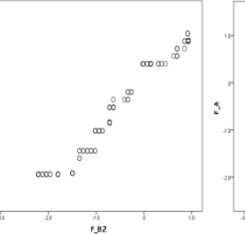
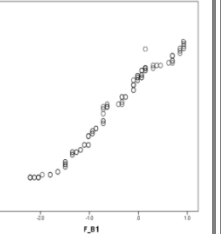
Testing hypothesis (H01):

To test that the null hypothesis (H01) is correct/incorrect or there is an important link between Pedagogy and self-management (subordinates' deviation from permanent orientations) in one hand, and (subordinates' deviation daily-directions) on the other hand, and given that there are five sub-dimensions of directing ten sub-dimensions of pedagogy it results five Ten-lined schedules 10 sub-dimensions of variable (Pedagogical-based directing) for each of the five sub-dimensions of orientation. The researcher chooses to epitomize these five tables in only one five-lined table presenting the relationship between Pedagogy-based directing and self-management-based self-directed What it meant (the deviation of subordinates from permanent orientations and daily directions) as shown in the following (Table.3):

Table 3-The Relationship between IV-(B)-Pedagogy and DV-(A)-Self-Management with Five function-indicating Graphs.

Code of Variable	Examining hypothesis with analytical statistics												The Kruskal-Wallis test a for managers' perception of Pedagogy and self-Management					
	The significance of relationship						The denotation of relationship											
	Pearson (Chi) ²		Likelihood Ratio (Chi) ²		Linear by Linear (Chi) ²		β	F		T		R	R ₂	Kruskal-Wallis Ratio (Chi) ²				
	Cal.(v)	Si g.(P)	Cal.(v)	Si g.(P)	Cal.(v)	Si g.(P)	Re g.C o.(β)	Ca l.(F)	Si g.(P)	Ca l.(T)	Si g.(P)	R C o.	C o. R ₂	W. ave rag e	Std . Div .	(C hi) ²	P. Val ue	Si g.
FB1 & FA	41	0.0	35	0.0	14	0.0	0.08	12	0.0	3	0.0	0.09	0.08	3.01	.271	26.17	0.001	Si g.
FB2 & FA	32	0.0	30	0.0	18	0.0	0.078	15	0.0	3	0.0	0.098	0.084	3.35	.281	29.18	0.002	Si g.

FB3 & FA	39 1.3 6	0. 0 0	32 9.0 1	0. 0 0	19 6.0 5	0. 0 0	0. 8 3	23 11 .8	0. 0 0	3 8 6	0. 0 0	0. 9 4	0. 8 8	3.2 0	.24 6	31. 09	0.0 05	Si g.
FB4 & FA	31 0.5 8	0. 0 0	29 9.3 4	0. 0 0	17 9.4 4	0. 0 0	0. 8 5	24 35 .6	0. 0 0	3 6 9	0. 0 0	0. 9 5	0. 9 0	3.0 6	.20 9	32. 11	0.0 04	Si g.
FB5 & FA	30 7.0 9	0. 0 0	40 3.3 8	0. 0 0	18 5.1 1	0. 0 0	0. 8 9	18 65 .6	0. 0 0	3 5 4	0. 0 0	0. 9 1	0. 8 2	3.8 2	.19 6	32. 75	0.0 01	Si g.

Source: the field study

(Table.3) offers the results of statistical analysis which shows that the greatest value of weighted average among managers' perception of Pedagogy and subordinates' deviation from the permanent orientations and daily-directions are (3.82) > the cell ranks 3 by (0.82) and standard deviation (.196). at sig. (.001). while, the least value of weighted average is (3.01) > cell rank 3 by (.01) at sig. level (1%). While, the average value of $(X^2)-(Chi)^2=(30.26)$ at a sig. level less than 1%, for Kruskal-Wallis which checking the significant differences between the managers' opinions about pedagogy and self-management (subordinates' deviation from the permanent orientations). while, the lowest value of Pearson (PCC)- $(X^2)-(Chi)^2=(307.09)$ and likelihood-ratio test $(Chi)^2=(299.34)$ which both > the paralleled values (26.54), (31.18) in order, and sig. at level of sig.=(5%) i.e. degree of confidence= (95%) at (df)=(16). While, the least value of liner by liner $(X^2)-(Chi)^2 = (146.80)$ > its paralleled values (25.36) at sig. = (5%) and (df)=(16). Moreover, test relation type through the lowest value of (F-test) = (1276.8) and (T-test) = (31.2) and both > their paralleled values (287.05 & 1.94) and the sig. (P) was (0.0) for each, and (df)= (1,377 & 369). direction of relation appears through ranking of (β) values between (-0.78) up to (-0.89), it means a direct (negative) relation between Pedagogical-based directing and self-management (subordinates' deviation from permanent orientations). At the same time, the minimum value is equal to that of the (R)=(0.90) and (R²)=(0.81) which means (Pedagogy) explains 81% of the changing in self-management (Subordinates' deviation from permanent orientations and daily-directions). The former of the relationship between pedagogy and self-management-(subordinates' deviation); F (B1/1-1/5), F (B2/1-2/5), F (B3/1-3/5), F (B4/1-4/5) and F (B5/1-5/5) were represented by five different types of factor analysis, however the final was represented by only one type of factor analysis; F (B5/1-5/5) (B1-B10). simple regression analysis was confirming results in each case as shown by the (5) graphs showed in (Table.3) to explain that In all of the examined correlations, the dots appeared to indicate that the two variables on the semi-straight line were more than (82

percent). So, as a result of that, the null sub-hypotheses (H_{01}) was rejected to accept alternatively the reverse hypothesis which demonstrate the existence of a statistically significant association between; on the one hand, Pedagogical-based directing and self-management-based upon (subordinates' deviation-the permanent orientations), and (subordinates' deviation-the daily-directions) on the other hand.

Testing hypothesis (H_{02})

(Table.4) displays results of statistical analysis which offers that the largest value of weighted average among managers' perception of Andragogy-self-directed and subordinates committed with the (permanent orientations), and subordinates committed with the (daily-directions) are (4.15) > the cell rank 3 by (1.15) and standard deviation (.286). at sig. (.005). while, the lowest value of w. average is (3.28) > cell rank 3 by (.28) at sig. level (1%). While, the average value of (X^2)-(Chi)²=(25.94) at a sig. level less than 1%, for Kruskal-Wallis which testing the sig. differences between the managers' perception about Andragogy and subordinates' committed-permanent orientations and daily-directions).

Table 4- Relationship between IV-(C)-Andragogy and DV-(A)-Self-Management with Five function-indicating Graphs.

Code of Variable	Examining hypothesis with analytical statistics												The Kruskal-Wallis test a for managers' perception of Andragogy and subordinates committed				
	The significance of relationship						The denotation of relationship										
	Pearson (Chi) ²	Likelihood Ratio (Chi) ²	Linear by Linear (Chi) ²	β	F	T	R	R ²	Kruskal-Wallis Ratio (Chi) ²								
Cal.(v)	Si g. (P)	Cal.(v)	Si g. (P)	Cal.(v)	Si g. (P)	Re g. Co. (β)	Cal. (F)	Si g. (P)	Cal. (T)	Si g. (P)	R Co.	Co. R ²	W. average	Std. Div.	(Chi) ²	P. Value	Si g.
FC1 & FA	36.1	0.00	32.8	0.00	16.9	0.00	0.087	14.32	0.00	2.09	0.00	0.098	3.28	.248	26.12	0.00	Si g.
FC2 & FA	32.0	0.00	37.1	0.00	19.0	0.00	0.092	15.11	0.00	3.07	0.00	0.098	3.67	.239	27.10	0.00	Si g.
FC3 & FA	39.2	0.00	30.1	0.00	18.6	0.00	0.091	20.16	0.00	3.08	0.00	0.099	4.15	.286	29.13	0.00	Si g.

FC4	31	0.	35	0.	19	0.	0.	23	0.	3	0.	0.	0.	4.0	.22	23.	0.0	<i>Si</i>
&	5.6	0	9.8	0	7.4	0	9	17	0	4.	0	9	9	9	9	21	00	<i>g.</i>
FA	6	0	2	0	6	0	5	.8	0	9	0	5	0					
FC5	38	0.	37	0.	18	0.	0.	19	0.	3	0.	0.	0.	3.9	.19	24.	0.0	<i>Si</i>
&	7.0	0	8.3	0	9.8	0	9	23	0	6.	0	9	9	2	0	16	00	<i>g.</i>
FA	7	0	3	0	1	0	4	.7	0	5	0	6	0					

Source: the empirical study

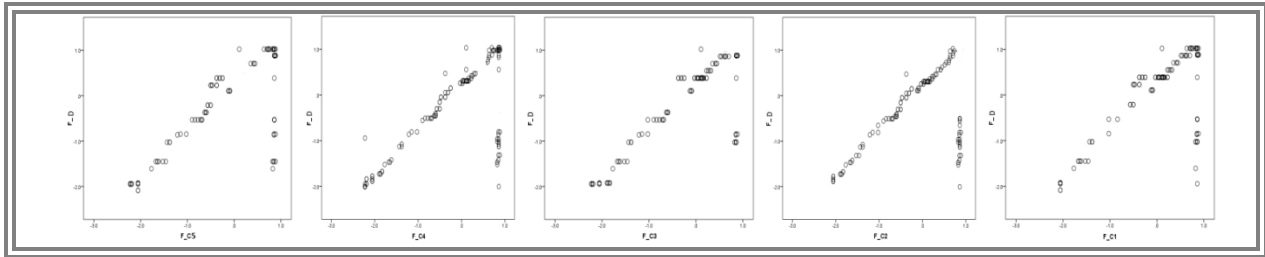
In addition, the minimum value of Pearson (PCC)-(X^2)-(Chi^2)=(315.66) and likelihood-ratio test (X^2)-(Chi^2)=(308.21) which both > the equivalent values (26.54), (31.18) in order, and sig. at level of sig.=(3%) i.e. degree of confidence=(97%) at (df)=(16). While, the minimum value of liner by liner (X^2)-(Chi^2) = (168.09) > its equivalent values (25.36) at sig. = (5%) and (df)=(16). While, test relation type through the minimum value of (F -test) = (1432.1) and (T -test) = (29.5) and both > their equivalent values (287.05 & 1.94) and sig. (P) was (0.0) for each, and (df)= (1,377 & 369). direction of relation appears through ranking of (β) values between (+0.87) up to (+0.95), it means a direct (positive) relation between Andragogy-self-directed and subordinates' committed with the (permanent orientations) and (daily-directions) while, the lowest value of (R)=(0.92) and (R^2)=(0.84) which means (Andragogy) explains 84% of the changing in subordinates' committed-(permanent orientations and daily-directions). The former of the relationship between Andragogy and subordinates committed; F (C1/1-1/5), F (C2/1-2/5), F (C3/1-3/5), F (C4/1-4/5) and F (C5/1-5/5) were represented by five different types of factor analysis, however the final was represented by only one type of factor analysis, F (C5/1-5/5) (C1-C10). simple regression analysis was confirming results in each case as shown by the (5) graphs showed in (Table.4) to explain of all the examined correlations, the dots appeared the two variables on the semi-straight line were more than (87 percent). consequently, the null sub-hypotheses (H_02) were rejected to accept alternatively the reverse hypothesis which demonstrate that there is a major link between; on the one hand, Andragogy-self-directed and subordinates committed with the (permanent orientations and subordinates committed with the (daily-directions) on the other hand.

Testing hypothesis (H3)

The (Table.5) discusses the findings of the study that the hypothesis test (H3) is correct/incorrect as follows:

Table 5- Heutagogy as Mediator V. in the Relationship between (I.V.) Andragogy and (D.V.)-Self-Management-(A).

Code of Variables	Significance of the relationship						Denotation of the relationship						Regression analysis			
	Pearson (Chi) ²		Likelihood Ratio (Chi) ²		Linear by Linear (Chi) ²		F		T		R	R ²	β1	β2	β3	β4
	Cal (v)	Si g. (P)	Cal (v)	Si g. (P)	Cal (v)	Si g. (P)	Cal (F)	Si g. (P)	C al (T)	Si g. (P)	R C o. R ²	C o. R ²	Re g. Co. (β1)	Re g. Co. (β2)	Reg. Co. (β3)	Reg. Co. (β4)
(I.V.)-Andragogy (B1-B10) ► (D1-D7) (intermediate variable Heutagogy)	38 1.6 8	0. 0 1	34 6.0 7	0. 0 0	27 7.6 4	0. 0 0	26 02. 8	0. 0 1	2 9. 9	0. 0 0	0. 9 3	0. 8 6	+0. 56 4*			
(I.V.)-Andragogy (B1-B10) ► (A1-A5) (the (D.V.)-Self-management)	42 0.1 3	0. 0 0	39 6.1 2	0. 0 0	33 9.8 2	0. 0 0	25 21. 6	0. 0 1	3 7. 1	0. 0 0	0. 9 1	0. 8 2		+0. 48 6*		
(Andragogy) B1-B10 & (D1-D7) ► (A1-A5)	30 9.1 7	0. 0 4	32 4.2 9	0. 0 0	25 3.4 9	0. 0 0	23 11. 03	0. 0 0	2 7. 3	0. 0 0	0. 9 6	0. 9 2			+0.6 57* *	+0.4 39**



Source: based on empirical study

(Table.5) offers a regression-analysis used in (three-steps) to test Heutagogy-mediator role: (1)-The first step: test impact of the (I.V.)-Andragogy -(C1-C10) on the (Mediator V.)-Heutagogy-(D1-D7) the value of $(R^2)=(0.86)$ it means Andragogy explain 86% of the changes in Heutagogy Self-determined and $\beta_1=(+0.564)$. Which means (positive) relation and if a change occurs in the (I.V.) in one unit it will change the (Mediator V.)-Heutagogy by its value $(+0.564)$. Then, (2)-The Second step: test impact of (I.V.)- Andragogy on (D.V.)-self-management-(A1-A5). Results offers that $(R^2)=(0.82)$ which means (Andragogy) explain 82% of the changes in Self-management, and $\beta_2=(+0.486)$, meaning that any changes of Andragogy in one unit will change the Heutagogy by its value $(+0.486)$. (3)-The third stage: (Mediator V.)-Heutagogy-self-determined is linked to the relationship between the (I.V.)-Andragogical and (D.V.)-self-management which generate (increasing) value of $(R^2)=(0.92)$ it means the (I.V.)-Andragogy and the (Mediator V.)-Heutagogy explained 92% of changes in self-management. Moreover, value of $\beta_3=(+0.657)$ & $\beta_4=(+0.439)$ which means (positive) relation between (I.V.), (Mediator V.) and (D.V.) and sig. at the level of (5%). In addition, the lowest value of $(PCC)-(X^2)-(Chi^2)=(309.17)$ and likelihood-ratio test $(X^2)-(Chi^2)=(324.29)$ which both $>$ their tabulated values (26.54) , (31.18) in order, and sig. at level of sig. $=(5\%)$ i.e. degree of confidence= (95%) at $(df)=(16)$. While, the lowest value of liner by liner $(X^2)-(Chi^2) = (253.49) >$ its tabulated values (25.36) at $sig. = (5\%)$ and $(df)=(16)$. While, test relation type through the lowest value of $(F-test) = (2311.03)$ and $(T-test) = (27.3)$ and both $>$ their equivalent values $(287.05 \& 1.94)$ and sig. (P) was (0.0) for each, and $(df) = (1,377 \& 369)$. The former of the relationship between (I.V.)-Andragogy and (Mediator V.)-Heutagogy The connection was represented by five different types of factor analysis; $F (C1/1-1/5)$, $F (C2/1-2/5)$, $F (C3/1-3/5)$, $F (C4/1-4/5)$ and $F (C5/1-5/5)$, whereas the final was represented by only one type of factor analysis, $F (C5/1-5/5)$ (C1-C10) and simple regression analysis was confirming results in each case as shown by the (5) graphs showed in (Table.5) to explain why the dots appeared in all of the tested correlations when the two variables on the semi-straight line were more than (90 percent). This is collectively proving (H3) hypothesis, there is a mediation role of (Heutagogy) in the relationship between Andragogy-self-directed and self-management-(subordinates' committed with permanent orientations and daily directions).

1.1. Testing hypothesis (H4)

Regarding to prove that the hypothesis (H4) is correct/incorrect, the following (Table.6) summarized results of this hypothesis as follows:

Table 6- Hierarchical Regression Concerning (I.V.)-Pedagogy-based directing: and Cybergogy as (Moderator V.).

Code of Variable	The dependent variable (D.V.) Self-Management-(A1-A5)													
	significant of relationship						indication of relationship				Hierarchical regression analysis			
	Pearson (Chi) ²		Likelihood Ratio (Chi) ²		Linear by Linear (Chi) ²		F		T		R ²	Δ R ²	β	Sig. (P)
	Cal. (v)	Sig. (P)	Cal. (v)	Sig. (P)	Cal. (v)	Sig. (P)	Cal. (F)	Sig. (P)	Cal. (T)	Sig. (P)	Co. R ²	Co. Δ R ²	Reg. Co. (β)	(P)
(B1-B10) ► (I.V.)-Pedagogy	38 6.3 0	0.0 0	40 8.2 9	0.0 0	28 3.9 0	0.0 0	12 6.2 1	0. 0 0	14. 39	0.0 0	0.54	-	- 0.7 3	0. 0 1
(E1-E7) Δ (Moderator variable)	42 5.0 9	0.0 0	51 2.3 3	0.0 0	32 6.1 1	0.0 0	13 2.1 3	0. 0 0	19. 66	0.0 0	0.68	Δ 0.23	- 0.8 6	0. 0 3
(I.V.)-Pedagogy (B1-B10) Δ (E1-E7) Interaction of Pedagogy and Cybergogy	49 1.1 8	0.0 0	60 2.1 7	0.0 0	37 1.1 8	0.0 0	19 3.0 8	0. 0 0	32. 56	0.0 0	0.89	Δ 0.16	- 0.5 9	0. 0 0

Source: based upon the field study

To check the moderator role of Cybergogy the first stage is insert the (I.V.)-(Pedagogy). then the second stage insert the (Moderator V.)-(Cybergogy), and final stage insert the (Interaction V.)-(Pedagogy and "Cybergogy"). Thence, (Table.6) display the results of this analytical hierarchical regression analysis as the lowest values of Pearson (PCC)-(X²)-(Chi²)=(386.30) and likelihood-ratio (X²)-(Chi²)=(408.29) which both >paralleled tab. values (26.54), (31.18) in order, and significant at level of sig.=(1%) at (df)=(16). While, the lowest value of liner by liner (X²)-(Chi²)=(283.90) > its tabulated values (25.36) at sig.=(1%) and (df)=(16). Thence, type of relationship can specified through the lowest values of (F-test)= (126.21) and (T-test)=(14.39) both> its paralleled tab. values (287.05 & 1.94) and sig. (P) was (0.0) for each, and (df)= (1,377 & 369). Moreover, the direction of relationship determined from (β) values (-0.73) which means (negative) relation between (Pedagogy) and (Self-management), at sig. (5%). Moreover, strength of the relation determined from the lowest value of (R²)=(0.54) which means (Pedagogy) explains 54% of changing in (Self-management). Then, when entering the moderator variable, the two variables (Pedagogy and Cybergogy) participate in the explained of 68% of the changes in the dependent variable (self-management), where the value of (R²)=(0.68), which means that the Moderate V. (Cybergogy) has contributed in the demonstration of 14% of the changes in (self-management). Thence, the direction of the relation determined by (β)= (-0.59) i.e. (I.V.) (Pedagogy) have a (negative) relation with "Self-management" but when the Moderate V. (Cybergogy) have (positive) relation so when entering as interaction reduces (β) value by (-0.14) of self-management. in addition, the interaction between (Pedagogy and Cybergogy), this interaction added 35% to (R²) to become 89% instead of 54% which significant at the level of (1%). The former of the relationship between (Moderator V.)- Cybergogy and (D.V.)-Self-management The relationship was studied using five different types of factor analysis; F (A1/1-1/5), F (A2/1-2/5), F (A3/1-3/5), F (A4/1-4/5) and F (A5/1-5/5), however the final result was displayed using only one type of factor analysis; F (A1/1-5/5) (E1-E7) and simple regression analysis was confirming results in each case as The dots appeared the two variables on the semi-straight line were greater than (92 percent) in all the tested connections, as demonstrated by the (5) graphs in (Table.6). This is collectively proving (H4) hypnosis, there is a moderation role of (Cybergogy) in the relationship between Pedagogy and self-management-(subordinates' committed with permanent orientations and daily directions) in investigated town council

RESULTS AND CONCLUSION

- ▶ There is a (negative) relationship between Pedagogy-based directing and self-management-based on (subordinates' deviation from the permanent orientations and the daily-directions).
- ▶ There is a (positive) relationship between Andragogy-Self-directing and (subordinates committed with the permanent orientations and the everyday-directions).
- ▶ The relationship between Andragogy-self-directed and self-management-based on (subordinates committed with the permanent orientations and the daily-directions) is mediated by the (Heutagogy-Self-determined).
- ▶ The (Cybergogy-based-social media) moderates the relationship between Pedagogical-based directing and subordinates committed with (the permanent orientations and the daily-directions).

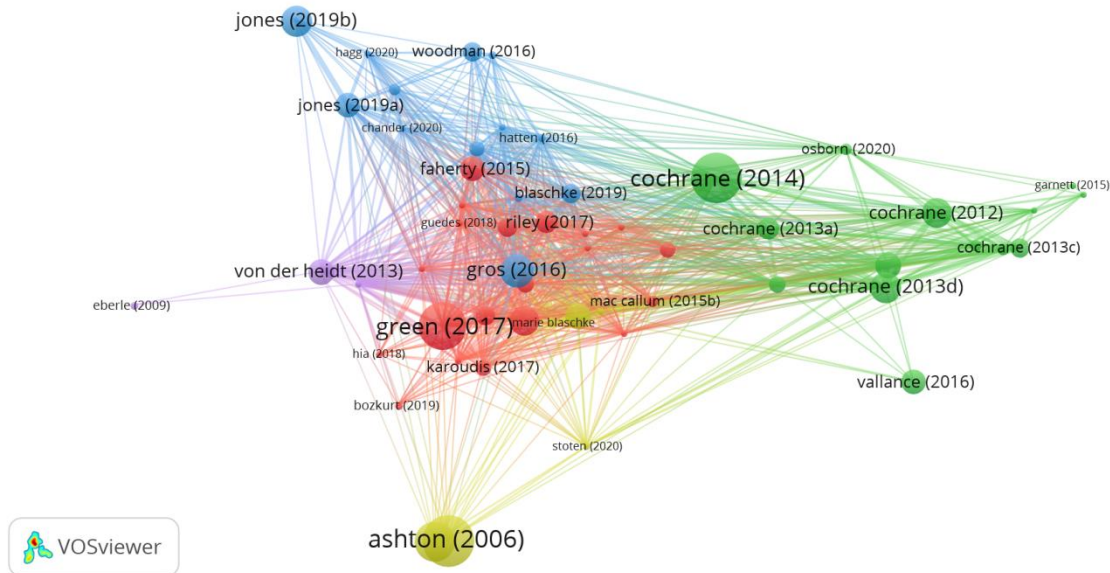


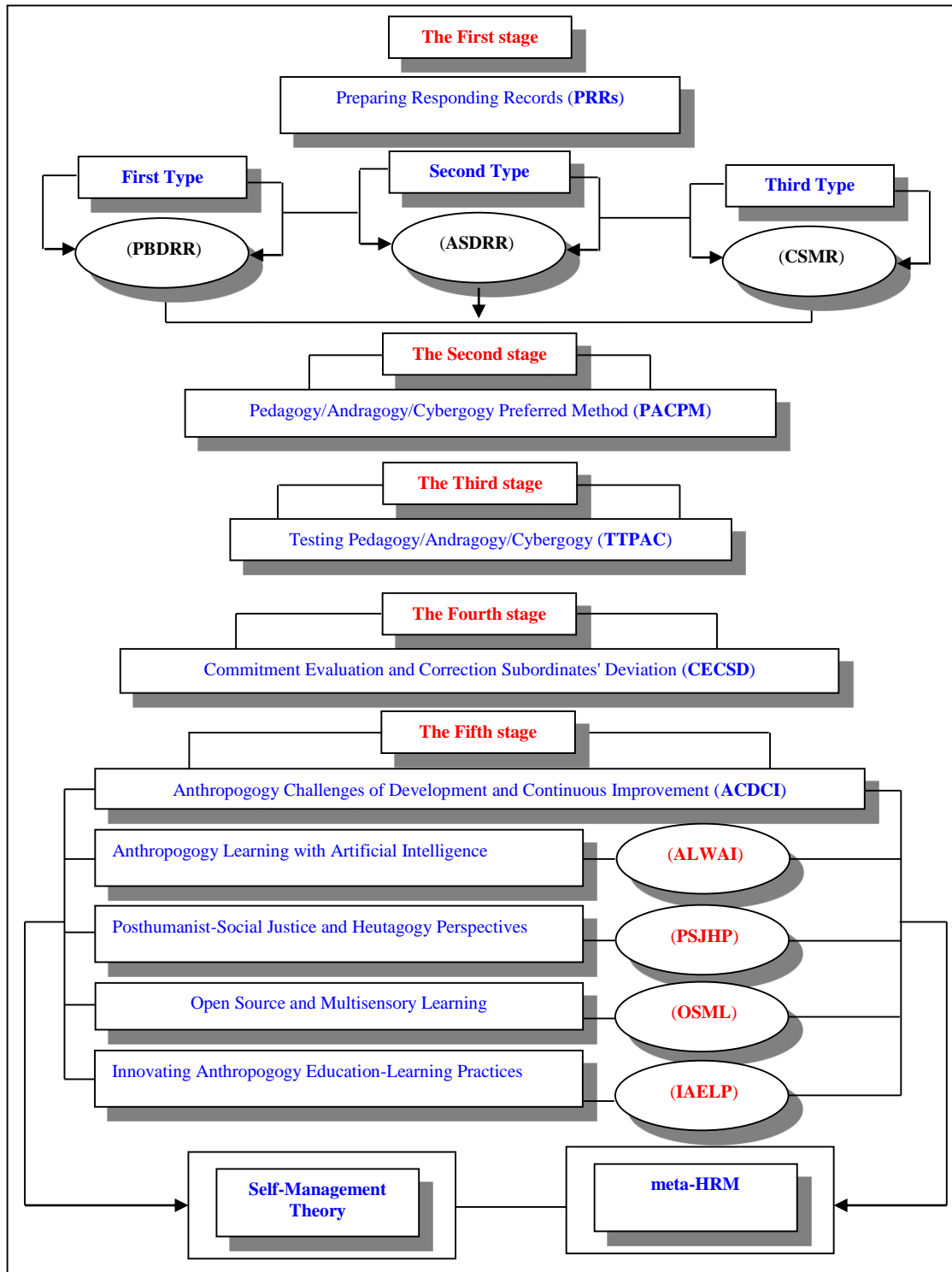
Fig. 4 - Bibliometric coupling analysis pedagogy and Heutagogy. Source: VOSviewer.

(Fig.4) shows the Bibliometric analysis (e.g., Vallaster, et al., 2019; Mulet, et al., 2019), and the web of science (WoS), there are 58 articles linking between (Pedagogy and Heutagogy) Which proves the importance of the Heutagogy and its relationship to Pedagogy, there are no articles linking between (Andragogy-Cybergogy and Pedagogy-Cybergogy) which proves the importance of linking the four variables of the study.

Recommendations

Here, this part presenting **The proposed Five-dimensional Model for Anthropogogy (Pedagogy/Andragogy/Cybergogy)-Directing-Learning Technique: The First stage (PRRs): Preparing Responding Records (PRRs):** this stage consists of three records proposed to determine and classify the response of subordinates to the permanent-orientations and daily-directions and choosing the suitable method for directing: **First type (PBDRR):** Padagogy Based-Directing Responding Record (**PBDRR**): the subordinates' committed with the permanent orientations and everyday directions (Padagogy based-directing) which means direct orders and instructions from his manager and therefore his role is just receiving orders. **Second type (ASDRR):** Andragogy Self-Directed Responding Record (**ASDRR**): the subordinates' deviation from the permanent orientations and everyday directions and therefore directing himself (Andragogy-self-directed). **Third type (CSMRR):** Cybergogy-social media Responding Record (**CSMRR**) (if yes which one?): the subordinates' committed with the instructions through the social-media communication faster than traditional way. **The Second stage (PACPM):** Pedagogy/Andragogy/Cybergogy Preferred Method (**PACPM**) in this stage the subordinates are classified into (committed /or

deviation with the permanent orientations and everyday directions) according to the method of responding. **The Third stage (TTPAC):** Training and Testing Pedagogy/Andragogy/Cybergogy (TTPAC): in this stage manager should training and testing the subordinates' responding according to the new classification and review the extent of their response to instructions (permanent-orientations and everyday-directions). **The Fourth stage (CECSD):** Commitment Evaluation and Correction Subordinates' Deviation (CECSD): in this stage manager evaluation the extent and degree of subordinates' commitment through the new antropogogy method. in addition, managers correction any subordinates' deviation or Re-choose a new Anthropogogy method. **The Fifth stage (ACDCI):** Anthropogogy Challenges of Development and Continuous Improvement (ACDCI): in this stage manager should be depended on the philosophy of continuous improvement to developed and update his technique through the new challenges such as: Anthropogogy Learning with Artificial intelligence: (ALWAI). Posthumanist-Social Justice and Heutagogy Perspectives: (PSJHP). Open Source and Multisensory Learning (OSML). Innovating Anthropogogy Education-Learning Practices (IAELP). The proposed five-dimensional model supposed that increase the homogeneity between managers and their subordinates and increase the subordinates' committed and increase the homogeneity and/or concurrence of Strategic context and help manager to directing his subordinates' personality traits. These previous suggested recommendations for the Five stages of Anthropogogy Directing-Learning Techniques (ADLTs) can be formulated through (Fig.5) a five-dimensional proposal for the Anthropogogy (Pedagogy/Andragogy/Cybergogy)-Directing-Learning' Technique as follows:



Source: Firstly, Generated for the purpose of this study

Fig. 5 - A proposed Five-dimensional model for Anthropogogy Directing-Learning Techniques (ADLTs).

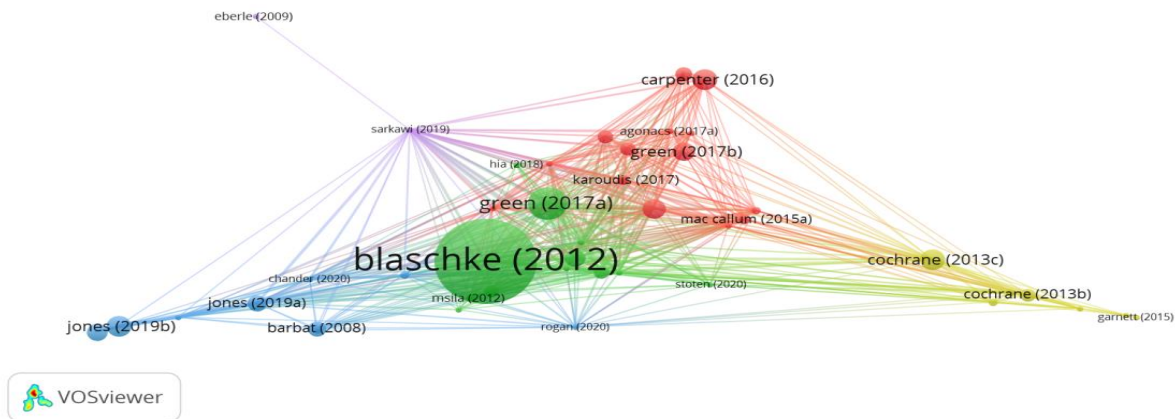


Fig.6 - Bibliographic map. Source: VOSviewer.

(Fig.6) displays the Bibliography data analysis by authors (e.g., Vallaster, et al., 2019; Mulet, et al., 2019), and the web of science (WoS), from Web of Science Core Collection there are (2) articles between (Pedagogy and Cybergogy); (6) articles linking between (andragogy and Cybergogy); (46) articles linking between (Andragogy and Heutagogy); (206) articles linking between (Pedagogy and Andragogy). Which requires the need to pay attention to research and study the four variables in the future.

Further Research Topics

- ▶ Using anthropogogy (Pedagogy and Andragogy) to be aligned with the strategic consistency.
- ▶ Impact of Cybergogical-based social media directing to facing and manage the crises.
- ▶ The role of anthropogogy (Pedagogy and Andragogy) and Cybergogy in improving efficient work life quality.

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