Learning Theories within Coaching Process

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Abstract—These days we face with so many advertisements in magazines, those mentioned coaching is pragmatic specialties which help people make change in their lives. Up to know Specialty coaches are not necessarily therapists, consultants or psychologist, thus they may not know psychological theories. The International Coach Federation identifies "facilitating learning and results" as one of its four core coach competencies, without understanding learning theories coaching practice hangs in theoretical abyss. Thus the aim of this article is investigating learning theories within coaching process. Therefore, I reviewed some cognitive and behavioral learning theories and analyzed their contribution with coaching process which has been introduced in mentor coaches and ICF certified coaches' papers and books. The result demonstrated that coaching profession is strongly grounded in learning theories, and it will be strengthened by the validation of theories and evidence-based research as we move forward. Thus, it needs more research in order to applying effective theoretical frameworks.

Keywords—Coaching, Learning theories. Cognitive learning theories, behavioral learning theories.

I. INTRODUCTION

NE of the most important challenges that people are faced today is how they can transfer knowledge into skill and adjust themselves with changes. When changes occur at a fast pace, there is little or no time for individual species to react and adjust to new circumstances. In the current era, people have to deal with changes in thinking skills, learn the correct way to solve problems, and make appropriate decisions. The inevitable reality is that human progress depends on learning. Therefore, the principle of learning can help explain much of our everyday behavior. Learning is a very well-known topic in psychology today. Educational psychologists are concerned with the use of psychology to increase the effectiveness of the learning experience, including facilities, curriculum, teaching techniques, and student problems. In the other hand we face with different cognitive and behavioral educational theories in the educational field. Both cognitive and behavioral theorist use scientific method in exploring learning process, but they are different in assumptions, principles, purposes and their methods. Generally each of these approaches is trying to provide a model for boosting the quality of education.

Coaching as a profession emerged from the world of sports into the world of business in the early 1980s. In this stage in the development of professional coaching was in the

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boardrooms of the world's top companies. These days it is rare to find a major multinational that does not offer executive coaching to its Chief executive and Directors. Top politicians and government officials have also become regular users of executive coaching services. In its 30 year history it has grown like a snowball rolling down a hillside by acquiring concepts and skills from a wide range of other disciplines consultancy, including management psychology, psychotherapy, linguistics, anthropology and meditation. As a result, the emerging profession has many different sub-groups including business coaches, NLP coaches, CBT coaches and many others, linked by a common thread of seeking to help their clients become more self aware and self responsible, and assist them to set SMART (specific, measurable, achievable, realistic, timed) goals for their future actions. The process of professionalization is still ongoing and involves improved accreditation and steps towards adopting a common code of conduct.

Coaching is a powerful relationship for people making important changes in their lives [1]. Coaching as a targetoriented approach due to integrating of different views into an operational one is ideal for present century and it has been shown that it will be effective in converting knowledge to skill and will lead to transformative learning if it is used efficiently. The International Coach Federation (ICF), which is selfdescribed as the voice of the global coaching profession, identifies, "facilitating learning and results" as one of its four core coach competencies [2]. Goal-oriented coaching has its own unique philosophy, based amongst others on goal and self-regulatory theories, which is worthy of serious exploration [3]. Numerous coaching texts and studies refer to the implicit nature of learning in coaching which paves the way for the achievement of goals and manifestation of change [4]-[7]. The hallmark of coaching is integrating tools from other fields (eg; psychology, management, philosophy, social science, etc.) as well as its proclivity for innovation. In turn the profession of psychology stands to make a significant contribution to the conceptual understanding and practice of coaching [8]. Up to know Specialty coaches are not necessarily mental health professionals. Thus this is interesting given the fact that many coaches and coaching manuals use techniques which borrowed behavioral and cognitive theories almost without realizing their rootedness. Zeus and Skiffington [9] mentioned that without understanding learning theories coaching practice hangs in a theoretical abyss. In summary, what clients consistently derive from a coaching experience includes: heightened selfawareness, self-acceptance and a sense of well-being; improved goal-setting and goal attainment, life balance and lower stress levels; increased self-discovery, self-confidence and self-expression; better communication and problemsolving skills; enhanced quality of life; and, changed and broader perspectives and insight [4]. Therefore, such outcomes, is only made possible through a process of learning. Thus the aim of this article is investigating learning theories within coaching process. Therefore this paper outlines the potential significance of cognitive and behavioral theories, and its impact on developing effective coaching practice and how it provides an environment to improve learning.

II. EASE OF USE

Whitmore [5] proposes that "coaching is unlocking a person's potential to maximize their own performance" and it is helping the client to learn rather than teaching them." Coaching has been shown to have a positive effect on student achievement in a large-scale evaluation of early literacy learning [10]. Joyce et al demonstrated that student achievement increased when coaching was part of a professional development program [10]. Lyons and Pinnell found a connection between literacy coaching and increased achievement in reading and writing [10]. Norton reported positive results of the statewide Alabama Reading Initiative (ARI) which includes a strong literacy coaching component on students [10]. They reported that coaching led to a significant improvement in student test scores. As a result of Lapp, Fisher, Flood, & Frey research, student literacy achievement increased markedly during, reading specialists provided halftime peer coaching and half-time student tutoring program [10]. On the other hand Hurd's phenomenological research on nine organizational coaching clients, revealed that, "coaching creates the conditions for learning and behavior change" [11]. In addition Olivero, Bane, and Kopelman found that training followed by one-to-one coaching significantly increased productivity compared to training alone [12].

III. METHOD

Basing the study on the perspective of coaches, a field hitherto un-chartered, called for a qualitative research framework [13]. The scholarly coaching literature has advanced considerably in the past decade. However, a review of the existing knowledge base suggests that coaching practice and research remains relatively uninformed by relevant psychological theory [14]. This paper briefly reviews the coaching process. It addresses some of the major psychological theories that use in the coaching method, as well. The paper locates behaviorism and cognivist within its epistemological roots by adopting a historical perspective. The psychology of learning literature and associated fields of study are used to facilitate this including the relevant coaching literature. Most of the research about coaching presented in this article, has been presented as dissertation, papers or posters at academic conferences, ICF conferences or wrote by authors who are certified with ICF. The literature is also supported by the use of my own experience of using coaching techniques over the last 2 years and of the anecdotal experiences of other coaches who have either trained me.

IV. COACHING

Everyone is familiar with the concept of coaching in sport. Nevertheless, the coaching includes lots of principles from sports coaching, like teamwork, going for the goal, most professional coaching is not competition or win/lose based but coaches look for win/win solutions. The athletic coach is often seen as an expert who guides and directs the behavior of individuals or teams based on his or her greater experience and knowledge in contrast professional coaches possess these qualities, but it is the experience and knowledge of the individual or team that determines the direction. Additionally, professional coaching, is fundamentally concerned with the enhancement of human functioning, achieved through the improvement of cognitive, emotional and/or behavioral selfregulation [14] and it is unlike athletic development, does not focus on behaviors that are being executed poorly or incorrectly. Instead, the focus is on identifying opportunity for development based on individual strengths and capabilities

There still remains a lack of clarity in root and concepts, and framework of coaching in other field. However ICF's definition of coaching is "partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential." [2] Douglas & McCauley mentioned that, the aim of life coaching is sustained cognitive, emotional and behavioral changes which facilitates goal attainment and performance enhancement [15]. As it is obvious the aim noticed elements of Kimble's definition of learning which introduced learning as 'permanent change in behavior or behavior potentiality that occurs as a result of experience' [16] On the other hand it considered cognitive and emotional changes which are noticed in cognitive learning.

There is so many definition of coaching which has been tried to explain it. Inter alia the most precise one which cover coaching proficiencies and explain its context and concept briefly is Grant's definition: "Coaching is a <u>collaborative</u>, <u>solution-focused</u>, <u>result-orientated systematic</u> process, used with normal, <u>non-clinical populations</u>, in which the coach facilitates the enhancement of the coachee's life experience and performance in various domains and fosters self-directed learning, personal growth and goal attainment of the coachee."

A. Collaborative Relationship

Mentoring and often teaching are characterized by an expert-novice relationship, both technical and empirical coaching literature emphasize the existence of an equal partnership between coach and client [1], [4], [11], [12]. In addition, "the coach does not need to be an expert in the coachee's area of learning, and what's great about coaching is that it just shows the value of not being an expert but being curious and willing to not know"[17] and, "the coach need only have expertise in facilitating learning and performance enhancement"[12].

B. Solution Focus Approach

Coaching focuses on constructing solutions rather than

analyzing problems ([12]. The coach's skills lie in helping the coachees tell their problem story in a way that reframes the presenting problem as being solvable and highlights the client's resources and ability to define and move toward a solution, while at the same time building a collaborative relationship in which the coach has permission to hold the client accountable for proposed action steps [18].

C. Result-Orientated

Without action there is no feedback and no experience to test by reflection thus the coaching process is meaningless. Coaches always ask clients to define action steps which are negotiated between coach and client during the coaching session. In the end of each session the client must be committed to the task, and is accountable for both the task and the result.

D. Systemic Process

As Grant [12] mentioned, "goal setting ignites the coaching cycle which is followed by focused, planned action toward the achievement of the goals". Each session the coach helps client to define a mid-term goal either intrinsic goals (e.g.: managing and dealing with emotions, promote intuition, identifying preference, etc.) or extrinsic goals (e.g.: determining vision, defining mission, prioritizing actions, finding a new ways, etc.), which is facilitate reaching the main goal. He/she utilizes various methods of observation, assessment and analysis to monitor and evaluate situations prevailing in clients' lives. Then, by capitalizing on their inherent creativity and potential, clients' realities are expanded towards a future vision. Finally, maintenance, support structures and constructive evaluation and feedback complete the coaching cycle in the achievement of goals [19].

E. Non-Clinical Populations

It has been argued that coaches do not need diagnostic skills and this should be left to clinical psychologists and psychiatrists (the 'real' holders of diagnostic skill). The focus on 'normal' non-clinical populations is central to delineating coaching from clinical and counseling psychology and psychotherapy. Thus, coaches just work with non-clinical population and they have to refer clients with clinical problem to clinical psychologists and psychiatrists because they don't have sufficient information and competency to deal with mental disorders. Therefore coaching cannot cover their problems and clients couldn't use coaching instead of treatments.

V. LEARNING THEORIES AND COACHING

A. Classical Conditioning

Cheetham and Chivers [20] argue that no review of the literature on learning theories could be complete without reference to the seminal work of Pavlov. Classical Conditioning involves conditioning a reflexive behavior by pairing a neutral stimulus with a naturally occurring one. After a certain amount of time, the neutral stimulus alone is sufficient for triggering the reflex.

Anchoring is a natural phenomenon and is similar to classical conditioning which extends associations to both internal mental and external events. The stimulus can be established by a touch, a word, a gesture, a motion, even a picture; anything that is consistently repeatable. In anchoring processes the client, in an emotionally aroused state, can override such associations if they are unwanted and can create new, meaningful and desired emotional memories [21]. Anchors can be practiced in multiple situations or future paced to insure that they transfer to new contexts. Anchors may be observed in the chaining of ideas and responses as one idea repeatedly evokes another.

The coach's role is helping people provide the sense of connection between the coachee's needs and values, and the results of the coaching [22]. In addition resilient is essential for learning and we are naturally inclined toward our core values and eager to do them without making a lot of effort or setting a bunch of goals and they are a main component of resilience. In addition Coaches use visualization which is based on the reinforcement paradigm. It involves making mental pictures of events or things which during the process the client will be conditioned with metaphors based on his needs and core values in order to promote resilience and build learning foundation on highly valued-bedrock and lead them into self described desired states (see Fig. 1)

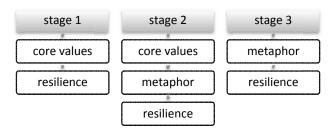


Fig. 1 Conditioning in coaching

B. Reinforcement Theory

The classical conditioning theory was developed by the behaviorist school of psychology, notably by B.F. Skinner [23]. Skinner mentioned that behavior is a function of its consequences. The learner will repeat the desired behavior if positive reinforcement (a pleasant consequence) follows the behavior. Positive reinforcement, or 'rewards' can include; verbal reinforcement such as 'That's great' or 'you're certainly on the right way. Coaches use verbal reinforcement when coachee find a new way, change their perspective, set a SMART goal, promote self-evaluation and act on the action steps. Coaches also use motivational massages, images, or voices as a positive reinforcement based on coachee's self defined metaphor in order to reinforce their efforts, and, resilience to act on effective behavior responsively.

C. Facilitation Theory (the Humanist Approach)

Carl Rogers and others have developed the theory of facilitative learning. The basic premise of this theory is that learning will occur by the educator acting as a facilitator that

is by establishing an atmosphere in which learners feel comfortable to consider new ideas and are not threatened by external factors [23]. He demonstrated active listening, accompanied by unconditional positive regard, supports clients in making tremendous positive changes.

Coaching is based on client-as-expert rather than the coach-as-expert. It is the art of facilitating the performance, learning and development of another. It is about learning, the coach and coachee enter into a learning partnership together. The coach needs to be able to stand in the shoes of the coachee or learner, to work within the coachee's map of the world, and to set aside their own preconceptions and assumptions [24]. They mobilize the coachee's inner resources for the purpose of enhancing performance or personal development [25]. The coach stretches, clarifies, supports and empowers the coachees to design their own solutions [26].

TABLE I COACHING SUPPORT

Element	Description
Listening actively	Listen to: by observing the client's body movements, gestures, tone of voice, speech pacing, pauses, and eye movements. Coaches can pay attention to the congruence of words, and nonverbal behavior of the coachee. Listen for: possibilities, goals, dreams, aspirations, possibilities, goals, dreams, discovering, harnessing, and clients' vision, values, commitment, and purpose in their words and demeanor in order to expanding on strengths and tools. Listen with heart, which they notice what emotions are emerging as they resonate with clients. Listening with intuition, which pays attention to the images, metaphors, and internal words or phrases that emerge from within as an intuitive connection. Listening with the body, coaches notice where in their body they are reacting to what they are hearing or sensing from the presence of the
Asking question	client. [1] Coaching uses powerful questions to facilitate coachees finding their own answers. Coaches ask questions rather than give answers. Coaches ask open ended questions instead of close ended ones.
Giving Feedback	Coaches serve as a mirror to help coachees see themselves. Coaches get feedback to cochees While they see or hear any clues of possibilities, goals, dreams, aspirations, possibilities, goals, dreams, discovering, harnessing, and clients' vision, values, commitment, and purpose by backtracking (i.e.: repeating their words and sentences), mirroring and reflecting the chochee's body language, gesture, posture, tone of voice and even breathing style.

Coaching relationship includes active listening; ask nondirective questions get positive feedback in order to facilitate coachee's learning and change. Table I introduces coaching support elements.

C. Experimental Learning Theory (ELT)

Experiential learning theory is a holistic model of the learning process and a multilinear model of adult development, both of which are consistent with what we know about how people learn, grow, and develop. Experiential learning draws on the work of John Dewey, Kurt Lewin, and Jean Piaget, but has been extensively developed by Kolb [27]. Experiential learning theory (ELT) has been widely used in management learning research and practice for over thirty-five years. ELT is a dynamic theory based on a learning cycle driven by the resolution of the dual dialectics of action/reflection and experience/abstraction. These two dimensions define a holistic learning space where in learning transactions take place between individuals and the environment. Kolb beloved ELT can serve as a useful framework to design and implement management education programs in higher education [27]. It can be summarized as learning by doing. The experiential learning model is an inductive learning cycle comprising four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Which they follow each other in a cycle [28]. In this theory, experiences are the central role in the learning process which distinguishes it from other learning theories. The term "experiential" is used in order to differentiate ELT both from cognitive learning theories, which tend to emphasize cognition over affect, and behavioral learning theories that deny any role for subjective experience in the learning process.

GROW is an acronym for Goal, current Reality, Options and Will. The GROW model fits the Kolb learning cycle, which has been a basic model of experiential learning. Goal setting is the proposed experience. Reality is explored by reflection and observation. Options come conceptualization, and action is the planned experiment to test the hypothesis. The model, are seen as the key elements of a coaching session which designed by Alexander in 1984, is widely used by coaches and follows all the necessary steps in a problem solving process [29]. "In models of coaching, the Kolb learning cycle can often be seen guiding the process" [28] in every single session. This process fits into the Kolb model, but only if the cochee takes action. Without action there is no feedback and no experience to test by reflection. The cycle stops dead without even completing one revolution.

The coach's role is to facilitate the coachee's movement through the goal-directed, self-regulatory cycle which the individual sets a goal, develops a plan of action, begins action, monitors and evaluates their performance, and based on this evaluation changes their actions to further performance enhancement and reach their goals. The important thing about the coaching conversation is that it starts with where the individual is (i.e. the individual's experience and preferred learning style), and allows as much freedom to learn as the individual can cope with. The coachee sets the agenda, not the coach. It is a gradual process of expanding the quality and scope of the individual's learning capability. Hence, in the Coaching process the coach starts working with and honoring the preferred learning style of the individual, and gradually

enhances the individual's ability to move through the complete experiential learning cycle.

1. Transformative Learning Theory

Transformative learning [30] is the process of effecting change in a frame of reference. Mezirow believe that in order To facilitate transformative learning, educators must help learners become aware and critical of their own and others' assumptions. Learners need practice in recognizing frames of reference and using their imaginations to redefine problems from a different perspective. Finally, learners need to be assisted to participate effectively in discourse. Discourse is necessary to validate what and how one understands, or to arrive at a best judgment regarding a belief.. At the core of Transformative Learning theory, is the process of "perspective transformation", with three dimensions: behavioral (changes in lifestyle), psychological (changes in understanding of the self), and convictional (revision of belief systems).

As coaching provides participants with hands-on experience performing the tasks they had learned about in training, they were able to receive feedback regarding the results of their actions from the job itself (when production and productivity were measured), organizational peers, superiors, coaches and customers. Consequently, they saw the extent to which their newly-acquired knowledge had been converted to practical skills that had positive utility. In essence, the positive reinforcement from all sources enhanced participants' selfefficacy [31]. On the other hand Goal-setting has also been demonstrated to enhance perceived self-efficacy [32]and after finding solution, taking steps toward mid-term goals, evaluating and reframing the actions then coachees can rely on themselves more than before and they evaluate themselves more. Coaching is an intervention specifically designed to create change by opening up a client to new perspectives or learning [1], [33]-[35]. As Mezirow mentioned "deep learning occurs, identified by a basic change in beliefs, principles, and feelings that results in a fundamental shift in an individual's understanding of oneself and others in relationship" [17]. Coaches use numerous tools which lead to perspective transformation. One of the main illusions, which have to be faced and dealt with, is the false belief that we are determined by our previous experiences. People believed in them as a real entity with its own fixed laws. They challenge the clients's belief and perception about self and situations. Therefore, Coaches use proven methods, like "1.2.3. Position", "Logical Levels Alignment", "TimeLine", "Change Belief Cycle", "Core Transformation", etc. in order to lead to perspective transformation to provide deep learning [36].

2. Action Learning

"'Action learning' It is the approach that links the world of learning with the world of action through a reflective process within small cooperative learning groups known as 'action learning sets' [23]. Action learning is a dynamic process that involves a small group of people solving real problems, while at the same time focusing on what they are learning and how

their learning can benefit each group members. action learning is ideal for finding solutions to problems that do not have a 'right' answer because the necessary questioning insight can be facilitated by people learning with and from each other in action learning 'sets'. Professor Reginald Revans which is the father of action learning, has said that there can be no learning without action and no action without learning. He argued that learning can be shown by this equation [23].

L (learning) = P(programmed knowledge) + Q(questioning insight)

Over the past 20 years, various approaches appeared in action learning, but the Marquardt model has gained wide-spread acceptance which is expanded Revans's formula which was added R refers to reflection. (see Fig. 2) This additional element emphasizes the point that "great questions" should evoke thoughtful reflections while considering the current problem, the desired goal, designing strategies, developing action or implementation plans, or executing action steps that are components of the implementation plan [37]. Inquiry and reflection, both are part of the generation of questioning insight, seek to surface tacit knowledge and uncover assumptions [38].

At the heart of the coaching discovery process are answers to simple, powerful questions. The interesting thing about a question is that it automatically causes us to start looking [1]. Coaching is a technique that uses powerful questions to facilitate coachees finding their own answers. Coaches ask questions rather than give answers, because questions lead to learning and answers may not [25]. The skill of asking divergent, or open-ended, questions is fundamental in the development of comprehension and creativity. Coaches ask open ended questions rather than close ended ones. Divergent thinking broadens one's perception and flows from asking open-ended questions that seek to understand related frameworks and one's own perspective. Open ended questions emerge coachee's intuition and creativity which is sometimes seen as synonymous with divergent thinking Divergent questions set a new foundational base for perception. They do not seek facts about the problem, but rather look for qualitative information about the uniqueness of the situation and the purposes of the individuals served by the solution. Such "purposeful information" always relates to the broadest perspectives rather than the minutiae. Asking questions about these issues opens perception and is expansive, or divergent, for the mind.

Coaches use close ended questions either but they just use them when the process of divergent thinking has been completed, ideas and information are gathered, then in order to organizing and structuring them, they use convergent question. In addition they use close ended question when they want to:

a) Begin narrowing the conversation and to get specific answers that lead them to a conclusion or a commitment, b) Getting the agreement for contract and, c) Backtrack in order to check in that they are on track.

Coaches ask 4 level strategic questions those start with

objective questions in order to observe and understand the main object and generate coachee's knowledge then shift to reflective questions, to explore feelings, motives, personal connections to situation and access to deep responses, continue with interpretative questions in order to make sense of situation as long as examining beliefs, values, and assumptions, and it's importance and implications, finally wind up with decisional questions which contain defining future actions and expressing commitments to them. (see Fig. 3)

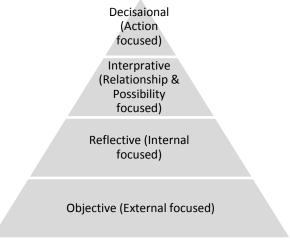


Fig. 3 Systemic coaching questions

VI. RESULT

Coaching integrates classical conditioning, reinforcement, transformative learning, and experiential learning theories in an operational one which can cause deep learning and lead to improvement of coachee's learning. As coaching considered cognitive and behavioral assumptions by noticing desired results of measurable behavior as well as insight or changes in the internal needs or motivation, therefore it complied with cognitive and behavioral learning theories.

VII. CONCLUSION

Coaching as a different approach which considered cognitive and behavioral aspect of learning can lead to improvement of educational level. Therefore it will be strengthened by the validation of theories and evidence-based research as we move forward. Thus, it needs more research in order to applying effective theoretical frameworks.

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REFERENCES

- L. Whitworth, H. Kimsey-House, P. Sandahl, "Co-Active Coaching: new skills for coaching people toward success in work and life", CA. Davis black publishing 2007
- [2] Coachfederation.org
- [3] Y. Ives, "What is 'Coaching'? An Exploration of Conflicting Paradigms", International Journal of Evidence Based Coaching and Mentoring Vol. 6, No.2, August 2008 p.100
- [4] K. Griffiths, "Personal coaching: A model for effective learning", Journal of Learning Design, vol 1, No 2; 2005 p.55-65.
- [5] J. Whitmore, "Coaching for performance" 3rd ed. London: Nicholas Brealey Publishing. 2002
- [6] R. Hargrove, "Masterful Coaching (Revised Edition)". San Francisco: Jossey-Bass Pfeiffer. 2003
- [7] B. M. A. Wilkins, "grounded theory study of personal coaching" Unpublished doctoral dissertation, San Diego State: University of Montana. 2000
- [8] J. Travis Kemp, "Psychology's Unique Contribution to Solution-Focused Coaching: Exploring Clients' Past to Inform Their Present and Design Their Future", evidence-based Coaching: Theory, research and practice from the behavioral sciences. Vol 1, Australia: Australian Academic Press, 2005 p. 40
- [9] P. Zeus, & S. Skiffington, "The Complete Guide to Coaching at Work, Sydney:: McGraw-Hill Australia. 2000
- [10] D. Carnahan, J. Righeimer, L. Tarr, C. Toll, C. Voss, "Reading First Coaching: A Guide for Coaches and Reading First Leaders". Chicaco: Learning Point Associates, 2004
- [11] J. L. Hurd, "Learning for Life: A phenomenological investigation into the effect of organizational coaching on individual lives" Unpublished doctoral dissertation, USA: Union Institute and University Graduate College. 2002
- [12] A. M. Grant, "Towards a Psychology of Coaching: The Impact of Coaching on Metacognition", Mental Health and Goal Attainment. Submitted in partial requirement for the degree of Doctor of Philosophy, Department of Psychology, unpublished Doctoral Dissertations, Australia; Macquarie University. 2001
- [13] A. Griffiths, "Coaching and Spiritual Values in the Workplace: exploring the perspective of coaches". International Journal of Evidence Based Coaching and Mentoring Special Issue.4, 2010, 65-82
- [14] B. G. Spence, G. L. Oades, "Coaching with self-determination in mind: Using theory to advance evidence-based coaching practice", International Journal of Evidence Based Coaching and Mentoring, Vol. 9, No. 2 2011
- [15] C. A. Douglas, C. D. McCauley, "Formal developmental relationships: A survey of organizational practices" Human Resource Development Quarterly, 1999, 10(3), 203-220.
- [16] P. A. Aparece, "Teaching, Learning and Community: An Examination of Wittgenstein an Themes applied to philosophy of education" Roma: Iura Editionis et versionis reservantur 2005 p 75
- [17] Carter T M. Appreciative inquiry and adult transformative learning as an integrated framework to guide life coaching practice. Unpublished Dissertation of doctoral of Philosophy (Ph.D.) in Psychology, San Francisco, California: faculty of Saybrook Graduate School and Research Center in partial fulfillment of the requirements; 2009
- [18] A. M. Grant, An Integrative Goal-Focused Approach to Executive Coaching. Evidence based coaching handbook: putting best practices to work for your clients Hoboken, N.J.: John Wiley & Sons , 156-192, 2006
- [19] K. Griffiths, "Personal coaching: A model for effective learning" Journal of Learning Design, vol.1 no.2, pp. 55-65, 2005
- [20] G. Cheetham, G. Chivers, "How professionals learn in practice: an investigation of informal learning amongst people working in professions'", *Journal of European Industrial Training*, 25, 5, 247-92, 2001
- [21] P. S. Linder, "NLP Coaching: An evidence-based approach for coaches, leaders and individuals", *First published the United States, Kogan Page*, 2010
- [22] B. Bachkirova, E. Cox, E. Clutterbuck "The Complete Handbook of coaching", London: SAGE, 2010
- [23] L. Dunn "Learning and Teaching Briefing Papers Series" Oxford Centre for Staff and Learning Development, 2002 http://www.brookes.ac.uk
- [24] J. Hay, "Coaching, train the trainer", *London: Fenman Ltd*, Issue 7, 2003, Available at: http://www.fenman.co.uk

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- [25] O'Connor, Joseph & Lages, Andrea. How Coaching Works. A & C Black. First published, Great Britain, 2007
- [26] M. Smith, R. A. Gilbert, "learning team approach to executive recruitment, coaching & consultancy", Institute of Work-Based Learning Middleser University, 2011
- Learning, Middlesex University, 2011
 [27] S. J. Armstrong, C. Fukami, "Handbook of Management Learning, Education and Development" London: Sage Publications, 2008
- [28] E. Cox, "An Adult Learning Approach to Coaching. Evidence based coaching handbook: putting best practices to work for your clients Hoboken", New Jersey, John Wiley & Sons, p 200, 2006
- [29] C. Harding, "Using the Multiple Intelligences as a learning intervention: a model for coaching and mentoring", International Journal of Evidence Based Coaching and Mentoring, Vol. 4, No.2, Bournemouth University, UK, PP:19-42
- [30] J. Mezirow, "Transformative Learning: Theory to Practice, new directions for adult and continuing education" no. 74, Jossey-Bass Publishers, 1997
- [31] G. Olivero, K. Bane, D. Kopelman, E. Richard, "Executive coaching as a transfer of training tool: effects on productivity in a public agency" *Public Personnel Management* pp 12-22, 1997
- [32] C. A. Frayne, G. P. Latham, "Self-management training for increased job attendance: A follow-up and a replication," *Journal of Applied Psychology*, Vol.74, 411-416, 1989
- [33] C. R. Rogers, "The necessary and sufficient conditions of therapeutic personality change" Journal of Consultative Psychology, Vol.21, 95– 103, 1957
- [34] J. Starr, "The Coaching Manual The definitive guide to the process, principles and skills of personal coaching" *Pearson Education*, 2003
- [35] Munro, R, (2012), Coaching and the Change Paradox: A Heuristic Study, International Journal of Evidence Based Coaching and Mentoring Special Issue No.6, PP:88-101, Oxford, UK.
- [36] N. Nielsen, K. Nielsen, "The Graves Model and its application in coching" Berlin: NLP & Coaching Institute 2010 available at <www.NLP-Nielsen.de> p 8
- [37] M. Marquardt, H. S. Leonard, A. Freedman, C. Hill, "Action learning for developing leaders and organizations: Principles, strategies, and cases", Washington DC American Psychological Association, 2009
- [38] V. Vaarttjes, "Integrating action learning practices into executive coaching to enhance business results" *International Journal of Evidence Based Coaching and Mentoring*, Vol. 3, No. 1, 2005. p 1-17