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A LEARNING NEEDS THEORY OF MOTIVATION: HIGHLIGHTING UNDERLYING NEEDS FROM LEARNING STYLES AND THEIR RELATION TO WORK MOTIVATION

Summary. Learning styles are tendencies or preferences in terms of grasping and transforming knowledge. However, having worked with Experiential Learning Theory and learning styles for more than a decade, we observed that individuals highlight consistent underlying needs associated with each of the four learning styles that have been mislabeled as ‘personality’ problems. In this paper, we propose a Learning Needs Theory of Motivation based on these underlying needs and their relation to the emergent research on work motivation. We also present simple but powerful exercises in organizational and educational settings to facilitate discussions that raise awareness and deepen understanding of learning needs. We believe that reframing tendencies and preferences in each of the learning styles into underlying needs that have to be met corresponds to the definition of work motivation as a phenomenon involving intrapersonal and interpersonal (and group) dynamics, cognitive and affective processes, and needs.

Keywords: experiential learning, work motivation, learning styles, teams, needs

TEORIA MOTYWACJI OPARTA NA POTRZEBACH UCZENIA: KLASYFIKACJA POTRZEB ZE WZGLĘDU NA STYLE UCZENIA SIĘ I ICH ODNIESIENIA DO MOTYWACJI PRACY

Streszczenie. Style uczenia się są skłonnościami lub preferencjami w kontekście pozyskiwania i przekształcania wiedzy. Jednakże, pracując przez ponad dekadę nad Teorią Eksperymentalnego Uczenia i stylami uczenia się, Autor zaobserwował, iż jednostki wyróżniają spójne potrzeby związane z każdym z czterech stylów uczenia się, które niesłusznie określano jako problemy osobowościowe. W niniejszym artykule zaproponowano Teorię Motywacji Opartą na Potrzebach Uczenia się, której podstawę

stanowią te wyróżnione potrzeby i ich relacja w stosunku do wyłaniających się badań nad motywacją pracy. Zaprezentowano również proste, lecz skuteczne, ćwiczenia w warunkach organizacyjnych i edukacyjnych, służące ułatwieniu dyskusji, która podnosi świadomość i pogłębia rozumienie potrzeb uczenia się. Autor artykułu wierzy, że ponowne ujęcie skłonności i preferencji w każdym ze stylów uczenia się podkreślające potrzeby, które mogą korespondować ze zdefiniowaną motywacją pracy, jest zjawiskiem uwzględniającym intra- i interpersonalne (oraz grupowe) zmiany, poznawcze i afektywne procesy oraz potrzeby.

Słowa kluczowe: teoria motywacji, style uczenia się, motywacja pracy

1. Introduction

Organizations and educational institutions have used learning styles to help leaders, managers and students develop self awareness in terms of their preferences in grasping and transforming knowledge. Although Experiential Learning Theory or ELT¹ and the Learning Style Inventory or LSI² have been used in such settings and established as one of the more influential theories that is used in managerial and leadership development programs,³ our work involving ELT and using the LSI over the past decade as faculty, researchers and educators/trainers in executive education surfaced a simple yet profound consistency of underlying needs associated with the four learning styles that have not been explored and linked to work motivation.

In this paper, we propose that understanding the underlying needs for each of the learning styles can be very useful when working in teams or when working with others. More explicitly, we argue that learning styles and work motivation are intrinsically tied. The structure of this paper begins with a brief overview of motivation theories highlighting the emergent stream of work motivation and the necessity to include learning needs. We then briefly discuss ELT and learning styles (see Lingham⁴ for a more detailed description that includes integrative development). Finally we present the needs associated with each of the learning styles and propose how understanding this can help us motivate others in organizational and educational settings.

¹ Kolb D.A.: *Experiential learning: Experience as a source of learning and development*. Englewood Cliffs, Prentice-Hall Inc., New Jersey 1984.

² Kolb D.A.: *The Kolb learning style inventory*. TRG Hay/McBer, Boston 1999.

³ Vince R.: Behind and beyond Kolb's learning cycle. *Journal of Management Education* 1998, no. 22(3), p. 304-319.

⁴ Lingham T.: *Experiential learning theory*, [in:] Clegg S., Bailey J.R. (eds.): *International Encyclopedia of Organization Studies*. Sage Publications, Thousand Oaks, CA 2008.

2. Motivation Theories and Work Motivation

Victor Vroom⁵ defines motivation as a process controlled by the individual in making behavioral choices that lead to desired results. In a more recent definition, Latham and Pinder⁶ define motivation as a psychological process resulting from the interaction between the individual and the environment. Underlying these definitions are two fundamental components of motivation: *what* motivates people and *why* people behave the way they do. Although numerous motivation theories exist, they can be categorized into these two fundamental components: content theories (i.e., what motivates people) and process theories (why people behave the way they do)⁷ Dolan and Lingham⁸ assert that content theories “stem from the understanding of motivation that is based on the attempts to satisfy unmet needs.” Examples of content theories are Maslow’s Hierarchy of Needs,⁹ Alderfer’s ERG Theory¹⁰; McClelland’s Socially Acquired Needs Theory¹¹ and Herzberg’s Motivator-Hygiene Theory.¹² Process theories, they argue, are concerned with explaining the behavioral and thought processes through which individuals attempt to satisfy their needs. Examples of process theories include Expectancy Theory,¹³ Goal Setting Theory,¹⁴ and Equity Theory.¹⁵

Drawing from these foundational works on motivation, researchers have recently identified work motivation as an area relevant to management and organizational behavior research.¹⁶ Identified as one of the key issues in organizational behavior research,¹⁷ work

⁵ Vroom V.: *Work and Motivation*. John Wiley & Sons, New York 1964.

⁶ Latham G.P., Pinder C.C.: *Work motivation theory and research at the dawn of the twenty-first century*. *Annual Review of Psychology* 2005, no. 56, p. 485-516.

⁷ Dolan S., Lingham T.: *Fundamentals of international organizational behavior*. Chandos Publishing (Oxford) and New Delhi, India: Sara Books Pvt. Ltd, Oxford, UK 2008.

⁸ *Ibidem*, p. 56.

⁹ Maslow A.H.: *A theory of human motivation*. *Psychological Review* 1943, no. 50, p. 370-396.

¹⁰ Alderfer C.P.: *Human needs in organizational settings*. Free Press, New York 1972.

¹¹ McClelland D.C.: *Achievement motivation can be learned*. *Harvard Business Review* 1965, no. 43, p. 6-24.

¹² Herzberg F.: *Work and the nature of man*. World Publishing Company, Cleveland 1966.

¹³ Vroom V.: *op.cit.*

¹⁴ Locke E.A., Latham G.P.: *Theory of goal setting and task performance*. Prentice-Hall, Englewood Cliffs, New Jersey 1991.

¹⁵ Adams J.S.: *Toward an understanding of inequity*. *Journal of Abnormal and Social Psychology* 1963, no. 67, p. 422-436.

¹⁶ Pinder C.C.: *Work motivation in organizational behavior*. Prentice Hall, Upper Saddle River, New Jersey 1998; Van Knippenberg D.: *Work motivation and performance: A social identity perspective*. *Applied Psychology: An International Review* 2000, no. 49(3), p. 357-371; Eccles J.S., Wigfield A.: *Motivational beliefs, values and goals*. *Annual Review of Psychology* 2002, no. 53, p. 109-132; Latham G.P., Pinder C.C.: *Work motivation theory and research at the dawn of the twenty-first century*. *Annual Review of Psychology* 2005, no. 56, p. 485-516; Curral L., Marques-Quniteiro P.: *Self-leadership and work role innovation: Testing a mediation model with goal orientation and work motivation*. *Revista de Psicologia del Trabajo y de las Organizaciones* 2009, no. 25(2), p. 165-176.

¹⁷ Van Knippenberg D.: *op.cit.*

motivation has been defined as a phenomenon that involves both intrapersonal and interpersonal dynamics;¹⁸ involving both cognitive and affective processes;¹⁹ and as a function of needs, values and beliefs²⁰ and goals with action.²¹ In this paper, we propose that this emergent stream of research should include a Learning Needs Theory as learning styles do affect intrapersonal and interpersonal (and group) dynamics; involve cognitive and affective modes of learning; and also involve consistent underlying needs associated with each style.

3. Experiential Learning Theory

Experiential Learning Theory or ELT is a learning process involving the combination of grasping and transforming knowledge through experience.²² The theory presents two ways in which we grasp knowledge: Apprehension and Comprehension (presented as the vertical axis); and two ways in which we transform knowledge: Intension and Extension (presented as the horizontal axis).

Grasping knowledge. Apprehension and comprehension are two key aspects central to the theory of Experiential Learning and represent the dialectically related ways in which we grasp knowledge. The Apprehension-Comprehension dialectic is derived from dual knowledge theory, which states that there are two, yet inseparable ways, of knowing: Concrete and Abstract. This dialectic can be stated as the emotional-conceptual dialectic²³. We grasp experience by either being involved through Apprehension using the concrete experience (or CE) learning mode or Comprehension using the abstract conceptualization (or AC) learning mode. The CE mode is one where we interact with our environment through immersion, experiencing it with our senses,²⁴ feelings and emotions.²⁵ On the other hand one can also grasp knowledge through the AC mode by exercising one's cognitive capacities instead of senses and/or emotions. We can think about, analyze and theorize to gain knowledge without

¹⁸ Pinder C.C.: op.cit.

¹⁹ Curral L., Marques-Quinteiro P.: op.cit.

²⁰ Latham G.P., Pinder C.C.: op.cit.

²¹ Eccles J.S., Wigfield A.: op.cit.

²² Kolb D.A.: *Experiential...*, op.cit.

²³ This emotional-conceptual dialectic corresponds to the affective and cognitive process inherent in work motivation (Curral & Marques-Quinteiro, 2009).

²⁴ Ittelson W.H., Cantril H.: *Perception: A transactional approach*. Garden City, Doubleday & Company, Inc., New York 1954; Donceel J.F.: *Philosophical psychology*. Sheed and Ward, Inc., USA 1963.

²⁵ Dagleish T., Power M.: *Handbook of cognition and emotion*. John Wiley & Sons Ltd., England 1999; Ekman P., Davidson R.J.: *The nature of emotion: Fundamental questions*. Oxford University Press, New York 1994.

being immersed in the environment. Comprehension is defined as “Abstract Knowing”, which is experienced as the linguistic, conceptual, interpretive process based in the newer left cerebral cortex of the brain.²⁶

Transforming knowledge. Apart from how knowledge is grasped, Kolb²⁷ articulates that the transforming of knowledge is also central to the theory of Experiential Learning. Simple perception of experience alone is not sufficient for learning; something must be done with what we have taken in, or grasped. Intension is the act of reflecting on or observing some state or experience whereas extension is the actual action – deliberate or experimental – that will generate new states and experiences. This dialectic involves the praxis of action and reflection²⁸. We transform knowledge by either being involved through the reflective observation (or RO) learning mode or the active experimentation (or AE) learning mode. The RO mode is one where we incorporate diverse perspectives from the knowledge we gained through reflection or observation. The dialectical related AE mode is one where the focus is to do something about the knowledge we gained.

4. Learning styles

The combination of preferred modes for grasping and transforming knowledge is highlighted as an individual’s preferred learning style. Such a combination creates four learning styles. Kolb²⁹ asserts that learning is maximized when an individual goes through all four modes of learning beginning at a mode that is reflective of that individual’s learning style. It is when we interact with others that we may notice they also have such learning tendencies. As we progress into adulthood, we develop certain predispositions or preferences for how we grasp and transform knowledge. This tendency to choose certain learning modes is indicative of a preferred learning style. A brief description of each style is discussed.

Diverging. An individual with a diverging learning style tends to choose the CE mode in grasping information and the RO mode in transforming knowledge. Such individuals tend to be personally involved in any situation or event and are sensitive to feelings and people. Individuals with a diverging learning style also tend to view issues from many and/or different perspectives, look for the meaning of things and also carefully observe a situation

²⁶ De Bono E.: The mechanism of mind. Simon and Schuster, New York 1969; Gazzaniga M.: The social brain: Discovering the networks of the mind. Basic Books, New York 1985.

²⁷ Kolb D.A.: Experiential..., op.cit.

²⁸ This dialectic of action and reflection corresponds to the goals with action aspect inherent in Eccles’ and Wigfield’s (2002) review of motivation.

²⁹ Kolb D.A.: Experiential..., op.cit.

before making any judgments. Their interest in knowledge and idea generation is the reason for such a style to be labeled as “diverging.” As such, they tend to do well and even thrive in situations that involve the bringing together of diverse perspectives such as brainstorming. Their passion for gathering information is ideal for tasks or work involving creativity or the arts, entertainment and service. Such people also tend to be imaginative, have the ability to listen with an open mind, and to function as excellent team players. In a classroom setting, discussion forums work well for individuals having diverging learning styles.

Assimilating. Individuals with an assimilating learning style tend to use the AC mode to grasp knowledge and the RO mode for transforming knowledge. People with this preferred style tend to look at diverse perspectives but with a specific intention to understand and to distill information to seek clarity and precision. They tend to logically analyze ideas, and to plan systematically. People with this learning style have a tendency to remove themselves emotionally and instead seek to understand situations intellectually. Their focus on achieving clarity make them thrive in tasks or work areas involving theories, and ideas that promote precision such as the sciences, research and development and most academic environments. They tend to work well on their own and have very high standards in their work. In a classroom setting, assigned readings, listening to lectures and developing conceptual models work well for individuals with this preferred style.

Converging. Sharing the preference for the AC mode in grasping knowledge with the assimilating learning style, people with a converging learning style tend to also prefer the AE mode in transforming knowledge. Individuals with this learning style have an interest in not just understanding a situation or event but they also want to be able to take action using this knowledge. Unlike individuals that focuses on the soundness of a theory (those with assimilating learning styles), an individual with a converging learning style focuses on the practicality of theoretical models. Their propensity to use ideas to solve problems makes them ideal for careers in technology, engineering, and design. As such, they prefer to work with technical tasks than to deal with social problems or interpersonal issues. Individuals with converging learning styles thrive when they are given tasks with clear parameters or boundaries. In a classroom setting, using case studies, simulations and laboratory assignments work well for people with converging learning styles. Educational environments that focus on examinations and tests also align with the converging learning style.

Accommodating. Individuals with an accommodating learning style tend to prefer immersing themselves in the CE mode to grasp knowledge and the AE mode to transform knowledge. Similar to individuals with diverging learning styles, those with accommodating learning styles tend to be sensitive to feelings and people as they are concerned about relating to others. However, people with this learning style are also very focused on being able to get

things done, taking risks and influencing people through action. They tend to accommodate (or adapt) to the environment they are immersed in. Such individuals focus on having “hands-on” experience as their primary mode of interacting with their environment, tending to act on their ‘gut’ rather than using logical analysis. They also do well in tasks or jobs related to sales, marketing and management due to the emphasis on action or getting things done. As with the diverging learning style, those with an accommodating learning style also like to work in teams but with the focus on getting things done, completing a project or doing field work. In a classroom setting, completing assignments, fulfilling tangible tasks and doing presentations work well for individuals with this preferred style.

5. A Learning Needs Theory of Motivation

As Experiential Learning Theory³⁰ is considered one of the more influential theories used or referenced to in leadership and managerial development programs,³¹ proposing a Learning Needs Theory of motivation as a perspective to understand work motivation would be necessary, critical and perhaps also contribute to our understanding of how to effectively work in teams. We present the four learning styles to showcase the different underlying needs for each. People with balanced or centered learning styles would be able to work with what the situation or task requires (i.e., having flexibility or comfort to work with what is best for the situation) and do not get stuck with getting frustrated if underlying needs are not met. Another point to understand is that ELT is a dynamic theory suggesting that people can develop learning flexibility and this is largely possible by understanding how to motivate others with different learning styles or to work in environments that emphasizes particular learning styles (for example, engineers and designers tend to function in a converging environment as they work with parameters or clients’ needs and researchers tend to function in an assimilating environment). Based on the combination of learning modes (one from grasping knowledge and the other from transforming knowledge), we revisit the four learning styles highlighting their unique underlying needs:

Diverging. Individuals who prefer diverging learning style are motivated by information. In a work environment, such people tend to throw out information to ensure that different perspectives, thoughts or ideas are considered. Such individuals, however, are not wedded to their ideas. The need to ensure that as much information as possible is considered important

³⁰ Kolb D.A.: Experiential..., op.cit.

³¹ Vince R.: op.cit.

to individuals with diverging learning styles. They would ask questions such as “Have we considered this idea?”, or “What about looking at this from another angle?” In short, people with diverging learning styles have an underlying need to work with, uncover or entertain information.

Assimilating. Individuals with this preference need to seek clarity and precision in what they do. In a work environment, such people tend to focus on why they are doing a task. They need to have a clear idea of the purpose or rationale concerning the task, product, or deliverable. Even goals or objectives need to be made clear to them or they will ask questions to achieve clarity. They tend to ask questions like “Why are we doing this?”, or “Can you help us understand this objective?”, or “How does this align with the overall goal of the organization? In short, people with assimilating learning styles have an underlying need for clarity and understanding the purpose of any task given to them.

Converging. Individuals with this learning style function well when they are given parameters, guidance or expectations along with the task. Such individuals need to work around knowing what is expected of them or what their clients/customers need. They will ask expectation related questions such as “How long do we have to complete this task?”, or “Can you let us know what is it that you are expecting from us?”, or “I need to know what the clients really wants so that we can give them what they want.” Without some sense of parameters, guidance or expectations, they would feel lost and even frustrated. In short, people with converging learning styles have an underlying need for parameters when embarking on any task assigned to them.

Accommodating. Individuals with this preference tend to push for action and need to have a sense that they are doing things to accomplish a task. Such individuals love to work fast and come across as dynamic and quick in what they do. They react adversely to having to deal with questions or clarifications as they feel like these behaviors stall or hinder the momentum of action. They will ask questions like “Can we move along?”, or “Do we need to have such lengthy discussions? We need to push on and start working on the project/task.”, or they may make statements like “Don’t worry about details. We will work it out as we progress through the task.” Such individuals love to work fast and as such are not concerned about being mired in clarity or details. In short, people with accommodating learning styles have an underlying need for action.

Table 1

Underlying Needs of Different Learning Styles, Related Work Foci and Developmental Suggestions

Learning Styles ^a	Underlying Need	Examples of Tasks that Align with Learning Styles	Preferred Engagement Mode	How to Frame Tasks/Projects and guide development
Diverging	Information: Work with, uncover or entertain information. Gathering information from diverse sources	Market research; Bench marking; Brainstorming; Managing teams and dealing with multiple opinions; Creating lively discussions; and Working with cross-functional task/projects.	Teams	Present projects as needing information or gathering information bounded by structures or limitations. Give them some freedom. Gently guide them not to stray too far.
Assimilating	Clarity/purpose: Understanding purposes behind tasks and knowing why suggestions or objectives are important	Clearly defined projects; Setting clear goals and objectives; Refining work; work requiring high standards; and Editing reports.	Individual	Present projects as getting a better understanding and coming up with clear recommendations. Give them time. Gently guide them to work faster.
Converging	Parameters: Requirements, guidelines or expectations related to tasks.	Working with clients who have high expectations; Deriving parameters (scoping); problem solving; and Client management.	Individual and teams or clients	Present projects as guided by specific guidelines or parameters. Give them specific guidelines. Gently guide them to be creative.
Accommodating	Action: Working fast and being efficient.	Projects with short deadlines; Task oriented projects (list of things to do); and Networking or working in teams to get work done.	Teams (Individual if scope is manageable)	Present projects as urgent and requiring actions that need to be carried out or done. Give them trust. Gently guide them to be more precise.

^aOnly the four learning styles are presented. Individuals with balanced learning styles are able to flex based on the needs of the situation

Table 1 shows the underlying needs for each learning style and its relevance to work motivation. We have also included information on how to develop or guide individuals with the different preferred learning styles.

6. Raising Awareness of Learning Needs in Organizational and Educational Settings

In this section, we present how we help organizational members and students understand, appreciate and become aware of the underlying needs inherent in individuals with different learning styles.

Organizational Setting. When we teach learning styles in executive education or corporate programs, we use an exercise to help participants understand the different styles. After completing the LSI and determining their learning styles, we form them in four groups according to their learning styles and have them plan a vacation for the whole group. Almost all the time, we notice the accommodating group having very lively discussions, laughing and coming up with the plan very quickly; the assimilating group working quietly and thoughtfully (usually with a scribe jotting down notes); the converging group figuring out what criteria should be identified so that they can work through the process; and finally the diverging group being very engaging and on occasion sending out scouts to hear what other groups are saying or discussing. After about 10 to 15 minutes, we get them to report out their plan (outcome) and how they came up with the plan (process). On most occasions we hear plans that are ambitious and somewhat vague coming from the accommodating group and when asked for more detail, they usually respond in ways that imply “don’t worry about that, we will work it out.” The diverging group highlights the need to incorporate interests from everyone and come up with options or one where many possible activities are possible to cater to individuals in the group. The converging group tends to highlight their process and showcase how decisions were made or the voting process involved once they established some parameters to complete the task. They usually mention that they found it easy to work in their groups.

When asked what would happen if the different learning styles are put into a group to complete the same exercise, people start reacting to the difficulties that would emerge. Once we present the underlying needs for each of the learning styles, the entire discussion becomes lively and engaging using concrete examples they have encountered in their work environment realizing that they often mistake learning needs as ‘personality’ problems or issues. Participants immediately acknowledge that approaching interactions at work from a

learning needs perspective is not only powerful but provides them with new skills to work with teams, manage their bosses and/or clients, and facilitates a deeper understanding of how to motivate others.

Educational Setting. As part of our MBA curriculum design, we create learning teams of six to ten students that include all four learning styles. One of their first experiences in teams is to engage in a Group Decision Making Exercise (GDME) which is a simulation where the teams function as a top management team of a consulting firm task to fire three of its six employees. The teams are video recorded as they work in separate rooms for 40 minutes to complete the decision making process.

Without fail, when we sit in their teams or watch the DVDs with them, members in the team with converging learning styles immediately start asking for or identifying parameters (even developing formulae or matrices) to work through the decision making process. Students with assimilating styles tend to stop this process and begin by asking any questions that they feel are not clear and need to be addressed before moving on. Members in the team with preferred accommodating styles are immediately interested in knowing the individual decisions and begin a voting process to start moving the decision making process forward. Finally, we notice individuals with diverging learning styles asking questions from individuals to bring opinions or thoughts to the table so as to ensure that they have heard from everyone. The confluence of these activities based on the needs from the different learning styles invariable creates tension and conflict in the team with some members feeling absolutely frustrated after the conclusion of the exercise.

In our debrief as a class after completing the exercise, we highlight how the frustrations or tensions experienced are a function of unmet underlying learning needs related to the different learning styles in the teams. We then discuss how we can address learning needs by paying attention to the questions members ask raising awareness that learning styles are figural in the exercise and some teams work through these frustrations that surface from the different needs while others struggle with it. We have the teams watch the exercise again with the intent to identify their own learning needs and that of others and discuss how managing and meeting these needs can create healthy and successful teamwork.

7. Conclusion

In this paper we present that a Learning Needs Theory of Motivation can contribute to the emerging research in work motivation. We discuss how understanding the underlying needs related to the different learning styles can positively affect intrapersonal and interpersonal

(and group) dynamics and that such a perspective further takes into account cognitive and affective processes related to work motivation.

Since Experiential Learning Theory has been widely used and robust across diverse nations and cultures, our Learning Needs Theory of Motivation that focuses on the underlying needs in each of the four learning styles can be equally influential. Having worked on learning needs with organizations with offices in the US, Europe, Asia and Africa and educational institutions in Europe and the US, we are confident that such an approach is applicable to our increasingly complex global work environment. Using simple and powerful exercises to understand the underlying needs for each learning style can indeed help: 1. Managers and leaders manage upward by understanding their managers learning style; manage clients and customers; and motivate (and develop) their employees in the work environment; and 2. Students develop the understanding and the skill to prepare them to work effectively in teams upon graduation. We put forward that a Learning Needs Theory of Motivation can be an effective applied perspective to help leaders, managers and educators due to its intrinsic link work motivation.

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