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Preferred Digital Learning Styles among Management Education Graduates in Today's Digital Era

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Abstract--*As of the traditional model, the learning paradigm has advanced to modern methods and the whole credit should be given to the advancement of the digital era. This mainly concentrates on the learner's holistic development for encountering the challenges of the future. In providing Management programs and courses with regards to Higher Education (HE), the learning styles (LS) in addition to strategies should be integrated since the Internet as well as digital world has suffused through every society strata stimulating all sorts of changes in social, technological and economic ones. Since this world is in an express mode that is driven by technology, the future seems to be disruptive in the instance of 'HE' as the world is traveling from Information age to the age of experience. To adopt the original, innovative and newer LS for gratifying the learners, the 'HE' should embrace Information and communications technology (ICT). Rather than just providing knowledge, the assortment of digital and traditional learning would ensure skills-based learning in order to deal with the remarkable intricacy and uncertainties of this earth. By providing disparate LS in 'HE', the analytical ability, entrepreneurial skills, and teamwork can be built which consecutively surmount national boundaries and ameliorate the interdisciplinary learning together with life skills. The focus of this study is to explore the disparate LS in addition to strategies, which can well be integrated in teaching/learning that favour the new generation called the GenZ (people who born during the period where social media platforms, Internet, mobile devices and also other forms of digital communications is common). As a result, reinventing the course of delivering the knowledge to these students in 'HE' is the foremost focus that is faced in today's Digital Era.*

Key words--*digital learning; digital learning preferences; learning styles; Higher Education; Management Education*

I. INTRODUCTION

As per the digital learning report as of Arizona States University (ASU) in addition to the Boston Consulting Groups (BCG), if universities and institutions consider digital learning and also endow in developing first-class course and programs, then critical objectives can be realized, and enhanced student outcomes can be attained (Ascione, 2018) (Source: https://www.ecampusnews.com/2018/06/27/7). Research ought to be done on utilizing the technology based learning for students with an eye to detect the best possible solution. Since the students have stopped depending only on the traditional way of learning, disparate teaching as well as LS should be generated for keeping up with this generation. The essential plan is to make sure to provide a best environment and personalized LS for enhancing the skill, thus the strategy, plan, development, implementation along with management of digital platforms are fundamental.

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The acknowledgment was provided nowadays for the fact that a particular LS will not work for every student and certainly not for the specific ethnic or cultural group (Arp, Woodard, & Mestre, 2006; Gulbahar & Alper, 2011). A hybrid approach is needed since every student encompasses their way of learning and that approach should provide instruction on the majority of the disparate LS. Personalized learning with regard to learning strategy has attained implication as it can cater to any LS that the student is in need of. Therefore, personalization of learning is basically an imperative digital strategy, which houses the adults' learning preferences, LS, as well as the behaviours. Instructors confront difficulties whilst moving their know-how and invaluable experiences as of conventional to online environments (Gulbahar & Alper, 2011). The actual challenge is the identification of the individual preferences with regards to specific LS since it is crucial for recognizing the individual differences amid the learning groups that are affiliated to an assortment of faculty as well as subjects, which might be required to be added with diverse LS

Beadles II and Lowery evaluated the LS to know whether it can envisage the preference of educational delivery or not. Their discovery exposed the differences in LS among students who preferred to register in a conventional program in addition to those who preferred a web-centered program. Thus, the researchers deduced that, "… those LS might well be a vital determinant of the choice of educational delivery technique" (p. 110) (Beadles II & Lowery, 2007). The virtual world of learning, in tandem with the tools as well as technologies applied, has absolutely varied the delivery method; however, it hasn't altered the supreme objective of learning. As today's technologies permit educators to perform in a multi-modal learning setting, the LS requirements of the entire students are provided with the option to perform well (Gulbahar, 2011; Whiteley, 2007). These studies, consequently, indicate that online learning environments ought to be modeled and executed to house individual differences, in addition, there is plenty more investigation required so as to illuminate the phenomenon (Gulbahar & Alper, 2011). Thus, the study is performed for showcasing the disparate LS, which can well be included via the digital medium that can well be delivered via manifold modalities for revamping the LO.

II. LITERATURE REVIEW

Steinmayr, Weidinger, & Wirthwein (2008) performed research on academic achievement as well as it was determined that "academic achievement must be regarded to be a versatile build up that encompasses an assortment of domains of learning". The research emphasized the requirement of having an attitude to shift to a learning modality when it is needed. While applying this learning solution, it required both culture and environmental support to the learners for attaining their objects. This might be the utmost vital principle in utilizing a virtual environment and it provided a good viewpoint of educational research. It as well stated that academic achievement was considered to be the great advantage to an individual and also it was having more consequences in developing a wealthy nation.

Gulbahar & Alper (2011) discussed the chosen LS that was identified in an online learning environment that enriched the learning practice along with their quality. The chief objective was to deliver the difference between an assortment of learning predilection and styles in an online settings that would profit the e-instructors and also it provided the significance of learning preferences as well as LS. The resemblance among learning strategy and LS favored by students was also identified. This research also presented that there was an important connection amongst the students LS and the favoured strategy and also this work showed '8' disparate e-LS which included visual, social, auditory, individual, concrete, and abstract learning.

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Phillip M & Miah, (2017) stated that there were several LS available for learners which included visual, auditory, kinesthetic, etc. By utilizing the suitable LS for the student to teach was resulted in the enhancement of learning. There were many LS available for most of the students, but in certain instances, the main concept was faulty because it failed to justify the notions that needed comprehension, explanation as well as recalling basic proofs and thoughts. There was no evidence found to predict that this work supports the utilization of LS but it assured that this will give benefits to the students learning. Kolb LS was known to be the utmost favored LS from an inventory to design LS instrument. As per this work's concept, it defined that an individual will get much knowledge when they get information in their suitable LS as stated by the author. Although there was evidence of lacking support and debunking the LS, a group of people who accepted the LS. An opinion was put forwarded to endorse more proof-centered approaches to learning.

Rana Ardichivili, & Polesello, (2016) highlighted the significance of autonomous learning by understanding the aim of the learning organizations via adaptable approaches that combined with technology. There were loads of adaptable means that was put forwarded to handle integrating technology and also eradicating the plan of customary learning that needed learners to be highly autonomous in the learning procedure. The organizations were developing programs that were more concerned about developing self-directedness that permitted people to develop their knowledge and services to attain effective outcomes. This work showed that the individuals were more occupied with the content given via online sources and the students were concerned in the learning procedure. The blended learning methods must be evaluated for the feasibility of implementing in the educational environment.

III. RESEARCH PROBLEM

The present place of the literature reveals that there isn't any proof to succor the usage of LS in this method (Pashler et al., 2008; Rohrer and Pashler, 2012). There is only a little research that is being done on analyzing the effect of digital-LS on the disparate domains of learning that sway the academic accomplishments of graduates in Biz Schools. Those domains are as follows: i) knowledge (cognitive), ii) attitudes (affective) and iii) skills (psychomotor domain). The high-level learning outcomes (LO) like knowledge, attitudes as well as skills are distinct with observable along with measurable aspects. This assists in ascertaining whether an innovative design has an impact on these overarching LO and also aids in developing the student's ability. Pedagogic model is actually a classical design of learning, which is an old-fashioned conception, as this method couldn't be sufficient for engaging the students with different LS. This might well be because the delivered content might occasionally be just abstract. In addition, the students might prefer to learn as they wish anytime and anywhere, and also they would as well want to have adaptability in accessing the information and having control on the delivery of learning by means of an instantaneous access to neutral criticism, which will help them to be-on-line and keep them motivated on the way to attain their academic triumph. The technology is required to be permeated for generating innovative LS, which can make students participate in self-paced as well as active learning.

Equal chances to the student for learning and preparing for work as well as future education should be afforded by the Institutions (at least it should try) irrespective of their house's economical conditions. A necessity is arisen to go after innovative teaching or learning methodology that is learner-based, which has a positive effect on the learning domains. The research is to recognize and also explore the LS that would aid

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students to assimilate knowledge as well as prepare aimed at future studies that in-turn would apprehend the scholastic learning and ameliorate academic accomplishment of 'HE' graduates.

IV. RESEARCH METHODOLOGY

Centred on secondary sources of data published by universities and International agencies in their periodicals, conference events, and websites, this work is developed. Along with that, Peer-reviewed national as well as, international journals concerning 'HE' and management were also reviewed for the paper. This is a methodical study and conceptual work.

V. THE DIGITAL LEARNING STYLES

The teachers need to comprehend and acclimatize disparate LS for effectively delivering the instructions to assist the 'HE-students' to study independently (Grasha, 1996). LS is the favored means for a person to assimilate, comprehend, as well as retain information (Lai and Lee, 2019). The disparate LS, which were identified to assist the pupils in the digital epoch as per the theories, models as postulate are:

Gulbahar & Alper (2011) posited that as per the Kolb's LS Model (1984), the learning occurs via experiences as well as due to the cognitive process of the mind thus it is cyclic, as this specific model concentrates upon learning capabilities. The learning modes' combination employed for establishing the '4' quadrants indicate the '4' LS:

1) Accommodators (favoured the feeling in addition to doing experience),
2) Divergers (favoured the feeling along with watching experience),
3) Assimilators (favoured the thinking in addition to watching experience),
4) Convergers (favoured the thinking together with doing experience).

While the Felders-Silverman Model is centred on LS of a student that is grounded on propensity and recommended students might encompass a higher predilection for particular activities with LS combinations are positioned in opposition to one another, and it is a fusion of preceding models as well as theories:

The learning dimensions are

1) Sensing /Intuitive style (acquired as of the Myer Briggs's Type Indicator)
2) Visual /Verbal style
3) Active /Reflective style (embraced as of David Kolb's model of experimental learning)
4) Sequential /Global style \

As the technological advancement and the escalated utilization of ICT in the course of teaching-learning, there stands no restriction of teaching & learning to be done only in the class-room or the university grounds. The ICT facilitated, online resources, WiFi campuses, together with e-learning have given the chance to the individuals to study synchronously as well as asynchronously. Meta-Analysis research was performed during 1996 and 2008 by the Department of Education around 2009, which advocates that individuals who took part in an online class (fully or partially) performed superior to the student who took part only in the conventional face-to-face instruction (Gebara, 2010). The instructor can identify specific LS for developing course content as well as material for delivering the lessons in a web-centered learning setting (Gulbahar &

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Alper, 2011). The LS should be personified for each person to aid them gain the correct skill since this is an age of digital transformation of organizations, robotics, automation, digitization, along with innovation. The disparate digital LS which were observed in some researchers are:

1) Individual/Solitary learning – this style is promoted by learners who are self-governing and concentrate on self-introspect, well-being, and continuously learn by thinking concerning the past.
2) Social/Collaborative learning – in this technique, the learner prefers learning in group or peer to peer interaction. People required being responsive towards others' feelings in addition to situations amid interactions.
3) Auditory/Aural learning – the learners who favor this style have a preference for music and encompass a good sense of identifying disparate music genre as well as musical instruments, additionally, comprehend music loud as well as clear.
4) Visual Learning – the learner goes for pictorial representations, images, maps to gather and also communicate information.
5) Concrete learning – here, the learner would like to learn via their communications with the physical world like the touch, hear, smell, along with taste.
6) Abstract learning –in this style, the learner prefers to learn by reasoning and intuition to understand the concepts, ideas, and also feelings.
7) Physical learning/Kinaesthetic learning – in this LS, the person learns by means of touch and feels proportionate to the objects, situations, and world around. The learner would like to figure out situations, generate ideas whilst doing some physical activity like walking/exercising.

VI. THE LEARNING STRATEGY THAT IMPACTS THE STUDENT'S ACADEMIC ACHIEVEMENTS

In the digital LS, individuals will utilize a number of tools, for instance, online courses, blogs, videos, podcasts, et cetera where no pressure is given in memorizing the facts, collecting information, along with motor skills, thus it affect the learning procedure. There is basically a requirement to coordinate differentiated instruction centered on gauging the course needed, students' ability, and also adjusting strategies by means of controlling the cognitive elements in the learning procedure. Zheng, Flygare and Dahl (2009) emphasized the requirement for research by stating that "the internet centred technology applications has been augmenting that has lead to the demand of comprehending the individuals' cognitive styles along with their interface with a disparate instructional strategy in online learning" (p. 222). Finally, the relationship amid students' predilection towards the learning designs & technology and also their effect on learning performance was emphasized by the researchers. In addition to this, Akkoyunlu and Soylu (2008) as well exposed that as per individuals' LS, their perspective on the amalgamated learning procedure, like the ease of utilization of the web setting, assessment, face-to-face setting, et cetera, vary (p. 183).

The figure below exhibits the steps that impact academic success.

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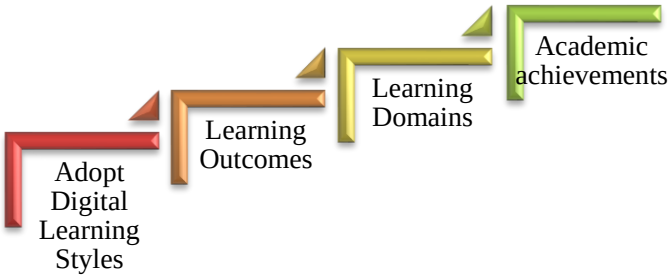

Fig.1 Digital learning Strategy impacts Academic Achievements

LO – These are nothing but the anticipated outcome of what a student should know, comprehend as well as know how to illustrate subsequent to the fulfillment of a learning procedure. When illustrating the Outcomes, it is obliging to utilize terms that are verbs in order that that they are assessable and discrete or that illustrate a discernible action that is distinct. The finest results will comprise a report of the conditions along with their satisfactory performance level.

The disparate learning behaviors that an individual should exhibit as an objective of the learning procedure, and Learning Domains are the classification of these behaviours. Subsequent to the experience, the students ought to have incorporated new skill, knowledge, as well as attitude.

Academic Achievements is the outcomes' performance, which points towards the degree to which an individual has completed their particular objectives that were the focal point of the activities in instructional settings. Bloom's Taxonomy was generated in 1956 by Dr.Benjamin Bloom (Educational psychologist) for constructing measurable LO that was taken as of the learning domains.

The board recognized '3' domains of scholastic learning or activities (Bloom, et al. 1956):

a) Cognitive - mental skills (knowledge, comprehension, evaluation, application, synthesis, analysis)
b) Affective - Attitude
c) Psychomotor – Physical or manual skills

VII. SCOPE FOR FUTURE WORK

The different LS that are adopted for online/e-learning should be linked to the digital LS. To know whether the graduates today are eager to move in the directions of synchronous and asynchronous styles of learning, and also if there is a significant gap that is present between online learning as well as digital-LS.

VIII. DISCUSSION

In this Digital Innovation era, wherein the competition is extreme, there stands a requirement to influence the utilization of ICT for developing the pedagogy to recompense the Innovation shortfall, which has impeded the 'HE' system in differentiation as well as diversification of 'HE' institutions. The potential in addition to the influence of personalized learning, blended learning, along with other digital-LS ought to be explored in advanced learning experience in 'HE' via placing the student at the core of learning and be zealous for coupling innovation as well as creativity in cultivating omnipresent pedagogy to advance scholastic achievement for every learners. Studies have recommended that the actual belief in LS has steadily lessened over the period; nevertheless, new teaching-learning modalities influenced by technology have forged ahead,

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which caters to the diverse LS. Melissa declared "Online learning caters to the disparate styles of learners, be it might be auditory, visual, or kinaesthetic learners. An adult does not like being lectured. They desire to be engaged with the learning content and even partake in the learning procedure. More significance should be placed to enhance the instructional practice in this fast-changing technological and business setting. There might be noteworthy changes to the proposed LS in which the conventional LS in conjunction with blended instructional practice could well be accommodated and later it could separately work towards deep learning of conceptions via synchronous as well as asynchronous learning forms.

IX. SUMMARY AND CONCLUSION

The LS has directed towards the digital LS in today's technologically enhanced world. The Student's capability of incessantly learning via the digital LS that is rampant nowadays interprets that learning into outcomes that function as a competitive advantage in the incessantly developing world is vital. Therefore, the Institutions should endow in learning-centred technology that could aid in affording learning agility to students. There is an expectation by the students to get content that is pertinent and also innovative with the intention to acquire immersive learning experience and also support them to go for lifetime learning. The learner should be in-focus by dealing with their learning requirements and foreseeing their LS for their holistic development.

Today's learners encompass great expectations on their academic experience who need excellence, appealing as well as engaging experience in teaching-learning and practice must be modern, new and bendable, which makes them succeed in the future. In their everyday activities, the digital LS occupies a major part, students anticipate technology to improve their learning experiences by means of bridging the gap that existed in early teaching methods in addition to learning modalities. This clearly indicates that the institutions have to be equipped with the needed skill to utilize technology in the classroom to assist the students better as well as guide them to be incessant learners in an advancing world

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