

Generation Z's learning Preferences: Implications for Work Organizations in United Arab Emirates

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Abstract:

Literature shows that Gen Zyouth (born 1995 onwards) are inclined to interactive e-learning; they prefer to learn just-in-time; and learn through a collaborative networked approach. Most of existing studies are West-based, the outcomes of which may not be fully applicable to other parts due to differences in factors underlying generational differences. United Arab Emirates (UAE) is one such country where there is a scarcity of studies on Gen Z. Taking lead from West-based research outcomes, this study aims to determine whether UAE Gen Z have learning preferences similar to Western Gen Z, and the impact of these on organizational learning and development. The conceptual framework of the study is based on 'Technology Acceptance Model'. Sample comprised Gen Z students studying in universities in UAE. A mix of quota and snowball sampling techniques was used due to restrictions faced in probability sampling. Data was gathered through an online questionnaire. Results show that UAE Gen Z prefer interactive e-learning, just-in-time learning and collaborative networked learning and that these preferences are likely trigger acceptance and usage of organizational systems based on these approaches, and also lead to their intention to participate in organizational learning and development delivered through these methodologies. The outcomes of this research are in line with outcomes of West-based research on Gen Z. This study will help work organizations in UAE in understanding learning preferences of Gen Z and aligning their learning and development with these preferences to make optimum use of this new generation of employees about to formally join them.

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1. Introduction

The emerging workforce demographics is characterized by presence of Baby Boomers (born 1946-1964), Generation X (born 1965-1980) and Generation Y (born 1981-1994) in the work place, with Generation Z (born 1995 onwards) about to complete their university studies and join the workplace. The presence of three generations in the workplace with the 4th one about to enter organizations has created a complex situation for work organizations especially when research has shown differences among these generations with regard to personal and workplace traits. Unlike other generations, Generation Z started to use technology from their infant years and have been living with smart phones and continuously connected internet, which have affected them in

many ways. According to literature, Gen Z represents the greatest generational shift the workplace has ever seen, which will require a paradigm shift from work organizations to re-engineer their approaches to HR development and work performance.

2. Literature Review

2.1 The Concept of Social Generation

The concept of a 'generation' is not a new concept; it can be found in very early literature (Biggs, 2007). Pilcher (1994) defines a generation as a cohort of people within a given population who experience the same significant events within a given period of time. According to Mannheim, a seminal figure in the study of generations who gave his theory of generations in

1923, the three commonalities shared by a generation include shared temporal location, shared historical location and shared socio-cultural location (Gilleard & Higgs, 2002). Kupperschmidt (2000) defines a generation as an identifiable group of people, who belong to a same temporal bracket and hence experience similar significant life events at critical stages of development.

2.2 The Generational Groups

Based on the studies on social generational groups, many scholars have concluded temporal brackets to classify distinct generations; a summary of which is given in table below (Table-1):

Table-1 – Generational birth years

Source	Baby Boomers	Gen X	Gen Y	Gen Z
U.S. Census Bureau	1946-1964	1968-1979	1982-2000	
Mark McCrindle (2014)	1946-1965	1965-1980	1980-1995	
Stredwick (2013)	1946-1964	1965-1979	1980-1990	
Solnet, Kralj & Kandampully (2012)	1945-1964	1965-1978	1979-1994	
Knoll Inc. (2014)	-	1965-1978	1979-1997	1998 onwards
Gilbert (2011)			1982-2000	
Watkins & Neal (2014)			1980-2000	
Horovitz (2012)				Mid-Late 1990s
Kingston (2014)				After 1995

As evident from Table-1, different studies have suggested different age brackets albeit with minor differences based on the context of the studies. Based on these studies, this research by the author assumes the age bracket for Generation Z as 1995 onwards.

2.3 The Generational Differences in the Workplace

'Generational differences' has always remained a buzz word in the social media, and have received extensive coverage in media, both in the past and present day (Alsop, 2008; Needleman, 2008). Zemke et al (2000) and Smola & Sutton (2002) have proposed that a cohort of people, who share similar historical, economic and social experiences, would also have similar work values, attitudes, and behaviors. Differences between generations have been studied from different aspects i.e. differences in work attitudes (Twenge, 2010), differences in personality and motivation (Wong et al, 2008) and differences in work values (Smola & Sutton, 2002).

2.4 Generational Differences in Learning Preferences

Rosemary (2005) and Andrews and Tynan (2011) have highlighted that changing technology is continuously affecting learner preferences. These assertions, when seen in the context of different generational studies, seem to suggest that learning technology, and hence its usage, has changed over times with every new generation adopting this technology more than its predecessor generation. The research outcomes suggesting and supporting generational differences in learning preferences can be summarized as follows:

2.4.1 Baby Boomers Baby Boomers have not grown up with computers therefore they may have difficulties in getting along with technological advancements, and would likely prefer to learn content through instructor-led lecture and note taking, rather than learning from the internet (Johnson & Romanello, 2005; Iwarren, 2012). United Nations Joint Staff Pension Fund (UNJSPF, 2009) has observed that Baby Boomers have a tendency towards traditional classroom learning blended with participation, critical reflection and feedback. Cambiano et al (2001) have found from their

research that Baby Boomers prefer tactile (tangible) learning and have a tendency towards hands-on learning activities.

2.4.2 Gen X Gen X prefers to learn in a simple manner, employing the easiest and quickest way possible (Cambiano et al, 2001; Johnson & Romanello, 2005). United Nations Joint Staff Pension Fund report (UNJSPF, 2009) has observed that Gen X has inclination towards self-directed learning; they are interested in e-learning and require integration of technology to access information easily. According to Iwarren (2012), Gen X learned in a structured manner including lectures and group activities, and used simple calculators with less of computer-based interactivity.

2.4.3 Gen Y Gen Y grew up with computers, with expert use of internet and accessibility to a world of information (Howe & Strauss, 2000; Iwarren, 2012). They are highly inclined towards simulations and interactivity, much more than previous generations, and prefer to find required information from internet rather than reading a book (Tapscott, 1998). United Nations Joint Staff Pension Fund report (UNJSPF, 2009) has observed that Gen Y has a tendency towards informal and incidental learning, delivered through technology and media, and designed around personalized and customized environment.

2.5 Generation Z – The Knowledge Gap

With regard to studies on generational differences in the workplace, research has so far focused on the three generations that are present in today's workplaces i.e. Baby Boomers, Gen X and Gen Y, and has not fully extended to Gen Z for the reason that Gen Z has still not formally joined the workplaces. Given this state of information on Gen Z vis-à-vis the immediate nature of this demographic change about to hit the work organizations, there is a need to study work traits, needs and preferences of this emerging cohort, which will help work organizations in managing Gen Z in the best possible way.

2.6 Generation Z Growing Up E-Environment

Gen Z's growing up environment is characterized by over 5 billion Google searches per day, around 4 billion YouTube views, over one billion

Facebook accounts and over one million applications in the App Store (McCrindle, 2014). According to World Bank 2012 report, the number of mobile subscriptions worldwide had increased from less than 1 billion in 2000 to more than 6 billion (World Bank, 2012). Unlike previous generations, Gen Z adopted technology since their infant years (Randy, 2013; Staples, 2018), due to which they enjoy using technology, and have become experts in use of social media, mobile operating systems, smart phone and internet (Buzzetto-Hollywood & Alade, 2018). They have grown up in the midst of the digital revolution and are the first true digital natives (McNeill, 2018). Growing up with technology from their very early years, Gen Z they have integrated technology into all aspects of their daily lives.

2.7 Generation Z Learning Preferences

Having grown up with e-technology since infancy, Gen Z has developed learning preferences that are heavily influenced by their usage of technology.

2.7.1 Interactive E-Learning

According to Graber (2014), Gen Z is used to having instant access to information and prefers to communicate through online means. Given an option, they would prefer to watch a video rather than reading an article for learning or gaining any information (McCrindle, 2014). This strong affinity for and usage of interactive e-technology is having effects on learning behaviors of Gen Z. Shaw and Fairhurst (2008) and Graber (2014) have noted that this generation does not prefer traditional learning through classroom lectures; they are rather inclined towards learning by interactivity. Graber (2014) has added that this preference for interactive e-technology has led to a requirement for exploring a variety of new approaches like e-learning, mobile learning and social learning.

2.7.2 Just-in-Time Learning Emelo (2013) has observed that Generation Z prefers to use information and knowledge that is required at a particular moment, which implies that their learning preference will bring an enhanced focus to 'just-in-time learning'. Just-in-time learning is defined as a system that delivers training to workers when and where they need to perform specific tasks or quickly learn new skills

(Sambataro, 2000), or to solve a particular workplace problem (Malon, 2003). Kozinsky (2017), Doucette (2018) and Staples (2018) have also noted this trait of Gen Z that they are inclined towards, and are expected to, 'pick and choose' what they want at a point in time. Fister (2015) has concluded that 41% of Gen Zs feel workplace technology will help them get answers to questions faster and 25% want tools to help them develop skills; a need which organizations can meet by considering building more just-in-time learning opportunities on an as-needed basis.

2.7.3 Collaborative Networked Learning

Gen Z learning preferences have been shaped by their strong affinity for online devices in their habit and need for social networking in form of collaboration and sharing knowledge. Emelo (2013) has quoted a Wikia study which said that 60 % of Gen Zs like to share their knowledge with others online, which strongly indicates that they will want collaborative learning opportunities and technologies available to them once they have entered the workforce. Graber (2014) suggests that learning and development of this new generation must be based on peer learning, knowledge sharing and collaborative networked learning. Various studies (for example Feiertag& Berge, 2008; Angeline, 2011; Solnet, Kralj&Kandampully, 2012; Watkins& Neal, 2014;MacNeill, 2018)have supported this assertion that Gen Z are used to online collaboration. Such a form of collaborative learning is called Collaborative networked Learning, which is defined as learning which occurs through electronic communications between self-directed learners and experts (Findley, 1988; Dillenbourg, 1999; Chen, & Chiu, 2008).

2.8 The Limitation of the Generational Literature

A prominent limitation of the research on generational differences is that the literature is ethnocentric as it is mostly focused on West. Cennamo& Gardner (2008) have observed that most research into generational differences has been conducted in the US, UK and Canada. They have quoted Statistics New Zealand (2007) which says that New Zealand has followed similar demographic patterns to those countries, including political, economic, social and

technological trends.Lim (2015) has asserted that critical life influencing social, economical and historical events are different over time and geography; therefore, a cohort of generation experiencing a set of conditions in Western countries may not be experienced by the same cohort in the Arabian Gulf Region, in general, and in United Arab Emirates (UAE) in specific.

2.9 Generation Z in the United Arab Emirates

2.9.1 Generational Demographic Statistics

PA Consulting Group, Middle East &North Africa, in their report (PA Consulting Group, 2015) has suggested the UAE generational age brackets as Gen X (1965-1980), Gen Y (1981-1994) and Gen Z (1995-2014), which is more aligned with the figures appearing in most of the international generational literature.

2.9.2 UAE Generation Z Usage of Technology

ASDA'A Burson-Marsteller has reported Arab Youth Survey done in 2015 on UAE citizens of ages 18-24, according to which 82% use internet daily, 77% own a smart phone, 75% read news online at least once a week, 91% visit social media channels at least once a week and 53% do so daily and 41% use Facebook to share information (ASDA'A Burson-Marsteller Arab, 2015). A similar survey repeated in 2017 indicated significant % increase in use of social media and e-technology. Use of Facebook enhanced from 55% in 2016 to 68% in 2017 (+13); use of WhatsApp increased from 62% in 2016 to 68% in 2017 (+6%); use of YouTube enhanced from 33% in 2016 to 50% in 2017 (+17%) (ASDA'A Burson-Marsteller Arab, 2017).

2.9.3 UAE Generation Z – The Knowledge Gap & its Implications

While there are very few formal studies done on Gen Y in UAE, Gen Z seems to be lacking the attention of researchers and practitioners. This could be due to the fact that earliest of Gen Z youth are of an average age of 23years in 2019 and still in the final years of their university studies. The earliest members of this generation are expected to leave universities in 2019 and formally step into the workforce. Emirates 24/7, a Dubai-based news website, has published a report highlighting that Gen Z will be shaping the future

of many companies in the region, therefore companies must understand their needs and design ways to attract and retain them as the demand for talent will rise in the coming years (Emirates 24/7, 2015). In another report, The Arabian Post (2015) has cautioned that Middle East employers must understand this new generation and adapt to their unique demands in order to attract and retain them in an age of digital revolution. This knowledge gap with regard to Gen Z in UAE will present a significant challenge for work organizations when this cohort of young digital natives joins the work places in a year or two.

3. Research Methodology

3.1 Research Objective

The research aims at studying learning preferences of Gen Z in UAE, analyzing as to how these preferences will impact organizations and how these can be integrated into organizational learning and development (L&D) design. Due to scarcity of formal studies on Gen Z in UAE, this research takes learning preferences of Western Gen Z as a starting point, based on the assumption that UAE Gen Z has also been exposed to an e-environment similar to Western Gen Z which could have led to developing of similar traits.

3.2 Theoretical Framework

A theoretical framework is defined as a collection of theories and models from the literature which underpins a research study (Hussey & Hussey 1997), and which a researcher chooses to guide him/her in research (Imenda, 2014). Western literature suggests that Gen Z have developed a preference for interactive e-learning, just-in-time learning and collaborative networked learning. This study uses the 'Technology Acceptance Model (TAM)' as theoretical framework for determining UAE Gen Z's interest towards these preferences and their intention to participate in organizational L&D programs designed around these preferences.

Technology Acceptance Model (TAM) is an effort to explain causal factors that mediate user acceptance of information systems (Davis, 1989; Davis, Bagozzi & Warshaw, 1989). TAM draws on Ajzen and Fishbein's theory of reasoned action, using principles adopted from Fishbein and Ajzen's (1975) attitude paradigm from psychology. Davis, Bagozzi & Warshaw (1989)

explained causal relationships between system design features (external stimuli), perceived usefulness and perceived ease of use (cognitive response), attitude towards using (affective response) and actual system usage (behavioural response). Davis (1989) explained that user's attitude towards using a system is the major determinant of behavioural intention and actual system usage, and that attitude towards using in turn is a function of perceived usefulness and perceived ease of use of the system design features. Davis (1989) defined Perceived Usefulness (PU) as the degree to which a person believes that using a particular system would enhance his or her job performance, and Perceived Ease of Use (PEU) as the degree to which an individual believes that using a particular system would be free of physical and mental effort. Behavioral Intention to use technology is defined as the extent to which a user formulates conscious plans to use or not to use a technological system (Li & Huang, 2009; Clement & Bush, 2011). TAM was found to fully mediate the effects of system characteristics on usage behaviour, accounting for 36% of the variance in usage, especially Perceived Usefulness which was 50% more influential than Perceived Ease of Use. Studies (for example; Adams et al, 1992; Hendrickson et al, 1993; Subramanian, 1994; Szajna, 1994) provide empirical evidence on the relationships that exist between Perceived Usefulness, Perceived Ease of Use and System Use.

TAM has undergone many modifications from its original form. The 'attitude' construct was dropped from the original model by Venkatesh and Davis (1996) as they found it not fully mediating the relationship between PU and PEU and BI. 'Perceived Enjoyment' was included as an intrinsic motivator into TAM by Lee, Cheung and Chen (2005) in order to examine its impact on students' attitude and intention to use internet-based learning. Van der Heijden (2004) defines Perceived Enjoyment as the extent to which the activity or services offered by the system is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated. Later, the 'actual use' was dropped from the original model by Masrom (2007).

This research by the author uses original TAM version after dropping constructs of 'attitude to use technology' (Venkatesh & Davis, 1996) and

‘actual use’ (Masrom, 2007). In addition, this research drops ‘perceived ease of use’ from the original TAM on the assumption that Gen Z accesses and uses information technology with ease and without any physical or mental stress when compared to previous generations for whom ‘perceived ease of use’ was an essential factor in adopting technology. It adds ‘Perceived Affinity’ for information technology as an intrinsic motivator (Malone, 1981), to determine its influence on intention to use information technology by Gen Z. This research is therefore a modification of TAM (Davis, 1989 & 1993),

using ‘Perceived Affinity’ in place of ‘Perceived Ease of Use’. Given the conclusions from West-based literature that Gen Z show preference for Interactive E-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL), this research studies the impact of these preferences on UAE Gen Z’s acceptance of a learning system based on IEL, JTL and CNL in their job fields and their intention to participate in organizational L&D designed around these features (Fig-1).

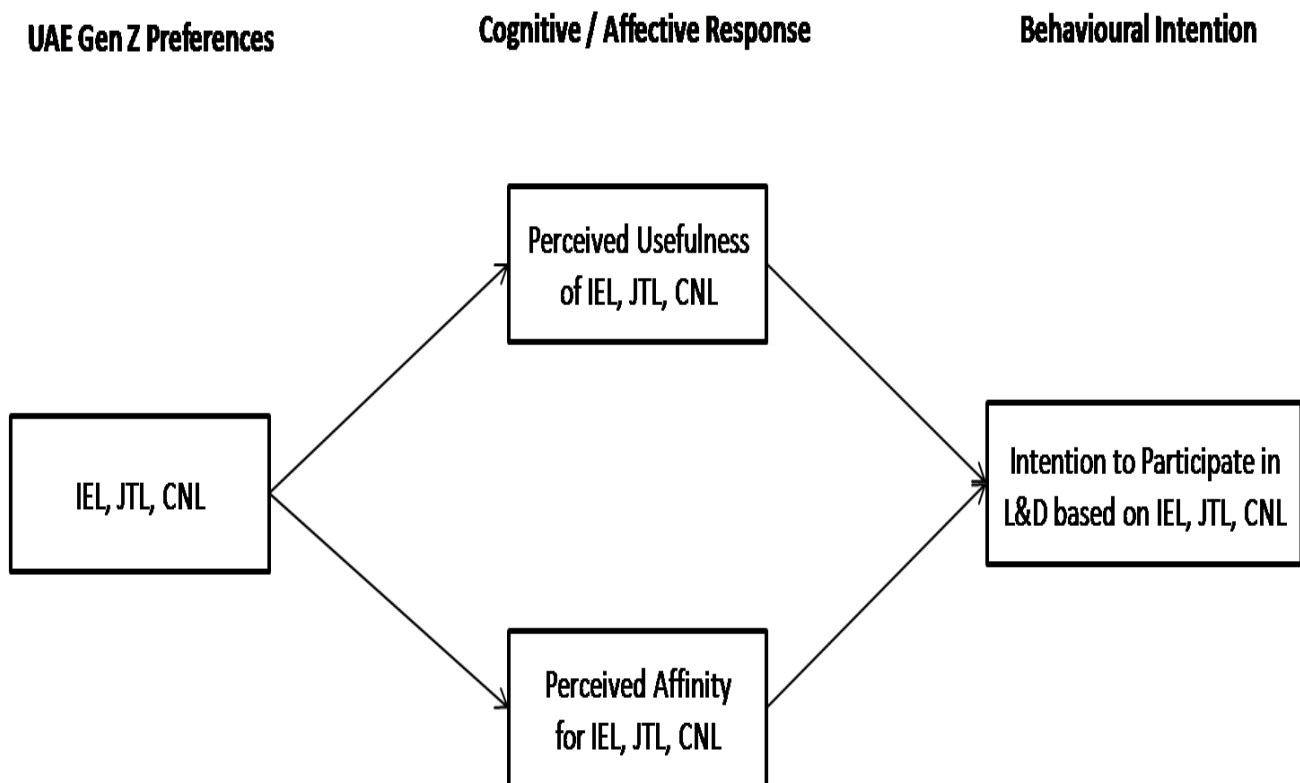


Figure 1: Theoretical Framework of the Study (adapted from TAM)

3.3 The Conceptual Framework & Hypotheses

According to Miles & Huberman (1994), a conceptual framework is a visual or written product that explains either graphically or in narrative form, the main things to be studied i.e. the key factors, concepts, or variables, and the presumed relationships among them. This research aims at studying the impact of UAE Gen

Z’s preference for interactive e-learning (IEL), just-in-time learning (JTL) and collaborative networked learning (CNL) on their Perceived Usefulness (PU) of and Perceived Affinity (PA) for organizational systems based on these methodologies, and their intention to participate in organizational L&D designed around these features. The conceptual framework is shown below in Fig2.

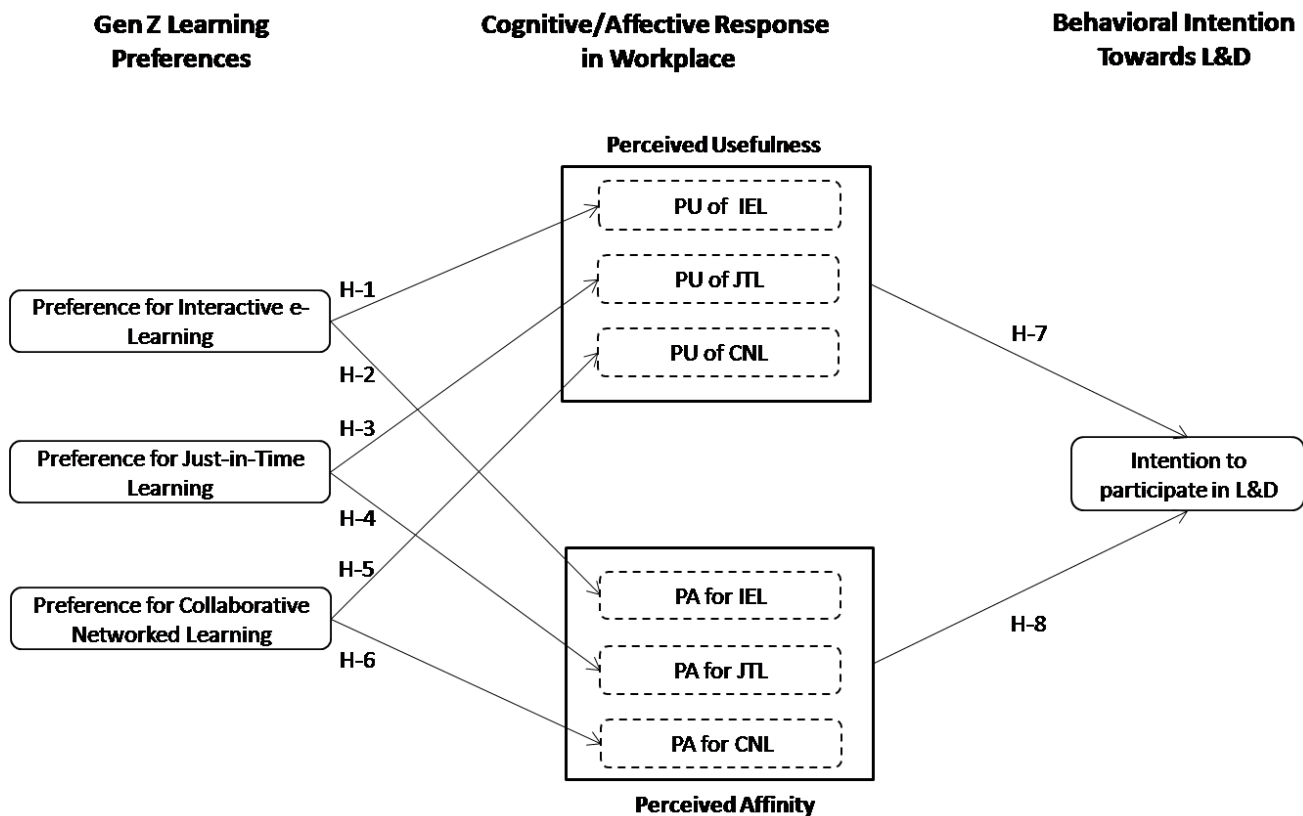


Figure 2: Conceptual framework (based on Technology Acceptance Model)

Based on the above framework, this research formulates the following research hypotheses:

H-1: UAE Gen Z's preference for Interactive E-Learning (IEL) is a significant predictor of their Perceived Usefulness of L&D system based on IEL in workplace in United Arab Emirates.

H-2: UAE Gen Z's preference for Interactive E-Learning (IEL) is a significant predictor of their Perceived Affinity for L&D system based on IEL in workplace in United Arab Emirates.

H-3: UAE Gen Z's preference for Just-in-Time Learning (JTL) is a significant predictor of their Perceived Usefulness of L&D system based on JTL in workplace in United Arab Emirates.

H-4: UAE Gen Z's preference for Just-in-Time Learning (JTL) is a significant predictor of their Perceived Affinity for L&D system based on JTL in workplace in United Arab Emirates.

H-5: UAE Gen Z's preference for Collaborative Networked Learning (CNL) is a

significant predictor of their Perceived Usefulness of L&D system based on CNL in workplace in United Arab Emirates.

H-6: UAE Gen Z's preference for Collaborative Networked Learning (CNL) is a significant predictor of their Perceived Affinity for L&D system based on CNL in workplace in United Arab Emirates.

H-7: UAE Gen Z's 'Perceived Usefulness' of IEL, JTL and CNL is a significant predictor of their intention to participate in L&D programs delivered through these methodologies in workplace in United Arab Emirates.

H-8: UAE Gen Z's 'Perceived Affinity' for IEL, JTL and CNL is a significant predictor of their intention to participate in organizational L&D programs delivered through these methodologies in workplace in United Arab Emirates.

3.4 Research Design

This research adopts 'deductive' approach, which involves testing theory by generating and testing hypotheses (Robson, 2002) and explaining causal

relationships between variables by collecting and analyzing quantitative data, the results of which can be generalized (Gill & Johnson, 2002; Saunders, Lewis & Thornhill, 2009).

3.5 Target Population

The target population is the entire group of people to whom the results of research are applied (Lavrakas, 2008; Saunders, Lewis & Thornhill, 2009; Creswell, 2012; Bernard et al, 2013). The target population of this study is UAE Gen Z, born 1995 onwards. Given the beginning birth year of 1995, the eldest of this youth are of the average age of 23 years in 2019.

3.6 The Sampling Frame

The sampling frame (Lewis-Beck et al, 2004; Babbie, 2008; Saunders, Lewis & Thornhill, 2009) of this study is the UAE Gen Z youth (born 1995 onwards) who are still in universities across the seven (7) Emirates of the UAE and are about to complete their studies / training in next 1-3 years and formally join the work organizations. According to UAE Higher Education Fact Book 2013-2014 and Gulf News (May 2, 2016), quoting GCC Education Industry Report, the total number of UAE Nationals in universities in different Emirates in 2017-2018 were estimated at 80,570, of which 33,460 (41.5%) were male students and 47,109 (58.5%) were female students, and which is the sampling frame for this study.

3.7 The Sample Size

Saunders, Lewis & Thornhill (2009) have suggested a sample size of 383 for a population of 100,000, at confidence level 95% and at margin of error 5%, for probability sampling under a quantitative method. Based on this, the research by the author takes the sample size of 383, at confidence level 95% and at margin of error 5%.

3.8 Sampling Technique

While this research by the author aimed for adopting probability sampling technique (Tashakkori, & Teddlie, 2003a; Saunders, Lewis & Thornhill, 2009; Creswell, 2012; Kumar, 2014), it however faced challenges in drawing a random sample from students studying in selected universities due to policy restrictions. Resultantly, the study employed a mix of Quota and Snowball sampling techniques. Semiz (2016) has supported the case for quota sampling by saying that it is the method with the

highest capability to represent the population among the non-probability sampling methods. Saunders, Lewis & Thornhill (2009) have noted that for populations that are difficult to identify or access, snowball sampling may be the only way out.

3.9 Data Collection Instrument

This study employed a questionnaire based on 30 statements, which have been adapted from previous studies done under Technology Acceptance Model. The questionnaire was designed to gather responses from participants on Likert's 5-point scale i.e. Strongly Agree-5, Agree-4, Neither Agree/Disagree-3, Disagree-2 and Strongly Disagree-1. The questionnaire was administered online and results were collated automatically, which were then analyzed using SPSS 22. Validity of the questionnaire (Kumar, 2014; Saunders, Lewis & Thornhill, 2009; Bolarinwa, 2015) was ensured by adapting statements from previous studies done on 'Technology Acceptance Model' along with seeking expert opinion. The reliability of the questionnaire (Kumar, 2014; Saunders, Lewis & Thornhill, 2009; DeVellis, 2012; Bolarinwa, 2015; Litwin, 1995) was measured using Cronbach's Alpha method. Cronbach's Alpha values for all the variables were greater than 0.8, indicating good internal consistency.

4. Findings

4.1 Interactive E-Learning (IEL)

According to descriptive statistics, UAE Gen Z show strong preference for Interactive E-Learning ($M = 4.38$, $SD = 0.62$). 46.6% of the respondents 'strongly agreed' and 46.1% 'agreed' to having preference for Interactive E-Learning, while 7.1% were undecided and only 0.2% 'disagreed' to this.

4.1.1 Correlation between Gen Z's Preference for IEL and Perceived Usefulness of IEL

Pearson's r analysis showed that UAE Gen Z's preference for IEL ($M = 4.38$, $SD = 0.62$) and their Perceived Usefulness of IEL system ($M = 4.23$, $SD = 0.65$) have a significant strong positive correlation to each other ($r = 0.829$, $p < 0.001$, $N = 436$). Regression analysis ($F(1, 434) = 951.245$, $p < 0.01$; $R^2 = 0.687$, Adjusted $R^2 = 0.686$) indicated that Gen Z's preference for IEL could count for 68.6% of the variance in their Perceived Usefulness of IEL system in their future jobs. A significant strong predictive

impact of Gen Z's preference for IEL on their Perceived Usefulness of IEL system was indicated by Regression coefficients ($C = 0.643$, $\beta = 0.842$, $t = 30.842$, $\text{Sig} < 0.001$). This proves hypothesis H-1 which states that UAE Gen Z's preference for Interactive E-Learning (IEL) is a significant predictor of their Perceived Usefulness of L&D system based on IEL in workplace in UAE.

4.1.2 Correlation between Gen Z's Preference for IEL and Perceived Affinity for IEL

Pearson's r analysis showed that UAE Gen Z's preference for IEL ($M=4.38$, $SD= 0.62$) and their Perceived Affinity for IEL system ($M=4.24$, $SD= 0.66$) have a significant strong positive correlation to each other ($r=0.782$, $p < 0.001$, $N=436$). Regression analysis ($F(1, 434) = 684.729$, $p < 0.01$; $R^2 = 0.612$, Adjusted $R^2 = 0.611$) indicated that Gen Z's preference for IEL could count for 61.1% of the variance in their Perceived Affinity for IEL system in their future jobs. A significant strong predictive impact of Gen Z's preference for IEL on their feeling of Perceived Affinity for IEL system was indicated by Regression coefficients ($C = 0.784$, $\beta = 0.811$, $t = 26.167$, $\text{Sig} < 0.001$). This proves hypothesis H-2 which states that UAE Gen Z's preference for Interactive E-Learning (IEL) is a significant predictor of their Perceived Affinity for L&D system based on IEL in workplace in UAE.

4.1.3 Correlation between Gen Z's Perceived Usefulness and Behavior Intention for IEL

Pearson's r analysis showed that UAE Gen Z's Perceived Usefulness of IEL system ($M=4.23$, $SD= 0.65$) and their Behavior Intention to participate in L&D delivered through IEL ($M=4.35$, $SD= 0.65$) have a significant strong positive correlation to each other ($r=0.853$, $p < 0.001$, $N=436$). Regression analysis ($F(1, 434) = 1155.025$, $p < 0.01$; $R^2 = 0.727$, Adjusted $R^2 = 0.726$) indicated that Gen Z's Perceived Usefulness of IEL system could count for 72.6% of the variance in their Behavior Intention to participate in L&D delivered through IEL in their future jobs. A significant strong predictive impact of Gen Z's Perceived Usefulness of IEL system on their Behavior Intention to participate in L&D delivered through IEL was indicated by Regression coefficients ($C = 0.542$, $\beta = 0.872$, $t = 33.986$, $\text{Sig} < 0.001$). This partially contributes to

proving of hypothesis H-7 which states that UAE Gen Z's 'Perceived Usefulness' of Interactive E-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in L&D programs delivered through these methodologies in workplace in UAE.

4.1.4 Correlation between Gen Z's Perceived Affinity and Behavior Intention for IEL

Pearson's r analysis showed that UAE Gen Z's Perceived Affinity for IEL system ($M=4.24$, $SD= 0.66$) and their Behavior Intention to participate in L&D delivered through IEL ($M=4.35$, $SD= 0.65$) have a significant strong positive correlation to each other ($r=0.863$, $p < 0.001$, $N=436$). Regression analysis ($F(1, 434) = 1263.732$, $p < 0.01$; $R^2 = 0.744$, Adjusted $R^2 = 0.744$) indicated that Gen Z's Perceived Affinity for IEL system could count for 74.4% of the variance in their Behavior Intention to participate in L&D delivered through IEL in their future jobs. A significant strong predictive impact of Gen Z's Perceived Affinity for IEL system on their Behavior Intention to participate in L&D delivered through IEL was indicated by Regression coefficients ($C = 0.565$, $\beta = 0.865$, $t = 35.549$, $\text{Sig} < 0.001$). This partially contributes to proving of hypothesis H-8 which states that UAE Gen Z's 'Perceived Affinity' for Interactive e-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in organizational L&D programs delivered through these methodologies in workplace.

4.2 Just-in-Time Learning (JTL)

Descriptive statistics indicated that UAE Gen Z show strong preference for Just-in-Time Learning ($M= 4.37$, $SD= 0.67$). 47.9% of the respondents 'strongly agreed' and 42.9% 'agreed' to having preference for Just-in-Time Learning, while 8.5% were undecided and only 0.2% 'disagreed' to this.

4.2.1 Correlation between Gen Z's Preference for JTL and Perceived Usefulness of JTL

Pearson's r analysis showed that UAE Gen Z's preference for JTL ($M=4.37$, $SD= 0.67$) and their Perceived Usefulness of JTL system ($M=4.28$, $SD= 0.64$) have a significant strong positive correlation to each other ($r=0.816$, $p < 0.001$, $N=436$). Regression analysis ($F(1, 434) =$

861.864, $p < 0.01$; R square = 0.665, Adjusted R Square = 0.664) indicated that Gen Z's preference for JTL could count for 66.4% of the variance in their Perceived Usefulness of JTL system in their future jobs. A significant strong predictive impact of Gen Z's preference for JTL on their Perceived Usefulness of JTL system was indicated by Regression coefficients ($C = 1.036$, $\beta = 0.759$, $t = 29.358$, $\text{Sig} < 0.001$). This proves hypothesis H-3 which states that UAE Gen Z's preference for Just-in-Time Learning (JTL) is a significant predictor of their Perceived Usefulness of L&D system based on JTL in workplace.

4.2.2 Correlation between Gen Z's Preference for JTL and Perceived Affinity for JTL

Pearson's r analysis showed that UAE Gen Z's preference for JTL ($M = 4.37$, $SD = 0.67$) and their Perceived Affinity for JTL system ($M = 4.24$, $SD = 0.65$) have a significant strong positive correlation to each other ($r = 0.706$, $p < 0.001$, $N = 436$). Regression analysis ($F(1, 434) = 430.122$, $p < 0.01$; R square = 0.498, Adjusted R Square = 0.497) indicated that Gen Z's preference for JTL could count for 49.7% of the variance in their feeling of Perceived Affinity for JTL system in their future jobs. A significant moderate predictive impact of Gen Z's preference for JTL on their feeling of Perceived Affinity for JTL system was indicated by Regression coefficients ($C = 1.397$, $\beta = 0.669$, $t = 20.739$, $\text{Sig} < 0.001$). This proves hypothesis H-4 which states that UAE Gen Z's preference for Just-in-Time Learning (JTL) is a significant predictor of their Perceived Affinity for L&D system based on JTL in workplace.

4.2.3 Correlation between Gen Z's Perceived Usefulness and Behavior Intention for JTL

Pearson's r analysis showed that UAE Gen Z's Perceived Usefulness of JTL system ($M = 4.28$, $SD = 0.64$) and their Behavior Intention to participate in L&D delivered through JTL ($M = 4.42$, $SD = 0.66$) have a significant strong positive correlation to each other ($r = 0.803$, $p < 0.001$, $N = 436$). Regression analysis ($F(1, 434) = 786.184$, $p < 0.01$; R square = 0.644, Adjusted R Square = 0.643) indicated that Gen Z's Perceived Usefulness of JTL system could count for 64.3% of the variance in their Behavior Intention to participate in L&D delivered through JTL in their future jobs. A significant strong predictive impact of Gen Z's Perceived Usefulness of JTL

system on their Behavior Intention to participate in L&D delivered through JTL was indicated by Regression coefficients ($C = 0.769$, $\beta = 0.822$, $t = 28.039$, $\text{Sig} < 0.001$). This partially contributes to proving of hypothesis H-7 which states that UAE Gen Z's 'Perceived Usefulness' of Interactive E-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in L&D programs delivered through these methodologies in workplace.

4.2.4 Correlation between Gen Z's Perceived Affinity and Behavior Intention for JTL

Pearson's r analysis showed that UAE Gen Z's Perceived Affinity for JTL system ($M = 4.24$, $SD = 0.65$) and their Behavior Intention to participate in L&D delivered through JTL ($M = 4.42$, $SD = 0.66$) have a significant strong positive correlation to each other ($r = 0.820$, $p < 0.001$, $N = 436$). Regression analysis ($F(1, 434) = 893.262$, $p < 0.01$; R square = 0.673, Adjusted R Square = 0.672) indicated that Gen Z's Perceived Affinity for JTL system could count for 67.2% of the variance in their Behavior Intention to participate in L&D delivered through JTL in their future jobs. A significant strong predictive impact of Gen Z's Perceived Affinity for JTL system on their Behavior Intention to participate in L&D delivered through JTL was indicated by Regression coefficients ($C = 0.776$, $\beta = 0.825$, $t = 29.887$, $\text{Sig} < 0.001$). This partially contributes to proving of hypothesis H-8 which states that UAE Gen Z's 'Perceived Affinity' for Interactive e-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in organizational L&D programs delivered through these methodologies in workplace.

4.3 Collaborative Networked Learning (CNL)

According to descriptive statistics, UAE Gen Z show strong preference for Collaborative Networked Learning ($M = 4.36$, $SD = 0.66$). 46.6% of the respondents 'strongly agreed' and 43.3% 'agreed' to having preference for Collaborative Networked Learning, while 9.9% were undecided and only 0.2% 'disagreed' to this.

4.3.1 Correlation between Gen Z's Preference for CNL and Perceived Usefulness of CNL

Pearson's r analysis showed that UAE Gen Z's preference for CNL ($M=4.36$, $SD=0.66$) and their Perceived Usefulness of CNL system ($M=4.23$, $SD=0.64$) have a significant strong positive correlation to each other ($r=0.801$, $p<0.001$, $N=436$). Regression analysis ($F(1, 434) = 777.640$, $p<0.01$; $R^2 = 0.642$, Adjusted $R^2 = 0.641$) indicated that Gen Z's preference for CNL could count for 64.1% of the variance in their Perceived Usefulness of CNL system in their future jobs. A significant strong predictive impact of Gen Z's preference for CNL on their Perceived Usefulness of CNL system was indicated by Regression coefficients ($C = 1.073$, $\beta = 0.748$, $t = 27.886$, $\text{Sig} < 0.001$). This proves hypothesis H-5 which states that UAE Gen Z's preference for Collaborative Networked Learning (CNL) is a significant predictor of their Perceived Usefulness of L&D system based on CNL in workplace.

4.3.2 Correlation between Gen Z's Preference for CNL and Perceived Affinity for CNL

Pearson's r analysis showed that UAE Gen Z's preference for CNL ($M=4.36$, $SD=0.66$) and their feeling of Perceived Affinity for CNL system ($M=4.21$, $SD=0.70$) have a significant strong positive correlation to each other ($r=0.743$, $p<0.001$, $N=436$). Regression analysis ($F(1, 434) = 535.453$, $p<0.01$; $R^2 = 0.552$, Adjusted $R^2 = 0.551$) indicated that Gen Z's preference for CNL could count for 55.1% of the variance in their feeling of Perceived Affinity for CNL system in their future jobs. A significant strong predictive impact of Gen Z's preference for CNL on their feeling of Perceived Affinity for CNL system was indicated by Regression coefficients ($C = 0.989$, $\beta = 0.760$, $t = 23.140$, $\text{Sig} < 0.001$). This proves hypothesis H-6 which states that UAE Gen Z's preference for Collaborative Networked Learning (CNL) is a significant predictor of their Perceived Affinity for L&D system based on CNL in workplace.

4.3.3 Correlation between Gen Z's Perceived Usefulness and Behavior Intention for CNL

Pearson's r analysis showed that UAE Gen Z's Perceived Usefulness of CNL system ($M=4.23$, $SD=0.64$) and their Behavior Intention to participate in L&D delivered through CNL ($M=4.27$, $SD=0.71$) have a significant strong positive correlation to each other ($r=0.787$, $p<0.001$, $N=436$). Regression analysis ($F(1, 434) =$

706.651 , $p<0.01$; $R^2 = 0.620$, Adjusted $R^2 = 0.619$) indicated that Gen Z's Perceived Usefulness of CNL system could count for 61.9% of the variance in their Behavior Intention to participate in L&D delivered through CNL in their future jobs. A significant strong predictive impact of Gen Z's Perceived Usefulness of CNL system on their Behavior Intention to participate in L&D delivered through CNL was indicated by Regression coefficients ($C = 0.662$, $\beta = 0.849$, $t = 26.583$, $\text{Sig} < 0.001$). This partially contributes to proving of hypothesis H-7 which states that UAE Gen Z's 'Perceived Usefulness' of Interactive E-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in L&D programs delivered through these methodologies in workplace.

4.3.4 Correlation between Gen Z's Perceived Affinity and Behavior Intention for CNL

Pearson's r analysis showed that UAE Gen Z's feeling of Perceived Affinity for CNL system ($M=4.21$, $SD=0.70$) and their Behavior Intention to participate in L&D delivered through CNL ($M=4.27$, $SD=0.71$) have a significant strong positive correlation to each other ($r=0.773$, $p<0.001$, $N=436$). Regression analysis ($F(1, 434) = 642.811$, $p<0.01$; $R^2 = 0.597$, Adjusted $R^2 = 0.596$) indicated that Gen Z's feeling of Perceived Affinity for CNL system could count for 59.6% of the variance in their Behavior Intention to participate in L&D delivered through CNL in their future jobs. A significant strong predictive impact of Gen Z's feeling of Perceived Affinity for CNL system on their Behavior Intention to participate in L&D delivered through CNL was indicated by Regression coefficients ($C = 1.061$, $\beta = 0.761$, $t = 25.354$, $\text{Sig} < 0.001$). This partially contributes to proving of hypothesis H-8 which states that UAE Gen Z's 'Perceived Affinity' for Interactive e-Learning (IEL), Just-in-Time Learning (JTL) and Collaborative Networked Learning (CNL) is a significant predictor of their intention to participate in organizational L&D programs delivered through these methodologies in workplace.

5. Discussion

5.1 Interactive E-Learning

Avery large % (92.7%) of the sampled UAE Gen Z showed strong preference for interactive e-learning, which is in line with West-based studies (Shaw & Fairhurst, 2008; Future Think LLC White Paper, 2009; Graber, 2014; Lara, 2014; McCrindle, 2014). This preference for interactive e-learning could be attributed to UAE Gen Z's heavy usage of technology as reported by ASDA's Burson-Marsteller in their surveys of 2015 and 2017. Pearson's *r* analysis and Regression analysis indicated a significant strong correlation and predictive impact of Gen Z's preference for IEL on their 'Perceived Usefulness' of IEL system and their feeling of Perceived Affinity for IEL system. This 'Perceived Usefulness' and Perceived Affinity' for IEL has a significant strong correlation and predictive impact on their 'Behavior Intention' to participate in L&D delivered through IEL methodology. This outcome is in line with various studies on TAM (Davis, 1989; Davis, Bagozzi & Warshaw, 1989; Adams et al, 1992; Davis, 1993; Hendrickson et al, 1993; Subramanian, 1994; Szajna, 1994; Wu, 2009) which have reported mediating impact of 'Perceived Usefulness' (PU) of a system on 'Behavioral Intention' to use the system. To the extent of Gen Z's affinity for technology, this study support assertion by Gioia (2013) that Gen Zs have developed a greater 'affinity' for technology, and this 'affinity' could become an intrinsic motivator (Malone, 1981) for Gen Z to use information technology.

5.2 Just-in-Time Learning

Similarly, a very large % (90.8%) of the sample indicated strong preference for just-in-time learning; a trait that is similar to Western Gen Z as observed by Emelo (2013) and Fister (2015). This preference for just-in-time learning could be attributed to UAE Gen Z's heavy usage of technology as reported by ASDA's Burson-Marsteller in their surveys of 2015 and 2017. Pearson's *r* analysis and Regression analysis indicated a significant strong correlation and predictive impact of Gen Z's preference for JTL on their 'Perceived Usefulness' of JTL system and a significant moderate correlation and predictive impact of Gen Z's preference for JTL on their feeling of 'Perceived Affinity' for JTL system. This study, subsequently, shows that Gen Z's feeling of 'Perceived Usefulness' of and 'Perceived Affinity' for JTL system has a significant strong correlation and predictive

impact on their 'Behavior Intention' to participate in L&D delivered through JTL methodology.

5.3 Collaborative Networked Learning

In a similar manner, a very large % (89.9%) of the sample showed liking for collaborative networked learning, similar to Western Gen Z as reported in various studies (Feiertag & Berge, 2008; Angeline, 2011; Solnet, Kralj & Kandampully, 2012; Emelo, 2013; Graber, 2014; Watkins & Neal, 2014). This preference for collaborative networked learning could be attributed to UAE Gen Z's heavy usage of technology as reported by ASDA's Burson-Marsteller in their surveys of 2015 and 2017. Pearson's *r* analysis and Regression analysis indicated a significant strong correlation and predictive impact of Gen Z's preference for CNL on their 'Perceived Usefulness' of CNL system and 'Perceived Affinity' for CNL system. This study has further shown that Gen Z's 'Perceived Usefulness' of and 'Perceived Affinity' for CNL system has a significant strong correlation and predictive impact on their 'Behavior Intention' to participate in L&D delivered through CNL.

6. Conclusion & Recommendations

This research, aimed at determining learning preferences of UAE Generation Z, started with assumption that since UAE Generation Z has technology usage traits similar to their Western counter-parts, they could have developed similar learning preferences as well under the impact of this affinity for technology. The study has found that UAE Gen Z exhibit a strong inclination towards interactive e-learning, and that this inclination will lead to their acceptance and usage of organizational learning systems based on interactive e-learning, and also result in their intention to participate in organizational L&D if this L&D is delivered through interactive e-learning methodology. Besides interactive e-learning, this research has also found that UAE Gen Z prefer to seek information that is relevant just-in-time, similar to Western Gen Z. This research has proved that UAE Gen Z's preference for just-in-time learning will lead to acceptance and usage of organizational learning systems that deliver information just-in-time to perform tasks and projects at hand rather than providing information that is not relevant at that point in time. This attribute will, in turn, lead to UAE Gen Z's intention to participate in organizational L&D that delivers information and learning of

skills relevant to a task or a project at hand. This research has also found that UAE Gen Z prefer to learn in a networked collaborative manner, which is similar to Western Gen Z. This research has proved that UAE Gen Z's preference for collaborative networked learning will lead to their acceptance and usage of organizational learning systems that promote collaborative networked learning through online networks, which in turn will have lead to UAE Gen Z's intention to participate in organizational L&D delivered through such a methodology.

This research makes the following recommendations for work organizations in UAE with regard to their information and learning systems targeted for Generation Z employees:

- a. Organizations must design their learning systems and provide flow and provision of information to Gen Z employees through interactive e-learning methodology in order to attract them to use these systems.
- b. Besides ensuring flow of information through interactive e-learning systems, organizations must also customize this information to be available to Gen Z employees as and when they require it for performing a specific task at hand. Such an approach must also be adopted in organizational L&D by planning and offering learning of skills as and when required by Gen Z employees.
- c. Learning systems of organizations must be designed to allow Gen Z to exchange and share information online with others to facilitate learning and performing work by mutual collaboration.

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