



Millennials in Higher Education: Do They Really Learn Differently

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ABSTRACT

Background: Effective skill development remains an important vehicle for national prosperity. As what appeared to work with their predecessor generation (Gen X) does not have the same results with Millennials many educators today are experimenting with pedagogies to effectively train Millennials. Globally, it is becoming evident that the Millennials in higher education learn very differently than their predecessors

Purpose: Our study provides comparisons on three learning parameters of learning affectivity, goal orientation and competition between Gen X & Millennials..

Methods: To study whether the learning attributes are similar or they differ across the two generations we compared the means of the three attributes under consideration.

Results: We find Millennials to be different from Gen X across the three studied parameters suggesting that teaching pedagogies require a rethink for Millennials

Conclusions: These results could be useful in designing appropriate teaching pedagogies that are likely to improve Millennials' learning.

1. Introduction

In recent years' educators have struggled with their effectiveness in getting the Millennials (also called Generation Y or Gen Y (those born between 1982-1999) to learn in class, with almost all educators having experienced millennial students' learning attitude as "OK. I am sitting here in class entertain me" (Alexander & Sysko, 2013). We contend that this appears to be a very different attitude than that exhibited by their previous generation, Generation X or Gen X (those born between 1965- 1981). Millennials' learning attributes appear to be quite different than those of their predecessor generation, Gen X.

Understanding these differences is critical because the answers to selecting the appropriate and effective teaching pedagogies for Millennials may lie therein. Millennials have access to vast amount of information and are comfortable with web-based, self-directed learning (Au-Yong-Oliveira, Gonçalves, Martins & Branco, 2018; Hopkins, Hampton, Abbott, Buery-Joyner, Craig, Dalrymple & Wolf, 2018). The association of technology as a millennial's sixth sense differentiates this generation from their predecessors,

Gen X (Alexander & Sysko, 2013). While Millennials are viewed as immersed in technology, Gen X are all considered immigrants in their technology usage (Hershatter & Epstein, 2010). Since the attributes of Millennials appear different than their predecessors we argue that to achieve the learning outcomes with each generation effectively, it is important that the teaching methods be adapted to keep the generations' learning styles in mind. The findings are likely to provide educators with the necessary inputs to pedagogy design for delivering courses effectively for each generation.

Research shows that both generations also exhibit different work values. Studies have identified work values associated with Gen X to be their ability and desire of work/ life balance, an individual orientation and loyalty to relationships (Alexander & Sysko, 2013). In contrast, Millennials are accustomed to working in a structure and prefer to work in teams, so much so, that they find it difficult to think individually and have difficulty in honing critical analysis skills (Alexander & Sysko, 2013). They are willing to accept authority and are self-expressive, believe in strong values, are loyal towards individual managers and

expect immediate rewards and recognition for their work. On the negative side, Millennials “bring with them a hedonism, narcissism, and cavalier work ethic” (Alexander and Sysko, 2013). As opposed to Gen Xers, who prefer to change jobs, Millennials are more likely to create parallel professions or opt for complete career changes (Gursoy et al, 2008, Reeves & Oh, 2008, Reilly, 2012). Gen X and Millennials are found to be similar in their desire to multitask, their awareness of diversity, their ‘work to live’ attitude (Gursoy et al, 2008, Reeves & Oh, 2008, Reilly, 2012).

The Millennials have recently begun entering the workforce and industry estimates suggest that currently this generation is about 50% of the total world workforce and this is likely to increase to 75% by 2025. Therefore, educating this generation effectively to prepare them to be effective leaders becomes essential. To achieve this goal, the teaching pedagogies may require a revisit to ensure that they can enable learning in ways that are synchronized with the learning styles of this generation (Gupta & Goyal, 2018; Sojka & Fish 2013; Pelton & True, 2004).

Studies have suggested that Gen X and Millennials exhibit different learning styles. For instance, traditional lectures and class discussions which found favour with Gen X are not the preferred way to learn for Millennials (Putz, Hofbauer & Treiblmaier, 2020; Johnson & Romanello, 2005). At the same time individual learning attributes such as learning affectivity (Linnenbrink, 2007), goal orientation (Lee, 2019; Beenen, 2014) and competition (Zaphiris, 2007) have been shown to be antecedents to learning (Gupta & Goyal, 2018). Despite the acceptance of such differences, there is paucity of work to understand the generation specific differences and similarities in learning attributes. Such findings will enable the selection of teaching pedagogies suitable for each generation. In this paper we study three learning attributes – learning affectivity, goal orientation and competition with two objectives. First, to understand the similarities and differences in the learning attributes of Gen X and the Millennials. The second objective is to investigate and analyse the interactions between learning attributes within each generation and then compare them for both the generations. Insights from the interaction between the learning attributes can enable choosing the appropriate pedagogy. For

instance, if, along with an increase in goal orientation, and increase in competition happens, then probably a pedagogy like gamification using leaderboards (Gupta & Goyal, 2018) would be appropriate. On the other hand, if along with an increase in goal orientation there is a decrease in competition then probably continuous collaborative assignments (Zaphiris, 2007) might be the appropriate pedagogy to achieve the desired learning outcomes. Specifically, the address the following research questions:

1. What are the similarities and differences in learning attributes between Gen X and Millennials?
2. How do learning attributes interact with each other for Gen X and Millennials?

With the first research question we would be able to identify the learning attributes, their similarities and differences between the two generations. With the second research question we would be able to get deeper insights into the appropriate teaching pedagogies as we will also know the interactions among the learning attributes.

The study adds to the body of literature on learning attributes of Gen X and Millennials. We identify the similarities and differences in learning attributes of Millennials and Gen X students in higher education. Accordingly, our specific contribution to learning literature is two fold: (1) findings can provide inputs to instructors about the learning attributes of the two generations which can inform them about the pedagogies that are likely to work well for the two generations; and (2) the study adds to the existing studies on characteristics of the two generations. We specifically contribute by informing about learning attributes exhibited by students of the two generations in higher education.

The structure of the paper is as follows. The next section discusses the existing work on the three learning attributes being studied and the differences in learning styles of Millennials and Gen X and is followed by the hypotheses. We then outline the methods used for the study and then present the results from our study. The paper is concluded with major learning style differences between Gen X and Millennials. Further, the three learning attributes (Learning Affectivity, Goal Orientation, and Competition) were also reported and stated that teaching pedagogies require a rethink for Millennials. In the end, the limitation and future research has also been included while targeting better teaching pedagogies.

2. Theoretical Framework

In this section, we discuss the learning attributes of learning affectivity, goal orientation and competition. We also discuss the existing works on generational differences in learning styles.

3. Learning Attributes

3.1. Learning Affectivity

Learning, the motivation to learn, along with the emotional state of students are components of the learning affectivity realm (Beard, Cleg & Smith, 2007). Studies support a relationship between affectivity and a student's self-efficacy opinions and goals (Linnenbrink & Pintrich, 2002; Dweck & Leggett, 1988). Student engagement is impacted by their learning goals and is mediated by learning affect. If the affect is pleasing the interaction between goals and engagement will be positive and vice versa (Linnenbrink, 2007). If the goal is clear, engagement is more likely to occur (Warmelink et al., 2020).

3.2. Goal Orientation

Goal orientation is a form of motivation to learning (Ames & Archer, 1988). Goal orientation is an individual's allocation of attention and effort to the learning tasks (Beenen 2014; Kozlowski & Bell, 2006; Lee et al, 2003; Elliot & Church, 1997). Achievement goal is directed towards achieving the desired behaviour (Wiener, 1986). There are two approaches to goal orientation: performance orientation (Urduan & Kaplan, 2020; Ames & Archer, 1988) and mastery goal (Belenky & Nokes-Malach 2012; Ames 1992). A student with a performance goal orientation works towards being judged capable by demonstrating success by putting in minimal effort in outperforming peers Ames & Archer, 1988. Individuals with a goal orientation of gaining mastery have development of new skills as the focus of learning (Gertsakis, Kroustallaki & Sideridis, 2021; Belenky & Nokes-Malach 2012; Ames 1992).

3.3. Competition

The goal structure of individuals affects their group interaction with members and in turn influences the group outcomes (Deutsch, 1949). In this context, studies distinguish between cooperation

and competition (Zaphiris, 2007). In the presence of trust, co-operation exists and is reflected in mutual assistance and sharing of resources. In contrast, low levels of trust lead to unhealthy competition where the desire to win results in hindering other members' success, use of coercive strategies and existence of power differentials (Zaphiris, 2007). In the context of social interdependence when the goals of the individual are negatively correlated with that of the situation, context competition occurs (Deutsch, 1949). A sense of competition is introduced in children from their early childhood in multiple aspects including admission to academic programs, exam scores, sports, and in careers (Zaphiris, 2007). Schools are considered competitive by children (Johnson & Johnson, 1983). The difference between competition and cooperation is blurred in the classrooms, as in classrooms, to beat each other in test scores, students are not likely to do so to cause harm to others (Zaphiris, 2007).

3.4. Generational Differences in Learning Styles

Learning styles preferred by Millennials have been found to be significantly different from those in Gen X, their predecessor generation (Gupta & Goyal, 2018; Raines, 2002, Oblinger, 2003; Howe & Strauss, 2000). While Gen X favoured lectures, faculty contact, associating concepts being discussed with their personal experiences and regarded course tasks as a requirement for earning the degree (Johnson & Romanello, 2005), Millennials do not appreciate traditional lectures, traditional communication standards as a learning mechanism and have no acceptance of delays (Putz, Hofbauer & Treiblmaier, 2020; Feiertag & Berge, 2008, Johnson & Romanello, 2005).

Millennials prefer a learning style that is collaborative and enjoy working and learning in groups and teams, working with technology, require excitement and entertainment, favour structured and experiential activities and are quick to learn from their mistakes (Putz, Hofbauer & Treiblmaier, 2020; Feiertag & Berge, 2008; Johnson & Romanello, 2005; Jonas-Dwyer & Pospisil, 2004). In contrast Millennials' lack motivation, drive and accountability and an interesting quality demonstrated by Millennials is their sense of entitlement to a 'B' grade for just showing up in class

(Alexander & Sysko, 2013). Although Millennials have a preference for what, why and when of their learning, their casual attitude towards research sources, their tendency to believe any peer opinion as gospel truth and lack of original ideas is worrying (Stukalina, 2014, Hershatter & Epstein, 2010) and requires deliberation.

4. Hypothesis

Studies have suggested that there is a significant impact of learning attributes of learning affectivity, goal orientation and competition on the learning outcomes of students. It has also been suggested that Millennials and Gen X differ in their preferences of learning pedagogies (Putz et al, 2020). Learning orientation demonstrated by Millennials appears to be in contrast with traditional learning pedagogies that had worked for earlier generations (D'Amato, A., & Baruch, Y. 2020; Cugin, 2012). Yet there is paucity of work with in-depth inquiry into the differences in learning attributes between Gen X and Millennials which can be used to choose appropriate teaching pedagogies that would engage each generation with learning. This study aims to fill this gap and we hypothesise that:

H1: Gen X and Millennials differ in their learning attributes

It is well established that there is significant correlation between training motivation and succeeding affect (Chung et al., 2021; Tannenbaum, Mathieu, Salas & Cannon-Bowers, 1991; Mathieu, Tannenbaum & Salas, 1992), learning (Noe 1986; Baldwin et al, 1991; Mathieu, Tannenbaum & Salas, 1992; Clark et al, 1993) and performance (Lee, 2019; Hicks & Klimoski, 1987). However, the interaction between these learning differs for Millennials and Gen X has not received adequate attention. We aim to fill this gap and hypothesise that:

H2: Interaction among learning attributes differs for Gen X and Millennials

5. Research Design

The study focuses on higher learning attributes of students in higher education. Specifically, we use students of master's in business administration for our sample. A self-administered survey questionnaire was given to the students of three reputed management

institutions in India. Between the three institutions the sample included students from both the generations being studied.

6. Methods

The first objective of the study was to identify whether the studied attributes are similar or they differ across the two generations. For this we needed to compare the means of the three attributes under consideration. For comparing the means of two independent groups, independent-group t test should be used as it gives an indication of the separateness of the two sets of data (Box, 1981, Jindal & Jaiswal, 2015, Mehta, 2020). Given the large data set of our study, it meets the preconditions (independence and normality) for use of t-test on our data.

The second objective of our study was to analyse how these learning attributes are related to each other for each group. To address this, we calculated the correlations of the three learning attributes for both Gen X and Millennials.

7. Questionnaire Design

The questionnaire design and finalization was done in two phases. In phase one of the questionnaire design initial questions were developed based on existing studies (Gupta & Goyal, 2018) and some industry studies. These were complemented with discussions with a few randomly selected students from Gen X and Millennials. This resulted in an instrument with 23 items which were measured on a 5 point Likert scale. Since this was a self-administered questionnaire, some questions were reverse coded so as to minimize the respondent bias.

Exploratory Factor Analysis of these 23 questions resulted in three factors with an average variance explained (AVE) of 42.03 %, a Cronbach Alpha of 0.472 and a Composite Reliability (CR) 0.234. This suggested that an improvement in the instruments' reliability was needed (Hair, Ringle & Sarstedt, 2011). Thereafter, we dropped 12 items from the dataset with factor loading less than 0.50 (Chin 1998). Three items were removed from learning affectivity, four from goal orientation and five from competition. Confirmatory Factor Analysis (CFA) was conducted on the remaining 11 items where four items corresponded to learning affectivity, three for goal orientation and four for competition.

The results of the CFA are reported in Table 1. The final instrument had a Cronbach alpha of 0.72, indicating an acceptable level of reliability (Nunnally, 1978) and a CR of each construct being greater than 0.708 (Hair et al., 2011). The AVE of the factors also improved to 56.86% which is greater than the recommended 50% (Hair Jr, Howard & Nitzzi, 2020).

A random sample of 30 students was then selected for the pilot and the questionnaire was administered again after 15 days to the same respondents to test the reliability. The test retest reliability was 0.86.

Discriminant validity was established using the Heterotrait Monotrait ratio (HTMT) given in Table 2. The ratios were all under 0.80 (Henseler et al., 2015; Voorhees et al., 2016) establishing the items are loaded into their own constructs and not loaded in other constructs.

Table 1: Factor Reliabilities.

Item/ Factor	Items	Cronbach's α	Composite Reliability
Learning Affectivity	4	0.726	0.703
Goal Orientation	3	0.737	0.854
Competition	4	0.727	0.780

Table 2: Discriminant Validity (HTMT).

Item/ Factor	Learning Affectivity	Goal Orientation	Competition
Learning Affectivity			
Goal Orientation	0.338		
Competition	0.216	0.176	

8. Variables

The CFA discussed in the previous section gave us three factors of learning affectivity, goal orientation and competition. Learning affectivity was measured by asking students about the importance of grades, teamwork, helping others etc. Goal orientation was measured by asking questions like whether they were motivated by their classmates, and whether they give importance to where their classmates are in the class. The last construct of competitiveness was measured by asking if respondents competed with classmates, relatives and friends and if they felt grades were important. All questions were on a five point Likert scale.

9. Data

Data for the study was collected during the 2018-2019 academic year. The survey was sent via google form to the selected 800 students across the three institutions in a stratified manner to ensure students from all three groups were represented. The motivation and the objectives of the study were discussed with the students in class by the authors with a request to respond to the survey. The response was completely voluntary and kept anonymous. Responses were received from 600 students, a response rate of 75%.

Our final dataset consisted of responses from 600 postgraduate business management students from three large nationally and internationally accredited business schools at which the authors were teaching core courses in finance and organizational behaviour to the entire sample. In one of the school's, the students were enrolled for a two-year part time executive Masters in Business Management (MBA) program. The sample selected from this group consisted of survey participants from Gen X and had a work experience of more than 5 years. In the other two business schools, respondents were enrolled for two types of business programs. The first program was a regular two-year, full time management program which did not require any prior work experience. The second program was also a full time management program which required minimum two years' work experience and took one year to complete. The executive program students were in the second term from a total of four terms. The millennial students were in their third or fourth term from a total of six terms.

Our final sample consisted of the following from the 3 business programs: one-year full time program (n=137), final year students of the 2-year full time program (n=119), first year students of a two-year full time program (n=124), and first year students of the two-year executive business program (n=220) (Figure 1). The students in the full time programs were in the age group 22-28 years and therefore formed the Millennial group while the students in the executive program were in the age group of 38-50 years forming the Gen X cohort. Final dataset included 380 responses from Millennials and 220 from Gen X. Demographic data for the responses has been reported in Table 3.

Participants in the two generations were similar in terms of age group, education and work experience. 3.37 % percent of the participants were millennials

in the age group of 22-28 years, 31.2% were Gen X in the 41-50 years' age group and 5.4 % were Gen X in the 38-40 age group. The gender distribution across two generations is similar with 22% of survey

participants in Gen X and 20% from Millennials being females. Among the two groups, the majority of the participants had a bachelor's degree in areas other than engineering (Table 3).

Table 3: Respondent Demographics.

		Total	Gen X (38-50 years)	Millennials (22-28 years)
Gender	Female	123	48	75
	Male	477	172	305
Highest Education	Bachelors (Engineering)	217	100	117
	Bachelors(others)	316	140	186
	Masters	53	36	17
	PhD	14	14	0
Program Groups	One year full time program	137	0	137
	2nd Year, Two Year Program	119	0	119
	1st Year, Two Year Program	124	0	124
	2 year part time Executive Program	220	220	0
Total		220	380	

10. Results

10.1. Millennials and Gen X – Learning Attributes' Differences and Similarities

The mean scores for all the three studied learning attributes are statistically different for both the generations of students (Table 4). This suggests that Gen X and Millennials may be quite different from each other in their learning affectivity, goal orientation and competition attributes. Millennials scored lower than Gen X on 2 of the 3 attributes, i.e., learning affectivity and goal orientation. Millennials scored higher than Gen X on competition (Table 4). Millennials scored a mean of greater than 3.5 for learning affectivity and goal orientation and below 3 for competition. For Gen X, the mean scores for learning affectivity and goal orientation are greater than 3.5 and the mean for competition is below 2.5.

The highest mean score within each group was for learning affectivity and lowest was for competition. This suggests that for both the groups learning affectivity is high and the lower score for competition suggests that both groups do not perceive themselves to be highly competitive. The higher mean for

competition in Millennials as compared to Gen X suggests that Millennials are more competitive than their predecessor generation. Goal orientation mean score was the 2nd highest for Millennials. A mean score of greater than 3.5 for both groups on the goal orientation attribute suggests that both groups have a high goal orientation. Between the two groups, Millennials have a lower goal orientation. These findings provide support to our first hypothesis that Millennials and Gen Y differ in their learning attributes (Table 5).

Table 4: Gen X and Millennials Attribute Differences.

		N	Mean	Std. Dev	Significance (Student t-test)
Learning Affectivity	Millennials	380	4.35	0.59	0.00***
	Gen X	220	4.51	0.52	
Goal Orientation	Millennials	380	3.54	0.71	0.074*
	Gen X	220	3.65	0.73	
Competition	Millennials	380	2.77	0.74	0.00***
	Gen X	220	2.28	0.94	

*: significant at 90%; ***: significant at 99%

Table 5: Summary of Generational Difference Results.

Attribute	Millennials as compared to Gen X	Significant difference	Mean Ranking (Millennials)	Mean Ranking (Gen X)
Learning Affectivity	Lower	Yes	1	1
Goal Orientation	Lower	Yes	2	2
Competition	Higher	Yes	3	3

Both Millennials and Gen X show a significant positive correlation of learning affectivity with goal orientation suggesting that for both generations of students

an increase in learning affectivity will also result in an increase in goal orientation. (Table 6).

Table 6: Attribute Correlations: Gen X and Millennials.

	Learning Affectivity	Goal Orientation	Competition
Millennials			
Learning Affectivity	1		
Goal Orientation	.198**	1	
Competition	-.130*	.187**	1
Gen X			
Learning Affectivity	1		
Goal Orientation	.332**	1	
Competition	.029	-.003	1

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed).

Some of the correlations among the studied learning attributes for the two generations differ from each other (Table 7), thus providing only partial support to our second hypothesis. While correlation between competition and learning affectivity is significantly negative for Millennials, it is neither negative nor significant for Gen X. The correlation between goal orientation and competition is significantly positive for Millennials, and is not significant for Gen X.

Table 7: Correlations of Differences & Similarities.

Attribute	Learning Affectivity	Goal Orientation
Goal Orientation	+ve (Similar)	
Competition	Different	Different

11. Discussion & Conclusion

In this paper we discuss the generational differences for Gen X and Millennials in three attributes (learning affectivity, goal orientation and competition) that may impact learning. We follow this with an analysis of the

differences and similarities in correlations among these attributes for both the generations. The findings fully support our first hypothesis and partially support the second hypothesis.

We find that both generations are significantly different on each of the attributes studied. Also, while both generations score highest on learning affectivity and lowest on competition, the ranking of the means for goal orientation were not the same for the two generations. For Millennials, learning affectivity and competition showed a significant relationship with all the other attributes. In the case of Gen X, learning affectivity was positively correlated to goal orientation. While both groups score highest in learning affectivity, millennial's score lower than Gen X on this attribute.

Instructors can increase learning affectivity of students by bringing out the importance of classroom learning through activities on the relevance to management concepts in the current business events, discussion on management success and failure stories (Bledow et al., 2017) and how the student's classroom

learning will equip them to make successful managers and business leaders. Activities such as group work and individual situation and case analysis can be used for this so that students begin to experience their goals drawing closer with their learning (Gupta & Goyal, 2018).

Our findings resonate with earlier findings according to which affect has been shown to influence the relationship between goals and engagement (Dweck & Leggett, 1988, Linnenbrink & Pintrich, 2002). Since the goal orientation of Millennials is lower than that of Gen X, it can be expected that their individual allocation to attention and effort could be lower (Beenen 2014, Kozlowski & Bell, 2006, Lee et al, 2003, Elliot & Church, 1997). Creating leader boards, having extrinsic rewards to students performing well and maintaining visibility to the learning happening in class could all be techniques used to increase the goal orientation of this generation (Chapman & Rich, 2015). Sharing of regular feedback with students on individual and class assignments is also likely to communicate to the students the extent of their own learning Table 8.

One of the potential techniques to utilize the higher competitive nature of Millennials is gamification of class activities. Competition and challenges of a game create an enthusiasm to play it and gamification of learning utilizes competition as an important ingredient in motivating learning (Prensky, 2001). Since technology has been found to be an effective tool in teaching (Deterding et al, 2011), instructors can consider utilizing technology and competition based teaching tools (Tetteh, 2015, Feiertag & Berge, 2008, Jonas-Dwyer and Pospisil, 2004, Johnson & Romanello, 2005). On-line simulations (Johnson & Romanello, 2005) and virtual learning environments utilizing gamification (Erhel, 2013; De Lange et al., 2003) are likely to utilize the competitive spirit of Millennials to enhance their learning outcomes (Table 7).

The significant positive correlations between goal achievement and learning affectivity indicate that if we use the pedagogies for goal orientation, learning affectivity would also increase. This means that we do not always have to use all the suggested pedagogies for both learning affectivity and goal orientation, but either one or a few of each could be used as an increase in one is likely to cause an increase in the other attribute.

The activities involving competition should be designed keeping in mind that for Millennials an increase in competition may lead to a decrease in learning affectivity. At the same time some level

of competition is desirable since it is likely to be positively correlated to the goal orientation.

Table 8: Suggested teaching pedagogies.

	Traditional Pedagogies used for Gen X	Suggested Pedagogies for Millennials
Learning Affectivity	Class room lectures	Connect concepts to current events Case studies Class activities including group and individual Share stories of success and failure from the business world
Goal Orientation	Self-paced readings Periodic assessments	Use of leaderboards for learning visibility Extrinsic rewards for tasks well performed Continuous assessment Provide quick feedback
Competition	Class ranking	Use of gamification Uses of on-line simulations

12. Limitations and Future Research

The first limitation of our study is due to its sample. As the study sample was limited to the institutions where the authors taught, findings may not be generalizable to the whole MBA population in India or across the globe or in general to all students in higher education. The results may differ across different student populations in other higher education programs. The second limitation is regarding the data collection. Since the survey was self-administered therefore respondent bias could not be eliminated. Although we made the participation in the study voluntary and ensured anonymity to the students, the fact that the authors were also the instructors for these students may have affected the responses. Third limitation of the study is that the data maybe skewed more towards male population as compared to the female population. This could be because in India the percentage of female students in higher education has been less than male students in India (AISHE, 2020). The results should be viewed in the context of the years defining the generations, as cut off dates for different generations may have been defined differently by various scholars (Yahr & Schimmel, 2013).

To make the findings from this study more robust and generalizable, we suggest further studies along similar lines across geographies and across different programs in higher education. Also differences across gender could be studied for their learning attributes.

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Both Authors have contributed equally in theory development, data collection and analysis of the paper.

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Conflict of Interests

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Declarations

It is authors own original work.

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