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Instagram techno-entrepreneurial innovation: Gen Z self-learning motives in social media

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Abstract: Social media such as Instagram can be seen as a social learning channel to build techno entrepreneurship. This study aims to examine Generation Z motivation factors to use Instagram. The survey was conducted in Jakarta by 278 young people respondents as representatives of high school and college students. The independent variables, such as peer groups, self-presentation or narcissism, commercial benefits, entertainment, and cultural identity, were examined for their influence on self-learning behaviour. The results showed that some of the dominant variables were commercial benefits in income to promote various products, brands, and ideas. Gen Z members either use their business opportunities or opt to work as influencers. Self-presentation was significant and even tended to border on narcissism, where peer groups were also relevant. The need for entertainment was a significant influence on behaviour, while cultural identity was not. Gen Z was engaged as a techno-entrepreneur using Instagram as an innovative online social learning platform to learn independently.

Keywords: generation Z; Instagram; online behaviour; self-learning; social media; techno-entrepreneur.

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Debra Hidayat is a Marketing Communication Consultant who handles various corporate clients in the field of public health. In addition, in the last few years, she has been working to help local communities examine consumers' behaviour, both end-users and corporations, to help her clients achieve a harmonious relationship with their environment. She completed her Bachelor of Fine Arts at Art Center College of Design in Pasadena, California, USA, and earned her Master of Arts in Marketing Communication at Binus University in Jakarta, Indonesia.

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1 Introduction

Technology always appears in every era, so that people born and raised in a certain period have a special relationship with the development of technology at that time. Along with the human life cycle, values, beliefs, social work and thoughts, and technology grow together due to human 'culture'. Therefore, technology is part of the culture and vice versa, and culture grows with technology (Pacey, 1983, 2001, 2013). Human interaction with technology places it as a subject and the centre of attention, especially in pursuing technological inventions and developments. The exploration in this paper pays attention to human behaviour and technological culture, which are increasingly important today. Technology becomes a culture, and then public openness is people's everyday life, mainly social media to certain user groups such as cohorts with international consequences. This growth of technology culture as a social dimension by Van Dijck (2013) was referred to as the culture of global connectivity. Young people are connected to get to know each other, discuss, and share knowledge as consumer behaviour on e-commerce (Mansur et al., 2019).

Everyone in the world can learn from anyone via the internet, primarily through social network sites. Young people use social media as a medium to learn to complement their knowledge and skills after school hours. The advantages of media technology, especially the internet, have changed learning and sharing knowledge. Several previous studies have shown that e-learning is considered equal or superior to traditional education (George et al., 2014). There is a shift from formal learning in schools to independent learning as social learning on social media as an innovative education (Lee-Kelley and Blackman, 2005; Kyei-Blankson et al., 2014), which is the focus of this paper. However, this research focuses on Generation Z with characteristics as digital natives because they are very technology literate. Therefore, this paper's position is on the increasing role of social media and the opportunity to become a media for entrepreneurship training.

The young age group has had a strong relationship with gadgets and the internet since childhood. They learn to interact directly using computer-mediated communication. Apart from traditional schools, young people independently find classes without physical space on the internet, especially Instagram and YouTube. At first, they were mentored, and when they were young adults without being guided by parents and teachers, they

explored the online learning space. Furthermore, at school, teenagers face the same learning technology as at home. Together with their classmates, under the teacher's guidance, they explore all parts of the curriculum with computer-supported collaborative learning. Both at home, at school, and when with peer groups, teenagers face the reality of being involved in social learning innovation. Young people produce content and sort out their future talent to produce and distribute ideas that many people can see or consume as a product. This paper discusses the innovations made by young people related to social media and makes it a learning process in techno-entrepreneurship.

The unique perspective of this research paper is intended to fill in aspects that have received less attention from previous studies. For example, Toutain et al. (2017), and Chea (2017) paid attention to entrepreneurship learning and discuss developing abilities and skills among students, while Ratten and Usmanij (2020) focused on entrepreneurship education. Misalnya, Toutain et al. (2017) and Chea (2017) paid attention to entrepreneurship learning. However, our research paper pays more attention to online media as independent learning for young people than the previous research. Some researchers call online training for techno entrepreneurs, although independent learning was recommended to be equipped with a face-to-face component. For example, Evans and Volery (2001) found that an efficient and effective online training program for young entrepreneurs should be developed and put into hands-on practice. However, online self-learning can be combined with face-to-face communication, and they have different learning styles when using social media (Balakrishnan and Gan, 2016).

Generation Z (Gen Z)—a cohort of those who were born between 1997 and 2012 (Pew Research Centre, 2019)—is the generation that follows the Millennials or Gen Y. Gen Z has been using the internet all their lives since their childhood. This cohort is comfortable with technology and social media. One of the social media outlets that have proliferated and have come to be a part of Gen Z's life is Instagram (IG) and the use of Pinterest in learning and teaching (Pearce and Learmonth, 2013). Gen Z cohorts were bright, digitally infused, driven, and ready to change the world (Seemiller and Grace, 2016). Gen Y was characterised as optimistic and self-focused, whereas Gen X was independent and cynical; Gen Z has its own identity and characteristics. Since 2014, Gen Z began entering college, and this cohort is known to be loyal, thoughtful, determined, compassionate, open-minded, and responsible. Gen Z's view also provides additional labels such as competitive, spontaneous, adventurous, and curious.

Gen Z has spread out as young employees, entrepreneurs, educators, and students in the second decade of the millennium. Their habits depend on gadgets for their everyday lives, both offline and online (Hidayat, 2018). According to Fietkiewicz et al. (2016), every day, Gen Z focuses on creating and maintaining relationships with peers through social media and face-to-face. Gen Z creates and sustains their relationship with peers and prefers to learn independently but in a social environment. They tend to use videos for learning and engage with passionate, knowledgeable, and caring teachers. Gen Z students prefer face-to-face meetings, texting, instant messaging, and specific social media platforms over other communication modes (Seemiller, 2017). The internet has not only been a friend of Gen Z since childhood but has also become an integral part of their lives. It was used in hundreds of ways to connect every member of Gen Z with several others, building friendships and, in a way, making the world better. Gen Z does not know the world without the internet. For them, every second of life is inseparable from one to several screens that Gen Z multitasks with their handhelds.

Some previous studies have considered the users' cohort on IG usage, such as motive underlying IG use among Gen Z users analysed by groups (Ting et al., 2016). Shields and Kane (2011) also examined Internet use correlations among college students in a social and psychological variable. In China, Sai (2019) discusses youth entrepreneurship skills after leadership training in the face-to-face classroom. One previous study divided the cohorts into three groups. Users aged 23 years and below were called neoteric-inheritors; between 24 and 37 were called prospective pursuers, and users aged between 38 and 53 were called social-strivers. These cohorts did not consider Gen Z as the youngest cohort. Therefore, their study is different in terms of the focus of attention. On the other hand, this study places Gen Z as a separate cohort and labels them the 'Instagram generation'. This study's uniqueness was to understand the socio-psychological aspects of Gen Z (8–to 22 years old) that motivate their use of IG as their preferred social media outlet.

Another similar study examined the motives for using social networking sites (SNS) and engagement (Jordan and Weller, 2018) were related to group identities. Other factors were also investigated, such as collective self-esteem and gender impacts among young adults (Barker, 2009). This study has little in common with the current research regarding being a peer group member that is assumed to have the most important motivation for using SNS. However, this study focuses on the influence of gender and some of the variables mentioned above. According to him, women share their motivational images higher in the group-in-self, passing time, and entertainment. His findings also show that negative collective self-esteem correlates with social compensation. This previous research shows that those cynical about their social groups use SNS to communicate with other group members. Furthermore, the use of SNS was likened to seizing public compensation and seeking social identity satisfaction. The cohort groups that were respondents in the study were likely to be Gen Y. In contrast to that study, the current research focuses on the Gen Z cohort.

Other studies that focus more on using IG also provide insights into the importance of technology use among the youth. Stapleton et al. (2017) conducted a similar study to identify the purpose of IG among adults. The similarity among these previous studies was the psychological aspect, for example, the motivations for using IG (Lee et al., 2015) and users' characteristics and motivations for engaging with social live streaming services (Zimmer and Scheibe, 2019). However, this research focuses only on the role of extreme narcissistic attitudes in self-promotion on IG (Moon et al., 2016) and as a framework for the attitude-behaviour relationship (Werder, 2009). Another study focused solely on the sense of community on Twitter and IG by exploring the roles of motives and parasocial relationships (Blight et al., 2017). The researchers' findings have provided a clearer picture of social media relations with adolescents or young adults, such as IG and Facebook. Saville et al. (2020) and Hewson (2018) also describe young people's engagement, motivation, and behaviour in SNS in the context of daily consumption.

Many schools and colleges realise that their students in the second and third decades of this millennium are already different. Therefore, according to O'Shea and Link (2019), there has also been a change in learning and teaching design by trying to use additional technologies such as augmented and gamification. Shirin et al. (2017) research the interaction of e-learning, but the subject is still prevalent in Islamic teaching and does not explicitly pay attention to entrepreneurship. However, in all previous studies, not all aspects concerned to the researchers as this paper would like to show Gen Z's experiences from the psychological perspective. Then empirical research that self-learning is very instrumental in arousing the spirit of entrepreneurship in Gen Z circles.

Tseng (2013) also stated that e-learning has a role in increasing entrepreneurial knowledge and experiences in entrepreneurial development.

This paper presents a detailed examination of Gen Z's motivation in using IG, which involved psychological, economic, sociological, educational, and cultural motives. The previous research in psychological elements is also a concern to understand why Gen Z has a deep connection with IG, not with different SNS types. IG, including live streaming, is part of Gen Z's identity. Gen Z's economic intention is to make communication technology devices a basis for their business movements, and this cohort is known as a cohort of technopreneurs. As technopreneurs, Gen Z can truly master media technology to be acquired as a business world. Therefore, IG is the mainstay of Gen Z in building their business, besides being involved with entertainment, education, and cultural spheres of life. This paper's highlight agrees with Raphaely and Marinova's (2013) opinion by mentioning the concept of sustainability and humanistic education. This paper aims to enhance previous research findings, and this study is novel in that it seeks to study human behaviour in the computer and internet context.

Based on a series of previous studies, an advanced inquiry that combines economic, educational, communication technology, and cultural perspectives is still needed so that the research questions are as follows: what are the factors that motivate Gen Z to use social media such as Instagram as a communication channel for techno-entrepreneurial informal learning; Is there a relationship between several variables such as peer groups, self-presentation or narcissism, commercial benefits, entertainment, and cultural identity on self-learning behaviour?

2 Literature review

2.1 Computer-mediated communication

This research paper discusses Gen Z as learners who utilise social media to become their self-learning media on entrepreneurship and youth development. Entrepreneurial skills are needed, both within the company itself as intrapreneurship and entrepreneurship (Amo, 2006). Therefore, several perspectives related to this discussion were psychology of communication, computer-mediated communication (CMC), and computer-supported collaboration learning (CSCL) to be considered for empirical study. CMC, in a broader sense, is another form of communication that was mediated by digital technology. Meanwhile, the psychological aspect of communication study is a group of communication theories that develop aspects of cognitive psychology (Holmes, 2009) while, in the education world, the participants interact through social media. Rafaeli (1997) proposed the CMC theory as interpersonal communication in one-to-one or many-to-many modes. Interactivity consists of sharing text, sound, and images that form social networks (Rafaeli, 1988, 1990, 1998, 2007; Jones et al., 2004; Kent et al., 2016). Since the beginning of the millennium, there has been an intensification of the transformation process and systemic evolution in education, but more sustainable actions are needed to improve the quality of education in a converged environment (Rosini and Limongi-França, 2013).

2.2 Computer-supported collaboration learning

The involvement of the internet for Gen Z, especially of the social media such as YouTube and Instagram, must be seen as a learning process outside the formal classroom. Formal classes involve the same technology, but young people spend more time outside the classroom. Although traditional learning is continuously changing and adapting to technology but is still a part of students' daily lives. CSCL places students interactively to engage in building mutual understanding for the benefit of the teaching-learning process. The internet has given young people a free way of learning because, as it is understood, CSCL theory also grows along with CMC in various interaction modes such as face-to-face, long-distance, and synchronous or non-synchronous (Halavais, 2016; Dillenbourg et al., 2009; Stahl et al., 2006), and Laurillard et al. (2000) said it was an affordance for learning in a non-linear narrative medium. CSCL pays attention to the process and results of knowledge-sharing activities (Fischer and Mandl, 2005). They also focused on the psychological dimensions of social interaction (Kreijns et al., 2002; Dillenbourg, 2005) and the importance of inter-stakeholder coordination support (Fischer and Dillenbourg, 2006).

2.3 Social learning innovation and self-efficacy

Learning and communication always occur together and cannot be separated. The discovery and development of learning theory were still implicitly tucked away in communication theories relevant to learning. From the perspective of psychology, it was formally developed for learning, which was strongly influenced by the flow of behaviourism by Skinner (2011) and others who stated that people learn in response to external stimuli. When someone gets an external stimulus, such as a reward or punishment, he or she makes conditions that maximise reward and minimise punishment (Shanahan, 2009). This paper discusses the process of social learning in interaction through social media.

Albert Bandura proposed social learning theory as the development of behaviourism based on production, search, or investigation. Social learning theory states that individuals learn through modelling

or observation and imitation of others. A person's cognitive process begins with attention, memory, and motivation (Bandura, 1977), which continues to be developed in the context of audio-video and online communication such as social media. In this research, online communication participants were now more involved, engaging, coherent, and believable than ever before. Therefore, new media participants look more severe in emotion so that the characters or models seen on Instagram make participants' influence stronger and become part of self-learning. In the social learning theory of Bandura, self-directedness operates through a self-system that comprises cognitive structures and sub-functions for perceiving, evaluating, motivating, and regulating behaviour (Bandura and Schunk, 1981; Dweck, 2013). Although formal education is essential for building economic independence and reducing poverty (Niankara and Traoret, 2019; Adu and Denkyirah, 2017)), informal education for entrepreneurship, for example, can build family capacity building.

In line with social learning theory, Bandura (1999) also further explains self-efficacy, which refers to the belief of a person or group of people in their capability to produce effects on an event. This theory will reflect the identity of young people on Instagram

social media who visually and verbally state their identity to be known and understood by netizens because, according to Bandura (1983), self-efficacy beliefs determine how people feel, think, motivate themselves, and behave through four main processes such as cognitive, motivational, affective, and selection processes.

In this paper context, self-learning was closely related to managing their innovative learning processes via the internet. Self-learning innovation needs a self-regulated learning strategy by the online devices (Zimmerman and Schunk, 2001). This term refers to “actions and processes directed at the acquisition of information or skills that involve agency, purpose, and instrumentality of perception by learners”.

The purpose of this research is to analyse the factors that motivate Gen Z to use social media Instagram as a communication channel for informal learning about techno-entrepreneurship. This paper focuses on examining the relationship between several variables such as peer groups, self-presentation or narcissism, commercial benefits, entertainment, and cultural identity on self-learning behaviour.

3 Method

This study uses a quantitative analytical approach to the survey (Keyton, 2014) using a set of questionnaires compiled with structured questions. This study was conducted in Greater Jakarta (Jabodetabek), and this region can be considered a representative of a big city with several small and medium-sized cities around it. The research location considers urban and suburban areas because Gen Z is part of the city residents. However, because respondents were in the same age group, the same level of education assumed that the population has a relatively similar homogeneity level. The survey was conducted by visiting high schools and university locations. Several high schools were selected as research locations based on their rankings in terms of students’ achievements of each school in its area and included the top ten schools. Universities were chosen based on size, and thus the largest universities in the region, both public and private, were selected. The population tends to be homogeneous because it was categorised as one cohort, the sampling technique was purposively conducted (Trochim et al., 2015).

The survey used a self-administered questionnaire design that was constructed according to the tested variable. These measures were adapted from past studies (Ting et al., 2016) and were arranged in positive-word statements using a five-point Likert scale. The questionnaire distribution took two ways—first, distribution directly to the respondents and filling out the printout questionnaire’s answers. Secondly, respondents were asked to fill the questionnaire online in front of the surveyor.

A total of 300 questionnaires were distributed to a sample of 278 respondents comprising high school students (48%) and university students (52%). By gender, 57% of the group comprised female respondents, and 43% comprised male respondents. By age, 52% of the respondents were between 17 and 20 years, and 48% were between 21 and 23 years old.

4 Results

Findings and discussion presented this study’s results as a summary in several statistical tables and a graph that shows the relationship between the variables. In the first stage,

testing was conducted using SPSS 20 with the research indicators with factor loading values < 0.05 . Thus, it can be said that validity was met.

Not all factors had a significant effect on behavioural intention in using IG. Some motivational factors of Gen Z showed a positive relationship, and the rest were not significant. As seen in Table 1, only four indicators had significant positive influences on behavioural intention, such as peer groups (PEER), self-presentation or narcissism (SELF), commercial benefit (COMM), and entertainment (ENTR). However, cultural identity (CULT) did not significantly influence the behavioural intention of Gen Z.

Table 1 Factor loadings, AVE, and construct reliabilities

<i>Constructs/items</i>		<i>Factor loadings</i>	<i>Average variance extracted</i>	<i>Construct reliabilities</i>
<i>Peer group</i>			0.684	0.756
1	I like to hang out with my peers	0.678		
2	My friends mean a lot to me	0.791		
3	I pay attention to the opinions and recommendations of friends	0.778		
4	Associating with groups makes me happy	0.699		
5	My friends and I depend on each other	0.665		
<i>Self-presentation</i>			0.689	0.821
6	I like to be seen on Instagram	0.887		
7	I would like to be the focus of people's attention	0.857		
8	I would like people to comment on my look	0.757		
9	I like people to give 'likes' on my appearance on Instagram	0.698		
10	I like my own look	0.912		
<i>Commercial benefit</i>			0.897	0.879
11	I like to search products on Instagram	0.982		
12	I like to be a product endorser on Instagram	0.897		
13	I like to earn money as a clogger on Instagram	0.884		
14	I like spent time on Instagram for the money	0.911		
15	For me, Instagram has become a field of my business	0.796		
<i>Entertainment</i>			0.622	0.786
16	I always look for entertainment on Instagram	0.624		
17	I like to interact and be connected on Instagram	0.736		
18	I like to use Instagram to seeking friends or to find a date	0.687		
19	I like seeing good looking people on Instagram	0.711		
20	I like entertaining people with my look on Instagram	0.802		

Table 1 Factor loadings, AVE, and construct reliabilities (continued)

		Factor loadings	Average variance extracted	Construct reliabilities
	<i>Culture Identity</i>		0.589	0.801
21	I like to use Instagram to share nature and culture	0.574		
22	I like to share cultural photos	0.602		
23	It gives me satisfaction if people can understand my culture through Instagram	0.595		
24	Promoting culture and tourism is a positive activity through Instagram	0.651		
25	My culture should be seen worldwide on Instagram	0.587		
	<i>Self-learning behaviour</i>		0.771	0.794
26	I set my own learning activities on Instagram	0.692		
27	I learn from other people on Instagram	0.783		
28	I imitate 'celebgram' ways and styles on Instagram	0.817		
29	I learn and practice promoting products or ideas	0.713		
30	I am looking for information about products and brands	0.668		
31	I make my business plan	0.674		
32	I prepared a presentation script in front of my phone-camera	0.652		
33	I record myself and share it on Instagram	0.764		
34	I try to improve my ability to be an endorser	0.682		
35	I motivate myself to be the best speaker	0.786		

Gen Z learns and acquires knowledge from group experiences in online and offline interactions (average variance extracted 0.684). They meet every day and discuss various things they have experienced together, including earning income from social media like Instagram.

The peer group was where Gen Z finalises its business plans after watching YouTube, vlogger activities, and marketers. When surveyed, it was found that each person claimed to enjoy being together with peer groups (factor loadings 0.678). Individuals felt part of the group (0.791), paid attention to the opinions and recommendations of their friends (0.778), felt very dependent on one another in groups (0.665), and for Gen Z, associating with groups makes them happy (0.699).

The variable of self-presentation or self-actualisation, or even narcissism, was Gen Z's IG activities. This cohort uses social media as part of the commercial to get the benefit. Gen Z introduces something or product branding to find attention (average variance extracted 0.698). The courage to appear before the public was an act of marketing communication that a techno-entrepreneur must possess.

The survey shows that Gen Z likes to be seen publicly on Instagram (factor loadings 0.887), likes to be the focus of people's attention (0.857), likes people to comment on his/her look (0.757), enjoys people giving 'likes' on his/her appearance (0.698), and liked his/her appearance on Instagram (0.912). Thus, narcissism has become Gen Z's 'power' because social media was 'home' to this cohort.

The techno-entrepreneurial experience was reflected in all factors of social media usage behaviour, especially Instagram. Gen Z's self-learning behaviour, however, spends more time independently studying. Even so, the online and offline lives of students were inseparable from one another. Then techno-entrepreneurship can be seen from Gen Z activities that use the Instagram business model. The most compelling motivation is to obtain commercial benefits as a form of entrepreneurship. This cohort reads opportunities and directly acts as individuals who run their businesses. The business world was in their digital world. Whatever Gen Z does on the internet, it was expected to provide financial benefits (average variance extracted at 0.897 with construct reliability of 0.879). Gen Z likes to search for products on Instagram (factor loadings 0.982), so they try to get many followers and their attention as capital to promote a brand. Gen Z likes to be an endorser of a brand on Instagram (0.897), the motivation was to get money benefits as a vlogger (0.884), and they like to spend time on Instagram with economic motivation (0.911). Also, Instagram was their current and future business model (0.796).

Looking for entertainment was also a motivation for Gen Z to always open Instagram (average variance extracted 0.622 with construct reliability 0.786). Gen Z claimed to open Instagram for fun (factor loadings 0.624), interact and connect with friends (0.736), even find new friends or find a mate (0.687). For Gen Z, Instagram was a place to find beautiful and handsome people in the world (0.711). Instagram was suitable for sharing the fun with others, both with photos and videos (0.802).

Table 2 shows significant positive correlations for four variables such as peer group (PEER), self-presentation (SELF), commercial benefit (COMM), and entertainment (ENTR). Each beta value strengthens its correlation with the dependent variable 'Behaviour' (BEHAV), except for the cultural identity variable (CULT), which has no significant standardised coefficients beta. The computed model fitness R^2 statistics also support the given model (Table 3).

Table 2 The computed t statistics for each model coefficient of the model

Model	Coefficients ^a										
	Unstandardised coefficients		Standardised coefficients		T	Sig.	Correlations			Collinearity statistics	
	B	Std. error	Beta	Zero-order			Partia l	Part	Tolerance	VIF	
(Constant)	0.745	0.271		2.750	0.007						
PEER	0.164	0.085	0.192	10.934	0.056	0.621	0.195	0.128	0.446	2.242	
SELF	0.226	0.078	0.270	20.918	0.004	0.637	0.287	0.193	0.515	1.942	
COMM	0.384	0.085	0.404	40.519	0.000	0.683	0.421	0.300	0.551	1.814	
ENTR	0.421	0.308	0.394	30.107	0.032	0.676	0.438	0.477	0.579	1.786	
CULT	0.029	0.087	0.030	0.336	0.738	0.523	0.034	0.022	0.537	1.862	

^aDependent Variable: Y (BEHAV).

Although the localised identity of a group of Gen Z somewhere can be fused and was now growing as a global village of Gen Z, cultural attributes were usually present in online interactions. As Hecht (1993, 2009) stated, online communities' cultural identity was a source of identity and locations for identity expression that communicated on social media (average variance extracted 0.589 with construct reliability 0.801). Some of Gen Z mentioned that they use Instagram to share various pictures of natural beauty and culture in their place to the public (factor loadings 0.574), photos of art and cultural activities were also shared with the public (0.602) because they feel satisfied if they can share to all people so that the public understands its culture through Instagram (0.595). Even Gen Z acknowledged that by posting pictures of the beauty of nature and local culture, they had helped promote tourism so that the tourism business flourished (0.651). Their local culture must also be enjoyed by the global village citizens (0.587).

Table 3 The computed model fitness R^2 statistics for the model given

Model	R	R Square	Adjusted R Square	Std. error of the estimate	Change Statistics				
					R Square change	F change	Df1	Df2	Sig. F change
1	0.763 ^a	0.582	0.565	0.48414	0.582	33.111	4	95	0.000

^aPredictors: (Constant), X5 (CULT), X4 (ENTR), X3 (COMM), X2 (SELF), X1 (PEER).

^bDependent Variable: Y (BEHAV).

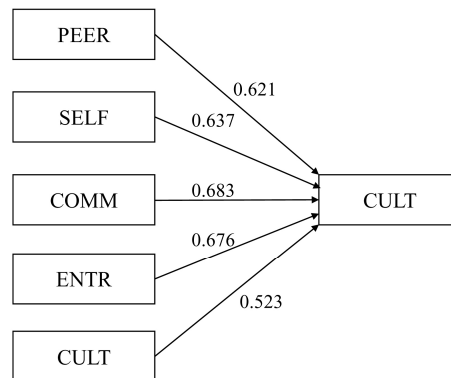
Self-learning behaviour (average variance extracted 0.771 with construct reliabilities 0.794) in Gen Z was very appropriate, seeing young people use the media technology for their daily lives. Instagram becomes their place to learn, and Gen Z sets their learning activities on this social media (factor loadings 0.92); Gen Z learns from other people on IG (0.783). Maybe many things were obtained from people who appear on IG to inspire them to take the opportunity and make IG a second campus. It could be that there were many different characters of people found at IG, but these young people filter out the positive things that need to be emulated and what to avoid.

Even Gen Z was watching and imitating people who first publish themselves as influencers, saying, "I imitate *celebgram* (celebrity endorser on Instagram) ways and styles on Instagram" (0.817). These young people also want to be 'programmed' and follow the style of their presentation. Gen Z's self-learning was not only by watching, but they tried to practice "how to promote products or ideas" on Instagram (0.713). Students may already be familiar with academic assignments at high schools and universities, so sharing content was not difficult. Gen Z then "looks for information about products and brands" (0.668) online and shop as consumers who were familiar with various brands. Even Gen Z made a business plan (0.674) to realise the desire as an influencer, marketer, and technopreneur. Copying celebrities at IG made these young people practice and prepare a presentation script in front of their phone camera (0.652).

The correlations summarised in Table 4 have excluded the cultural identity variable (CULT) with the lowest correlation score. The other four independent variables (PEER, SELF, COMM, and ENTR) significantly affected BHAV. However, the five independent variables are illustrated with their correlations, as shown in Figure 1 as the given model.

Table 4 Correlations

		<i>BEHAV</i>	<i>PEER</i>	<i>SELF</i>	<i>COMM</i>	<i>ENTR</i>
Pearson Correlation	BEHAV	1.000	0.621	0.637	0.683	0.523
	PEER	0.621	1.000	0.657	0.576	0.619
	SELF	0.637	0.657	1.000	0.559	0.519
	COMM	0.683	0.576	0.559	1.000	0.580
	ENTR	0.676	0.619	0.519	0.580	1.000
Sig. (1 - tailed)	BEHAV	–	0.000	0.000	0.000	0.000
	PEER	0.000	–	0.000	0.000	0.000
	SELF	0.000	0.000	–	0.000	0.000
	COMM	0.000	0.000	0.000	–	0.000
	ENTR	0.000	0.000	0.000	0.000	–
<i>N</i>	BEHAV	278	278	278	278	278
	PEER	278	278	278	278	278
	SELF	278	278	278	278	278
	COMM	278	278	278	278	278
	ENTR	278	278	278	278	278

Figure 1 Correlations

As participants, they also produced videos by recording themselves and shared them on IG (0.764). Gen Z was also aware that self-learning skills must be trained continuously and need perseverance and hard work. Therefore, they were trying to improve their ability to be an endorser (0.682). Finally, they motivated themselves to become the best speakers shared on Instagram to the public (0.786).

5 Discussion

5.1 Peer groups

Peer groups were an essential trigger for forming groups within the Gen Z networks because individuals cannot be separated from their peers where they influence each other.

It can be said that each generation has a degree of closeness that was different from each type of SNS. Gen Z spends most of its time interacting on IG, Line, and Snapchat every day. Alhabash and Ma (2017) also found the same thing among college students and have indicated that the highest use indication was Snapchat and IG, followed by Facebook and Twitter. All can be seen as a form of students' empowerment (Shafaei and Nejati, 2012). Gen Z was different from the Millennials and Gen Y, who use Facebook and Twitter more. Hamid et al. (2015) also found this habit as personality traits. This finding shows the importance of peer relationships for the youngest generation in a family. Compared with other studies' results, this study's findings were like what was found in another study in Singapore (Chua and Chang, 2016), which examined the relationship between self-presentation and peer comparisons on social media. The influence of peers, especially among young women, concerning beauty was a popular topic of discussion. However, this study focused on several social media types and found that IG was an ideal space for young women users who discuss beauty.

Peer groups grow identity for small groups and larger aggregates. Its characteristics become sharper and appear in text conversations and shared images or audio and video files. Netizens rely on SNS for the formation of their group identity. Especially for Gen Z, this has been the most active association with deficient self-regulation—in psychological communication perspective—toward the habit that grows among teenagers who spend time on SNS (Lee et al., 2017). Previous research in Turkey (Bulut and Doğan, 2017), for example, identified seven factors that explained the motivation of SNS users, namely business orientation, the ability to create, socialising, entertainment, status-seeking, communication, and information seeking. Similar findings were obtained in Taiwan, where four different subgroups were identified: groups of users who were highly motivated, who were less motivated, who were relaxation-oriented, and who were socially oriented (Su et al., 2018).

Gen Z has never been separated from their gadgets, which keep them online, even when they do other activities as they constantly multitask. Users of the *YouNow* application, for example, like streaming and watching videos while chatting with other users and showing their appreciation to the players using emoticons. When broadcasts take place, there was no anonymity, so that the synchronous live streaming on IG reminds us of one of the films, *The Truman Show*, because everyone could consciously share about his/her own life in real-time (Scheibe et al., 2016). Gen Z likes this interactive watching activity while discussing what they were watching in their peer groups.

5.2 *Self-presentation*

Narcissism for Gen Z was identified with self-presentation on IG because it can be said that IG was their world since they became teenagers. As stated by Bandura (1983, 1999), self-efficacy, in this context, is the opening argument for how young people place themselves in a virtual space for public consumption. Their expressions were typical and showed the vocabulary of the cohort. Self-presentation with selfie-posting was a means of self-presentation. Similar findings by Kim (2020) and Orr et al. (2019) were influenced by the appearance on Instagram on body dissatisfaction through self-esteem for users who need popularity. However, this study's uniqueness was the characteristics of Gen Z interactions that show more openness in the peer group association, especially on social media. In face-to-face interactions, some of the peer group members tend to be more closed and introverted. This finding was in line with previous research that has

found that introverted and neurotic people found their real selves on the internet, while extroverts and non-neurotic people found their real selves through traditional social interactions (Amichai-Hamburger et al., 2002). Narcissism can vary in degrees among individuals; some have higher degrees and lower self-esteem concerning online activities. Gender differences affect the type of narcissistic content except on social media (Mehdizadeh, 2010), especially the women's narcissism in channels (Han, 2020), and especially how to manage impressions on the front stage (Cunningham, 2013).

Even though Gen Z was known to be independent and has intense self-confidence, their appearance on IG peaked their tenacity. Although not researching Gen Z, this was in line with other research that found that people feel more able to express their 'true selves' on the internet. Their face-to-face interactions were intended to form close relationships with people they meet on the internet (Bargh et al., 2002). Sharing selfies and videos on IG for Gen Z was tantamount to arranging photos on family albums—as the older generation does—but it also shows their personalities, lifestyles, and preferences. This finding was in line with the results of previous research, which has revealed four motivations for posting selfies on SNS (Sung et al., 2016):

- 1 seeking attention
- 2 communication
- 3 posting
- 4 entertainment.

However, this paper shows the in-depth behavioural factors that motivate the use of IG.

IG and several other SNSs can be considered as the media for psychologically introverted people. However, it might be less convenient for extroverted people who want direct interactions while meeting their peers. The introvert and neurotic persons find the 'real me' on the internet, while extroverts and non-neurotic persons find 'the real me' through traditional social interactions such as face-to-face interactions (Amichai-Hamburger et al., 2002).

5.3 Commercial benefits

One of Gen Z's motives was financial benefits to continue remaining online and staying connected with other people. Gen Z can become technopreneurs with just a gadget. Previous research has also found such similarities that the use of IG has been gaining prominence among brand publications and has even dominated the platforms in every appearance (Meier and Schäfer, 2018). Gen Z takes the commercial benefits of using IG, and this opportunity allows them to turn into technopreneurs by sharing images and brands (Lee and Jeong, 2019). Gen Z utilises a live digital channel as an electronic wallet (Do and Do, 2020), and Dlamini and Bimha (2017) also mentioned that entrepreneurship is a credible career path.

IG has a positive impact on Gen Z and uses it as a site for their business. It can also improve the welfare of SNS users. These results related to the effects of SNS on well-being found it necessary to consider the positive motivational side of comparison and social jealousy. Their study underlines that to understand the effects of SNS on well-being, it must consider the positive motivational side supported in this research as a commercial benefit, utility, and sustainability of participants' online activity.

Its superior features and specific user profiles drive the utilisation of IG as a business model for Gen Z. IG enables the presentation of identity, documentation, socialisation, and dominant aesthetics in participant interactivity. Power was rooted in a hedonic and symbolic game that strengthens brand perceptions in the community and the participant's intention to consume. This result was in line with Ilich and Hardey's (2020) findings confirming and expanding the theory of use and gratification about striking brand associations and the involvement of IG as a marketing communication medium. They suggested the multi-directional impact of secondary image sharing for individuals, peers, and brands.

5.4 Entertainment

Motives for seeking entertainment and pleasure influence the use of IG for Gen Z. Various sharing pictures and videos show teenagers' favourite using handhelds to watch cinema movies, vlogs, picking beautiful photos, and so on. This finding was in line with Meier and Schäfer (2018) findings, which stated that the intensity of social comparisons on IG was positively related to users' emotional effects and had adverse effects such as social jealousy. He also stated that inspiration on IG was related to increasing positive influence. As the commercial benefits obtained by Gen Z, it turns out that the SNS effect provides welfare and happiness as a positive motivational side. Ju et al. (2014) found that technology use became a lifestyle for promoting mobile business. The world of education thus must change following the development of technology and the younger generation. Iyer et al. (2021) mentioned that stakeholders must consider an education system based on the student experience.

5.5 Cultural identity

Cultural identity for young people may not be so prominent that local culture was not significantly reflected in their social media presentations such as Instagram. Like the younger age group, Gen Z shows a more global culture in the appearance of dress, language, and cuisine, except for customs at local parties. Identity in the traditional definition can be revised through youth engagement with educational technology (Bond and Bedenlier, 2019; Issroff and Scanlon, 2002). According to Buckingham (2007), young people's technology-savvy identities was reflected in their experiences as learners, citizens, consumers, family, and community members. According to Goldman et al. (2008), social relationships and technologies engage learning and young people's identity. Hecht (2009) also underlines that the identity communicated was more as "social beings whose lives revolve around communication, relationships, and communities and who operate from multiple and shifting identities".

6 Conclusions

The use of social media networks, especially Instagram, shows that people can generate income. The results showed that some of the dominant variables motivated by Gen Z in using IG matched this group's character while playing their role as students. The commercial benefit was the most prominent dominant factor that motivated IG use among Gen Z, which promotes various products, brands, and ideas, while also making

room for its business opportunities or operating as an influencer. Self-presentation was significant for Gen Z and tended to border on narcissism in their everyday lives. Individual and IG group users find a place to publicise their friendship in happiness, beauty, or grief. Everything of experience and knowledge was shared with their peer groups, connected people, and IG became their group identities. IG was also an entertaining social media platform because of the many pictures and videos on it. Cultural identity does not influence IG's usage behaviour, but Gen Z has become a citizen of modern cities globally. Gen Z utilises IG as part of activities that were beneficial both for self-learning and their business practice. IG becomes the future business field for Gen Z.

The implications of the results of this study direct that computer-mediated communication should be used as the main social learning media by all elements of education stakeholders. Non-formal education demands greater attention in the future by utilising social media such as Instagram as a learning channel that supports formal education. A democratic education model has arrived where all parties can act as both a source and a receiver. The democratisation of education through online channels must be formulated as an effective future social education model.

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