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GEN Z SELF-PORTRAIT: VITALITY, ACTIVISM, BELONGING, HAPPINESS, SELF-IMAGE, AND MEDIA USAGE HABITS

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ABSTRACT

Aim/Purpose	This study examined the self-perception of adolescents and young people aged 17-21 – how they perceived their personal characteristics, self-image, vitality, belonging to a local and global (glocal) society, happiness index and activity, media usage habits in general and smartphones in particular – in other words, it sought to produce a sketch of their character.
Background	Different age groups are influenced by various factors that shape them, including living environment, technological developments, experiences, common issues, events of glocal significance, and more. People belonging to Gen Z were born at the end of the previous century and the beginning of the 21st century (up to 2010). This generation was born into the digital technological age and is the first one born into the environment defined by smartphones, and social media. Its members are referred to as "digital natives" because they were born after the widespread adoption of digital technology in the Western world. They entered an environment characterized by the widespread daily use of smartphones, the Internet, and technology in general.
Methodology	This was a quantitative study based on a sample of 418 Israeli adolescents and young people aged 17-21. The following questionnaires were administered anonymously and disseminated online to an audience of youths aged 17-21 across Israel: A demographic questionnaire; Self-esteem; Vitality; Belonging vs. alienation; Social-emotional aspects; Usage habits in digital environments; Usage habits of learning on a smartphone; Open questions.
Contribution	The current study tried to define clusters to characterize adolescents and youth aged 17-21.
Findings	Results show that study participants had high self-esteem and vitality, felt belonging, happy, and satisfied with their life, and perceived themselves as active and enterprising at an average level or above. The study identified two clusters. Participants in Cluster 1 were characterized by higher parameter averages than those in Cluster 2 on the self-image, vitality, belonging, happiness, and activism

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scales. Participants in Cluster 1 felt that using a smartphone made life easier, helped them solve everyday problems, made everyday conduct easier, and allowed them to express themselves, keep up to date with what is happening with their friends, disseminate information conveniently, be involved in social life, and establish relationships with those around them. They thought that it was easy to collaborate with others and to plan activities and events.

Recommendations for Practitioners

When examining cluster correlations with data in relation to other variables, it is apparent that participants in Cluster 1 had more options to reach out for help, report more weekly hours spent talking and meeting with friends and feel that using a smartphone makes everyday life easier and facilitates their day-to-day conduct than did participants in Cluster 2. The smartphone allows them to express themselves, keep updated regarding what is happening with their friends and disseminate information easily, helps them be involved in social life and establish connections with those around them. They find it easy to communicate and cooperate with others and to plan activities and events. By contrast, participants in Cluster 2 felt that the smartphone complicates things for them and creates problems in their daily lives. They feel that the use of social networks burdens them and that the smartphone prevents them from being more involved in their social life, and from establishing relationships with those around them. They felt that communication by smartphone creates more problems in understanding messages.

Recommendations for Researchers

One of the challenges of this generation is forming an independent identity and self-regulation in a digital, global, across-the-border era that offers a variety of possibilities and communities. They must examine the connection between the digital and personal spaces, to be able to enjoy virtual communities and a sense of togetherness, and at the same time maintain privacy, autonomy, and individuality. Many studies point to the blurring of boundaries between the private-personal and the public, at numerous problems in social networks, including social problems, shaming, and exclusion from various groups and activities. The fear of shaming and the desire to keep up with everything that is happening create a state of mental stress, and adolescents often feel that they urgently need to check their smartphones. Sharing with others can help them deal with negative content and experiences and avoid the dangers lurking in their web surfing. Yet sharing, especially with friends, often causes intimate content to become public and leads to shaming and invasion of privacy.

Impact on Society

Gen Z was born into an environment where smartphones, the Internet, and technology in general, are widely used in everyday routine, and they make extensive use of technological means in all areas of life. One of the characteristics of this generation is "globalization." The present study showed that about 84% of participants felt to a moderate degree or higher that they were citizens of the world.

Future Research

The findings of this study revealed a significant difference in self-image between males and females. An attempt was made to explain the findings in light of previous studies, but the need arose for studies on the self-image of young people of Gen Z that would shed light on the subject.

Keywords

information and communication technology (ICT), smartphones, teenagers, young adults, generation Z, cluster analysis

INTRODUCTION

This study examined the self-perception of adolescents and young people aged 17-21: how they perceived their characteristics, self-image, vitality, belonging to a *glocal* (reflecting or characterized by both local and global considerations) society, happiness index and activity, media usage habits in general and smartphones in particular – in other words, it sought to produce a sketch of their character.

YOUNG PEOPLE AGED 17-21: GENERATION Z

Different age groups are influenced by various factors that shape them, including living environment, technological developments, experiences, common issues, events of local and global significance, and more. People belonging to Gen Z were born at the end of the previous century and the beginning of the 21st century (up to 2010). This generation was born into the digital technological age and is the first one born into the environment defined by smartphones, and social media. Its members are referred to as "digital natives" because they were born after the widespread adoption of digital technology in the Western world. They entered an environment characterized by the widespread daily use of smartphones, the Internet, and technology in general (Carter, 2018; Chicioreanu & Amza, 2018; McCrindle & Wolfinger, 2009). Researchers (Carter, 2018; McCrindle & Wolfinger, 2009) have noted that this generation makes extensive use of technological means in all areas of life. One of the characteristics of this generation is "globalization" in consuming music, fashion, food, culture, entertainment, and global connections. Researchers (Carter, 2018; McCrindle & Wolfinger, 2009) have argued that this generation experiences feelings of uncertainty and ambiguity more than previous generations did. Furthermore, one of the characteristics of this generation, in the Western world, is greater variety in the ethnicity and structure of their family of origin than of its predecessors. Researchers (Carter, 2018; Turner, 2015) have pointed out the widespread use by this generation of mobile digital technologies, such as smartphones and tablets, as opposed to desktops. Phones serve as the central means of accessing information on the Internet. Whereas the previous generation used phones mainly for communication, this generation also uses many technological applications and engages in non-verbal symbolic communication, for example, emojis. The digital communication of this generation takes place at a much higher speed than that of the previous generation, and the social presence and nature of their digital interactions are more pronounced.

One of the main characteristics of this generation, compared to its predecessors, is the scope of use and the degree of exposure to the Internet for various purposes, such as watching videos, playing games, searching for information, and the use of applications such as scanners, cameras, recordings, online scheduling, alerts, and more (Zilka, 2018a, 2018c, 2020a). They use media daily to create and maintain social connections, but also to create films, edit photos and music clips, and develop multimedia presentations and content. They write more than any other generation, and they are interested in the writing process and the final product (Rosen, 2010). Socially, they have more friends than previous generations, including global social connections, and crossing geographic and cultural boundaries. Social media is an important part of their lives. It provides opportunities for socializing, keeping up to date, sharing information, and spending time with others. They use the media to express their autonomy openly. They create networked publics, that is, a space created by using web technologies. These spaces present challenges and opportunities for expression, recruitment of target audiences, and dissemination of content to broad audiences. Many tools help create and share information, working in teams and supporting others. These spaces support users in creating interpersonal communication between friends and developing social skills (Asterhan & Bouton, 2018; Carter, 2018; Chicioreanu & Amza, 2018; H. Rosenberg & Asterhan, 2018; Shatto & Erwin, 2016).

Researchers (Herzogenrath-Amelung, 2016; Pérez-Escoba et al., 2016; Schwieger & Ladwig, 2018) reported that Generation Z youths have quick response ability, drive to continuous and immediate interaction, high expectations of technology, practice independent learning, and excel in parallel multitasking. Researchers (McCrindle & Wolfinger, 2009; Shatto & Erwin, 2017) noted that members of

this generation tend more toward entrepreneurial activity than did previous generations. They learn from people near and far, by oral and written means, both formally and informally, through a variety of digital tools, and do so more frequently than did the previous generation. They prefer to consume information visually and graphically and prefer obtaining it from symbol-based messages and images rather than from a "page." Because of the availability of smartphones, the learning experience has become part of the life of the generation everywhere, at any time, and in any situation. Shatto and Erwin (2017) pointed out that members of this generation tend to learn from watching and by trial and error more than their predecessors did; they rely more on the Internet as a source of information than on printed books. Researchers (Adobe, 2016; Ernst & Young, 2016; Merriman & Valerio, 2016; Schwieger & Ladwig, 2018) related that these youths learn optimally by doing and creating. They are inclined toward entrepreneurship, which manifests in autodidacticism. Researchers have found that the most popular means of using the Internet and web applications is the smartphone (Goggin & Hjorth, 2014; Ito et al., 2010; Livingstone, 2009; Livingstone et al., 2014; Zilka, 2018b).

Social Emotional Aspects, Belonging, and Efficacy

The present study explored social-emotional aspects using research tools that examined self-image, vitality, feelings of belonging, efficacy, meaningful interactions, positive experiences, and successes, as well as feelings of self-worth, of being needed, and of contributing to the environment.

Self-image

Self-image refers to a set of traits that a person attributes to oneself. Researchers point to the importance of self-image in academic achievement, social connections, and coping styles. M. Rosenberg (1965) found that there are three main factors affecting the formation of self-image: a person's inner belief in oneself, reflection, and social comparison. Inner belief refers to the belief that people have in their abilities and skills. A person's belief in one's abilities is an "anchor" for self-identity, even when one's environment and performance change. The inner belief contains experiences that have left a mark on a person at the conscious and unconscious levels. *Reflection* refers to the processes of self-observation of one's habits, patterns of behavior, and the feedback that one receives from other people: the "looking-glass self." The *social comparison* refers to the comparison a person makes between self and others. When individuals change their social environment, it may be followed by a change in self-image.

Belonging vs alienation

A sense of alienation refers to the loss of a person's sense of belonging, which is expressed in a feeling of estrangement from the environment, from the people close to oneself, and participation in the social fabric of the environment. The sense of alienation is liable to result in the separation and distancing of a person from the environment, inducing feelings of social isolation, powerlessness, normlessness, lack of social support and social connections, and foreignness. The sense of alienation may change when individuals feel that the environment wants to accept them into its ranks (Berry & Sabatier, 2010; Dean, 1961; Sabatier & Berry, 2008; Viner et al., 2012). Researchers (Adobe, 2016; Ernst & Young, 2016; Merriman & Valerio, 2016; Schwieger & Ladwig, 2018) have noted that the generation born at the end of the previous century and the beginning of the current one is characterized by self-discipline and self-searching processes. They are a generation that is self-aware, prefers self-learning, and recognizes the importance of developing skills. They see technology and creativity as important aspects that are integrated into their identity. They are independent and resilient and know that achievement comes with hard work. They are ambitious, entrepreneurial, and development-oriented; they are creative and value personal tone; they plan for the future; and they are willing to learn for themselves. Researchers (Bauerlein, 2008; Tapscott, 2008) emphasized that this generation is different from the previous one and that it pursues freedom of choice and freedom of expres-

sion. Members of this generation make decisions based on information, aware of its great complexity and of the fact that the same situation may be looked at from different angles. It is easy for them to partner with others; openness and transparency characterize their conduct.

The present study examined the self-perception of adolescents and youths aged 17-21: how they perceive their personal characteristics, self-image, vitality, belonging to a glocal society, happiness index and activity, media usage habits in general, and of smartphones in particular; in other words, it sought to produce a sketch of their character.

Research Questions

- How do 17-21-year-olds perceive themselves, their personal characteristics, self-image, vitality, belonging to a glocal society, the activity and happiness index, media use habits in general, and smartphones in particular?
- Are there correlations between personal characteristics and media use habits in general and of smartphones in particular?
- Is it possible to identify character clusters for 17-21-year-olds?

METHODOLOGY

This was a quantitative study.

Sample

The study involved 418 Israeli teenagers and youths, aged 17-21 (M = 18.7, SD = 1.5), of whom 79% were female. Marital status of parents: 76% of participants came from families whose parents were married, 19% from families of divorced parents, and the rest from single-parent families or separated parents. The sample covered various socio-demographic regions across Israel.

The youths expressed their willingness to take part in the study of their own free will. Participation was voluntary. The anonymous questionnaires were disseminated online.

Research Tools

The following questionnaires were administered anonymously and disseminated online to an audience of youths aged 17-21 across Israel.

1. A demographic questionnaire that included 10 items, such as age, gender, sector, country of origin, year of immigration, number of rooms in the home, number of siblings, marital status of the parents, economic situation, and living conditions.
2. Self-esteem. The questionnaire was developed by M. Rosenberg's (1965), self-esteem scale. The questionnaire includes 10 items (Table 1). Respondents were asked to rate the extent to which they agreed with each statement, ranging from not at all (1) to very much (5).
3. Vitality. The questionnaire was developed by Bostic et al. (2000). The questionnaire includes 6 items (Table 2). Respondents were asked to rate the extent to which they agreed with each statement, ranging from not at all (1) to very much (5).
4. Belonging vs. alienation. The questionnaire is based on Dean's (1961), Berry's (1990), and Sabatier and Berry's (2008) research tools. The questionnaire includes 5 items (Table 3). Respondents were asked to rate the extent to which they agreed with each statement, ranging from not at all (1) to very much (5).
5. Social-emotional aspects, the index of happiness and self-efficacy (SEL). The questionnaire is based on the research tools of Erikson (1980). The self-efficacy questionnaire measures perceptions of learning ability according to Bandura's (1986) model. The questionnaire includes 8 items (Tables 4-5). Respondents were asked to rate the extent to which they agreed with each statement, ranging from not at all (1) to very much (5).

6. Usage habits in digital environments. The questionnaire is based on Zilka's (2018a, 2018b) research tools. The questionnaire includes 10 items (Table 6). Respondents were asked to rate "how many hours a week usually ..." ranging from not at all (1), 1-5 hours (2), 6-10 hours (3), 11-15 hours (4), to over 15 hours a week (5).
7. Usage habits of learning on a smartphone. The questionnaire is based on Zilka's (2018a, 2018b) research tools. The questionnaire includes 13 items (Table 7).
8. Open questions: Why do you think so many people use their smartphones so much? Do you feel that the smartphone is a part of you? If your smartphone is taken away from you for a week, will you manage? What will you miss? What will you gain?

Statistical Processing

Continuous variables were reported by means and standard deviations, and categorical variables were reported by frequencies and proportions. Pearson's correlation coefficients were calculated between scales.

Some data were missing: 6 of the 419 participants did not answer some questionnaire items. No discernable patterns were found by inspecting the missing data, which suggested that they were missing at random. For data missing at random, valid multiple imputations have been shown to reduce bias even when there is a large proportion of missing data (Madley-Dowd et al., 2019). Before cluster analysis, we imputed missing observations using multiple imputations (replacement values) with the R MICE package. In the MICE approach, regression models, treating each missing value as a dependent variable, generated multiple predictions for missing values by including all other variables in the dataset as predictors (Azur et al., 2011).

A silhouette method followed by k-means clustering was used to divide individuals into homogeneous clusters according to the means of five scales: self-esteem, vitality, belonging, happiness, and initiative.

To characterize the clusters and identify the scales that best differentiate between the clusters, univariate analyzes were used.

K-means clustering is an unsupervised machine-learning algorithm, developed by Hartigan and Wong (1979). It consists of defining clusters in a way that total within-cluster variation is minimized. Total within-cluster variation is defined as the sum of squared Euclidean distances between items and the corresponding centroid. Each observation is assigned to a given cluster so that the sum of square distances of the observations to their assigned cluster centers is minimized. The average silhouette method was used to determine the optimal number of clusters that best fit the data (Hartigan & Wong, 1979; Rousseeuw, 1987). The average silhouette method computes the average silhouette of observations for different values of k.

The analysis was performed by the R Foundation for Statistical Computing, version 4.0.5.

Findings

Tables 1-7 summarize the distribution of agreement, by percentage, with each statement according to the questionnaire to which it belongs. The degree of agreement with the statement is rated from 1 (do not agree at all) to 5 (completely agree). A rating greater than 2 indicates moderate or strong agreement with the statement. In each table, the column ">2" indicates the percentage of the sample that identified with the statement at a medium level or higher (the statement rated 3, 4, or 5). In Table 6, which describes leisure patterns, participants were asked to answer how many hours a week they spend in the activity described; the column "6+ hours per week" indicates recreation in a particular category of more than 6 hours per week.

SELF-ESTEEM

Respondents were asked to rate the extent to which they agreed with each statement. Table 1 shows that 90% or more of the entire sample reported self-esteem at a moderate level or above. The statement that received the lowest percentage of agreement is 8, "Overall I feel respect for myself." Only 58% of the sample agreed with it to a moderate degree and above. Significant differences were found between the genders, with higher self-esteem among males.

Table 1. Agreement patterns for the self-esteem questionnaire

Statement	Percentages of agreement					
	>2	1	2	3	4	5
1. Overall I'm satisfied with myself	94	0	6	18	59	17
2. I think that overall, I'm good	79	5	16	34	37	8
3. I think I have some good qualities	96	0	4	9	60	27
4. I'm able to do things well, just like most other people	96	1	3	19	48	28
5. I feel I have a lot to be proud of	93	1	5	29	35	29
6. Sometimes I definitely don't feel helpless	80	5	14	26	38	17
7. I feel I'm a valuable person, at least on an equal footing with other people	93	3	4	15	48	30
8. Overall I feel respect for myself	58	18	24	31	17	11
9. Overall, I don't tend to feel like I'm a failure	94	2	4	9	34	51
10. I have a positive attitude toward myself	88	1	10	19	48	22

	[ALL] N=418	F N=332	M N=86	p overall	N
Self-esteem	3.74 (0.61)	3.68 (0.62)	3.96 (0.50)	<0.001	418

VITALITY

Respondents were asked to rate the extent to which they agreed with each statement. Table 2 shows that the majority of the sample (80% or more) agreed that it had characteristics that express vitality and energy at a moderate level and above.

Table 2. Agreement patterns for the vitality questionnaire

Statement	Percentages of agreement					
	>2	1	2	3	4	5
1. I feel active and full of life	90	2	7	25	45	21
2. Sometimes I feel active and full of life	58	12	31	27	18	13
3. I'm energetic, cheerful, and full of life	91	2	6	29	40	22
4. I look forward to every new day	79	4	16	42	26	11
5. I usually feel alert and watchful	84	1	15	32	37	15

6. I feel full of drive	84	2	14	33	34	16

Belonging vs. Alienation

Respondents were asked to rate the extent to which they felt. Table 3 shows that the majority of the sample (90% or more) felt moderate or stronger identification with the country. Relatively low percentages of consent (only 82% agreed with the statement to a moderate degree or more) were recorded in response to statement 5, "Are you usually satisfied with your country?"

Table 3. Agreement patterns for the belonging questionnaire

Statement	Percentages of agreement					
Do you feel that you…	>2	1	2	3	4	5
1. Belong to the state?	94	2	4	12	40	41
2. Are a citizen of the whole world?	84	2	14	29	33	22
3. Are proud of your citizenship?	94	1	5	17	39	38
4. Are usually satisfied with your society?	94	1	5	23	43	29
5. Are usually satisfied with your country?	82	4	14	34	32	16

Happiness Index and Personal Initiative

Respondents were asked to rate the extent to which they felt. Tables 4 and 5 show that overall the respondents in the sample were happy and satisfied with their active and enterprising life. Over 90% responded that they were happy, satisfied, and active at a moderate level and above.

Table 4. Consensus patterns for the Happiness Index Questionnaire

Statement	Percentages of agreement					
Do you feel that…	>2	1	2	3	4	5
1. Are you satisfied with life in the country?	86	3	10	36	33	17
2. Is your family satisfied with life in the country?	88	3	9	30	40	19
3. Are your parents and family members generally happy?	96	**0**	4	21	48	27
4. Do you usually feel happy?	97	1	2	24	53	20
5. Are you usually happy with yourself, with what you have?	96	**0**	4	20	45	32
6. Do you manage to do the things you love?	93	1	5	18	51	25

Table 5. Agreement patterns for the Initiative questionnaire

Statement	Percentages of agreement					
	>2	1	2	3	4	5
1. Do you feel that you are an active and enterprising person?	89	3	8	31	39	19
2. Do you see yourself as someone who is able to deal with unpleasant situations that may occur in life?	93	1	5	22	40	31

Leisure Hours and Media Consumption Habits

Table 6 shows the distribution of leisure-time occupations. Of particular interest is the "6+ hours per week" column, which indicates the activity on which respondents chose to spend over 6 hours of their time per week: 74% percent indicated being on social networks, 65% surfing the Internet, 48% meeting friends, 37% talking on the phone with friends, 36% spend on computer programs, 23% watching movies and YouTube, 19% reading a book, and 3% reading a newspaper.

Table 6. Agreement patterns for the leisure-time occupation questionnaire

Statement	Percentages of agreement				
	6+ hours per week	1-5 hours	6-10 hours	11-15 hours	15+ hours
1. Watching TV	34	66	23	9	2
2. Watching movies	22	78	18	4	0
3. Watching YouTube	24	76	18	5	1
4. Surfing the Internet	65	35	31	17	18
5. On social networks	74	26	30	20	24
6. Reading a newspaper	3	97	2	0	0
7. Reading a book	19	81	13	5	2
8. With friends	48	52	32	10	6
9. Talking with friends on the phone	37	63	24	8	6
10. Computer programs	36	64	17	10	10

Using a Smartphone

Table 7 presents the distribution of attitudes toward the use of smartphones. Most of the sample (90%) agree to a moderate and high extent that the use of the smartphone helps in communicating with people and in organizing daily life; 41% agree that the smartphone interferes with establishing relationships with those around them; and about 50% believe that the smartphone and social networks are a burden on them.

Table 7. Agreement patterns for the smartphone use questionnaire

Statement	Percentages of agreement					
	>2	1	2	3	4	5
1. Does the smartphone help you solve problems in your daily life?	95	1	4	19	43	33
2. To what extent does using a smartphone make your day-to-day routine easier?	96	0	4	13	48	35
3. Does the smartphone create problems in your daily life?	54	15	31	37	13	4
4. Do you feel that using social media is burdensome for you?	57	19	24	39	14	3
5. Do you feel that the smartphone prevents you from being more involved in your social life and prevents you from forming connections with those around you?	41	25	34	32	8	1
6. Are there more problems in understanding messages in smartphone communication?	76	7	17	38	28	9

Statement	Percentages of agreement					
7. Does the smartphone allow you to express yourself, keep updated on what is happening with your friends, and disseminate the information you want to disseminate in a convenient way?	96	2	2	16	37	43
8. Do you feel that the smartphone helps you be more involved in your social life and helps establish connections with those around you?	95	1	4	15	40	39
9. Do you feel that using social networks helps you?	82	4	14	30	33	19
10. Do you feel it is easier to communicate with others by smartphone?	95	2	2	21	36	38
11. Is there more cooperation between people through smartphone communication?	82	2	15	38	31	13
12. Does communication by smartphone make it easier to plan activities and events?	95	2	3	11	36	48
13. Does the smartphone help you solve problems in your daily life?	95	1	4	19	43	33

Correlations Between Scales

Table 8 presents Pearson's correlations between the various scales. In variables that reflect leisure time entertainment, a high score indicates more weekly hours of recreation. The following scales are positively and distinctly correlated: self-image, vitality, belonging, happiness, and entrepreneurship, more hours of surfing the Internet, meeting friends, and seeing the smartphone as helpful, non-burdensome, and assisting in socialization. A strong feeling of belonging was found to be negatively correlated with reading hours (the more one feels to belong the less one reads). The feeling that the smartphone makes things easier in everyday life is negatively associated with reading hours. The feeling that the smartphone makes everyday life difficult is negatively associated with self-image, spending time with friends, and a feeling that the smartphone makes life easier and helps create social connections.

Table 8: Pearson's correlations between the various scales

NAME	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Self-esteem	3.73	0.61	1.00											
2. Vitality1	3.43	0.78	0.50	1.00										
3. Belonging	3.90	0.72	0.32	0.47	1.00									
4. Happiness	3.81	0.63	0.59	0.65	0.71	1.00								
5. Initiative	3.79	0.80	0.39	0.52	0.32	0.44	1.00							
6. Watching TV, movies	1.37	0.54	0.08	0.10	0.00	0.10	-0.09	1.00						
7. Surfing the web	1.97	0.77	0.14	0.13	0.15	0.07	-0.06	0.29	1.00					
8. Reading	1.16	0.37	-0.02	-0.03	-0.22	-0.08	0.01	0.25	0.11	1.00				
9. Talking, meeting friends	1.63	0.69	0.18	0.29	0.08	0.02	0.33	0.22	0.33	0.09	1.00			
10. Smartphone easy	4.09	0.73	0.26	0.29	0.34	0.35	0.34	0.08	0.05	-0.10	0.12	1.00		
11. Smartphone difficult	2.65	0.72	-0.15	-0.08	0.04	-0.03	0.01	0.07	-0.05	0.14	-0.11	-0.19	1.00	
12. Smartphone social	3.90	0.63	0.26	0.28	0.42	0.34	0.21	-0.05	0.27	-0.06	0.12	0.57	-0.21	1.00

Note. N = 418. All correlations greater than 0.10 are significant at $p < .05$

Characterization of Homogeneous Groups (Clusters) by Scale

According to the average silhouette method, two clusters fit the data best (Figure 1): cluster 1 (N = 282) and cluster 2 (N = 136). The clusters were significantly different for all five scales selected to identify them. As can be seen in Table 9, participants associated with cluster 1 are characterized by higher averages on self-image, vitality, belonging, happiness, and activity. Regarding other variables, participants belonging to cluster 1 have more options to reach for help, report more weekly hours talking to and meeting with friends and feel that use of a smartphone makes life easier and has social aspects.

Table 9. Comparison of indices and demographics between the two clusters

	[ALL] N=418	1 N=282	2 N=136	p. overall	N
Age	18.7 (1.54)	18.7 (1.48)	18.6 (1.64)	0.653	418
Gender:				0.702	418
F	332 (79.4%)	222 (78.7%)	110 (80.9%)		
M	86 (20.6%)	60 (21.3%)	26 (19.1%)		
B17:				<0.001	409
no	21 (5.13%)	2 (0.72%)	19 (14.3%)		
yes	388 (94.9%)	274 (99.3%)	114 (85.7%)		
L1:				0.040	418
1	279 (66.7%)	184 (65.2%)	95 (69.9%)		
2	115 (27.5%)	86 (30.5%)	29 (21.3%)		
3	24 (5.74%)	12 (4.26%)	12 (8.82%)		
Self-esteem	3.74 (0.61)	3.94 (0.48)	3.31 (0.63)	<0.001	418
Vitality	3.43 (0.78)	3.78 (0.61)	2.70 (0.55)	<0.001	418
Belonging	3.90 (0.71)	4.17 (0.56)	3.33 (0.66)	<0.001	418
Happiness	3.80 (0.63)	4.08 (0.48)	3.22 (0.50)	<0.001	418
Initiative	3.78 (0.80)	4.09 (0.64)	3.15 (0.72)	<0.001	418
Viewing habits	1.59 (0.42)	1.58 (0.41)	1.62 (0.45)	0.404	418
Watching TV, movies	1.37 (0.54)	1.36 (0.50)	1.39 (0.61)	0.685	418
Surfing the web	1.97 (0.77)	1.97 (0.74)	1.98 (0.82)	0.871	418
Reading	1.17 (0.37)	1.14 (0.32)	1.22 (0.47)	0.091	418
Talking, meeting friends	1.64 (0.70)	1.69 (0.74)	1.54 (0.59)	0.025	418
Smartphone easy	4.08 (0.73)	4.25 (0.66)	3.75 (0.75)	<0.001	418
Smartphone difficult	2.65 (0.72)	2.66 (0.72)	2.64 (0.72)	0.755	418
Smartphone social	3.91 (0.62)	4.01 (0.57)	3.68 (0.67)	<0.001	418

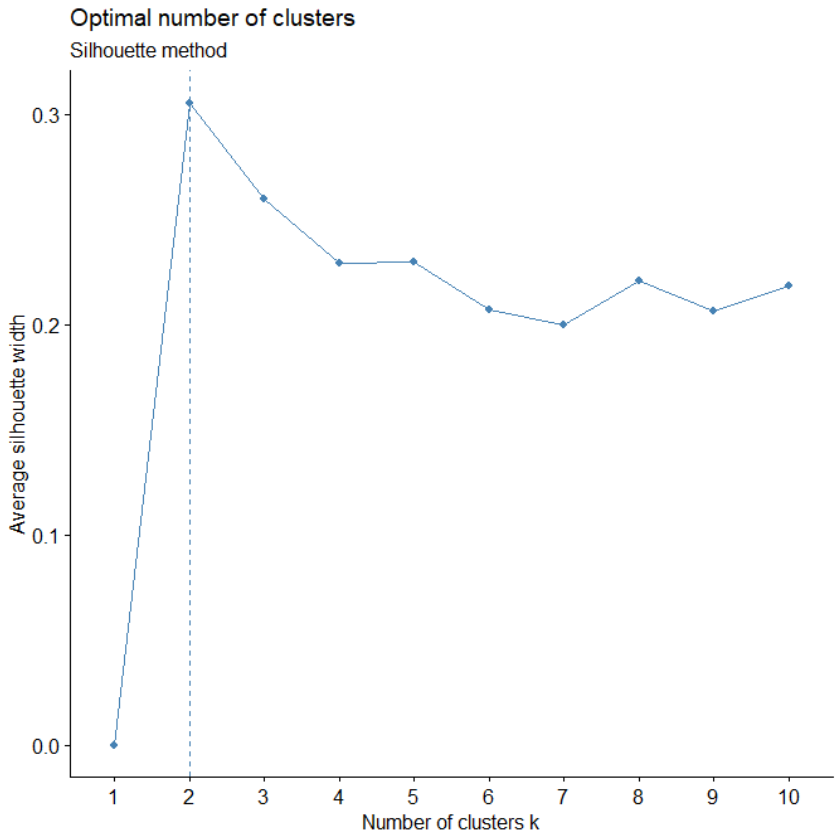

Figure 1. Optimal number of clusters based on 5 scales, N = 418

DISCUSSION

This study aimed to explore the self-perception of 17-21-year-olds: their personal characteristics, self-image, vitality, belonging to a glocal society, activity and happiness indices, and their habits of using media in general and of smartphones in particular; in other words, to create a sketch of their character. It looked to find correlations between personality traits and media use habits and sought to determine whether it is possible to define clusters based on the self-image of 17-21-year-olds.

SELF-IMAGE, VITALITY, BELONGING TO A GLOCAL SOCIETY, HAPPINESS, AND SELF-EFFICACY

The research question was how 17-21-year-olds perceive themselves, their personal characteristics, self-image, vitality, belonging to a glocal society, activity, and happiness, as well as their habits of using media in general and smartphones in particular. The study results show that participants have a strong self-image, high vitality, feel belonging and are happy, are satisfied with their life, active and enterprising to a moderate or above degree.

Over 90% (Table 1) of participants were satisfied with themselves and reported self-esteem at moderate and above levels. Over 80% (Table 2) agreed that they had qualities that express vitality and energy at moderate and above levels. Over 90% (Table 3) felt belonging to the country to a moderate and above degree.

Over 90% (Tables 4-5) of participants felt happy and were satisfied with their active and enterprising life to a moderate and above degree. Most participants indicated that they came from families whose parents were married (76%), 19% from families of divorced parents, and the rest from single-parent families or separated parents. Researchers (Carter, 2018; McCrindle & Wolfinger, 2009) have noted

that one of the characteristics of this generation, in the Western world, is a wider variety in the structure of the family cell from which they hail than of its predecessors.

The present study found that participants did not report a feeling of uncertainty and ambiguity, as researchers found in previous studies (Carter, 2018; McCrindle & Wolfinger, 2009), possibly because they were born into the global digital environment and perceived it to be their natural environment. Researchers (Birch & Ladd, 1997, 1998; Zilka, 2014, 2015, 2017) have pointed out that adolescence is considered to be characterized by having to cope with many changes, including physiological, emotional, mental, and social, therefore it is important for teens and young people to have an environment that fosters feelings of belonging and being protected, of growth, interest, efficacy, challenge, successes, and feedback, an environment that enables meaningful interactions, positive experiences, and successes. Adolescents need an environment that enables a sense of social connection and belonging, experiences of close and supportive friendships, and social acceptance, which create meaningful interactions leading to involvement and playing meaningful roles. The findings of this study indicate that respondents have high self-esteem, are vital, feel belonging, are happy, satisfied with their lives, active and enterprising. This suggests that they feel a sense of belonging, growth, interest, ability, challenge, success, feedback, and significant interactions.

Researchers (Baumgartner et al., 2014; Baym, 2010; Desjarlais & Willoughby, 2010; Livingstone et al., 2014; Zilka, 2018a, 2018b, 2019, 2020c, 2021b) have argued that in an environment that contains many communities, the process of defining self-identity is more complex than in previous periods. The findings of this study, however, show that for most participants the transition from "community to community," from group to group happened easily and naturally, although the dynamics differed between the different communities. At the same time, some participants noted difficulties, such as posting a message in the wrong group, which may cause embarrassment and anguish. They felt that they needed to be alert and attentive with regard to the smartphone because of the great number of messages they receive, which made it difficult to keep track of them. Some complained of difficulty in understanding interactions that take place in different communities, at times leading to communication failures, crises, and conflicts. These findings reinforce those of previous studies (Patchin & Hinduja, 2006; Zilka, 2017, 2018a, 2018b, 2019, 2020b, 2020c, 2021a, 2021b).

Correlation Between the Scales

Regarding the correlations between personal characteristics and media usage habits in general and smartphones in particular, the study shows (Table 8) that the scales were positively and distinctly related: self-image, vitality, belonging, happiness, and entrepreneurship correlated with surfing the Internet, meeting friends, and a feeling that the smartphone makes life easier, less burdensome, and helps create social connections. The feeling that the smartphone makes everyday life easier was negatively associated with hours of reading. The feeling that the smartphone makes everyday life more difficult was negatively associated with self-image, spending time with friends, and the feeling that the smartphone makes life easier or helps form social connections.

Gen Z was born into an environment where smartphones, the Internet, and technology, in general, are widely used in everyday routine, and they make extensive use of technological means in all areas of life. One of the characteristics of this generation is "globalization" (Carter, 2018; Chicioreanu & Amza, 2018; McCrindle & Wolfinger, 2009). The present study showed (Table 3) that about 84% of participants felt to a moderate degree or higher that they were citizens of the world. This finding reinforces previous studies, in which it was found that one of the characteristics of this generation is globalization, including the consumption of music, fashion, food, cultural entertainment, and global connections.

The study indicates (Table 7) that the majority of participants in the sample (90%) agreed to a moderate or greater extent that the use of a smartphone helped in communicating with people and or-

ganizing daily life. At the same time, 41% of the sample felt that the smartphone interfered with establishing relationships with those around them, and about 50% believed that the smartphone, and social networks in particular, were a burden. One of the challenges of this generation is forming an independent identity and self-regulation in a digital, global, across-the-border era that offers a variety of possibilities and communities. They must examine the connection between the digital and personal spaces, to be able to enjoy virtual communities and a sense of togetherness, and at the same time maintain privacy, autonomy, and individuality. Many studies (Zilka, 2014, 2015, 2017, 2021b) point to the blurring of boundaries between the private-personal and the public, at numerous problems in social networks, including social problems, shaming, and exclusion from various groups and activities. The fear of shaming and the desire to keep up with everything that is happening create a state of mental stress, and adolescents often feel that they urgently need to check their smartphones. Sharing with others can help them deal with negative content and experiences and avoid the dangers lurking in their web surfing. Yet, sharing, especially with friends, often causes intimate content to become public and leads to shaming and invasion of privacy. Many noted that they shared personal and intimate information with friends, and these disseminated it online, which caused them grief and a sense of anger and alienation toward the members of the groups where the content was distributed. Adolescents must learn to distinguish between sharing public content and maintaining their privacy and that of their peers.

Characterization of Clusters: Homogeneous Groups Based on Scales

The research question was whether clusters can be defined for the self-image of 17-21-year-olds. In this study, two clusters were identified that best fit the data (Figure 1), cluster 1 (N = 282) and cluster 2 (N = 136). The clusters were significantly different on all five scales (Table 9). The findings indicate that participants associated with cluster 1 were characterized by higher averages on the self-image, vitality, belonging, happiness index, and activity scales than were participants associated with cluster 2. When examining cluster correlations with data in relation to other variables, it is apparent that participants in cluster 1 had more options to reach out for help, report more weekly hours spent talking and meeting with friends and feel that using a smartphone makes everyday life easier and facilitates their day-to-day conduct than did participants in cluster 2. The smartphone allows them to express themselves, keep updated regarding what is happening with their friends and disseminate information easily, helps them be involved in social life and establish connections with those around them. They find it easy to communicate and cooperate with others and to plan activities and events. By contrast, participants in cluster 2 felt that the smartphone complicates things for them and creates problems in their daily lives. They feel that the use of social networks burdens them and that the smartphone prevents them from being more involved in their social life, and from establishing relationships with those around them. They felt that communication by smartphone creates more problems in understanding messages.

Research Limitations and Future Studies

The findings of this study revealed a significant difference in self-image between males and females. An attempt was made to explain the findings in light of previous studies, but the need arose for studies on the self-image of young people of Gen Z that would shed light on the subject.

The study examined the characteristics of Gen Z according to criteria common in the Western world. At the same time, there are information gaps regarding this generation in other parts of the world. Therefore, the findings and conclusions of this study can be applied to members of Gen Z living in the Western world. It is recommended to study the characteristics of Gen Z in other parts of the world, following the assimilation of the smartphone in extensive areas worldwide, in addition to the Western world.

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