Original Article

The school from the perspective of adolescents of the Generation Z

Ana Flávia Campeiz[1], Wanderlei Abadio de Oliveira[2], Luciana Mara Monti Fonseca[3], Luciane Sá de Andrade[4], Marta Angélica Iossi Silva[5]

[1] Psychologist, Student of the Health Nursing Graduate Program of the Nursing School of Ribeirão Preto at Universidade de São Paulo. Ribeirão Preto, SP, Brazil. E-mail: fafacampeiz@hotmail.com.

[2] Psychologist, Ph.D. in Public Health Nursing. Professor level III of the Nursing School of Ribeirão Preto at Universidade de São Paulo. Ribeirão Preto, SP, Brazil. E-mail: wanderleio@usp.br.

[3] Nurse, Ph.D. in Public Health Nursing. Associate Professor of the Nursing School of Ribeirão Preto at Universidade de São Paulo. Ribeirão Preto, SP, Brazil. E-mail: lumonti@eerp.usp.br.

[4] Psychologist, Ph.D. in Education. Professor of the Nursing School of Ribeirão Preto at Universidade de São Paulo. Ribeirão Preto, SP, Brazil. E-mail: lucianeandrade@eerp.usp.br.

[5] Nurse, Ph.D. in Public Health Nursing. Associate Professor of the Nursing School of Ribeirão Preto at Universidade de São Paulo. Ribeirão Preto, SP, Brazil. E-mail: maiossi@eerp.usp.br.

Received: 03/01/2017.
Accepted: 10/23/2017.
Published: 12/31/2017.

Suggest citation:
Campeiz AF, Oliveira WA, Fonseca LMM, Andrade LS, Silva MAI. The school from the perspective of adolescents of the Generation Z. Rev. Eletr. Enf. [Internet]. 2017 [cited __/__/__];19:a58. Available from: http://doi.org/10.5216/ree.v19.45666.

ABSTRACT

The objective was to analyze the school meaning for students part of the Generation Z from a High School of a capital city in the north region of Brazil. We conducted a qualitative study with 57 participating adolescents. We collected data through focus groups, and we analyzed it using content analysis, thematic modality. The results showed two thematic nuclei: School, a space to learn and to prepare for the future; and, Standoff and in steps, the school that needs to re-discover itself. Adolescents comprehend the school as a space to build learning, but they consider the virtual environment also as a space to build knowledge. This study offers contributions to rethink the education directed to the digital generation, as an effort to incorporate new languages and innovations to teaching, besides guiding the definition of plans and routes of care and, health attention that considers the new relationships between adolescents and technology.

Descriptors: Education; Information Technology; Adolescent; Pediatric Nursing.

INTRODUCTION

Adolescence is a moment of the human development marked by transformation processes. Adolescents are active subjects, capable of having and incorporating values to the contemporary society[1]. Many times, these characteristics impair the construction of attention models capable of favoring the protagonism, autonomy and, the care with oneself and with the other in this particular moment of life. Thus, this study offers original aids to comprehend the perceptions and the senses about the school and the teaching-learning process of adolescents from the digital era, which will be able to help primary health care professionals in the construction of health education strategies for this public.

The digital era is a phenomenon that directly influences the school environment, especially when

students are in constant interaction with Information and Communication Technologies (ICT). Digital natives arose from this era, the children born after 1980 are known as such, and the adolescents who make constant use of technological devices for communication and entertainment[2], staying connected and integrating technologies to their lives[2-3]. This group is classified in two generations: generation "Y" – born between 1980 and 1990, and generation "Z" – born since 1990[4].

The ICTs should be comprehended as tools that potentialize learning, as they are included in games, online portfolios, virtual programs, and applications in mobile devices, which can attract the attention and thus, to reach the digital native students[5]. Recent research[4,6], also emphasize demands for innovation and use of technologies for which schools need to be attentive to meet the needs of students' training and development. These ideas and demands can be expanded to other areas, like health.

Accordingly, it is perceived that nurses and other primary health attention professionals encounter difficulties to offer education actions and health promotion to adolescents. For this field, this development moment has different ways of dealing with health and its processes, resulting in the interpretation that it will always be hard work and with obstacles[7]. To comprehend how this public expresses themselves in the contemporaneity and how is their way of learning and being involved in the learning process are needed to minimize this difficulty. Thus, our objective was to understand the meaning built by students of the Generation Z about the school.

METHOD

We conducted a descriptive study with a qualitative approach, in a public school in Palmas/TO, Brazil. Fifty-seven high school (HS) students (56% girls) spontaneously accepted to participate in the study, being 38.60% in the first HS year, 31.57% of the second year and, 29.83% of the third year. As inclusion criteria, participated adolescents regularly enrolled and attending high school at the moment of our study, born since 1990, that is, part of the Generation Z, according to the referential adopted for this investigation[4]. As exclusion criterion, we did not consider adolescents born before 1990.

We collected the data during November to March of 2017, using a closed questionnaire to know the participants' profiles, which contemplated data related to the sociodemographic profile and conditions of access to the Internet, and the conduction of focus groups (FG).

We conducted six FG sessions. This technique allowed us to build spaces to propitiate qualified speech and hearing, besides the problematization about the addressed themes, from planned and reflexive discussions about the studied phenomenon[8-9].The sessions were conducted at school, during class time, with the consent of the school managers, professors, and students. We conducted two focus groups with each school year. We recorded the sessions and transcribed them later. With the objective to guarantee the anonymity of the groups and individuals, we used an identification for the focus groups as FG I, FG II, and so on.

The focus groups were guided by a pre-established script containing the guiding question: "What is

the school function to you?". In sequence, we asked questions about the theme in focus, such as, the importance of school; how they describe and experiment their school experiences; how ICTs are presented in the school environment and the teaching-learning process; what are their vision about the school; how do adolescents perceive school and its interface with digital media; the relationship of available devices and its use, among others. The second meeting deepened questions and reflections about the scheduled subject.

We analyzed the data using content analysis, thematic modality, proposed by Bardin[10], which excels by the identification of meaning units/key-expressions, from the interpretation of data content constituted of thematic nuclei of analysis. The analytical-interpretative trajectory followed the steps: exhaustive contact with the material; apprehension of the material particularities; material organization; codification; material exploration and elaboration of the interpretative synthesis[9-10]. We identified two thematic nuclei: School, a space to learn and to prepare for the future; and Standoff and in steps, the school that needs to re-discover itself. We used the Vygotskian[11] referential in the data analysis.

The Committee of Ethics in Research (CEP) of the Nursing School of Ribeirão Preto at Universidade de São Paulo evaluated and approved the research project (Protocol nº 1401216). We followed all guidance of the Brazilian rules for studies with human beings, and the adolescents only participated after their consent and, the free and informed consent of their legal guardians.

RESULTS

Adolescent's age varied between 14 and 19 years. Regarding the access to media, we identified that participants obtain information about the most different subjects primarily through the Internet (96.49%). Regarding computer and internet access, 92.98% stated to have computer access and, 96.50% had internet access. About the time spent using the internet, 40.35% stayed online three to five hours a day and, 35.08% stayed online more than eight daily hours.

School, a space to learn and to prepare for the future

We identified that the meaning of the school educational practice from the construction of knowledge and the expectation that is created from this relationship. Participant's speeches pointed, at a first moment, the school as a learning place and for regular training, and consequently, with the finality of preparing students for the work world. Also, there is the student's perception that the school should instruct and guide them:

There are things that we do day-to-day that I understood its function here at school. So I think that the school has this function of explaining, showing, teaching. (FG I)

[...] I think that in any person's life there is a function of shaping and preparing me for work (FG II).

The speeches emphasize the school function to literate, to explain and teach, so the students learn

"everything". However, the student's perception about the school does not reduce to the passive idea of receiving information without the elaboration process, but it is destinated to information organization, which propitiates building knowledge, as mentioned:

... the school helps me to organize what I learn. (FG II)

Besides, learning by digital natives is motivated when practicing what is studied and, they search ways that can provide this to them, aiming to leave the "stage of ideas", therefore, to put "things into practice":

I like to do things, I am not good to be in the stage of ideas, I like to put things into practice. For example, in geography, we see the wars, but there isn't much besides the things written in the book and the teacher's words, so I think that it could have music, more pictures. So I search for how bombs are made because I like chemistry, so I study that on the side. (FG II)

The speeches demonstrate a traditional representation of adolescents about the school, considered as focused in the "theory" and in the "stage of ideas" which is not seen with enthusiasm by students, while they feel the need to perceive the phenomenon in "practice". It is also noted here the absence of pedagogical strategies involving the students and stimulating more engagement from them.

There is a perception that all school meanings are related to the job market. The school helps in the possibility of a future job, through the lessons and offered knowledge, as well as, by having other meanings for those who want to get into a university (improve their lives).

[...] the function [of the school] is to literate me, to educate and to prepare me for college and job market...to give me the minimal condition so that I am capable of having a profession. (FG III)

I research a lot about agronomy, veterinary, and economy on the internet. I want to go for agronomist engineer or veterinary degree. (FG III)

Standoff and in steps, the school that needs to re-discover itself

Adolescents from the Generation Z presented difficulties to adapt to the school space, discontentments regarding the traditional teaching-learning methodologies that are still current which do not correspond to their needs anymore. Student's demands from the new generation reinforce the need to update methodologies for better comprehension of the ministered content, as observed in the following parts:

There are no instruments besides the board, if they used them, the class would be cooler, time would go by quicker, and we also would be able to see the examples, not only imagining (FG I).

I think that technology comes only to help. When there is a movie, is anyone absent? No. When there is any fair event for professions and science, is anyone absent? No. When we have to bring music, to do a play, is anyone absent? No. (FG II)

In another direction, the media and ICTs propagation and their constant advance implicate in a change of roles for teachers who started to be information mediators:

We keep playing with the phone too long during the class time, but sometimes we do it because the class is too boring, we get sleepy, without counting the times that you clearly see that the teacher does not dominate the subject, then even during class I keep looking for videos on Youtube about the subject, [...] then I watch it in the classroom with the earphones or at home, so I can understand the subject better (FG I).

Adolescents also punctuated the lack of digital instruments by students who had experienced private schools. The comparison between public and private school narrated by students synthesize the desire for a public school with quality:

The sound speakers, DVD, slides, does not bother in any way. They would only help the class to get tiresome and, sometimes, boring. My opinion is that the school should invest in this (FG I).

Even if there is a video classroom, Data show, informatics lab, the teachers don't use them, most teachers give all the content based on the books and then every class is always the same thing. I think that the teachers could think about this, but here there is also cost containment that the electricity would be spent, so they use this argument to not use it (FG II).

DISCUSSION

To the participants, the school still is perceived as a privileged shaping place, but it competes nowadays with mobile devices and internet access that to some extent, socialized the knowledge. According to the adolescents' speeches, we can infer knowledge construction through the experience with the other and with the world. Thus, the historical and cultural context of digital native adolescents gives meaning and basis for their learning, which is in contact with many other daily spaces, including the virtual one[11].

Another finding of our study refers to how adolescents learn. The digital native does not want to learn and then practice, but they use the trial and fail method to learn, considering that they are not afraid to make mistakes. Therefore, they easily learn[12].Thus, what we had before as pedagogical assumptions, of learning and then practicing, nowadays, the new teaching and learning paradigms bring the easy and critic rationality as perspective; where learning should happen in practical situations that are effectively meaningful, problematizing and reflexive. Accordingly, the emphasis in a critic health education model with promotional health expression and, the performance of health teams in schools is consistent with the perspective of

combining levels of interventions capable of empowering subjects for the transformation process of vulnerable factors which act in the health using active and participative health education strategies[13-14].

Thus, the use of technology to complement learning in the classroom, considering these as familiar to the students, allows developing new interactive and collaborative learning forms[12] becoming an alternative for traditional paradigms of the teaching-learning process. Notwithstanding, the ICTs as technological, educational resources presented benefits surpassing the academic competencies linked to cognition, but allow the autonomy development in the intellectual and behavioral spheres, considering the students are searching for solutions by themselves for challenges faced in their daily lives[15]. There is here important indicator for decision making about the need to re-think and reform plans and health care pathways for adolescents of school age[13] from the Generation Z.

In this perspective, recent studies about electronic games corroborate[16-19], where the education becomes the main objective[18]. This didactic technological resource is capable of motivating the child's learning process and stimulating behavior changes when integrating ludic characteristics to specific contents[16,18], thus they can reach the health education objective, presenting success in the therapy of chronic diseases and psychological treatments[17], addressing sexuality during adolescence, as well as, helping to cope with childhood obesity[18]. Thus, it is considered a powerful strategy for health promotion[18,20].

Thus, it is also important to consider that it is a challenge for the school to follow-up with the knowledge that students build outside. One of the ways to motivate and attract students is to get closer to their daily experiences. Sometimes, the knowledge presented and built at school does not make sense to students. Therefore, the contact with medias, cell phone, internet, social network, become more interesting, configuring greater identification[15]. These challenges are not only present in the education field, but also to professionals from other fields, as health, who deal and relate with students, hence, needing to be prepared to use media and digital resources in their favor.

On the other hand, the school is also associated with preparation for the professional future and better conditions of insertion in the job market[20-21]. Thus, students value the school that supports them to work, being possible to comprehend the knowledge as something that should be used to exercise a specific profession or to allows the direct insertion in the job market, consequently, constituting the schooling as an assumption of employability.

Thus, the Vygotskian approach can bring significant implications to comprehend this approximation process of the students, educational spaces and their instruments. This approximation requires interaction between people and, nowadays, reflections about which elements are used as mediators in the teaching-learning process[11]. In the scenario presented by participants, technology is presented as a new instrument capable of transforming the human nature and, as a consequence, transforms the collective action and, the means of communication which will be the base to define how they learn.

As a whole, the data also revealed the need for updating and using new pedagogical resources. They emphasized the absence of instruments, techniques and dynamic strategies capable of attracting the digital

native students. The detachment of the school about the use of ICTs in the classroom is a constant observation by the students, once they considered as motivational tools for and by them[15]. Thinking of new efficient learning practices attractive to this generation, we found fundamental the possibility of the student to actively participate in the autonomic control of the learning process, propitiated by the situations when they have the opportunity to experiment and test their ideas[22].

Considering this scenario, the need to reformulate the role of teachers who are called to be positioned as facilitators of discoveries, so they develop a mediation work between adolescents and the new educational technologies. The teachers were requested to readapt and model pedagogical strategies, motivational practices, and domain of specific knowledge, as well as, of technological instruments. Besides, the incorporation of ICTs in the teaching and learning processes permeates as a challenge to be faced by public policies, overall in regards to the qualification of teachers as a mediator agent[6].

This demand of participants, for development and qualification of teachers, as well as, the improvement of schools, allow problematizing the concept of proximal development zone (PDZ) [11]. This PDZ refers to a space between assimilated content and those which depends on the intervention of a more experient or prepared person to be assimilated[11]. For the Generation Z, it can have a consensus that the teachers and the schools are not “more experient or prepared” to guide them to internalize new lessons, new behaviors (as the adoption of healthy living habits, for example) and new ways to interpret and exist in the world. It is not only about reformulating the teacher’s role, but of other professionals who will act with the adolescent public who need to have these aspects in perspective so they are effective in their performance.

At last, our results suggest that the school should stay associated with pedagogical models that do not facilitate the teaching-learning process of current adolescents. To the student’s health field, the results problematize the impact of these discoveries in what refers to the proposition of health promotion, prevention, and education actions. Thus, the ICTs should be considered as valuable instruments for behavior change and adoption of healthy living habits by adolescents.How can we operate this question? The participants already indicated the difficulties which are not education prerogatives – limited resources, unprepared professionals for the new reality, deficient physical structures – but there are already successful experiences in the health field, as the use of games and applications that help in the health professional training, especially in nursing[20], the work of nurses and other professionals in the care for populations.

Overcoming the difficulty in applying new technologies in the educational processes can be explored from the Vygotskian’s perspectives that put the other as co-responsible for his learning process, but that also leads us to think how to be elements acting in the PDZ currently and are capable of making the other advance in knowledge[8]. For the health field, this is a central idea, as the health teams need to be compromised with the care and health education through a singular therapeutic and educational plan, without neglecting how these will produce significant and long-lasting effects in the adolescents’ lives. The idea is worth for the fields of education and student’s health, passing through the intersectoral action of different teams in these spaces

and dealing with the Generation Z, which requires new teaching and learning approaches and processes to promote health and to stimulate the adoption of healthy life habits.

FINAL CONSIDERATIONS

Enlightened by the adolescents' perception, the school is below expectations desired by its students once it presents obstacles as the lack of public investment, as well as, the absence of training for the scholar actors in accepting and managing the equipment and teaching and learning strategies that make sense in the time of the Generation Z. The participants suggest new perspectives to build knowledge to the scholar institution, like methodologies expressing more dynamics and lessons that make sense, that are effective and that allow their development and critical positioning in the current society.

The study makes an original contribution to the perception of Generation Z adolescents about the school and the teaching-learning process. Such knowledge can subsidize discussions in many fields, like health, to propose effective intervention strategies that are connected to the reality, to the needs and demands of this public. Meanwhile, studies with other methodological designs can expand the knowledge presented in this article, overall mixed studies or with different sample groups. Other studies can increase the comprehension of the field about the theme, for example, investigating behavioral variables related to the use of ICTs.

REFERENCES

1. Silva MAI. Adolescence: resignify it to understand it and act. Rev Enferm UFPE on line [Internet]. 2012 [cited 2017 dec 31];6(3). Available from: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/7124.
2. Linne J. Dos generaciones de nativos digitales. Intercom Rev Bras Ciências da Comun [Internet]. 2014 [cited 2017 dec 31];37(2):203-21. Available from: http://doi.org/10.1590/1809-584420149.
3. Franco CP. Understanding digital natives' learning experiences. Rev Bras Linguística Apl [Internet]. 2013 [cited 2017 dec 31];13(2):643-58. Available from: http://doi.org/10.1590/S1984-63982013005000001.
4. Oliveira LB, Honório SRFS. Atração e desligamento voluntário de jovens empregados: um estudo de caso no setor jornalístico. Rev Adm [Internet]. 2014 [cited 2017 dec 31];49(4):714-30. Available from: http://doi.org/10.5700/rausp1179.
5. Bona AS, Basso MVA. Portfólio de Matemática: um instrumento de análise do processo de aprendizagem. Bolema Bol Educ Matemática [Internet]. 2013 [cited 2017 dec 31];27(46):399-416. Available from: http://doi.org/10.1590/S0103-636X2013000300005.
6. Comitê Gestor da Internet no Brasil. Análise dos resultados - TIC Educação 2014. Barbosa AF, coordenação. Pesquisa sobre o uso das tecnologias da informação e comunicação nas escolas brasileiras [Internet]. São Paulo: Comitê Gestor da Internet no Brasil; 2015 [cited 2017 dec 31]. Available from: http://cetic.br/media/docs/publicacoes/2/TIC_Educacao_2014_livro_eletronico.pdf.
7. Henriques BD, Rocha RL, Madeira AMF. Saúde do adolescente: o significado do atendimento para os profissionais da atenção primária do município de Viçosa, MG. Rev Med Minas Gerais [Internet]. 2010 [cited 2017 dec 31];20(3):300-9. Available from: http://www.rmmg.org/artigo/detalhes/357.
8. Oliveira DL. The use of focus groups to investigate sensitive topics: an example taken from research on adolescent girls' perceptions about sexual risks. Cien Saude Colet [Internet]. 2011 [cited 2017 dec 31];16(7):3093-102. Available from: http://doi.org/10.1590/S1413-81232011000800009.

9. Minayo MCS. Ciência, técnica e arte: o desafio da pesquisa social. In: Minayo MCS. Pesquisa Social: teoria, método e criatividade. Petrópolis: Vozes; 2013. p. 9-29.
10. Bardin L. Análise de conteúdo. Lisboa: Edições 70; 2010.
11. Vygotsky LS. Pensamento e palavra. In: Vigotski LS. A construção do Pensamento e da Linguagem. São Paulo: Martins Fontes; 1934. p. 101-30.
12. Miranda L, Morais C, Alves P, Dias P. Redes Sociais na aprendizagem: motivação e utilização dos estudantes de ensino superior. In: Moreira JA, Barros DM, Monteiro A. Educação a Distância e e-Learning na web social. Santo Tirso (PT): WHITEBOOKS; 2014. p. 73-95.
13. Schaffer MA, Anderson LJW, Rising S. Public Health Interventions for School Nursing Practice. J Sch Nurs [Internet]. 2016 [cited 2017 dec 31];32(3):195-208. Available from: http://doi.org/10.1177/1059840515605361.
14. Feio A, Oliveira CC. Confluências e divergências conceituais em educação em saúde. Saúde e Soc [Internet]. 2015 [cited 2017 dec 31];24(2):703-15. Available from: http://doi.org/10.1590/S0104-12902015000200024.
15. Silva LO, Molina Neto V. Os sentidos da escola e da Educação Física para estudantes e docentes de uma rede publica municipal. Mov [Internet]. 2014 J [cited 2017 dec 31];20(3):1133-52. Available from: http://seer.ufrgs.br/index.php/Movimento/article/view/40669.
16. Machado LS, Moraes RM, Nunes FLS, Costa RMEM. Serious games baseados em realidade virtual para educação médica. Rev Bras Educ Med [Internet]. 2011 [cited 2017 dec 31];35(2):254-62. Available from: http://doi.org/10.1590/S0100-55022011000200015.
17. Karime A, Hafidh B, Khaldi A, Aljaam JM, El Saddik A. MeMaPads: Enhancing children's well-being through a physically interactive memory and math games. In: 2012 IEEE International Instrumentation and Measurement Technology Conference Proceedings [Internet]. IEEE; 2012 [cited 2017 dec 31]. p. 2563-6. Available from: http://doi.org/10.1109/I2MTC.2012.6229520.
18. Dias JD, Mekaro MS, Cheng Lu JK, Otsuka JL, Fonseca LMM, Zem-Mascarenhas SH. Serious game development as a strategy for health promotion and tackling childhood obesity. Rev Lat Am Enfermagem [Internet]. 2016 [cited 2017 dec 31];24:e2759. Available from: http://doi.org/10.1590/1518-8345.1015.2759.
19. Mano SMF, Gouveia FC, Schall VT. "Amor e sexo: mitos, verdades e fantasias": jovens avaliam potencial de material multimídia educativo em saúde. Ciência Educ [Internet]. 2009 [cited 2017 dec 31];15(3):647-58. Available from: http://doi.org/10.1590/S1516-73132009000300012.
20. Fonseca LMM, Leite AM, Mello DF, Silva MAI, Lima RAG, Scochi CGS. Tecnologia educacional em saúde: contribuições para a enfermagem pediátrica e neonatal. Esc Anna Nery [Internet]. 2011 [cited 2017 dec 31];15(1):190-6. Available from: http://doi.org/10.1590/S1414-81452011000100027.
21. Leão G, Dayrell JT, Reis JB. Jovens olhares sobre a escola do ensino médio. Cad CEDES [Internet]. 2011 [cited 2017 dec 31];31(84):253-73. Available from: http://doi.org/10.1590/S0101-32622011000200006.
22. Zayapragassarazan Z, Kumar S. Active Learning Methods. NTTC bulletin [Internet]. 2012 [cited 2017 dec 31];19(1):3-5. Available from: http://www.jipmer.edu.in/sites/default/files/2581_2012_NTTC_Bulletin_2012_Mar.pdf.