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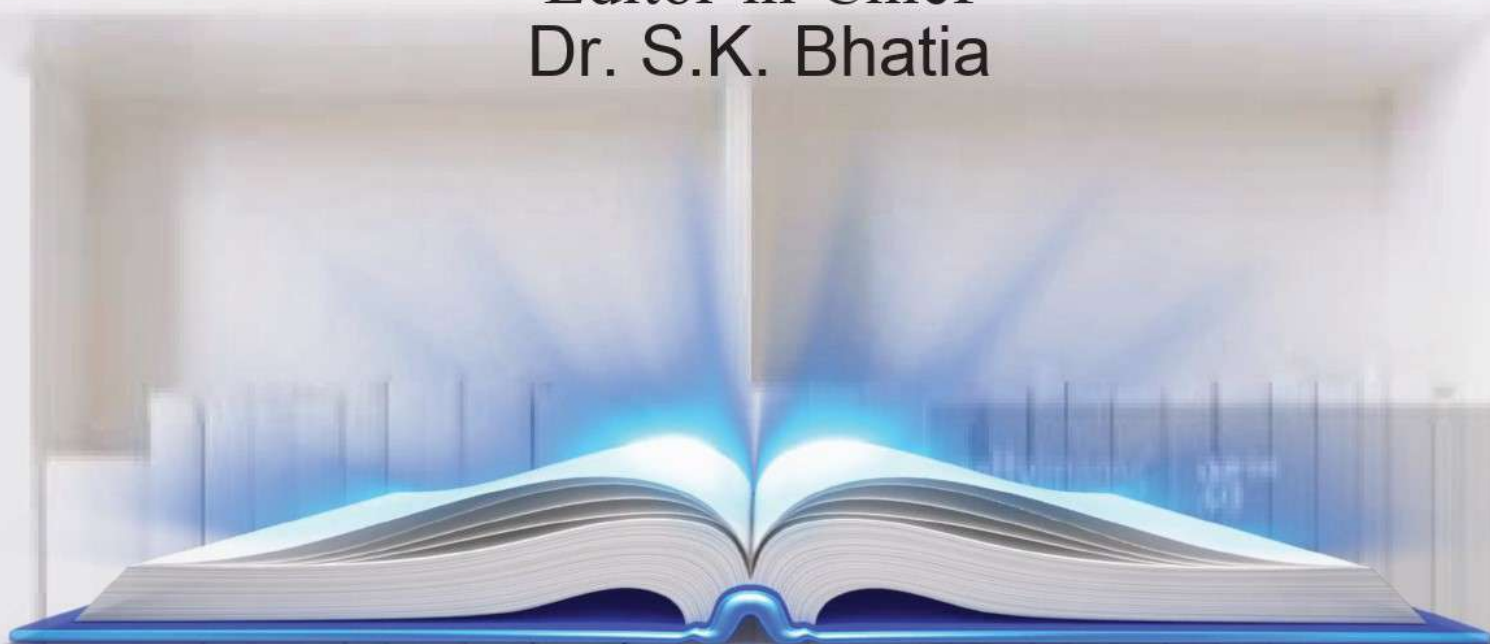
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**Editor-in-Chief
Dr. S.K. Bhatia**



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Bi-Annual Journal

Would like to appeal to the learned readers to send us their views, counter views, suggestions, comments, and observations etc. via “Letters to Editor” (which will be published in the next Issue) on the articles published in this Journal so that an academic discussion may start and our efforts may become more participative and thereby more meaningful and interesting.

Editor-in-Chief

The Themes for the next Issue January-2023

Section I.

1. Valuing professionalism and training in Teacher Education courses.
2. Changes in perspectives on areas of research in Teacher Education.
3. Perspectives on how learning in Curriculum and Pedagogy are demonstrated in Teacher Certification Programs.
4. Perspectives on effective Evaluation Practices in Teacher Education Programs.
5. Innovations and Innovative practices in Teacher Education Programs.
6. Diversity and Inclusion: Different International perspectives.
7. Ensuring access and equity in high quality Teacher Education programs.
8. ICT-related Innovations and practices in Teacher Education Programs.
9. Policy Perspectives in Teacher and School Education.
10. Reports on related conferences, seminars and workshops, including International offerings.
11. The Prolonged Online Mode of Teaching-learning - Challenges, Innovative experiments, Findings.
12. Tailored Interventions in Learner-centered Education.
13. Blended Learning as an outcome of Online Learning during the ongoing pandemic.

Section II. Innovative Experiments in Schools:

1. Teachers’ Professional Growth
2. Optimising Students’ Achievement
3. Holistic Learning
4. Experiments in the area of Experiential Learning.
5. Objective Evaluative Strategies During the Prolonged Closure of schools.
6. Solving School Problems through Action Research
7. Measuring Students’ all-round Achievements through Ensemble assessments.

Thanks and Regards
Editor-in-Chief
Dr. S.K. Bhatia

Editorial



Due to the spread of the coronavirus pandemic across the world, this deadly disease is generating a considerable degree of fear, worry and concern in the population at large and among certain groups in particular. Educational practitioners and the student-community also suffered a lot and are still struggling to streamline the process of teaching-learning. The pandemic put a restraint on field studies, as also on physical interactions, observations and collection of in-person data for research purposes. Due to the untiring efforts of the governments of different countries, the researchers in the medical arena, with the help of frontline doctors and their supporting staff could control the disease significantly, but new mutations are still emerging and some or the other countries are still being attacked by the Coronaviruses. Like in all other fields, the education sector also got a setback in teaching-learning and research pursuits. The pandemic pushed the educational administrators to put the teachers-students into the online teaching-learning. A partial control on this disease, further, switched the online mode to the blended one. Many problems were and are being faced in switching over from one to the other mode/s. Many researchers and scholars took up several research studies, incorporating their experiences pertaining to the different modes of teaching-learning. Besides reflecting on the modes of educational discourses during the pandemic, the target group of authors was given many other educational areas to be explored and pen down their creative ideas in the forms of research papers and articles.

Our request got over-whelming response and we got many papers and articles in the field of teacher and school education. For the present issue, 12 themes in the area of teacher-education and seven in school education were sent to the stakeholders. Our learned referees and the members of the Editorial Board enjoyed a veritable feast when they read the papers selected for the current issue.

Our authors, having different milieus, concentrated on the themes they came across on account of the issues faced by themselves or those faced by their research scholars. Some scholars penned down their innovative ideas on the basis of their day-to-day encounters with academic and teaching-learning strategies, as also on the basis of their imaginative creativity. A few authors focused on their basic disciplines and presented a deeper insight with or without integrating them with the supporting subjects. Innovative Way of Learning Basic Language of Chemistry, for example, is the topic on which the authors concentrated on their basic discipline and went on adding new dimensions to it. A blossoming author did a significant study with the help of her teacher and the school principal and she authored an innovative project on Remote Observation and Surveillance Equipment (ROSE) for Landslides. Some authors laid emphasis on their respective National Policies of Education of their respective countries. In this regard, the author of the article on Holistic Learning – What and How, has well illustrated an important aspect of the Indian National Policy of Education- 2020. Similarly, other authors have also focused on some or the other area of teacher and school education. The Editorial Board feels obliged to the authors who have contributed many thought-provoking papers for quenching the thirst of the readers who anxiously wait for each subsequent issue of the journal.

Some scholars take a keen interest in their respective countries' educational policies. Each country develops its education policy, keeping in view the ambitions of their respective citizens and those of their national goals, i.e., they keep in view the individual and social aims of education. How nice it would be, if some of our authors study the educational policies of their respective countries, as also those of some other countries and

develop studies, giving a comparative view of how different countries attach importance to their educational priorities. While doing so, they should not simply admire the lofty aims determined by the governments, but should critically examine whether the educational expectations are fully attainable or would just remain half-baked. The Holistic Learning, for example, destined to be accomplished, as enshrined in the Indian National Educational Policy 2020, may be studied by some authors critically, as some of them may think how this lofty aim be attained in the face of some heterogeneous factors, like different I Q and attitudinal levels of the students, their different backgrounds, different teaching methods followed by the teachers, different environmental factors, etc. They can thus conclude whether Holistic Learning is attainable or its claim is just a myth.

Our pleasant and challenging societal encounters provide new opportunities to develop new papers and articles. At one stage, it appeared that the wide-spread Corona epidemic was going to be completely curbed. The schools and higher-level educational institutes started returning to the old offline mode. But destiny proved otherwise and it had something else in store. New Coronavirus variants emerged in some countries, like Botswana, Canada, United States of America, Nigeria, China, etc. and its fear is looming over the entire world. Under this uncertainty, the teaching-learning shifted from offline mode to online and blended learning is emerging as the latest mode of imparting education. The only good outcome of this pandemic is that it extended the scope of finding new ways of teaching-learning. Technology has tagged feathers to the modes of learning. Thus, our authors have been inspired to undertake new research studies in new areas triggered by the pandemic.

Our Editorial Board suggests a long list of themes to the established and the budding authors which is tagged before the editorial page and the same is sent along with the “Call for Papers”. The invitation is not confined for these themes only. The scholars are free to write on any theme falling in the area of teacher and school education. The ultimate beneficiaries are the school students and their teachers, as also the student teachers and their educators. We welcome the papers developed for these beneficiaries. We have started getting papers and articles from the school teachers and Principals also. It is heartening to note that even students of junior classes take up some projects with the help of their teachers and subscribe their project reports to our journal. In this regard Ridhima Dogra’s attempt of contributing ROSE is commendable. This is a good development and we invite more such papers from schools. With this the members of the Editorial Board and those of the advisory Board request all the stakeholders to take the necessary precautions in the present state of the Corona threat and wish them good mental and physical health.

Dr. S.K. Bhatia
Editor-in-Chief

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RESEARCH ARTICLES

Students' Ethical Behaviour in Online Classes

Rahayu Apriliawati

Abstract

This study is aimed at investigating the ethical behaviors performed by students in online classes. It is descriptive qualitative research. Observation and questionnaires as well as informal interviews for lecturers are the tools of data collection. 10 lecturers and 66 students participated in this research. Only a small number of lecturers (<37.5%) stated that the students always show discipline, manner, engagement, honesty, responsibility, creativity, innovation, adaptive with technology. Based on the analysis of the questionnaire given to the lecturers, many lecturers (70-73%) stated that the students sometimes are honest, responsible, and good at using language in oral and written form. Based on the results of the questionnaire analysis given to the students, many students (77.84%) said that they were always disciplined and responsible in online classes. About creativity, innovation, adaptive to technology, according to some of the lecturers (65%), students sometimes have a good internet connection during online class, use a headset with headphones and a microphone to get good audio quality and prevent disruptions to others. However, not many students (less than 50%) stated that they have a good internet connection during online class, use a headset with headphones and a microphone to get good audio quality and prevent disruptions to others. In general, based on the analysis of the interview, the lecturers stated that students do not always exhibit expected ethical behaviors in online classes. The students sometimes used inappropriate virtual backgrounds which distracted the lecturer and classmates, noisy environment, no smile on face, and energetic face, attach inappropriate photo profiles. In addition, the lecturers stated that the students do not always engage during online classes especially in showing critical thinking. In conclusion, the ethical behaviors of students in online classes in the English Education Study Program of FKIP UNTAN are sometimes: disciplined, good mannered, engaging, honest, responsible, creativity to technology, and good communication with lecturers and peers.

Key Words: Ethical Behavior, Online Classes, Transformational language

Introduction

Pandemic has turned conventional classroom learning into online classroom learning. With virtual classrooms, teachers and students no longer need physical proximity. Instead, they form an online community of e-Learners and e-Teachers as well as e-Learning technologies to achieve teaching and learning goals. This change has an impact on all aspects of teaching and learning for lecturers as well as student-teachers in FKIP UNTAN Pontianak ranging from planning, learning objectives, learning materials, learning steps, and learning evaluation. However, the change is not only in the learning aspects but also occurs in students' behaviors. Various issues arise related to changes in students' behaviors such as discipline, manner, engagement, honesty, responsibility, adjustment to technology, and transformational language. Based on

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professional talk in the WA group of lecturers, the lecturers complain of the inconvenience of dealing with students' behaviors when delivering lectures in online classes. This invites Researcher to conduct a study on students' ethical behaviors in online classes.

Ethics, in general, is defined as good behavior that conforms to norms that apply to society, which are performed either on a particular individual, group, profession, or individual (Collins Essential English Dictionary, 2003). Mutual respect, fairness, tolerance, and goodwill are the foundations of this ethics. In other words, ethics is also applied to classroom learning in both virtual and conventional classes. Therefore, both students and teachers are expected to know and follow acceptable ethical norms to create a conducive and optimal learning atmosphere where both lecturers and students know their role and have an obligation to carry it out. In addition, applying ethics can strengthen the character of student-teachers to become a good model for their students in the future.

In connection with this, appropriate behavior that applies to conventional classes should also be applied to online classes even more than the application of behavior in conventional classes because according to Anderson and Simpson (2007) ethical problems in online classrooms are more complex to deal with because the use of technology in online classes can reinforce difficulties in monitoring problems. If lecturers are concerned that students are showing academic dishonesty in traditional classrooms, then those concerns should be raised in online classrooms where "psychological distance" can increase academic dishonesty. For example, in a face-to-face classroom, lecturers can ensure that the work submitted by students is their own especially when they give a handwritten assignment. This, however, becomes a challenge in an e-Learning class because it is unlikely that e-Teachers can validate positively, if the assignment submitted online is the work of that student or someone else. Thus, there is an urgent need to uphold ethical conformity in e-Learning.

The preparation of being a teacher is a very important endeavor. In English education Study Program of FKIP UNTAN, the student-teachers are trained not only for mastering the cognitive aspects of language teaching and learning but also positive behavior because they are English teacher candidates who will be the role-model for their students. Therefore, the investigation of student-teacher behavior in online classes is critical to the preparation of successful English student-teachers and should be considered a must in a teacher education program.

Several researchers have examined qualitatively and quantitatively students' behavior towards online classes (Dhahir, 2020; Mariah et al, 2019; Cragg, 2008; Muhtar, 2018). However, there is little literature investigating ethical behavior of student-teachers or teacher candidates. This study will investigate how are the ethical behaviors performed by the English student-teachers in the English Education Study Program of FKIP Untan.

Definition of Ethics

Ethics can be defined as rules for conduct. In other words, Ethics is a set of rules, principles, or ways of thinking as a code of conduct to judge right or wrong behavior. Ethics can determine the proper practice of conduct and the greater good. The conclusion is that ethics is a set of principles for good human behavior.

Good Behavior

Good behavior is an act to do what is considered morally correct following applicable regulations. Morals are rules of conduct based on right or wrong. For example for a student following the rules set by the faculty, he/she has performed good moral behavior. Good behavior is following acceptable standards and rules. Delivering presentation of his materials of the work and not copying and pasting from the writings of others is good behavior. In society, good behavior, for example, follows the laws of society and is in accordance with social order. Good behavior has been taught since childhood and gradually becomes innate in an adult. Most people learn right and wrong in their homes during their childhood and from their environment. For example, lying is an unwise act. Children who do the act of lying, are given punishment, by their parents.

Ethics and e-Classes

Rules about right and wrong behavior are indispensable not only in teaching offline classes but also in online classes. Ethics rules in online classes should be in the norm that is applied on campus so that students are expected to follow the rules set by the university. Rules can consist of, for example, about time, tasks, how to interact with classmates and lecturers where ethical behavior should be maintained, or attitude responsible for the integrity of the task given by the lecturer.

It is expected that with the rules on ethics following the online classes, students are expected to be able to discipline themselves to time management because time is very important in influencing ethical principles. Students can find ways to learn and take responsibility for their learning. They can be learners who can direct themselves. “Self-directed learning is a learning process in which students can take important initiatives to plan, implement, and evaluate their own learning experience” (Merriam et al., 2007). When attending online lectures, they have to be ready to commit to becoming independent learners. e-Learners are expected to be independent and self-directed (Kabilan, 2014). Intrinsic motivation, self-discipline, and commitment are basic traits for students studying online. The absence of face-to-face interaction in online classrooms does not mean the absence of visual cues in the communication process” (Kabilan, 2014). In addition, they should be able to synthesize information and reflect on learning materials obtained online.

Ethics in online classrooms are to maintain self-integrity and academic honesty in a learning environment that risks giving the space for academic dishonesty despite innate deterrents (such as requirements for authenticity reports for all assignments). Students have a responsibility to know the rules and regulations of the institution and comply with them.

In online interactions, e-Learners are people who actively participate in discussion forums. When engaging in online discussions, they avoid using negative, or overly critical comments but should support each other and fellow e-Learners in seeking information, feedback, and finding the source of online learning materials (Camuse, 2010).

Ethically behaved e-Learners will create a sense of friendship through the exchange of positive ideas and be able to invite other students to engage in discussions. There is openness to new ideas and do not feel threatened by such openness. e-Learners will be motivated to participate voluntarily to enrich the online

learning experience. In other words, humility coupled with a desire to share information is the characteristic of the ethical behavior of online students.

In an atmosphere of mutual trust and mutual respect, e-lecturers can play a role in facilitating, ensuring that the discussions remain on the right track and number of relevant questions to spur dialogue to be more meaningful. Ideally, lecturers only mediate healthy arguments that inevitably appear in online academic discussions.

In the university, the code of ethics is usually written in the student-handbook which contains a set of guidelines that govern the rules to be followed. In a university, there will be the institution's code of ethics. The code of ethics categories consist of the following: (a) discipline (b) manner (c) student engagement (d) honesty (e) responsibility. Usually, the code of ethics is written in the student handbook.

Method

This is a case study of descriptive qualitative research that will investigate the ethical behaviors of student-teachers. It is a qualitative study that allows the Researcher to strive to understand the meaning constructed by student- teachers. Through one semester of observation on the online classes, the description of the ethical behavior of students has been investigated.

The population of the research is all lecturers and students at the English Education Study Program of FKIP UNTAN Pontianak. There are 10 English Lecturers and 66 students who have been taken as the sample of this research. The sample of the research from lecturers has been selected based on the following criteria:

- a) Holding online classes
- b) Using varieties of platforms
- c) Giving at least four online classes.
- d) They are English lecturers

Whereas sample from student-teachers has been selected based on the following criteria:

(a) Joining online classes in TEFL Methodology, Seminar Research Design, and Microteaching in the academic year 2020/2021.

(b) English student-teachers

The data collection that is applied is students' and teachers' questionnaires, observation, and formal talk with lecturers, about how ethical is behavior of students in online classes. The quantitative data from students' and teachers' questionnaires were analyzed based on the ethical behavior rules namely discipline, manner, student engagement, honesty, responsibility, creativity, innovation, adaptive with technology, and language transfer. Next, the Researcher analyzed each code and calculated the percentage. The next step is to organize thoughts and ideas based on the result of the analysis. The Researcher then determined which codes focus thoughts and ideas about each research question. The Researcher has analyzed the questionnaires distributed to the lecturers and student- teachers as the primary data. The instrument of the questionnaire can be seen in Table-1. The online class observations were collected, analyzed, coded, and stored every day from May the 1st to July 31st, 2021 as secondary data.

Table 1 Ethical Behaviors of English Student- Teachers in Online Classes						
No	Ethical Behaviors	Behaviors	Always 1	Sometimes 2	Rarely 3	Never 4
A	Discipline	Getting to the online class on time				
		Filling out online attendance				
		Turning on the camera				
		Joining the class from beginning to the end				
B	Manner	Wearing appropriate dress when attending the class				
		The photo profile is appropriate				
		The virtual background is appropriate and not distracting for the lecturer and classmates				
		Using a 'virtual hand raise' when asking				
		Finding a non-disturbing environment				
		Smiling and energetic face				
C	Student Engagement	Staying seated during online classes				
		Giving responses/comments				
		Not dominating other students to ask or giving comments				
		Respect lecturers who have teaching authority				
		Having private conversations during online class				
		Showing critical thinking				
D	Honesty	Not doing anything else during the online class				
		Doing assignments without plagiarism				
		Writing citations with mentioning authors				
		Using others' work as his/her original work.				
		Copying/imitating peer work				
		Write citations in their assignments				
		Knowing how to document sources, placing a citation in their work.				
		Knowing how to cite sources, paraphrase information and cite the source				

(Continued)

Table 1 Ethical Behaviors of English Student- Teachers in Online Classes—cont'd

No	Ethical Behaviors	Behaviors	Always 1	Sometimes 2	Rarely 3	Never 4
E	Responsibility	Completing their work and keeping a record of sources to avoid plagiarism.				
		When writing essays and citing sources, students put the citation in the essay and on the reference page to avoid plagiarism.				
		Submitting assignments based on the time set by lecturers.				
		Well prepared for joining the online class				
		Contact lecturers ahead of time when they have an emergency or illness,				
		Contact privately via e-mail or WA to determine a plan to make up the missed work if they miss a class				
		Taking responsibility for learning by a willingness to listen, ask appropriate questions, and do the work seriously				
F	Creative, innovative, adaptive with technology	Have good internet connection during online class				
		Using a headset with headphones and a microphone to get good audio quality and prevent disruptions to others				
		Un-muted when they wish to speak.				
		Mute their audio to reduce background noise for all participants.				
		Turning mobile phones off.				
G	Transformational language	Good tone by selecting the correct words in online discussion				
		Good oral communication with lecturers				
		Good written communication with peers				
		Good written communication with lecturers				
		Good written communication with peers				

Research Results and Discussion

The results obtained are discussed in the view of the fundamental aims of the research namely-- How are the English student- teachers' ethical behaviors in online classes observed by lecturers? and How are the English student teachers' ethical behaviors in online classes observed by students? The data have been collected and analyzed to find out how the English student- teachers' ethical behaviors in online classes are observed by lecturers and how the English student-teachers' ethical behaviors in online classes are observed by students.

The following data shown in Table-2-17 were collected to enable the Researcher to provide answers to the research questions raised in the study. To this end, data gathered were analyzed and presented based on the research questions.

1. *The English student-teachers' ethical behaviors in online classes observed by lecturers.*

To find out the English student- teachers' ethical behaviors in online classes observed by lecturers, the Researcher has analyzed the responses of questionnaires distributed to 10 English lecturers. These 10 lecturers are active in applying synchronous and asynchronous in their teaching. Table-2 below is the result of the analysis calculated by percentages:

Table 2 Ethical Behaviours of Students in Online Classes Observed by Lecturers					
No	Students' Ethical Behaviours	Percentage			
		Always	Sometimes	Rarely	Never
1	Discipline	37.5	52.5	10	0
2	Manner	30	56	10	4
3	Student Engagement	30	48.33	16.66	5
4	Honesty	11.25	73.75	8.75	6.75
5	Responsibility	11.66	73.33	15	0
6	Creativity Innovation, Adaptation with Technology	23.33	65	8.33	3.33
7	Transformational language	20	70	6	4

Based on Table-2, there is a small number of lecturers (>37.5%) who stated that the students were always disciplined, good mannered and engaged, honest, responsible, creative, innovative, adaptive with technology. Many lecturers (70-73%) stated that the students sometimes were honest, responsible, and good at using language in oral and written.

A. *Students' Discipline in Online Classes Observed by Lecturers*

This research also analyzed specifically each indicator of ethical behavior of students in online classes. Table- 3 below is the result of the analysis based on the discipline indicators.

Table 3 Students' Discipline in Online Classes observed by Lecturers

No	Students' Discipline	Always 1	Sometimes 2	Rarely 3	Never 4
1	Getting to the online class on time	30	70	0	0
2	Filling out online attendance	60	40	0	0
3	Turning on the camera	30	30	40	0
4	Joining the class from beginning to the end	30	70	0	0

Table-3 shows that 70% of lecturers observed that the students in online classes sometimes get to the online class on time and join the class from beginning to end. 60% of lecturers stated that the student- teachers always fill out online attendance but there is only a small number of lecturers who stated that the student-teachers always turn on the camera and join the class from beginning to the end.

2 Students' Manner in Online Classes Observed by Lecturers

Manner is also investigated in this study. The manner which is observed is *wearing an appropriate dress when attending the class, the appropriateness of virtual background used, using a 'virtual hand raise' when asking, finding a non-disturbing environment, and smiling and energetic face performance*. Table-4 below indicates that 60-70% of lecturers observed that students did not always display appropriate virtual backgrounds, did not always find a non-disturbing environment, and did not always show smiling and energetic faces. In addition, 40-50% of lectures said that the student-teachers sometimes wear an appropriate dress when attending the class and use a 'virtual hand raise' when asking. In an essence, students were not always wearing an appropriate dress when attending the class and used a 'virtual hand raise' when asking. Few lecturers (10-20%) stated that student- teachers always used a 'virtual hand raise when asking and they had smiling and energetic faces.

Table 4 English Student-Teachers' Manners in online classes observed by Lecturers

No	Students' Manners in Online Classes	Always	Sometimes	Rarely	Never
1	Wearing appropriate dress when attending the class	60	40	0	0
2	The virtual background is appropriate and not distracting for the lecturer and classmates	40	60	0	0
3	Using a 'virtual hand raise' when asking	10	50	20	20
4	Finding a non-disturbing environment	20	70	10	0
5	Smiling and energetic face	20	60	20	0

3. The Students' Engagement in Online Classes Observed by Lecturers

Table-5 shows the student- engagement in online classes observed by lecturers. 70% of lecturers stated that the student- teachers always respect the lecturers who have teaching authority. For the critical thinking performance, 70% of lecturers stated that sometimes the student- teachers show critical thinking whereas

30% said that the students rarely showed critical thinking skills. 50% of teachers stated that the student-teachers always stayed seated during online classes whereas another 50% stated that the student-teachers sometimes stayed seated during online classes.

Table 5 Student-Teachers' Engagement Observed by Lecturers

No	Student- Engagement in online classes	Always	Sometimes	Rarely	Never
1	Staying seated during online classes	50	50	0	0
2	Giving responses/comments	20	40	40	0
3	Not dominating other students to ask or make comments	40	40	10	10
4	Respect lecturers who have teaching authority	70	30	0	0
5	Having private conversations during online class	0	60	20	20
6	Showing critical thinking	0	70	30	0

4. Students' Honesty in Online Classes Observed by Lecturers

Table-6 describes that most of the lecturers (80%) stated that students sometimes perform honesty particularly in not doing anything else during online classes; doing assignments without plagiarism; knowing how to document sources, placing a citation in their work; Knowing how to cite sources, paraphrasing information, and citing the source. Many lecturers (70%) said that the students sometimes used others' work as his/their original work, copied or imitated peer work.

Table 6 Honesty Observed by Lecturers

No	Students' honesty in Online Classes	Always 1	Sometimes 2	Rarely 3	Never 4
1	Not doing anything else during the online class	10	80	0	10
2	Doing assignments without plagiarism	20	80	0	0
3	Writing citations with mentioning authors	30	60	10	0
4	Using others' work as his/her original work.	0	70	10	20
5	Copying/imitating peer work	0	70	10	20
6	Write citations in their assignments	10	70	20	0
7	Knowing how to document sources, placing a citation in their work.	10	80	10	0
8	Knowing how to cite sources, paraphrase information and cite the source	10	80	10	0

5. Students' Responsibility in Online Classes Observed by Lecturers

Most of the lecturers (80-90%) said that students sometimes show their responsibility in online classes namely-- completing their work and keeping a record of sources to avoid plagiarism; putting the citation in the essay and on the reference page to avoid plagiarism; submitting assignment based on the time set by lecturers. 70% of lecturers observed that the students contact the lecturers ahead of time when they have an emergency or illness.

Table 7 Students' Responsibility Observed by Lecturers					
No	Students' Responsibility	Always 1	Sometimes 2	Rarely 3	Never 4
1	Completing their work and keeping a record of sources to avoid plagiarism.	0	90	10	0
2	When writing essays and citing sources, students put the citation in the essay and on the reference page to avoid plagiarism.	10	80	10	0
3	Submitting assignments based on the time set by lecturers.	10	90	0	0
4	Well prepared for joining the online class	20	60	20	0
5	Contact lecturers ahead of time when they have an emergency or illness,		70	30	0
6	Contact privately via e-mail or WA to determine a plan to make up the missed work if they miss a class	30	50	20	0

6. Students' Creativity, Innovation, Adaptation with Technology in Online Classes Observed by Lecturers

Most of the lecturers (90 %) identified that the students sometimes show their creativity, innovation, adaptation to technology. Half the number of lecturers stated that students always mute their audio to reduce background noise for all participants but the other half said that students sometimes muted their audio to reduce background noise for all participants. 60% of lecturers identified that the students turn mobile phones off.

Table 8		Students' creativity, innovation, adaptation to technology in online classes observed by lecturers			
No	Students' creative, innovative, adaptive to technology	Always	Sometimes	Rarely	Never
1	Taking responsibility for learning by a willingness to listen, ask appropriate questions, and do the work seriously	20	50	20	0
2	Have good internet connection during online class	10	90	0	0
3	Using a headset with headphones and a microphone to get good audio quality and prevent disruptions to others	0	90	0	0
4	Un-muted when they wish to speak.	0	70	30	0
5	Mute their audio to reduce background noise for all participants.	50	50	0	0
6	Turning mobile phones off.	60	40	0	0

7. The Transformational Language of English Student-Teachers in Online Classes Observed by Lecturers

Table-9 displays that students sometimes use good language in online classes. 50% of lecturers said that the students sometimes use a good tone by selecting the correct words. 70% of lecturers said the students sometimes were good in oral communication with lecturers and peers and written communication with peers. Most lectures agreed that students sometimes were good at written communication with lecturers.

Table 9		Students' Transformational Language in Online Classes Observed by Lecturers			
No	Students' Transformational Language	Always	Sometimes	Rarely	Never
1	Good tone by selecting the correct words in online discussion	20	50	10	20
2	Good oral communication with lecturers	30	70	0	0
3	Good oral communication with peers	20	70	10	0
4	Good written communication with lecturers	0	90	10	0
5	Good written communication with peers	30	70	0	0

B. The English Student- Teachers' Ethical Behaviors in Online Classes Observed by Students

To find out the English student- teachers' ethical behaviors in online classes observed by students, the Researcher has analyzed the responses of questionnaires distributed to 66 English student- teachers. These 66 English student-teachers were taking TEFL, Seminar Research Design, and Micro Teaching subjects. The result of the analysis calculated by percentages shown in Table-10:

Table 10 Ethical Behaviours of Students in Online Classes Observed by Students				
Students' Ethical Behaviours	Percentage			
	Always	Sometimes	Rarely	Never
1. Discipline	65.025	32.375	2.6	0
2. Manner	45.96	40.94	9.38	3.72
3. Student Engagement	35.72	49.23	11.98	3.07
4. Honesty	15.24	38.87	19.7	26.2
5. Responsibility	70.05	24.46	5.48	0
6. Creativity Innovation, Adaptation with Technology	25.78	47.93	18.21	7.81
7. Transformational language	77.84	18.76	3.4	0

Based on Table-10 above, only a small number of students stated that they were always good mannered, engaged, honest, creative, innovative, and adaptive in online classes but many of them (65.025%-77.84%) said that they were always disciplined and responsible in online classes. None of them said that they were never disciplined and used transformational language.

1. Student Discipline in Online Classes Observed by Students

Table-11 below shows that 70-90% of students said that they were always disciplined. They always get to the online class on time (71%) and join the class from beginning to end (93.8%). Many of them (65.6%) also said that they filled out the online attendance and sometimes they turn on the camera (60.9%)

Table 11 Students' Discipline in Online Classes Observed by Students					
No	Discipline	Always 1	Sometimes 2	Rarely 3	Never 4
1	Getting to the online class on time	71	28.	1	0
2	Filling out online attendance	65.6	34.4	0	0
3	Turning on the camera	29.7	60.9	9.4	0
4	Joining the class from beginning to the end	93.8	6.2	0	0

2. Students' Manners in Online Classes Observed by Students

Table-12 below shows that 76.6% of students stated that they were always wearing an appropriate dress when attending the class. 50% of students said that they were always using an appropriate virtual background that was not distracting for lecturer and classmates and always performed with smiling and energetic face.

Table 12 Distribution Students' Manners in Online Classes Observed by Students					
No	My student- teachers' behaviors in online classes	Always 1	Sometimes 2	Rarely 3	Never 4
1	Wearing appropriate dress when attending the class	76.6	21.9	0	0
2	The virtual background is appropriate and not distracting for the lecturer and classmates	50.	34.4	9.4	0
3	Using a 'virtual hand raise' when asking	9.4	45.3	37.5	7.8
4	Finding a non-disturbing environment	43.8	56.2	0	0
5	Smiling and energetic face	50	46.9	0	0

3. Students' Engagement in Online Classes Observed by Students

Table-13 shows the student- teachers' engagement observed by students themselves. It displays that most students (87.5%) stated that they stayed seated during online classes. Many of the students (73.4%) sometimes do not dominate others in asking or giving comments. Only a few student teachers never dominated other students in asking or comments. Less than 50% of students said that they always respected lecturers who have teaching authority.

Table 13 Student Engagement observed by Students					
No	Student teachers' Engagement in online classes	Always 1	Sometimes 2	Rarely 3	Never 4
1	Staying seated during online classes	87.5	10.9	1.6	0
2	Giving responses/comments	42.2	56.3	1.5	0
3	Not dominating other students to ask or comments	0.3	73.4	20.3	6
4	Respect lecturers who have teaching authority	42.2	51.6	6.2	0
5	Having private conversations during online class	1.5	46.9	42.2	9.4
6	Showing critical thinking	40.6	56.3	0.1	3

4. Students' Honesty in Online Classes Observed by Students

The students' honesty can be seen in Table-14. Many students (76.6%) said that they never use others' work as his/her original work for their assignments given by lecturers. They (73.4%) also never *copied*/imitated peer work. Half the students said that they knew how to document sources, place a citation in their work, and know-how to cite sources, paraphrase information and cite the sources.

Table 14 Honesty observed by Students					
No	Honesty	Always 1	Sometimes 2	Rarely 3	Never 4
1	Not doing anything else during the online class	0	37.5	40.6	21.9
2	Doing assignments without plagiarism	1.5	39.1	37.5	21.9
3	Writing citations without mentioning authors	17.2	57.8	15.6	9.4
4	Using others' work as his/her original work.	0	15.6	7.8	76.6
5	Copying/imitating peer work	0	7.8	18.8	73.4
6	Write citations in their assignments	25	50	18.8	6.2
7	Knowing how to document sources, placing a citation in their work.	39.1	51.6	9.4	0.1
8	Knowing how to cite sources, paraphrase information and cite the source	39.1	51.6	9.4	0.1

5. Students' Responsibility in Online Classes Observed by Students

The result of the analysis on students' responsibility can be seen in Table-15 below. Most of the students (87.5) said that they always submit their assignments based on the time set by lecturers and many of them (78.1) said that when writing essays and citing sources, they always put the citation in the essay and on the reference page to avoid plagiarism. About 60% of students said that they always contact lecturers ahead of time when they have an emergency or illness privately via e-mail or WA to determine a plan to make up the missed work if they miss a class.

Table 15 Students' Responsibility Observed by Students					
No	Student- teachers' Responsibility	Always	Sometimes	Rarely	Never
1	Completing their work and keeping a record of sources to avoid plagiarism.	65.6	28.1	6.3	0

(Continued)

Table 15 Students' Responsibility Observed by Students—cont'd

No	Student- teachers' Responsibility	Always	Sometimes	Rarely	Never
2	When writing essays and citing sources, students put the citation in the essay and on the reference page to avoid plagiarism.	78.1	15.6	6.3	0
3	Submitting assignments based on the time set by lecturers.	87.5	12.5	0	0
4	Well prepared for joining the online class	54.7	39.1	6.2	0
5	Contact lecturers ahead of time when they have an emergency or illness,	68.8	23.4	7.8	0
6	Contact privately via e-mail or WA to determine a plan to make up the missed work if they miss a class	65.6	28.1	6.3	0

6. Students' Creativity, Innovation, Adaptation with Technology in Online Classes Observed by Students

To identify the students' creativity, innovation, and adaptation with technology observed by students is displayed in Table-16. It can be seen in this table that most of the students (>80%) stated that they always take responsibility for learning by a willingness to listen, ask appropriate questions, and do their assignments seriously. They also sometimes had good internet connections during an online class. It is about 50% of students who said that they sometimes used a headset with headphones and a microphone to get good audio quality and prevent disruptions to others and turn mobile phones off.

Table 16 Table-16: Students' creativity, innovation, and adaptation with technology observed by Students

No	Students' creativity, innovation, adaptation with technology in online classes	Always	Sometimes	Rarely	Never
1	Taking responsibility for learning by a willingness to listen, ask appropriate questions, and do the work seriously	84.4	14.1	1.5	0
2	Have good internet connection during online class	15.6	81.3	3.1	0
3	Using a headset with headphones and a microphone to get good audio quality and prevent disruptions to others	32.8	57.8	9.4	0
4	Un-muted when they wish to speak.	0	48.4	32.8	17.2
5	Mute their audio to reduce background noise for all participants.	1.6	26.6	42.2	29.7
6	Turning mobile phones off.	20.3	59.4	20.3	0

7. The Transformational Language of English Student- Teachers in Online Classes

Table-17 shows most of the students stated that they always had good written communication with lecturers but only some of them (68.8%) thought that they always had good oral communication. Most of the students said that they always had good oral as well as written communication with their classmates.

Table 17 Students' Transformational Language Observed by Students					
NO	Students' Transformational Language in online classes	Always	Sometimes	Rarely	Never
1	Good tone by selecting the correct words in online discussion	71.9	23.4	4.7	0
2	Good oral communication with lecturers	68.8	29.7	1.5	0
3	Good written communication with peers	81.3	14.1	4.6	0
4	Good written communication with lecturers	85.9	12.5	1.6	0
5	Good oral communication with peers	81.3	14.1	4.6	0

Discussion

To be successful in life, everyone must follow the community rules. Ethics are defined as rules of conduct, when people exhibit acceptable practices in society and under governing bodies of instruction, People are delivering patterns of what is considered acceptable, good behavior. Their moral reasoning can help in the decision-making process and selecting choices that work in their favor. Following a code of ethics is a great start in meeting ethical requirements in higher education. Students at the university need to locate information on netiquette rules and academic requirements so that they can comply with and understand expectations. In addition, self-directed learning consists of planning, carrying out, and evaluating learning practices to meet goals. Self-directed learning is self-guided behavior that the adult learner implements to be responsible and structured in higher education. Following a combination of these ethical practices can help students, as adult learners, make good to perform ethical behavior in online classes.

Ethical subjectivism is the belief that ethics are simply statements of personal opinions and personal attitudes. Ethical cultural relativism is the belief that right and wrong are culturally based for individuals. Ethical utilitarianism is the belief that the consequences of an action are the foundation of ethics. Kantian ethics is the belief that the principles that people live by should be those exhibited by their practical reason. It is important to be mindful of these theories for students, when interacting with others in online classes, to establish a rapport with peers and help communication flow smoothly.

Individuals have different backgrounds, experiences, and beliefs that make up their moral characters and these could influence behavioral patterns and expression in classes. Critical thinking is a thought process that involves gathering and evaluating information to make decisions and solve problems encountered. It is necessary to apply critical thinking when students are composing responses in class, completing assignments, and managing time to meet their goals of the study. Stephen Brookfield (1987) defined four characteristics of applying critical thinking when making decisions: (a) identifying and challenging assumptions, (b) challenging the importance of context, (c) trying to imagine and explore alternatives, and (d) reflective

skepticism. Students must be aware of their assumptions and inferences, removing them from thought processes, or researching the truth of the situation can influence to make a decision and help to make better decisions.

Plagiarism involves the act of using others' work and trying to pass it off as one's original work. Essentially, plagiarism is stealing another person's work or ideas. It can occur intentionally and unintentionally. Students should know how to document their sources and that is called placing a citation in their work. When students understand how to cite sources and when they paraphrase information and cite the source, these steps help reduce plagiarism. Students should complete their work in class and keep a record of sources to avoid plagiarism. When writing essays and citing sources, students should put the citation in the essay and on the reference page to avoid plagiarism. Moral dilemmas can occur online. Online students should know how to respond to diverse issues online and have a good sense of self-efficacy. Self-efficacy is a personal belief regarding how to control events in life. Online classes are not psychological centers but a place for learning. The lecturers facilitate the class, not to solve students' personal problems or read excuses for missed or late assignments. It is students' responsibility to do their work and avoid excuses. Communication in online classes is through correspondence. Therefore, it is important to co-compose diplomatic messages.

The messages can carry a tone, so selecting the correct words can make a difference in online communication. Communications with lecturers and peers are the majority of messages in the online classroom. Individuals have different personality styles that can impact communication as well. When someone is mindful of different styles of behavior, they can be more tolerant of others in online classes.

Conclusion and Suggestions

1. Conclusion

The online classes have been a global phenomenon since the pandemic. Students from elementary to higher education participate in online classes including English student-teachers at the English Education Study Program of FKIP UNTAN. This study has investigated the ethical behaviors displayed by English student-teachers during their participation in online classes. The results of the research indicate that there are a small number of lecturers (>37.5%) who stated that the students were always disciplined, good mannered and engaged, honest, responsible, creative, innovative, adaptive with technology. Many lecturers (70-73%) stated that the students were not always honest, responsible, and good at using language in oral and written form in online classes. However, the students stated contradictorily with the lecturers' statements. Many students (77.84%) said that they were always disciplined and responsible in online classes and only a small number of students stated that they were not always in a good manner, engaged, honest, creative, innovative, and adaptive in online classes. Based on professional talk with lecturers and student interviews, it is found out that the lecturers and the students admitted that the students sometimes used inappropriate virtual backgrounds which distracted lecturer and classmates. The students sometimes were in a disturbing environment, with no smile and energetic face, and attached inappropriate photo profiles. The students and the lecturers stated that the students sometimes engaged during online classes especially in showing critical thinking. They sometimes have private conversations during an online class. It is a very interesting finding of students' honesty. Most lecturers stated that their students were sometimes honest in online learning classes. They sometimes do plagiarism, not mentioning sources or authors in their writing, copying peer

work. Students are also not always responsible for their work. They did not submit assignments based on the time set by lecturers, were not always well prepared for joining the online class, not always contact lecturers ahead of time when they have an emergency or illness. Concerning the creative, innovation, adaptive to technology, according to some of the lecturers (65%), students sometimes have good internet connection during online class, use a headset with headphones and a microphone to get good audio quality and prevent disruptions to others. However, not many students (<50%) stated that they have a good internet connection during online class, use a headset with headphones and a microphone to get good audio quality and prevent disruptions to others. For communication, the students sometimes transform good language. They sometimes are good at oral and written communication with lecturers and peers. In conclusion, the ethical behaviors of student-teachers in the English Education Study Program of FKIP UNTAN are sometimes or not always disciplined, good mannered, engaged, honest, responsible, creative to technology, and good communication with lecturers and peers.

2. Suggestion

As there is a diverse opinion among students and lecturers on ethical behaviors in participating in online classes, it is suggested from this research that the faculty and the English study program should have standard operating procedures to be followed by student-teachers so that the students know what they must do in online classes.

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Online Hate Speech and the Personal Experiences of Young Adult Filipinos

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Abstract

This study was anchored on Fairclough's (1995) Critical Discourse Analysis. It answered the main problem: What are the personal experiences of young adult Filipinos about online hate speech? Socio-demographic profile in terms of age, gender, ethnicity, and educational attainment were discussed; online hate speech based on their personal experiences, the participants' demographics, the intensity of online hate speech, topics that mostly produced hate speech, personal experiences that caused them to receive and practice online hate speech, the determined emotions felt by the young Filipino adults when they receive and practice online hate speech, and correlations between all the variables of the study were discussed and described. Descriptive survey research revealed the demographic profile of the participants while correlational research interpreted the relationship between the variables of the study. Findings reveal that the young Filipino adults perceived hate speech as a negative assumption towards other people. They experienced it on Facebook from users who mostly insulted their gender preferences and age, and whenever they talk about politics. The participants feel angry and embarrassed when they practice and receive hate speech, respectively. Statistical findings however show that based on the seven main variables that were investigated, results show no significant correlation of young adult experiences on five of the seven variables. However, the results of correlation between the intensity of hate speech and the reception of the participants revealed a very highly significant correlation between variables. It gained a correlation of 32.516 and p-value of 0.000. Results of correlation between topics on social media and the personal experiences of young adults about hate speech gained a correlation of 33.934 and p-value of 0.000 showing a very highly significant correlation between the variables. Among others, the research recommends careful attention on young adults' further experiences that may become traumatic when not properly addressed.

Key Words: Online Hate Speech, Critical Discourse Analysis, Online Personal Experiences

Introduction

Nowadays, it is very easy for someone using the social media platform such as Facebook to experience receiving hate speech from people they hardly know. Tontodimamma et al. (2020) explain that hate speech is any communication that downgrades a person or group in terms of some characteristics such as race, color, ethnicity, gender, sexual orientation, nationality, and religion. Bahador (2020) wrote that it includes insults, discrimination, dehumanization, demonization, and incitement to violence. Hate speech is more than just "harsh words." Hate speech is hard to classify because according to Crabb et al. (2019), its interpretation is subjective in nature.

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Filipinos were seen to have a high average of spending their time on social media, which leads the Philippines to be known as the “social media capital of the world” (Ichimura, 2020). They spend 102,054 hours on social media and that is equivalent to 4,252 days or 11.64 years in total. Social media users interact and share content and information with each other every day, hence, providing a huge chance for hateful messages to circulate. According to O’Regan and Theil (2020), “the age of digital media has allowed online speech and content to be shared anonymously and often without a second thought for the consequences.”

Many cases of hate speech have been documented in social media platforms such as Facebook, Youtube, Twitter, Tiktok, and other popular sites to which the youth and young adults alike go. Aslan (2017) found out that labeling innocent people that bashers despise is just one of the many “crimes” committed. He cited in his study the example of Syrians who are the constant victims of bashers in Youtube. They were labeled with undesirable names such as “traitors, potential threat, overstepping, and the sources of financial difficulties.”

In Europe, Assimakopoulos, Baider, and Millar (2017) report the plight of migrants from neighboring continents who are being put on spotlight in many social media discourses using iteration of expressions such as “huge migration crisis, waves of migrants flooding the EU” and many other undesirable expressions. These xenophobic hate speeches are hurtful to the migrants concerned and will add up to their concerns of homelessness together with other serious worries.

In the Philippines, nothing is more serious than the hate speeches of the sitting president against his critics. Since these speeches are televised live, they are also uploaded in Youtube, Twitter, and Facebook. These moments catch the attention of his supporters who, it seems, are well-trained to lash out soul-wrecking hate messages. His and his cohorts’ war of attrition with journalists like Nobel Peace Prize winner Maria Ressa is a classic example. Conde (2020) believes that the show of authoritarianism in the Philippines harms the free speech of the Filipinos. However, free speech can also do people harm especially the youth and young adults who are daily users of social media.

The present research found out what online hate speech can do to one of the most vulnerable sectors of the society who are the young single adults – whether male or female. These groups are those who are into Facebook, Omegle, Twitter, Tiktok and other social media platforms that are prone to hate speech and cyberbullying.

The study determined the demographic profile of the participants in terms of (a) age; (b) gender; (c) educational attainment; and (d) ethnicity; meaning of hate speech based on respondents’ personal experiences; social media platforms used; demographics prone to hate speech; impact of hate speech, topics on social media that produce hate speech; personal experiences of young adults that made them practice or receive hate speech; participants’ feelings of practicing or receiving hate speech; and correlations of demographics to personal experiences, intensity of hate speech to participants’ reception, and social media topics to the personal experiences of the respondents.

Theoretical Framework

This research is anchored on the Theory of Critical Discourse Analysis (CDA) that was proposed by Norman Fairclough in 1995. It was used in this study to analyze hate speech on social media based on the personal experiences of the respondents. Critical Discourse as a theory analyzes qualitatively and critically the ways in which discourses construct, maintain, and legitimize social inequalities. In the present research, the authors

investigated the “bashings” of social media users on the posts made by young single adults aged 15-30. As what CDA asserts, the way in which people use language in social media is purposeful, whether the language choice uttered in written form is conscious or unconscious.

Scope and Limitations

The study was limited to the single, adult Filipinos aged 15 to 30 who use the social media and receive hate speech from social media users. Critical Discourse Analysis was used to analyze their feelings while the use of Pearson Chi-Square helped describe their experiences.

Materials and Method

Research Design

For this research, the use of CDA was purposively used quantitatively by using a descriptive correlative survey design. The research described the participants' demographic profile and their personal experiences toward hate speech on social media. Correlational research design was used to describe the relationship between the variables (a) demographics and personal experiences of the participants, (b) intensity of hate speech and the reception of the participants, and (c) topics on social media and the personal experiences of young adults about hate speech.

Sampling Techniques and Participants

This research used probability sampling method to adhere to the theory of probability to be able to get a sample in the most scientific way. The Researchers used 20 percent to get the total respondents needed to represent the population. Using plus or minus 5 percent margin of error, the total respondents were 260 individuals having equal male and female participation. The participants were young adults aged 15-30 (as per Republic Act 8044). They were divided equally according to gender; thus, 130 males and 130 females.

Instrument

The research primarily used a four-point Likert scale questionnaire to survey the participants and obtain their answers. It was validated and subjected to Cronbach Alpha's reliability test for a more reliable result.

Data Gathering and Ethical Considerations

The questionnaire was designed and submitted to experts for validation; ran a pilot test, revised by entering the corrections; used principal components analysis to identify underlying components that are being measured by the survey questions; subjected the survey questionnaire for Cronbach Alpha to check its internal consistency; revised the survey form for the last time. Then, the questionnaire was encoded using the Google Form. The Researchers sent the questionnaire through email to the selected participants for actual data gathering. The participants' full consent was obtained, and their privacy and anonymity were ensured. The answers were tallied and interpreted immediately. Finally, the Researchers avoided the representation of primary data findings in a biased way. In the entire conduct of the research, the Researchers assured the participants of the protection of their names and information.

Data Analysis

Since the design is being governed by quantitative approach, the research used quantifiable data analysis that includes calculation of frequencies of variables and differences between variables. It employed frequencies, percentage, and mean to calculate the simple statistics. Since the research is correlative in nature, it employed the use of Pearson Chi-square correlation to find out the degree of correlation of every variable used in the study.

Result and Discussion

Question 1: What is the demographic profile of the participants in terms of (a) age;(b) gender;(c) educational attainment; and (d) ethnicity

Figure 1 shows more than 48% of the participants belong to ages 21-23, followed by participants belonging to ages 18-20 having 45%, while participants aged 24-26 have a total of 4.42%; and, lastly, participants belonging to ages 27-29 have a total of 1.61%. On the other hand, Figure-2 shows that the female participants (49.00%) outnumbered the male participants (44.18%) and LGBTQ participants (6.83%). Meanwhile, Figure-3 reveals that there were more 2nd year students (51.41%) who participated in the study than 3rd year students (30.12%) and 1st year students (18%).

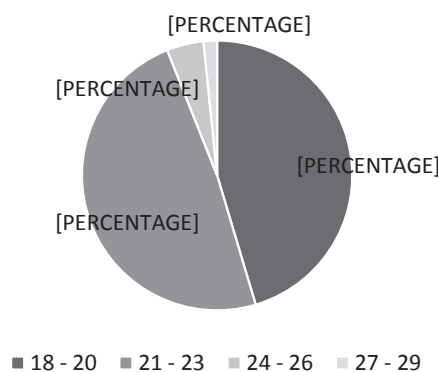


Figure 1. Age

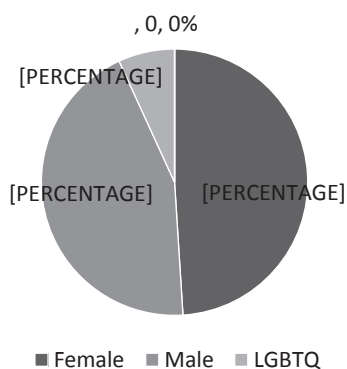


Figure 2. Gender

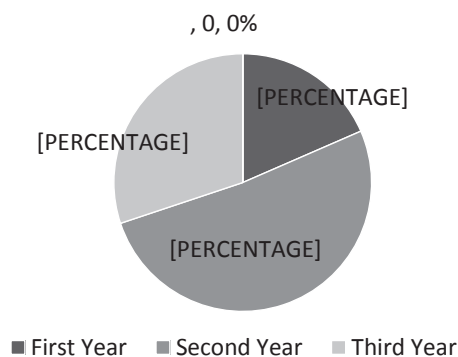


Figure 3. Educational attainment

The demographic profile shows that age 17-30 are the big users of social media. This is corroborated by statistics shown (**statista.com**) that in the Philippines, 86% of social media users belong to age 18-24 years old who are young adults.

Table 1 presents the ethnicity of the participants where the majority is Tagalog with 81%, followed by Cebuano with 2.41%, then Bicolano and Ilocano with 2.01%. On the other hand, Kapampangan, Pangasinense, Hiligaynon/Ilonggo and Waray received the lowest percentage; 0.40%, 0.80%, 0.80% and 0.80%.

Table 1 Ethnicity		
Ethnicity	Frequency	Percentage
Bicolano	5	2.01
Cebuano	6	2.41
Cebuano, Hiligaynon/Ilonggo	1	0.40
Hiligaynon/Ilonggo	2	0.80
Ilocano	5	2.01
Kapampangan	1	0.40
Pangasinense	2	0.80
Tagalog	202	81.12
Tagalog, Bicolano	5	2.01
Tagalog, Cebuano	2	0.80
Tagalog, Hiligaynon/Ilonggo	4	1.61
Tagalog, Ilocano	7	2.81
Tagalog, Ilocano, Pangasinense	1	0.40
Tagalog, Pangasinense	2	0.80
Tagalog, Waray	2	0.80
Waray	2	0.80

Question 2: What is the meaning of hate speech, according to young adults, based on their experiences?

Figure 4 revealed the three answers with the highest scores on the respondents' thoughts about hate speech. First, is the notion of the word hate speech as "unpatriotic." In the societal context of what is happening around the country, not being patriotic could mean disloyalty to the cultures and traditions of the Filipinos. Most appropriately, it could connote xenophobia or racism even to a fellow Filipino. Second answer is that hate speech reflects issues in the society. Presently, the Filipinos are politically charged due to the incoming election and so, people can read a lot of bashings done by one person to another, and mudslinging of people against people. Finally, the top answer in the survey about hate speech being an act of insult or disrespect which looks like just the two as it has the similar context of not according high regards for the opinions of others.

Gagliardone et. al (2015) explained that in matters of national or international legislation, hate speech connotes harm, discrimination, hostility, or violence. This research showed disrespect, societal problems, and insult as synonymous to hate speech. Summing up, we conclude that social problems are the root cause of hate speech in social media.

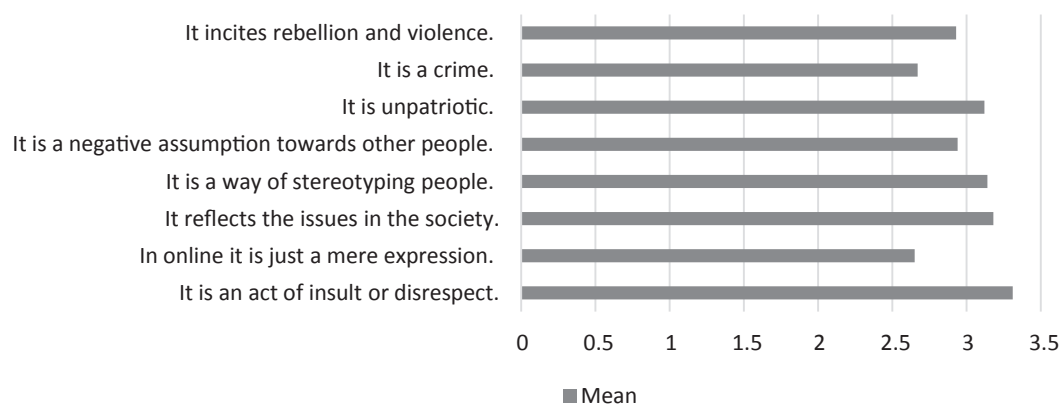


Figure 4. Respondents' meaning of hate speech

Question 3: What particular social media platform do young adults use where they encounter hate speech mostly?

Figure 5 presents the particular social media platforms that young adults use where they encounter hate speech mostly. Among the social media platforms listed, Facebook got the highest mean of 3.69. As of July 2021 (statista.com), this social media site ranks the first over all other social media site as it registered over two billion users around the world.

According to the findings of this research, Facebook remains as the number one platform for hate speech. According to **Rappler (2021)**, Facebook is also no. 1 in the list of social media platforms that are open for abuse.

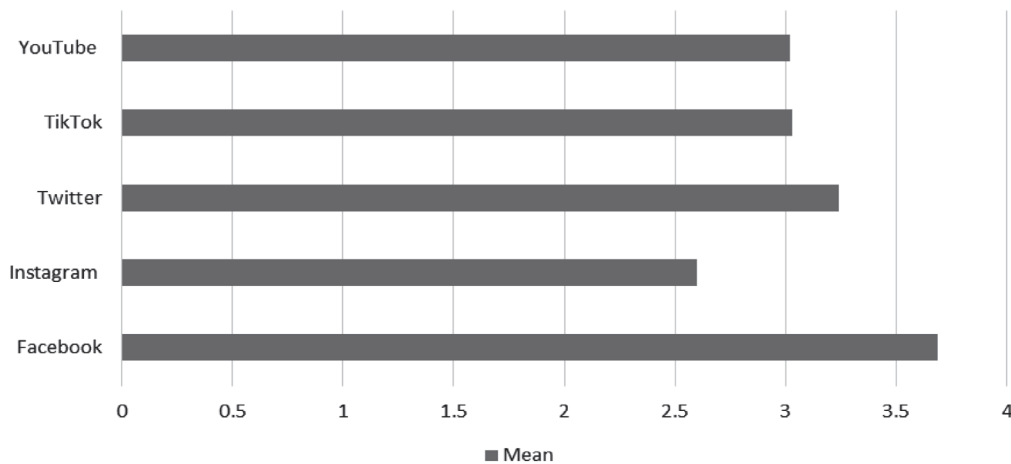


Figure 5. Particular Social media platform that young adults use

Question 4: What demographics of social media users are prone to hate speech?

Gender preference as the highest scoring answer for this question is not a surprise after all. Nowadays, talks about gender is as poverty, rape, and other social problems. The second answer that is “color” is another social disease that the Filipinos must cure. In the USA, presently, American Asians, like the Filipinos, are being discriminated against because of their color and features. This leads us to the third most popular answer which is Race. It could be contemplated from the answers that from the West to the East up to the Southeast Asians, gender, race, and color are problems that the Filipinos need to hurdle if they want to live peacefully as world citizens. Figure- 6 shows the details.

Olafson and Tran (2021) report that 55% of social media users around the world are males. While their research did not clearly point men as the source of cyber hate crimes on gender, color or sexual reference, other research and newspaper reports point to the male gender as those that lead in groups in reference to these three demographics.

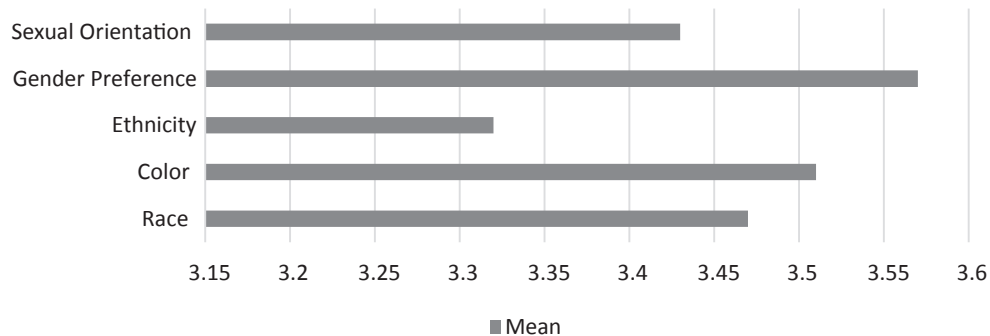


Figure 6. Demographics of social media users prone to hate speech

Question 5: What impact of hate speech have the respondents received?

The top three answers show the impact of hate speech on the receivers. These are as follows: (a) someone tried to change my point of view; (b) I felt insulted; and (c) My claims, ideas, and points of view were challenged as they do not agree with it. Nowadays, it is not common for social media users to bad-mouth somebody or tear up one's beliefs no matter how firm it is. They will use language that is disgusting, condescending, and disparaging which an innocent user would take heavily to the heart.

Not only in the Philippines, but around the world hate speech has a resounding impact to crimes such as mass murder, lynching and ethnic cleansing that started only with insults, harsh speech, and disagreements (Laub, 2019).

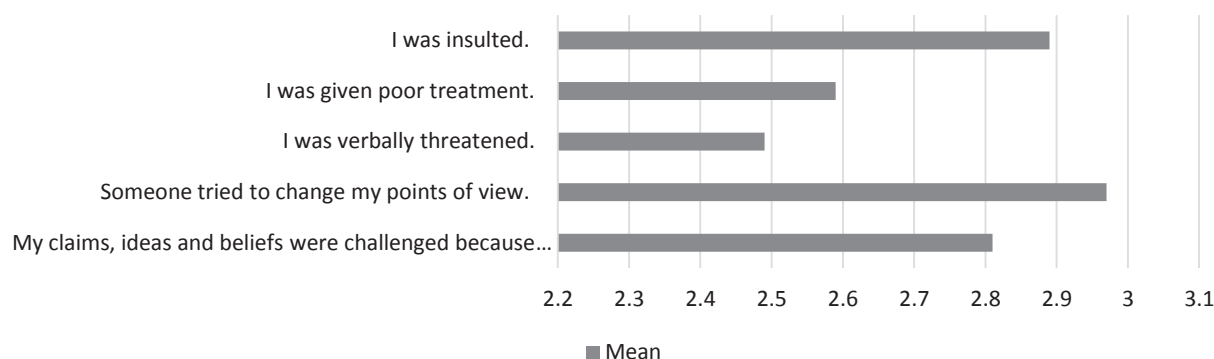


Figure 7. Impact of hate speech received by media users

Question 6: What topics on social media mostly produce hate speech?

Politics, physical appearance, and activism – these are the top three answers of the respondents which also reflect the social problems people nowadays face. With politics, even before election begins, it has been the favorite topic in the social media by the users. Issues about President Rodrigo Duterte, the Marcoses, Aquinos, and many other political personalities have triggered the interest of the Filipinos about political debates in social media. Then, there is body shaming, face shaming, and lewd remarks that constitute people's physical appearance. Finally, there is activism, particularly in politics that makes the people's day in social media. These, among other reasons, are the flavors that give color to social media use.

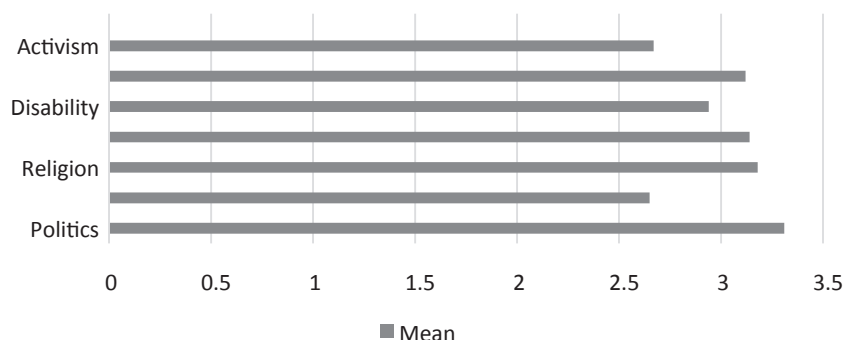


Figure 8. Topics in social media that mostly produce hate

Question 7: What personal experiences of young adults (a) made them practice hate speech as well? (b) caused them to receive hate speech on social media?

From the answers received, top three personal experiences that make young adults practice hate speech are as follows: (a) race; (b) age, and (c) physical appearance. This means nowadays, it is easy for anyone to throw mud at others because of these three social reasons. Meanwhile, the personal experiences of young adults that make them receive hate speech include (a) age, (b) race, and (c) political views. Notice that in the previous questions posed by this research, these reasons have already emerged as main variables that make people hate other people.

Tontodimamma et al (2020) affirmed that politics, physical appearance of a person, activism, among others have been leading topics in social media that produce hate speech. The findings of the present research agree on this.

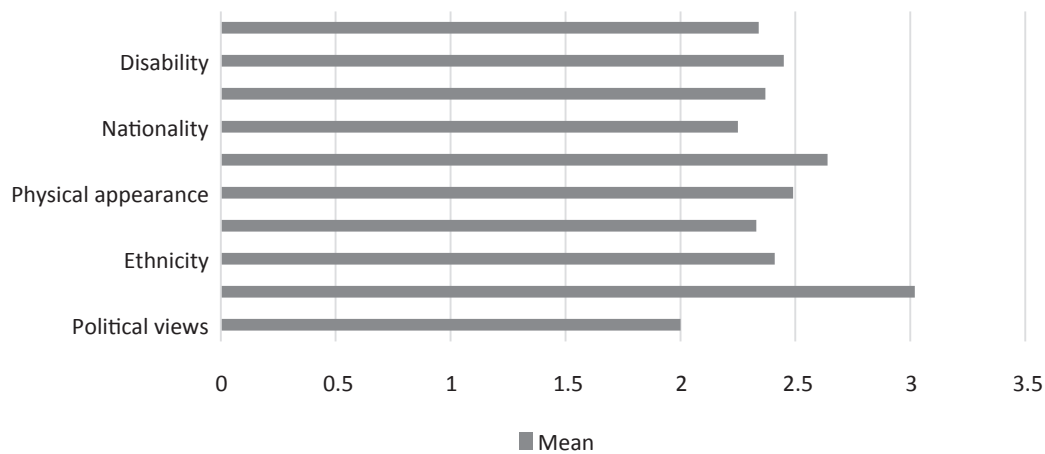


Figure 9. Personal qualities that cause young adults to practice online hate speech

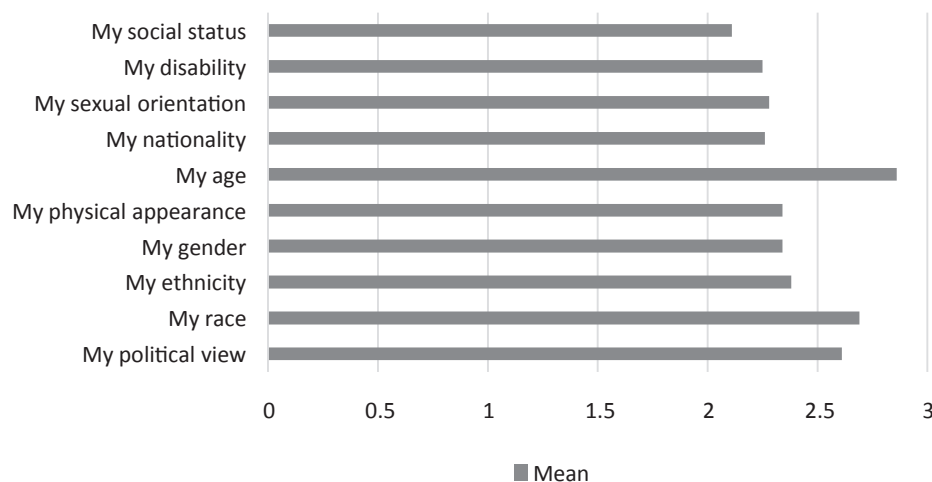


Figure 10. Personal Qualities that cause young adults to receive online hate speech

Question 8. What was felt by the participants upon (a) delivering hate speech to others, (b) receiving hate speech from others?

Most of the participants felt angry upon delivering hate speech on others. Others felt guilty while not so many of them said they were satisfied with what they did. But when they were given hate speech, they felt embarrassed, angry, and threatened. In a world where usually hate begets hate, these are how the respondents felt. The effect of hating others is a retaliation of an unsatisfied feeling that the respondents have learned as they participate in the game of mudslinging, shame, and destroying one's personality in social media.

In the Psychology of hate crimes released by APA.com, the writers believe that those who have been offended by hate crimes may generally feel violated, offended, frightened, but not all will retaliate by getting even. The research findings based on the respondents think otherwise as most of them have felt offended and ended up offending others as well.

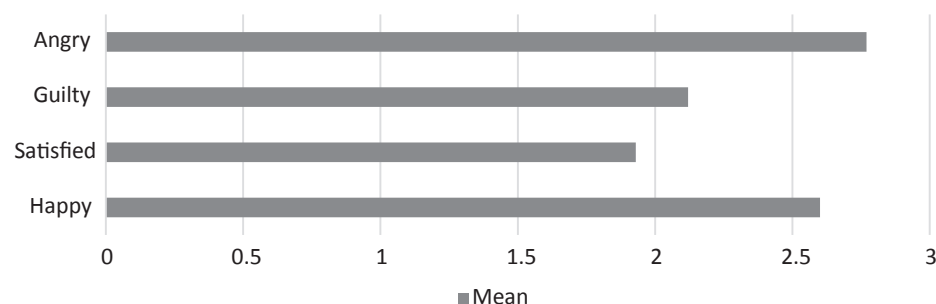


Figure 11. Participants' perceptions upon delivering hate speech to others

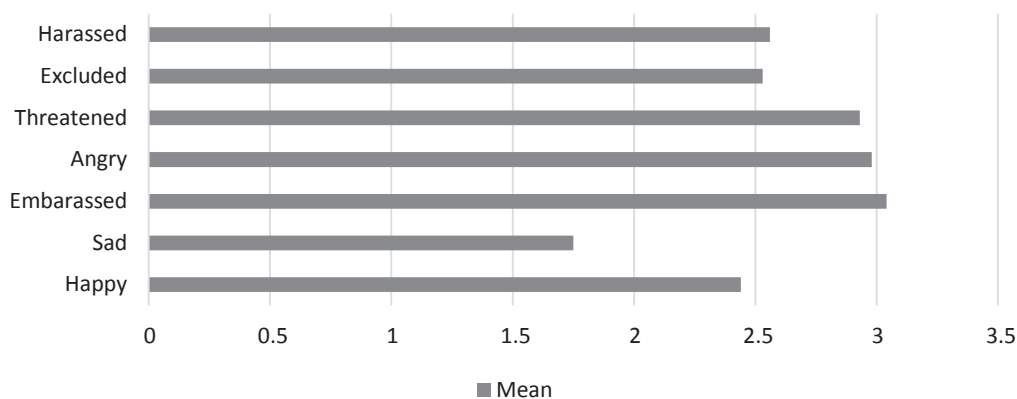


Figure 12. Reception of the participants upon receiving hate speech

Question 8. Is there a correlation between demographics and the personal experiences of young adults?

In terms of age, findings reveal that there is no overall significant correlation between the respondents' age and their personal experiences in social media although religion is significantly correlated. This finding means that age has nothing to do with social media users' personal experiences when they indulge in the use of any social media platform.

Pacheco and Melhuish (2018) detailed their findings in their research showing that demographics indeed play a big role in the personal experiences of young adult users of the social media.

Table 2 Correlation of Age to Personal Experiences			
Personal Experiences	Pearson Chi-Square	p-value	Interpretation
Race	20.324	0.908	No significant correlation
Color	21.247	0.880	No significant correlation
Ethnicity	18.773	0.945	No significant correlation
Gender preference	24.855	0.732	No significant correlation
Sexual orientation	18.712	0.946	No significant correlation
Nationality	42.110	0.070	No significant correlation
Religion	44.009	0.048	Significant correlation

Table 3 reveals that there is no correlation between participants' gender and their personal experiences on social media. This means that gender does not have anything to do with the variables that have touched their feelings except in religion where a significant correlation was observed.

Table 3 Correlation of Gender to Personal Experiences			
Personal Experiences	Pearson Chi-Square	p-value	Interpretation
Race	8.040	0.235	No significant correlation
Color	5.920	0.432	No significant correlation
Ethnicity	7.436	0.282	No significant correlation
Gender preference	5.528	0.478	No significant correlation
Sexual orientation	8.962	0.176	No significant correlation
Nationality	5.904	0.434	No significant correlation
Religion	16.750	0.010	Significant correlation

Table 4 reveals that there is no significant correlation of educational attainment on the personal experiences of the young adult social media users. It means that the media users' educational orientations have nothing to do with whatever they have experienced on the social media.

Table 3 Correlation of educational attainment to users' personal experiences			
Personal Experiences	Pearson Chi-Square	p-value	Interpretation
Race	5.796	0.446	No significant correlation
Color	3.325	0.767	No significant correlation
Ethnicity	3.3622	0.768	No significant correlation
Gender preference	4.939	0.552	No significant correlation
Sexual orientation	0.588	0.997	No significant correlation
Nationality	12.506	0.052	No significant correlation
Religion	9.135	0.166	No significant correlation

Question 10: Is there a correlation between the impact of hate speech and the reception of the participants?

The result of the correlation of the impact of hate speech on how the participants received, it shows through Pearson chi-square that at 32.516 with $p = 0.000$, the impact was very highly correlated. It means that these two variables have a very strong relationship with each other. Therefore, the impact of hate speech is strongly tied to the impact of acceptance of those that have been affected by this act.

Ring (2013) summarized that social media are rife with hate. She explained how the young users are torn apart because of the hate speech that they usually read in the social media. Ring's dissertation corroborated with the statistical findings of the research that there is a very highly correlation between the impact of hate speech and the reception of the participants towards it.

Question 11: Is there a correlation between the topics on social media and the personal experiences of the young adults about hate speech?

The result of the correlation between topics found in the social media platforms and how the young adults received them was calculated using Pearson Chi-Square. The result of 33.934 with $p = 0.000$ shows a very highly significant correlation. This means that the two variables are strongly tied to each other. The young adults are highly affected by what they read as they engage with those who bash them on social media.

According to the research of **Shields-Nordness (2015)**, young adults are very sensitive to the topics found in social media and their sensitiveness results to isolation most of the time. This research also found out that there is a very high correlation of topics in social media and the personal experiences of the young adults.

Conclusion and Recommendations

Social media could be one of the best things that happened in this world as seen on how fast communication is, if compared to the slow snail-like methods of the 20th century. Presently, people are enjoying its glory, and even its power to connect to people everywhere around the world. True to form, the world has become one whole village of communicating people. However, in return of this boon lies the bane of misuse of the social media. It seems like people everywhere have been given the power or authority to lay out their platform, what's more their deep thoughts turned into nightmares. These nightmares may include what have been tackled in this research – hate speech which, as this research asserts.

With the findings of the present research, the following recommendations are presented to the readers:

1. That the government will give stricter rules about cyber bullying in the country
2. That the parents will become a constant guide to their young adult sons and daughters who are one of the victimized sectors of the society in terms of social media viewing
3. That the country will produce a hotline for the victims of online bullying for the further protection of this vulnerable sector.
4. Finally, that a hotline on mental health will be established for everyone's care of sanity in the country.

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Feedback Preferences in the Performance of Skills Laboratory Procedures of Generation Z Sophomore Nursing Students

Perlin Zellaine T. Licas

Abstract

Introduction: Generation Z students are a unique and truly digital-native generation who are now entering the nursing program and eventually, become a part of the healthcare workforce. Nurse Educators, therefore, must be guided with their teaching approaches to effectively interact with this generation of Nursing Students.

Method: A choice-based conjoint analysis study was conducted among 224 randomly selected Generation Z Sophomore Nursing Students from a higher education institution in Metro Manila, Philippines. Consenting respondents were surveyed and ranked 13 choice bundles with 4 attributes of feedback. Part-worth utilities and importance values were estimated to determine the feedback preferences of the respondents.

Result: The most important attribute was the type of feedback (43.85%), followed by the timing (22.37%) and method (17.93%) of feedback. The source of feedback (15.85%), however, was the least important attribute. Results also indicated that the respondents preferred a feedback mechanism which involved immediate (utility = 0.66, SE = 0.18), constructive (utility = 1.11, SE = 0.24), and guided (utility = 0.19, SE = 0.24) appraisal from their teachers (utility = 0.59, SE = 0.18).

Conclusion: Generation Z Nursing Students prefer a feedback mechanism that provides immediate, constructive, and guided appraisal from their teachers or educators. Understanding the feedback preferences of Generation Z Nursing Students will provide better learning opportunities, and it can be utilized in formulating appropriate feedback strategies in the nursing curriculum.

Key Words: Conjoint Analysis; Feedback Preferences; Generation Z; Nursing Students.

Introduction

A performance-based, student-centered approach should be implemented in the curricular design and teaching strategies, with emphasis on what the learners should know, understand, and demonstrate and how to adapt to future life roles. The success of this approach, as emphasized in OBE strategy, is largely dependent on the students' accountability to take responsibility for their learning and utilizing cooperative learning (Darling-Hammond, Flook, Cook-Harvey, Barron, & Osher, 2019). Therefore, courses should provide experiences that students may encounter in the real world.

Cognizant that feedback can foster better learning among Generation Z Nursing Students, it is imperative to understand their feedback preferences to maximize the learning opportunities to achieve intended learning outcomes and to establish a more efficient student-educator learning relationship.

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Thus, this study primarily aims to determine the feedback preferences of Generation Z Sophomore Nursing Students in the clinical skills laboratory procedures. Specifically, the study will identify preferred attributes in the feedback experience to allow educators to develop an appropriate mix of the student preferences and educator's preference to maximize the learning opportunities.

Research Design

The study utilized conjoint analysis to determine the feedback preferences of Generation Z Sophomore Nursing Students on four attributes: timing, type, method, and source of feedback. Conjoint analysis characterizes an attribute with various levels or degrees according to the choices or preferences of respondents on these different levels (Orme, 2010). This design determines the joint effect of the levels of two or more attributes of stimuli on the total evaluative judgments of a set of stimuli (Rao, 2011). In this study, the identified attributes included *timing*, *type*, *method*, and *source* of feedback which were ranked by the respondents to understand their preferences. Eligible respondents to ascertain the readability of the instruments and to identify administration issues with the orthogonal cards.

Consent to Participate and Voluntary Participation

The Researcher secured written informed consent from all respondents, under no form of coercion, after providing full disclosure about the study's background, purpose, procedures, risks, and benefits, expected participation, and respondent's research rights. The Researcher also emphasized the respondent's right to withdraw participation at any point in the study.

Result, Analysis and Discussion

Table 1 Conjoint Analysis of the Feedback Preferences of Generation Z Sophomore Nursing Students ($N = 274$)			
Attributes and Levels	Part-Worth Utilities	Standard Error	Importance Values
Timing			22.37%
Immediate	0.66	0.18	
Delayed	-0.66	0.18	
Type			43.85%
Reinforcing	1.01	0.24	
Constructive	1.11	0.24	
Corrective	-2.13	0.24	
Method			17.93%
Demonstrate	0.01	0.24	
Guide	0.19	0.24	
Question	-0.20	0.24	
Source			15.85%
Teacher	0.59	0.18	
Peers	-0.59	0.18	

Pearson's $r = 0.99, p = 0.0001$ Kendall Tau = $0.83, p = 0.001$
 Kendall Tau for Holdouts = $1.00, p = 0.021$

It can be gleaned from the Table-1 that in terms of the timing of feedback, respondents preferred immediate feedback (utility = 0.66, SE = 0.18) and did not prefer delayed feedback (utility = -0.66, SE = 0.18). The result may be explained by the nature of Generation Z of being impatient. Generation Z typically wants to know right away the Instructor's comments and criticism on how they perform in a lesson or skill. This result is in congruence with those of Guthrie (2018) who posited that people in Generation Z rarely wait for anything because of the fast technology they have witnessed. Thus, having no patience to deal with delayed activities. Although impatient, Generation Z may use this energy to change the world. Additionally, Generation Z may have preferred immediate feedback because it is ideal timing to make their learning more meaningful and beneficial for effective acquisition and retention of information. Immediate feedbacks provide a basis for correcting mistakes or misinterpretations a student may have gained during instructions (Kehrer, 2013). In this way, the outcomes are more efficient since mistakes and false beliefs can be corrected quickly. In contrast, delayed feedback was least preferred because evaluations are provided hours or days after the learning task (Shute, 2008), making feedbacks less efficient. According to Kehrer (2013), delayed feedback can still make learning better; however, it may cause difficulty among students and make their future performance more inefficient. Furthermore, the longer the gap between the activity and the feedback, information retention becomes lesser thus, the achievement of intended learning outcomes becomes low (Kaul, Gong, & Guiton, 2014).

On a separate note, results indicated that in terms of the type of feedback, the most preferred type was constructive feedback (utility = 1.11, SE = 0.24) followed by reinforcing feedback (utility = 1.01, SE = 0.24), while corrective feedback was least preferred (utility = -2.13, SE = 0.24). This result shows that Generation Z readily accepts constructive and reinforcing comments about their performance rather than be corrected. A constructive type of feedback was most preferred since it is a supportive feedback approach that helps identify solutions to areas of weakness. Moreover, constructive feedback provides an unbiased appraisal of performance as they occurred intending to increase knowledge and skills by avoiding errors. Chicca & Shellenbarger (2018) posited that members of Generation Z are pragmatic and are not bound by structure instead, they are adaptive and flexible to learning. As such, this generation of students requires a transparent, immediate, and supportive approach when the rationale for teaching decisions is discussed. To add to this, constructive feedback strengthens good performance, delineates poor performance, provides individual action plans, motivates learners, and inspires and promotes student learning.

Notably, reinforcing feedback was less preferred than constructive feedback since this type of feedback approach tends to be repetitive. Dabell (2018) even affirmed that to maintain motivation and to interact with Generation Z students, educators must vary the types of positive reinforcements instead of using similar or old approaches. If students hear messages repeatedly, the messages lose their values and impact thus, negatively affecting learning outcomes. Therefore, positive reinforcements must be provided to those students who go beyond expectations, go the extra mile, or perform outstandingly. Behavioral theorists such as Hall, Guthrie, Thorndike & Skinner even focused on the role of reinforcement in motivating an individual to behave in certain ways. Positive feedback can just be as simple as saying, "*great job*" or as passing comment to someone who did a great job, or it can also be more comprehensive and planned. Dabell (2018) also noted that good behaviors should not be rewarded. Instead, expected behavioral hard work and the extra mile of excellence should be encouraged with a goal to give timely encouragement to make the behavior happen again. Results also indicated that a corrective type of feedback was least preferred among the respondents

which can be attributed to the feelings of humiliation and inferiority of being corrected in front of peers. With corrective feedback, students feel intimidated and develop lower self-esteem and confidence.

Providing feedback is a difficult and challenging task but is essential to help students be successful (Natesan, Stehman, Shaw, Story, Krzyzaniak, & Gottlieb, 2019). Although providing the appropriate feedback is a difficult and challenging task, educators must endeavor to give students proper feedback to help them with their learning outcomes (Natesan et al., 2019). Hence, feedbacks should not only encompass the correction of mistakes, but also the provision of an assessment of how well a student has done. Cognizant that the nursing profession deals with patients' lives, educators must correct a student's mistake. The traditional method of education even suggests that corrective feedback is the best approach to influence a learner's learning. Yet, this feedback method should be carefully considered when motivating Generation Z Nursing Students noting that this generation of students, corrective feedback distracts them and may lead to poorer performance, low self-esteem, and more errors.

As presented in the Table-1, results indicated that the most preferred method of feedback was the guided feedback method (utility = 0.19, SE = 0.24) while the question method was least preferred (utility = -0.20, SE = 0.24). This result may be explained by the students' belief that the Guide's feedback method can strengthen their executive functioning skills, provide the strategies they need to succeed, and help them understand and focus on proper skill performance. Alken, Tan, Luursema, Fluit, & van Goor (2013), even noted that this feedback method helps students learn how to manipulate and apply the new concept they have learned in real-world scenarios or demonstration during guided practice. With guided feedback, educators can immediately direct the students and help them understand and focus on the skills they need to learn. Hattie & Yates (2014) even pointed out that students are disinterested in previous errors but clamor for guidance with what they must do in the future.

Results also noted that the demonstration method of feedback was less preferred than the guided method of feedback. In demonstration feedback, students are taught the processes and techniques needed for a task. It artistically allows students to relate and to act upon the ideas behind the skills demonstrated by an educator (Holt, 2008). The direct demonstration approach is an effective method of instruction, especially when students can repeat the procedure. As such, students find it easier to apply the new knowledge step-by-step in the field (Corpuz & Salandanan, 2015). However, the question method of feedback was least preferred, therefore, instructors must have a clear intent for questioning their students and must ask them the right questions to facilitate the learning and thinking processes of students (Boyd, 2015).

Lastly, the results presented in the Table-1, elucidated that Generation Z sophomore Nursing Students prefer their teachers as the source of feedback (utility = 0.59, SE = 0.18) rather than their peers (utility = -0.59, SE = 0.18). This result may be explained by the students' perception that their teachers or educators are the only sources of authority who are competent enough to give suitable comment, unlike their inexperienced peers. Tsu & Hue (2000) noted that students prefer the teacher feedback mechanism than peer feedback since teachers are qualified to provide the students with useful comments. This notion is particularly true among Generation Z Sophomore Nursing Students who view their teachers and educators as their competent and experienced guide in their clinical practice. On the contrary, respondents did not prefer the peer feedback mechanism since they feel that it is the teacher's responsibility to provide an appropriate critical appraisal of their performance and that their peers do not have the necessary ability to provide a useful evaluation

(Pearce, Maulde, & Baik, 2009). Moreover, Saito & Fujita (2004) reported that there are several biases with peer feedback such as friendship, reference, purpose, and collusion (lack of differentiation) biases. To add to this, Generation Z student feels humiliated when a peer provides the feedback since they are an unreliable source of information and perceived the feedback of their peers as ignorant sharing.

Focusing on the different attributes of feedback, results showed that the most important attribute was the type of feedback (43.85%), followed by the timing (22.37%) and method (17.93%) of feedback. The source of feedback (15.85%), however, was considered the least important attribute. The type of feedback, unlike other feedback attributes, has a more defined feedback reference which encourages and motivates students to learn. Moreover, the type of feedback mechanism employed by educators helps strengthen good performance, delineate poor performance, and offer positive reinforcements to a student who excels beyond the set expectations. Moreover, a good feedback mechanism must be timely, specific, supportive, relevant, informative, accurate, and understandable.

(Hamid & Mahmood, 2010). However, according to Zehra (2015), poor feedback results in a dismissive and defensive attitude thus, students become apprehensive and less receptive to the educator's appraisal.

In general, feedback is a cornerstone of effective teaching, and it can improve a student's clinical performance (O'Mara, McDonald, Gillespie, Brown, Miles, 2014). Nursing Students tend to be high-performing achievers who may experience failures because of the rigors of nursing school. However, positive, constructive, and engaging feedback can enhance their learning. On the other hand, an absent, ambiguous, and inconsistent feedback approach can impede student learning (Gilies, Gilbert, & McNeil, 2014; Haghani & Fakhari, 2014).

Conclusion

Generation Z Sophomore Nursing Students prefer a feedback mechanism that provides immediate, constructive, and guided appraisal from their clinical instructors or educators. Student preference and educator approaches should appropriately blend to promote optimized learning opportunities among generation Z Nursing Students.

From among the identified feedback attributes, giving constructive feedback is the most important attribute of feedback. When an Educator provides constructive feedback, it fosters learning and improved skills acquisition because it reflects genuine concern that students can recognize that can increase motivation to learn.

Understanding feedback preference is not the only determinant of learning, however, Educators must utilize feedback preferences in carefully designing and implementing student learning activities to promote optimal learning among Generation Z student

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Holistic Learning—What and How

Dr. Mamta Aggarwal

Abstract

Pedagogues keep on making efforts to improve the curriculum transaction and try to optimise students' achievement. Various Educational committees, the world over, suggest that learning should be holistic. They point out that mere learning the course-contents is grossly inadequate and attempts should be made to make education wholesome and students should be prepared to attain holistic learning so that they become ideal citizens and make their lives more meaningful as individuals and as members of the society. They should be prepared for interconnectedness and wholeness. It fosters connections between subjects, between learners through various forms of community. It generates a balance between content and process, learning and assessment, and analytic and creative thinking. This article includes the different components of holistic learning, viz. home, school, environment, community and society at large. It goes on to find ways and means how the students attain the wholesome learning.

Key Words: Holistic Learning, Holistic Education, interconnectedness, Dynamic Balance, Environment, Community,

Introduction

Whenever the term – 'Learning' occurs, it is, usually linked to 'learning the course-contents'. And it is also a fact that the students, after successfully learning the course contents, do well in their examinations and many of them are able to get good jobs or engage themselves in some profession or business and lead a comfortable occupational life. A few questions arise – Do such persons lead a good family life; are they well fit in the society; do they enjoy good health; do they fulfil the requirement of national prosperity, etc.? The apt answer is – 'No, only a few'. If a person is not comfortable in any of the segments of society, viz. home, school, community, society at large, work-place environment, etc., he/she will remain incomplete in some or the other aspect of his/her life. This leads us to the concept of Holistic Learning.

Concept of Holistic Learning

The concept of Holistic Learning can be found in the works of some educationists, like John Dewey, Maria Montessori and Vasily Sukhomlinsky. Late in the 20th century and into the twenty-first century, the concept of holism became more popular. In India also, the concept of Holistic Learning is not new. Emphasis used to be laid on this learning since ancient times. If we recall the times when gurukuls used to be considered as an effective source of imparting education, *Gurus* used to take care of students' Holistic Learning. At *Gurukuls*, attempts used to be laid to offer Holistic Learning through an integrated set of learning experiences that addresses the students' essential needs of Body, Mind, Heart, and Spirit. The emphasis used

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to be on professional, social, religious and spiritual learning. The *Gurukul* system resulted in the all-around development of the students.

The Holistic Learning, in the present era, is not confined to acquiring core curriculum that is transacted in schools, as also in institutes of higher learning. It is a wider concept and includes what a person is expected to learn from home, educational institutes, environment, community, workplace and society at large. All the man-making ingredients, when triggered and enter a person's body, mind and spirit, constitute the 'Holistic Learning'. All this turns a person into a whole man or an all-rounder.

Holistic Learning implies that children will grow in the development of their intellectual, mental, physical, emotional, and social abilities so that they are capable of meeting the demands and challenges of everyday life.

UNESCO (2013) defines Holistic Learning as "an approach that seeks to fully activate all aspects of the learner's personality (intellect, emotions, imagination, body) for a more effective and comprehensive learning."

The concept of Holistic Learning has been analysed comprehensively given through the following definitions given in <http://astralsite.com/1110/HolisticLearning.html>

Holistic Learning is based on the principle of interconnectedness and wholeness. Thus, the student is seen as a whole person with body, mind, emotions and spirit.

Holistic Learning seeks to develop approaches to teaching and learning that foster connections between subjects, between learners through various forms of community.

Holistic Learning seeks a dynamic balance in the learning situation between such elements as content and process, learning and assessment, and analytic and creative thinking.

Holistic Learning is inclusive in terms of including a broad range of students and a variety of learning approaches to meet their diverse learning needs.

Holistic Learning and Holistic Education

Holistic Learning and Holistic Education are, usually, considered synonymous. But a thorough analysis of these concepts reveals how these are similar and how these are different. Holistic Education is a broader term and is curriculum oriented, while Holistic Learning is learner-oriented and lays down what a learner is expected to derive from the wholesome curriculum. The most ideal situation is when a learner should be able to run the entire gamut, consisting of all the learnable material provided by the different institutes, namely home, school, environment, community, etc., but this seldom happens due to the quality of acquired genes, differentiated family-bringing up, environmental effects and so on. So Holistic Education is the full pool of the knowledge available for each individual from different agencies, And Holistic Learning is the optimum drawing out from this pool of knowledge in an integrated manner with the help of home, schools, community, etc.

Holistic Education comprises of the desirable competencies to be nurtured by different agencies. These agencies play their role towards learners' achievements in the areas of cognitive, emotional, social, ethical, physical and intellectual needs in an integrated manner. These agencies, under Holistic Education, set the targets of learning competencies at the highest level and the learners, under Holistic Learning, are expected

to learn optimally according to their aptitudes, interests, intelligence, physical and mental competence, etc. A target, under Holistic Education for example, has been set that the learners should be able to exercise age-related courtesies, be interactive with environment, grasp curriculum content, attain post-school relevant knowledge, life skills, societal expectations and entrepreneurial skills and out of this broad pool of knowledge, they, under Holistic Learning, should be able to draw out the varied knowledge according to their respective mental and physical energies. The teachers and other stakeholders, while facilitating learning, should attach importance to the learners' interests and aptitudes. Thus, Holistic Education encompasses wide spectrum of expectations from the aforesaid agencies. Miller (1992) rightly says that "Holistic Education is not to be defined as a particular method or technique; it must be seen as a paradigm, a set of basic assumptions and principles that can be applied in diverse ways."

Sources and Process of Generating Holistic Learning

As has been stated in the preceding description that the major sources of generating Holistic Learning are home, school, environment, community and society, it is pertinent to identify the main components of Holistic Learning to be provided by each agency and the process to be followed in updating the learners with the required knowledge.

Home-related Learning

Home provides a big chunk of Holistic Learning. In fact, whatever is learnt at home becomes the basis of learning by a wholesome person. A wholesome person is expected to be well-versed in his/her cognitive, intellectual, social, aesthetic, physical, moral and occupational pursuits. The foundation of all these is laid at home.

Parents' first duty is to look after the physical growth of the child in the right perspective. A healthy and safe home environment is essential for promoting and protecting health and development during childhood. Children should be provided age-related balanced diet and it should be ensured that their hygienic, rest and play activities are properly looked after. Bronfenbrenner (2001) rightly says that "Children need stable, supportive social environments and access to resources within the home to enhance cognitive, emotional, and physical development." A proper health is the prerequisite for attaining other home-related areas of learning. The foundation of the right mode of treating and conversing among the family members, friends and relatives is laid at home. The age-appropriate identification and operation of home-gadgets also take place at home. Parents should develop children's habits of cleanliness, proper upkeep of different household products, salutation manners, etc. They should take their wards on visits to places like zoo, historical places, museums, planetariums, beauty & natural spots, etc. As the belief is that children's intelligence mainly grows up to the age of 14, all the aforesaid activities put a spur to it.

While infusing the home-related learning in children, parents should treat them as friends; only then children's natural nurturing will take place. Parents' dictatorial attitude will make them introverts with suppressed personalities. Forced learning may take place by such children, but they are not able to develop their emotional domain and they are not able to blossom as innovative thinkers. The quality of husband-wife relationship, interactive language used by them and the performance of other household duties have also a direct bearing on their wards.

School- related Learning

If proper nurturing has taken place at home, children's task of learning at school gets facilitated. The various national and state-level educational councils and boards of education provide the curricula for the different school classes. The educationists of the modern era make an attempt to develop the wholesome curricula for the schools. The curricula up to the 10th class, usually, consist of core subjects. The subjects at the senior school level are more focused and are studied, keeping the future options in mind, like pursuing of higher academic or professional or vocational courses.

Besides cognitive development, modern schools are supposed to take care of students' life skills, psychomotor skills, emotional competencies, social belongingness, physical well-being and looking forward to being useful members of the society.

For cognitive development, in different domains, teachers are expected to complete the curriculum transaction by employing the content-based strategies, like constructive and problem-solving strategies for learning the topics which can be based on students' previous knowledge, discussion method for the contents having pros and cons and so on. As the curriculum transaction proceeds, teachers should use the formative evaluation techniques suitably. In order to make the curriculum transaction effective, teachers should be competent enough to use the classroom management techniques effectively. Teachers should ensure that the components of various domains, viz, cognitive, affective and psychomotor should be taken due care of during the course of the curriculum transaction.

The life skills, nurtured at home, are further sharpened and multiplied and polished at school. Teachers play an important role in moulding and further strengthening students' life skills. The World Health Organization has defined life skills as, "the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life." UNICEF, UNESCO and WHO list the ten core life skill strategies and techniques as: problem solving, critical thinking, effective communication skills, decision-making, creative thinking, interpersonal relationship skills, self-awareness building skills, empathy, and coping with stress and emotions. Schools provide lots of opportunities for developing students' life skills when they attend their regular classes, during the morning assembly and when they participate in different co-curricular activities.

In order to make the school teaching wholesome, students are exposed to the entrepreneurial skills right from the middle classes in general and its depth increases in senior school classes. National Education Policy of 2020 (NEP) of India lays emphasis on developing entrepreneurial skills. It recommends that vocational education should be integrated with educational offerings in all institutions by choosing focus areas based on skills gap analysis and mapping of local opportunities will develop entrepreneurial competencies besides capacities and will go a long way to make vocational education a part of the larger vision of Holistic Education.

Teachers should keep on observing how the students are learning in the classrooms, labs, library, ground and elsewhere in the school compound. They should be well-versed about their students' interests, aptitudes, cognitive grasping and other life skills. The knowledge of all these will enable the teachers to prepare the students well for their future ambitions.

Value education is also an important component of Holistic Education. Teachers should imbibe values in students by presenting their own value-loaded model as it has rightly been said that values are caught, not taught.

Focusing on school-role towards students' holistic learning, NEP 2020 has suggested that curriculum content may be reduced in each subject to its core essentials, to make space for critical thinking and more holistic, discovery-based, discussion-based, and analysis-based learning. Regarding evaluation of students' achievements, NEP 2020 says that the aim of assessment in the culture of our schooling system should shift from one that primarily tests rote memorization skills to one that is more formative, is more competency-based, promotes learning and development for our students, and tests higher-order skills, such as analysis, critical thinking, and conceptual clarity.

Environment-related Learning

Environment further supplements and strengthens the children's home and school learning. Its positive components add to and the negative ones restrict the target of Holistic Learning. Besides the home and the school, Child's physical environment includes the outside noise, quality of outside buildings, layout of the streets & roads, prevailing climate, following of the rules and regulations of the recognised bodies, the type of relationships with the people in the vicinity, etc. Holistic Learning gets a positive support if the climate is child-friendly, the layout of the adjoining buildings, streets and roads is good and the people follow the rules and regulations established by the competent authorities. On the other hand, the toxins, pollutants, noise, crowding, adverse climate change, etc. are detrimental for child's growth. Floods, wildfires and other negative weather conditions destroy infrastructure and economies, and pose unique threats to young bodies and minds. In order to liberate the children from such environmental disorders, all concerned should take efforts to make the environment children friendly.

Besides the physical environment, children are influenced by their social environment also. Their social environment includes their family members, school mates & teachers and other people whom they observe and/or with whom they interact. Such encounters may be positive or negative. The positive interactions add to or strengthen their knowledge base; whereas the negative influences impinge upon their learning. Positive social environments develop the virtues of good qualities, like acceptance, kindness, forgiveness, etc. Contrary to this, negative social environment, like neighbourhood crime and gambling dens, drug-abuse, racial discrimination, etc. will have detrimental effect on one's Holistic Learning.

Community and Society- based Learning

The people, living in the same geographic place and having similar interests, are said to be part of a community. Society is a broader term and consists of different communities. According to MacIver and Page (1965), "Society is a system of usages and procedures, authority and mutual aid, of many groupings and divisions, of controls of human behaviour and of liberties."

Learning attained at home and school is to be complemented by the community and society. The internal school environment includes its structural components, psychological approach of the principal and the teachers, social interactions with the peers and teachers, etc. Students, to generate a Holistic Learning, have to extend such interactions to the various community sectors. They are expected to apply their classroom

knowledge to a real-world setting. They can make their learning further wholesome by applying their updated school knowledge by visiting historical monuments, museums, business complexes, art galleries, etc. Their knowledge may also be updated by inviting outside experts in different areas. Such encounters help in determining students' career paths also.

With reference to Holistic Learning, it is not required that the learners will be required to approach community and society literally; what is required is that the community and society-based learning should take place at home and in school under the guidance and cooperation of parents and teachers. The media and electronic gadgets, like computers, mobile phones, etc. are there to facilitate learning. Cleanliness, for example, is first learnt at home, environment and then from school. As the child comes in contact with the community, he/she can further realise the importance of keeping our environment clean through the locally adopted means. When he/she comes in contact with a larger society, like the videos from some advanced countries, he/she comes to know about the cleanliness instruments, segregation of dry and wet garbage, keeping garbage-drums at different places etc. In this way, Holistic Learning is gained by the learners.

Conclusion

Holistic Learning, for an individual learner, is the optimum learning derived from the holistic curricula, both hidden and explicit. The hidden or implicit components may not be in black and white, but these are the positive components and form part of Holistic Learning. The explicit components of the curricula constitute the different syllabi meant for different classes. The parents and the teachers have to be conscious of the fact that they have to optimize their children's Holistic Learning. They should try to update the children's learning from the pool of explicit and implicit curricula and each child's Holistic Learning will depend upon his/her capacity to learn based on his/her cognitive strengths, attitude, aptitude, intelligence, interests, facilities available, etc.

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Teaching Skills in Teacher Training: Theoretical and Factor Models

Hamed Ghaemi

Abstract

Training in skills requires implementing reliable tools allowing them to prove their development during teacher training. This research is aimed at assessing the psychometric properties of a measuring tool implemented when training teaching skills for physical education teachers and at proving whether its internal structure fits in the theoretical models reviewed in the literature. The research included 1104 undergraduate students (59.78% male and 40.22% female) from Spanish higher education institutions. A factor and exploratory analysis of the Teaching Skills in Physical Education Teacher Training survey was carried out for such a purpose. The results showed a good fit to the three-correlated model and some discrepancies regarding the skills of the theoretical models suggested by the literature. Implications for the teaching practice and the students' skill development are hereby discussed.

Key Words: Factor Analysis, Teaching Skills, Physical Education, Skills Assessment, Teacher Training

Introduction

The knowledge society claims for teacher qualification at all the different educational levels. After the Sorbonne Declaration (1998), higher education takes a Skills Approach. The teacher training institutions establish that prospective teachers should learn to know, live-in and be-in an ever-evolving society and school (Delors, 1996). This requires bringing the university closer to the society within the context of the new European Higher Education Area (EHEA) (OECD, 2016; Palmer et al. 2009).

In the international scene (Giroux, 2018, Laval and Dardot 2013, Muros and Fernández-Balboa, 2005); it has been questioned whether the teacher training institutions might have been aligned with neoliberal political interests. Often, the search for a greater connection between the university and the business demand seems to lead us to creating professional profiles according to financial demands. Bernstein (2001) advised on the situation arising from the economy and the cultural practices, as well as the sort of educational practices being replicated in the various educational scenarios. According to Apple (2000), both the teacher training institutions and the schools themselves ended up adjusting to the needs and interests of the neoliberal society.

Nevertheless, regarding the skills training in initial teacher training, Echeverría (2002) thinks there should be three levels of professionalization: learning to develop teaching tasks, acquiring and improving personal skills and knowing how to implement them in an integrated fashion within a context. For such purposes, personal and professional skills must be activated, strategically combining skills and abilities. Corominas et al. (2006) and Tejada and Navío (2005) also support the need for learning how to dynamically harmonize intellectual and practical skills combined with other personal and interpersonal ones during the theoretical- practical

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training, in order to allow prospect teachers to overcome uncertainty when social changes arise (OECD, 2016).

From a critical training perspective, the teachers' skills development must be linked to the social transformation (Laval, 2004; Ritzer, 2007), in order to train reliable teachers willing to commit themselves to the training of a citizenry (Sachs, 2016). In this regard, within the educational scenarios, there is a need for professionals with high capacities to take part in the teaching-learning processes and solve issues in a creative and ethical fashion (Evetts, 2013; Frey et al., 2019; Gluchmanová, 2017; Ribeiro and Amorim, 2020). Hence, it is necessary to train skills in novel teachers by seamlessly addressing their personal and professional capacities. Therefore Capitanescu-Benetti and D'Adonna (2020) and Perrenoud (2004) find mastering the teaching development skills are crucial for teacher training, as well as other interpersonal skills to learn how to involve students in the learning activities. Erhorn et al. (2020) and Silva et al. (2021) also encourage the development of training opportunities resulting in learning how to support students with specific learning needs by means of inclusive, interactive, and collaborative pedagogical sequences aimed at addressing diversity and different learning paces within the classroom.

Campos-Izquierdo and Martín-Acero (2016), and Tilbury and Wortman (2004) consider two types of skills for training novel teachers: **generic skills and specific skills**. Acquiring and developing them will require a disciplinary and transdisciplinary collaboration, which will overcome the traditional issue of balkanization or fragmentation of the existing knowledge inherent to the educational programmes for those novel teachers (Hargreaves and Fullan, 2014). The project Tuning Educational Structures in Europe (González and Wagenaar, 2003) arises from a methodology based on four pillars: a) generic skills; b) specific skills; c) the role of the ECTS system within the curricula; and d) the learning, teaching, assessing and performance roles to achieve quality. This skills training model means a benchmark for Europe regarding the design and academic organization of university degrees. For Spain, the design of higher education degrees lies on the Spanish National Agency for Quality Assessment (ANECA), which guides and monitors specific and generic teaching skills (De Miguel et al., 2005; González Maura and González Tirados, 2008). Specifically, in Initial Teacher Training in Physical Education (ITTPE) such teaching skills are organized at instrumental (including cognitive skills), interpersonal (relating to the capacity to express one's feelings, critical skills, and the capacity for self-criticism) and systemic (such as creativity or leadership) levels (ANECA, 2005a, 2005b).

In ITTPE, the development of instrumental skills enables to optimize the pedagogical capacity of prospective teachers by activating communicative, technological, and cognitive skills (Kirk et al., 2006; Romero et al., 2017). Changes observed in physical education teaching have evolved from positivist traditional training to constructivist and social-critical ones (Anderson and Krathwohl, 2001; Arends, 2012; Kelly, 2004; Kirk et al., 2006). Thus, new skills are included: cognitive skills in order to understand ideas and thoughts supporting the motor field; to take decisions and solve issues connected to the practice of physical and motor activities, as well as technological ones enabling the management of new tools and operating systems, both for the teaching practice and for collecting data and monitoring sport performance; and lastly, linguistic skills as the oral and written communication method for accessing knowledge arising from the different international scenarios.

Personal and interpersonal skills stand for affective-social abilities enabling success in social relationships resulting from collaborative work, the development of personal and group accountability, the ethical commitment and social skills (Hopkins and Ravindranath, 2007; Wright et al., 2021). Such abilities require

consensus, consultation and discussion capacities, problem solving and the search for solutions (Aririguzoh, 2022; Jafar, 2016), which are vital for organizing and leading educational institutions (Bourgonje and Tromp, 2011; Sánchez- Tarazaga, 2016). In the specific field of physical education, this is related both to the emotional body language capacity and the improvement of social skills connected to the sport activity where there is teamwork enabled by the social and ethical commitment promoted by such processes of interaction and social cooperation.

Systemic and integrative skills require awareness and knowledge to understand how the parts interrelate and integrate within a whole (Ceo-DiFrancesco et al., 2019). Combining understanding and knowledge enables the (teaching and learning) person to analyse how the parts of a whole interrelate and group with each other. In the case of body-expressive activities, students are encouraged to create, experiment, choose gestures and dynamic movements by the music in order to find ways to face challenges either individually or in group, with creative and innovative actions where the body self-awareness is present (Buck and Snook, 2018; De Bono, 2005; Harker et al., 2018). This triggers personal autonomy, self- efficiency to perform tasks and the capacity to solve problems (Hepplestone et al., 2016; Keller-Mathers, 2011). All this requires previously acquiring and mastering instrumental and personal skills. In this sense, the European Commission (2013) has called for the development of a teacher-training model incorporating such skills aimed at learning how to think, know, feel and act as a teacher.

Palacios-Picos, López-Pastor and Fraile Aranda (2019) in recent studies in ITTPE on the training of generic and specific skills for teaching physical education, point out that not all of them are equally present or valued in curricula programmes or assessment systems. As for Meier (2020), Moreno- Murcia et al. (2015), training teaching skills means developing capacities for planning learning, its development and implementation, the teacher performance and results assessment.

Despite the reviewed theoretical models guiding the teacher's skills training, there are no studies proving the validity of tools for measuring skills within the context of teachers' higher education. The polysemous concept of skill and the models suggested by the Tuning Project or the ANECA have not yet been empirically verified. Therefore, the purpose of this study was focused on assessing the metric properties of a measuring tool used in teaching skills training for Physical Education teachers and on verification of its suitability to the theoretical models suggested by Tuning and ANECA.

Method

Sample

This study involved 1104 undergraduates (660 male participants 59.78%, 444 female participants 40.22%) from 20 University Centres in 20 Spanish Cities. Out of them, 751 (68%) were undergraduates studying the fourth academic year of degree in primary education teacher with Special Mention in Physical Education (SMPE) and 353 (32%) were undergraduates studying the fourth academic year of Degree in Physical Activity and Sports Sciences (DPASC). The participants' selection was carried out by a non-probabilistic sample, taking universities belonging to a Red Nacional de Evaluación Formativa en Educación Superior (Spanish National Network of Formative Assessment in Higher Education) as the benchmark. The data collection was performed by duly trained teachers, with the participants explicit consent. The ethical rigor was guaranteed as established by the Ethics Committee of the University Researchers . Also, an informed consent form was

signed by all participants, who, in turn, were not only informed, verbally and in writing, about the purposes and the procedure of the study, but also were ensured anonymity and that the data would exclusively be used for the purposes of the investigation.

Tool

The Questionnaire of **Perception of Teaching Skills in Physical Education** (Palacios-Picos, et al., 2019) made up of four subscales relating to teaching skills and three subscales relating to transversal skills was used. The initial set of items was reviewed by eight expert judges specialised in ITTPE, both for primary physical education and the degree in DPASC, with a minimum of 15 years of experience in ITTPE and renowned prestige as teachers and researchers. After reviewing and analysing the experts' appraisals, items were grouped, removed and changed, resulting in a total of 21 items out of the 24 initial ones.

This questionnaire has proved sufficient evidence regarding reliability and validity (Palacios-Picos et al., 2019) when talking about teaching skills, although the metric properties of the transversal skills segment have not been analysed. Those 21 items relate to the perception students have of the help received by means of the subjects taken for each degree in order to develop every transversal skill included in them. The first subscale is made up of nine items relating to **personal and interpersonal skills** (e. g. "Ability to analyse and summarise", "Ability to organise and plan", "Teamwork", "Abilities in interpersonal relationships"). The second subscale is made up of seven items on **skills for managing teaching-learning processes** (e. g. "Organising and encouraging learning settings", "Devising and implementing attention to diversity strategies"). The third subscale refers to **instrumental skills** and has five items (e. g. "Knowledge of a foreign language", "Computer knowledge related to study"). The participants articulated their level of agreement with regard to each of the statements in a five-point Likert scale (0 = not at all and 4 = a lot).

Data Analysis

The analysis process was developed following two stages. At **Stage 1** the initial sample was divided into two random subsamples of $n = 552$ participants each and performed an exploratory factor analysis (EFA) with respect to the polychoric correlations matrix among the items (Hair et al., 2010) assessed taking into account the replies of the first half of the sample ($n = 552$).

After verifying the data suitability for the factor analysis with the Kaiser Meyer Olkin (KMO) test and Bartlett's test of sphericity ($KMO = .94$; Bartlett's test of sphericity, $\chi^2(276) = 1296.07$; $p < .001$) an optimised parallel analysis was carried out (Timmerman & Lorenzo-Seva, 2011).

At stage 2, three models were assessed by the confirmatory factor analysis (CFA) with respect to the polychoric correlations matrix obtained through the second random subsample ($n = 552$): **the single-factor model, the two-correlated factor model and the three-correlated factor model**. Reliability of measurements (internal coherence, reliability of individual indicators, construct reliability and measurement error) was assessed on the last model. All the models were assessed through diagonally weighted least squares with respect to the polychoric correlations matrix using the R 3.6.3 software (R Core Team, 2021) and the Lavaan package (Rosseel, 2012).

Results

The aim was to verify whether the grouping of systemic, instrumental and personal skills carried out by the Tuning study matched the exploratory and confirmatory analysis of this work.

Stage 1. Exploratory Factor Analysis

The optimised parallel analysis performed on 1000 random replications obtained an optimal solution of a factor when considering the 95th percentile of the random variance ratio and of three factors when considering its mean value. The three-factor selected solution explains the 52% of common variance. Table 1 shows the factor analysis results. **The first factor**, with an polychoric correlations value of 8.87, explains the 21% of common variance and has been named as *Personal and Interpersonal Skills* (F1). It is made up of 9 items with their contents being related to individual skills concerning being able to express feelings, having criticism and self-criticism capabilities, having social skills related to interpersonal skills, developing the ability to work in teams or expressing social or ethical commitment. These skills usually promote social interaction and cooperation processes. **The second factor**, with an eigenvalue of 1.37, explains the 18% of common variance and has been named as *Teaching-Learning Process Management and Planning* (F2). It groups 7 items related to various organisational and managing skills for teaching-learning processes. **The third factor**, with an eigenvalue of 1.03, explains the 13% of common variance and refers to the *Instrumental Skills* (F3). It is made up of items related to technological skills concerning the use of the new technologies and information management, as well as linguistic skills such as oral and written communication or the knowledge of a foreign language.

Table 1		Exploratory Factor Analysis. Saturations, Communalities and Explained Variance.			
Factor 1. Personal and Interpersonal Skills		F1	F2	F3	h2
1.25	Analysis and synthesis capabilities	.46	.22	.08	.39
1.26	Organisational and planning abilities	.52	.20	.00	.46
1.30	Teamwork	.62	.01	.10	.33
1.31	Interpersonal relationship skills	.56	.15	.04	.48
1.32	Critical thinking	.88	.12	.04	.69
1.33	Ethical commitment	.66	.07	.17	.53
1.34	Autonomous learning	.82	.14	.02	.55
1.35	Adjusting to new situations	.67	.10	.04	.59
1.36	Creativity	.48	.22	.00	.43
Eigenvalue: 8.87; Explained common variance: 21%; Ordinal Cronbach's $\alpha = .89$; McDonald's $\omega = .89$					
Factor 2. Teaching-Learning Process Management and Planning					
1.23	Knowing educational institutions organisational features	.03	.43	.23	.39
1.24	Developing suggestions for changing the educational reality	.10	.52	.13	.48
2.1	Organizing and encouraging learning settings		.69	.17	.61
2.2	Managing learning progress		.78	.16	.65
2.3	Devising and implementing attention to diversity strategies		.78	.01	.51
2.4	Involving students in their learning and the institution's life		.76	.04	.64
2.7	Informing and involving families		.49	.46	.56
Eigenvalue 1.37; Explained common variance: 18%; Ordinal Cronbach's $\alpha = .87$; McDonald's $\omega = .89$					

(Continued)

Factor 3. Instrumental Skills		F1	F2	F3	h2
1.28	Knowledge of a foreign language		.11	.58	.38
1.29	Computer knowledge related to study		.20	.82	.59
2.6	Taking part in institution's management		.42	.51	.59
2.8	Using Information and communications technology		.13	.78	.57
2.9	Addressing the profession's duties and ethical dilemmas		.16	.48	.53
Eigenvalue: 1.03; Explained common variance: 13%; Ordinal Cronbach's $\alpha = .83$; McDonald's $\omega = .86$					

Stage 2. Confirmatory Factor Analysis

At the second stage, the goodness-of-fit of three one-, two- and three-factor models was compared. The result was very favorable to the three-correlated factor model. As shown in Table 2, the improvement of fit in model 3 with respect to the rest of the models, was conclusive.

Table 2 Comparison of Fit Indexes for the Three Models Considered									
Model	χ^2 (df)	$\Delta\chi^2$ (Δ df)	p($\Delta\chi^2$)	RMSEA	Δ RMSEA	CFI	Δ CFI	TLI	Δ TLI
1	1106.63 (189)	-	-	.066	-	.96	-	.963	-
2	732 (188)	374.43(1)	< .001	.051	.015	.98	.013	.978	.015
3	645.59 (186)	86.81(2)	< .001	.047	.004	.98	.003	.981	.003

Note. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker- Lewis Index; df = Degrees of Freedom; Δ (CFI, TLI, RMSEA) = Changes in Fit with Respect to the Previous Least Restrictive Model.

Overall, ordinal alpha reliability results (Gadermann, et al., 2012) of $\alpha = .94$, and McDonald's omega (McDonald, 2013; Revelle and Zinbarg, 2009) of $\omega = .95$ were obtained. Both values were considered as excellent. As for the first subscale, internal consistency indexes ($\alpha_1 = .89$; $\omega_1 = .89$) were good. Regarding the second subscale, reliability indexes ($\alpha_2 = .87$; $\omega_2 = .89$) were good. Likewise, regarding the third subscale, reliability values ($\alpha_3 = .83$; $\omega_3 = .84$) were adequate.

The composite reliability (CR) analysis of every latent variable provides a construct reliability indicator. The CR was higher than .70 ($CR_1 = .86$; $CR_2 = .85$; $CR_3 = .80$) for all instances. This means the three subscales' indicators, when taken together, are a reliable measurement for the construct. As for the average variance extracted (AVE), values of AVE₁ = .51 for the first latent variable, AVE₂ = .52 for the second latent variable, and AVE₃ = .51 for the third latent variable were obtained. Since the average variance extracted was higher than .50 for all instances, it was concluded that a substantial amount of the indicator's variance was explained by the construct when compared to the measurement error. Overall, all these indicators meant reliability signs in the operationalisation of the three latent variables making up the scale.

The single-indicator's reliability was also simultaneously analysed. Each indicator's reliability could be verified by R^2 values, which show a variance ratio for each indicator explaining the latent variable, where high R^2 values meant the indicator was reliable. The most reliable indicator of Factor 1 (Personal and Interpersonal Skills) was item 1.35 (*Adjusting to new situations*; $R^2 = .55$) and the least reliable was item 1.30 (*Teamwork*; $R^2 = .19$). As for factor 2 (Teaching-Learning Process Management and Planning), the most reliable was item 2.4 (*Involving students in their learning and the institution's life*; $R^2 = .53$) and the least reliable item was 1.23 (*Knowing educational institutions organisational features*; $R^2 = .32$). Finally,

regarding factor 3 (Instrumental Skills), the most reliable was item 2.9 (*Addressing the profession's duties and ethical dilemmas*; $R^2 = .6$) and the least reliable was item 1.28 (*Knowledge of a foreign language*; $R^2 = .3$). With regard to convergent validity evidence (e. g. indicators for each latent variable share a high ratio of common variance), as shown in Table 3, (a) the factorial loads for all the indicators were significant; (b) all of them, except one, were higher than .5; and (c) the saturations's average variance of the items for each factor were all higher than .5, which can also be considered as a convergent validity indicator.

The discriminant validity evidence showed that all of the constructs analysed are unique and different to each other. In order to verify whether there is discriminant validity evidence, three approaches (Hair et al., 2010) were used. Firstly, the correlation between each pair of factors was set to 1, and the fit of the resulting models was compared to the initial three-correlated factor model's fit. The results showed that this model was significantly higher than the models where the correlation between F1 and F2 ($\Delta\chi^2(1) = 3272.3$, $p < .001$), between F1 and F3 ($\Delta\chi^2(1) = 3066.8$, $p < .001$), and between F2 and F3 ($\Delta\chi^2(1) = 2504.4$, $p < .001$) was set to 1, as shown in Table 4.

Table 3 Three-Correlated Factor Solution Assessments

Latent Factor	Indicator	B	SE	Z	p-value	Beta
F1	1.25 Analysis and synthesis capabilities	1	0	-	-	0.68
F1	1.26 Organisational and planning abilities	0.9	0.03	34.89	0	0.65
F1	1.30 Teamwork	0.6	0.02	28.47	0	0.45
F1	1.31 Interpersonal relationship skills	0.97	0.03	34.82	0	0.66
F1	1.32 Critical thinking	1.02	0.03	35.87	0	0.71
F1	1.33 Ethical commitment	1.06	0.03	35.43	0	0.68
F1	1.34 Autonomous learning	0.87	0.03	33.23	0	0.61
F1	1.35 Adjusting to new situations	1.09	0.03	36.4	0	0.73
F1	1.36 Creativity	1.06	0.03	34.64	0	0.64
F2	1.23 Knowing educational institutions organisational features	1	0	-	-	0.61
F2	1.24 Developing suggestions for changing the educational reality	1.14	0.03	34.21	0	0.67
F2	2.1 Organising and encouraging learning settings	1.01	0.03	34.58	0	0.7
F2	2.2 Managing learning progress	1.02	0.03	34.66	0	0.72
F2	2.3 Devising and implementing attention to diversity strategies	1.01	0.03	33	0	0.62
F2	2.4 Involving students in their learning and the institution's life	1.19	0.03	35.2	0	0.74
F2	2.7 Informing and involving families	1.27	0.04	33.66	0	0.64
F3	1.28 Knowledge of a foreign language	1	0	-	-	0.54
F3	1.29 Computer knowledge related to study	1.15	0.04	31.75	0	0.65
F3	2.6 Taking part in institution's management	1.29	0.04	32.67	0	0.73
F3	2.8 Using Information and communications technology	1.18	0.04	31.68	0	0.66
F3	2.9 Addressing the profession's duties and ethical dilemmas	1.24	0.04	32.88	0	0.75

Secondly, the confidence interval test (Anderson and Gerbing, 1988) showed that the confidence interval of correlations between factors did not include 1 ($pF1-F2 = .778$ [.762 - .794], $SE = .008$; $pF1-F3 = .703$ [.687 - .719], $SE = .008$; $pF1-F3 = .835$ [.817 - .853], $SE = .009$). Thirdly, it was confirmed that the HTMT ratio (Henseler et al., 2015) of correlations between indicators of different factors (heterotrait-heteromethod correlations – HT) and between the correlations of the same factor (monotrait-heteromethod correlations – MT) was lower than .9 ($F1 - F2$, $HT / MT = .771$; $F1 - F3$, $HT / MT = .693$; $F2 - F3$, $HT / MT = .835$).

Table 4 Comparison of Fit Indexes for the Four Three-Factor Models									
Model	χ^2 (df)	$\Delta\chi^2$ (Δ df)	$p(\Delta\chi^2)$	RMSEA	Δ RMSEA	CFI	Δ CFI	TLI	Δ TLI
3 Factors	645.59 (186)	-	-	.047	-	.983	-	.981	-
1 (F1-F2)	3917.69 (187)	3272.3(1)	< .001	.134	.087	.865	.118	.848	.133
2 (F1-F3)	3712.69 (187)	3066.8(1)	< .001	.131	.084	.872	.111	.856	.125
3 (F2-F3)	3149.76 (187)	2504.4(1)	<.001	.120	.073	.893	.09	.879	.102

Note. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker- Lewis Index; df = Degrees of Freedom; Δ (CFI, TLI, RMSEA) = Changes in Fit with Respect to the Previous Least Restrictive Model.

Discussion

The results obtained showed an integral formative view of skills in physical education teacher training, where three dimensions developing teaching skills were aligned with ANECA (2005a, 2005b). The exploratory factor analysis showed an in-training skills three-factor structure. With regard to **the first factor** concerning personal and interpersonal skills, it was made up of nine items integrating a logic unit around two dimensions of skills development: (1) attributes of the person, such as their readiness to develop autonomous learning, critical thinking, ethical commitment or the ability to contribute with creative, alternative and innovative solutions, as well as being able to adjust to new situations, by implementing analysis, synthesis, organisation and planning abilities. All of them depend on the participant's involvement and allow them to develop and extend to the classroom the necessary interpersonal skills and abilities to handle teamwork and social skills (Wright et al., 2021). The existence of critical thinking and ethical commitment evince that the basic skills training model teaches self-awareness skills in order to adjust to different situations and settings by implementing creative, innovative and flexible ideas to the necessities of the persons in the changing contexts, as recommended by Evetts (2013), Frey et al. (2019), Laval (2004) and Ritzer (2007). The integrated development of personal and interpersonal skills requires a training model structured into logic teaching units used for dynamising, combining and practicing them (Echeberría, 2002; OECD, 2016). Some of those skills included in Tuning (González and Wagenaar, 2003) are understood when combined as critical to know, understand, become aware and thrive in a working environment, promoting self-knowledge and collaborative relationships with others.

With regard to **the second factor**, which is related to the skills needed to manage and develop learning processes, it is made up of seven items following two training approaches:

(1) knowing the functioning and organisation of institutions and the educational reality itself and (2) planning and developing the learning process by leveraging, boosting and generally managing learning progress. Both approaches address a teacher skill training macromodel recommended by the European Commission (2013), urging to teach skills for learning to think, know, feel and act as teachers, by integrating teaching knowledge, skills and attitudes to manage both the institution and the classroom. This view highlighted the need for knowing the organisation and actual functioning dynamics of the educational institutions (Bourgonje and Tromp, 2011) in order to get professionally involved in institutional projects (Sánchez- Tarazaga, 2016). This factor also incorporated skills and abilities for planning and managing the students' learning process, by boosting and monitoring their progress in the classroom, developing pedagogical strategies and helping

students that are most in need of assistance (Erhorn et al., 2020). According to Lukas et al. (2014), Moreno-Murcia and Sánchez-Latorre (), Perez-González et al. (2019), and Yew and Wang (2016) these skills are critical and transversal to quality teacher training models. Besides, basic training seems to address the development of skills aimed at involving students in developing their own learning, as well as in the institution's life, by placing value in informing and involving families, calling for communication, dialogue and discussion with them, as well as involving them in the learning of their own children around an open and welcoming educational community they all belong to (Capitanescu-Benetti and D'Adonna, 2020).

With regard to **the third factor**, that is instrumental skills, it includes various skills around the technological mastering and knowledge of languages in order to greatly contribute to institution's management, by allowing, for instance, to manage internal administrative issues or resources, or undertake different professional roles (teaching, administrative, managing and institutional roles) along with other teachers and organisations in order to develop national and international transdisciplinary shared projects (Perrenoud, 2004). In line with Tuning (González and Wagenaar, 2003) and ANECA's instructions (2005a, 2005b), communicative, technological and cognitive instrumental skills allow one to better understand the educational reality and transform it. Technological skills for teacher training as a way to access and handle information (Prat and Camerino, 2012; Prat et al., 2013; Romero et al., 2017) are especially highlighted. It also includes the professional duty of understanding and addressing challenges and ethical dilemmas inherent to the profession, even against the educational system itself and its misalignments, and of advocating for the socially accepted great values such as the respect for human dignity and gender equality (Gluchmanová, 2017; Ribeiro and Amorim, 2020).

The integrated approach of the Physical Education skills teacher training presented in this study is also observed in the studies carried out by Hortigüela-Alcalá et al. (2018), where various skills, such as creative skills, autonomous work, inter- and intrapersonal skills, reflective skills, critical skills, communicative skills and metacognitive skills are included.

Besides, according to Meier (2020) and Moreno-Murcia et al. (2015), the ability to develop pedagogical strategies in the classroom are vital to drive the students' autonomy, increase their active development and promote a classroom atmosphere facilitating efficient teaching- learning processes (Aelterman et al., 2014; Cheon and Reeve, 2015; Perez-González et al., 2019; Yew and Wang, 2016).

There has been sufficient evidence contributing to support that the three subscales making up the measuring tool have an adequate internal consistency, enough reliability for single indicators and an appropriate reliability for the construct. Regarding validity, there has been sufficient evidence of convergent and discriminant validity. However, it would be advisable to study the potential existence of a strong common factor, as suggested by the correlation values among the three latent variables and the results of the optimised parallel analysis.

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Economic Implications of School Dropouts in Nigeria

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Abstract

The menace of school dropouts is becoming a global issue that needs to be kept in check so as to improve on educational attainment. This work centred on school dropouts and implications on the economy. The area of study was the entire Cross River State of Nigeria where twelve schools were randomly sampled, four each from the three senatorial zones. Both secondary and primary data were employed for the research, the secondary data was obtained from the various school admission registers and entry schedules while the primary data was generated through the use of the questionnaire. The results show a progressive increase in the total number of dropouts especially in the Girls secondary school. Schools located in the border town and in the community ravaged by inter-tribal war also experienced surges in the number of dropouts. It was recommended among other things that all stakeholders involved in the education industry must play their role. Parents who are the first stakeholders in this industry as well as the first teacher and role models to the children should show more concern in their children/ward's interest in education and finance their education.

Keywords: Dropouts, Economy, Students, Education

Introduction

Education is a key to developing the economic, social, scientific and political institutions of any nation, therefore access to education should be at the centre of the development agenda of most developing countries. Each year, a significant number of Nigerian students terminate their studies without sitting for the examination for which they had been preparing or enrolled for (Oyinloye 2015). These are the dropouts, students who fail to complete a school or secondary school course. But despite the very abundant evidence on the benefits of economic and social value of educational attainment, many students still drop out of school for one reason or the other.

In a competitive economy; requirements of knowledge which includes human capital, skills, innovation and technology cannot be over emphasized. Formal education is a key to success because people with high degrees of literacy, numeracy skills, ability to analyse and adapt have more prospects of getting employment and succeed professionally. This is why Arowolo, Arowolo & Adaja, (2016) emphasized that education is the foundation of a nation's economic well-being and the prerequisite to sustaining the quality of life, so dropping out of school therefore should not be encouraged because it simply does not pay. This work centers on secondary school dropouts in Nigeria with specific interest on the remote causes and the economic

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implications. It should be noted that it takes six years (all other things being equal) to round up secondary school education in Nigeria resulting to awards of certificates either from West African Examination Council (WAEC) and National Examination Council (NECO), the two bodies officially recognized to conduct examinations for secondary school leavers. Despite the fact that WAEC and NECO certificates may not necessarily be enough to gain meaningful employment in diverse areas of the economy, it is a prerequisite for admissions into tertiary institutions and also accepted as a minimum requirement to get nonprofessional jobs and placements in the lower cadres of the military and para military establishments.

The primary objective of this work is to investigate the economic implications of school dropouts in Nigeria. Specifically, the study seeks to find out:

1. The causes of school dropouts in Cross River State
2. Impact of school dropouts on the economy

The following research questions shall guide the research:

1. What are the causes of school dropouts?
2. What are the impacts of school dropouts on the economy?

Literature Review

Concept of school dropouts: School dropout according to Aja – Okorie (2017) means leaving education without obtaining a minimal credential, most often a higher secondary education.

In the words of Kamla-Raj (2007), a drop out is any student, who for one reason or the other leaves school prematurely before graduation, without transferring to another school. This is most seen in rural areas where there is dismal poverty, ignorance and children form a distinguishable part of the family labour force. De Cos (2005) also stated that dropout is the ultimate withdrawal from school as students who withdraw from senior secondary school prematurely end up not obtaining any certificate of graduation. The term “dropout” qualifies those students who could not complete their education programme at any level of education due to one reason or the other, as advanced by Ayodele and Bada (2007) who emphasized dropping out from school occurs after children have previously achieved access to school.

Empirical Review

The empirical review would focus on the causes of school dropouts in Nigeria in view of the fact that Oyinloye (2015) noted that Nigeria holds the World record of having the highest number of her young people out of school with approximately 10.5 million kids out of school. Similarly, while comparing Nigeria’s educational attainment to that of Britain and USA in their study, Egwunyenga and Nwadiani (2004) observed that Britain had 98%, United State of America 89% while Nigeria had 59% respectively as reported by Nakpodia (2005) on development indicators. It is therefore imperative for the Nigerian government to live up to expectations in their responsibilities to ensure that the issue of school dropouts is kept under check.

In his study, Ajaja (2012) identified the causes of students drop out globally and classified them into four clusters. These include school related, job related, family related, and community related. De Cos (2005),

Bridgeland, Dulilio and Morrison (2006) identified five major reasons why students drop out of school in U.S. These include; uninteresting classes, inability to cope with school after much absence, friendship with unserious elements, absolute freedom to do anything and failure in school.

Different studies carried out in Nigeria about the causes of dropouts in secondary schools reveals different multifaceted results. For instance, a study conducted in Ondo State, South west of Nigeria by Oyinloye (2015) posited that lack of interest in school work, poor academic performance, poverty and failure are some of the causes of student dropout from school. The findings were also in consonance with the work of Alika and Egbochuku (2019).

Lekwa and Anyaogu (2016) carried out a study about the causes of the decline in final year examinations enrolment in the five south eastern states of Nigeria comprising of Abia, Anambra Ebonyi, Enugu and Imo. They observed that the abnormality cannot be attributed to transfer to private schools and vice versa. However, both the private and the public secondary school teachers expressed the opinion that poverty is responsible for the students' dropout of schools, hence, going to hawk on the streets. The teachers went ahead to explain that they see their students hawking and that parents who before this time did not allow their children to go and hawk now seem to encourage the trend. More so, the teachers totally agreed that economic downturn is responsible for the increase in the number of students who dropout of school and get involved in street hawking.

Yusuf (2008), studied the causes of dropouts in Zamfara state located in the north-western part of Nigeria and found out that the situation is not any better, if not worse. He noted the high poverty rate among parents which may be attributed to economic factors which may have a relationship with their inability to meet the financial demands for their children's schooling. Cost of transportation to and from school on a daily basis, school fees, PTA fees, uniform fees and other items, provision of other daily monetary demands to the children, cost of textbooks and other school materials are found to be a burden for some of the parents which negatively affects the secondary education of their children. As a result Kainuwa, (2014) summed it up in his study that parents choose to take their children out of school and involve them in activities that produce income such as working on the farm, and many times these activities are illegal, immoral, and extremely detrimental to the lives of the children.

The implications are that as the pool of dropouts continues to grow, employment opportunities for them are more limited, because today's economy requires increased literacy, more education, enhanced technological skills, and lifelong learning.

Likewise, the rate of engagement in high-risk behaviours such as premature sexual activity, early pregnancy, delinquency, crime, violence, alcohol and drug abuse, and suicide has been found to be significantly higher among dropouts. Dropouts are more likely than other citizens to draw on welfare and other social programs throughout their lives.

Ajaja (2012), investigated the incidence of dropouts in the south zone of Nigeria and found out that the high level of youths' restiveness is constituted by individuals who dropped out of senior secondary schools programme. He established that in the south for instance, members of various militant groups are made up of youths between ages fifteen to twenty who dropped out of senior secondary school programmes. They are used by politicians to advocate for resource control in the oil-rich Niger-delta. In the north, there are the "Almanjeris" who are used by politicians to protest political issues, policies, ethnicity and religious bigotry.

Methodology

The area of study is the entire Cross River State which is divided into three senatorial zones. Total number of public secondary schools is 487. Twelve schools were sampled from the total number, four each from a senatorial zone. The respondents make up the principals and vice principals of the twelve sampled secondary schools, making a total of twenty-four respondents. The questionnaire was employed to generate data which was analysed by simple percentages

The breakdown of the secondary schools is shown below:

Sampled Secondary Schools from Cross River North Senatorial Zone

1. Girls Secondary School, Obudu
2. Army Day Secondary School, Igoli
3. Government Technical secondary School, Bendi
4. Mbube West Secondary School, Ekumtak

Sampled Secondary Schools from Cross River Central Senatorial Zone

1. Agbo Comprehensive Secondary School, Egboronyi
2. Community Secondary School, Ugep
3. Mbembe Community Secondary School, Obubra
4. Government Secondary School Ikom

Sampled Secondary Schools from Cross River South Senatorial Zone

1. Government Secondary School, Akamkpa
2. Government Secondary School, Uwanse
3. Community Secondary School, Abanwan
4. Government Comprehensive Secondary School, Odukpani

Table 1		Admission Enrolment (Crs North)			
S/no	Names of Schools	2012	2013	2014	2015
1	Girls Secondary School, Obudu	750	801	828	845
2	Army Day Secondary School, Igoli	780	850	872	885
3	Government Technical Secondary School, Bendi	605	598	601	615
4	Mbube West Secondary School, Ekumtak	802	845	848	902

Source: Admission registers of the schools

Table 2 Admission Enrolment (CRS Central)

S/no	Names of schools	2012	2013	2014	2015
1	Agbo Comprehensive Secondary School, Egboronyi	452	457	502	524
2	Community Secondary School, Ugep	922	975	980	995
3	Mbembe Community Secondary School, Obubra	858	878	896	905
4	Government Secondary School, Ikom	902	943	954	978

Source: Admission registers of the schools

Table 3 Admission Enrolment (CRS South)

S/no	Names of Schools	2012	2013	2014	2015
1	Government Secondary School, Akamkpa	898	902	912	931
2	Government Secondary School, Uwanse	950	985	962	978
3	Community Secondary School, Abanwan	343	329	351	354
4	Government Comprehensive secondary School, Odukpani	412	432	438	445

Source: Admission registers of the schools

Table 4 Final Examinations registration (CRS North)

S/no	Names of Schools	2018	2019	2020	2021
1	Girls Secondary School, Obudu	653	671	689	701
2	Army Day Secondary School, Igoli	750	812	838	849
3	Government Technical Secondary School, Bendi	570	567	559	567
4	Mbube West Secondary School, Ekumtak	770	795	799	801

Source: entry schedules of the various schools

Table 5 Final Examinations Registration (CRS Central)

S/no	Names of schools	2018	2019	2020	2021
1	Agbo Comprehensive Secondary School, Egboronyi	421	432	461	469
2	Community Secondary School, Ugep	891	929	945	949
3	Mbembe Community Secondary School, Obubra	821	830	839	842
4	Government Secondary School, Ikom	801	812	819	823

Source: Entry schedules of various schools

Table 6 Final Examinations Registration (CRS South)

S/no	Names of Schools	2018	2019	2020	2021
1	Government Secondary School, Akamkpa	850	855	857	861
2	Government Secondary School, Uwanse	801	812	810	815
3	Community Secondary School, Abanwan	302	292	303	310
4	Government Comprehensive secondary School, Odukpani	199	201	195	215

Source: Entry schedules of various schools

Research question 1: What are the causes of school dropouts?

Table 7 Respondents on the causes of school dropouts (N = 24)					
S/no	Items	Yes	No	% Yes	% No
1	Parents pay emphasis on the girl child	6	18	25	75
2	School fees are paid early and regularly	8	16	33	67
3	Environment is conducive for learning	9	15	37.5	62.5

Source: Author's computation

Findings:

The results in Tables 4, 5, and 6 show clearly a progressive increase in the number of students' dropout. In the Northern senatorial zone Girls secondary school Obudu with a total of three thousand, two hundred and twenty-four intakes had the highest number of dropouts of five hundred and ten. This could be as a result of the lack of interest shown by parents towards the girl child education.

In the central senatorial zone, the highest dropouts occurred in Government Secondary School Ikom with a figure of five hundred and twenty-two from a total intake of three thousand seven hundred and seventy-seven students. This occurrence may not be unconnected with the fact that the town is a border town with a thriving trans-border trade that seemed more attractive to the young men instead of pursuing their education.

Taking a look at the southern senatorial zone, Government Comprehensive secondary school Akamkpa had the highest number of dropouts of nine hundred and seventeen students from a total intake of one thousand seven hundred and twenty-seven students. This high occurrence could be as a result of the inter-tribal war that took place in the community as of the time of this research.

Results from table 7 shows that 75% of respondents do not agree that parents pay emphasis on the girl child education. In the same vein 67% of the respondents do not agree that school fees of students are paid early and regularly too. Similarly, 62.5% of the respondents do not agree that the school environment is conducive enough for learning

Conclusion and Recommendations

The work discussed the causes and economic impact of students' dropouts in secondary schools in Nigeria. The paper identified, poverty, poor state of the economy and parents' preference to boy education as the causes of dropouts. For a robust economy students' dropouts issue should be tackled seriously so that education attainment can be improved.

From the foregoing, the following recommendations were made:

1. The government should provide a package of services within each community, work with families, churches and other community organizations to develop a collaborative program for dropout prevention.
2. The government should provide a broad range of instructional programs to accommodate students with different needs.

3. All stakeholders involved in the education industry must play their role. Parents who are the first stakeholder in this industry as well as the first teacher and role model to the children should show more concern in their children/wards' interest in education and finance their education.
4. Government should encourage and support programs that motivate parents to participate at all levels of their children's education.
5. The government should select and train teachers who are interested in working with at-risk students
6. The government should develop and implement a collection system for data on dropouts, and use it to identify groups at risk, set policy and fund programs at the national level.

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Effects of the ‘ABOVE’ Method in Improving Academic Performance of Grade-11 Online Learners

Richard Ian Bert C. Bolosan

Abstract

Online learning became one of the modalities of delivering education when the Pandemic hit us and affected more than 1.4 billion learners around the world. Now that schools are opening, some learners opted to continue their schooling through online distance learning. Thus, Online Learning for high schoolers must provide opportunities for young learners to access the basic skills and knowledge that they can acquire in a normal school setting. The Researcher wanted to know if there are differences between conducting an online class with structured or fixed parts and conducting a normal online class. The study was conducted to determine and analyze the effects of the ABOVE (Activating Schema/Analyzing situation, Buddy-up, Objective-setting, Visualizing concepts and ideas and Evaluating the cognitive and affective domain) method in the academic performance of Grade 11 Online Learners. Twenty-five (25) learners served as respondents in the Qualitative-descriptive study. Data gathered from the pre and post intervention survey was analyzed by computing the mean. Results of the study revealed that the ABOVE method was effective in the academic performance of the learners, for it encourages learners to think critically, collaborate with fellow learner and reflect at the end of the lesson. The study then recommends all school heads, supervisors, and other school administrators to encourage teachers to use the ABOVE method in conducting online classes because the intervention being used helps learners develop their 21st century skills.

Key Words: Innovations, Pedagogy, Online Learning, Teaching Practices, Distance Learning ABOVE - Activating Schema/Analyzing situation, Buddy-up, Objective-setting, Visualizing concepts and ideas and Evaluating the cognitive and affective domain

I. Context and Rationale

The Pandemic has immensely changed the way we live, and education is no exception as it caused a lot of anxiety to students and teachers alike. Stress that is caused by the new normal education practices like staying at home and inability to substitute classroom opportunities during the covid-19 crisis. The pandemic caused 1.4 billion learners across the globe to stay at home (Cluver et al. 2020) and this set up denied all the learners basic support and opportunities to learn better than the schools provide.

The opening of classes in the Philippines last October have forced some schools to offer different modalities in learning-- one of which is the Online Distance Learning (DepEd Order No. 12, s 2020). Synchronous learning is one of the strategies in ODL where learners are participating simultaneously using a live online lesson, often aiming to replicate ‘in classroom’ teaching where both teacher and students are together at the

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same place and time (Kokoulina, 2020). However, Orlando and Attard (2015) stated that “teaching with technology is not a one size fits all approach as it depends on the types of technology in use at the time and also the curriculum content being taught”. This means that the incorporation of technology provides additional factors for consideration in terms of teaching pedagogy and construction of learning experiences. However, connectivity and accessibility problems arise because access to the internet connection and learning devices continued to be a privilege up to this day, placing those with poor internet access at a disadvantage when it comes to online classes.” For a better picture, 45% of Filipino citizens (46 million) and 74% (34,500) of public schools do not have access to the internet (Jones, 2019) .

Aside from the lack of tangible technology to be used, an additional limitation to consider is that ODL learners require expert supervision and, therefore, adult availability and involvement is very vital (Schroeder and Kelley 2010; Youn et al. 2012). Moreover, online learning may not give sufficient or appropriate opportunities to involve learners who need more interactions and hands-on activities to focus and learn compared to adult learners. In addition, a study commissioned by Microsoft in 2015 and discussed in Time magazine found that the average attention span was in fact only 8 minutes (seconds) way shorter from the 10-15 minutes period claimed by Harley and Davies in 1978.

Oh and Jonassen (2007); Ward et al. (2010) stated that students find online classes insufficient as many have difficulties in comprehension and learning online. Muilenburg and Berge (2005) noted that students who do not learn from traditional classes reported a lot of challenges in online learning. Wang and Woo (2007) as cited by Ward et al.

In addition, studies show that the students are unable to successfully integrate, or contrast memorized facts and formulate with real life applications because of the lack of supervision of a physical teacher on the other side of the screen.

Because of this, practical knowledge and school knowledge are becoming mutually elusive; many students see little connection between what they learn in the classroom with real life. Additionally, the traditional teaching method of teachers as information- giver to passive students appears to be outdated. Obviously, the traditional teacher-as-information- giver and textbook guided classroom that is now being applied in online classes has failed to bring about desired outcome of producing thinking students.

The K-12 curriculum is learner-centered. As such, teachers have to give prior attention to the characteristics of the students. For instance, to provide optimum instruction, it is important to know the appropriate teaching-learning approaches and strategies applicable to a certain group of online learners. This knowledge will help the teachers design and tailor the activities to be conducted in the virtual classroom.

The administrators and teachers must then be guided by relevant strategies in teaching in order to achieve their goals. Hooser (2010) stressed in his study that teaching strategies are used by teachers to facilitate effective teaching and better quality of learning by pupils. These are devised to suit the different ways that pupils learn. While some pupils learn and retain pieces of information that are fed to them through a lecture, others learn better by interpreting or acting out certain situations. Other pupils, however, absorb information with the aid of visual cues in addition to the lecture and reading. The use of different teaching strategies assures and provides the pupils with different learning exposures to maximize learning and retain the information given to them.

In the present situation of the Philippine Educational System, the primary goal of teaching is to provide appropriate and effective instruction to students (Salvieto, 2014). Thus, a teacher is responsible to devise and provide the necessary materials for use in classes (Dy, 2011). Developing instructional materials or devising strategies used in classes play an integral role in the teaching – learning process. Use of instructional materials has a strong relationship with academic performance at the secondary students as mentioned in Dahar (2011).

There is a tendency that Online Distance Learners may not develop critical thinking. Oh and Jonassen (2007); Ward et al. (2010) pointed out one of the setbacks of ODL when argued that students find online classes insufficient as many have difficulties in comprehension and learning online. Muilenburg and Berge (2005) noted that students who do not learn from traditional classes reported a lot of challenges in online learning. Wang and Woo (2007) as cited by Ward et al.

Collaboration is a very vital 21st century skill, Because of ODL the culture of camaraderie, unity and teamwork is hindered. The other concerns, however, have already been noted by experts in the field of distance education, there is the issue of social integration and peer culture, and the possibility of transmission of values in a “virtual” classroom. Since there is a lack of human interaction in the learning process, students may learn less in such a set-up as opposed to those in the traditional classroom (Edge and Loegering, 2000; Gamage et al., 2020). Second, there is also an issue on the unnaturalness and the results of online learning, since it goes against how natural teaching and learning supposedly take place (Larreamendy-Joerns and Leinhardt, 2006; Adnan and Anwar, 2020). The lack of face-to-face human interaction in the online learning space and process appears disconcerting to both educators and learners alike.

Therefore, there is a genuine need to examine and study the effect of the new format of online class or Innovative online teaching strategy titled ABOVE method in the academic performance of Grade 11 Online Distance Learners.

II. Action Research Questions

This study determined whether the ABOVE method is an effective strategy to improve students' performance on Grade 11 Online Distance Learning Learners of Cadaratan National High School for the School Year 2020-2021.

Specifically, it sought to answer the following questions:

How effective is the ABOVE method in improving academic performance of learners in Grade 11?

III. Proposed Innovations/Interventions and Strategy

Based on the observations of the Researcher, most of the learners have difficulty in staying engaged in the online class and tend to be passive most of the time.

According to John Dewey (1938), students learn better when they are engaged in the learning process and knowledge has to be discovered by the individuals to have a significant meaning to them. Thus, the Researcher will implement the ABOVE Method which restructures the format of an online class.

Ultimately, this Research will test the effectivity of the said strategy as a platform for the teachers and learning facilitators to follow the structure of online class and rise above the adversities of teaching during the

pandemic. With or without crisis, learners must always develop 21st century skills such as creativity, critical thinking, collaboration, and such can be achieved by following the new ODL learning structure or format. The structure of the class will be Activating Schema/ Analyzing situation, Buddy-up, Objective-setting, Visualizing concepts and ideas and Evaluating the cognitive and affective domain ABOVE. Specifically, this research aims to achieve the following desired results:

- a. Activate the schema of learners and let them be engaged in the class at the beginning of the class. With this activity the learners will seek to correlate prior knowledge with new learning in order to construct meaning that serve to guide, interpret and clarify content;
- b. Develop collaboration among and between learners even if separated by space. Buddying-up or collaborative learning activities help learners to find explanations of their understanding that assists them elaborate and reorganize their knowledge (Van Boxtel, Van der Linden, and Kanselaar, 2000)
- c. Guide the direction of students towards academic success through objective-setting. In support of this, Barry (2007) stated that young people will work harder, longer and will commit more willingly to tasks where accomplishment is certain to be an outcome
- d. Let the learners understand the lesson better by analyzing infographics and other visual media. Unlike traditional data visualization, infographics incorporate text and images together to convey a complex idea in a creative, easy-to-understand way (Darling, 2017; Pritchard, 2016); and
- e. Evaluate the learners holistically. Being able to use cognitive and affective domains in higher educational experience can improve learning opportunities for students (Quinlan, 2016).

IV. Action Research Method

a. Sources of Data

The main respondents of the study will be 25 Grade 11 online learners who will learn some SHS subjects such as Practical Research and Oral Communication through the ABOVE Method.

b. Data-Gathering Procedure

The Researcher asked permission from the School Principal to conduct the proposed action research. Upon the approval of the request, the Researcher immediately started the following:

- a. The School Principal approved the parts or format of the online class.
- b. The Researcher administered the pre-intervention survey
- c. The Researcher recorded and analyzed the survey results.
- d. ABOVE method was used in conducting online class.
- e. The post-intervention survey was administered.
- f. Analysis of results was done to check if the performances of students improved.

c. Research Instrument

A survey questionnaire was developed by the Researcher. It is composed of 10 survey questions validated and checked by the school principal.

Another instrument used was the Interview Protocol consisting of questions which focused to elicit qualitative data that verified the respondents' answers in the questionnaire.

This rating scale was accomplished by the teachers. Their responses were scored by using the four-point scoring system developed by Tuckman written as follows:

Scale	Range Interval	Descriptive Interpretation
4	3.51-4.50	Strongly Agree (SA)
3	2.51-3.50	Agree (A)
2	1.51-2.50	Disagree (D)
1	1.00-1.50	Strongly Disagree (SD)

d. Statistical Tool

The following statistical tools were used in the study:

The data from the responses of respondents was collated, tabulated, categorized, analyzed, and interpreted and provided significant answers to the specific problems of the study. Weighted mean was used in the analysis of the data collected.

V. Time Table/Gantt Chart

Deliverable	Activity	Time Frame
Work Plan	Planning 1. Identification of the respondents of the study 2. Selection of research design and tools for the study	December 2020
Data Gathering Activities	Development of Data-Gathering tools 1. Gathering of Data 2. Deepening of responses provided through interview and dialogue.	January to May 2021
Initial Findings and Analysis	1. Collect the data 2. Analyzed the data gathered 3. Report Writing	June 2021
Final Report Writing	Finalization of the Written Report	July 2021
Proposed Action Plan based on the results of Action Research.	Dissemination of Result.	July 2021

VI. Discussion of Results and Reflection

This section deals with the presentation, analysis and interpretation of the data gathered to answer the problems posed in this study.

The discussion in this section is arranged according to two major concerns of the study: first, the identification of the effects of the ABOVE method in the academic performance of Grade 11 Online Learners, and second, the recommendations the Researcher provides for their improvement of the conduct of online distance learning.

Table 1 Mean Rating on the perceptions of learners before the implementation of the ABOVE method		
Indicators	Mean	DI
1. The pre-lesson activities are very engaging	2.44	D
2. I can see relationship between my prior knowledge with the new lesson	2.78	A
3. I collaborate with my classmates during class	2.35	D
4. I learn from the input of my classmates through group work	1.73	SD
5. The objectives of the lesson were clear	2.42	D
6. The teacher sets goals and expected output from students	2.47	D
7. The visual aids are very much appealing	3.20	A
8. PowerPoint presentations help us understand the concepts better	2.50	D
9. The teacher gives us tasks to check if we have understood the lesson	3.21	A
10. I was given the opportunity to reflect on lesson I have learned	1.67	SD
Overall Mean	2.48	D

Legend:	Range of Means	Descriptive Interpretation
	3.27-4.00	Strongly Agree (SA)
	2.51-3.26	Agree (A)
	1.76-2.50	Disagree (D)
	1.00-1.75	Strongly Disagree (SD)

Before the implementation of the ABOVE method, it is evidently manifested in Table -1 that most of the Grade- 11 learners are not engaged during the beginning of the lesson, do not collaborate with others, learners have no clear goals or directions at the beginning of the lesson and are not given the opportunity to reflect on the learnings and challenges they have encountered during the lesson. The learners Disagree (2.48) that the strategy used by the teacher was effective

Students' comments were given to support the findings.

Hindi ko naintindihan yung topic, parang ang bilis matapos ng lecture. (I wasn't able to understand the lesson, it was so quick.)

Awan unay inubrami, nagsao lang ni teacher tapos nagdinggeg kam lang (We did nothing but to listen to our teacher's lecture.)

Table 2 Mean Rating on the perceptions of learners after the implementation of the ABOVE method		
Indicators	Mean	DI
1. The pre-lesson activities are very engaging	3.28	SA
2. I can see relationship between my prior knowledge with the new lesson	3.54	SA
3. I collaborate with my classmates during class	3.77	SA
4. I learn from the input of my classmates through group work	3.31	SA
5. The objectives of the lesson are clear	3.75	SA
6. The teacher sets goals and expected output from students	3.67	SA
7. The visual aids are very much appealing	3.44	SA
8. PowerPoint presentations help us to understand the concepts better	3.50	SA
9. The teacher gives us tasks to check if we have understood the lesson	3.86	SA
10. I was given the opportunity to reflect on lesson I have learned	3.65	SA
Overall Mean	3.58	SA

Legend:	Range of Means	Descriptive Interpretation
	3.27-4.00	Strongly Agree (SA)
	2.51-3.26	Agree (A)
	1.76-2.50	Disagree (D)
	1.00-1.75	Strongly Disagree (SD)

It can be gleaned from Table-2 that the respondents strongly agreed on all the indicators along the effectiveness of the strategy being used during online class. It obtained an overall mean rating of 3.58 which fell under *Strongly Agree* category. This implies that the ABOVE method has a positive effect to all the Grade- 11 online learners.

Indicators 1 and 2 with respective mean score of 3.28 and 3.54 (SA) prove that a well-thought-out preliminary activities such as letting learners analyze and activate their prior knowledge could contribute in the success of the delivery of the lesson and formation of concepts and ideas. Hammond et. Al (2021) highlight the importance of the systematic and sequential building of background knowledge for an increased ability to comprehend. As educators, we have to bear in mind that the relevance of the prior knowledge only becomes important when this knowledge is activated (Brod, 2021).

With 3.77 and 3.31 as mean score, the ABOVE method highlights the importance of collaboration amongst learners. The mean scores corroborate with the findings of Higley (2018) that a successful collaborative group activity allows learners to feel a sense of community and provides learners with an active role and responsibility, which is shared among his or her established groups. Online learners in well-designed learning environments experience meaningful learning, develop higher order thinking, and begin to develop an e-Learning community where collaborative group activities are encouraged.

Some respondents expressed:

I like being in a group for I feel like I'm not alone and I have someone whom I can learn with and learn from.

Kayatko nu ag gro-group kami kase ada kadwak mangubra dagitay activities.

(I like being in a group for I have groupmates to accomplish every task given to us.)

It can also be gleaned from the Table-2 that learners are more productive and more focused when more organized goals are set and objectives of the lesson were clear as manifested in indicators 5 and 6 with a 3.75 and 3.67 mean rating which conveys strong agreement. This result can also be gleaned from the study of Stronge & Grant (2014) which states that effective goal-setting practices help students focus on specific outcomes, encourage them to seek academic challenges, and make clear the connection between immediate tasks and future accomplishments.

The ODL learners respond well with pictures, charts and infographics as manifested by the mean rating of 3.44 and 3.50 at indicators 7 and 8 respectively. Anu_V (2021) proves that Visuals have a significant impact on the brain as they help to retain information for a longer period of time. Moreover, Visuals can turn complex topics into a simpler form. By just looking at the visual information, the complex topic can be understood for better learning outcomes.

Respondents stressed that:

Nu picture lang makitkitami ket agpanununot kami haan nga agbasbasa latta ubra min. (Pictures and graphics enable us to think not just merely reading what is on the slides)

When our teacher uses only visuals, we have no choice but to listen attentively.

The last two indicators in Table-2 suggest that relevant tasks and reflecting on the topic have a positive impact on the learners. The mean rating of 3.86 and 3.85 confirms that holistic assessment such as paper and pencil tests, performance tasks and reflection play an important role in the academic success of the learners. Recurring reflection activities encourage students to think critically about their writing practices and to make sense of and reimagine their experiences for future benefit (Dyment et. al, 2010). In addition, Finlay, (2008) agreed that reflective practice is ‘learning through and from experience towards gaining new insights of self and practice.

Some respondents expressed:

Magustwak no agsurat kam reflection in a paper or in our freedom wall, kase ma voice out mi nu naawatanmi or haan tay lesson.

I like it when we have reflective writing on paper or on our digital freedom wall for it gives us assessment if we have understood the lesson or not.

VII. Conclusion, Recommendations and Reflections

A. Conclusion

In the light of the findings, the following conclusions are drawn:

1. Learners exposed to ABOVE method have an improvement on their level of performance which is evidently manifested in the study.
2. Respondents have a positive perception on the use of the ABOVE method as shown by their comments and positive feedbacks about the intervention.

B. Recommendations

The findings and conclusions of the study suggest relevant implications and recommendations:

1. Continue the use of the ABOVE method in conducting online classes.
2. Encourage administrators, supervisors and teachers to use same intervention in all subject- areas.
3. Teachers shall be provided with more seminars, workshops on the principles of the ABOVE method

C. Reflections

UNESCO recommends distance learning programs and open educational applications during school closure caused by COVID-19 so that schools and teachers continue to teach their pupils and limit the interruption in education. Therefore, many institutes continued to go for the online classes (Shehzadi et al., 2020). The Educational system in our country adapted to the changes brought by the pandemic. Different modalities were offered, however many difficulties sprang due to the limited resources teachers and learners had. Education landscapes became a ground to experiment new ways of delivering basic education.

Although a number of setbacks were presented we cannot deny the fact that the new normal in learning could enable educators to think of innovative and more relevant teaching strategies that could help learners learn better.

Results of the studies show that the students perform much better in online learning than in traditional learning. Henriksen et al. (2020) highlighted the problems faced by educators while shifting from offline to online mode of teaching. In the past, several research studies had been carried out on online learning to explore student satisfaction, acceptance of e-learning, distance learning success factors, and learning efficiency (Sher, 2009; Lee, 2014; Yen et al., 2018).

As Educators we should be open to possibilities and propel ourselves to adapt and rise above the challenges the pandemic is bringing us. Delivering quality basic education should be our first priority despite the constraints we currently have.

The pandemic made us realize that we can cater to all of our learner's needs if we plan and create better solutions not for a new normal but for a better normal in the field of education.

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A Study of the Professional Commitment and Occupational Stress among Teacher Educators in COVID-19 Pandemic

Dr. Amit Ahuja

Introduction

In contemporary competitive professional society, professional commitment is an indispensable factor associated with a professional. The outcomes of an organization are almost dependent on the professional commitment of its workers. Professional commitment is an attitude which an individual has towards his/her profession. The commitment is indispensable for any profession and teaching is not an exception to this. Professional commitment refers to the socio-psychological association of an individual to his/her profession and its vision and mission. It is the extent to which an individual identifies him/her self with the profession and accepts its values (Mowday et al, 1979 and Morrow & Goetz, 1988). It is an attitude which an individual has towards his/her profession and it helps in discriminating between those who are devoted to their profession from those who are not so. The outcomes of an organization are dependent on the professional commitment of its workers. Professional commitment is vital for organizational quality, performance, and productivity. A teacher's work is not confined within the classrooms only but it is extended beyond that and is up to the school, organization and education system also. The professional commitment of the teachers is essential for the education sector to grow (Huberman, 1993). The professional commitment of teachers includes efficacy and occupational competency. A professionally committed teacher shows a willingness to execute determined efforts for the profession, has belief and accepts the goals & values of the profession and has will to continue to do so in the future also. As a professional, a teacher shows commitment to learners, society, attain basic human values and achieve excellence.

Another variable associated with any job or occupation is stress and is known as occupational stress. It is a worldwide growing problem (Cotton & Hart, 2003) and leads to substantial resourceful loss for an organization. Occupational stress is the collapse of the emotional stability of the employees ultimately leading to a state of disorganization in their behaviour (Nwadiani, 2006). Besides a source of income and social identity, any job or profession also exerts pressure on the employees. In this global world, no occupation is stress free and that stress differs in intensity or the degree. In the teaching profession, enhanced expectations, the disparity between the designation and task performed (Mohamed, 2018), overload (Morgan & Craith, 2015), working conditions, etc. lead to occupational stress among the teachers (Cooper & Marshall, 1976). Occupational stress as a negative feeling may lead to depression, rejection, anger, frustration among the teachers (Kyriacou, 2001).

Present day world is in the deadliest grip of deadliest Corona virus and the resultant pandemic has brought the world to a standstill. In India, there has been a complete lockdown since March, 2020 which continued up

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to June, 2020 and after that unlock process by the Government was initiated. Teachers and teacher educators had to take classes, examinations and evaluation in online mode but they had to be physically present in the institutions for administrative work and other assigned Departmental duties thus compelling them to face this double challenge that is ensuring quality teaching in online mode and keeping themselves Corona free while working in offline mode. So, how does the professional commitment of teacher educators still stand in COVID-19 pandemic? What is the status of occupational stress among teacher educators in COVID-19 pandemic? How does the occupational stress among teacher educators in COVID-19 pandemic influence the discharge of duties on their part? How are the professional commitment and occupational stress correlated with each other? To address these aspects the present study was conducted by the investigator to explore the professional commitment and occupational stress, their levels and correlation between professional commitment and occupational stress among the teacher educators during COVID-19 pandemic.

Review of Related Literature

The review of related literature revealed that in comparison to male teachers, the female teachers had a significantly higher level of professional commitment (**Kauts, 2013; Shukla & Waris, 2016; Bala, 2017** and **Habib, 2019**) but some studies have reported that female and male secondary school teachers do not differ significantly with respect to professional commitment (**Bashir, 2017**). Gender and teaching experience have no significant effect on the professional commitment of school teachers (**Malik & Sharma, 2013; Gill & Kaur, 2017** and **Raja, 2017**). No significant difference between the professional commitment of urban and rural secondary school teachers has also been reported (**Shukla & Waris, 2016**). The Government and Government aided school teachers do not significantly differ with respect to professional commitment (**Raja, 2017**). Co-relational studies have found a significantly positive correlation of professional commitment with job satisfaction (**Bashir, 2017**) and self-efficacy of secondary school teachers (**Habib, 2019**). The professional commitment of teachers teaching at secondary school level is influenced by salary, motivation, respect in the society and attitude towards the teaching profession (**Hussen et al, 2016**). The professional commitment of the teachers is a reliable predictor of their teaching effectiveness (**Bashir, 2019**).

In the domain of occupational stress, studies have reported that in comparison to female secondary school teachers, the male secondary teachers have a higher occupational stress (**Kaur, 2017; Sing & Katoch, 2017** and **Davismani & Grace, 2020**) but some studies have reported that the female secondary school teachers have significantly higher occupational stress than male secondary school teachers (**Harish & Jayaprabha, 2018; Chitra, 2020** and **Joshi, 2020**). It was also found that in comparison to Government school teachers, private school teachers have higher occupational stress (**Harish & Jayaprabha, 2018**). Heavy workload, number of students in class, sub-standard professional development opportunities, lack of healthy interaction among the colleagues, short academic session and lengthy syllabus, financial problems at home, low salary, low autonomy, high professional expectations, job insecurity, etc. are some of the causes for professional stress amongst the secondary school teachers (**Kaur, 2017** and **Harish & Jayaprabha, 2018**). The nature of work is the major cause of occupational stress (**Mohamed, 2018**).

To address the issue, that is, professional commitment and occupational stress among teacher educators in COVID-19 pandemic, with the help of review of related literature, following research questions were formulated:

Research Questions

- (i) How does professional commitment keep teacher educators motivated for their job in COVID-19 pandemic?
- (ii) How does occupational stress influence the professional commitment of teacher educators in COVID-19 pandemic?
- (iii) What are the plausible reasons for the occupational stress among teacher educators in COVID-19 pandemic?
- (iv) How are professional commitment and occupational stress among teacher educators correlated with each other?

To explore the above research questions, following research objectives were framed:

Research Objectives

- (i) To study the level of professional commitment among teacher educators of Guru Gobind Singh Indraprastha (GGSIP) University in COVID-19 pandemic.
- (ii) To study the factors responsible for professional commitment among teacher educators of GGSIP University in COVID-19 pandemic.
- (iii) To study the levels of occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.
- (iv) To study the reasons for occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.
- (v) To explore the correlation between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

Hypothesis

For research objective (v), following null hypothesis was formulated by the investigator-

H₀₁: There is no significant correlation between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

Methodology

The investigator intended to explore the current status of professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic so, a descriptive survey research design was employed.

Definition of Key Terms

Professional Commitment: It is a multidimensional construct and amalgamation of working relationships with the students, parents, colleagues, and administrators (Bala, 2017).

Occupational Stress: It is an unpleasant situation in which occupational associated factors affect and interact with the employees and disrupt their psychological well beingness and cause them to deviate from usual functioning (Jarvis, 2002).

Teacher Educators: The teachers teaching in B.Ed. institutions affiliated to GGSIP University.

Sample and Sampling

Due to administrative, academic, time and COVID-19 related constraints, 8 B.Ed. institutions of Guru Gobind Singh Indraprastha University (GGSIP University), Delhi were randomly selected as the sample of the study. From each of these 8 institutions, the research tools were administered on 5 teacher educators of these institutions which were also randomly selected. So, in total 40 teacher educators of these 8 B.Ed. institutions were the final sample of the study.

Tools for Data Collection

Following research tools were used and developed by the investigator for data collection:

- A standardized test that is Professional Commitment Scale for Teachers (2011) developed by Kaur, Ranu, and Brar was administered to measure the professional commitment among the teacher educators of GGSIP University in COVID-19 pandemic. The scale consisted of 45 items and all of these items were equally (that is nine items for each commitment type) distributed into 5 areas of commitment that is commitment to (i) learner, (ii) society, (iii) profession, (iv) attain excellence and (v) basic human values. The test-retest method was used to establish the reliability of the test. As per the manual of the test, it was administered on the selected sample and the scoring of response sheets was done.
- A standardized test that is Teacher's Occupational Stress Scale (2012) by Jamal & Rahim was administered to measure the occupational stress among the teacher educators of GGSIP University in COVID-19 pandemic. The scale consisted of 30 items. The items were classified into different dimensions leading to stress amongst the teachers like poor colleague relations, students' behaviour, substandard professional recognition, poor classroom resources and workload. The validity of this scale was established by correlating it with standardized scales and ranged from 0.71 – 0.89. The Cronbach Alpha reliability value was 0.89. As per the manual of the test, it was administered on the selected sample and the scoring of response sheets was done.
- Structured interview was conducted to explore the factors responsible for professional commitment among teacher educators of GGSIP University in COVID-19 pandemic. Its content validity was established by consultation with other research experts. Their valid suggestions were incorporated in drawing the final draft of interview schedule.
- Another structured interview was conducted to explore the reasons for occupational stress among teacher educators of GGSIP University in COVID-19 pandemic. Its content validity was also established by consultation with other research experts. Their valid suggestions were incorporated in drawing the final draft of interview schedule.

These qualitative research tools developed by the investigator were used for the data collection after establishing their content validity and reliability.

Techniques of Data Analysis

Relevant qualitative and quantitative approaches for the data analysis were used for data analysis. t-test, and the frequency counting were employed as quantitative approach for data analysis. Content analysis as the qualitative approach was used for the analysis of the obtained data. Hence, a mixed research method was employed for data analysis.

Data analysis

(i) To study the levels of professional commitment among teacher educators of GGSIP University in COVID-19 pandemic.

The educational test for exploring the levels of professional commitment among teacher educators of GGSIP University in COVID-19 pandemic was administered by the investigator on the randomly selected sample, that is, 40 teacher educators. Table 1 shows the corresponding statistics after data analysis:

Table 1 Levels of professional commitment of teacher educators of GGSIP University in COVID-19 pandemic.			
Levels of Professional Commitment	N	Mean (M)	S.D. (G)
High Level	09 (22.5%)	152.59	14.89
Moderate Level	26 (65%)		
Low Level	05 (12.5%)		
Total	40		

The obtained mean value (M) is 152.59 and standard deviation (G) is 14.89. The inferential statistics shows that $M \pm G$ range marks the levels of professional commitment of teacher educators of GGSIP University in COVID-19 pandemic. The range of $M \pm G$ is 167.48 – 137.7 that means a teacher educator with professional commitment score beyond 167.48 will have high level of professional commitment, a teacher educator with professional commitment score between 167.48 – 137.7 will have moderate level of professional commitment and a teacher educator with professional commitment score below 137.7 will have low level of professional commitment. So, table 1 shows that there are 09 teacher educators (22.5%) having high level of professional commitment, 26 teacher educators (65%) who are moderately professionally committed and 05 teacher educators (12.5%) with low level of professional commitment.

(ii) To study the factors responsible for professional commitment among teacher educators of GGSIP University in COVID-19 pandemic.

Data Analysis: Structured interview was conducted to explore the factors responsible for the professional commitment among teacher educators of GGSIP University in COVID-19 pandemic. The content analysis of the responses of teacher educators was done. It was found that for 55% respondents their passion for teaching profession was the main reason for their professional commitment as they chose teaching profession

deliberately. For rest of the 45% respondents, their desire to be lifelong learners motivated them to join this teaching profession and thus in this way it keeps them professionally committed.

Interpretation: The different views expressed by the teacher educators reflect that serving the society through teaching by shaping future generations keeps them enthusiastic and hence professionally committed.

(iii) To study the levels of occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

The educational test for exploring the levels of occupational stress among teacher educators of GGSIP University in COVID-19 pandemic was administered by the investigator on the randomly selected sample, that is, 40 teacher educators. Table 2 shows the corresponding statistics after data analysis:

Table 2 Levels of occupational stress of teacher educators of GGSIP University in COVID-19 pandemic.			
Levels of Occupational Stress	N	M	σ
High Level	08 (20%)	83.29	3.73
Moderate Level	30 (75%)		
Low Level	02 (5%)		
Total	40		

The obtained mean value (M) is 83.29 and standard deviation (σ) is 3.73. The inferential statistics shows that $M \pm \sigma$ range marks the levels of occupational stress of teacher educators of GGSIP University in COVID-19 pandemic. The range of $M \pm \sigma$ is 87.02 – 79.56, that means a teacher educator with occupational stress score greater than 87.02 will have high level of occupational stress, a teacher educator with occupational stress score between 87.02 – 79.56 will have moderate level of occupational stress and a teacher educator with occupational stress score below 79.56 will have low level of occupational stress. Table 2 shows that there are 08 teacher educators (20%) having high level of occupational stress, 30 teacher educators (75%) who have moderate occupational stress and 02 teacher educators (5%) with low level of occupational stress.

(iv) To study the reasons for occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

Data Analysis: Another structured interview was conducted to explore the reasons for the occupational stress among teacher educators of GGSIP University in COVID-19 pandemic. The content analysis of the responses of teacher educators was done. It was found that 35% respondents were allotted the class periods without any time break. 25% respondents were assigned institution associated administrative responsibilities and it used to exhaust them. For rest of the respondents that is 40% teacher educators, low salary, less promotional & research opportunities and mild professional growth were the plausible reason(s) for occupational stress among them.

Interpretation: The different views expressed by the teacher educators reflect that occupation associated financial aspects and professional growth are the major factors that lead to occupational stress among them.

(v) To explore the correlation between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

Table 3 shows the t value for the coefficient of correlation (r) between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.

Table 3 Coefficient of Correlation (r) between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic.	
r value	t value
- 0.43	- 2.93 [#]

[#].01 level of significance

* .05 level of significance

The t value – 2.93 is significant at 0.01 level of significance. There is a significant negative correlation between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic. So, the null hypothesis that is H_{01} : There is no significant correlation between the professional commitment and occupational stress among teacher educators of GGSIP University in COVID-19 pandemic, is rejected.

(vi) Project outcome

The project outcomes of this study are reflected as the educational implications for the following stakeholders:

Educational Implications for teacher educators: On the part of the teacher educators, a good rapport with the colleagues and students can minimize occupational stress among them. The teacher educators should be given academic freedom for research and teaching. As far as possible, any non-academic and administrative job should not be assigned to them.

Educational Implications for educational administrators: The educational administrators that is the principals as a family head, should intervene whenever the relationship between the teacher educators of that institution are spoiled which is necessary to restore social and professional bonding between them. The principals should judiciously assign the academic work load to the teacher educators with equal distribution of classes. Due administrative efforts should be exercised to upgrade the physical and academic infrastructure of the institution as it demotivates the teacher educators to work and give their best.

Educational Implications for curriculum planners: The curriculum planners of secondary teacher education course should frame the curriculum with latest technological updates. Merely, compelling the students and teacher educators to complete a syllabus in length and breadth should not be the aim. However, enhancing the employability of teacher education curriculum may be an innovative approach to minimize occupational stress and motivate the professional commitment of teacher educators.

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INNOVATIVE SCHOOL EXPERIMENTS

Innovative Way of Learning Basic Language of Chemistry

Dr. Anjni Koul, Dr. Ravijot Sandhu and Ms. Gunjan Gupta

Abstract

The symbols of elements, valency and chemical formulae are usually placed in the syllabus of science at the secondary stage in India. It has been observed that students find learning of symbols of elements, their valency and chemical formulae not only difficult but dry and abstract. As a result, students try to memorise them without any interest. Therefore, it becomes a challenge for the teachers to transact these abstract concepts in an interesting way. This research paper focuses on innovative way of making basic language of chemistry interesting and retaining joy of learning among students by allowing them to experience the minds-on, hands-on learning that nurtures their creativity and imagination.

Key Words: Symbols of Elements, Valency, Chemical Formulae, Toy Pedagogy, Visually Impaired, Secondary Stage

Introduction

The subject chemistry has its own language such as symbols of elements, ions, valency, equations of chemical reactions and so on. A chemical symbol denotes in short, a particular element. Chemical reactions are easy to write with chemical symbols than having to write the lengthy chemical names. Numerous studies have revealed that most of the students lack confidence and find difficult in writing chemical symbols and chemical formulae (Marais & Jordaan 2000; Bradley & Steenberg 2006; Taskin & Bernholt 2014).

The experience of Researchers, being in the field of science education, show that students face difficulty in learning symbols of elements, their valencies and chemical formulae. During interaction with teachers, the Researchers observed that teachers also show discomfort in keeping the motivation among students in learning chemistry, as most of the students are unable to balance the chemical equations correctly as they cannot write correct chemical formulae. For writing correct chemical formulae, students have to write correct symbols and their valencies. Also, while interacting with various science educators at different platforms, Researchers realized that learning about symbols; valencies and chemical formulae seem to be universal problem with students across the globe. Symbols of elements, their valencies and writing of chemical formulae are dealt with at secondary level in India. Students try to memorize them without any interest.

There are various card games which can be followed to teach symbols, valency, and chemical formulae etc., in joyful way during teaching-learning process. The studies have shown that card games can be used to learn the

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names and symbols of the elements and also to recognize typical compounds formed by them. This approach was well received by the students and it also engaged them more intensely for longer period (Franco-Mariscal et al., 2012). Card games have also been used by students to practice in identifying an element or ion from chemical symbol, categorizing elements as either metals or nonmetals, determine whether elements will combine to form ionic or covalent compounds etc., (Morris 2011).

In order to make learning of elements and their symbols, valency, chemical formulae etc., interesting among learners, Researchers focused on the following questions:

- Did the innovative way of teaching symbols of elements, their valencies and writing chemical formulae generate interest among learners of secondary stage?
- Was innovative way of teaching symbols, their valencies and chemical formulae more effective and stress free?

Why Toy/Game based Pedagogy?

Teaching basics of chemistry by using toys and involving students in games makes them interested in understanding the basic concepts of chemistry. These allow students to experience the minds-on, hands-on learning that improve their problem-solving skills and also improve their science content knowledge. Toys/games may help in the development of various domains such as, cognitive, psychomotor, socio-emotional, communicative, etc. among learners. The literature has shown that toys and games have existed in India since ancient times. Traditional Indian toys and games were simple and could connect to the real-life knowledge. The literature also shows that how the traditional games are part of one's heritage and cultural tradition, but with the passage of time, they are forgotten and are not passed on to younger generations, due to modern lifestyle (Pramanik & Bhattacharya 2018). According to Amir and Subramaniam 2005, toys can be used by children of all ages to see and recognize science embedded in their daily lives. Teachers who use toys in their lesson plans consider that the creativity, problem solving skills and mental skills of their students improve.

Toys can be used as learning tool for holistic development and experiential learning. As a part of the implementation plan of National Education Policy 2020 in India, it has been voiced that, toys aligned with Indian culture and ethos can be used as pedagogical tools in schools. As a part of the Aatma Nirbhar Bharat mission, the Ministry of Education also recommends to introduce toys and puppet making skills among students.

Methodology - Toy/Game based Pedagogy

Knowing the importance of toy/game-based pedagogy the Researchers used this pedagogy as a strategy for teaching-learning of names of elements and their symbols. They used locally available materials while developing a toy/game. One such example is explained in this paper.

How to create a toy?

Materials Required

Cardboard, coloured chart paper, a pair of scissors, glue, marker, iron nail, one wooden strip.

Stickers having names of following symbols: H, He, Li, Be, B, C, N, O, F, Ne, Na, Mg, Al, Si, P, S, Cl, Ar.

Design of the toy

Following steps were followed:

- Took a cardboard and cut it into a shape of a circular disc.
- Pasted a coloured paper on this circular disc.
- Divided this circular disc into twenty equal parts using sketch pen. This has been made tactile by dividing the disc into twenty equal parts using wax or thread or wire etc., (Figure 1).
- Wrote names of the elements/ pasted stickers of elements, such as, Hydrogen, Helium, Lithium, Beryllium, Boron, Carbon, Nitrogen, Oxygen, Fluorine, Neon, Sodium, Magnesium, Aluminium, Silicon, Phosphorous, Sulphur, Chlorine, Argon etc., one in each part (Figure 2). One can write names of elements alternatively in Braille too.
- Took a wooden strip and pasted a coloured paper on it. Divided this wooden strip into eighteen equal parts using sketch pen. Pasted stickers or wrote symbols of elements one in each part (Figure 3). One may write the symbols of elements alternatively in Braille too.

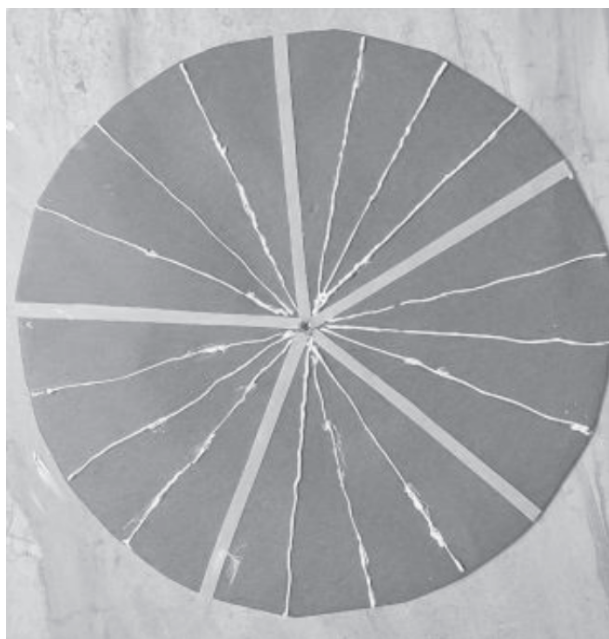


Figure 1: Circular Disc

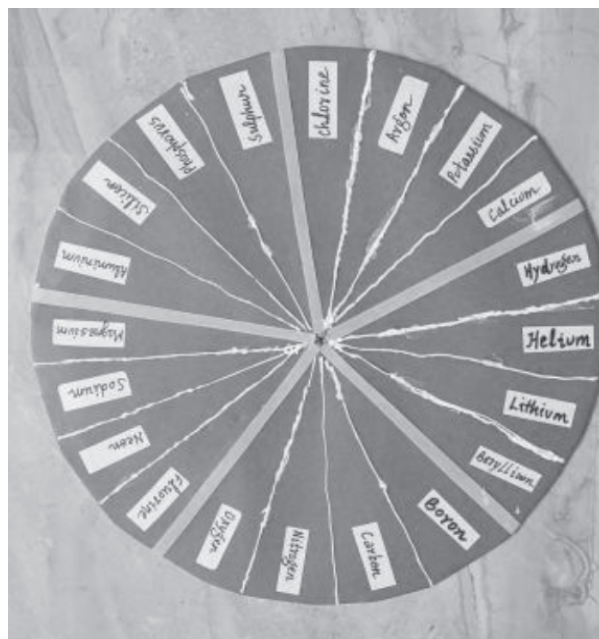


Figure 2: Names of Elements Written on the Disc

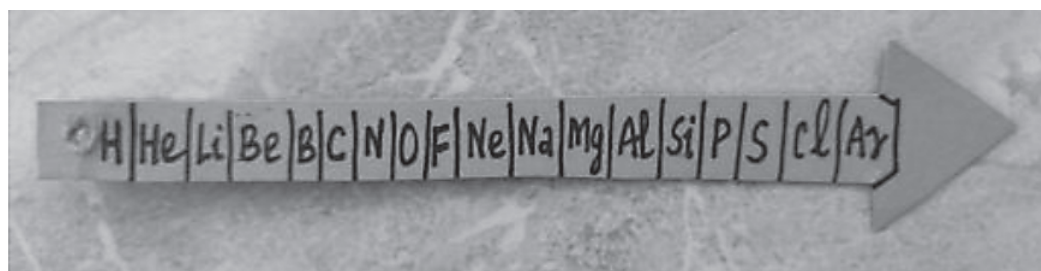


Figure 3: Wooden Strip

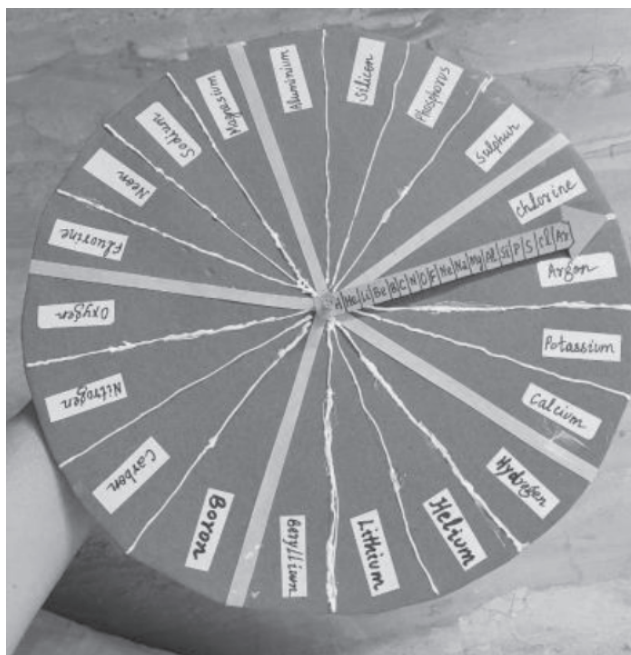


Figure 4: Tick-Tock, Symbol - Element Clock

- Attached this wooden strip to the circular disc using iron nail in such a way that the wooden strip could move freely around the circular disc (as the hand of the clock moves).
- And the toy was ready. The toy was named as “**Tick-Tock, Symbol - Element Clock**” (Figure 4).

How to play the game using the Toy “**Tick-Tock, Symbol - Element Clock**”

Rules of the game

This game can be played inside or outside the classroom.

A healthy inclusive classroom environment provides equal opportunity to all the students; those with and without learning difficulties can learn together.

- The Researchers encouraged visually impaired student to touch and feel the shape of the circular disc before starting the game.
- They divided the class into Two Teams-- A and B.
- The Researcher held the **Symbol - Element Clock** in her hand.
- One member from each team stood next to the Researcher.
- The team who won the toss got the first chance. The member from Team B named any one symbol displayed on the stick of the **Symbol -Element Clock**, say Cl.
- The member of team A moved the disc of the **Symbol-Element Clock** freely and waited till it stopped on its own. The stick stopped pointing towards any one of the Element, say Chlorine.

- Now, the player of Team B has to answer the following questions:
 - Is Cl the symbol of the chlorine?
 - Write any one formula having chlorine non-metal.
- The member of the Team B answered it correctly and got one point. He/she had also written at least one formula correctly, say KCl. The Team B got one more point.
- If Team B was not able to answer the question correctly, then chance would have been given to the member of Team A. If he/she answered it correctly, Team A would have got two points.
- Similarly, the game continued. The team that collected the maximum points won the game.

What More Can We Do?

This toy/game can also be modified and played to encourage multidisciplinary approach during teaching-learning

- Symbols can be written on the circular disc and valency can be written on the stick.
- Chemical name of the substances can be written on the disc and formulae on the stick.
- Specific characteristics of organisms on the circular disc and names of phylum of animalia on the stick.
- Names of rivers/ mountains on the circular disc and names of the states on the stick.

Science Concept behind the Toy/Game

One of the Researchers used this toy/game based pedagogy in the classroom with students of Class IX. While playing this game, it was important for the Researcher that students must know the science behind the toy / game. A chemical symbol is a short-hand method of representing an element. Instead of writing the name of an element, an element name can be represented with one or two letters. The chemical symbol for an element is used while writing the chemical formula for a molecule, or when writing a chemical equation. Valency is the ability of an atom to gain or lose electron, in order to achieve the noble gas configuration. It is obtained by determining the number of electrons in the outermost shell of an atom. The toy/game helped students to understand about the name of elements, their symbols and valency in interesting and joyful way.

Suggested Extension

The Researcher brought fun and enjoyment in the class by using the toy/ game. It motivated students to connect concepts of science with language (poetry/ prose).

One such example is placed below:

Tick Tock, Symbol - Element Clock
 Tick Tock, Symbol - Element Clock
 Hydrogen-H, Boron-B, Carbon-C, Oxygen-O
 Have first letter capitalized,
 What else you want to know?

Fluorine, Phosphorus and Sulphur
 It's the same case So?
 It's F, P and S
 Is there something else?
 He, Li, Be, Ne, Al, Si, Cl, Ar,
 All have first two alphabets from their name
 But there is one...which is not the same
 Sodium is not S or So....
 Symbol of Sodium is Na...
 It comes from Natrium, its latin name.
 H, Li, F, Na, Cl all have Valency one
 Be, O, Mg, S all have Valency of two
 What about elements with Valency three
 B, N, Al, P all these have Valency three...
 Let's play Symbol-Valency clock...
 This goes Tick-Tock, Tick

After playing the game using toy, the Researchers observed that the learning outcomes which students had achieved during teaching-learning process were:

They could--

Use scientific conventions to represent symbols of elements, valency, and formulae.

Exhibit creativity in designing toy/game using eco-friendly materials.

Apply learning of scientific concepts such as importance of symbols of elements in everyday life.

Exhibit values of honesty, objectivity, rational thinking while making the toy and playing the game.

Communicate the findings and conclusions effectively.

Make efforts to conserve and keep environment clean by making judicious use of materials and so on ...

Conclusion

One of the Researchers used this toy/ game pedagogy in the class and observed that students when divided into groups took it as a challenge to win the game. This not only strengthened the concepts but also made it joyful. The challenge for the Researcher was to engage the learners in joyful manner without losing the actual learning of the science concepts.

Researcher kept students engrossed in toy making and playing the game. The curiosity among students leads to acquisition of knowledge. It was observed that their positive emotions played an important role in

learning. Researchers also used this toy/game as an assessment tool, where students were assessed in a stress-free atmosphere. It changed students' state of mind from anxiety to fun and transformed over all environment of the class.

It is recommended that teaching science by using toys and involving students in games makes students interested in understanding the basic concepts of science. Toy/game- based learning allows students to experience the minds-on, hands-on learning that improves their problem-solving skills and nurtures their creativity and imagination (Jarrett et al., 2020).

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Understanding Adolescence from Anecdotes of My Teaching Journey

Richa Aggarwal

“Adolescence is a new birth, for the higher and more completely human traits are now born.”

—G. Stanley Hall

Every individual undergoes a series of transformations, right from conception till death, via the childhood – adolescence – adulthood process. Although the definitive period in years have been defined for each transition phase (stage) of life and is characterized by typical pre- defined norms, the behavioral characteristics specific to particular stages, and different dimensions ultimately makeup one’s personality.

Adolescence is the transitional stage of development between childhood and adulthood. It represents the period during which an individual experiences a variety of biological changes and encounters a number of emotional issues. It can be a turbulent as well as a dynamic period of one’s life. During adolescence, striving for autonomy, i.e., a sense of oneself as a separate and a self-governing individual becomes a salient task.

Psychologically however, adolescence as such is a vulnerable stage for both boys and girls of this age. They are easily carried away by perceptions, mainly generated by the lack of knowledge about a range of issues such as studies, career, sex, married life, society, religion, politics, or any relevant subject. The social implications of adolescent problems are dependent upon the social structure in a country like India, where family ties remain strong due to emotional, financial, and religious attachments. Thus, the gravity of implications is far less.

Adolescence can be a fairly stressful time for parents and for the family as a whole. Compared to parents, adolescents of all ages are generally less satisfied with the levels of adaptability in the family than their parents did. The main reason for escalation of conflict between them is that parents simultaneously treat adolescents like children and expect them to behave or act like an adult.

Effective communication is generally regarded as a focal point for good family functioning. Evidence from studies conducted on this subject suggests that loving parental behavior such as support, acceptance, approval, and nurturance augment a child’s self-esteem and improves their sense of competence. Conversely, having parents who are repeatedly disapproving, and insulting is also linked to low self-esteem in adolescents. Individuals subject to such condescending parenting need constant reassurance and may heavily rely on peers for affirmation of their self-worth. In some cases, the adolescents may also rely on their teachers to find much needed love, affection, understanding and a solution to their problems.

Socio-economic variations in a family environment may also affect the self- esteem of adolescents. Prior research studies on the socio-economic status (indicators being- income, education, and occupation) family

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functioning and human development indicates that social position influences families across time. Moreover, it was also observed that socio-economic disadvantages had negative consequences for both adults and children.

I too, am an individual who has passed through this adolescent phase. I have also studied in depth, the biological changes occurring in the body and the chemicals and hormones responsible for this transition. I have had the opportunity to peruse the theories of human development postulated by eminent personalities such as Freud's theory of Psycho-sexual development, Piaget's Cognitive (Intellectual abilities) Development theory, Erickson's Theory of Psycho-social development, and Kohlberg's theory of Moral development. Being the parent of an 8-year-old child and a teacher/mentor of senior class students for so many years, I can say this with confidence that what we are today and how we behave is largely affected by our family and social environment. Yes, other factors also do play their part but in the present scenario as care takers, our role is more challenging and demanding.

A common saying goes thus: *"A child's mind is like clay and can be molded into whichever shape desired. It is up to the parents and teachers to mold it into a beautiful and useful human being by inculcating good values in their young minds."*

I was lucky enough to be understood and motivated in the right way by my family and teachers. They were present when I needed them the most. I personally think this is the first and the most crucial thing to build a better relationship. My social environment was not entirely favorable, but as rightly said by Melanie Willard - *"Loss and hardships are unavoidable in life. However, how we deal with our pain is what will make us or break us."* I too gathered all my strengths to move ahead from all the adversities I've faced in my life.

I shall recount two anecdotes of my teaching journey here that will help you all to understand your child better. It doesn't matter whether you are a teacher or not because every child's first teacher is the parents and in each parent is a teacher, who wants to teach their children the beauty and the truth of this world.

Anecdotes

Coming of Age

What is the 'Coming of Age' that I am referring to here? I refer to the age when we all turn from teens to adults. It is the age when our body begins to develop and exhibit what is called as 'Growth Spurts'. This period is commonly referred to as '**puberty**'. During this time, our brain releases a specific hormone called **Gonadotropin releasing hormone (GnRH)** that kick starts the developmental changes.

Believe me when I say that it is not a laughing matter. Growing up is not an option, rather it's a necessity for the welfare of humankind. It happens to every teen, irrespective of gender, class, community, and our choices. During the onset of puberty, our body starts looking different on the outside. More than that, it brings with it some strong emotions and behavioral disturbances in the form of seeking identity, peer pressure, conflicting thoughts, mood swings, anxiety and feeling uncertain, being overly sensitive and constantly being conscious about one's own self.

For some new adults or better called as adolescents, puberty comes with a lot of excitement, eagerness and so many ifs and buts. Although they feel awkward in the beginning, by the time they get the hang

of the situation, most of them know how to handle it beautifully. But as every child is unique in his/her own way, so is their way of dealing with certain situations. Pubertal changes took a serious turn in the life of Niti.

Niti got her first menstrual period at the age of 12 (most common age for young girls to get their first period) while doing sports activities at school. Bear in mind that first menstruation is the sign that the hormones are working well in the body. In the midst of her sports class, she noticed that some of the notorious boys of the class were gaping and laughing at her. She immediately ran to the washroom and found that something thick and red was coming out of her vagina. It had leaked out onto her skirt and was now flowing down her legs. As she was not fully aware of this at that time, she started screaming. Luckily one of the senior class girls was there and helped her out in the best way possible.

After coming back home, Niti narrated to her mother everything that had happened. Listening to this, her mother had contentment on her face that her little girl had grown up. She explained in detail to Niti everything about the menstrual cycle. But Niti was disheartened, for just a few hours ago she had to deal with her menarche virtually all alone without her parents' help. There were so many questions swirling in Niti's mind for which she didn't have any answers. And perhaps these unanswered questions gave rise to feelings of frustration and exclusion in the girl. This led to her becoming insecure and lost in a completely different world. Next day, when she went to school, she was not the same confident cheeky girl as before but as a confused, shy, scared and a nervous child who was not sure of herself anymore.

The story of Niti is very common, as it generally happens with every second girl. But what is not so obvious and digestible for me is that if puberty is so common, then why the people of this 'sophisticated society' don't openly talk about such an important natural phenomenon? Why do teens like Niti feel anguished and anxious about their changing body looks? Don't you think it would be much better for us to discuss about these physical changes before they even happen?

It is certainly not easy to accept and understand the effect of moving hormones in our body that result in sudden weight gain, pubic hair, acne, body odor, chest lumps and voice modulation. Couple this with the double standards of our society, which on the one hand celebrates the attainment of a girl's menarche as a 'guarantee' card for her fertility and on the other hand considers the same girl as impure when she is menstruating.

Dear Parents and Society, as stated by Ralph Waldo Emerson, *"The age of puberty is a crisis in the age of man worth studying. It is the passage from the unconscious to the conscious; from the sleep of passions to their rage."*

We have to help our puberty-stricken teens to get through this crucial phase of life. In this case, I believe that the best solution is to provide them proper sex education at the right age. Our teens should get their answers about this 'social taboo' in an appropriate manner. As a parent or a guardian, show interest in your teen's school activities and encourage them to get involved in extracurricular activities such as sports, music, theater, and art. Create an amenable environment for them at home. Let them feel comfortable in their surroundings. Let them breathe easy without the fear of shame. Let them speak their heart out.

Let them embrace this new change. Let them enjoy their new identity.

NEET or JEE is not the End of Life

A 17-year-old Delhi boy tried to commit suicide for not getting a seat in the medical college of his choice.

With a cup of hot tea in my hand, I was turning the pages of the newspaper when I read this news. We often hear or read such headlines after the results of Board Exams or any other competitive exams. On reading this news, like any sane person, I too felt bad for the family. It also reminded me of Akshat. To give you, the readers, an idea about Akshat and what his story was, I would like to take you all back in time.

Akshat Jain, a student of Class XI in the medical stream, was a sober, disciplined and well-mannered child. He had an air of shyness about him too. I was the Class Teacher of his class. In those days, it was a rule that all the class teachers had to have their lunch sitting in their respective classes. It all seemed very bad in the beginning as I used to feel very uncomfortable having my lunch while sitting in a corner of the class, that too in front of so many senior students. I soon turned it into an advantage and started utilizing this time to interact with my students on a one-on-one basis to know them better. One day, after having my lunch, I called up Akshat. His head was down and was sitting quietly on the last bench.

“So, how much you scored in Physics? You have gotten the exam papers back, right?”

“I could not score well in any of the papers ma’am”. Saying so, he started sobbing uncontrollably. Within a few minutes, the bell rang, and I had to rush to another class. I told Akshat to meet me after all the classes were done for the day. After the school was over, he came to me and said in a forlorn voice, “Ma’am, I know I am not performing well in any of the exams, but I am trying my best to excel.”

“So where is the lack?” I asked him and continued “I have observed that you are a hardworking and sincere student who listens to his teachers carefully. But why is it not reflecting in your result? Is there any problem?”

“Yes Ma’am!” he replied in the same sad tone. “The problem is I did not want to study Science at all. I wanted to join the National School of Drama as I had always dreamt of being a famous Theater Artist. But my father wants me to be a doctor.

“Ma’am, I know that I am neither talented enough to clear NEET nor do I have any aptitude or interest in this field. I talked to my father many times about this and tried to convince him so many times. But all of this went in vain. My previous teachers know about this. Even the school counselors had a word with my father at the time of stream selection.” Akshat paused for a second and continued.

“My father was dismissive and told them to wait for my Class X results. During those 1.5 months, I was praying for my good scores but simultaneously, I was also feeling anxious about my future as I did not want to quit my passion and opt for science.” Akshat’s voice had become stronger and confident, now that he had someone to voice his feelings to. I let him continue talking and did not interrupt his flow.

“When the results were announced, I had scored a 9.6 CGPA. And this score pushed my father to think that I have the acumen of studying Science. The real problem is that I am not ready to put in the necessary efforts for studying Science” I thought that the last sentence was merely his perception and not the truth but chose to remain silent.

“Ma’am, my father is even ready to pay a hefty amount to buy MBBS seat from brokers if I cannot make it to any prestigious medical college on merit. Now it has been almost 3 months and I am struggling with understanding Physics, Chemistry and Biology. I really do not understand what to do.”

Akshat went on speaking everything, pouring it out altogether, as if for the first time he had gotten a chance to lighten his heart in front of anyone. After hearing his story, I could visualize where the problem was. I comforted him and said, “For the time being, you just focus on studies. Let’s see what can be done.”

Although it was not something new for me, it compelled me to think that how the fake ambition of parents to make their child a doctor or an engineer, forces the children to live their golden moments of life in anxiety and depression. A vast majority of parents want to fulfill their dreams and their ambitions through their children. I have seen that some parents put so much unrestrained pressure to make their children top their class that the natural development of the child stops. In India, hundreds of thousands of students are being taught the same syllabus and our so called ‘Modern Education System’ does the evaluation and grading of the child in such a way that there is no scope for creative learning or thinking out of the box. I want to share an excerpt which I had read somewhere, and it clearly highlights the lacunae of our education system.

In the forest, all the children of animals were asked to undertake an examination to award ranks. The sole criterion for awarding the rank was by the ability of the animal child to climb a tall tree. Our education system is somewhat similar to this, for in this exam, the child of the poor elephant will fail, and the child of a monkey will soar high.

Word spread like wildfire -- one that climbs the tree in a hurry would be considered the most successful. Everyone else’s life suddenly became meaningless. For all those animals whose children could not climb the tree immediately by jumping, coaching institutes were opened where children were taught how to climb the tree.

The elephants, the giraffes, the lions, the bulls, the buffaloes and all the fish of the forest enrolled their children in the Coaching Institute. Our son will also climb the tree and make our name proud, proclaimed the father elephant. And when the elephant’s son couldn’t climb the tree, the son committed suicide.

Know what your child is.

Are they elephant or lion, cheetah, hyena, giraffe, camel?

Or fish, swan, peacock, cuckoo?

Do you know if your child is an ant?

And if the child is, don’t be frustrated and disappointed.

The ant is the hardest-working animal on earth and can lift a thousand times more than its own weight.

Dear parents, please test your children's ability. Encourage them to move ahead in life rather than to follow the crowd blindly. Let them listen to their heart otherwise they might spend the rest of their life wishing they had. Remember, **someone has been awarded the Bharat Ratna even after playing the Shehnai**. And my dear students, who are appearing for Board Exams or any other competitive exams, please remember that you are the best in your own way. Just be confident of yourself, your abilities and strive to do your best in whatever you choose to do.

"Don't be a lost human being. Always walk with your head held high, with the values you inherit and learnt, not with the burden of regrets and hopes of life."

Reflections on Handling Adolescents

Impressionable children such as adolescents learn more by observing us, our behavior, and the general attitude of the society. So, if we want to mold a child in a particular way, we have to give them our undivided time and be a role model for them first. Therefore, we have to work on our own selves first. The following presents a few points on how we can go about in achieving it.

- Do you want your child to disown his/her principles and values of yours if incompatible? We have to understand them from their point of view, without imposing our thought process, perspectives and our expectations on them. We need to know the reason what makes them the way they are.
- Whatever lies around us in the form of non-living and living beings differ from each other in many aspects and we humans, the ultimate creation of God are no exception to this. Each one of us has our own individuality and certain distinctive abilities. Try to understand these individual differences.
- Do you remember the story of the hare and the tortoise? The moral of it was that *slow and steady wins the race*. Don't consider your child like a machine or a computer processor unit in which you will feed the input and get output in no time. Meaningful knowledge needs time to be assimilated in the mind. So let children learn at their own speed and interest level. In addition to this, discuss with them that 'Winning is not everything'. Sometimes learning lessons from failures is equally worthy.
- Let them explore, experiment and experience. Learning by doing is the best way to solve a problem.
- Did you ever compare your child with others and wish if he/she was like them? As we are living in a competitive society, it is no surprise that we expect excellence from our child. But this is not good for their mental health. Emotions may take the place of rational thinking and they might follow the wrong path to fulfill your expectations.
 - Don't humiliate or belittle your child in front of others, especially their peers. Sarcastic comments are always demoralizing. Keep your criticism specific to the behavior or an issue rather than making personal statements on character and personality.
 - Were you available whole heartedly when your child was lonely, stressed or lost? In that case, did you listen to him/her and comforted him/her or just scolded him/her without knowing the root cause of the problem? Remember the key is-- Deal with their aggression and negative behavior in a calm and constructive way. Encourage them to develop and follow a set of rules to abide by the society.

- We have to offer them positive support and show confidence in their abilities and delegate responsibilities to them.
- The gratification of desires needs motivation and positive reinforcement. There is an important term in Psychology called ‘Conditioning.’ It is the process of making a person believe in something or behave in a certain way by rewarding or punishing him each time an action is performed.

We are all exposed to conditioning in our day to day lives. For example, a father, when he comes home from office, always rebukes and punishes his child without caring to know the basic reason, may condition his child to fear him or develop anxiety at the time of the father’s return. Similarly, a teacher with defective methods of teaching or improper behavior may condition a child to develop distaste and hatred towards them, the subject they teach and even the school environment as a whole.

In a more complex case, a young woman who has had several unfortunate encounters with adult males may become so conscious in the presence of any adult male that she is unable to have normal social relations with them, let alone satisfactory sexual ones.

Thus, much of our behavior towards interests, attitudes, habits, sense of belongingness, criticism, moods, and temperaments, is to a great extent learned. This learned pattern of one’s behavior is acquired through conditioning. Conditioning not only helps in learning what is desirable but also helps in eliminating, avoiding or unlearning undesirable habits, unhealthy attitudes, superstitions, fear and phobias through de-conditioning.

So, proper conditioning of the child, particularly related to manner, behavior and beliefs during childhood and adolescence phases of life is imperative in today’s world.

- Being kind, considerate, honest, generous, and respectful towards each other can work for all situations.
- And if it is difficult to understand or evolve with them, then give them unconditional love without any doubt or any question.

Having mentioned these points, it doesn’t mean that we as a parent, teacher or a well-wisher should blindly accept what today’s teens demand and expect from us. We have to be a source of support and guidance. We should try to be a friend with them rather than being strict or authoritarian. Providing a stable, safe, and loving home environment and creating a culture of open communication is a must to avoid the conflicts between you and the child.

Remote Observation and Surveillance Equipment (ROSE) for Landslides

Ridhima Dogra



Ridhima Dogra of Class VI from Sadhu Vaswani International School for Girls made the school proud by winning reputed INSPIRE-MANAK award for the year 2021-22 under the guidance and leadership of the Head of the School - Ms Santosh Vyas and Ms Yamini Bisht (PGT-Biotechnology). The motivation and support from Ms Vyas has been encouraging students to win this highly reputed award every year.

The reputed INSPIRE-MANAK award is one of the most popular and highly reputed award schemes, executed by the Department of Science and Technology (DST) with National Innovation Foundation – India (NIF). The aim of this scheme is to motivate and promote the best ideas and innovations (related to real-life problems of the community) designed and developed by students of Classes VI to X nationwide.

Ridhima Dogra observed the problem of unpredicted landslides in the hilly areas of Northern India, leading to loss of lives. She worked on unmanned remote monitoring and alerting systems for landslides and hence developed Remote Observation and Surveillance Equipment (ROSE) for landslides. She won a cash prize of INR 10,000 under the INSPIRE –MANAK award scheme for developing her project.

Objective

The project focuses on unmanned remote monitoring and alerting systems for landslides. This stand-alone system will predict landslides for better understanding of the phenomena and pass real time information to the Disaster Management Team for rescue at remote locations.

Introduction

Northern part of India is a hilly terrain and is one of the highest mountain ranges in the world and is prone to landslides. This is a young mountain range, thus there have been huge number of landslides. These mountain ranges are difficult to monitor for landslides and even more difficult to launch rescue missions on time. These landslides cannot be stopped; therefore, it is not humanly possible to watch critical areas and landslides. Therefore, there is a requirement of a stand-alone, Solar Powered and Interactive Data Collection System. This is being done by harnessing already developed technologies, like Solar Energy, Proximity Switches and available Communication Network. The project can help save human life from sudden landslides without any human interference, automatically.

Ms. Ridhima Dogra, Student of Class VI, Sadhu Vaswani International School for Girls, New Delhi, India

Materials Required

The materials for making this project are cheap and easily available. Following materials will be required for the working of the project –

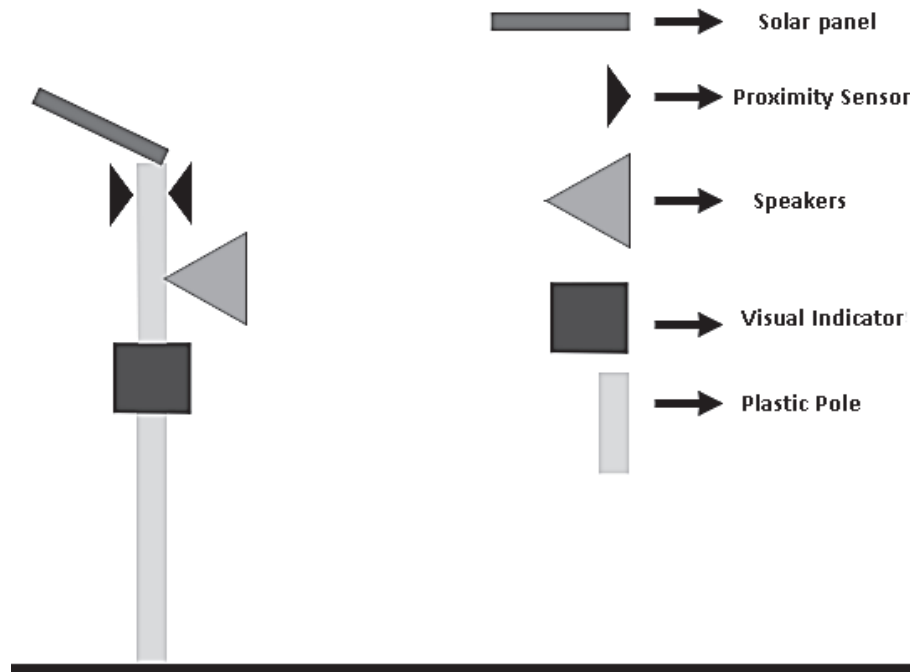
1. Plastic poles
2. Proximity sensors
3. Solar Panels
4. Cellular communication

Procedure

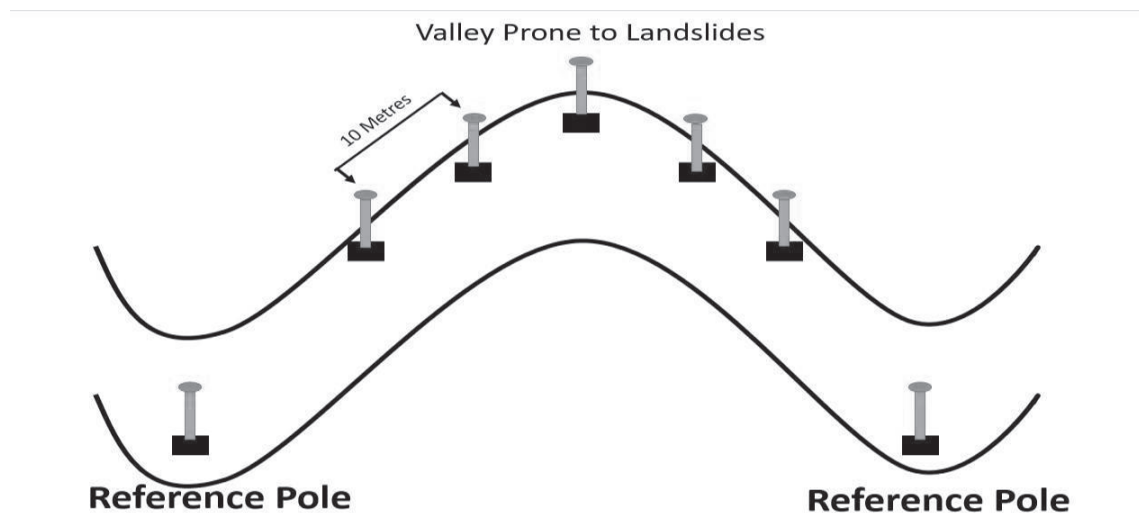
A particular area with high-risk zones will be identified. There would be two poles inserted for reference in the areas where landslides are not expected. In between of the reference poles, as per the capability of proximity switches, a number of similar poles will be installed. These poles will communicate with each other and the reference poles. The reference poles will collect data after a fixed interval of time. This data will be shared with a command centre in real time. In case there is a sudden large relative movement between the poles or the poles begin to move at the same time, then there will be an audio-visual alarm in the area and the same will be communicated to the rescue and rehabilitation centre of that particular area.

Construction

Pole construction:



Placement of poles: -



Data Collection

The data will be collected at a command centre from all the unmanned, stand alone, independent systems. The command centre can also store this data. This will help in analysing the categorization of zones against landslides. In case landslides are coming in the area then a software can help us to study the pattern of the incoming continuous landslides.

Utility of the Project

As the project is self-sustaining, it requires routine check-up/maintenance only; it can work without any help of humans. The requirement of the system is in remote locations where continuous supply of energy may not be available or may not be economical, so it is proposed that—

The electric supply/energy supply for the project is based on Solar energy. As nowadays, mobile data connectivity is available everywhere in India, therefore, communication with the command centre will not be a hindrance to the project. It will save lives and property and provide treasure of data for future studies.

Cost Effectiveness

Easily available Solar Panels, Small batteries, cheap mobile data, no use of manpower and low maintenance cost; all these features of the project make it cost effective.

Conclusion

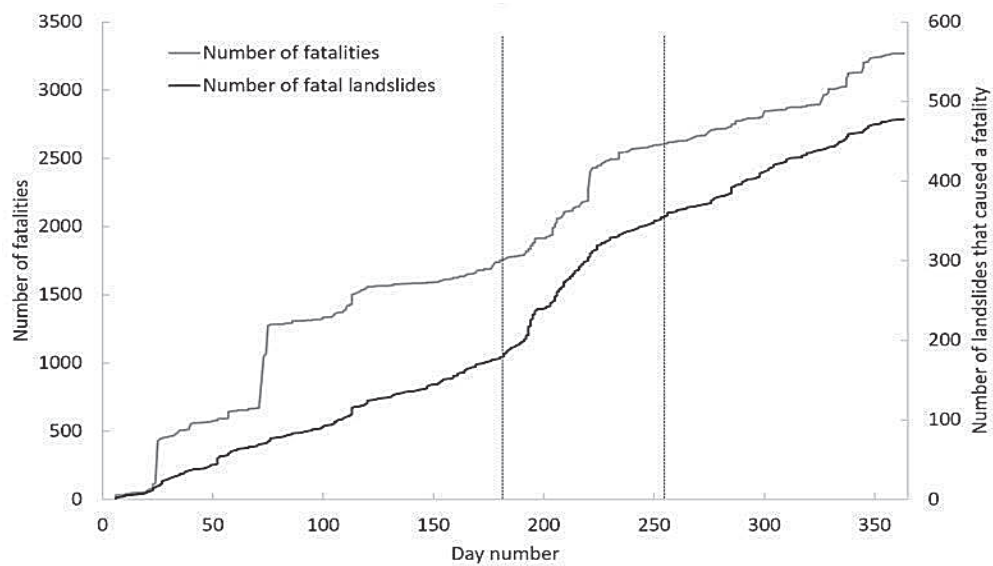
The project concludes that it can help in rescue and rehabilitation missions. The project can also help in making timely preparations for the incoming disaster. By implementing this project, large areas can be monitored by a very small team of experts and can save manpower.

Further Research/Development of the Project/Model

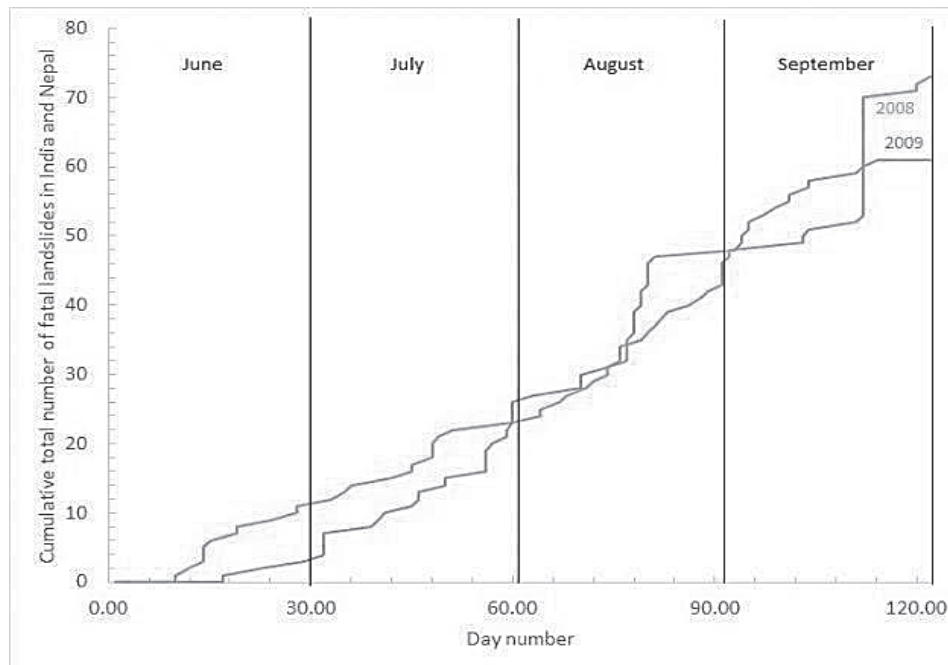
The project's future use could be to analyse and predict the incoming landslides. Data collected, after being analysed, could help us to prepare for the incoming landslides and create structures that can help us to prevent extensive damage.

In future, more sensors can be added to study better about landslides

Usage of Charts/Diagrams



Number of Fatalities Worldwide Due to Landslides



WHAT DO THE ORIGINAL THINKERS SAY ON EDUCATION

“Education is a process of living through, a continuous reconstruction of experiences.”

—John Dewey (USA)

“Education means enabling the mind to find out that ultimate truth which emancipates us from the bondage of dust and gives us wealth not of things but of inner light, not of power but of love. It is a process of enlightenment. It is divine wealth. It helps in realization of truth.”

—Rabindra Nath Tagore (India)

“Education should aim at all round development of the child. It is in this way, the child will develop into a good citizen. The objective of education is the realization of a faithful, pure, inviolable and hence holy life.”

—Friedrich Frobel (Germany)

“The great aim of education is not knowledge, but action.”

—Herbert Spencer (England)

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