

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

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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

References

- Boyd, M. P. (2015). Relations Between Teacher Questioning and Student Talk in One Elementary ELL Classroom. *Journal of Literacy Research*, 47(3), 370-404. <https://doi.org/10.1177/1086296x16632451>
- Carvalho, C., Santos, J., Conboy, J., & Martins, D. (2014). Instructor feedback: Exploring differences in students' perceptions. *Procedia-Social and Behavioral Sciences*, 159, 169-173. <https://doi.org/10.1016/j.sbspro.2014.12.351>
- Castillo, R. (2014). A paradigm shift to outcomes-based higher education: policies,

- principles, and preparations. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*. 14. 174-186.
https://www.academia.edu/17214540/A_Paradigm_Shift_to_Outcomes-Based_Higher_Education_Policies_Principles_and_Preparations
- Cevikbas, M. & Argun Z. (2016). An innovative learning model in the digital age: the flipped classroom. *Journal of Education and Training Studies*, vol. 5, no.11, 2017, pp. 189–200. <https://doi:10.11114/jets.v5i11.2322>
- Chicca, J., & Shellenbarger, T. (2018). *Connecting with Generation Z: Approaches in Nursing Education*. *Teaching and Learning in Nursing*, 13(3), 180–184. <https://doi:10.1016/j.teln.2018.03.008>
- Corpuz, B. & Salandanan, G. (2015). *Principles of Teaching I*. Lorimar Publishing, Inc., p. 73-75
- Dabell, J. (2018). *Effective teacher-student feedback practices*. <https://www.sec-ed.co.uk/best-practice/effective-teacher-student-feedback-practices>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 1–44. <https://doi:10.1080/10888691.2018.1537791>
- Dinmohammadi, M., Peyrovi, H., & Mehrdad, N. (2013). Concept analysis of professional socialization in nursing. *Nursing Forum*, 48(1), 26– 34. <https://doi:10.1111/nuf.12006>
- Hamid, Y. & Mahmood, S. (2010) Understanding constructive feedback: a commitment between teachers and students for academic and professional development. *Journal Pak Med Assoc*. 2010;60(3):224-227. <https://pubmed.ncbi.nlm.nih.gov/20225784/>
- Hampton D. & Keys, Y. (2016). Generation z students: Will they change our nursing classroom. *Journal of Nursing Education* 7 (4). <https://doi:10.5430/jnep.v7n4p111>
- Haghani, F. & Fakhari, M. (2014). Feedback in clinical education: Concept, barriers, and strategies. *Iranian Journal of Medical Education*.13(10):860-85. <http://ijme.mui.ac.ir/article-1-3015-en.html>
- Harerimana, A. & Mtshali, N.G. (2019). *Nursing students' perceptions and expectations regarding the use of technology in nursing education*. <https://doi:10.25159/2520-5293/5103>.
- Hauer, K. & Kogan, J. (2012). Realizing the potential value of feedback. *Med Educ.*; 46: 140-2. <http://dx.doi.org/10.1111/j.1365-2923.2011.04180.x>
- Jurenka, R., Stareček, A., Vraňáková, N. & Caganova, D. (2018). The learning styles of the generation group z and their influence on learning *Results in the Learning Process*. 251-260. <https://doi:10.1109/ICETA.2018.8572186>.
- Kheradmand, N. & Sayadiyan, S. (2016). Comparative investigation of the effects of immediate and delayed error correction on the achievement of male and female Iranian EFL learners' writing skills, *International J. Soc. Sci. & Education*, 6(1), 31-39. <http://ijsse.com/sites/default/files/issues/2016/v6i1/paper-04.pdf>
- Kleinschmit, M. (2015). *Generation Z characteristics: 5 infographics on the Gen Z lifestyle*. [https:// www.visioncritical.com/generation-z-infograp](https://www.visioncritical.com/generation-z-infograp)
- Kogan, J.R., Conforti, L.N., Bernabeo, E.C., Durning, S.J., Hauer, K.E., & Holmboe, E.S. (2012) Faculty staff perceptions of feedback to residents after direct observation of clinical skills. *Med Educ*.2012;46(2):201–15. <https://doi:10.1111/j.1365-2923.2011.04137.x>
- Macayan, J. (2017). Implementing outcome-based education (obe) framework: implications for assessment of students' performance. *Educational Measurement and Evaluation Review*. 8. 1-10. https://www.academia.edu/34442717/Implementing_Outcome-Based_Education_OBE_Framework_Implications_for_Assessment_of_Students_Performance
- Mannino, J. (2016). Educating nursing students for practice in the 21st century. *International Archives of Nursing and Health Care*. 2. <https://doi:10.23937/2469-5823/1510026>.
- Masadeh, T. & Elfeky, A. (2017). Immediate versus delayed feedback in promoting student teachers' skills for lesson plan implementation. *British Journal of Education*. Vol.5. pp.43-58.

- Narciss, S., Sosnovsky, S., Schnaubert, L., Andres, E., Eichelmann, A., Gogvadze, G. & Melis, E. (2014). Exploring feedback and student characteristics relevant for personalizing feedback strategies, *Computers & Education*, 71, 56–76. <https://doi.org/10.1016/j.compedu.2013.09.011>
- Nassaji, H. (2015). *The interactional feedback dimension in instructed second language learning: Linking theory, research, and practice*. Bloomsbury Academic. https://www.researchgate.net/publication/271644871_Interactional_Feedback_Dimension_in_Instructed_Second_Language_Learning
- Nassaji, H. (2016). Anniversary article interactional feedback in second language teaching and learning: A synthesis and analysis of current research. *Language Teaching Research*, 20(4), 535–562. <https://doi.org/10.1177/1362168816644940N>
- Natesan, S. M., Stehman, C., Shaw, R., Story, D., Krzyzaniak, S. M., & Gottlieb, M. (2019). Curated collections for educators: five key papers about receiving feedback in medical education. *Cureus*. <https://doi.org/10.7759/cureus.5728>
- O'Mara, L., McDonald, J., Gillespie, M., Brown, H., & Miles, L. (2014). Challenging clinical learning environments: experiences of undergraduate nursing students. *Nurse Education Practice*. 2014;14(2):208–13. <https://doi.org/10.1016/j.nepr.2013.08.012>
- Quinn, P. (2014). Delayed versus immediate corrective feedback on orally produced passive errors in English, (Ph.D. Dissertation): *Ontario Institute for Studies in Education*, https://tspace.library.utoronto.ca/bitstream/1807/65728/1/Quinn_Paul_201406_PhD_thesis.pdf
- Saito, H. & Fujita, T. (2004). Characteristics and user acceptance of peer ratings in EFL writing classrooms. *Language Teaching Research*. 8. 31-54. <https://doi.org/10.1191/1362168804lr133oa>.
- Zehra, R. (2015). *Effects of Personality on Blue Ocean leadership, the impact of Blue Ocean Leadership on life satisfaction*. https://www.researchgate.net/publication/318760677_Effects_of_Personality_on_Blue_Ocean_leadership_the_impact_of_Blue_Ocean_Leadership_on_life_satisfaction