The Effect of Moral Judgement Learning Model for Generation Z Students

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ABSTRACT--- Education aims to create individuals who are broad-minded, skilled, and have good morals. For this reason, moral education is seen as necessary as the primary foundation in shaping a generation so that it can become a global society in the current era of the industrial revolution 4.0. In achieving the goals of moral education, various strategies are needed in the classroom so that the results achieved are by what is expected. This research is quasi-experimental research using a one-group pretest-posttest design. This study aimed to determine the effect of the moral judgment learning model on the learning outcomes of high school students (SMA) as Generation Z with unique characteristics. The research instrument used in a learning outcome test to collect data on the pretest and posttest. Furthermore, the data collected was analyzed quantitatively using SPSS version 22 software to obtain descriptive statistics, pair sample correlations, and sample T-tests. The results showed a significant positive difference in the use of the moral judgment model on the learning outcomes of high school students as Generation Z from the pretest and posttest sessions.

Keywords-- Moral Judgement, Learning Model, Generation Z

1. INTRODUCTION

Currently, Generation Z has become the main topic of study in the world of work (companies) to education. This generation emerged after generation Y or millennials who have different characteristics from previous generations. [1] mentions that this generation is a generation that is global, diverse, technological, and entrepreneurial, even though they do not know the digital world without smartphones and social media.

In some literature, generation Z is termed the post-millennial generation or information generation (iGeneration), which are teenagers born in early 1995 to 2010. There are still many experts who give the wrong definition regarding this generation Z. They consider Generation Z the same as millennials. Each generation brings its different characteristics [2].

Generation Z as a teenager today has grown along with the development of technology. This indicates that Generation Z adolescents are more familiar with technology, the internet, and social media in communicating in their lives [3]. As a result of exposure to internet media and technology, Generation Z has a more significant positive and negative impact when compared to the previous generation. However, millennials and Z generations often fail to anticipate their challenges while at school and on campus [4].

The presence of Generation Z as school members certainly brings its consequences [5]. The unique characteristics possessed by this generation can become a particular problem in schools [6]. Generation Z students tend to like the digital-based learning process, which contrasts to teachers who come from a much different generation. This causes the learning process in schools to become increasingly tricky [7].

The problem of education is about the presence of this generation and the impact of changes and technological advances. In addition to having a positive effect on the development of science, technological advances also harm student behaviour. [8] revealed evidence that shows the decreasing level of understanding, ownership, and application of human values in
society, resulting in various non-normative behaviours, such as violent behaviour, human rights violations, and killings that violate human dignity. The same thing was also stated by [9] which says that the phenomenon of Indonesian education is currently decorated with various negative behaviours of students who are not by the nation's cultural values.

So far, direct moral learning in schools is considered ineffective. The argument put forward by Dewey also explains that explicit moral learning is not effective [10]. Ideally, moral education in schools should strive for a complete human existence [11]. In other words, moral education in schools must do something significant to build confidence, build character, respect life, and so on. In addition, moral education should aim to promote an understanding of the higher spiritual nature of humans in which students and teachers as the subject of their spiritual quest take place [12].

One of the efforts in maximizing moral learning outcomes in schools is to apply appropriate learning models. One of them is a learning model based on moral considerations. Moral judgment is an activity, behaviour, or attitude assessing which actions are morally right or wrong. In this case, if one realizes that a course of action is possible, then one should ask which course of action is more morally justifiable [13].

There are several previous studies related to the theme of moral considerations in learning in schools. [14] stated her findings that the level of moral judgment of students taught by the moral dilemma discussion method was significantly different when compared to students taught by the lecture and question and answer method. Another study stated that the application of moral cognitive-based learning through the value clarification technique (VCT) model proved effective on Civic Education learning outcomes by considering the moral judgment of elementary school students [15]. In addition, another study stated that there was an influence of religious knowledge and moral considerations on students' aggressiveness [16]. That is, the higher their spiritual knowledge and moral concerns, the less aggressive behaviour of students.

From these several studies, no research aims to produce a learning model based on moral considerations and then test the quality of the model from the aspect of its effectiveness. This study is a phase of testing the efficacy of a research and development study to determine how effective the moral judgment learning model is for generation Z students in high school.

2. LITERATURE REVIEW

2.1. Oral Judgement

According to Kohlberg, moral considerations and the basis of one’s moral orientation can be improved through moral learning that emphasizes cognitive development. That is, the moral learning process refers to the process of consideration, reasoning, and cognition. The primary basis of the moral approach is the ability to reason (cognitively) on moral issues that exist in society.

[17] explains that moral cognition emphasizes morality more on aspects of high taxonomic intellectual transactions (reasoning) in finding a solution to the problem contained in the given stimulus, which is referred to as a dilemma. The level of the dilemma dramatically determines the level of intellectual transactions that occur. Thus, the characteristics of the approach that forms the critical thinking process can support the intellectual and emotional development of elementary school students who are not yet perfect.

[18] explains that moral development seeks to develop moral reasoning and judgment based on moral levels and stages. Thus, the success of moral education can only be achieved if learning is carried out by the phases of students' moral, intellectual, and emotional development. In general, the cognitive structure is the stage of intellectual potential consisting of knowledge, comprehension, application, analysis, synthesis, evaluation [19]. Cognitive is defined as everything that concerns the ability to develop rational abilities (sense). The focus of the cognitive theory is how the processor efforts to optimize or develop practical skills possessed by individuals [20].

Piaget stated that children could actively construct their cognitive world [20]. According to Piaget, organizing and adjustment (adaptation) are processes or stages that underlie individual development in the world. The organizational tendency can be described as the innate tendency of every organism to integrate its processes into coherent systems. Adaptation is the ability of each individual to adjust to the environment and social circumstances [21].

The study of moral judgment usually focuses on how people respond to a moral dilemma. A typical paradigm in moral judgment usually involves an attempt to evaluate various situations involving danger or justice to conclude one’s morality or behaviour [22].

2.2. Moral Judgement Learning Model

The learning model that emphasizes aspects of moral development is based on the following assumptions: a) moral
education (moral citizenship, ethics of living in the state, character of the state); b) development is an effort to develop moral considerations through the moral stage; c) the process of moral development can be learned; d) morality standards are based on the universal philosophical concept of “justice”; e) moral judgments are a solution to conflicts between values (moral dilemmas), and f) moral judgments are made from everyday things and refers directly to everyday behaviour.

The purpose of the moral judgment-based learning model is to help students gradually develop their moral hierarchy, and that means developing moral reasoning to produce better morals and become better citizens. In general, moral education in schools is carried out through discussing dilemmas or aspects of thinking. The moral dilemma is intended to train students to make the best decisions with all the consequences [23]. Students’ moral development is expected to develop at a higher level through moral dilemma stories.

The role of moral dilemma stories in moral development can also develop students’ critical thinking skills. [17] believes that the learning process of a moral cognitive approach through dilemma stories can create moral conflict and foster problem-solving skills (problem thinking skills). Therefore, moral cognition is also associated with higher-order thinking skills or critical thinking.

2.3. Generation Z

Generation Z is a generation that has different characteristics from the previous generation. [24] defines generation Z as the first generation affected by digital technology such as social networking sites and various information overload from the internet both directly and widely. If generation Y (millennials) are still experiencing a technological transition to the internet, then generation Z was born when the technology was already available (digital natives).

Generation Z is grouped from the generation born after 1995 to the 2000s [25]. [26] explicitly states that Generation Z is a generation that grew up in the era of the internet and networks worldwide. This generation is characterized by 5.1 billion information seekers on Google per day, 4 billion YouTube viewers, more than 1 billion Facebook account users worldwide, and more than 1 billion iTunes music application users (Schwieger & Ladwig, 2018). In addition, this generation can scan the information it obtains and then dives deep into it and process that information by sharing or seeking input [27].

There have been many scientific studies that reveal structural differences between generation Z and previous generations. This condition is not caused by genetic factors but is caused by brain factors that respond to the environment outside them [28]. The generation Z generation brain is illustrated as a sophisticated cable and has a very complex visual image [29]. In the field of education and learning, Generation Z prefers learning in visual form because the part of the brain responsible for this ability is developed better than other parts of the brain [30].

From the aspect of their strengths, Generation Z is a person who has a broad understanding of differences, solidarity, equal rights and has a more open mind [31]. They are born with a situation in an environment of ethnic, cultural, and racial differences. These conditions shape the personality and mindset of Generation Z in viewing differences in race, ethnicity, culture and religion more openly [32]. In addition, the use of language in generation Z is more specific because they use language, words, and expressions in the communication process. They sometimes use different languages and expressions when interacting with their group and their parents [33].

3. METHODS

3.1. Research Design & Participants

The purpose of this study was to determine the extent of the influence of the moral judgment-based learning model on the learning outcomes of generation Z students in Citizenship Education (Civics) subjects. This research is quantitative research with a quasi-experimental design. This study uses a one-group pretest-posttest method by giving special treatment using the moral considerations learning model.

In addition, this study also involved participants from high school students in Lamasi District, Kab. Luwu, South Sulawesi Province. Fifteen class XI students were used as research subjects, which were determined using the purposive sampling technique. The research of this research participant is based on several considerations related to the conditions and research themes. One of them is determined based on the state of the class, which is more diverse from the background of the students' academic abilities.

3.2. Data Collection

Data was collected using a test technique in the form of a moral judgment test. The test questions are designed by
considering the theories in moral considerations by [34] in the form of stories in everyday life. The test instrument developed contains a short story about moral dilemmas and questions and answer choices concerning respondents' attitudes, actions, feelings, or perceptions regarding the dilemma presented.

In addition, the research instrument test has several answer choices that have a graded sequence (score) according to the indicators in the stages of development of moral considerations. The following criteria determine the scoring: (a) a score of 1 for stage 1, namely the obedience and punishment orientation stage; (b) a score of 2 for stage 2, namely the orientation of satisfying the needs, (c) a score of 3 for stage 3, namely the "good boy" image orientation stage, (d) a score of 4 for stage 4, namely the legal and regulatory orientation stage, (e) a score of 5 for stage 5, namely the reciprocal orientation stage, and (f) a score of 6 for stage 6, namely the universal value orientation stage. Before being used, the multiple-choice test was tested to determine the level of validity and reliability. The test results show that this instrument is declared valid and reliable, with a score of 0.82 for the data collection process.

3.3. Data Analysis

The data collected through the test instrument was analyzed quantitatively using the Statistical Package for the Social Science (SPSS) version 22 software. In this case, the researcher ran descriptive statistical tests, paired sample correlations, and paired T-tests to see the effect of the learning model. They were based on moral considerations on the learning outcomes of generation Z students.

4. FINDINGS/RESULTS

After the pretest and posttest data were collected, the data were analyzed using SPSS software by running a fundamental analysis of the mean, standard deviation, and t-test. In general, the results of the data analysis are presented in table 1.

Table 1. Paired Samples Statistics

|       | Mean | N  | Std. Deviation | Std. Error Mean |
|-------|------|----|----------------|-----------------|
| Pretest | 3.693 | 15 | .4920          | .1270           |
| Posttest | 5.007 | 15 | .4061          | .1049           |

Table 1 shows the results of descriptive statistical tests about the scores of students' moral considerations. The average score for moral considerations was calculated using a statistical procedure, namely the paired sample t-test. Based on the table, the average value of the moral judgment ability of 15 students increased from 3.69 in the pretest to 5.007 in the posttest session.

Table 2. Paired Samples Test

| Paired Difference | 95% confidence interval of the difference |
|-------------------|----------------------------------------|
| Mean | Std. Deviation | Std. Error Mean | Lower | Upper | t | df | Sig. (2-tailed) |
|-------|-----------------|-----------------|-------|-------|---|----|-----------------|
| Pair-1 Pretest-posttest | -1.3133 | .5817 | .1502 | -1.6355 | - .9912 | -8.744 | 14 | .000 |

Table 2 is a paired sample test output table. The table obtained data that t count > t table that is 8.74 > 2.14, with Sig. (2-tailed) of 0.00 < 0.05. There is a difference in the average value between the pretest and posttest on the moral judgment test of students. Thus, it can be concluded that there is an influence before and after applying the learning model based on the moral considerations of Generation Z adolescents on Civics learning. The increase was seen from the average score and the percentage value of the moral judgment test score. The following describes in detail the effectiveness of the PBPM model in increasing the moral judgment stage of generation Z students.
Based on the data, table 3 shows the average value of the pretest and posttest and the frequency of students' moral judgment stage scores. This model shows that it effectively increases the stage of development of students' moral judgment to the next step, namely stage 4. This stage is a stage of reciprocal consideration where the decision to do something right in the hope that one day will get help from others.

This learning model with moral considerations provides comprehensive understanding and knowledge to students. Students can recognize situations that occur in a moral dilemma, make decisions on the choice of behaviour that will be carried out by the main character for the moral dilemma presented. It reveals the logical reasons for moral behaviour that is carried out, recognizes and accepts various opinions regarding the logical reasons for behaviour, acknowledges and accepts multiple arguments regarding logical reasons that are higher than the moral stage of conduct, and is able to evaluate and reflect on values moral values taken along with the logic so that they can be held accountable for it.

## 5. DISCUSSION

Based on the study results, information was obtained that this moral consideration learning model was effective in increasing the stage of moral development of generation Z students. The stage of moral development of students from the average value and the tendency of the frequency of values that appeared increased from stage 3. It namely the stage of paying attention to the image of “good children” or the orientation of “good boy” and “nice girl” to stage four, namely the stage of paying attention to laws and regulations. Moral development is characterized by changes in reasoning, feelings, and behaviour about standards of right and wrong. The intrapersonal dimension in moral development regulates a person’s activities when involved in social interaction and conflict resolution [35].

There have been many moral inconsistencies in everyday life. This is because the relationship between moral judgments and actions is still unclear [36]. In the context of democratic citizenship, moral judgment competence can also be linked to various other aspects. The judgment of moral wrongdoing depends largely on inferences about the wrongdoer’s mental state, primarily whether the wrongdoer acted intentionally. In cross-cultural contexts, intentional actions are judged to be more wrong than unintentional actions [37,38].

In this moral judgment-based learning model, several phases provide three forms of social experience that influence moral choices/decisions [39]. First, the role expert opportunity, which is a cognitive process and social process, shows that students can place themselves in the motives, feelings, thoughts, and behaviour and resolve conflict situations between self-interest and others [40]. Thus, the conflict situation can be resolved relatively based on the consideration of both parties. Second, socio-cognitive conflicts, namely experiences that occur when students are faced with different views. In this diversity of perspectives, students will have internal dialogue [41]. In the dialogue process, students will understand and place these views in a particular thinking/cognitive structure to make the right decisions. Finally, the moral climate of the social environment that has the potential to be perceived is higher than the stage of moral consideration in resolving conflicts of personal claims with others [42].

The development of moral reasoning has an intrapersonal dimension, which regulates student activities when involved in social interactions and an interpersonal dimension that regulates social interaction in conflict resolution [43]. Thus, moral considerations relate to the rules and provisions of what students should do in interacting with others [44]. This is in line with the views of experts who state that the development of moral judgment does not occur because of nature but is the result of human interaction with their social environment [34,45].

The steps in this model of moral consideration effectively foster empathy, conscience, self-control, respect, kindness, tolerance and justice in students. These virtue values grow and are well-honed in students who are faced with moral dilemmas every day, especially moral dilemmas that occur and are encountered in the surrounding environment [13]. These attitudes become the basis for making moral decisions (moral judgment) which ultimately form moral intelligence and positive self-concepts for students in viewing themselves and their environment [46]. This moral intelligence helps students understand what is right and wrong in taking action or behaving so that they have strong moral beliefs in acting based on these beliefs and can be right and honourable [47].

This moral consideration model provides students with a comprehensive understanding and knowledge to recognize

| Information | Moral judgment stage | Total |
|-------------|----------------------|-------|
|             | 1 2 3 4 5 6         |       |
| Pretest     | 3 10 60 43 25 9    | 150   |
|             | 2% 6.7% 40% 28.7% 16.7% 6% | 100% |
| Posttest    | 0 0 11 20 76 43  | 150   |
|             | 0% 0% 7.33% 13.3% 50.7% 28.7% | 100% |
situations that occur in a moral dilemma they face [48]. In other words, this model can foster students' skills to make decisions and solve problems. The results showed a significant positive impact of increasing the student's consideration to stage six. This moral consideration model can help generation Z students deepen their understanding, motivation, and personal and social responsibilities to form a strong character in school. This follows the views of [51] which states that the moral education model is an effort to help students understand the concept of justice and help moral development from stage one to stage six. It is the teacher's duty to convey good values to students and stimulate a sense of justice in these students [52,53].

For generation Z, current learning, including moral learning, must be adapted to their needs and how they like to learn. This study states that it is no longer possible to satisfy Generation Z students by applying traditional learning methods or strategies [54]. This means that learning for generation Z students must integrate technology into the learning process in the classroom. [55] stated that mobile applications have a positive impact on student achievement outcomes. However, other results are contradictory because this study proves that even though Generation Z likes technology, they are not automatically interested in using it in the learning process.

In general, generation Z students are easily directed to the moral learning process because this generation has several advantages in social aspects that the previous generation did not have. Generation Z has a more positive life towards community, environment, emotionalism, justice, friendship, sensitivity to other people's problems, and high spirituality [56]. In fact, another study states that this generation is a “new conservative” group who adheres to traditional beliefs, respects family, and is able to control themselves and be responsible [57].

In response to this, schools need to change their learning strategies to be more visual and interactive with information that is instantly available. The most important thing for Generation Z students is how to incorporate technology and social media into the classroom [58]. In addition, learning for Generation Z students also needs to use digital tools and online forums for learning, such as Soundcloud, Piktochart, Canva, Twitter, Facebook, Instagram, WordPress, Educlipper, Prezi, and others [59].

6. CONCLUSION

This study aims to determine the effect of the moral judgment-based learning model on the results of the Z generation students’ moral judgment stage. The results showed a significant positive impact of increasing the student's consideration stage after being given treatment in Civic Education learning with a moral judgment-based learning model. This can be seen from the results of tests conducted by comparing the average scores of the pretest and posttest. The results of this study are expected to be the basis and additional reference for teachers and researchers in designing moral education lessons for generation Z students. This is considered necessary because this generation group has different characteristics and learning styles compared to previous generations. Thus, the problem of moral learning that occurs due to the gap factor between students as digital natives and teachers as digital immigrants can be minimized.

7. REFERENCES

1. Seemiller C, Grace M. Generation Z Goes to College. San francisco: Jossey-Bass; 2016.
2. Green DD, McCann J. The Coronavirus Effect: How to Engage Generation Z for Greater Student Outcomes. Management and Economics Research Journal. 2021;7(1):1–7.
3. Therrel JA, Dunneback SK. Millenial perspectives and priorities. Journal of the Scholarship of Teaching and Learning. 2015;15(5):49–63.
4. Miller AC, Mills B. ‘If they don’t care, i don’t care’: Millennial and generation Z students and the impact of faculty caring. Journal of the Scholarship of Teaching and Learning. 2019;19(4):78–89.
5. Helaluddin H, Wijaya H, Guntur M, Zulfah Z, Syawal S. Digital Immigrants Versus Digital Natives: A Systematic Literature Review of The “Ideal Teacher” in Disruptive Era. In: Borderless Education as a Challenge in the 50 Society: Proceedings of the 3rd International Conference on Educational Sciences (ICES 2019), November 7, 2019, Bandung, Indonesia. Yogyakarta, Indonesia: CRC Press/Taylor & Francis Group; 2020. p. 212–8.
6. Uygarer R, Uzunboylu H, Ozdamli F. A Piece of Qualitative Study about Digital Natives. Anthropologist. 2016;24(2):623–9.
7. Creighton T. Digital natives, digital immigrants, digital learners: An international empirical integrative review of the literature. Education Leadership Review. 2018;19(1):132–40.
8. Kanzal VR, Shubikshalakshmi G, Goswami L. Moral education: Current values in students and teachers effectiveness in inculcating moral values in students. The International Journal of Indian Psychology. 2016;4(1):174–87.
9. Arismunandar A. Transformasi manajemen pendidikan di era global. In: Seminar Nasional Pengukuran Kepemimpinan dan Manajemen, Literasi Teknologi Informasi, dan Pendidikan Karakter di Era Global. Bengkulu: Universitas Bengkulu; 2017.
10. Gao D, Wang D. Rethinking “basic issues” in moral education. ECNU Review of Education. 2020;1–20.
11. Zhang T. Problems of moral education in China’s schools and solutions. Sociology Study. 2017;7(6):325–30.
12. Shumeiko T, Imsgulova G, Balzhanova A, Shalgimbekova A, Baikenova R. Moral education of students of pedagogical higher educational institution. Mediterranean Journal of Social Sciences. 2015;6(5):62–8.
13. Kumar C R S. Moral Judgment of B.Ed Student Teachers in Relation To Their Social Maturity. International Journal of Research-GRANTHAALAYAH. 2017;5(9):250–65.
14. Susilawati S, Pangaruh penggunaan metode pembelajaran moral dan tingkat religiusitas terhadap peningkatan pertimbangan moral. Edcomtech: Jurnal Kajian Teknologi Pendidikan. 2017;2(1):89–100.
15. Prihandoko Y, Wasitohadi W. Efektivitas pembelajaran berbasis kognitif moral melalui model value clarification technique (VCT) ditinjau dari hasil belajar PKn dengan mempertimbangkan moral judgement. Satya Widya. 2015;31(1):17–31.
16. Wiseta FC, Novriani N. Pengaruh pengetahuan agama dan pertimbangan moral terhadap agresivitas siswa MAN Kabupaten Bungo. Nur El-Islam. 2018;5(2):79–99.
17. Darmadi D. Kemampuan dasar mengajar. Bandung, Indonesia: Alfabeta; 2012.
18. Sarbaini S. Model pembelajaran berbasis kognitif moral: Dari teori ke aplikasi. Yogyakarta, Indonesia: Aswaja Pressindo; 2012.
19. Dettmer P. New blooms in established fields: Four domains of learning and doing. Roeper Review. 2015;28(2).
20. Barrouillet P. Theories of cognitive development: From piaget to today. Developmental Review. 2015;38(1):1–12.
21. Suparno P. Teori perkembangan kognitif Jean Peaget. Yogyakarta, Indonesia: Kanisius; 2001.
22. Ivan C-E. On Disgust and Moral Judgments: A Review. Journal of European Psychology Students. 2015;6(1):25–36.
23. Zuriah N. Pendidikan moral dan budi pekerti dalam perspektif perubahan: Manggagas platform pendidikan budi pekerti secara kontekstual dan futuristik. Jakarta, Indonesia: Bumi Aksara; 2011.
24. Turner A. Generation Z: Technology and Social Interest. The Journal of Individual Psychology. 2015;71(2):103–12.
25. Rosenberry-McKibbin C. NoGeneration Z Rising. ASHA Leader. 2017;22(12):36–8.
26. Khan IA, Bansal V. Effect of Using PC Tablets on Perceived Learning Outcomes of Generation Z Trainees. International Journal of Learning and Development. 2018;8(1):21–36.
27. Palfrey J, Gasser V. Born Digital: Understanding The Fisrt Generation of Digital natives. New York: Basic Books; 2013.
28. Helaluddin H, Tulak H, Rante SVN. Strategi Pembelajaran Bahasa bagi Generasi Z: Sebuah Tinjauan Sistematis. JPE (Jurnal Pendidikan Edutama). 2019;6(2):31–46.
29. Cililiers EJ. The Challenge of Teaching Generation Z. PEOPLE: International Journal of Social Sciences. 2017;3(1):188–98.
30. Purcell MA. Teaching PSC to Gen Z. Journal of Political Science Education. 2019;1–9.
31. Popescu D, Popa DM, Cotel BG. Getting ready for Generation Z students-considerations on 3D printing curriculum. Propósitos y Representaciones. 2019;7(2):240–68.
32. Hampton DC, Keys Y. Generation Z Students: Will They Change Our Nursing Classrooms? Journal of Nursing Education and Practice. 2016;7(4):111–5.
33. Bencisk A, Juhász T, Horváth-Csikós G. Y and Z Generations at Workplaces. Journal of Competitiveness. 2016;8(3):90–106.
34. Kohlberg L. Tahap-tahap perkembangan moral. Yogyakarta, Indonesia: Kanisius; 1995.
35. Santrock JW. Lifelong development. Ankara: Nobel; 2011.
36. Francis KB, Howard C, Howard IS, Gummerum M, Ganis G, Anderson G, et al. Virtual Morality: Transitioning from Moral Judgment to Moral Action? PLoS ONE. 2016;11(10):1–22.
37. Shalgimbekova A, Baikenova R. Moral education of students of pedagogical higher educational institution. Mediterranean Journal of Social Sciences. 2015;6(5):62–8.
38. Kumar C R S. Moral Judgment of B.Ed Student Teachers in Relation To Their Social Maturity. International Journal of Research-GRANTHAALAYAH. 2017;5(9):250–65.
39. Mandiwati S, Pangaruh penggunaan metode pembelajaran moral dan tingkat religiusitas terhadap peningkatan pertimbangan moral. Edcomtech: Jurnal Kajian Teknologi Pendidikan. 2017;2(1):89–100.
40. Prihandoko Y, Wasitohadi W. Efektivitas pembelajaran berbasis kognitif moral melalui model value clarification technique (VCT) ditinjau dari hasil belajar PKn dengan mempertimbangkan moral judgement. Satya Widya. 2015;31(1):17–31.
41. Wiseta FC, Novriani N. Pengaruh pengetahuan agama dan pertimbangan moral terhadap agresivitas siswa MAN Kabupaten Bungo. Nur El-Islam. 2018;5(2):79–99.
42. Darmadi D. Kemampuan dasar mengajar. Bandung, Indonesia: Alfabeta; 2012.
43. Sarbaini S. Model pembelajaran berbasis kognitif moral: Dari teori ke aplikasi. Yogyakarta, Indonesia: Aswaja Pressindo; 2012.
44. Dettmer P. New blooms in established fields: Four domains of learning and doing. Roeper Review. 2015;28(2).
45. Barrouillet P. Theories of cognitive development: From piaget to today. Developmental Review. 2015;38(1):1–12.
46. Suparno P. Teori perkembangan kognitif Jean Peaget. Yogyakarta, Indonesia: Kanisius; 2001.
47. Ivan C-E. On Disgust and Moral Judgments: A Review. Journal of European Psychology Students. 2015;6(1):25–36.
48. Zuriah N. Pendidikan moral dan budi pekerti dalam perspektif perubahan: Manggagas platform pendidikan budi pekerti secara kontekstual dan futuristik. Jakarta, Indonesia: Bumi Aksara; 2011.
49. Turner A. Generation Z: Technology and Social Interest. The Journal of Individual Psychology. 2015;71(2):103–12.
50. Rosenberry-McKibbin C. NoGeneration Z Rising. ASHA Leader. 2017;22(12):36–8.
51. Khan IA, Bansal V. Effect of Using PC Tablets on Perceived Learning Outcomes of Generation Z Trainees. International Journal of Learning and Development. 2018;8(1):21–36.
52. Palfrey J, Gasser V. Born Digital: Understanding The Fisrt Generation of Digital natives. New York: Basic Books; 2013.
53. Helaluddin H, Tulak H, Rante SVN. Strategi Pembelajaran Bahasa bagi Generasi Z: Sebuah Tinjauan Sistematis. JPE (Jurnal Pendidikan Edutama). 2019;6(2):31–46.
54. Cililiers EJ. The Challenge of Teaching Generation Z. PEOPLE: International Journal of Social Sciences. 2017;3(1):188–98.
55. Purcell MA. Teaching PSC to Gen Z. Journal of Political Science Education. 2019;1–9.
56. Popescu D, Popa DM, Cotel BG. Getting ready for Generation Z students-considerations on 3D printing curriculum. Propósitos y Representaciones. 2019;7(2):240–68.
57. Hampton DC, Keys Y. Generation Z Students: Will They Change Our Nursing Classrooms? Journal of Nursing Education and Practice. 2016;7(4):111–5.
58. Bencisk A, Juhász T, Horváth-Csikós G. Y and Z Generations at Workplaces. Journal of Competitiveness. 2016;8(3):90–106.
59. Kohlberg L. Tahap-tahap perkembangan moral. Yogyakarta, Indonesia: Kanisius; 1995.
60. Santrock JW. Lifelong development. Ankara: Nobel; 2011.
61. Francis KB, Howard C, Howard IS, Gummerum M, Ganis G, Anderson G, et al. Virtual Morality: Transitioning from Moral Judgment to Moral Action? PLoS ONE. 2016;11(10):1–22.
62. Barrett HC, Bolyanatz A, Shalgimbekova A, Balzhanova A, Baikenova R. Moral education of students of pedagogical higher educational institution. Mediterranean Journal of Social Sciences. 2015;6(5):62–8.
63. Purcell MA. Teaching PSC to Gen Z. Journal of Political Science Education. 2019;1–9.
64. Popescu D, Popa DM, Cotel BG. Getting ready for Generation Z students-considerations on 3D printing curriculum. Propósitos y Representaciones. 2019;7(2):240–68.
65. Hampton DC, Keys Y. Generation Z Students: Will They Change Our Nursing Classrooms? Journal of Nursing Education and Practice. 2016;7(4):111–5.
43. Santrock JW. Kife-span development. New York: The McGraw-Hill; 2010.
44. Gabidullina F, Akhatova Z, Karimova I, Glukhova O, Zakirov R. Ethical Dissussions in the National Literature as A Form of Moral Education of The Students. Journal of Social Studies Education Research. 2018;9(2):295–305.
45. Malle BF. Moral Judgments. The Annual Reviews of psychology. 2020;12(12):1–26.
46. Abualait T, Bashir S. Moral judgment is important in COVID-19 pandemic. Journal of Infection in Developing Countries. 2021;15(5):615–7.
47. Iwasa N. Children’s everyday experience as a focus moral education. Journal of Moral Education. 2017;46(1):1–11.
48. Tsoi L, Dungan JA, Chakroff A, Young LL. Neural Substrates for Moral Judgements of Psychological Versus Physical Harm. Social Cognitive and Affective Neuroscience. 2018;13(5):460–70.
49. Chakroff A, Russell PS, Piazza J, Young LL. From Impure to Harmful: Asymmetric Expectations about Immoral Agents. Journal of Experimental Social Psychology. 2017;69:201–9.
50. Sweetman J, Newman GA. Replicating Different Roles of Intent Across Moral Domains. Royal Society Open Science. 2020;7(5).
51. Feldman Hall O, Mobbs D, Evans D, Hiscox L, Navrady L, Dalglish T. What We Say and What We Do: The Relationship between Real and Hypothetical Moral Choices. Cognition. 2012;123(3):434–41.
52. Kolsto SD. Science Education for Democratic Citizenship through The Use of The History of Science. Science and Education. 2008;17:977–97.
53. Keskin Samanci N. A study on the link between moral judgment competences and critical thinking skills. International Journal of Environmental and Science Education. 2015;10(2):135–43.
54. Demir B, Sonmez G. Generation Z students’ expectations from English language instruction. Journal of Language and Linguistic Studies. 2021;17(1):683–701.
55. Polakova P, Klimova B. Mobile technology and generation Z in the English language classroom – A preliminary study. Education Sciences. 2019;9(9):1–11.
56. Ariker C, Toksoy A. Generation Z and CSR: antecedents of purchasing intention of university students. KAUJEASF. 2017;8(16):483–502.
57. Otieno JO, Nyambegera SM. Millennials and generation Z employees are here: Is your organization ready? Journal of Language, Technology & Entrepreneurship in Africa. 2019;10(2):68–85.
58. Anealka AH. Education 4.0 made simple: Ideas for teaching. International Journal of Education & Literacy Studies. 2017;6(3):92–8.
59. Hernandez-de-Menendez M, Escobar Díaz CA, Morales-Menendez R. Educational experiences with generation Z. International Journal on Interactive Design and Manufacturing. 2020;14(3):847–59.