Investigating the Students' Attitude on Environmental Care at *Universitas Kristen Indonesia*

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Abstract. Students' attitude on environment care was investigated through this study, it was done in order to find out how the students attitude on environment is. This study was done at *Universitas Kristen Indonesia* by using a quantitative method with survey design. The respondents of this study were 69 students who were chosen using proportional purposive sampling out of 342 students. In collecting the data, there were three set of questionnaire used which consisting of 24 statements for each questionnaire, besides, an interview sheet was also used as an instrument to find out a more detail information from the respondents. The findings of the study are: a) 87% of the students did agree that family environment contribute to build the students' attitude on environmental care; b) 94.18% of the students do agree that university environment contributes to build the students' attitude on environmental care attitudes. Then it is concluded that university environment has more contribution on building the students' environmental care attitude comparing to family and community environment.

Keywords: Students' Attitude, Environmental Care, Family, University, Community.

Introduction

The attitude of caring for the environment in everyday life in the community is interpreted as a person's reaction to the environment, by not damaging the natural environment. With an attitude of caring for the environment, it will create a clean and beautiful environment. Environmental care is the general attitudes towards environmental quality manifested in the willingness to express actions that can improve and maintain the quality of the environment in every behaviour related to the environment [1; 2]. If the attitude of caring for the environment can be expressed by actions, then students who care about the environment will always preserve the environment.

The formation of student character does not only occur in the university, that the environment of the community/friends, peers, especially families also play a role in the formation of character. The pattern of education in the family which also influences the condition of students on university becomes a duty for lecturers and all university residents in educating the character of students. The family environment that can apply discipline also has an impact on student discipline on university. Regarding time discipline, a child who is usually at home wakes up early in the morning not late to university. Likewise in the case of discipline to wear clothes, it always looks neat and following the rules on university. Besides family, the environment of fellow friends also influences the development of students. Friends who interact daily can have a positive or negative influence. If this chosen environment leads to an increase in self-quality then it will become a good human being as well.

The social environment consists of human groups themselves. The social environment is all people or other human beings who influence us, both directly and indirectly. In another definition, it is said that the social environment is "A place or atmosphere where a group of people feels like a member, such as the work environment, the RT environment, the educational environment, the pesantren environment, and so on". So the social environment is everyone and the atmosphere of the place can affect us both directly and indirectly. Education is believed to be one of the fields that has an important and strategic role in the development of a nation. Educational activities as a social reality whose existence is often expected as an agent of renewal in various segments of community life. The education process always takes place in an environment that is often referred to as an educational environment. In this environment includes the physical environment, social intellect, and values. The physical environment itself consists of the natural and man-made environment which is a place as well as a support or an obstacle for the ongoing educational process. Examples include facilities, infrastructure and existing physical facilities.

The word "attitude of caring for the environment" in social life is more pronounced as the reaction of caring for someone to the environment [3; 4; 5]. For example, do not damage the natural environment by always preserving the environment, or in other words must always maintain and preserve the environment so that it does not become damaged, polluted and even become extinct. With an attitude of caring for the environment, it will create clean and beautiful [6; 7; 8]. But the picture of environmental care attitude today feels increasingly ignored. People are more concerned with their own lives, so they fall asleep and eventually run away with an attitude of caring for the environment [8; 9; 10]. Such conditions are more visible in the lives of people in big cities, who are generally busy with themselves. Based on the background above and by making a brief temporary observation by the author of the university at the college level, there are still many students who are not so concerned about the environment. Some examples that the authors found were that there were still many students who littered and left rubbish lying everywhere, vandalism, environmental destruction, careless snacks, there were still many brochures planted in the trunks of trees near university, inharmonious relations between friends, and no awareness to protect the environment of students. This can happen because it is caused by several factors including the role of the social environment of the students themselves. Therefore, the authors in this study take the formulation of the problem "What is the role of the

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family environment, university environment and peers in the formation of a caring attitude for UKI students?" With the aim of the research is "analyzing the role of the role of the family environment, university environment and peers in the formation of a caring attitude for UKI students".

The results of this study are expected to add insight to the world of education related to the role of the social environment towards the formation of attitudes to care for the environment, can be useful for researchers who will conduct similar research, and educational institutions as a benchmark in learning, in general, can form students to always be aware of the importance environmental care attitude, can provide facilities that support lecturers and students to improve students' understanding of environmental care attitudes on university, and can be input for lecturers in determining methods or ways so students can care more about the surrounding environment.

Methods

This study was done at Postgraduate Program *Universitas Kristen Indonesia* from June 2019-Januari 2020. The method of this study was quantitative research with survey design [11; 12]. The respondent of the study was the Postgraduate students consisted of six study programs, as it is shown in the following table:

No	Study Program	Number of Students
1	Education Administration Magister	90
2	Law Magister	121
3	Christian Education Magister	70
4	Management Magister	37
5	Electronics Technic Magister	20
6	Architecture Magister	4
	Total	342

Table 1. Classification of Research Respondents

From the total number of the students (342), 20% were chosen to be the respondents of this study using proportional purposive sampling [13; 14], so, the number of the respondent of this study were 69 respondents which were distributed as follows:

No	Study Program	Number of Students	Respondents (20%)
1	Education Administration Magister	90	18
2	Law Magister	121	24
3	Christian Education Magister	70	14
4	Management Magister	37	8
5	Electronics Technic Magister	20	4
6	Architecture Magister	4	1
Total		342	69

Table 2. Distribution of Number of Respondents in Each Study Program

The instrument of the study was divided in to tree sets of questionnaire, where each set of questionnaire was consisted of 24 statements. Fist questionnaire was used to measure the role of the family environment on building the students' environmental care attitudes; the second questionnaire was used to measure the role of the university environment on building the students' environmental care attitudes; and the third questionnaire was used to measure the role of community environment on building the students' environmental care attitudes. Data obtained through questionnaires were analyzed quantitatively using a Likert scale that has five classification values (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Results and Discussion

Every individual uses both methods both to develop themselves and in interactions with their environment. The attitude of caring for the student environment does not necessarily arise without effort from themselves and their social environment in its formation. In this study, there are three results of research conducted on 69 Postgraduate Students. The instrument used in measuring the role of the family environment towards the formation of students' environmental care attitudes can be seen from several aspects of the indicator, including acceptance of an object of the environment itself, participation by students both in the family, university and community, attitude assessment, organization, and the formation of character or lifestyle. The responses of the students on the first questionnaire can be seen at the following table and figure.

2575

Table 3. Students' Responses Frequency Percentage

Classification	0/0
Strongly Disagree	0
Disagree	0
Neutral	8,95
Agree	78,60
Strongly agree	12,45
Total	100

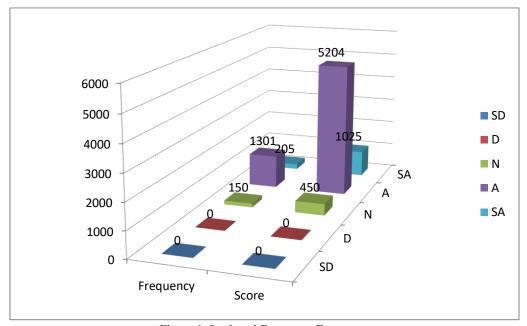


Figure 1. Students' Responses Frequency

Description: SD (Strongly Disagree), D (Disagree), N (Neutral), A (Agree) and SA (Strongly Agree)

From the above table and figure, it can be seen that most of the postgraduate students (78.60%) said that the role of the family environment towards the formation of students' environmental care attitudes is good, 12.45% of the postgraduate students said that the role of the family environment towards the formation of students' environmental care attitudes is very good, and 8.95% said that the role of the family environment towards the formation of students' environmental care attitudes is rather good. The analysis of the data obtained with the parameters of the role of the family environment towards the formation of attitudes to care for the student's environment. If referring to the indicator of the role of the family environment, the inculcation of religious values in the daily lives of respondents with very low and low-frequency levels in the family is very lacking, this is due to the supervision and religious education of both respondents' parents who rarely can divide his time is due to work, so supervision and religious education cannot be monitored every time [15; 16]. Parenting or how to educate parents in the formation of the respondent's identity is good enough because the respondent's parents have an adequate level of education from high school to college. The same thing with the rules in the family environment is quite good because the level of parental education and understanding of parents towards the rules in the family is very good, this can be seen from the attitude of respondents who obey the rules not to come out late at night [17; 18; 19]. Interaction between families is very lacking because both parents are working, so the intensity of time to communicate is very minimal, it can be seen from the attitude of respondents who rarely help or help each other in doing homework at home.

The inculcation of values and ethics in the family is quite good due to the high level of parental education to be able to guide and teach manners to respondents, for example by not calling names to older people and not being selfish and always respecting other family members by not turning on TV or radio with a loud volume [20; 21; 22]. If referring to indicators of the role of the family environment, the inculcation of religious values in the daily lives of respondents with moderate, high, and very high-frequency levels in the family is very good this is due to the supervision and religious education of both respondents' parents who can dividing their time because both parents have a lot of time at home, some parents are self-employed, some fathers work, but the mother does not, so supervision and religious education can be monitored at any time [23; 24]. Parenting or how to educate parents in forming the identity of respondents is good enough because the respondent's parents have a sufficient level of education from high school to college. The same thing with the rules in the family environment is quite good because the level of parental education and understanding of the parents of the rules in the family is very good. Interaction between families is also very good because both parents or one of them are staying at home, so the intensity of time to communicate is very good. The inculcation of values and ethics in the family is quite good because of the high level of parental education to be able to guide and teach manners to respondents [24; 26]. From the results of the

analysis of the data generated it was concluded that the family environment provides a significant role in the formation of an attitude of caring for the environment.

The university environment is also based on several indicators that are considered to be benchmarks to determine the role of the university environment in the formation of students 'environmental care attitudes, including lecturers providing direction and knowledge about environmental health, lecturers' attitudes in the formation of student character, sportsmanship in all respects, development of intellectual and emotional aspects of students in their humanitarian dimensions, student attitudes towards lecturers (ethics), lifestyle of university friends, student relations with other students, instilling disciplinary values and motivation [27; 28; 29]. The responses of the students on the second questionnaire can be seen at the following table and figure.

Classification	%
Strongly disagree	0
Disagree	0
Neutral	5.81
Agree	78.16
Strongly agree	16.02
Total	100

Table 4. Students' Responses Frequency Percentage

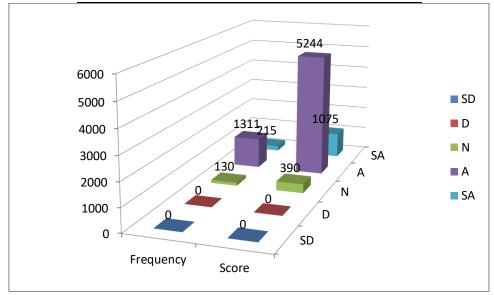


Figure 2. Students' Responses Frequency

Description: SD (Strongly Disagree), D (Disagree), N (Neutral), A (Agree) and SA (Strongly Agree)

From the above table and figure, it can be seen that most of the postgraduate students (78.16%) said that the role of the role of the university environment on building the students' environmental care attitudes is good, 16.02% of the postgraduate students said that the role of the university environment on building the students' environmental care attitudes is very good, and 5.81% said that the role of the university environment on building the students' environmental care attitudes is rather good. The analysis of the data obtained with the parameters of the role of the university environment on building the students' environmental care attitudes, when referring to indicators of the role of the university environment, lecturers provide guidance and knowledge about environmental health very well to respondents with very low-frequency levels, because the lecturer already has very good competence and understands the material deeply. The attitude of the lecturer in forming the character of the respondent students was already good because most of the lecturers who taught at the research site were senior and experienced lecturers [30;31]. When in the university environment, respondents are fairly sporty in everything that is on the university example is to be honest, even though sometimes still cheating during the test. Development of the intellectual aspects of students here tends to be lacking, due to the different levels of acceptance of respondents. The attitude of students towards lecturers is not good when in class, for example often chatting, not paying attention, sometimes even sleeping in class while the lecturer is teaching [32; 33]. The lifestyle of university friends who tend to be negative is mostly followed by respondents. The relationship between students and other students is very good and the sense of family is very high. The inculcation of disciplinary and motivational values on university is less applicable by respondents with very lowfrequency levels, there are still many violations committed, for example in terms of neatness and time discipline [34; 35]. Planting values of discipline and motivation on university can be applied by respondents with moderate, high, and very highfrequency levels, for example always coming on time to university, dressing neatly according to university rules, and always doing assignments given by lecturers.

From additional data obtained through interviews with these lecturers, it can be seen that the existing lecturers, in general, have high education. With a high level of education, it can be concluded that the instructors have a high morale in educating students on the aspects of forming a caring attitude towards the environment, as can be known through the

instruments that have been processed, most students have received several lessons, and rules that can remind or form a caring attitude to the environment. So it is clear why the results of statistical data analysis show that the university environment is very instrumental in shaping the environmentally caring attitude of UKI Postgraduate students. This happened because basically the members of the university, especially the lecturers had a lot of influence in instilling a caring attitude towards their environment.

The third questionnaire which was used to measure the role of community environment on building the students' environmental care attitudes also be based on several measurement indicators, including the attitude of wanting to always help others, respecting differences, attitudes and behaviours to carry out their duties and obligations, instilling an attitude of caring for the environment, and can socialize with the surrounding environment. From several indicators then compiled in the form of statements collected to be an instrument to measure the contribution of the community's environment to the formation of environmental attitudes [36; 37; 38]. The responses of the students on the third questionnaire can be seen at the following table and figure.

•	•
Classification	%
Strongly disagree	0
Disagree	0
Neutral	6.18
Agree	78.06
Strongly agree	15.75
Total	100

Table 5. Students' Responses Frequency Percentage

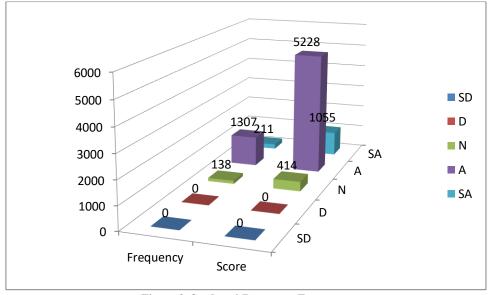


Figure 3. Students' Responses Frequency

Description: SD (Strongly Disagree), D (Disagree), N (Neutral), A (Agree) and SA (Strongly Agree)

From the above table and figure, it can be seen that most of the postgraduate students (78.06%) said that the role of community environment on building the students' environmental care attitudes is good, 15.75% of the postgraduate students said that the role of community environment on building the students' environmental care attitudes is very good, and 6.18% said that the role of community environment on building the students' environmental care attitudes is rather good. The results of data analysis obtained with the parameters of the role of the community environment on the formation of the character of the attitude of caring for the environment of students, it is known that there are low and very low frequencies. If referring to indicators of the role of the community environment, the attitude of wanting to always help others in the respondent's community environment with very low and low-frequency levels is quite good, this can be seen from the frequent respondents participating in cooperation in the community environment and helping in fundraising in Public. The attitude of respecting differences in the community is also quite good because often the respondents with very low and low-frequency levels have enough to get instruction on university and at home.

Attitudes and behaviours to carry out the duties and obligations of respondents with very low and low-frequency levels in the community are still not good. For example respondents still rarely help neighbours who are in trouble, this is because the level of sympathy of respondents is good but their empathy is still not good. Cultivating a caring attitude towards the environment in the respondent communities with very low and low-frequency levels is still not good. There is still a selfish nature of the respondents so that they are more concerned with their interests rather than the common interests [39; 40]. However, the application of simple living in the respondent community is often done. Socialization with the surrounding environment by keeping the environment clean has been done by respondents with very low and low-frequency levels because respondents often get teaching about the importance of the environment. There is still a selfish nature of the

respondents so that they are more concerned with their interests rather than the common interests. However, the application of simple living in the respondent community is often done. Socialization with the surrounding environment by keeping the environment clean has been done by respondents with very low and low-frequency levels because respondents often get teaching about the importance of the environment.

If referring to the indicator of the role of the community environment, the attitude of wanting to always help others in the community of respondents with moderate, high, and very high frequency is quite good, this can be seen from the frequent respondents following cooperation in the community and helping in fundraising in the community. The attitude of respecting differences in the community is also very good because often the respondents with moderate, high, and very high-frequency levels are sufficiently getting teaching on university and at home [41, 42]. Attitudes and behaviours to carry out the duties and obligations of respondents with moderate, high, and very high-frequency levels in the community are still quite good. For example, respondents often help neighbours who are struggling, this is because the level of sympathy and empathy of respondents is very good and sensitive to others. Cultivating a caring attitude towards the environment in the respondent communities with moderate, high, and very high-frequency levels is good enough. The selfish nature of the respondents can be defeated with a high sense of togetherness and kinship so that it is more concerned with the common interests rather than their interests. The application of simple living in the respondent community with moderate, high and very high frequency is often done. Socialization with the surrounding environment by maintaining the cleanliness of the environment has been carried out and applied by respondents with moderate, high, and very high-frequency levels because respondents often get teaching about the importance of the surrounding environment or the environment [43]. The results of the statistical analysis of the independent variables are known that the community environment has a high influence as well as the family and university environment that the role of the community environment also has a high influence on the formation of students' environmental care attitudes.

Likewise, with the preparation of students 'environmental care attitude instruments, each item contained in the research instrument is based on indicators that are considered to be representative of students' environmental care attitudes themselves, where the determined indicators are taken from several theories which are then combined [44]. As for the indicators referred to here include, Receiving: students have the awareness to keep the classroom clean. Students receive direction or advice from both parents regarding environmental awareness, students take part in cleaning up the river around the residence, students always ask the lecturer when there are unclear things about matters relating to the environment, students aware or know that stagnant water can cause many diseases. Responding: Students can interact with peers, lecturers, and other university members, students do not come late to university, students work together or have discussions in carrying out the tasks instructed by the lecturer, and visit when there are friends who are sick. Valuing: Students always be friendly to peers, lecturers, and other university members, students always make good use of university facilities, students have the right to reprimand friends if the friend throws garbage out of place, students like clean and neat classes. Organization: Students participate in extracurricular organizations or activities, students participate if there is an organization from outside the university who comes to university, is responsible for the position or role in the organization that has been undertaken, arranges activities together, tolerance in making decisions and being respectful other people's opinions. Characterization: preparing own university needs, if the university distance is close, it's better to use a bicycle or walk, accustomed to not cheating when the exam is in progress.

Conclusion

Based on the finding of this study, it is concluded that the social environment, both within the family, university and community environment, both have an important role as well as responsibility towards the formation of a student's environmental care attitude. The social environment of students who apply environmental love in their daily lives, whether they realize it or not, it builds the students' environment care by loving the surrounding environment. Then some recommendation could be recommended based on the conclusion of this study, such as: a) parents are one of the important factors in the formation of students' environmental care attitudes, therefore in this study, it is expected that all parents can continue to apply concrete environmental care attitudes in life student every day at home; b) It is expected that all lecturers should continue to provide direction and knowledge about environmental health, to always remind students that they are always sportsmanship in all matters, showing ethics towards other university members, showing positive lifestyles, and always instilling the values of discipline and motivation, because basically, the university is also the greatest potential in guiding students to behave and behave, especially in a caring attitude to the surrounding environment; and c) It is expected that peers and the community around postgraduate students can give better examples to students as the next generation of the nation to create a clean, healthy environment and neat other than that who can always show his love for the environment such as empathy, tolerance, and responsibility in his role to love the environment.

References

- [1] Yousuf, A., & Bhutta, S. (2012). Secondary School Students" Attitude Towards Environmental Issues in Karachi Pakistan. *Journal of Educational and Social Research*, 2(10), 154-165.
- [2] Sarjou, A. A., Soltani, A., Afsaneh, K., & Mahmoudi, S. (2012). A study of Iranian students' attitude towards science and technology, school science and environment, based on the ROSE project. *Journal of Studies in Education*, 2(1), 90-103.
- [3] Lovell, M. (2006). Caring for the elderly: changing perceptions and attitudes. *Journal of vascular nursing*, 24(1), 22-26

- [4] Adejoke, O. C., Mji, A., & Mukhola, M. S. (2014). Students' and Teachers' awareness of and attitude towards environmental pollution: A multivariate analysis using biographical variables. *Journal of human ecology*, 45(2), 167-175.
- [5] de la Vega, E. L. (2004). Awareness, knowledge, and attitude about environmental education: responses from environmental specialists, high school instructors, students, and parents (Doctoral dissertation, University of Central Florida).
- [6] Leep Hunderfund, A. N., Dyrbye, L. N., Starr, S. R., Mandrekar, J., Naessens, J. M., Tilburt, J. C., ... & Goold, S. D. (2017). Role modeling and regional health care intensity: US medical student attitudes toward and experiences with cost-conscious care. *Academic Medicine*, 92(5), 694-702.
- [7] Panth, M. K., Verma, P., & Gupta, M. (2015). The role of attitude in environmental awareness of under graduate students. *International Journal of Science Education*, 32 (3), 349, 377.
- [8] Nadeak, B., Simanjuntak, D. R., Naibaho, L., Sormin, E., Juwita, C. P., & Pardede, S. O. (2019). Analysis of Nursing Quality Services. *Indian Journal of Public Health Research & Development*, 10(6), 1380-1384.
- [9] Fua, J. L., Wekke, I. S., Sabara, Z., & Nurlila, R. U. (2018, July). Development of environmental care attitude of students through religion education approach in Indonesia. In *IOP Conference Series: Earth and Environmental* Science (Vol. 175, No. 1, p. 012229). IOP Publishing.
- [10] Tyas, E. H., & Naibaho, L. (2019, November). The urgency of entrepreneurship learning in the industrial age of 4.0. In *Journal of Physics: Conference Series* (Vol. 1387, No. 1, p. 012032). IOP Publishing.
- [11] Naibaho, L. (2019). Teachers'roles on English Language Teaching: A Students Centered Learning Approach. *International Journal of Research-Granthaalayah*, 7(4), 206-212.
- [12] Nadeak, B., & Naibaho, L. (2019, November). Investigating the effect of learning multimedia and thinking style preference on learning achievement on anatomy at Universitas Kristen Indonesia. In *Journal of Physics: Conference Series* (Vol. 1387, No. 1, p. 012116). IOP Publishing.
- [13] Nadeak, B., Iriani, U. E., Naibaho, L., Sormin, E., & Juwita, C. P. (2019). Building Employees' Mental Health: The Correlation between Transactional Leadership and Training Program with Employees' Work Motivation at XWJ Factory. *Indian Journal of Public Health Research & Development*, 10(6), 1373-1379.
- [14] Naibaho, L. (2019). The Effectiveness of Independent Learning Method on Students' Speaking Achievement at Christian University of Indonesia Jakarta. *Asian EFL Journal*, 23(6), 142-154.
- [15] Hertweck, M. L., Hawkins, S. R., Bednarek, M. L., Goreczny, A. J., Schreiber, J. L., & Sterrett, S. E. (2012). Attitudes toward interprofessional education: comparing physician assistant and other health care professions students. *Journal of Physician Assistant Education (Physician Assistant Education Association)*, 23(2).
- [16] Tuncer, G., Sungur, S., Tekkaya, C., & Ertepinar, H. (2007). A comparative study on pre-service teachers' and elementary students' attitudes towards the environment. *International Research in Geographical & Environmental Education*, 16(2), 188-198.
- [17] Uitto, A., Juuti, K., Lavonen, J., Byman, R., & Meisalo, V. (2011). Secondary school students' interests, attitudes and values concerning school science related to environmental issues in Finland. *Environmental education research*, 17(2), 167-186.
- [18] Billings, M. E., Engelberg, R., Curtis, J. R., Block, S., & Sullivan, A. M. (2010). Determinants of medical students' perceived preparation to perform end-of-life care, quality of end-of-life care education, and attitudes toward end-of-life care. *Journal of palliative medicine*, 13(3), 319-326.
- [19] Ardan, A. S. (2016). The Development of Biology Teaching Material Based on the Local Wisdom of Timorese to Improve Students Knowledge and Attitude of Environment in Caring the Preservation of Environment. *International Journal of Higher Education*, 5(3), 190-200.
- [20] Horka, H., & Hromadka, Z. (2009). Perception of health in the context of environmental issues among students of the faculty of education Masaryk university. Sborník Scool and health-topical issues in health education. Brno: Centrum pedagogického výzkumu PdF MU, 33-49.
- [21] Hassan, A., Rahman, N. A., & Abdullah, S. I. S. S. (2011). The level of environmental knowledge, awareness, attitudes and practices among UKM students. *University Kebangsaan, Malaysia*, 13, 5-8.
- [22] Nadeak, B., Naibaho, L., Sormin, E., & Juwita, C. P. (2019). Healthy Work Culture Stimulate Performance. *Indian Journal of Public Health Research & Development*, 10(6), 1385-1389.
- [23] Farmer, J., Knapp, D., & Benton, G. M. (2007). An elementary school environmental education field trip: Long-term effects on ecological and environmental knowledge and attitude development. *The journal of environmental education*, 38(3), 33-42.
- [24] Jenkins, E. W., & Pell, R. G. (2006). "Me and the Environmental Challenges": A survey of English secondary school students' attitudes towards the environment. *International Journal of Science Education*, 28(7), 765-780.
- [25] Dijkstra, E. M., & Goedhart, M. J. (2012). Development and validation of the ACSI: measuring students' science attitudes, pro-environmental behaviour, climate change attitudes and knowledge. *Environmental Education Research*, 18(6), 733-749.
- [26] Cheng, Y. M., Lou, S. J., Kuo, S. H., & Shih, R. C. (2013). Investigating elementary school students' technology acceptance by applying digital game-based learning to environmental education. *Australasian Journal of Educational Technology*, 29(1).
- [27] Berglund, T., & Gericke, N. (2016). Separated and integrated perspectives on environmental, economic, and social dimensions—an investigation of student views on sustainable development. *Environmental Education Research*, 22(8), 1115-1138.

- [28] Aydin, F., Coskun, M., Kaya, H., & Erdonmez, I. (2011). Gifted students attitudes towards environment: A case study from Turkey. *African journal of agricultural research*, 6(7), 1876-1883.
- [29] Cavas, B., Cavas, P., Tekkaya, C., Cakiroglu, J., & Kesercioglu, T. (2009). Turkish Students' Views on Environmental Challenges with respect to Gender: An Analysis of ROSE Data. Science Education International, 20, 69-78.
- [30] Barnett, M., Vaughn, M. H., Strauss, E., & Cotter, L. (2011). Urban environmental education: Leveraging technology and ecology to engage students in studying the environment. *International Research in Geographical and Environmental Education*, 20(3), 199-214.
- [31] Swaim, J. A., Maloni, M. J., Napshin, S. A., & Henley, A. B. (2014). Influences on student intention and behavior toward environmental sustainability. *Journal of Business Ethics*, 124(3), 465-484.
- [32] Duvall, J., & Zint, M. (2007). A review of research on the effectiveness of environmental education in promoting intergenerational learning. *The Journal of Environmental Education*, 38(4), 14-24.
- [33] Huang, H. M., Rauch, U., & Liaw, S. S. (2010). Investigating learners' attitudes toward virtual reality learning environments: Based on a constructivist approach. *Computers & Education*, 55(3), 1171-1182.
- [34] Raman, R. A. (2016). Attitudes and Behavior of Ajman University of Science and Technology Students towards the Environment. *IAFOR Journal of Education*, 4(1), 69-88.
- [35] Nadeak, B. (2019). Effects of Servant Leadership and Training Programs on Servant motivation of Hospital Medical Personnel. *Indian Journal of Public Health Research & Development*, 10(9), 1772-1775.
- [36] Le Hebel, F., Montpied, P., & Fontanieu, V. (2014). What Can Influence Students' Environmental Attitudes? Results from a Study of 15-year-old Students in France. *International Journal of Environmental and Science Education*, 9(3), 329-345
- [37] Ballantyne, R., Packer, J., & Everett, M. (2005). Measuring environmental education program impacts and learning in the field: Using an action research cycle to develop a tool for use with young students. *Australian Journal of Environmental Education*, 21, 23-37.
- [38] Johansson, U. (2012). Towards a biocentric attitude in environmental education.
- [39] Yalçinkaya, E., & Çetin, O. (2018). An Investigation of Secondary School Students' Environmental Attitudes and Opinions about Environmental Education (EE). *Review of International Geographical Education Online*, 8(1), 125-148.
- [40] Bartosh, O., Tudor, M., Ferguson, L., & Taylor, C. (2006). Improving test scores through environmental education: Is it possible?. *Applied Environmental Education and Communication*, 5(3), 161-169.
- [41] Treagust, D. F., Amarant, A., Chandrasegaran, A. L., & Won, M. (2016). A Case for Enhancing Environmental Education Programs in Schools: Reflecting on Primary School Students' Knowledge and Attitudes. *International Journal of Environmental and Science Education*, 11(12), 5591-5612.
- [42] Özsoy, T., & Avcilar, M. Y. (2016). An Investigation of the Effects of Consumers'environmental Attitudes on Perceptions of Green Ads And Attitudes Toward The Brand. *Journal of Academic Research in Economics*, 8(1).
- [43] Uzun, N., Atlı, K., & Sağlam, N. (2010). Evaluation of the high school students' environmental attitudes and interest levels: Kalecik-Turkey Sample.

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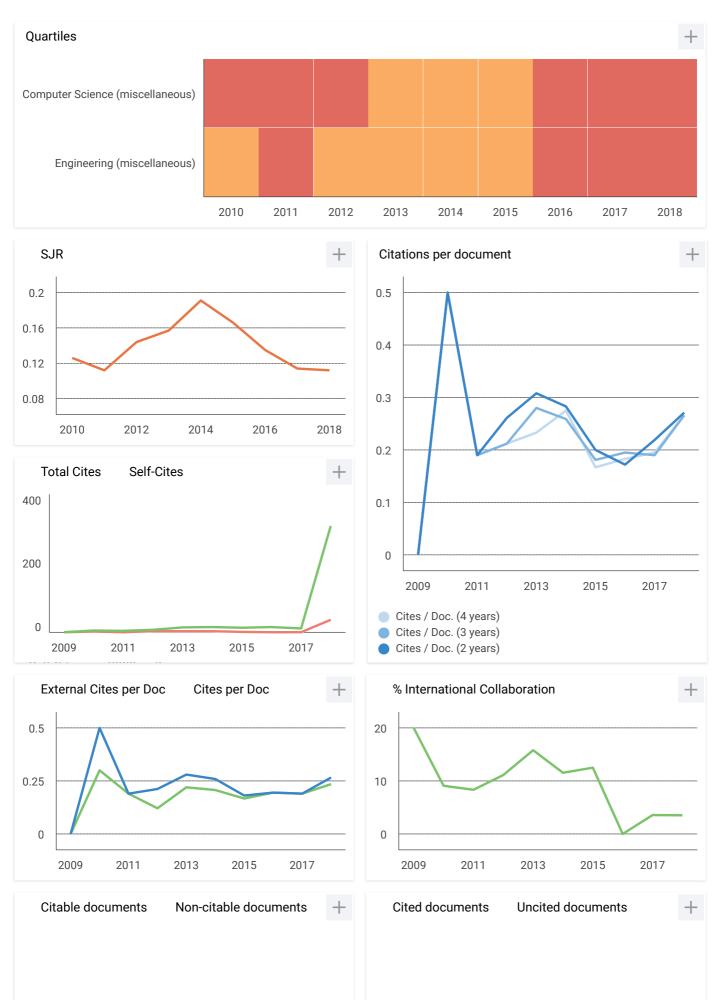


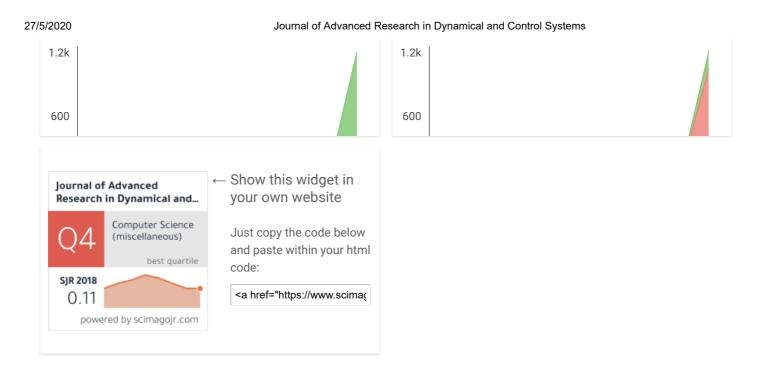
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