
European Journal of Education Studies

ISSN: 2501 - 1111 ISSN-L: 2501 - 1111 Available online at: <u>www.oapub.org/edu</u>

DOI: 10.46827/ejes.v10i11.5083

Volume 10 | Issue 11 | 2023

MORAL COMPASS AND UNETHICAL PRACTICES IN ACADEMICS AMONG SECONDARY SCHOOL STUDENTS IN BARINGO COUNTY, KENYA

Daniel Kimutai Kemei¹¹, Chrispus Koinange Wawire², Philomena Wavinya Ndambuki³ ¹Department of Education, Kenyatta University, Cenya Orcid.org/0009-0007-1231-4890 ²PhD, Department of Education, Kenyatta University, Kenya Orcid.org/0000-0002-5167-8247 ³PhD, Department of Education, Kenyatta University, Kenya

Abstract:

Academic honesty is a critical aspect of an education system as it ensures learners have the necessary knowledge, skills, and competencies. However, there have been reported incidences where learners have engaged in unethical practices. This study sought to establish whether moral compass is related to the enactment of ethical practices in academics among 396 systematic sample of secondary school students aged between 16 to 21 years. Data was analyzed using descriptive and correlational approaches. The results showed that the majority of the respondents had a high moral compass. Also, very few (12%) had never engaged in unethical practices in academics. In addition, moral compass was inverse and significantly related to involvement in unethical behaviours in academics. It was recommended that further studies should be conducted on why there is incongruence between student's beliefs and values and ethical practices in academics.

Keywords: moral compass; unethical practices; academics; values; students; cheating

ⁱ Correspondence: email <u>kemeidaniel123@yahoo.com</u>, <u>wawire.chrispus@ku.ac.ke</u>, <u>ndambuki.philomena@ku.ac.ke</u>

Copyright © The Author(s). All Rights Reserved.

1. Introduction

Unethical practices in academics are one of the reasons causing the nation's workforce to have inadequate knowledge and skills. Students who may have committed unethical practices may have excelled in their academics; however, the achievement of learning may not have been achieved. Ahmed (2018) lamented that nowadays it is not shocking to find a student who has graduated and is unable to invent a simple concept. He claimed that this situation could be due to the quality of academic outcomes attributed to engagement in unethical practices in academics. Unethical practices refer to actions that go against the laid-down rules of academic integrity (Yu, et al. 2018). For instance, when a teacher instructs students to do an assignment, some copy from other students who have done it and present the assignment as their original work. According to Feday (2017), unethical practices refer to helping other students in an academic endevour or getting recognition for someone else's work. Wamalwa et al. (2020) classified unethical practices as acts of using written notes on pieces of paper or student palms in an examination. Therefore, the present study adopted the definition of unethical practices in academics as violating academic rules by giving or receiving assistance in an academic task.

Unethical practices in academics is an endemic problem that is common in many educational institutions worldwide (Feday, 2017; Mugala et al. 2022). According to Anitha and Sundaram (2021) in a survey of 106 college students in India, 93.4% of the respondents indicated that they had engaged in unethical practices. Ives (2020) reported that 82.9% of his sample of 1172 university students in Romania claimed that they had engaged in unethical practices in academics. In a study by Mugala et al. (2022) on forms of academic corruption among 400 university students in Zambia, it was reported that 25.3 % of the respondents engaged in plagiarism while 4.1 % colluded. In a study done by Ahmed (2018), 33.3% of his respondents had engaged in examination malpractices. Wamalwa et al. (2020) found out that 71.6% of 202 respondents in a nursing school in Western Kenya engaged in cheating. Thus, from the foregoing, cheating is a phenomenon that is rampant all over the world.

Wamalwa et al. (2020) reported that one of the reasons why students enacted unethical practices in academics was few examination officials who would have ensured that examination rules and regulations were followed. However, even if examination rules are adhered to because of the dire repercussions of being found cheating, Yahya and Sukmayadi (2020) pointed out that the harsh consequences often lead to a temporary adherence to examination rules and regulations. Despite their recommendations, cases of unethical practices continue to be reported. This therefore means other reasons why students engage in the vice need to be established.

A key determinant of ethical practices in academics is the moral compass. Clarken (2010) asserted that morality is a critical aspect of an education system. Moral compass refers to values and principles that an individual holds which directs one on what is wrong or right (Moore and Gino, 2013). Clarken (2010) stated that an individual is

considered to be directed by a moral compass if he/she displays: compassion; forgiveness; integrity; and responsibility. This study envisioned that a deviation from the moral compass makes students become unreliable and irresponsible hence engaging in unethical practices in academics. Also, there seems to be an inverse relationship between what students believe is right and their actual behavior in class (Hendricks et al., 2011). The question therefore that arises is: *"could students be engaging in academic cheating knowing that it is not acceptable?"* The present study therefore sought to establish whether knowledge regarding dimensions of morality is related to ethical practices in academics.

2. Moral Compass and Academic Cheating

In a descriptive study by Olusola and Samson (2015) on moral intellect as a remedy to examination transgressions among 230 high school students in Nigeria with a mean age of 15.62 years, breaking of academic rules and moral intelligence were oppositely related. This implies that individuals who are able to stick to their principles and values are unlikely to engage in academic deception. Olusola and Samson selected their respondents from three schools. This potentially had an effect on the extent to which their results were generalized.

In a literature review done by Wolhuter and Van der Walt (2020) on the views of parents and society concerning student indiscipline in South Africa reported that a deficit in moral principles significantly contributed to the rise in cases of adolescent indiscipline. Another qualitative study by Segalo and Rambuda (2018) using a convenient sample of eight teachers in South Africa found that a deficiency in morals and values was a reason for student indiscipline. Catacutan (2019) did a survey on attitudes that university students have toward academic policy violations in Kenya. Five hundred and fifty-four respondents were recruited from a population of business students in a private institution of learning. It was reported that those who had studied ethics disapproved of cheating as opposed to those who hadn't.

Stephens (2017) in the literature review on how to cheat and not feel guilty reported that students cheat without feeling guilty due to moral disengagement. He reported that students do not accept liability for their cheating acts by attributing it to external factors. Since Stephen's study relied on secondary data which may not be up to date, the present study used primary data.

A study done by Kam et al. (2018) among 386 (grade six to seven) secondary school students in China, it was reported that moral obligation projected the motive of engaging in unethical practices in academics but not the actual act. Yang et al. (2020) undertook two studies on self-compassion, unethical behavior, and moral disengagement among 222 and 3236 college and middle school students in China. It was argued that self-compassion predicted a decrease in unethical acts. Also, moral disengagement is positively associated with ethics violations. Further, in a series of experiments among university students in Sweden, Pulfrey et al. (2018) reported that sticking to group values was related to collective cheating and not individual cheating. This implies then that

individuals may engage in academic cheating when the group he/she is in is engaging in unethical practices.

In light of the foregoing, there is no clear-cut agreement as to whether individual values actually predict engagement in ethical practices in academics. That is, while some studies have reported that principles and values held relate to academic cheating, others have held that students enact unethical practices in academics despite the knowledge that it is wrong. Therefore, the present study sought to find clarity on whether being moral translated to ethical practices in academics using a sample of secondary school students in Baringo County, Kenya. In addition, the results of the study may contribute to the advancement of knowledge regarding moral compass and ethical practices in Kenya's education system.

3. Research Question

Is moral compass related to the enactment of ethical practices in academics?

4. Methodology

The study was done using a sample of form four secondary school students in Baringo County, Kenya. The total number of participants was 396 (aged 16 to 21 years) out of which 203 (52%) were female and 193(489%) were males. The sample was selected systematically from a pool of 1665 students from a stratified sample of 10 public boarding secondary schools. A self-reported Lennick and Kiel (2005) moral competence inventory was adapted and used to collect data regarding moral compass. The final instrument had 30 items measuring the four dimensions of the moral compass namely: Integrity; Compassion; Forgiveness; and Responsibility. Scoring involved summing up the scores of each respondent. The highest possible raw score was 150 while the least was 30. Also, to obtain the score in each of the four dimensions of the moral compass envisaged by Lenick and Kiel (2005), the scores of items in each dimension were summed up. The instrument was considered appropriate because it has been used in several studies. For instance, Wankel et al. (2011) used the scale in their study and reported a reliability Cronbach alpha of .99 suggesting that the MCI is dependable.

Data for unethical practices in academics was collected using an adapted version of Midgley et al.'s (2000) five-point Likert Patterns of Adaptive Learning scale. Two items were added to the three statements in the original scale. The items required respondents to state the frequency of engagement in several types of examination misconduct. The scale was suitable as it has been used by other researchers like Midgley and Anderman (2004) who returned reliability Cronbach alpha values that ranged from .80 and .89 connoting that the scale is trustworthy.

5. Results

5.1 Descriptive Statistics for Moral Compass

Moral compass five-point Likert-type scale with responses ranging from 'never' = 1 to 'in all situations' = 5 was given to respondents. Some items were reversely coded meaning that 'never' = 5, 'rarely' = 4, 'sometimes' = 3, 'in most situations' = 2, and 'in all situations' = 1. A higher score (91 to 150) meant a high moral compass.

The frequency scores are displayed in Figure 1.



Figure 1 shows that majority of the respondents had high moral compass. This suggests that the respondents are able to live according to set out principles and values. Put differently, respondents could be able to identify that engaging in academic dishonesty is not right. Furthermore, the moral compass scale was collapsed into four moral compass subscales as theorized by Lennick and Kiel (2005).

The mean and standard deviation for each level of moral compass subscale were also calculated and the results are presented in Table 1.

Levels of moral compass	Mean	Standard deviation	Skewness	Kurtosis						
Compassion	14.22	2.76	-0.24	-0.36						
Forgiveness	28.91	4.22	-0.23	-0.01						
Integrity	33.54	4.11	-0.30	0.38						
Responsibility	32.64	4.10	-0.19	0.44						

Table 1: Descriptive Data for Moral Compass (N = 396)

From data in Table 2 respondents rated their moral compass dimensions as medium to high. Compassion had a mean of 14.22 (SD = 2.76) out of a maximum of 20 while forgiveness had a mean of 28.91 (SD = 4.22) out of a maximum of 40. Also, integrity had

a mean of 33.54 (SD= 4.11) while responsibility had a mean of 32.64 (SD =4.10) out of 45. The values of skewness were negative indicating that the scores were above the mean. In addition, the values of skewness were between the acceptable range of -3 and +3, suggesting a normal distribution (Tabachnick & Fidell, 2013).

Figure 2 relays frequency counts that respondents carried out acts that violated academic rules. It discloses that 12% of the participants had never carried out any form of academic dishonesty while 59.6% rarely engaged in unethical acts. On top of that, only 1.5% of the participants engaged very often in unethical practices in academics.



Figure 2: Number of Times Participants Engaged in Academic Dishonesty (*N* = 396)

Cumulatively, Figure 2 showed that very few (12%) have never engaged in academic cheating at some point. The outcome indicates that most students committed an academic transgression at some point in their academic life. Similar findings were arrived at by Jurdi et al. (2011) where over half of their respondents engaged in unethical practices in academics. The result is slightly lower than the findings of Galloway (2012) in which 93% of their respondents had engaged in unethical practices in academics at least once. However, they are higher than what Ahmed and Sheikh (2016) found as 55.1% of their respondents carried out acts of unethical practices in academics single or multiple times.

In order to test the study objective, respondents' scores in moral compass and unethical practices in academics were subjected to bivariate correlation analysis and results are shown in Table 2.

Table 2: Relationship between Moral Compass and Unethical Practices in Academics (<i>N</i> = 396)						
Moral compass sub scale	r	Sig				
Compassion	.00	.999				
Forgiveness	17**	.001				
Integrity	26**	.000				
Responsibility	13*	.011				
**. Correlation significant at $p = 0.01$ (2-tailed)						
*. Correlation significant at <i>p</i> = 0.05(2-tailed)						

*. Correlation significant at p = 0.05(2-tailed)In data coming from Table 2, compassion had no link with unethical practices in academics (r(394) = 0.000, p > .05). This implies that being compassionate or not does not determine whether one engages (or not) in academic cheating. However, the relationships between: forgiveness and academic cheating (r(394) = -.17, p < .01); integrity and academic dishonesty (r(394) = -.26, p < .01); as well as responsibility and academic dishonesty (r(394) = -.13, p < .05) were inversely and statistically significant. The negative values of r imply that as integrity, forgiveness, and responsibility increase engagement in academic cheating decreases. Prompted by these results, the combined relationship between all the elements of the moral compass on academic dishonesty was tested by performing standard multiple regression analysis. This was done after testing for assumptions of the test. For example, the tolerance values in Table 3 are far from zero. In addition, Variance Inflation Factor (VIF) is not more than three. Thus, the assumption of

The results from standard multiple regression are as summarized in Table 3.

Model	β	SE	Std. β	t	Sig.	Tol	VIF	
Constant	12.70	1.73		7.33	.000			
Compassion	.13	.07	.105	1.99	.047	84	1.19	
Forgiveness	09	.05	112	-1.97	.050	.73	1.37	
Integrity	17	.04	232	-4.45	.000	.86	1.16	
Responsibility	04	.05	048	869	.385	.78	1.28	
Note: $R = .291$; $R^2 = .085$; $F(4,391) = 9.049$, $p < 0.05$; β = beta; SE = standard error; Std. β = standard beta;								
Tol = tolerance; VIF = variance inflation factor								

multicollinearity was not violated (Tabachnick & Fidell, 2013).

The results in Table 3 showed that all domains of the moral compass altogether significantly predicted academic dishonesty *F* (4,391) = 9.049, *p* <.05. The results imply that the moral compass was related to unethical practices in academics. The table also revealed that integrity was a bigger contributor to unethical practices in academics (Std. β = -.23) followed by forgiveness (Std. β = -.11). Responsibility marginally determined unethical practices in academics (Std. β = -.047). Finally, the domains of moral compass collectively explained 8.5% of the variance in academic dishonesty (*R* = .29, *R*² = .085).

6. Discussion of the Results

The objective of the study was to establish the link between moral compass and unethical practices in academics. The descriptive data from the moral compass scale showed that respondents' state of moral compass was above average. Also, the patterns of the adaptive learning scale revealed that the majority of the respondents engage in unethical practices in academics. The foregoing therefore implies that despite students claiming that they have a high level of ethicality, the majority of them have at some point engaged in unethical practices in academics. This scenario could be explained in terms of Festinger's (1957) cognitive dissonance theory which explains the reasons why people behave contrary to their beliefs and values. Cognitive dissonance theory asserts that learners could explain their engagement in unethical practices in academics using neutralizing techniques. In support, Dahl, and Waltzer (2018) pointed out that people go against principles and values by disconnecting and switching off the principle that is being violated. This therefore suggests that respondents could be selectively suspending their moral values and engaging in academic cheating without experiencing negative emotions.

The results also compare well with what was reported by Yang et al. (2020) about unethical behaviors and moral disengagement. A positive link was established between participating in unethical behaviours and moral dissonance. In support, Sidi et al. (2019) contended that students look for ways of achieving good grades through dishonesty means while fully aware that it is wrong. This may be reflective of the moral relativism of the present society where dishonesty has been accepted as a way of life or culture (Galloway, 2012).

The results partly agree with the findings of Kam et al. (2018) who claimed that moral obligation predicts the intention to commit unethical acts and not the actual cheating behavior. Similarly, Pulfrey et al. (2018) in a study on why good students cheat argued that students engage in collective cheating as a way of conforming to values held by groups. That is, group values and not personal ones determined academic policy transgressions.

Despite the incongruence between respondents' state of moral compass and their actual behavior, the results from bivariate and multiple regression analysis revealed that moral compass determined one's involvement in academic cheating. This concurs with the findings of previous studies. For instance, Koscielnak and Bojanowska (2019) and Septiana et al. (2020) found out that examination cheating behavior among students is dependent on their ability to hold onto their values and principles. The results further compare favourably with the findings of Olusola and Samson (2015) who reported that moral competence related negatively to academic policy violations.

Also, a literature review done by Wolhuter and Van der Walt (2020) on the views of parents and society concerning student indiscipline in South Africa reported that a deficit in moral principles significantly contributed to the rise in cases of adolescent indiscipline. Furthermore, another qualitative study by Segalo and Rambuda (2018) using a convenient sample of eight teachers in South Africa found that a deficiency in morals and values was a reason for student indiscipline. Catacutan (2019) did a survey on attitudes that university students have toward academic policy violations in Kenya. It was reported that those who had studied ethics disapproved of cheating as opposed to those who hadn't.

In brief, the results, supported by past research submit that the moral compass plays a critical role in the enactment of unethical behaviours in academics. Accordingly, it is imperative for stakeholders to come up with organized values and principles that all students should hold as this may direct their moral compasses. In addition, ways of implementing these values by stakeholders in education need to be included in the curriculum. Also, the beliefs and actions of respondents were incongruent suggesting the need for further studies which may help establish the reasons for these incongruences.

7. Conclusion

Since there were a high number of respondents who confessed to taking part in unethical practices in academics despite their moral compass scores being high, it was concluded that there was incongruence in the beliefs of students as regards what is ethical and unethical and their actual behavior. In other words, students engage in academic cheating despite their beliefs that it is wrong. This suggests that having a moral compass does not necessarily lead to one behaving ethically in academics. Also, the results, supported by past research submit that moral compass is a significant determinant of academic cheating. Therefore, a conclusion was reached that a moral compass reduces the chances of a learner engaging in academic cheating. Specifically, living according to one's principles, acting responsibly, and with integrity reduces the probability of participating in academic cheating.

Conflict of Interest Statement

The authors declare no conflict of interest.

About the Authors

Daniel Kimutai Kemei (ORCID: <u>orcid.org/0009-0007-1231-4890</u>) is an Educational Psychology PhD graduand. He earned his Bachelors and Master's Degree from Moi University in the year 2006 and 2012 respectively. His research interests are in learner characteristics and quantitative methods in psychology. He has published articles in international scientific journals (<u>doi.org/10.47772/IJRISS.2023.7897</u>; <u>doi:10.9790/0837-2808090515</u>, <u>handle/123456789/415</u>). He is currently a manager at a financial institution.

Dr. Chrispus Koinange Wawire (ORCID: <u>https://orcid.org/0000-0002-5167-8247</u>) is a Lecturer at Kenyatta University, Department of Educational Psychology. His research interests are in Education, teaching and study methods.

Dr. Philomena Wavinya Ndambuki is a Lecturer at Kenyatta University, Department of Educational Psychology. Her research interests are in multicultural perspectives in counseling, adolescent development and couples and family counseling.

References

- Ahmed, S.S. (2018). Impact of cheating university examination on quality of education in Kenya: A case of UMMA University, Kenya. *European Journal of Education Studies*, 5(1), 272- 287. <u>https://doi.org/10.5281/zenodo.1419300</u>
- Anitha, P. & Sundaram, S. (2021). Prevalence, types, and reasons for academic dishonesty among college students. *Journal of Studies in Social Sciences and Humanities*, 7(1)1-14.
- Catacutan, M.R. (2019). Attitudes toward cheating among business students at a private Kenyan university. *Journal of International Education in Business*, 14 (1), 20-36. <u>https://www.emerald.com/insight/2046-469X</u>.
- Dahl, A. & Waltzer, T. (2018). Moral disengagement as a psychological construct. *American Journal of Psychology,* 131(2), 240-246. <u>https://doi.org/10.5406/amerjpsyc.131.2.0240</u>
- Feday, S.W. (2017). Academic dishonesty in Ethiopian higher education and its implication for corruption. *Beijing Law Review*, 8, 10-20. <u>https://doi.org/10.4236/blr.2017.81002</u>
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Galloway, M.K. (2012), Academic dishonesty in advantaged high schools: prevalence, justification, and possibilities for change. *Ethics and Behavior*, 22(5), 378-399. https://doi.org/10.1080/10508422.2012.679143
- Ives, B. (2020). Your students are cheating more than you think they are. Why? *Educational Research: Theory and Practice, 31*(1)46-53. <u>https://eric.ed.gov/?id=EJ1250265</u>
- Kam. C.C.S., Hue, M.T. & Cheung, H.Y. (2018). Academic dishonesty among Hong Kong secondary school students: application of theory of planned behavior. An International Journal of Experimental Educational Psychology, 38(7), 945-963. https://doi.org/10.1080/01443410.2018.1454588
- Koscielnak, M. & Bojanowska, A. (2019). The role of Personal values and student achievement in academic dishonesty. *Frontiers in Psychology*, 10: 1887. <u>https://doi.org/10.3389/fpsyg.2019.01887</u>
- Lennick, D. & Kiel, F. (2005). *Moral intelligence: Enhancing Business Performance and Leadership Success*. Upper Saddle River, NJ: Pearson education.
- Midgley, C. & Anderman, E.M. (2004). Changes in self-reported academic dishonesty across the transition from middle school to high school. *Contemporary Educational Psychology*.29, 499-517. <u>https://doi.org/10.1016/j.cedpsych.2004.02.002</u>

- Midgley, C., Maehr, M.L., Hruda, L.Z., Anderman, E., Anderman, L., Freeman, K.E, ...Urdan, T. (2000). *Manual for the Patterns of Adaptive Learning Scales*. The University of Michigan. <u>https://doi.org/312672586</u>
- Mugala, A., Masaiti, G. & Mwila, K. (2022). Unpacking academic corruption in Zambia higher education: forms, causes and mitigation measures. *Creative Education*, 13(1), 55-74. <u>http://dx.doi.org/10.4236/ce.2022.131004</u>
- Pulfrey, C., Durussel, K., & Butera, F. (2018). The good cheat: Benevolence and the justification of collective cheating. *Journal of Educational Psychology*, 110(6), 764-784. <u>https://doi.org/10.1037/edu0000247</u>
- Segalo, L., & Rambuda, A.M. (2018). South African public school teachers' views on right to discipline learners. *South African Journal of Education*, 38(2), 1-7. <u>https://doi.org.10.15700/saje.v38n2a1448</u>.
- Sidi, Y., Blau, I., & Eshet-Alkalai, Y. (2019). How is the ethical dissonance index affected by technology, academic dishonesty type and individual differences?. *British Journal of Educational Technology*, 50(6), 3300-3314. <u>https://10.1111/bjet.12735</u>
- Wamalwa, E.M.W., Okoth, J.M. & Ochanda, D. (2020). Factors contributing to academic dishonesty in Kenya Medical Training College Western Kenya. *European Journal of Medical and Health Sciences*, 2(4)1-6. <u>https://doi.org/10.24018/ejmed.2020.2.4.407</u>
- Wankel, C., Stachowicz-Stanusch, A. & Tamtana, J.S. (2011). The impact of the national culture dimension and corruption on students' moral competencies- research results. *Journal of International Management*, 3(2), 19-45. <u>http://joim.pl/wpcontent/uploads/2020/02/3-2-2</u>.
- Wolhuter, C.X., & Van der Walt, J.L. (2020). Indiscipline in South African schools: the parental/ community perspective. KOERS- Bulletin for Christian Scholarship, 85(1), 1-11. <u>https://doi.org/10.19108/koers.85.1.2436</u>
- Yahya, A.H. & Sukmayadi, V. (2020). A review of Cognitive dissonance theory and its relevance to current social issues. MIMBAR, 36(2), 480-488. https://doi.org/10.29313/mimbar.v36i2.6652
- Yang, Y., Guo, Z., Wu, J. & Kou, Y. (2020). Self-compassion relates to reduced unethical behavior through lowered moral disengagement. *Mindfulness*, 11, 1424-1432. <u>https://doi.org/10.1007/s12671-020-01354-1</u>

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York: Harper and Row

Yu, H., Glanzer, P.L, Johnson, B.R., Shiram R., and Moore B. (2018). Why college students cheat: A conceptual model of five factors. *The Review of Higher Education*, 41(4), 549-576. <u>https://doi.org/10.1353/rhe.2018.0025</u>.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a <u>Creative Commons Attribution 4.0 International License (CC BY 4.0)</u>.