

Constructing CSR student self-consciousness through university social responsibility implementation: evidence in Indonesia

Lidya Agustina, Meyliana Meyliana and Hanny Hanny

Abstract

Purpose – The role of higher education institutions is paramount in creating social and cultural conditions for sustainability. Several studies show universities play an important role in promoting public understanding and awareness about sustainability. The purpose of this study is to analyze the application of university social responsibility (USR) on green and nongreen campuses and how it affects the corporate social responsibility (CSR) of students' self-consciousness (SSC), especially in accounting undergraduate programs by looking at how the undergraduate programs shape their curriculum and can build student awareness related to CSR.

Design/methodology/approach – A total of 704 accounting undergraduate programs students from eight different universities in Indonesia were surveyed to test the CSR SSC. Eight participating universities were included in the green campus based on Universitas Indonesia Green Metric (UI GreenMetric) and nongreen campus. Each university was analyzed regarding the application of USR.

Findings – The results of this study show that universities included in the green campus at the UI GreenMetric do not necessarily have a higher USR than the nongreen campus. Overall, there is evidence that graduates from universities with high USR implementation have better CSR SSC than graduates from universities with low USR implementation. Furthermore, the findings of this study show that there is a high value of ethic and CSR knowledge coming from university students with high USR implementation but not so with character. The findings show the same results from students between the two university groups.

Originality/value – To the best of the authors' knowledge, this study is the first attempt to examine the effect of USR implementation on CSR SSC in Indonesia, by putting students' CSR knowledge as a part of CSR SSC.

Keywords Green campus, University social responsibility, CSR student self-consciousness, Non-green campus, Green and non-green campus

Paper type Research paper

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Abbreviations

CSR = Corporate social responsibility;

USR = University social responsibility;

CSR SSC = Corporate social responsibility student self-consciousness; and

UI GreenMetric = Universitas Indonesia Green Metric (greenmetric.ui.ac.id).

Introduction

Empirical investigation into how contemporary organizations perform their business ethics and responsibilities has become one of the most important business problems of the 20th century (Gunawan, 2015). Furthermore, Panwar *et al.* (2010) explain that an industry is

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surrounded by a number of organizations that have an extraordinary impact on industrial behavior in the forms of social and policy influences and environmental behavior. It can be assumed that students will occupy a variety of positions, as either members of the industry (staff and management) or external parties of the industry (e.g. the ministry of finance and the capital market supervisory board) that can influence industry behavior. Therefore, the role of higher education institutions is paramount in creating social and cultural conditions for sustainability (Lange and Kerr, 2013).

A survey conducted by EY (2016) on stakeholders, Chief Financial Officer interviews and quantitative data show that nonfinancial information has become increasingly important in managing organizational values. Therefore, organizations are required to present information related to their economic, social and environmental impacts. However, the KPMG survey in 2017 shows that many countries in the world were trying to increase the level of Corporate Sustainability reporting, while the trend to include nonfinancial reports in annual reports has increased dramatically in 2017, which was around 78% of the world's top companies (G250) (KPMG, 2017). This is in line with the results of studies conducted by previous researchers that the disclosure of nonfinancial information in the annual report affects investors' decision-making in investing (Chua, 2006; Coram *et al.*, 2009; Simnett *et al.*, 2009). Therefore, when companies intend to increase their capacity to compete, it is necessary to consider the impact of their operations on economic, environmental and social structures and also report these impacts to stakeholders (Caliskan, 2014).

The development of information disclosure that shows the economic, social and environmental impacts of the company's overall operations requires the responsibility of professional accountants in establishing and conducting reporting systems (Caliskan, 2014). Universities, especially accounting undergraduate programs, need to specifically address the development of disclosure through an integrated curriculum with corporate social responsibility (CSR). Furthermore, accounting students who are part of business students are future leaders and employees who can determine the future economy of a country, through knowledge and business decisions (Almutawa and Hewaidy, 2020). Therefore, establishing the correct awareness of accounting students about CSR is an important thing that companies and academics need to pay attention to as their preparation steps in creating a better future business climate (Ham *et al.*, 2015).

Previous studies have shown that education can play an important role in promoting public understanding and awareness about sustainability (Fiksel *et al.*, 2013). Universities have a great responsibility in raising awareness, knowledge, skills and values of public sustainability and leading the transformation of society in terms of sustainability (Zhao and Zou, 2015). Schurer, Kassenboehmer and Leung (2015) in their study examined the personality traits of students for eight years and assumed that the personality traits of young people (young adulthood) can still be forged and markedly changed. Universities clearly have the ability to shape one's personality through continuous treatment in daily routine activities for three to five years of study. Then, Schurer *et al.*'s (2015) results show that university education makes a person more open to experience, has higher awareness, is able to consider new experiences and can also face work pressure in the long run. Based on this, the authors assume that students will bring social values obtained during their study into their workplaces through their character.

Previous studies on university social responsibility (USR) have focused on developing a conceptual USR, in the form of literature reviews (Ali *et al.*, 2021; Wigmore-Álvarez and Ruiz-Lozano, 2012), conceptual frameworks (Chen, *et al.*, 2015; Dima, 2017), USR measurement (Coelho *et al.*, 2017), review of USR (Martín-Rubio and Andina, 2016), USR dimensions (Pompeu *et al.*, 2014) and case studies (Davis *et al.*, 2003). However, studies that link them to the impact of the implementation of USR are very rare, especially in the context of developing countries (Ali *et al.*, 2021). Furthermore, studies on USR impact related to CSR awareness for future professionals need to be carried out on business

faculty students. This is because many educators and experts believe that social responsibility should be fully integrated into educational modules to help students make social and ecological choices as entrepreneurs (Ali *et al.*, 2021). This study seeks to fill the research gap by focusing on studies on accounting students in Indonesia, so as to provide empirical evidence regarding the USR impact study related to CSR student awareness in developing countries. This study aims to examine how the role of USR can shape student awareness about CSR, where such awareness is formed during their years of studying at a university. USR is a form of CSR applied at universities, where USR has the same concept as CSR, but its implementation is carried out at the university and its community. USR depends on not only products and care for the environment and society but rather how the university community can relate to all aspects of the society as a whole in terms of university learning missions, quality of life for students and how universities deal with “green” issues as they handle commercial matters (Kouatli, 2018). Results of a study conducted by Vázquez *et al.* (2014) on 400 students showed that their education and high involvement in the field of sustainability and social responsibility would foster their awareness of the importance of USR.

Previous data findings show that Indonesia was still ranked lowest in the implementation of CSR in seven Asian countries (Azzahra, 2016). One of the identified obstacles in implementing CSR in the field is the problem of competent Human Resources as well as an understanding of the implementation and evaluation in the field (<https://swa.co.id>). Researchers assumed that the problem of competent Human Resources in understanding and implementing CSR is related to individual awareness and CSR knowledge and involvement gained since their time of studying.

This study examines how the awareness of final year accounting students is regarding the implementation of CSR. Testing awareness of CSR among accounting students is important because accounting students are the future of professional accountants, so their perception of sustainability is paramount (James, 2015). They play an important role in building the core of CSR. Even now, accountants are at the forefront of conducting research on theories in social and environmental accounting (Tilt, 2009). Furthermore, professional accountants are responsible for preparing integrated financial reports. An integrated financial report, which is a report with a combination of two pieces of information, that is, financial report and sustainability report, is a challenge for accounting professionals to continue to expand their involvement in the preparation of these reports. Their behavior in supporting the sustainability report can influence the quality of the report (James, 2015).

The tests of this study are divided into two categories, the first is testing the application of USR at universities that fall into the “green campus” and “non-green campus” categories. The second is testing the differences of CSR student self-consciousness (SSC) in the final-year accounting students studying at the university. The results of this study can provide tangible evidence that awareness about the implementation of CSR was built since university study, where the undergraduate programs at universities that apply good USR can produce graduates who have more awareness and knowledge in implementing CSR. The results of this study can enrich studies in the USR area, considering that previous studies on the topic of USR have often focused on the conceptual USR (Wigmore-Álvarez and Ruiz-Lozano, 2012; Chen *et al.*, 2015; Dima, 2017; Ali *et al.*, 2021) and the determinant of USR (Mintarti Dasuki, 2014; Pompeu *et al.*, 2014). However, it is very rare for studies to use USR as a determinant and link it to the efforts of universities in forming student awareness of CSR. Many studies on USR have been conducted in the Western world, but very few of these studies have been conducted in developing countries such as Indonesia. Furthermore, this study does not find a similar study in the Indonesian context, even though Indonesia is the largest country in the Southeast Asia Region and also has the largest market. Therefore, many foreign companies and investors invest in Indonesia. The issue of CSR in Indonesia is very important, because Indonesia faces a number of fundamental

problems in realizing sustainable development goals (Gunawan and SeTin, 2018). Therefore, companies in Indonesia are expected to carry out CSR activities and disclose and link them to sustainability issues. Furthermore, Gunawan and SeTin (2018) explained that studies on the topic of CSR, especially in the field of accounting, is important and relevant for understanding this problem. In addition to supporting the development of CSR through the curriculum, the results of this study are also expected to provide additional literature for future researchers.

Theoretical background

Corporate social responsibility, university social responsibility and cognitive learning theory

Social responsibility is a transparent and ethical organizational behavior, and it is in line with applicable laws and norms. It is a form of organizational responsibility for the impact of its decisions and operations on the society and the environment without ignoring the expectations of stakeholders from the organization so that the organization can contribute to sustainable development (Chen *et al.*, 2015). The implementation of social responsibility in universities is known as USR. The term USR expresses the relevant higher education institutions' social responsibility. USR has the same concept as CSR. Vázquez *et al.*, (2014) states that the university is the only party that has an influence on this sustainable development among the new generation. Therefore, universities are educational agents who can put the topic of responsibility and ethics as the basis of their curriculum (Vázquez *et al.*, 2014).

Chen *et al.* (2015) stated that as a formal educational organization, universities can improve sustainable development practices in their organizational management as a form of concern for their social responsibilities. In this case, the universities not only share knowledge or CSR concepts to students but also practice the concept in the form of USR (Setiawan and Davianti, 2018), so there is an active learning process. The active learning process is based on cognitive learning theory.

Cognitive learning theory studies about how the human mind works when they experience learning (Celikoz *et al.*, 2016). It states that learning is a long process that can bring various behavior, knowledge, abilities and attitudes based on the events they experience. Referring to this theory, learning must be done actively. In this case, students need to be active to feel real experiences in the learning process; therefore, their learning process does not just accept what is read and listened to conceptually. Furthermore, cognitive learning theory also states that the real experience gained by students can be a process where students adjust their previous thinking with what they find from real experience in this learning process so that there is a change in their perception of what is being learned and triggers new awareness regarding the things they are learning. Referring to cognitive learning theory, the Green Campus policy as well as the implementation of USR involving students in the program will provide experiences that can build students' new perceptions about the USR programs, especially regarding to Green Campus policy. Thus, building CSR students' experience through the curriculum of the accounting study program is expected to increase students' awareness to be responsible for the society and the environment so that this awareness will carry over their role as the accountants in the future. In line with the cognitive learning theory above, Setiawan and Davianti's (2018) research states that combining students' concept and practice of social responsibility is important for these students. They can have greater opportunities to be involved in CSR activities so that they can build their ethics and social responsibility as future professional candidates.

In addition, in the face of global developments such as globalization and competition among higher education, many universities struggle to compete and survive in the face of industrial changes (Gulavani, *et al.*, 2016). By adopting CSR strategy, universities can use this approach as part of their competitive strategy. Therefore, by developing CSR strategy

at the university, the university is expected to function as a social institution that can develop individual learning and human capital, socialization and inculcation of citizens and political loyalty, preservation of knowledge and other guidance that is useful for the country (Gumpert, 2000). The integrated role of CSR in the learning curriculum of a degree program, especially the business faculty, can provide CSR knowledge and training to students to make them responsible citizens (Gulavani *et al.*, 2016).

Corporate social responsibility and student self-consciousness

CSR is a long-term organizational effort and is carried out sustainably for the stakeholders and the environment. This CSR activity is an organizational policy that is guided by both personal and organizational values (Isa, 2012). Vo (2011) stated that to increase corporate awareness of CSR, the knowledge of micro, small medium enterprise (MSME) business practitioners about CSR needs to be increased, and scholars need to play an active role in the socialization and promotion of CSR toward MSMEs. Aligned with Vo (2011), Caliskan (2014) states that accountants need to support the application of CSR toward sustainable development by integrating this principle of sustainability into the company's decision-making system.

Accountants who will carry out this task should have a high awareness of the importance of CSR and understand CSR practices. This is inseparable from the role of universities. According to Schurer *et al.* (2015), university education allows an individual to have a higher awareness. Vasilescu *et al.* (2010) stated that the function of a university is to not only issue a diploma but also help their students find directions and ways of thinking that not only focus on the interests of individuals but also pay attention to the interests of the society. This shows that the university has a great responsibility in raising public awareness, knowledge, skills and values of sustainability and leading the transformation of society in terms of sustainability (Zhao and Zou, 2015). One of the examples is through students who are a part of the community and interact directly with the university during their study at the university. Results of the study conducted by Vázquez *et al.* (2014) on 400 students showed that their education and high involvement in the field of sustainability and social responsibility would foster their awareness of the importance of USR.

Some universities choose to develop their social responsibility practices by putting their attention and participation in greater depth on the issue of global warming. University participation in minimizing global warming is called the Green Campus Initiative (Shahrullah *et al.*, 2014). This Green Campus Program provides a means to foster environmental awareness by offering clear and controlled methods for the campus in an effort to take environmental issues, innovations and research from academic departments and apply them to daily campus management. The Green Campus Program is expected to make environmental care and positive action an intrinsic part of the life and ethos of educational facilities. The program involves students, academic staff, nonteaching staff, the media, local businesses, contractors and visitors (Taisce, 2016).

A study by Tezel *et al.* (2018) shows that the implementation of USR on the green campus has a positive contribution to the inner bond of students to nature and to students' awareness of environmental problems. Tezel *et al.* (2018) also stated that to improve the success of the Green Campus Program, universities should think about the expectations of students who have taken sustainability education and provide opportunities for them to be involved in the Green Campus Program. The Green Campus Program at the university is believed to be able to improve the implementation of USR on the campus through various campus-related activities and policies, inviting students to care more about the environment through community service and environmental research. Therefore, the authors argue that universities included in the category of "green campus" will apply USR well and will have a high USR.

The measurement of USR according to [Gulavani et al. \(2016\)](#) is realized in the form of the field of social responsibility practices at the university which include: design of learning at the university regarding social responsibility; social responsibility to the environment; waste paper recycling system; social responsibility at work; social responsibility to the community; social responsibility in the form of developing research centers; and social responsibility toward stakeholders. The seven practice areas according to [Gulavani et al. \(2016\)](#) are used in this research as a basis for measuring USR implementation, especially in accounting undergraduate programs at universities as the subject of this study.

Based on the explanation of the relationship between USR and CSR SSC, the research hypotheses are as follows:

- H1a.* The implementation of university social responsibility to accounting undergraduate programs has a positive relation to corporate social responsibility student self-consciousness.
- H1b.* There are differences in corporate social responsibility student self-consciousness of the students in accounting undergraduate programs at universities in the high university social responsibility category and low university social responsibility.

Corporate social responsibility student self-consciousness, ethic, character and knowledge

Based on the definition by [Merriam-Webster \(2019\)](#) Dictionary, consciousness is a physical awareness and feeling, judgment from the heart, mental alertness and purposeful awareness. The phenomenon of consciousness shows that humans are able to understand and treat themselves consciously. Consciousness is a complex psychological process that leads to the understanding of various imaginations by an individual in the form of activities and behaviors as a result of interaction with others ([Bolotova, 2006](#), cited in [Paukova, 2014](#)). Therefore, it can be concluded that is the mental, physical and feeling awareness of a student that comes from an understanding formed as a result of their interactions with others in the form of activities and behaviors. In addition, the measurement of SSC is carried out through three parts – ethic, character and knowledge. The complete table describing instrument measurements can be seen in [Appendix 1](#).

Student ethic

The measurement of student self-awareness of CSR for accounting students based on ethic is based on the premise that moral development can be improved through the educational process, especially ethic education in accounting ([Alam, 1999](#)). Furthermore, according to [McPhail and Gray \(1996\)](#), “the way in which accounting is conceived, constructed and taught makes it inevitable that accounting students will experience intellectual and moral atrophy”. Ethic will lead to moral commitment in individuals in making decisions. Research result by [Caliyurt \(2007\)](#) examines the thinking and practice of academics about accounting ethic education at Turkish Public Business Schools, specifically on the question “Why Do Academics Teach Ethic in Accounting Classes?” Of all respondents, 31.9% stated that ethic education promotes the submission of accurate financial reports and 28.5% answered that ethic education gave awards to the accounting profession.

Moreover, the researchers point out that ethic education in accounting will enhance students’ ability to formulate ethical judgments and play an important role in highlighting the importance of high ethical standards ([Liu et al., 2012](#)). Ethical measurement in SSC uses the ethic of care item constructed by [Skoe \(1993\)](#) which we believe to be the only ethic of care measurement tool that exists today. This potential relationship between ethic of care and stakeholder theory is paramount for CSR issues, because stakeholder theory is said to be the dominant paradigm in CSR ([McWilliams and Siegel, 2001](#)). Research result by [Andre \(2013\)](#) which examines ethic of care as a determinant of stakeholder inclusion and CSR

perception in business education that shows stakeholder inclusion is related to ethic of care. CSR perception is related to stakeholder perception. CSR perception is also related to ethic of care. The results of the study support the assumption that ethic of care is a determinant for all types of CSR perception. The resulting practical implications lead to if business schools want their students to implement CSR when they later become managers, then they must build a bridge in the curriculum between business ethic education based on the theory (“educare”) and teaching of CSR (Andre, 2013). Based on this explanation, the research hypotheses are as follows:

- H2a.* The implementation of university social responsibility to accounting undergraduate programs has a positive relation to student ethic.
- H2b.* There are differences in the ethic of students in accounting undergraduate programs at universities in the category of high university social responsibility and low university social responsibility.

Student character

Character as the second part in measuring SSC toward social responsibility is an important key that underlies every activity and behavior chosen to be carried out by an individual (Mergler, 2007). A character cannot be formed automatically (Pala, 2011). Character building requires a process of continuous learning, example, teaching and practice (Pala, 2011). The educational environment is the right place to teach about values, respect and responsibilities for all students, especially for accounting students where the characters underlie a variety of specialization choices (O’Shea, 2018). In addition, proper direction through knowledge and expertise can shape the character of students to be more mature in acting and responsible for every decision they make. Character measurements use the questionnaire created by O’Shea (2018) as a result of the latest research from various previous studies that develop about the character and expertise needed by an accountant. This questionnaire was developed based on Holland’s RIASEC model and additional characteristics that assess analytical skills, preference for structure, communication and interpersonal skills, risk approach and conscientiousness. Based on this explanation, the research hypotheses are as follows:

- H3a.* The implementation of university social responsibility to accounting undergraduate programs has a positive relation to student character.
- H3b.* There are differences in the character of students in accounting undergraduate programs at universities in the category of high university social responsibility and low university social responsibility.

Students’ corporate social responsibility knowledge

A person’s knowledge of CSR can affect that person’s self-awareness so that increasing self-awareness of CSR will increase their intention to implement CSR (Chatzoglou *et al.*, 2017). Thus, it can be said that students’ knowledge of CSR affects their awareness of CSR. Then, when their self-awareness of CSR increases, it will increase their intention to implement CSR.

An important factor needed in the process of developing student knowledge is by creating a learning environment that can support the process of building student knowledge (Hailikari *et al.*, 2008). Departing from Hailikari’s *et al.* (2008) research, it can be said that by implementing a high USR in universities, it will support the development of student knowledge about CSR.

The measurement of accounting student’s self-consciousness knowledge of social responsibility is derived from the impetus of integrated reporting (IR). IR, which is also known as One Report by Eccles and Krzus (2010, as cited in Owen, 2013), is translated as

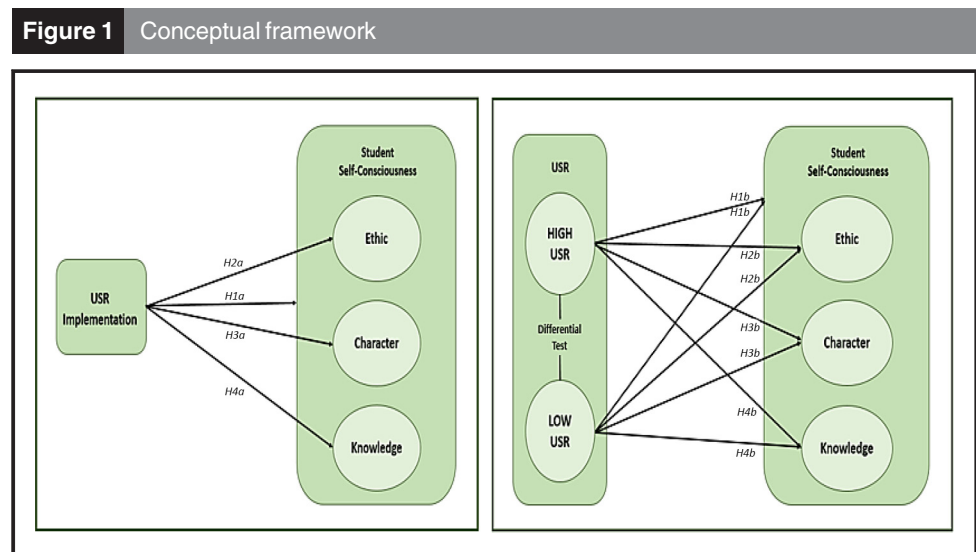
a report that contains all financial and nonfinancial information and the relationship between the two, as well as company performance that can add or reduce the value of shareholders and stakeholders. The global introduction of IR has changed the direction of forming the accounting curriculum. The impact will change the old curriculum of accounting undergraduate programs by emphasizing several topics, such as: strategy, governance, risk and performance and financial management accompanied by additional knowledge, such as: green accounting, sustainability reporting, environmental accounting and triple bottom line accounting (Owen, 2013). Knowledge measurement using multiple choice questions will be built based on the items contained in the Global Reporting Initiative (GRI). This measurement includes economic, social and environmental standards. Based on this explanation, the research hypotheses are as follows:

- H4a.* The implementation of university social responsibility to accounting undergraduate programs has a positive relation to students' corporate social responsibility knowledge.
- H4b.* There are differences in the students' corporate social responsibility knowledge in accounting undergraduate programs at universities in the high university social responsibility category and the low university social responsibility category.

Based on the theoretical background and the development of the hypothesis above, the conceptual framework of the research is summarized in Figure 1.

Data and analysis

Indonesia University, abbreviated as UI, is one of the best public universities in Indonesia. UI GreenMetric is a UI innovation that has been widely recognized internationally as a ranking of the world's first higher education institutions based on high commitment in the management of the campus environment. Now, UI GreenMetric of World Universities is increasingly global and is increasingly being followed by universities in various countries. In 2016, UI attracted worldwide attention through its competition program in the environmental field on an international scale and was named UI GreenMetric World University Ranking 2016. The ranking of universities in the competition is considered as the first ranking of the higher education institutions in the world based on high commitment in the field of campus environmental management (UI GreenMetric, 2016). The sample taken in this study



consisted of four universities which were included in the Green Campus category and four other universities which were not included in the green campus category. Next, we determine the criteria used to determine a “green campus” university through the following stages:

- Information obtained from www.goodnewfromindonesia.id is used in determining the four universities in Indonesia that are included in the top ten ranking of “green campus” universities based on the UI Green Metric.
- The four selected universities are required to have an Accounting Undergraduate Program.
- The four universities are willing to be interviewed about USR at the university.

However, the following criteria are used to determine universities that are not included in the green campus category:

- It is a reputable university that is not included in the green campus category according to the UI Green Metric World University.
- The university is located in the same city as the four universities which are included in the green campus category.
- The four universities selected are required to have an Accounting Undergraduate Program.
- The four universities are willing to be interviewed about USR at the university.

Furthermore, 100 questionnaires were distributed to each university from the eight universities, so that a total of 800 questionnaires were distributed, but only 704 questionnaires were completely filled in and could be processed. The questionnaire was filled out by third-year accounting students (or who have taken CSR-related courses) to fill in a number of responses used to measure SSC’s CSR. Meanwhile, to obtain additional information on USR, we also interviewed the managers of accounting undergraduate programs from the eight universities. We interviewed 35 managers, consisting of the head of the accounting study program and the secretary of the accounting study program, as well as the management accounting and responsibility accounting lecturers from the eight participating universities.

The interview aims to find out and observe the implementation of USR in the accounting study program, especially to see how CSR topic is included and implemented in the accounting curriculum. The questions asked in the interview relate to working activities prepared by study programs such as research activities, community service, seminar activities, social services, management accounting and responsibility accounting project assignments, all of which involve the students. The results show that the program managers are very aware of the importance of integrating USR in their sustainability strategy. In addition, a proper USR implementation process can increase students’ awareness of environmental responsibility. Management accounting and responsibility accounting lecturers also assign the students to conduct interviews with company management accountants. The students are asked to get the information about how the companies manage their waste and expired products which are potentially wasted and obtain the information how management accountants prepare a profitable green budget for the company and their stakeholders in the future.

To examine the relationship between exogenous (independent) variable of USR implementation on endogenous (dependent) variable of SSC on CSR, partial least squares structural equation modeling (PLS-SEM) was used (Hair *et al.*, 2014). The Mann–Whitney U Test was used to test the difference in the comparison of each indicator from CSR SSC to USR with high USR and low USR categories. The Manova Test (Multivariate Analysis of

Variance) was used to test the differences in the overall CSR SSC indicators simultaneously against USR within high USR and low USR categories (Nachar, 2008).

Table 1 shows that 704 students from eight universities in the Java region became the respondents in this study. Each student was involved during the questionnaire filling activity which was carried out for approximately 20 min. Students who became the respondents were students who have taken courses related to CSR, so they were usually in the third year of university study or were in the fifth semester or above. In addition, the average age range of respondents was 19–21 years.

Results

Reliability and validity of the measures

Appendix 1 explains the questionnaire items used to measure both dependent and independent variables. Ethic was measured by 14 items developed by Caliyurt (2007), and character was measured by 45 items based on the question items developed by O'Shea (2018) and Mergler (2007). Each question was measured by applying a five-point Likert scale with a range of 1, strongly disagree, to 5, strongly agree. Knowledge was measured by ten multiple choice questions that we compiled based on general knowledge about CSR and economic, social and environmental standards in the GRI (Initiative, 1997). Appendix 2 shows Cronbach's alpha for the ethic variable questions 0.823, Cronbach's alpha for character variable questions 0.905 and Cronbach's alpha for knowledge variable questions 0.585 so that the three reflected satisfactory internal consistency reliability. This study measured the validity of ethic, character and knowledge items using factor analysis (Appendix 2). Principal component analysis and Varimax were also adopted to verify the significance and independence of survey questions. The survey results were analyzed using the Kaiser–Meyer–Olkin Measure of Sampling Adequacy factor analysis (KMO) for the ethic variable = 0.850, Bartlett's chi-squared test = 2,230.676 and contributed to an explanation variance of up to 48.846%. Factor analysis (KMO) of character = 0.906, Bartlett's chi-squared test = 10,795.320 and contributed to explanation variance of up to 55.205%. Factor analysis (KMO) of knowledge = 0.702, Bartlett's chi-squared test = 497.664 and contributed to explanation variance of up to 44.321%. Reliability test for USR question items was with Cronbach's alpha value of 0.885.

University social responsibility analysis

The USR variable indicator was adopted from Gulavani *et al.* (2016) which was divided into seven indicators that we developed into 67 question items based on the UI GreenMetric. Each item in this question was only given a value of 1 and 0, 1 for each answer of there is an activity or USR implementation and 0 for each answer of there is no activity or no USR

Table 1 Summary of respondents

University	Gender		Number of people	Semester			Age	
	Male	Female		Median	Mean	Median	Mean	SD
M	19	54	73	7	7.0	21.00	20.75	0.94
S	46	50	96	5	4.4	19.00	19.44	1.02
KS	35	65	100	5	5.7	20.00	20.06	0.95
W	32	68	100	7	6.4	21.00	20.24	3.80
D	17	46	63	5	5.3	20.00	19.95	0.77
NS	32	60	92	5	5.0	20.00	21.89	20.97
U	46	34	80	5	5.7	20.00	20.28	0.86
T	37	63	100	7	6.6	21.00	20.74	0.69
<i>Total</i>	<i>264</i>	<i>440</i>	<i>704</i>					

Source: Primary data

Table 2 Total weight of university social responsibility

No.	Name of university	Total of weight value	USR category
1	M	34	High
2	S	24	Low
3	KS	29	Low
4	W	28	Low
5	D	37	High
6	NS	35	High
7	U	37	High
8	T	29	Low

Source: Primary data

implementation. Then, the answer to each question item was summed for each indicator to be weighted. This weighting ranges from values 1 to 5, where a value of 1 was for the smallest number of items and a value of 5 was for the largest number of items. The weighting done for the assessment of the number of question items was divided equally for each weight value. After completing the weights, the next step was to sum up the weight values obtained from the seven operational variables. The highest total weighted value of the seven indicators was 40; this was because the learning design indicators were divided into two assessments – safety studies and curriculum design.

In [Table 2](#), to determine the limits for the low and high categories, we used the median value. Values below the median are categorized as low, while values above the median are categorized as high. The reason we categorized low on answers that are below the median is because the value of the answers with a score below the median shows the number of answers with a smaller binary score. The total weighting values of the eight universities have the lowest value of 24 and the highest value of 37. Based on the total values, we divided them into two categories, the low USR category for the total weighting values ranging from 24 to 29 and the high USR category for the total weighting value ranging from 34 to 37. Based on the weighting results of USR, it was found that universities included in the “green campus” on the UI GreenMetric did not necessarily have a high USR, and conversely, it could not be generalized that every university not included in the “green campus” on UI GreenMetric had a low USR.

[Table 3](#) shows the mean and standard deviation for each USR group. The two USR groups showed differences in ethic (0.05), character (0.049), knowledge (0.41) and student’s self-consciousness (0.17). [Table 3](#) also shows the biggest difference in accounting undergraduate programs that have a high USR with a low USR is in terms of knowledge about CSR, while the lowest difference is in terms of character. These findings reveal that the accounting undergraduate programs that implement USR well (high USR) is effective in increasing students’ knowledge about CSR, besides producing students with better ethic and character.

Table 3 Summary of university social responsibility across ethic, character, knowledge and student self-consciousness

	N	Ethic		Character		Knowledge		SSC	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
High USR	308	3.990	0.358	3.769	0.347	5.165	1.966	4.308	0.890
Low USR	396	3.940	0.434	3.720	0.396	4.755	1.935	4.138	0.922

Source: Primary data

Hypothesis testing

PLS-SEM was used to examine the relationship between USR implementation and CSR SSC. SEM is a multivariate technique that combines factor analysis with regression, which allows researchers to measure variables and latent variables.

The results of the PLS-SEM test in Table 4 show that USR has a positive influence on student ethic by 54.3%, USR has a positive influence on student character by 61.2%, USR has a positive influence on students' CSR knowledge by 83.7% and USR has a positive influence on CSR SSC by 77.9%. The test results are consistent with the directions proposed in the hypothesis, and all hypotheses are supported (*H1a*, *H2a*, *H3a* and *H4a*).

Hypotheses *H2b* through *H1b* (Table 5) examine differences in ethic, character, knowledge and CSR SSC between accounting undergraduate programs with high USR and low USR categories. Mann-Whitney test results indicate that there are differences in the ethic and CSR knowledge of students in the accounting undergraduate programs with a high USR category and with a low USR, but the average difference in ethic is small (0.106), while the average difference in knowledge is quite large (0.457). The test results for the character of students in the accounting undergraduate programs with a high USR category and with a low USR were proven to be no different, so *H3b* was rejected.

The Manova test was used to test *H1b* (Table 5) which predicts differences in the CSR SSC students in accounting undergraduate programs with high USR and low USR categories. The Manova test results show there are significant differences between CSR SSC students in accounting undergraduate programs with high USR and low USR categories, with an average difference of 0.592. The test results show that hypotheses *H1b*, *H2b* and *H4b* are supported.

Discussion and conclusion

The findings of this study indicate that accounting undergraduate programs at universities included in the green campus may not necessarily apply USR better than accounting

Table 4 Hypothesis test (partial least squares structural equation modeling)

Hypothesis	β	R ²	t-test	t-table ($\alpha = 5\%$)	Result
<i>H1a</i> (USR has an influence on ethic)	0.737	0.543	5.934	1.96	Supported
<i>H2a</i> (USR has an influence on character)	0.782	0.612	2.436	1.96	Supported
<i>H3a</i> (USR has an influence on knowledge)	0.915	0.837	19.526	1.96	Supported
<i>H4a</i> (USR has an influence on SSC)	0.882	0.779	13.816	1.96	Supported

Source: Primary data

Table 5 Hypothesis test (difference test)

Hypothesis	Mann-Whitney		Manova		Result
	Z	Significance	F	Significance	
<i>H1b</i> (there is a difference in student ethic in the undergraduate programs in the high USR and low USR categories)	4.547	0.000			Supported
<i>H2b</i> (there is a difference in the character of students in the undergraduate programs category of high USR and low USR)	1.385	0.166			Rejected
<i>H3b</i> (there is a difference in the students' CSR knowledge in the undergraduate programs in the high USR and low USR categories)	3.471	0.001			Supported
<i>H4b</i> (there is a difference in CSR SSC in the undergraduate programs in the high USR and low USR categories)			7.006	0.000	Supported

Source: Primary data

undergraduate programs at universities that are not included in the green campus. Based on our interviews and observations on accounting undergraduate programs from eight different universities, we concluded that each undergraduate programs and university was fully aware of the importance of implementing USR. They continually strive to improve the system, implement campus policies that are both humans and healthy environment oriented and make effort to improve the application of USR better (the lowest USR score is only for one university with a score of 24 from a maximum score of 40). They realized that the good implementation of USR could help shape the character of students in the future.

The results of this study can provide tangible evidence that awareness of CSR implementation is reflected through the ethic, character and knowledge of students' CSR that has been built since their university study. The accounting undergraduate programs at universities that apply USR properly can produce individual graduates who have more awareness and knowledge in implementing CSR (findings are supporting *H1a*, *H2a*, *H3a* and *H4a*). Therefore, practical implications lead to the undergraduate programs that expect their students to be aware of and to implement CSR when later they occupy a position in a company. It is necessary to apply a good USR to the undergraduate programs and "build bridges" through the curriculum. Thus, the results of this study are in line with cognitive learning theory.

Furthermore, the results of this study also show that there are differences in student ethic, student CSR knowledge and CSR SSC in the accounting undergraduate programs at universities that apply USR better (higher) than in the accounting undergraduate programs at universities with low USR (findings are supporting *H1b*, *H2b* and *H4b*). However, there is no difference in the character of students in the accounting undergraduate programs at universities that apply high USR with the accounting undergraduate programs at low USR universities. This may occur if we refer to the statement of [Was et al. \(2006\)](#) that many approaches are taken to build student character, including formal approaches and informal approaches. Character education with a formal approach is carried out by providing lessons and assignments that are deliberately designed to influence student character, while informal character education is carried out by providing experiences from the environment, learning atmosphere and community that affect student character. In this case, many character education programs combine these approaches in developing character education programs ([Was et al., 2006](#)). Thus, the student character of CSR at universities that apply high USR and universities that apply low USR is no different, if it is not accompanied by education on CSR based on a formal approach adequately. The same thing was expressed by [Pala \(2011\)](#). Character education with a formal approach in the form of deliberate teaching about good character is very important. By combining character education with formal and informal approaches, character education is formed with a comprehensive approach that can form a positive moral culture that supports the expected values ([Pala, 2011](#)).

Implication, limitations and future research

This research has implications for universities, companies and academics. Higher education institutions need to strive to improve the application of USR through improving teaching and learning systems, curriculum, research and community service with students, as well as social and environmental activities to produce individual graduates who have more awareness (ethic and character) and knowledge in implementing CSR. Companies often make effort to recruit employees who have good ethic, work ethic, character and knowledge, so they can jointly build and develop the company. In this case, it will certainly make it easier for companies to choose graduates from the undergraduate programs that apply USR well. Although the results of the study state that there is no difference between the character of accounting students in the CSR field from universities with the high USR versus low USR category, by recruiting accounting graduates from the high USR category

universities, companies have a higher chance of obtaining professional accountants with higher knowledge of CSR and ethics. Thus, the accountant's self-consciousness will be easier to form.

Although there are significant implications from this research, there are still many shortcomings for further research. The limitation of this study is the cross-sectional research design, where like other studies with questionnaire surveys, we only tested data collected at a limited time. Therefore, we suggest further research can carry out a longitudinal research design. Another limitation of this study is that the assessment of SSC (ethic, character and knowledge) is carried out by the students themselves, whose results depend on how the students assess themselves. Future research is expected to be able to assess SSC (ethic, character and knowledge) of graduates of a university viewed from the users of the graduates (companies). Then, further limitation of this study is that this study ignores the possibility of developing student's awareness about CSR in various ways before studying in the accounting undergraduate program. Future research is expected to compare the level of CSR awareness of students before and during their study in the accounting undergraduate program.

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Appendix 1

Table A1 Instrument measurements

<i>Variable</i>	<i>Types of variable</i>	<i>Operational definitions</i>	<i>Indicators</i>
Ethic of accounting student	Endogenous variable (as dependent variable)	Ethic education can increase moral commitment in decision-making (McPhail and Gray, 1996; Alam, 1999; Caliyurt, 2007)	1. Being sensitive to the environment 2. Having empathy towards other people's conditions 3. Having voluntary drive to provide help Consisting of 14 questionnaire items
Character of accounting student	Endogenous variable (as dependent variable)	Formation of character through education and expertise makes students be more mature in their actions and responsible in every decision they make (O'Shea, 2018; Mergler, 2007)	1. Fixing wrong-doings 2. Straightening out things that are not according to the rules 3. Having a concern for the environment 4. Being responsible for yourself and others 5. Thinking carefully about the possible effects 6. Personal awareness 7. Social condition 8. Risk (attitude) 9. Enterprising 10. Communication Consisting of 45 questionnaire questions
CSR knowledge of accounting student	Endogenous variable (as dependent variable)	The need for additional knowledge for accounting students to adjust to the impetus of integrated reporting, in the form of: green accounting, sustainability reporting, environmental accounting and triple bottom line accounting (Owen, 2013)	Knowledge about the global reporting initiative: 1. Economic standards 2. Social standards 3. Environmental standards Consisting of ten multiple choice questions
USR implementation	Exogenous variable (as independent variable)	Learning design is related to the subject of social responsibility (Gulavani et al., 2016) CSR related to the environment (Gulavani et al., 2016) Waste paper recycling (Gulavani et al., 2016) CSR in the workplace (Gulavani et al., 2016) CSR in the communities (Gulavani et al., 2016)	Learning the subject of social responsibility that is open to students and staff to promote human rights and the values of social and ethical inclusion among them Consisting of five dimensions equipped with indicators derived from GreenMetric UI (Interval scale) Learning in the form of activities that reduce consumption and waste and to create further understanding of the importance of preserving and protecting the environment Consisting of three dimensions equipped with indicators derived from GreenMetric UI (Interval scale) Learning to train students to use wasted paper and prepare paper bags of different sizes that can be distributed to local health foundations for their own income Consisting of three dimensions equipped with indicators derived from GreenMetric UI (Interval scale) Learning to maintain high employee recruitment, development and retention standards through employee volunteerism, health, safety and welfare programs, sports and welfare programs, employee training and employee communication channels Consisting of ten dimensions equipped with indicators derived from GreenMetric UI (Interval scale) Learning where higher education institutions must contribute to social and educational activities for women, children and adolescents, who live under severe social discrimination and poverty in nearby locations Consisting of ten dimensions equipped with indicators derived from GreenMetric UI (Interval scale)

(continued)

Table A1

Variable	Types of variable	Operational definitions	Indicators
		CSR through research center (Gulavani <i>et al.</i> , 2016)	Learning where higher education institutions must carry out scientific research, training and vocational programs, publications and documentation of the social, economic and cultural development of civil society by establishing research centers Consisting of six dimensions equipped with indicators derived from GreenMetric UI (Interval scale)
		CSR to stakeholders (Gulavani <i>et al.</i> , 2016)	Learning where activities must include collaboration among stakeholders such as students, parents, alumni, organizations and government departments Consisting of three dimensions equipped with indicators derived from GreenMetric UI (Interval scale)

Appendix 2

Table A2 Reliability and validity of the measures

		Extraction value	Factor loading	Eigenvalue	Explanation variance (%)
1	I am often sensitive to the suffering of others	0.557	0.809	4.305	30.747
2	I often think about other people who are more unfortunate than I am	0.594	0.802	1.346	9.615
3	I feel touched when I see people who are fragile and have to depend their lives on others (for example: disabled people, elderly people, poor people, etc.)	0.49	0.866	1.188	8.484
4	The suffering of others does not bother me	0.334	0.906		
5	When I see someone being used, I will be protective of them	0.324	0.908		
6	I am an empathetic person	0.376	0.908		
7	I understand the feelings of someone who is not appreciated	0.494	0.877		
8	When I walked pass homeless people, I wondered why the government did not guarantee their livelihood	0.502	0.809		
9	I feel very angry watching the suffering of people who are in poverty	0.536	0.858		
10	When I see pregnant women or elderly in public places (e.g. Hospitals, Schools, Public Vehicles), I will immediately give my seat to them	0.432	0.852		
11	When I see someone having difficulty crossing the road, then I will immediately help the person	0.539	0.859		
12	I often help friends who are in trouble (e.g. learning problems, relationships, adaptations, etc.)	0.472	0.893		
13	I often make regular visits to those in need (e.g. orphanages, nursing homes, fostered schools that need teaching staff, etc.)	0.666	0.804		
14	I often work voluntarily for those who need it	0.524	0.808		
	<i>Character (Cronbach's $\alpha = 0.905$)</i>	Extraction value	Factor loading	Eigenvalue	Explanation variance (%)
1	When I realized that something was not right, I immediately found a way to straighten it (e.g. seeing a friend cheat, then I would report it)	0.4	0.946	9.594	21.32
2	I am responsible for my own future (e.g. I am disciplined in learning, have principles in relationships)	0.353	0.941	3.928	8.729

(continued)

Table A2

		Extraction value	Factor loading	Eigenvalue	Explanation variance (%)
<i>Ethic (Cronbach's $\alpha = 0.823$)</i>					
3	I always focus on achieving my goals, so I will not allow others to divert my attention from the original goal	0.474	0.92	2.311	5.136
4	Everyone looks at me to do the right thing every time (my environment believes that I will not be misguided)	0.566	0.915	1.839	4.086
5	I can choose freely what I will do (I tend to ignore the norm if I really want to achieve my personal goals)	0.392	0.898	1.413	3.139
6	I think that my behavior can help others (I am sure that my concern for the environment will be able to help others)	0.524	0.957	1.257	2.794
7	I hope to do my best in everything (I always think to contribute to protecting the environment)	0.447	0.945	1.249	2.775
8	I am a very organized person (well organized)	0.616	0.907	1.15	2.557
9	I can accomplish everything through my personal efforts	0.519	0.885	1.071	2.38
10	I always admit my mistakes	0.651	0.877	1.03	2.289
11	I really care about the impact of my behavior on others	0.581	0.889	0.996	
12	I have to make sure that my decision does not adversely affect others	0.502	0.901	0.934	
13	I always know the reason why I am angry or sad	0.437	0.883	0.906	
14	I have to make sure I have all the equipment I need before I go to class	0.575	0.913	0.872	
15	In making a decision, I always consider it carefully beforehand	0.482	0.945	0.855	
16	When I make mistakes, I am willing to be punished	0.583	0.881	0.821	
17	My decision will determine how I behave (e.g. if I want to have savings, then I must limit myself to do shopping)	0.491	0.931	0.817	
18	If someone is mean to me, then it is not my fault if I harm them	0.476	0.896	0.76	
19	Sometimes I go wild and out of control so that I can hurt others (physically or nonphysically)	0.633	0.889	0.739	
20	Sometimes I bother people I do not like	0.603	0.879	0.724	
21	I tend to give up when all my actions fail to fulfill my mission	0.564	0.922	0.699	
22	I cannot control my own behavior	0.565	0.913	0.685	
23	I believe that hiding my mistakes is the best way	0.579	0.901	0.664	
24	It is not my fault if you do not bring stationery for your class	0.455	0.876	0.637	
25	When angry, I curse at other people	0.414	0.921	0.62	
26	If I choose to do something risky, then this is my personal business and has nothing to do with other people	0.511	0.847	0.599	
27	I involve too much consideration of feelings that prevents me from taking action	0.531	0.861	0.589	
28	Sometimes someone makes me act out of control	0.678	0.85	0.564	
29	Sometimes I cannot control my emotions	0.626	0.837	0.546	
30	I am good at leading groups	0.537	0.93	0.525	
31	My friends will argue that I am among those who dare to take risks	0.539	0.9	0.504	
32	I am interested in new ideas	0.579	0.922	0.487	
33	I can do almost anything well	0.613	0.92	0.458	
34	I can see the best in a situation	0.579	0.912	0.432	
35	I always try to find excitement in a job	0.523	0.932	0.422	
36	I used to share information rather than to keep it to myself	0.367	0.932	0.414	
37	I collaborate with others in developing and implementing new ideas	0.568	0.92	0.398	
38	I provide and share resources to help implement new ideas	0.572	0.923	0.373	
39	I always keep in touch with classmates	0.702	0.904	0.361	
40	I often meet with classmates to have a formal and informal conversation	0.752	0.878	0.338	

(continued)

Table A2

		<i>Extraction</i>	<i>Factor</i>		<i>Explanation</i>
		<i>value</i>	<i>loading</i>	<i>Eigenvalue</i>	<i>variance (%)</i>
41	I often interact with classmates	0.751	0.902	0.32	
42	I am trusted as someone who is easy to get along with difficult people	0.71	0.872	0.312	
43	It is easy for me to speak to various types of people	0.712	0.866	0.294	
44	I have a unique ability to make my group function effectively	0.611	0.933	0.256	
45	If I want to, then I can be persuasive to encourage others to do what I tell them to	0.497	0.877	0.233	
<i>Knowledge (Cronbach's $\alpha = 0.585$)</i>		<i>Extraction</i>	<i>Factor</i>		<i>Explanation</i>
		<i>value</i>	<i>loading</i>	<i>Eigenvalue</i>	<i>variance (%)</i>
1	CSR definition	0.397	0.768	2.208	22.082
2	Guidelines for preparing CSR reports	0.611	0.691	1.172	11.723
3	GRI standard	0.617	0.696	1.052	10.516
4	The scope of CSR performance	0.316	0.727	0.999	
5	Stakeholders related to company performance and product quality	0.524	0.705	0.943	
6	CSR disclosure activities related to economic performance	0.668	0.671	0.884	
7	Corporate governance sections	0.69	0.635	0.788	
8	CSR disclosure activities related to environmental performance	0.583	0.715	0.680	
9	Assessment of company performance in environmental management by the Ministry of Environment of the Republic of Indonesia	0.47	0.751	0.672	
10	CSR disclosure activities related to social performance	0.556	0.669	0.600	

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