

TESTING A MODEL OF GLOBAL CITIZENSHIP IN HIGHER EDUCATION INSTITUTIONS IN THE SADC REGION

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ABSTRACT

Higher Education Institutions (HEIs) equip the labour force with the necessary skills and knowledge to engage effectively as global citizens. The aim of this study was to test the Reysen and Katzarska-Miller (2013) model of global citizenship identity in the context of HEIs in the SADC region. This study approaches global citizenship from a social identity perspective in which identification as a global citizen is at the center. Identification as a global citizen is theorised to follow a Normative Environment and Global Awareness as antecedents. In turn global citizen identification (GCI) produces six prosocial outcomes. This model proposes nine domains of Global Citizenship including two antecedents, an identification as a global citizen and six prosocial outcomes. Participants included 242 students and staff from universities across seven countries participating in the UNESCO *#OpenUpYourThinking* Researchers Challenge. Participants completed an online version of the Global Citizenship Scale. In this study, the antecedents and outcomes of GC were all positively and significantly correlated demonstrating a linear relationship between all domains. The results provided empirical support for this model in the context of HEIs in the SADC region. GCI was significantly predicted by normative environment and global awareness. In turn, GCI significantly predicted the six prosocial outcomes. Indirect prediction effects between normative environment, global awareness and GCI significantly predicted the six prosocial outcomes.

Keywords: survey research, Africa, global citizenship, higher education, global citizenship education, structural equation modelling, model testing

INTRODUCTION

Global citizenship (GC) is an attribute that the ideal university graduate should possess. GC entails psychological connection to a global collective that is not bound by geographical limits such as borders (Cantón and Garcia 2018). Global citizens are empathic as evidenced by their understanding of people across defining boundaries of diversity such as countries, cultures, ethnicities, and religions. Such individuals also care for people groups and the shared environment. Katzarska-miller and Reysen (2019) underscored the sense of connectedness to global communities as a key principle that culminates in shared feelings of empathy and personal responsibility.

The notion of global citizenship is strongly associated with education as it enables the integration of knowledge and skills into global competencies (Smith et al. 2017). Higher Education Institutions (HEIs) imparts skills and knowledge that positions the workforce for participation and engagement in global economies as global citizens (Torres 2015). Smith et al. (2017) reported that in general, a higher level of educational attainment results in reduced tendencies to show favouritism towards one own group over another. Thus, HEIs have a central role to play in nurturing global citizenship attributes. Some institutions employ an intentional pedagogy to nurture global citizenship and may also formalise it into the curriculum. This strategy is referred to as Global citizenship education (GCED) (Horey et al. 2018). GCED incorporates a wide range of learning outcomes including a world-minded identity and membership, critical civic literacy capacities, managing and understanding conflict, social action, and considerations of privilege, power, equity, and social justice (Toukan 2018).

The importance of fostering global citizenship is understood, but implementation is hamstrung by the multiple and varied definitions and subsidiary concepts included in the theoretical and operational definitions of the construct, global citizenship. Consequently, within the HE context there are various approaches to GC. Horey et al. (2018) identified that among 29 studies on GCED, four main categories of purposes for researching CG were reported: to describe practice, to examine perceptions, to develop theory, or to assess impact. There is relative heterogeneity within the frameworks of GC with each theory or model subscribing to a slightly different orientation. However, there is also commonality among these approaches (Pashby et al. 2020). Horey et al. (2018) identified a commonality in terms of attributes and outcomes of GC, such as understanding, values, actions, skills, and perceptions. Previous notions of intercultural and global competence in theoretical models of CG were recently replaced by the concept of intercultural citizenship and global citizenship (O'Dowd 2019). This shift in approach emphasizes active positive engagement in a globalised society. There is no universal consensus resulting in researchers and practitioners selecting theories that are aligned

with their understanding of the concept. A significant amount of work was conducted on theories of CG, allowing for researchers to implement quantitative methods for measurement and test theoretical models accordingly (e.g., Morais and Ogden 2011; Reysen and Katzarska-Miller 2013; Toukan 2018).

Theoretical or conceptual models of global citizenship

As mentioned before, GC as a construct was described and studied in various ways. Trede, Bowles, and Bridges (2013) state that global citizenship is characterized by a set of values centered around social responsibility, global equality, and human rights. Other authors define global citizenship in terms of sustainability and environmentalism, national equality, responsibility to take action, civic engagement, social justice orientation, and valuing other cultures (Horey et al. 2018; Katzarska-Miller et al. 2012). Shultz (2007) identified three broad approaches to framing GC conceptually namely, a neoliberal approach, a radical approach, and a critical/transformational approach. The *neoliberal approach* emphasises the global citizen as being able to participate in the global economy (Rizvi 2015). The role of education in line with a neoliberal approach is to facilitate international participation through cultural competencies and language proficiency (Shultz 2007). The *radical approach* to GCED is rooted in a conflict perspective, in which global structures that perpetuate and deepen the North-South divide are analysed and challenged (Shultz 2007). The *transformational approach* recognises the need to negotiate local and global agendas, resolve conflict, and to act in solidarity. This approach views the global citizen as one who can link action at both the local and international level, in ways that challenge oppression, marginalisation, and poverty (Shultz 2007).

Morais and Ogden (2011) developed a model of CG through a thorough literature search. These authors identify three interconnected domains of GC: global competence (e.g., understanding and cultural knowledge), social responsibility (e.g., interdependence with and concern for others), and global civic engagement (i.e., action). The broad interconnected domains were useful, but challenges in operationalisation remained. The overwhelming conclusion is that several conceptual or theoretical models emerged and inspired the development of quantitative measurements of CG to complement the theoretical position of the researcher. A criticism lodged against this broad conceptualisation was the lack of attention given to the role of the development of social identities including the identity as a global citizen. In response to this criticism, Reysen et al. (2012) developed a structured working model of GC from a social identity perspective.

A Model of Global Citizenship: Antecedents and outcomes

At the core of the model of CG proposed by Reysen et al. (2012) is global citizenship identification. Previous research has identified that awareness of being connected to others in the world, and exposure to environments and settings that place importance on the values of global citizenship, are factors important in the development of greater identification as a global citizen (Reysen and Katzarska-Miller 2013). These two precursors of GC identification are referred to respectively as global awareness and normative environment.

GC identification relates to the experience of having a psychological connection to a group, which results in identifying as belonging to that group (Reysen et al. 2012; Reysen and Katzarska-Miller 2013) Reysen et al. (2012) suggests that normative environment and global awareness predict global citizenship identification. The model thus identifies two antecedents of GC identification.

GC identification in turn is hypothesised to predict six prosocial outcomes; intergroup empathy, valuing diversity, social justice, environmental sustainability, intergroup helping, and felt responsibility to act. *Intergroup empathy* refers to a felt connection and concern for others outside one's in-group. *Valuing diversity* refers to an interest and appreciation for diverse cultures. *Social justice* relates to supportive attitudes towards human rights, and the equal treatment of people. *Environmental sustainability* is defined as the understanding that humans and nature are connected, and a concern for the natural environment. *Intergroup helping* refers to the desire to help others outside one's in-group, and may involve volunteering, donating, and working with charitable organisations. *Felt responsibility to act* refers to feeling obligated to take actions that improve the world (Reysen et al. 2012). Within this model, it is postulated that there is an indirect relationship between identification, the antecedents and outcomes.

The model articulated into a Global Citizen Scale (GCS) developed by Reysen et al. (2012). The *Global Citizen Scale* thus incorporated nine domains. Each domain was developed specifically to measure the domains of global citizenship in the model. The scale thus measures the two antecedents and six prosocial outcomes of GC in addition to global citizenship identification.

Reysen et al. (2012) evaluated their model of GC in a Texas university through evaluating the impact of a college course curriculum infused with GC related concepts in relation to global citizenship identification. This research found that participation in the programme predicted improved global awareness (an antecedent), which in turn predicted greater identification as a global citizen and associated prosocial outcomes in the six domains.

The majority of research testing this model was conducted among Texas university students. For example, using this model, Assis et al. (2018) investigated how university students

view their institutions in terms of taking responsibility or being concerned with environmental and social outcomes. These factors are understood as being closely related to the antecedent, normative environment. These authors reported a significant relationship between students' perceptions of the university and the degree of GCI and subsequently their support of the six prosocial outcomes. Similarly, Blake et al. (2015) identified that university environment, as well as specific course content, predicted the antecedents, identification, and outcomes of GC. Taken together, these results provide empirical support for the model of global citizenship in the context of HE. It underscores the importance of the university setting in promoting an identity as a global citizen. The HE context through GCED can cultivate global awareness and act as a normative environment that acts as antecedent for GC identification. The socio-cultural environment of HEIs has been theorised and proven to play an important influential role in students' identification as global citizens (Assis et al. 2018; Blake et al. 2015; Pike 2008; Reysen et al. 2012). However, this model was primarily tested in a limited geographical area, which highlights the need for further investigation in different socio-cultural contexts.

Katzarska-Miller et al. (2012) evaluated the Reysen et al. (2012) model across three different countries, namely the USA, India, and Bulgaria. These authors found that the definitions of GC differed between countries. However, the relationship between the identification as a global citizen and prosocial outcomes were similar. These results highlight that regardless of how different countries and cultures define GC, the endorsement of GC core values and in-group identification with GC results in better pro-social outcomes.

The research conducted using this model was done primarily in developed countries such as the USA. Reysen et al. (2012) highlighted the need for the model of antecedents and outcomes to be examined in other cultures and higher education sectors. Developing countries or emerging democracies used as research settings for the empirical model testing excluded continental Africa as a geographical region. Continental Africa is fairly varied in the size and quality of the higher education sector, and studies are recommended at smaller units of analysis or regional foci within continental Africa. This manuscript reports on an attempt to test this model of GC in the context of the HE sector in the SADC region. For the purposes of this article, the model of GC formulated by Reysen et al. (2012) will be the focus of attention, because the institution is conceptualised as a living and learning environment in which students and staff could develop GC values.

Research aim

The purpose of this study was to test the model of global citizenship developed by Reysen and Katzarska-Miller (2013) within the context of HEIs in the Southern African Development

Community (SADC) region.

METHODS

Design

This study adopted an online, cross-sectional survey design. Surveys were appropriate given the geographical space that was covered, and the flexibility afforded in terms of completion. The study used attitudinal measures to test the identified model of global citizenship.

The model proposed that the antecedents of normative environment and global awareness predict global citizenship identification. In turn, global citizenship identification predicts the six prosocial values and beliefs. The use of cross-sectional data derived from attitudinal measures require an engagement with the assumptions of predictive relationships and model testing. Temporal precedence was inferred from the theoretical model. For example, normative environment and global awareness are theoretically shown to exist prior to global citizenship identification. The empirical support provided by Reysen et al. (2012) formed the basis for this inference. Similarly, there must be a linear relationship between the identified variables. Again, the association is inferred from the theoretical model proposed by Reysen and Katzarska-Miller (2013) and supported with the empirical findings from earlier modelling and testing of the scales of the instrument. Thus, the use of survey research was appropriate and a conservative approach was adopted to the data analysis to demonstrate that the data generated by the sample in this survey supported the proposed analysis.

Participants

The population for this study were students and staff from HEIs drawn from seven SADC countries, Participating countries were invited based on their participation in a UNESCO project called, #OpenUpYourThinking Researchers Challenge. This project was hosted during the pandemic. Current staff and registered students from identified universities were invited to participate.

Simple random sampling was used. All staff and students at the identified institutions formed the sampling frame and were invited to participate. Eligible participants received the initial invite and two reminders from designated persons in their respective institutions. The sample included 242 participants who completed the online survey. A limitation to note was that a description of the participants from each university constituting the overall sampling frame was not made available to the research team. Thus, the completeness of the frame could not be established. Similarly, response rates could not be established. The sample was treated

as a coherent group of students enrolled and staff employed at the HEIs identified from the participating countries.

Instruments

Demographic questionnaire: A self-constructed demographic questionnaire was used to elicit basic information from participants.

The *Global Citizen Scale* (Reysen et al. 2012) was used for data collection. This scale was developed specifically to measure domains of global citizenship included in the model. The scale provided two subscales (or domains) for Normative Environment and Global Awareness as the two antecedents in the model. The scale also provided a subscale or domain score for global citizenship identification as the first outcome variable in the model. The scale then provides six subscale or domain scores for the identified outcomes of global citizenship identification. These outcomes were named *Intergroup Empathy*, *Valuing Diversity*, *Social Justice*, *Environmental Sustainability*, *Intergroup Helping* and *Responsibility to Act*. Thus, the scale has nine domains or subscales that correspond to the antecedents, identification and outcomes proposed in the model.

The scale has 22 items and uses a 7-point Likert scale that ranging from 1 (strongly disagree) to 7 (strongly agree). The items were phrased and scored positively to improve the ease of use in analysis and subsequent interpretation. Similarly, the internal consistency on subscales were reportedly good with Cronbach's ranging from .86 to .94 (Reysen et al. 2012).

In the present study, the overall scale achieved a high level of reliability as evidenced by the Cronbach's alpha of $\alpha = .92$. The subscales achieved alphas greater than .70 with the exception of Social Justice ($\alpha = .56$) and responsibility to act ($\alpha = .67$). It is generally accepted that scales with a smaller number of items tend to have lower alpha's (Vaske, Beaman, Sponarski 2017). Agbo (2010) suggests that the evaluation the 95 per cent confidence interval (CI) of Cronbach's alpha may provide a better estimation. In this study, Social Justice has an $\alpha = .56$, CI (.44 – .66). Responsibility to Act had an $\alpha = .67$, CI (.57 – .74). Both of the upper CI's in this case fall within the accepted range of above .65 in social research (Vaske et al. 2017). It was thus decided to proceed with the analysis.

Data analyses

Descriptive statistics were used to summarise sample characteristics.

A correlation matrix was computed between all sub-domains of the GSC. The scores were all continuous scores which supported the use of the Pearson product-moment correlation to test for the associations between the variables. This step also contributed to testing the

assumption that there was a linear relationship between the variables.

In order to test the model proposed by Reysen and Katzarska-Miller (2013) and replicate it in this sample, structural equation modelling (SEM) was used. The sample size in this study ($N=242$) exceeded the threshold sample size of 200 recommended by Kyriazos (2018) for SEM. Thus, the sample was considered adequate for SEM. Tests of normality indicated that all subscales were negatively skewed, indicating responses clustering on the higher end of the scales. Normality was thus not seen in the subscales (Kolmogorov-Smirnov = $p > 0.5$ for all domains). This is expected, given the characteristics of the sample. No transformations were conducted for the scores, as regression analysis and SEM procedures are robust against normality violations and skewness (Garson 2012; Zygmunt and Smith 2014).

The Maximum likelihood estimation (MLE) technique was used, with 5000 iterations to determine the model fit. Various indices were used to establish the model fit. The Chi-square statistic was used to establish goodness of fit for the overall model. The Chi-square statistic should not test significant at the 0.05 alpha level (Hooper et al. 2008). Model fit was evaluated using the comparative fit index (CFI), for which values greater than .90 are acceptable (Cangur and Ercan 2015). The root mean square error of approximation (RMSEA) was set at a value of .08 as an indication of best fit, with values between 0.08 to 0.10 providing a mediocre fit (Hooper et al. 2008). The RMSEA value indicates how far the predictive model is from a perfect fit. The standardised root mean square residual (SRMR) was used as an absolute measure of fit, with values ranging between 0 and 1.0 (Hooper et al. 2018). The SRMR value set as indicating a well-fitting model in this study had a threshold of .05 or less.

It is assumed by the model that identification as a global citizen “mediates” the relationship between the antecedents and the outcomes (Reysen and Katzarska-Miller 2013). Indirect prediction effects were analysed in order to establish the hypothesized third-party relationship (mediation) between antecedents onto prosocial outcomes by global citizenship identification. All analysis was carried out in STATA (v15.1).

Ethics

Ethics clearance for the study was given by the Human and Social Science Research Ethics Committee of the University of the Western Cape (HS20/5/2). Permission to conduct the study at the campuses of participating HEIs was given by the respective Registrars. In compliance with the Protection of Personal Information Act (POPIA) No. 4 of 2013, (Condition 8, sections 23–25) (South Africa 2013) relating to data subject participation, no contact details were provided to the research team. Universities designated a staff member to distribute the surveys via the communication platform at the respective universities. Participants could withdraw

without fear of negative consequences. The invitation included an information sheet detailing what participation entailed, avenues for recourse and the rights and responsibilities of researchers and participants in this study. Surveys were completed anonymously. The de-identified data was stored responsibly with access codes that were only known to the team working with data analysis. Consent was given by participants selecting the option to commence the survey after reading the information summary.

RESULTS

The sample consisted of 242 participants from 7 countries who took part in this survey. Just over two-thirds of participants were from South Africa (68.2%). The remaining participants were from Botswana (17.8%), Namibia (3.7%), Zambia (3.7%), Malawi (2.5%), Eswatini (2.5%), and Zimbabwe (1.7%). Participants consisted of undergraduate students (30.2%), postgraduate students (36.4%), academics and researchers (22.3%) and management or professional staff (8.7%). Almost two-thirds of the participants were women (60.3%), and 39.3 per cent were male. One (1) participant preferred not to specify gender.

Correlation matrix

The results of the correlation matrix are shown in Table 1.

Table 1: Correlation matrix

	1	2	3	4	5	6	7	8
1. Normative environment	-							
2. Global awareness	.51**	-						
3. Global citizenship identification	.63**	.68**	-					
4. Intergroup empathy	.32**	.45**	.45**	-				
5. Valuing diversity	.35**	.48**	.48**	.62**	-			
6. Social justice	.33**	.27**	.45**	.39**	.47**	-		
7. Environmental sustainability	.23**	.35**	.30**	.42**	.40**	.47**	-	
8. Intergroup helping	.29**	.35**	.45**	.45**	.54**	.60**	.43**	-
9. Responsibility to act	.35**	.51**	.54**	.55**	.62**	.49**	.47**	.70**

Note: ** = $p < .01$

All the domains of the GSC were positively correlated with one another. The correlation coefficients ranged between .23 and .70 suggesting varying strengths of the associations from modest to strong. All coefficients tested significant at a 0.01 alpha level. Thus, we can confirm that there are linear relationships between the variables that are significantly different from 0 or chance.

Structural equation modelling

The antecedents (normative environment and global awareness) as well as the outcome variables of global citizenship were covaried due to relatedness of the constructs of prosocial behaviours and values as expected. The model of global citizenship tested in this study produced the following results on the fit indices: $\chi^2 = 38.18$, $p < .01$; RMSEA = .095, CI; CFI = .97; and SRMR = .46. The thresholds and cut-off values for all fit indices were met, with the exception of the Chi-square

Chi-Square tested significant a 0.01 alpha level. Chi Square is particularly sensitive to violations of normal distribution and to sample size (Zygmunt & Smith, 2014). McNeish and Wolf (2021) concluded that Chi Square should not be used as a sufficient requirement when evaluating model fit, but it must be used in combination with other indices. Taken together, these results indicate that the model tested in this sample supports the underlying theoretical model proposed by Reysen and Katzarska-Miller (2013).

The model combining Normative Environment and Global Awareness as antecedents predicted 57 per cent of the variance on GCI ($R^2 = .57$). Normative Environment ($\beta = .38$, $p < .01$), and Global Awareness ($\beta = .48$, $p < .01$) respectively emerged as significant predictors of GCI at a 0.01 alpha level whilst controlling for the other variable in the model. For every one-unit change in the values of Normative environment there was a corresponding increase of .38 on GCI controlling for Global Awareness. Similarly, for every one-unit change in Global Awareness, there was a corresponding change of .48 in GCI controlling for Normative

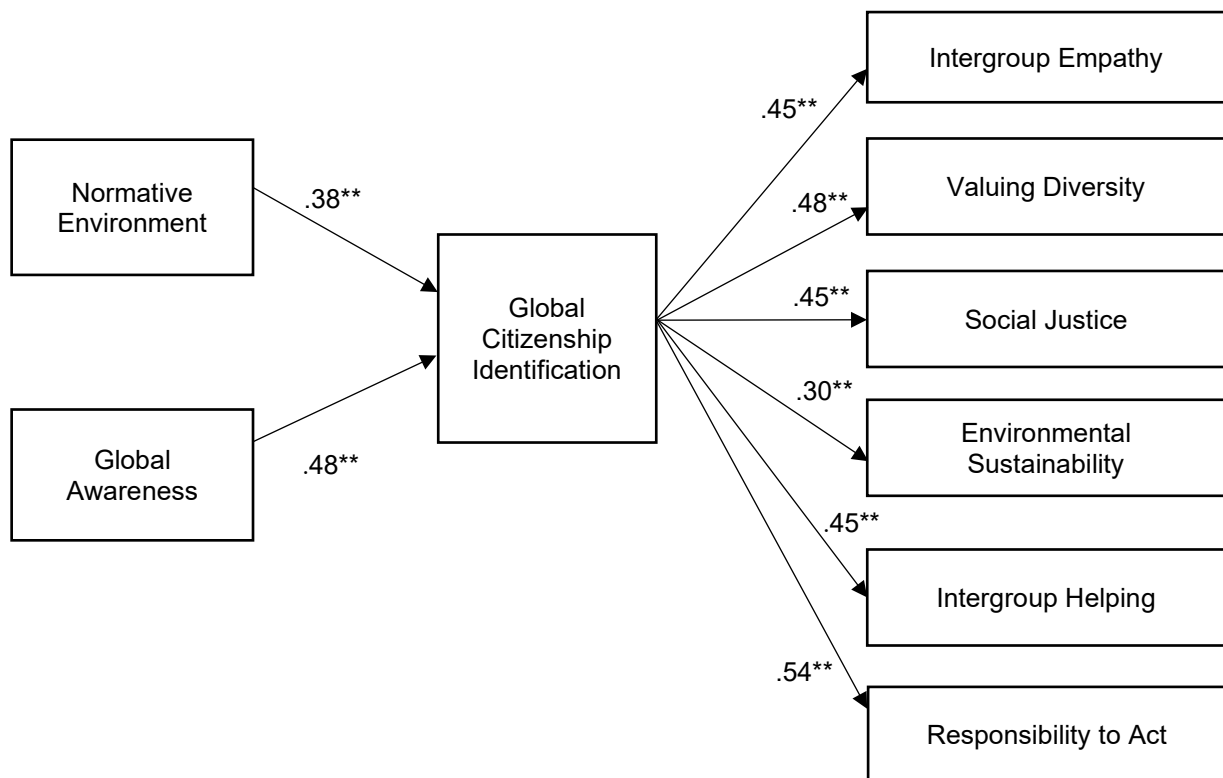


Figure 1: Model of global citizenship; standardized Betas shown

Environment.

GCI significantly predicted the six outcome domains: Intergroup Empathy ($\beta = .45, p < .01$); Valuing Diversity ($\beta = .48, p < .01$); Social Justice ($\beta = .45, p < .01$); Environmental Sustainability ($\beta = .30, p < .01$); Intergroup Helping ($\beta = .45, p < .01$); and Responsibility to Act ($\beta = .54, p < .01$). The model is presented in Figure 1, with standardised Beta values shown.

Indirect effects of global citizenship identification

The results of this study included indirect effects of the preconditions of global citizenship identification on the six prosocial outcomes. Table 2 summarises the indirect effects identified through SEM. Significant indirect effects were found. The global citizenship preconditions significantly predicted GCI that in turn significantly predicted the six prosocial outcomes.

Table 2: Indirect effects of global citizenship outcomes via global citizenship identification

Variable	Normative Environment	Global Awareness
Intergroup Empathy	.17**	.22**
Valuing Diversity	.20**	.22**
Social Justice	.17**	.22**
Environmental Sustainability	.11**	.14**
Intergroup Helping	.17**	.22**
Responsibility to Act	.21**	.26**

Note: ** = $p < .01$, *standardized Betas shown*

DISCUSSION

The aim of this study was to test the model of GCI formulated by Reysen and Katzarska-Miller (2013) in the context of higher education institutions (HEIs) in the SADC region. Assumption testing confirmed that the data produced in this study supported the analysis conducted. Significant, positive correlations were found among the nine domains of global citizenship as measured by the Global Citizenship Scale (normative environment, global awareness, global citizenship identification, intergroup empathy, valuing diversity, social justice, environmental sustainability, intergroup helping, and responsibility to act). The significant, positive correlations demonstrated a linear relationship between the domains, which satisfied the prerequisite for the subsequent SEM.

The results of this study supported the model of GC proposed by Reysen and Katzarska-Miller (2013). Normative Environment and Global Awareness significantly predicted identification as a global citizen. In turn, GCI significantly predicted the six prosocial outcomes.

Examination of indirect prediction effects supported and replicated a third-party

relationship between the antecedents, identification (GCI) and outcomes of global citizenship. The indirect effects highlight that GCI acts as a mechanism through which normative environment and global awareness contribute to prosocial values and behaviours. The findings confirm that a third-party relationship exists in the predictive relationship between antecedents, the six prosocial outcomes and GIC. Reysen et al. (2012) reported this third-party relationship as mediation. This analysis did not set out to identify the nature of the indirect relationship. However, given the significant correlations reported in the correlation matrix between all nine domains suggests that the indirect relationship is unlikely to be mediation.

The indirect effects found in this study for normative environment on the identified outcome variables were lower than estimates previously reported in literature on this model. On the other hand, the indirect effects found in this study for global awareness were higher than reported in previous studies. For example, Reysen et al. (2012) and Reysen and Katzarska-Miller (2013) reported indirect effects for normative environment as having larger predictive effects than global awareness. In contrast, this study revealed that global awareness consistently showed larger indirect prediction effects than normative environment.

These results emphasise the importance of the HEI environment and its contribution to the development of productive and active global citizens with prosocial beliefs and values. Global studies reported that students' perception of their university as a socially responsible organisation has been found to predict global citizenship identification through the antecedents (Assis et al. 2018; Blake et al. 2015). In this study, normative environment showed a smaller contribution to the six prosocial outcomes than global awareness did. This may be for several reasons. Within the context of HEIs in the SADC region, global awareness, cultural diversity, and understanding is generally integrated into the curriculum as part of the historical and political history of countries in the SADC region.

An important implication of the findings is that the higher education sector constitutes an environment that promotes identity formation including the identity of a global citizen. The university environment is conceptualised as a space within which knowledge and values can be cultivated under the right conditions. Thus, HEIs in the SADC can promote GCI. This is particularly powerful given that there is differential access to mobility opportunities that traditionally is considered as the avenue for developing GC.

CONCLUSION

This study empirically supports the model of GC proposed by Reysen and Katzarska-Miller (2013) among HEIs in the SADC region. In this study, GCI was a function of student and staff perceptions of their environment as being prescriptive of GC values and global awareness.

Identification as a global citizen was a significant predictor of the six prosocial outcomes as measured by the Global Citizenship Scale (Reysen and Katzarska-Miller 2013) namely, intergroup empathy, valuing diversity, social justice, environmental sustainability, intergroup helping, and felt responsibility to act. The antecedents and outcomes of GC were all positively and significantly correlated in this study, demonstrating a direct, linear relationship between all domains. This study further identified an indirect prediction effect in which identification as a global citizen contributed to the prediction of prosocial outcomes as a function of normative environment and global awareness.

These results underscore the importance of HEIs being more intentional in the development and implementation of GCED programmes. This is particularly important given that the HE environment is able to promote the development of global awareness through the curriculum or co-curriculum, and provide a setting in which identification as a global citizen is supported and encouraged.

LIMITATIONS

Challenges were faced in the survey going live at participating HEIs outside of South Africa. Due to the time constraints of this project, and the challenges of the COVID-19 pandemic within the HEI climate, there were delays in securing the survey responses. These delays negatively impacted the representation of countries outside of South Africa in the sample. As a result, comparisons within and between countries could not be made, as South African participants accounted for the majority of the sample.

This study used indirect prediction effects to establish a third-party relationship whereby global citizenship identification acts as a mechanism through which normative environment and global awareness predict prosocial values. It should be noted that this analysis does not establish the nature of the third-party relationship, but rather the support of an indirect relationship.

RECOMMENDATIONS

The present study should be replicated with a more representative sample across strata within the SADC region. This study could be replicated with more detailed demographic information in order to make meaningful comparisons between groups. Comparisons across universities and countries would provide useful insight for further research.

Future studies can explore positional views on GCED which may impact the facilitation of GC within HEIs. Given that there are no structured university programmes for GCED within the SADC region, it becomes imperative to explore institutional awareness and promotion of

GC in the HE sector.

The analysis of this study did not explicitly examine the nature of the third party relationship between the identified variables. Future studies need to establish empirical evidence for the mediation claims through more sophisticated methods. Such studies must clearly establish that the following three conditions, postulated by Baron and Kenny (1986), are met: (1) Variations in the independent variable significantly account for variations in the proposed mediator; (2) Variations in the proposed mediator account for variations in the dependent or outcome variable and; (3) When the first two relationships listed here are controlled, a previously significant relationship between the independent and dependent variable is no longer significant, or at the very least reduced.

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