Water Conservation and Culture of Indifference among College Students: The Nexus of Descriptive Norms

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ABSTRACT South Africa is engaged in a vigorous campaign to rein in commercial and domestic water users to embrace water conservation practices. While the water conservation drive appears to have gained traction among commercial and urban water users, experts insist that a 'culture of indifference' toward water conservation still persists. The main objective of this paper was to determine the attitude and behavior of South African college students towards water conservation, and establish the linkages between college students' water conservation behavior and descriptive norm. The questionnaire survey was used to explore college students' water conservation attitudes and behaviors. Data analysis reveals a significant attitude of indifference, as college students do not appear to consider water conservation an overarching social issue. The results also show a positive relationship between social pressures, descriptive norm particularly and college students' water behavior and intentions. The paper concludes that college students are generally indifferent to water conservation.

INTRODUCTION

Water conservation efforts are becoming increasingly important as spiraling population and snowballing economic development continue to pile pressure on freshwater supplies across the world. The 2015 Global Risk Report conducted by the World Economic Forum ranks "water crisis as the number one global risk" that is likely to devastate many societies in the next 10 years. This is consistent with UNESCO's World Water Development Report (WWDR 2014), which predicts an exponential increase in freshwater demand in the coming years. For instance, domestic demand alone is projected to rise by one hundred and thirty percent by 2050. According to the WWDR report, water challenges will be intense in countries experiencing accelerated economic growth, or those where a majority of the populace does not have access to modern services. Experts posit that the climate change conundrum, which has affected weather and seasonal flows of freshwater is expected to aggravate not only future water supplies but also, impacts seriously on social and economic wellbeing of many countries (Bates et al. 2008; Palaniappan et al. 2010).

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Expectedly, across the globe, how to ensure optimal use and management of the dwindling water resources has become an overarching concern. An increasingly popular strategy to tackling the water situation is Water Demand Management (White et al. 2007). Water Demand Management (WDM) is "the adaptation and implementation of a strategy by a water institution or consumer to influence the water demand and the usage of water to meet any of the following objectives: economic efficiency, social development, social equity, environmental protection, sustainability of water supply and services, and political acceptability" (Tsatsi et al. 2010:24). An integral part of WDM is water conservation, which encompasses "the minimization of loss or waste of water, the care and protection of water resources and the effective and efficient use of water" (Tsatsi et al. 2010: 24). Efficiency here refers to the ability to perform a task or procedure, with a less amount of water (Griffin 2007). The ultimate aim of WDM and water conservation is to persuade consumers to embrace sustainable water consumption behaviors (Willis et al. 2011).

The South African Context

South Africa is listed among the countries that will experience water scarcity by 2050 (Black and King 2009). This is due partly to its peculiar

hydrologic condition. While rainfall is low, irregular and varied across the nation, groundwater supply is limited. According to Riemann et al. (2012), groundwater contributes only about thirteen percent of South Africa's total water supply. A United Nations Environment Program (UNEP) report in 2010 estimated the total actual renewable water resources (TARWR) in South Africa at 1007 m³ per person per year. The UNEP report according to experts indicates a palpable sign of water stress. According to the thresholds suggested by Falkenmark et al. (1989), and updated in Falkenmark (2013), a country falls into the water stress category if the average water resources per person is below 1700 m³/capita per year. The Department of Water Affairs' National Water Resources Strategy Report (NWRSR 2012), shows that South Africa is already using ninetyeight percent of its available water supplies albeit inefficiently while demand for water had overtaken supply in sixty percent of the country's water management systems. The report also suggests that fresh and groundwater supplies are almost fully exploited in some sections of the country, while the remaining surface water even if fully developed, may be insufficient to sustain the rapid economic growth (DWA 2010; NWRSR 2012).

Consequently, South Africa has been engaged in a spirited race to galvanize commercial and urban domestic water users to embrace water conservation practices. However, while the water conservation campaign appears to have gained traction among commercial and urban water users, the crusade does not appear to resonate with a greater percentage of the population. The Department of Water Sanitation (DWS 2015) asserts that the issue of negative attitude towards water resources is still a major problem, as a lot of the people are not playing their part in conserving the scare water resources. Clearly, water scarcity issues, especially, efficient and effective use of water is not after all, an urban or commercial affair. It is a campaign that requires the commitment and understanding of all South Africans who must develop "a social ethic of water conservation and ultimately a culture of sustainability of resource use" (DWA 2010).

Objectives

South Africa is populated predominantly by young people with those less than 35 years of

age accounting for about sixty-six percent of the total population (StatsSa 2011). College students fall within this influential population. Therefore, the main objective of this article is to determine the attitude and behavior of South African college students towards water conservation, and establish the linkages and relationships between college students' water conservation behaviors and descriptive norm (that is, the way people perceive what is generally done in particular situations or what is presently happening in that environment). Thus, providing baseline data about college students' attitudes to and water conservation behavior and intentions as well as the role social dynamics play in water conservation behavior in a group setting such as on a university campus.

Literature Review

According to psychologists, the decision by an individual to act one way or the other towards an object is predicted on that the individual's attitude or evaluation of the object (Ajzen and Fishbein 2005). Attitude has been defined as a summary evaluation of an object of thought (Vogel et al. 2014). In their seminal study, Eagly and Chaiken (2007:598) described attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor". In other words, attitude is a reflection of what people feel and think about how they would like to behave towards an object. However, scholars contend that the fact that an individual has an attitude does not necessarily suggest that the individual will eventually perform the behavior. An individual for instance, may be favorably predisposed to water conservation, yet his actions may not reflect or equate this favorable disposition. Clayton and Myers (2009) posit that attitude is more likely to influence behavior if it is strong, grounded on firsthand knowledge and the attitude object is perceived as important. Crano and Prislin (2006) posit that an individual's knowledge of an entity or attitude object increases the prominence and subsequently the strength of that attitude, and the probability of that attitude ultimately influencing behavior.

A number of studies have listed attitude among a range of underlying factors that determine water conservation behaviors especially water conservation curtailment and efficiency behaviors (Coral-Verdugo et al. 2008; Clark and Finley 2007; Lam 2006). However, the chunk of research on water conservation has generally focused on individual household consumption attitudes and water conservation practices (Fielding et al. 2012; Ritcher and Stamminger 2012; Makki et al. 2012; Beal et al. 2011; Corral Verdugo et al. 2008; Hassell and Cary 2007; Gilg and Bar, 2006). There is also a body of studies that have investigated residential water conservation intentions and behaviors (Willis et al. 2011; Nancarrow et al. 2008; Clark and Finley 2007; Lam 2006). In all, the studies show that attitude, when accurately measured, is a central factor in individuals' water conservation behavior and intentions (Russell and Fielding 2010). These studies, however, do not appear to have taken into cognizance the dynamics of group settings in water conservation behavior. As observed by Fielding et al. (2011), water use especially in households encompasses the actions of several other household members and for meaningful water conservation to occur in any household requires a collective behavior. For instance, if one member of a household is predisposed to conserving water and others are not similarly persuaded, that person's attitude alone is not likely to produce any significant reduction in water use in that household.

Literature suggests that aside from attitudes, social norms also act as intervening variables that mediate behavioral intentions. Clark and Finley (2007) have established that subjective norms (that is, how people perceive approval of people important to them for their actions) influence the individuals' water conservation behavior and intentions. This article will attempt to establish the role social dynamics play in water conservation behavior in a group setting that is whether normative pressure encourages or discourages college students' water conservation behavior and intentions.

Theoretical Foundation

The Theory of Planned Behavior (TPB) (Ajzen 1991) was adopted as a point of departure in understanding the essence of the students' attitudes and behavior, and their relationship with water conservation. The theory conceptualizes an attitude "as the overall evaluation of performing the behavior as positive or negative" (Russell and Fielding 2010). According to the TPB, the most direct determinant of behavior is intention, that is, the plan or motivation to act or "engage in the behavior". Intentions are mediated by three key factors: attitudes, subjective norms and perceived behavioral control (Fielding et al. 2012). Several studies using the TPB model demonstrate that attitudes have positive impact on behavior especially "water conservation curtailment and efficiency behaviors" (Clark and Finley 2007; Lam 2006). In summary, TPB posits that if individuals have a favorable attitude to water conservation, if they see approval from those they consider important to them like family and friends, and if they feel water conservation is something within their control, then they will likely embrace water conservation and move from just having intentions to engaging in actual water conservation actions (Russell and Fielding 2010).

Indifference to Water Conservation and Nexus of Descriptive Norm

Indifference is an attitude. The term 'indifference' can be understood in several ways. However, this paper is not a treatise on its manifold semantics or ethics. By the 'attitude of indifference towards water conservation', the researchers mean the preferences of people when asked to endorse positively or negatively evaluative statements regarding water conservation or when they are requested to evaluate (selfreport) their own action towards water conservation (Randolph and Troy 2009). For example, viewing water conservation as an unfavorable action reflects a negative attitude or lack of concern toward water conservation. Social scientists argue that the attitude of an individual to an entity is derived from a myriad of influences. According to Stern et al. (1995), as cited in Eagly and Chaiken (1998: 284), "people derive their attitudes on specific environmental issues from their general values and internalized norms". A norm is the grand rule that defines how members of a group should behave in a certain situation. Bicchieri (2006) describes social norms as a kind of grammar-defining the 'socially acceptable behavior' in social interactions. Normative conduct according to Kamau (2009) is typically derived through experience. In other words, attitudes are learned through social interactions. In his examination of the effect of attitudes and social normative pressures on water conservation, Grønhøj (2006) established that normative influence could either encourage or discourage water conservation in households. Similarly, research by Clark and Finley (2007) shows that water conservation intentions appear stronger when individuals think that engaging in that action will receive the support of those who are important to them. Cialdini et al. (1990) posit in the "focus theory of normative conduct" that "the focus of an individual's attention will dictate what behavioral expectation they follow". They argue that 'descriptive norm', that is how individuals perceive what is generally done in a given context or what is presently happening in that environment predicts the decision to carry out a behavior. Ajzen and Fishbein (2005) posit that individuals may be motivated to perform a behavior based on the perception that others are engaging in the focal behavior. However, some researchers assert that only those "normative beliefs", which people think are jointly shared and practiced appear to have an overarching influence on behavior (Bicchieri and Xiao 2009; Bicchieri and Chavez 2010). In order to test if attitude and descriptive norms were significant intervening variables of college students' water conservation behavior and intentions, the following propositions were made:

- There is a positive significance between college students' attitudes and water conservation behavior.
- College students' water conservation behaviors and intentions are positively related to social pressure.

METHODOLOGY

Respondents in this study were drawn from students at a large public university in the Eastern Cape Province of South Africa. Aiming at ninety-five percent confidence level and a five percent error tolerance, a sample of 600 was drawn from a population of 7087. The respondents' ages are between 18 and 27, with an average age of 18.7 years.

Respondents completed a self-administered questionnaire (n = 600). The greater number of questions asked in the study follows the Likert scale format as used by Fielding et al. (2011). The questions dealt with perceptions about the availability of and value of water, attitude to water conservation, current water practice, behavioral

intentions and descriptive norms as well as assessment of awareness level of respondents on water conservation and related issues. Altogether, 600 responses were obtained. The mean of the scale items represented a measure of the construct and the scales were reliable.

Attitude

Attitude towards water conservation was measured by asking respondents to state whether they agree or disagree with a series of 14 attitudinal statements on water conservation on a five-point scale adapted from the measuring instruments used by Dolnicar and Hurlimann (2010) in their study of Australians water conservation behavior and attitude.

Current Water Practices

To assess current water behavior, the respondents were asked to answer to the question: "What actions are you taking currently to save water?" in a 6-item scale. Check all that apply: "I make sure that the taps do not drip," "I use minimal water for washing clothes, ""I turn off the tap when brushing teeth," "I have showers that are less than 5 minutes," "I report leaking water pipes, toilet sink to relevant authority, and "Other". The six items were computed and the mean provided a measure of current water conservation behavior. Since the unit of analysis was students who by virtue of their tenure on campus are not involved in water efficiency behaviors or one-off actions (such as fixing leaks, installing a rainwater tanks, or water efficient shower head), the quantitative survey only asked respondents about their current water-saving or curtailment behaviors.

Self-efficacy or Perceived Behavioral Control

Three items in a five-point scale were used to measure this construct:

- 1. "I am confident that I could save water around the hostel if I wanted to",
- 2. "The decision to save water around the hostel is beyond my control", and
- 3. "Whether I save water around the hostel or not is entirely up to me" (strongly agree - to strongly disagree).

Measuring scale adapted from Fielding et al. (2011)

Behavioral Intentions

Three items on a five-point scale ranging from "strongly agree" to "strongly disagree", adapted from the work of Fielding et al. (2012) were used to assess future plans to engage in water saving or curtailment behaviors. The three items are: (1) "I plan to conserve water", (2) "I will make effort to conserve water", and (3) "I intend to conserve water". The three items were averaged to provide a reliable measure of the students' water conservation intentions.

Descriptive Norms

Respondents were asked to assess three statements: "Most students do not conserve water", "Most students would not disapprove if I do not conserve water", and "I feel no pressure by my friends and classmates to conserve water" on a five-point scale, ("strongly agree" to "strongly disagree"). The mean of the responses provided a measure of the descriptive norm.

Data Analysis

First, a descriptive analysis was applied to provide current trends and subsequently, Chisquare goodness of fit test was used to ascertain the significance of the college students' attitudes and water conservation behavior. A further test was carried out using the Pearson's R correlation coefficient and Spearman correlation to determine the relationship between college students' water behavior/intentions and social pressure.

RESULTS

Attitudes of College Students towards Water Conservation

In general, the results suggest that respondents are indifferent to water conservation. Although majority (80.5%) of respondents agree that water was important and needed to be prudently conserved, a high percentage does not consider water conservation their responsibility. Also, an overwhelming 96.8 percent do not perceive any present pressure to conserve water. Nevertheless, the study found that a significant percentage (42.5%) do not think that South Africa faces any serious future water scarcity. This may not be unconnected to the general belief of plenteous supply of water. An overwhelming 75.8 percent strongly believe that water is abundant in South Africa (See Table1).

Interestingly, the study found that water conservation was not an overarching social issue to students. In fact, water conservation appears to pale into insignificance as an issue of most concern to respondents relative to energy conservation. A whopping 384 respondents representing about sixty four percent (Table 1) were of the opinion that conserving electricity was more important than conserving water. This view may be underpinned by the fact that South Africans are frequently exposed to news about the country's power supply situation. As noted by Renn et al. (1992), societal concern for any issue assumes an elevated salience depending on how the media amplifies the risk. Overall, almost everyone (99.5%) agrees that greater attention should be paid to water conservation, while a sizable number (88.7%) stated that they could make more effort in conserving water.

Table 1: Attitudes of college students to water conservation

Statements	Agreement % (Frequency)
There is much water in South Africa.	75.8 (455)
Water is important and should be conserved	80.5 (483)
Conserving electricity is more important to conserving water	64.0 (384)
Water conservation is not a major issue in South Africa	53.5 (321)
Drinkable water is an unlimited resource	33.2 (199)
South Africa risk future water shortage unless we conserve water	42.5 (255)
I have experienced limited water supply before	29.6 (178)
Using water only when absolutely necessary will prevent water exhaustion	74.0 (444)
Putting the tap off when washing teeth can help save water	97.0 (582)
As an individual I can play an important role in saving water	88.7 (532)

Current College Students Water Conservation Behavior

The result shows that the main water conservation practices of the students are turning off the tap when brushing teeth (32.0%) and making sure that the taps do not drip (30.0%) (See Table 2). Although many college students agree that water is important and should be conserved, significantly fewer were making any sustained and considered efforts to conserve water around the campus.

Intention to Engage in Future Water Conservation Act

I will make an effort to conserve water

I intend to conserve water

Respondents were asked their willingness to or likelihood to engage in future water conservation behavior. As indicated in Table 3, majority of the respondents (275) representing 45.8 percent indicated that they would make effort to conserve water.

Relationship Between Descriptive Norm and College Students' Conservation Behaviors

As can be seen in Table 4 an overwhelming 74.6 percent of the respondents do not conserve water. This situation may not be unconnected to the fact that majority of students feel no social pressure to engage in water conservation behavior (73.3%). A further test using a chi-square goodness of fit test (Table 5a) and symmetric measure (Table 5b) indicate that there is a positive significance between

> 45.8 (275) 44.0 (264)

Table 2: Current water conservation behaviour of college st	college students
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Conservation practice	Yes, % (frequency)
I make sure that the taps do not drip	30.0 (180)
I use minimal water for washing clothes	16.3 (98)
I turn off the tap when brushing teeth	32.0 (190)
I have showers that are less than 5 minutes	21.0 (125)
I report leaking water pipes or toilet sink to relevant authority	1.2 (7)
Other	0
Table 3: Intention to act	
Future activities	Yes % frequency
I plan to conserve water	43.2 (259)

Table 4: Influence of descriptive norm on water conservation behaviour

Descriptive norm	Yes % (Frequency)
Most students do not conserve water	74.6 (448)
Most students would not disapprove if I do not conserve water	43.8 (263)
I feel no pressure from my friends and classmates to conserve water	73.3 (440)

Table 5: College students' attitude * water conservation behaviour cross tabulationcount

		Water conservation behaviour					Total
		Taps don't drip	Off when brushing	tap showers less than 5mins	report pipes	leaking 5	
College	Strongly agree	30	0	0	0	0	30
Students'	Agree	25	0	0	0	0	25
Attitude	Neutral	125	94	0	0	0	219
	Strongly disagree	0	4	190	32	0	226
	Disagree	0	0	0	93	7	100
	Total		98	190	125	7	600

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Table 5a: Chi-square tests

	χ^2 -Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1051.938ª	16	.000
Likelihood Ratio	1106.769	16	.000
Linear-by-Linear Association	455.827	1	.000
N of Valid Cases 600			

a. 7 cells (28.0%) have expected count less than 5. The minimum expected count is .29.

Table 5b: Symmetric measures

		Value	Asymp. Std. Error ^a	Approx. T^b	Approx. Sig.
Interval by					
Interval	Pearson's R	.872	.007	43.633	.000°
Ordinal by Ordinal	Spearman Correlation	.934	.004	64.131	.000°
N of Valid Cases	600				

a. Not assuming the null hypothesis.

N of Valid Cases

b. b. Using the asymptotic standard error assuming the null

c. Hypothesis. c. Based on normal approximation

college students' attitudes and water conservation behavior.

Relationship Between Social Pressure and College Students' Water Conservation Intentions

A further test was carried out using the Pearson's R correlation coefficient and Spearman correlation to check the relationship between college students' water behavior or intentions and social pressure, and the results indicate that college students' water behavior and intentions are positively related to social pressure (See Tables 6a and 6b).

College Students' Awareness of Water Conservation Practices

Lastly, the survey sought to ascertain the respondents' awareness of water conservation campaigns and knowledge of water conserva-

Table 6a: Water conservation behaviour* social pressure cross tabulation count

		Social pressure				Total	
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Water	Taps don't drip	180	0	0	0	0	180
Conservation Behaviour	Minimal water for Washing	60	38	0	0	0	98
Off ta	Off tap when brushing	0	162	28	0	0	190
	Shower less than 5mins	0	0	32	46	47	125
	Report leaking pipes	0	0	0	0	7	7
	Total	240	200	60	46	54	600
Table 6b: Syn	nmetric measures						
			Value	Asymp. Std. Error ^a	Appro	$x. T^b$	Approx. Sig.
Interval by Inte Ordinal by Ordi			.873 .940	.005 .005	43. 67.	836 071	.000 .000

a. Not assuming the null hypothesis. b. Using the asymptotic standard error assuming the null hypothesis. c. Based on normal approximation.

600

tion practices. Respondents were asked three questions: "Have you ever come across any message saying you should conserve water or use it wisely?", "What do you think about current awareness campaign on water conservation?", and "How do you rate your knowledge of water conservation practices?" The findings as indicated in Table 7a show that a significant number (41.2%) of the respondents have not encountered any message asking them to conserve water. The result also shows a huge gap in knowledge about water conservation and what constitutes efficient water use. A significant number (28.8%) admitted having little knowledge about water conservation practices that is, they do not know enough about what they can do to save water while only 7.5 percent of respondents had great knowledge of what to do to save water (Table 7b).

As shown in Table 7c, the preponderance of respondents (62%) thought the handling of the water conservation awareness campaign was very poor.

Table 7a: Have you ever come across any message saying you should conserve water or use it wisely?

	Frequency	%
Yes	247	41.2
No	301	50.1
Can't remember	52	8.7

Table7b: Knowledge of water conservation practices

	Frequency	%
No knowledge at all	173	28.8
Little knowledge	300	50.0
Good knowledge	82	13.7

Table 7c: What do you think of current water conservation awareness campaign?

	Frequency	%
Poor	375	62.5
Good	145	24.1
Very good	80	13.3

DISCUSSION

Data analysis reveals a significant attitude of indifference, as college students do not appear to consider water conservation to be an overarching social issue. A preponderance of respondents (64%) considers energy conservation more important and pressing than water conservation. This may not be unconnected to the fact that only a negligible percentage of students are aware of the current water situation in the country. As the findings indicate, over fifty percent of respondents have not encountered any communication on water conservation or related issues unlike the energy situation where South Africans are frequently exposed to news about the country's power supply situation. As noted by Renn et al. (1992), societal concern for any issue assumes an elevated salience depending on how the media amplifies the risk. Literature has established that information is a mediating factor on how much attitudes and norms influence intention and behavior of individuals (Trumbo and O'Keefe 2005). "Information covers intermediary behavior in which enduring value systems and pro-environmental behavioral patterns are reinforced" (Mathipa and Le Roux 2009: 256). Crano and Prislin (2006) argue that an individual's knowledge of an entity or attitude object increases the prominence and subsequently the strength of that attitude, and the probability of that attitude ultimately influencing behavior. The attitude of college students to water conservation is also underpinned by the belief of abundance of water in the country.

The fact that a relatively few college students (29.6%) have experienced limited water supply before could also be a plausible explanation for the indifference towards water conservation. It is likely that a firsthand experience of water scarcity by more respondents would have resulted in a more positive attitude towards water conservation. As indicated by Kempton and Holland (2003), "experiencing environmental damage can strengthen an environmental identity and make it salient", and this will eventually influence attitude.

Although results show that a majority of respondents (80.5%) consider water as an important resource and appear favorably disposed to water conservation, this seemingly 'concern attitude' does not reflect on the college students' water conservation behavior. As observed in the study, an overwhelming majority of college students do not conserve water. This is consistent with the proposition of Clayton and Myers (2009) that having an attitude does not necessarily translate to action except when the attitude is

strong, based on personal experience and salience. "Talk is cheap, people will say what seems socially desirable but will not really expend effort to act" (Kempton and Holland 2003:317). The poor water conservation behavior can putatively be ascribed to the influence of descriptive norm that is, the perception that others in the environment are not presently conserving water. As argued by Cialdini et al. (1990), the way individuals perceive what is generally done in a given context or what is presently happening in that environment predicts the decision to carry out behavior. Grønhøj (2006) established that normative influence could either encourage or discourage water conservation. This is consistent with Ajzen and Fishbein's (2005) postulation that individuals may be motivated to perform a behavior based on the perception that others in their environment are engaging in the focal behavior. Bicchieri and Chavez posit, "Only those normative beliefs that people perceive to be collectively shared and put into practice seem to matter to behavior." The perception that majority of group members are not engaging in the focal behavior appears to be a major disincentive for the students not to engage in water conservation.

CONCLUSION

The findings in this study in the main suggest that although college students consider water conservation necessary and would want to make efforts to conserve water use in the future, they do not think water conservation is of paramount importance and this seem to underpin their attitude of indifference. The results also show a positive relationship between social pressures, descriptive norm particularly and college students' water behavior and intentions. The paper concludes that college students are generally indifferent to water conservation. Clearly, the water conservation campaign does not seem to resonate with this very influential population. Many are seemingly disconnected and unaware of water issues such as water scarcity, and efficient and effective use of water. The general apathy among college students stems from the relative importance their environment seems to have attached to the water conservation issue. The best way to address this indifference and allow the students to take responsibility is to provide information that will help them understand that they are major stakeholders in the conservation drive and that their effort, no matter how little, will make a huge difference not only in saving water but also in preserving the environment. However, unless water conservation becomes a culture practiced by those considered influential in the colleges, many students would not be motivated to conserve. As literature has established, people are most likely to perform a behavior when they perceive that others are engaging in that focal behavior.

RECOMMENDATIONS

The gratifying aspect of this study is the fact that many college students are willing to make changes in their behavior. But they need help as to how to go about that. The utilities and municipal authorities must therefore intensify efforts in providing adequate information on what to do to conserve water conservation, how to do it and why it should be done. Communication strategies must pay particular attention to the issue of belief about plenteous water, which seems to be underlying the attitude of indifference. Except there is a proactive communication to counter this encompassing negative attitude then it is only a matter of time before the collective indifference undermines the expected change of another generation.

LIMITATIONS

There are a few limitations to the research methodology that bear mentioning. The sample for this research was drawn from a university located in a relatively rural setting with a predominantly Black population of average income groups. Furthermore, the university is located in a region that has a comparatively higher percentage of rainfall and freshwater supply. Results may have appeared differently if students of other races and economic status especially from urban cities in the semi-arid region where water is scarcer were included. As such, this research paper should not be mistaken for an empirically conclusive account of the attitudes and behavior of all college students.

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