

Using the Theory of Planned Behaviour in Social Marketing Intervention Programmes on HIV/AIDS

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Abstract

Purpose of research- This research contributes to social marketing literature by testing the constructs of the TPB model in social marketing interventions on HIV/AIDS in Ghana. **Design-** A convenience stratified sampling method was employed and a questionnaire was administered face to face to 481 respondents from the Manya Krobo and Fanteakwa Districts in the Eastern Region of Ghana. The data was analysed using descriptive statistics, t-test, ANOVA and correlation analysis. **Findings-** The results show that majority of respondents have neither subjected themselves to HIV/AIDS tests (51.8%) nor abstained from sex (91.6%). The study's implications are that all the TPB constructs in the literature are applicable to the Ghanaian situation except the relationship between perceived behavioural control, subjective norm, and individual age group. **Originality-** Although social marketing experts have indicated a need to apply theories of behaviour change to optimize campaign effectiveness, it is surprising that so little empirical research has been conducted on the topic, especially on the application of the Theory of Planned Behaviour (TPB) to HIV/AIDS intervention programmes in Ghana. To fill this gap, this research seeks to test the constructs of the TPB model in social marketing interventions on HIV/AIDS in Ghana. Therefore, the objectives are (a) to ascertain the impact of the social marketing interventions on HIV/AIDS related behaviours in Ghana and (b), to determine the perceived norm, self efficacy and attitude of Ghanaians toward HIV/AIDS intervention programmes. **Limitations-** This study is limited to only two districts in Ghana, which could affect the generalisation of the findings to the entire Ghanaian population.

Keywords: Theory of Planned Behaviour, Social Marketing, Interventions, Programmes, Ghana

Introduction

The overwhelming majority of people with HIV live in Sub-Saharan African countries, a region that has just over 10% of the world's population, but is home to 68% of all people living with HIV. An estimated 1.3 million people in Sub-Saharan African countries died from AIDS-related illnesses in 2009 (UNAIDS, 2010). In Ghana, the most recent sentinel surveillance done in 2011 indicated a national median HIV prevalence of 2.2% (GAC, 2012). The trend in the national median HIV prevalence in Ghana since 2000, shows that there has not been consistent decline of HIV prevalence in the country.

The highest prevalence rate was recorded among the 40-45 age group in 2009, and 30-34 in 2011, of which 77% of those who died of AIDS in Ghana fall within the 15-49 age group (GAC, 2012). This is very worrying since the bulk of the nation's active human resource base fall into this age group (NACP, 2009). Although social marketing experts have indicated a need to apply theories to optimize campaign effectiveness (Andreasen, 1997; Frazee *et al.*, 2007; Kelly, Murphy, Sikkema, & Kalichman, 1993; Thackeray, and Neiger, 2000), it is surprising that so little empirical research has been conducted on the topic, especially on the application of the Theory of Planned Behaviour (TPB) to HIV/AIDS intervention programmes in Ghana. To fill this gap, this research aims to test the constructs of the TPB model (perceived norm, self efficacy/perceived control, attitude,

intention and behaviour performance) in social marketing interventions on HIV/AIDS in Ghana. Therefore, the objectives are (a) to ascertain the impact of the social marketing interventions on HIV/AIDS related behaviours in Ghana and (b), to determine the perceived norm, self efficacy, attitude and intention of Ghanaians toward HIV/AIDS protective behaviours.

Literature Review

Kotler and Lee (2008) define social marketing as a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviours that benefit society as well as the target audience. French, *et al.* (2010) assert that social marketing should reduce its total dependence on commercial marketing and define social marketing as the systematic application of marketing alongside other concepts and techniques, to achieve specific behavioural goals, for a social good.

Fishbein (2000) argues that although there have been enormous progress in prolonging and improving the quality of life of those infected with HIV, there is still neither a cure for, nor a vaccine to prevent this disease. He asserts perhaps, and most importantly, that it has become increasingly clear that preventing the transmission and acquisition of HIV must focus upon behaviour and behaviour change.

Fishbein (2000), further states that to be effective, interventions should focus upon specific behaviours and, perhaps not surprisingly, the most effective interventions will be those directed at a single behaviour rather than at multiple behaviours. This is because each behaviour is substantively unique, and the substantive factors influencing one behaviour might be different to those influencing others.

French, *et al.* (2010) indicate that having an understanding of the use of theory (particularly behavioural theory) is important, as it can strengthen and enhance the development and delivery of social marketing interventions and, therefore, ultimately improve and strengthen their potential impact and effectiveness. Frazee, Rivera-Trudeau, and McElroy (2007), Maibach, Rothschild, and Novelli (2002), and Thackeray and Neiger (2000) also posit that behavioural change theories can help social marketers to efficiently plan campaigns by adding theory-based campaign elements in addition to the social marketing framework.

Niblett (2005) asserts that to achieve social marketing programme objectives, the interventions often create new awareness and new attitudes that facilitate change in the form of action. The extant literature suggests that most of the applications of behaviour change models to social marketing have been done in developed countries (Albarracín, McNatt, Klein, Ho, Mitchell, & Kumkale, 2003; Cismaru, Lavack, Hadjistavropoulos, & Dorsch, 2008; Sowers, French & Blair-Stevens, 2007; Uhrig, Ero lu, Bann, Wasserman, & Guenther-Grey, 2010). In Ghana, the limited number of research carried out on HIV/AIDS has concentrated mostly on

awareness creation and impact assessment (Adu-Mireku, 2003; Awusabo-Asare & Anarfi 1997; Awusabo-Asare, Anarfi, & Agyeman, 1993; Benefo, 2004; Ghana Statistical Service, 1998, 2003, 2008; Tweneboah-Koduah, 2001). Even though, theories of behaviour change including the Theory of Planned Behaviour (TPB) have been applied to social marketing in the developed country context, experience shows that all the constructs of the TPB might not apply in the Ghanaian context due to cultural values.

Luginaah, *et al.* (2005) conclude that the broader social impacts of HIV testing for those planning to marry may extend beyond individuals in different cultural contexts. The various dimensions of culture distinguish one group of people from another (Ilcan, 2002; Appadurai, 1996) and also serve as important lenses through which HIV prevention can be understood. Dimensions of culture (such as values, beliefs, and norms) are cultural constructs that influence sexual behaviours (Luginaah, *et al.*, 2005). Some researchers acknowledge that HIV transmission is a contextually-bound social phenomenon and that beliefs about the various dimensions of culture are salient contextual factors in HIV prevention (Jemmott, Catan, Nyamathi, & Anastasia, 1995; Parker, 2001). In essence, they assert that traditional and cultural values influence the knowledge and attitudes that affect HIV risk behaviours.

Consequently, the beliefs and practices of particular African cultures, for example, have been seen as accelerating the spread of HIV/AIDS or at least hampering understanding and prevention of the epidemic in the region (Tobias, 2001). This

has led some researchers to suggest that grounding HIV prevention programmes in dimensions of a target group's culture makes such programmes understandable and more effective (Parker, 2001).

3.5 Conceptual Framework

This research adopts Theory of Planned Behaviour to test relationship between HIV related attitude, intention, self-efficacy, normative belief and behaviour (Fishbein, 1967). The Theory of Planned Behaviour is a useful conceptual tool for social marketers (French & Gordon, 2015). It can be used as a tool when looking at a social behaviour that needs to be understood and each of the constructs can be analysed to develop an understanding of factors that are influencing behaviour (French & Gordon, 2015). In the work that led to the development of the TRA/TPB, Fishbein & Ajzen (1975) distinguished between attitude towards an object and attitude towards behaviour with respect to that object, and conclude that attitude toward the behaviour is much better a predictor of that behaviour than attitude towards the object at which the behaviour is directed.

Fishbein and Ajzen (1975; Ajzen and Fishbein (1980) and Ajzen (1991) clearly defined underlying beliefs, intentions, behaviour and measurement, and posit that it is critical to have a high degree of correspondence between measures of attitude, norm, perceived control, intentions, and behaviour in terms of action, target, context and time. Low correspondence between model construct measures on any of these factors will result in low correlations between TPB variables, while this correspondence will result in high correlations (Ajzen & Albarracin, 2007; Trafimow,

2007). The TPB focuses on theoretical constructs with individual motivational factors as determinants of the likelihood of performing a specific behaviour. The Theory of Planned Behaviour assumes that the best predictor of behaviour is its behavioural intention, which in turn is determined by attitude toward the behaviour and social normative perceptions regarding it (Montano & Kasprzyk, 2008). Bandura (1989) and Fishbein and Cappel-la (2006) contend that a person's self-efficacy for a given behaviour dramatically affects their intention (self-motivation) for performing that behaviour.

Self-efficacy studies in relation to HIV-protective behaviours posit that an individual's perceived ability to carry out a particular behaviour is necessary to prevent infection with HIV (Janz & Becker, 1984). Evidence comes from hundreds of studies that have been summarised in several meta-analyses and reviews (Armitage & Corner, 2001; Albarracin, Johnson, Fishbein, & Muellerleile, 2001; Albarracin, *et al.*, 2003; Durantini, Albarracin, Mitchell, Earl, & Gillette, 2006; Webb and Sheeran, 2006). Although TPB has been criticised, based on whether correlation results can explain behaviour (Weinstein, 2007), many published intervention study reports show that changing the TPB constructs leads to subsequent changes in behaviours (Albarracin, *et al.*, 2003; Rhodes, Stein, Fishbein, Goldstein & Rotheram-Borus, 2007; Kalichman, 2007).

According to the TPB, attitude is determined by the individual's beliefs about outcomes or attributes of performing the behaviour (behavioural beliefs), weighted by evaluations of those outcomes or attributes. Thus, a person who holds strong

beliefs that performing the behaviour will lead to a positive outcome will have a positive attitude towards the recommended behaviour. Conversely, a person who holds strong beliefs that performing the behaviour will lead to a negative outcome will have a negative attitude towards the recommended behaviour. Likewise, a person's subjective norm is determined by his or her normative beliefs, that is, whether important referent individuals approve or disapprove of performing the behaviour, weighted by his or her motivation to comply with those referents.

A person who believes that certain referents think he or she should perform a particular behaviour and is motivated to meet expectations of those referents will hold a positive subjective norm. Conversely, a person who believes these referents may think he or she should not perform the behaviour will have a negative subjective norm. A person who is less motivated to comply with those referents will have a relatively neutral subjective norm (Montano & Kasprzyk, 2008). The TPB has been used successfully to predict and explain a wide range of health behaviours and intentions, including smoking, drinking, health services utilization, exercise, breast feeding, and use of contraceptives, mammography, safety helmets, and seatbelts in a developed country context (Albarracin *et al.*, 2001; Bandawe & Foster, 1996; Bogart *et al.*, 2000; Fisbein, 1993; Trafimow, 1996).

Findings have been used to develop many effective behaviour change interventions (Fisher *et al.*, 1995; Gastil, 2000; Jemmott and Jemmott, 2000).

Strand, Rothschild, and Nevin (2004) posit that social marketers are good at de-

livering ideas, creating awareness and positive attitudes and developing branding and positioning. However, there is a huge disconnect in converting that increased awareness and attitude change into behaviour change. Wulfert, Wan, and Backus (1996), Lin, Simoni, and Zemon (2005), Steers, *et al.* (1996), and Niblett (2005) indicate condom use, one sexual partner, etc. as preventive measures the target audience needs to adopt to bring change in behaviour. Matheison, Peacock, and Chin (2001) describe age as a measure of personal resources or perceived behavioural control. However, Honold (2000) argues that user capabilities are usually a result of demographic (user's age, educational background, income) or situational (experience), which is supported by the work of Brigman and Cherry (2002) who contend that age increases the effect of subjective norms because older workers have a greater need for affiliation.

Wight *et al.* (1998) conclude that perceptions and self-efficacy to use condom between men and women can vary because in the case of condom use, the behaviour is not under the woman's direct control. Laraque *et al.* (1997) found that condom use among Central Harlem youth was motivated by the perceived value of condoms to avoid pregnancy, as well as avoidance of HIV/AIDS, but the strongest motivation was avoiding pregnancy.

Based on the above literature, the following hypotheses are formulated:

Hypothesis 1: there will be no significant difference between age groups of respondents and their subjective norms.

Hypothesis 2: there will be no relationship between respondents' intentions to perform

HIV-protective behaviours and their self-efficacy with respect to performing the behaviour.

Hypothesis 3: there will be no relationship between respondents' performance of HIV-protective behaviour and their response efficacy towards interventions on the pandemic.

Hypothesis 4: there will be no relationship between respondents' HIV-protective behaviour performance and their intention to perform the behaviour.

Research Methodology

This research employs a quantitative research method to determine the inferences that can be made about some characteristic, attitude, or behaviour of the population (Creswell, 2009). The population of the study constitutes all residents of two HIV sentinel sites in Ghana. The residents of these sites are selected for the study because they have the highest HIV prevalence in the country (NACP, 2009 and GAC, 2013). The two sentinel sites are Agormanya (5.8%), and Fanteakwa (4.0%) all in the Eastern Region (3.7%) of Ghana. HIV sentinel survey report, 2009 and 2013 respectively show Fanteakwa and Agormanya as the sites with the highest HIV prevalence. The research focuses mainly on residents at Agormanya and Fanteakwa districts who fall within the 18 and 49 age group because they are the most affected age group with HIV/AIDS epidemic in Ghana (NACP, 2009, GAC, 2013).

Due to the lack of a sampling frame from Ghana Statistical Service (GSS) for residents in Fanteakwa and Agormanya districts in the Eastern Region of Ghana (ie. GSS could not provide a list of all residents in the two districts), a convenience sam-

pling method was employed. This sampling method is limited and, therefore, the findings may not be generalised to the entire Ghanaian population. Magnani *et al.* (2005) conclude that sampling procedures should be capable of reaching all members of the population or sub population under investigation in order to produce unbiased estimates of trends in HIV infection rates and behaviours. Some researchers however, argue that research data do not have to be perfect (i.e. be unbiased) in order to be useful, and that undertaken research that entails time-consuming and costly sampling frame development is wasteful of scarce public health resources (Magnani *et al.*, 2005).

A questionnaire based on the Likert-style five-point rating scale was used to measure the degree of agreement of 1 for strongly agree and 5 for strongly disagree. The questionnaire contained two sections that covered the socio-demographic profile of age, sex, religion, area of residence, marital status and educational level of respondents, and section two that measured knowledge and impact of social marketing interventions on HIV/AIDS and constructs based on the Theory of Planned Behaviour, namely attitude, intention, self-efficacy, normative belief, response efficacy and behaviour. A convenience stratified sampling technique was employed to ensure that each population element {urban, rural, male and female respondents} is represented (Gunnar, 2000).

The questionnaire was translated into the local Ghanaian language to enhance understanding and cooperation. This was based on the five-step process for translating survey questionnaires by Forsyth *et al.* (2006), which included translation,

review, initial adjudication, cognitive interview pretesting and final review and adjudication. The aim of the study was explained to the respondents, and they were assured that their anonymity and confidentiality would be respected. The questionnaire was administered face-to-face to respondents in the Fanteakwa and Agormanya districts in Ghana. In all, 600 respondents were contacted but 481 co-operated, representing an 80.2% response rate. Giving the sensitive nature of the research topic, this method was considered more suitable in obtaining a good response rate.

Descriptive statistics such as mean and standard deviation, correlation, one-sample t-test and analysis of variance (ANOVA) were employed to analyse the data. ANOVA was carried to compare the significant difference between the means of populations of respondents. With the ANOVA technique, a sign value greater than 0.05 was examined for the mean difference, whereas the sign value of 0.05 or less shows the significance of differences between the different categories of the respondents. In this case, post hoc procedures such as Duncan's multiple range test was used to identify the pair or pairs of groups where the mean are significantly different (Garee, 1997). To evaluate how different groups differ, the mean of each group was used and the group mean

helped to determine on average, the views of all groups.

Analyses of Results and Discussion

Knowledge and Impact of Social Marketing Interventions on HIV/AIDS

The result indicates that 98.1% of the respondents have seen or heard social marketing interventions (SMI) on HIV/AIDS of which 72.8% have seen or heard SMI on HIV/AIDS for more than five years. This is consistent with reports by GAC, 2010; NACP, 2006; and Niblett (2005). On impact of SMI, the result shows that majority of respondents-over 57 %, agree that they no longer engage in unprotected sex, 61.5 % have started using condoms, whilst 75% have restricted sex to one partner, and 98% claim to have stopped sharing blades and needles with others. The majority of respondents however, disagree that they have gone for HIV/AIDS test (51.8%) or abstained from sex (91.6%). A t-test result in table 1 however, shows that there is a statistically significant difference ($t(473) = 5.590, p < 0.001$) between males and female on whether or not they have tested for HIV/AIDS. On the average, women are more likely to agree that they know their HIV status (mean=2.63) than men are (mean=3.59).

Table 1: Male and Female and whether they have gone for HIV/AIDS Test

Gender	N	Mean	T-test	Df	Sig.
Male	234	3.5983	5.590	473	0.001*
Female	241	2.6390			

*Significant Level= $P < 0.05$

The author concludes that SMI programmes designed to influence Ghanaians to go for HIV testing or abstain from sex have generally not been effective. This is consistent with Strand *et al.* (2004) who conclude that social marketers are good at delivering ideas, creating awareness and positive attitudes and developing branding and positioning. However, there is a huge disconnect in converting that increased awareness and attitude change into behaviour change.

The Subjective Norm, Attitude, Perceived Control, Intention, and Behavioural Performance of respondents.

On normative belief of respondents, the result shows that only 35.5% of the re-

spondents agree that a woman who is seen buying or carrying condom will not have a good image in the society. The result of the t-test in table 2 shows that there is a statistically significant difference ($t(479) = -4.628, P < 0.001$) between rural and urban respondents and their perceptions toward a woman who is seen buying or carrying condom. On average, rural respondents are to some extent more likely to agree that a woman who is seen buying or carrying condoms is promiscuous in society (mean=2.62) than their urban counterparts who are more likely to disagree with the statement (mean=3.36).

Table 2: Location of Respondents and their views on Women seen Buying or Carrying Condom

Location of Respondents	N	Mean	T-test	Df	Sig.
Male	132	2.6212	-4.6228	479	0.001*
Female	347	3.3582			

*Significant Level= $P < 0.05$

Few of the respondents (36.6%) agree that buying condom is still an embarrassing experience these days. In table 3, the t-test result shows that there is a statistically significant difference ($t(479) = 6.030, P < 0.001$) between genders and their attitude towards buying condom (whether they do or do not see it as an embarrassing experience). On average, men are more likely to disagree with the statement (mean 3.77) than women who are more likely to be neutral with the statement (mean=2.86). This is due to the normative

restrictions on women in Ghana which prevent them from engaging in certain activities (e.g., buying condom). This is consistent with Wight *et al.* (1998) who posit that perceptions and self-efficacy to use condom between men and women can vary because in the case of condom use, the behaviour is not under the woman's direct control.

Table 3: Gender and their Perceptions on Buying Condom

Gender	N	Mean	T-test	Df	Sig.
Male	237	3.7722	6.030	479	0.001*
Female	244	2.8648			

*Significant Level= $P < 0.05$

Majority of the respondents (90.2%) agree that most of the people who are important to them think that using condom, abstinence, keeping to one sexual partner or going for HIV test are proper ways of protecting themselves against HIV/AIDS. This suggests that respondents' perceived/group norm favours social marketing recommendations on HIV/AIDS in Ghana. To further understand the subjective

norms of respondents, the following hypothesis is tested.

Hypothesis 1: there will be no significant difference between age groups of respondents and their subjective norms. An ANOVA result in table 4 shows that there is no statistically significant difference ($F = 1.014$, $p > 0.386$) between respondents age groups and their subjective norms on condom usage, abstinence, and keeping to one sexual partner or going for HIV/AIDS tests.

Table 4: Age Group of Respondents and Subjective Norms

Age	Mean	SD	F ratio	Sig.
18-24	1.7123	0.70426	1.014	0.386
25-30	1.5951	0.75062		
31-40	1.6983	0.74856		
41-50	1.7500	0.69413		
Total	1.6736	0.72995		

*Significant Level= $P < 0.05$

The author concludes that Ghanaians, irrespective of their age groups, have the same subjective norms on HIV protective behaviours. This is not consistent with findings of Mathieson *et al.*, (2001), Honold (2000) and Brigman and Cherry, (2002) who contend that age increases the effect of subjective norms because older workers have a greater need for affiliation. However, a correlation result in table 5 discloses that there is a statistically significant relationship ($r = .140$, $P < 0.002$) between respondents' subjective norms concerning social marketing recommendations on HIV/AIDS and their intentions

to adopt the recommendations. This is in tandem with the findings of Montano and Kasprzyk (2008) and Fisbein and Cappella (2006).

Table 5: Correlations between Intention to Perform HIV-Protective Behaviour and Subjective Norms.

		Subjective Norms	Intention
Subjective Norms	Correlation Coefficient	1	.140**
	Sig. (2-tailed)		.002*
Intention	Correlation Coefficient	.140**	1
	Sig. (2-tailed)	.002*	

*Correlation is significant at the 0.01 level (2-tailed).

On self-efficacy of the respondents, the result shows that only 26.4% of the respondents agree that they are able to use condom without difficulty to prevent new HIV/AIDS infection. To further understand the self efficacy of respondents, the following hypothesis is tested. *Hypothesis 2:* there will be no relationship between respondents' intentions to perform HIV-protective behaviours and their self-efficacy with respect to performing the behaviour. In table 6, the result shows that there is a statistically significant relationship ($r=-.167$, $P<0.001$) between respondents' intention of buying/using condoms and their abil-

ity to use condom (self efficacy). The relationship is negative, so we can say that as the intention of respondents not to use condoms increases, there is the tendency that they have less ability to use condoms. In other words, the more the respondents improve their ability to use condoms, the less they will form an intention not to buy or use condoms. This is consistent with Bandura (1989) and Fishbein and Cappella (2006) who conclude that a person's self-efficacy for a given behaviour dramatically affects their intention (self-motivation) for performing that behaviour.

Table 6: Correlations between Intentions to Perform HIV-protective Behaviours and Self-efficacy

		Subjective Norms	Intention
Subjective Norms	Correlation Coefficient	1	-.167**
	Sig. (2-tailed)		.001*
Intention	Correlation Coefficient	-.167**	1
	Sig. (2-tailed)	.001*	

*Correlation is significant at the 0.01 level (2-tailed).

The author asserts that SMI programmes need to be put in place to educate Ghanaians on how they could properly use condoms to protect themselves against HIV/AIDS. The author posits that once respondents do not know how to use a condom, it is more likely they will not use condoms. This resonates with the research

by Lin *et al.* (2005) and Steers *et al.* (1996). The result suggests that all respondents irrespective of their age groups have the same perceived behavioural control when it comes to condom usage. This is not consistent with findings of (Mathieson *et al.*, 2001; Morris and Venkatesh, 2000; Brigman and Cherry, 2002). On response

efficacy of the respondents, the result in table 7 reveals that 55.8% of the respondents do not believe in condom as a means

of protecting themselves from HIV/AIDS infection.

Table 7: Response Efficacy on Condom Use to Preventing HIV/AIDS.

Level of Agreement	No.	%
Strongly Agree	154	32
Agree	48	10
Neutral	11	2.3
Disagree	172	35.8
Strongly Disagree	96	20.0
Total	481	100

To better understand the response efficacy of the respondents, the following hypothesis is tested. *Hypothesis 3: there will be no relationship between respondents' performance of HIV-protective behaviour and their response efficacy towards interventions on the pandemic.* A correlation results in table 8 reveals that there is a statistically significant relationship ($r = -.129$, $P < 0.005$) between respondents' belief in condom use as a measure of protecting oneself against new HIV/AIDS infection and their action to use condoms. The relationship is negative, so the author concludes that as belief in condom use de-

creases, condom use could increase. This means that respondents use condoms for reasons that might not relate to the efficacy of condom as a means of avoiding HIV/AIDS new infection. Sometimes respondents may use condoms to satisfy their sexual partners who demand the use of condom. This is consistent with Laraque, *et al.* (1997) who assert that condom use among Central Harlem youth was motivated by the perceived value of condoms to avoid pregnancy, as well as avoidance of HIV/AIDS, but the strongest motivation was avoiding pregnancy.

Table 8: Correlations between Performance of HIV-Protective Behaviour and Response Efficacy.

		Response Efficacy	Behavioural Performance
Response Efficacy	Correlation Coefficient	1	-.129**
	Sig. (2-tailed)		.005*
Behavioural Performance	Correlation Coefficient	-.129**	1
	Sig. (2-tailed)	.005*	

*Correlation is significant at the 0.01 level (2-tailed).

On intention to perform HIV/AIDS protective behaviour(s), the result indicates that majority of the respondents (80.6%) have formed an intention to protect themselves against HIV/AIDS. Specifically, 57.1% said they have formed an inten-

tion to go for HIV testing, 69.2% have the intention to buy or use condoms, and 92.1% have formed an intention to keep to one sexual partner to protect themselves against HIV/AIDS. On behavioural performance, the research found that 81.5%

of the respondents in the last 6 months have kept to one sexual partner to protect themselves against HIV/AIDS. However, in the last 6 months, majority of the respondents (81.3%) have not gone for HIV/AIDS testing. The result in table 9 shows a statistically significant difference ($F=14.270$, $P<0.001$) between respondents' marital status and their action to

use condom to protect themselves against HIV/AIDS. On average, the respondents who are in co-habitation (mean=1.33, $SD=0.577$) and single (mean=2.08, $SD=1.529$) are more likely to use condoms than their counterparts who are married (mean=3.26, $SD=1.852$), Divorced (mean=3.08, $SD=1.891$), widowed (mean=3.00, $SD=1.633$).

Table 9: Respondents' Marital Status and Action to Use Condom

Marital Status	Mean	SD	F ratio	Sig.
Single	2.0848	1.52907	14.270	0.001*
Married	3.2632	1.85155		
Divorced	3.0769	1.89128		
Widowed	3.0000	1.63299		
Co-habitation	1.3333	0.57735		
Total	2.6863	1.79325		

*Significant Level= $P<0.05$

To ascertain the relationship between behaviour and intention, the following hypothesis is tested. *Hypothesis 4: there will be no relationship between respondents' HIV-protective behaviour performance and their intention to perform the behaviour.* In Table 10a, the result shows that there is a statistically significant relationship ($r=.317$, $P<0.001$) between respondents intention to

test for HIV/AIDS to know their status and their action in the last six months to test for HIV/AIDS. Since the relationship is positive, we can conclude that as intention to test for HIV/AIDS increases, there is the likelihood that the respondents will go for HIV/AIDS test to know their status.

Table 10a: Correlations between Performance of HIV-Protective Behaviour and Intention

		Intention	Behavioural Performance
Intention	Correlation Coefficient	1	.317**
	Sig. (2-tailed)		.000*
Behavioural Performance	Correlation Coefficient	.317**	1
	Sig. (2-tailed)	.000*	

* Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 10b, the correlation result under hypothesis 4 also reveals that there is a statistically significant ($r=.502$, $P<0.001$) relationship between respondents' intention to keep to one sex-

ual partner to protect themselves against HIV/AIDS and their actions in the last six months to keep to one sexual partner. Since the relationship is positive, it can be concluded that as intention of respondents

to keep to one sexual partner increases, there is some tendency that respondents are more likely to take action to keep to one sexual partner. This finding is con-

sistent with research by Fishbein and Cappella (2006) and Montano and Kasprzyk (2008).

Table 10b: Correlations between Performance of HIV-Protective Behaviour and Intention

			Intention	Behavioural Performance
Intention		Correlation Coefficient	1	.502**
		Sig. (2-tailed)		.000*
Behavioural Performance	Perfor-	Correlation Coefficient	.502**	1
		Sig. (2-tailed)	.000*	

*Correlation is significant at the 0.01 level (2-tailed).

Theoretical and Managerial Implications

The study found all the TPB constructs in the literature applicable to the Ghanaian situation except the relationship between perceived behavioural control and subjective norm. The results found that all respondents, irrespective of their age groups, have the same perceived behavioural control and subjective norm to HIV/AIDS protective behaviours. The implementers of SMI programmes on HIV/AIDS in Ghana should ascertain why most Ghanaians have not taken action to know their HIV status. This can be done by utilising the TPB to design SMI programmes on HIV/AIDS to convert increased awareness and attitude change into behaviour change. Social marketing intervention programmes should be used to influence Ghanaians in general and Ghanaian men in particular to know their HIV/AIDS status. Even though majority of the respondents no longer engage in unprotected sex by using condoms to protect themselves, restricted sex to one partner, and have stopped sharing blades and needles with others, majority have not

gone for HIV/AIDS testing and have not abstained from sex. Therefore, it is recommended that interventions should be designed to influence Ghanaians to know their HIV status and influence the youth who are not yet married to abstain from sex. Though the normative beliefs of the respondents favour most HIV/AIDS protective behaviours, they have not formed intentions to perform some of them. This is due to the fact that the respondents do not have the skills and abilities to perform some HIV/AIDS recommended behaviours. There could also be some environmental factors preventing the respondents from forming intentions to perform HIV/AIDS recommended behaviours. The study recommends that social marketing intervention programmes on AIDS be designed to educate Ghanaians on the performances of HIV/AIDS recommended behaviours. Future research should moderate environmental factors between normative beliefs and intention to understand the environmental factors that could prevent Ghanaians to form intentions to

perform HIV recommended behaviours. The implementers of interventions on HIV/AIDS in Ghana should design SMI programmes targeted at rural dwellers to change their negative perceptions on HIV/AIDS preventive related behaviours. Finally, SMI programmes should be designed to demonstrate the proper use of condoms (both male and female) to Ghanaians and, particularly, influence woman to change their attitudes towards HIV/AIDS protective behaviours. This could be done

by changing the normative beliefs of the population that restrict women from engaging in some HIV/AIDS protective behaviours. This study is limited to respondents within the 18-49 years age group at only two districts in the Eastern Region of Ghana. Therefore, a nationwide survey should be conducted in the future to obtain information from Ghanaians in the various Regional, Municipal and District Assemblies.

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