

Predicting the intention of South African female students to engage in premarital sexual relations: An application of the Theory of Reasoned Action

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The Theory of Reasoned Action (Ajzen & Fishbein, 1980) was used to investigate the factors influencing South African female students' decision on whether or not to engage in premarital sexual intercourse. The group of participants consisted of 100 female heterosexual university students who were selected from a larger sample on the basis of sexual inexperience. As anticipated by the theory, both attitudes and subjective norms were found to predict intentions, with attitudes emerging as the stronger predictor. Additional analyses revealed that the hypothesized relationship between attitudes and the cognitive bases, beliefs about the outcome of premarital sexual relations, and the evaluation of these outcomes was supported. However, contrary to the theory, subjective norms were not correlated with motivation to comply with the perceived views of salient referents. The results are discussed in the context of a society in which AIDS is epidemic.

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Concern with premarital sexual relations has varied in focus and intensity over time and across cultures. Throughout, the enduring trend has been for women to be disparaged for sex outside of marriage. The traditional view that loss of virginity prior to marriage is of itself an ill has prompted many draconian measures, such as the inspection of young brides, and the ritual of female circumcision (Hosken, 1993). In more Westernized cultures, however, there has been a substantial decline in support for traditional beliefs about premarital sex over the past three decades (Weis, 1983). The more general view is that women can be sexually active in the context of a serious relationship, but sexual activity beyond these limits is less acceptable (Hynie, Lydon, & Taradash, 1997).

Yet premarital sex for women is still considered a problem. Traditional beliefs have been replaced by concern about the consequences of sexual relations, particularly illegitimate childbirth (cf. Macleod, 1999a, 1999b) and sexually transmitted diseases. With the advent of the AIDS pandemic (which in Africa is transmitted mainly through heterosexual sexual activity), attention has turned to sexual behaviour as an important factor in the fight to contain the disease. Of particular concern has been the behaviour of adolescents and young adults, as this group is acknowledged to be highly vulnerable to HIV infection (Richter & Swart-Kruger, 1995). Considerable research has focused on factors affecting condom use (Bandawe & Foster, 1996; Miles, 1992; Nicholas, 1998), exploring knowledge and beliefs about AIDS (Nicholas & Durrheim, 1995; Nicholas, Tredoux, & Daniels, 1994), and factors contributing to risk behaviours (Lindegger & Wood, 1995). A range of education strategies and media campaigns aimed at promoting safe sex practices has been developed. Yet implicit in many of the programmes and discourses dealing with safe sex is the assumption that women are primarily responsible for implementing the proposed safe practices, namely, the use of condoms, refraining from numerous partners or abstention (Strebel & Lindegger, 1998).

The HIV/AIDS crisis has highlighted the dearth of research on the sexual behaviour of youth in South Africa (Nicholas, 1995). Nicholas' (1995) study on university students indicates that women are more cautious about sex than men. Furthermore, women are more likely to start sexual activity at a later age than men. This is more likely to occur at the end of high school or at university, and in the context of a steady relationship. Men are

more likely to begin sexual activity while at school and to be sexually promiscuous. In addition to concerns about pregnancy and disease, there are numerous psychosocial ramifications associated with the decision to engage in premarital sex. This decision may influence individuals' self-esteem, their interpersonal relationships, social evaluation and many other aspects of their life.

The alarming prevalence of domestic violence and sexual abuse in South Africa indicates that many women do not have the choice of whether or not to engage in sexual activity. Aside from direct coercion, the inequality suffered by women in society is reflected in power imbalances in relationships. Thus, women frequently have little say in how sexual relations are conducted in heterosexual relationships. It has been recognized that this gender inequality must be addressed in the fight against HIV/AIDS (Tallis, 2000). While many South African women do not have autonomy in making choices about their sexuality, this is not the case for all women, particularly during the pre-marital stages of their lives. For this cohort, attitudes and beliefs about pre-marital sexual relations may influence what choices they make and how they position themselves with respect to heterosexual relations.

While the tenuous relationship between attitudes and behaviour has long been recognized, recent research has focused on identifying the factors that strengthen this relationship (Augoustinos & Walker, 1995). The Theory of Reasoned Action (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980) has achieved some success in this regard, and has become one of the more influential social psychological theories on decision-making (Kashima, Gallois & McCamish, 1993).

The Theory of Reasoned Action is a cognitive theory that is designed to predict and explain any human behaviour that is under volitional control. The model deals with the relationships between beliefs, attitudes, subjective norms, intentions, and behaviour. The best predictor of such behaviour is held to be the person's intention to perform the behaviour, with intention being a function of attitudes towards the performance of the behaviour and subjective norms.

The Theory of Planned Behaviour (Ajzen, 1991; Ajzen & Madden, 1986) presents an extension of the Theory of Reasoned Action model, incorporating the construct, "perceived control".

In this model, individuals' beliefs about the extent to which they are able to effect the intended behaviour is included as an explanatory variable, together with attitudes and subjective norms.

The Theory of Reasoned Action and the Theory of Planned Behaviour have been the focus of an enormous amount of research. They have been used to explain intentions and behaviours in a large number of arenas, ranging from health behaviour to commercial behaviour. A number of meta-analytic studies have found high correlations between the various factors comprising the models, confirming their explanatory power (Armitage & Conner, 2001; Manstead & Parker, 1995). In addition, the theories have been applied successfully to a wide range of cultures and ethnic groups, including groups in Korea and Hawaii (Park & Levine, 1999), China (Wong & Tang, 2001), Tanzania (Klepp, Ndeki, Thuen, Leshabari, & Seha, 1996) and Malawi (Bandawe & Foster, 1996), as well as African-Americans (Bogart, Cecil & Pikerton, 2000).

Of particular relevance for this study is the fact that the Fishbein-Ajzen model has been used extensively and with considerable success to predict a wide range of sex-related behaviours. Most of the studies in this category have focused on condom use and safe-sex behaviour, such as adolescent contraceptive behaviour (Jorgensen & Sonstegard, 1984), condom use (Bandawe & Foster, 1996; Boyd & Wandersman, 1991; Kashima, Gallois, & McCamish, 1993), and safe-sex behaviour (Terry, Galligan, & Conway, 1993; White, Terry, & Hogg, 1994). Recent research has also examined factors involved in decisions to engage in sexual activity, using the Theory of Reasoned Action (Klepp et al., 1996), and the Theory of Planned Behaviour (Taris & Semin, 1999). However, there is a need for such research to be continually replicated, so as to take into account varying norms and societal contexts.

The purpose of the present study was to utilize the Fishbein-Ajzen prediction model to understand the factors influencing the decision to engage or not to engage in premarital sexual intercourse among a sample of South African female heterosexual students. This study focuses on the intention of currently sexually inexperienced women to engage in sexual activity, and does not monitor actual behaviour. It was decided to not include measures of perceived self-efficacy or control, as suggested by the Theory of Planned Behaviour, as this might have elicited fears of rape and sexual assault, which would have contaminated the perception of free intention.

METHOD

Participants

The sample consisted of 194 female volunteers from a first-year psychology class. They ranged in age from 17 to 45 years ($M=19.4$ years) and were from diverse ethnic backgrounds. However, only the questionnaires of the 100 women who indicated that they were heterosexual and had never had sexual relations were used in the analysis of the Fishbein and Ajzen model. The age range of this active sample was 17 to 27 years ($M=18.8$ years). The majority of these participants (78%) were Christian, 13% were Muslim, 4% were Hindu and 2% Jewish. The remaining 3% did not indicate their religion. The race of the participants was not asked.

Pilot study

Twenty-five female students, representative of the population under study, were interviewed on their views of premarital sexual relations within the context of a steady dating relationship. This procedure led to the selection of 15 salient

beliefs about the consequences of sexual relations, and to the identification of 7 salient referents for use in the main study.

Materials

The development of the materials and subsequent analysis closely followed the methodology set out by Ajzen and Fishbein (1980). A questionnaire was developed, which contained three sections. The first section solicited demographic information, while the second section assessed the various constructs contained in the Theory of Reasoned Action, namely, the intention to engage in premarital sex, attitudes towards the behaviour, subjective norms, beliefs about the behavioural outcomes, evaluations of these outcomes, normative beliefs, and the motivation to comply to the wishes of significant referents. All these questions referred to sex within the context of a stable or 'steady' relationship. A third set of questions asked information about the respondent's sexual history, orientation and behaviour.

Variables

Intention: Participants' intention to engage in premarital sexual relations was measured by one item ("I intend to engage in premarital sexual intercourse in a steady dating relationship"), answered on a 7-point scale ranging from 1 ("extremely likely") to 7 ("extremely unlikely"). While the use of one item to measure a variable has its drawbacks, it is standard practice by researchers in this field (cf. Ajzen & Fishbein, 1980; Armitage, Conner, Loach, & Willetts, 1999; Kasprzyk, Montaño, & Fishbein, 1998; Rutter, 2000; Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992).

Attitude: Attitude towards engaging in premarital sexual intercourse in a steady dating relationship was measured with three items, using 7-point bipolar scales. These ranged from 1 (positive pole) to 7 (negative pole). The Cronbach alpha coefficient of this 3-item scale was 0.90.

Subjective norm: This was measured with one item using a 7-point scale, asking whether the people important to the participant think she "should" (1) or "should not" (7) engage in premarital sexual intercourse.

Behavioural beliefs outcome: The 15 salient behavioural beliefs about engaging in premarital sexual intercourse elicited in the pilot study were used. Participants' belief strength was measured on a 7-point scale by means of a question asking how likely sexual intercourse was to lead to the outcome in question. The scale anchors were 1 ("very likely") and 7 ("very unlikely"). The Cronbach alpha coefficient for this measure was 0.54.

Outcome evaluation: Participants were also asked to evaluate each of the behavioural beliefs on a 7-point scale, ranging from 1 ("very good") to 7 ("very bad"). This measure produced a Cronbach alpha coefficient of 0.76.

Behavioural belief outcome x evaluation (Sbe): For each belief outcome, the product of the above two variables, strength x evaluation was calculated. The measure, consisting of the sum of this product over the 15 beliefs, has a Cronbach alpha coefficient of 0.55.

Normative beliefs: For each of the seven normative referents identified in the pilot study, participants were asked whether they expected the referent to approve their engaging in premarital sex. This was measured on a 7-point scale ranging from 1 ("should") to 7 ("should not"). The Cronbach alpha coefficient for this measure was 0.83.

Motivation to comply: Participants' motivation to accede to the perceived wishes of each of their salient referents was measured on a 7-point scale, anchored by 1 ("very much") and 7 ("not at all"). This measure produced a Cronbach alpha coefficient of 0.84.

Normative belief x motivation to comply (Snm): The product of the responses on the expectation and motivation to comply items was calculated for each of the seven referents, and then totalled. The Cronbach alpha coefficient for this measure was 0.74.

The items of the questionnaire were scored on unipolar scales from 1 to 7, rather than the bipolar scales from -3 to +3 favoured by Ajzen and Fishbein (1980). It has been found that unipolar scaling is a significantly more powerful predictor of overall attitude than bipolar scaling (Hewstone & Young, 1988). Pagel and Davidson (1984) also propose that the belief components are measures of subjective probabilities and, as such, are more correctly scored from 1 to 7.

PROCEDURE

The volunteers were recruited from a first year psychology class. The purpose of the study was fully explained during the recruitment process. Hence, there was no need for subsequent debriefing. The participants were assured of complete confidentiality, and were not required to put their names or ethnic identity on the questionnaire. The results were made available to those who were interested.

RESULTS

Sexual history and behaviour

A question asking whether the participants had ever had a sexual partner was used to determine the sample that was to be used to investigate the Theory of Reasoned Action. This sample was comprised of the 100 participants who indicated that they had never had sexual intercourse. All indicated that they were heterosexual. The remaining 94 women had previous sexual experiences. Four of these declared their sexual orientation as homosexual, and five as bisexual.

The average age of the sexually inexperienced sample was 18.8 years ($SD=1.33$), which was significantly lower than that of the sexually experienced group, which was 20.7 years ($SD=3.45$) ($t=3.46, p<0.01$).

Within the experienced group, the average age at which sexual activity began was $M=17.4$ years ($SD=1.82$), with 25.5% starting before they were 17 years. This mean concurs with Nicholas' (1995) findings.

Questioned about safe-sex practices, the majority of the sexually experienced participants (87.2%) indicated that they used condoms. However, when questioned further, 29% of these admitted that condoms were used infrequently. Even so, the use of condoms is considerably greater than expected on the basis of national figures. The South African Demographic and Health Survey of 1998 (Medical Research Council, 1999) indicates that only 19.5% of women below 19 years, and 14.4% of women between the ages of 20 and 24 years of age use condoms.

The ensuing analyses use only the data obtained from participants who were not sexually experienced.

Intention to engage in premarital sexual activity

The average intention score was 5.42 ($SD=1.93$), indicating that, on the whole, the participants' intentions to engage in sexual intercourse was quite low. Only 25 women gave scores of less

than, or equal to 4, indicating that they did intend to have sex before marriage. Among the 100 participants, only 32 indicated that they were currently involved in a stable dating relationship. This factor did not appear to influence their intention to engage in premarital sex. There was no significant difference ($t(98)=0.60; p>0.05$) between the mean intention scores of those who were currently in a steady dating relationship ($M = 5.59, SD = 1.92$) and those who were not ($M=5.34, SD=1.95$).

Analysis of the behavioural beliefs

The sample was divided into two groups on the basis of their response to the question about whether they intended to engage in sexual relations: the intention group consisting of those whose intention scores were less than or equal to 4, and the non-intention group whose scores were greater than 4. Creating this dichotomy results in some loss of information, but permits greater perceptual clarity in assessing the differences between the participants as a function of their intention to engage in premarital sexual activity within the context of a stable relationship. Table 1 presents the comparison of the strength of responses for each belief between these sub-groups.

The groups differed significantly on 10 of the 15 beliefs. The effect sizes (using Cohen's d) for the differences between the intention and non-intention groups on these 10 beliefs ranged from $d=0.54$ to $d=1.71$. Using Cohen's classification of effect size (Cohen, 1988), only three are of medium sized effect ($d=0.5 - 0.79$), while the rest are large sized effects ($d 0.8$).

The participants intending to engage in premarital sex had a stronger belief that this would make them feel desirable; would help them find out whether they were sexually compatible with their partners; would show their partner how much they are loved; would satisfy their curiosity; would deepen their relationship with their partner; and would enable them to become sexually experienced and competent. On the other hand, those not intending to engage in premarital sexual intercourse had a stronger belief that premarital sex would give them guilt feelings at the loss of their virginity; would make them feel sinful; and would have serious negative consequences if they were not ready. While both categories of participants indicated that it was unlikely that engaging in premarital sex would help them gain peer group respect, those who intended to have sex were significantly less emphatic about this. Both groups felt equally strongly that sex would create stress related to fears of unwanted pregnancy and sexually transmitted diseases (STD); and that it could lead to regrets, should their partners subsequently reject them. There was no difference in the groups' perceptions of sex being appropriate only if marriage was planned, or the likelihood that sex would make them more dependent on their partners, or lead to subsequent promiscuity.

When the combined means for both the intend and non-intend groups were considered, the lowest means (implying strong concerns about this outcome) were registered for the items relating to the negative consequences if they were not ready for sex ($M=1.97$); fears about partner rejection ($M=2.01$); and worries about pregnancy, birth control, and STDs ($M=2.24$).

Comparisons with the sexually experienced group

As with the inexperienced group, the sexually experienced participants' strongest outcome beliefs were that premarital sexual intercourse was highly likely to have serious consequences if the woman was not ready ($M=2.07$); that it would lead to regrets if their partner rejected them ($M=2.95$); and that it would cause worries about pregnancy and STDs ($M=3.04$). In general, the sexually experienced group gave similar responses to the intend group (within the sexually

Table 1. Mean belief scores of participants intending and not intending to engage in premarital sexual intercourse (PSI)

Behavioural beliefs: "My engaging in PSI in a steady dating relationship would:"	Intention n=25	Non-intention n=75	t-value & [effect size] ¹
Give me stress and worries regarding unwanted pregnancy, birth control, STDs	2.24 (1.20)	2.24 (1.92)	0.00 [0]
Make me feel sexy, physically attractive and wanted	3.44 (1.61)	5.16 (1.73)	4.41** [1.01]
Help me gain peer group respect	5.56 (1.23)	6.31 (1.31)	2.50* [0.58]
Give me guilt feelings at the loss of virginity since sexual intercourse should be saved for marriage	4.60 (1.71)	2.41 (1.98)	-4.98** [1.14]
Make me feel sinful since premarital sexual intercourse is against my religion	5.08 (1.82)	2.11 (1.71)	-7.43** [1.71]
Help me find out whether my partner and I are sexually compatible	3.16 (1.65)	5.11 (1.84)	4.76** [1.09]
Show my partner how much I love him	3.76 (1.74)	5.59 (1.90)	4.26** [0.98]
Satisfy my curiosity	3.04 (1.40)	4.80 (2.11)	3.91** [0.90]
Deepen my relationship and bring me closer to my partner	2.24 (1.01)	4.92 (2.08)	6.23** [1.43]
Be appropriate only if we are planning to get married	4.08 (2.02)	4.85 (2.29)	1.51 [0.35]
Enable me to become sexually experienced and competent	3.60 (1.94)	4.93 (1.92)	3.02* [0.69]
Make me emotionally attached and dependent on him	3.52 (1.42)	3.19 (2.26)	-0.69 [0.16]
Predispose me to engage in subsequent sexual intercourse	3.96 (1.74)	3.63 (1.96)	-0.75 [0.17]
Have serious negative consequences if I'm not ready	2.52 (1.85)	1.79 (1.15)	-2.35* [0.54]
Lead to regrets if my partner rejects me	2.44 (1.92)	1.87 (1.33)	-1.63 [0.38]

NOTES:

(i) Standard deviation in parenthesis

(ii) The higher the score, the more unlikely the outcome.

*p < 0.05

** p < 0.001

¹ Cohen's d used as the measure of effect size

inexperienced sample) about the likely outcomes of the beliefs about premarital sexual intercourse. Statistically significant differences were found between the non-intend (sexually inexperienced) group and the sexually experienced group for 10 of the 15 beliefs. The beliefs on which they did not differ were related to the negative consequences of premarital sex if they were not ready for it; the likelihood of it leading to promiscuity ($M=3.85$); and their emotional dependence on their partner ($M=3.95$). The sexually inexperienced group thought there was a low likelihood of premarital sexual intercourse helping them gain peer group respect ($M=6.06$), and were equivocal about premarital sexual intercourse being appropriate only if marriage was planned ($M=4.62$).

Analysis of the normative beliefs

The salient referents used to establish normative beliefs were partners, parents, close friends, siblings, religious leaders,

grandparents, and uncles or aunts. The mean perceived views of the referents, together with the motivation to comply are presented in Table 2. In each case, the intend group reported the referent as significantly less opposed to their engaging in premarital sexual relations than did the non-intend group. The effect sizes for these differences ranged from $d=0.60$ to $d=1.06$. Four of these are classified as medium sized effects, and three as large sized effects. However, the means indicate that all the referents were thought to be on the non-approving side of the scale, with the exception of the partner and close friends, in the case of the intend group.

Significant differences between the two groups in respect of the motivation to comply to the wishes of referents were found for four of the seven referents. The effect sizes of these significant differences ranged from $d=0.73$ to $d=1.03$. One of these is classified as a medium sized effect while the other three are large sized effects. The non-intend group was more strongly motivated to comply with the wishes of parents, church leaders, grandparents and uncles or aunts. There was no significant difference in the motivation to comply with partners, close friends and siblings. The referent with whose wishes the intend

Table 2. Mean perceived opposition scores of salient referents and motivation to comply with these referents

Referents	Perceived opposition of referent			Motivation to comply		
	Intention n=25	Non-intention n=75	t value & [effect size] ¹	Intention n=25	Non-intention n=75	t value & [effect size] ¹
Partner	3.60 (1.26)	4.83 (1.83)	3.12* [0.72]	3.68 (1.38)	4.27 (1.59)	1.66 [0.38]
Parents	5.40 (1.50)	6.56 (0.93)	4.58** [1.06]	4.00 (1.71)	2.85 (1.52)	-3.17 [0.73]
Close friends	3.32 (1.44)	5.61 (1.48)	6.74** [1.56]	4.64 (1.68)	4.15 (1.68)	-1.26 [0.29]
Siblings	4.72 (1.62)	6.00 (1.34)	3.92** [0.91]	4.20 (1.76)	3.49 (1.58)	-1.89 [0.44]
Religious leader	6.16 (1.28)	6.72 (0.75)	2.67* [0.62]	4.72 (1.49)	3.04 (1.67)	-4.47** [1.03]
Grandparents	5.92 (1.26)	6.55 (0.96)	2.62* [0.60]	4.80 (1.12)	3.57 (1.58)	-3.60** [0.83]
Uncles/Aunts	5.16 (1.52)	6.12 (1.23)	3.18* [0.73]	5.56 (1.29)	4.09 (1.69)	-3.98** [0.92]

NOTES:

(i) Standard deviation in parenthesis

(ii) The higher the score, the more disapproving the referent; and the less motivation to comply.

*p < 0.05

** p < 0.001 001

¹ Cohen's d used as the measure of effect size

group exhibited the highest motivation to comply were partners. For the non-intend group, parents were the most significant referents.

Theory of Reasoned Action

Applying the Theory of Reasoned Action to the data indicated that the intention to engage in premarital sex is influenced by both attitudinal and normative control. The resulting model is presented in Figure 1.

There was a strong positive correlation between intention and attitude ($r=0.75$; $p<0.001$), and between intention and subjective norms ($r=0.60$; $p<0.001$). The relationship between behavioural beliefs x outcome evaluations (Sbe) and attitudes to premarital sex was significant ($r=0.37$, $p<0.001$), supporting the hypothesized model. However, the anticipated relationship between subjective norms and its belief-based estimate (perceived views of salient referents x motivation to comply (Snm)) was extremely low and not significant ($r=0.08$; $p>0.05$).

To test the accuracy of the Fishbein-Ajzen model, a multiple regression analysis was performed using intention as the dependent variable and attitude and subjective norms as the independent variables. The analysis indicates that the regression model was highly significant ($F(2,97)=79.90$; $p<0.001$), yielding a multiple correlation coefficient of $R=0.79$. The adjusted R^2 demonstrates that 61% of the variability in intention to engage in premarital sex is explained by attitudes and subjective norms. The standardized regression coefficients of the variables ($w=0.60$ for attitudes, and $w=0.29$ for subjective norms) show the relative importance of these variables in understanding the intention to engage in premarital sex. Thus, the attitudinal influence was considerably stronger than subjective norms.

The inter-correlation between attitude and subjective norm is significant ($r=0.53$; $p<0.001$), but is not strong enough to threaten the integrity of the regression equation. The absolute weights of the two variables may not be entirely reliable but the relative size of their contribution is. Table 3 presents the zero-

order correlations between all the variables.

Table 3. Relationships between components of the model: zero-order correlations

	Intention	Attitude	Subjective norm	Beliefs x outcome evaluations (Σbe)
Attitude	0.75**			
Subjective norm	0.60**	0.53**		
Beliefs x outcome evaluations (Σbe)	0.21*	0.37**	0.15	
Normative beliefs x motivation to comply (Σnm)	-0.05	0.06	0.08	0.20*

* $p<0.05$

** $p<0.001$

Further analyses were performed to explore the relationship between subjective norms and motivation to comply with the perceived views of salient referents. The subjective norm item was correlated with each of these factors separately. A strong positive correlation was found between the subjective norm and the perceived views of the salient referents ($r=0.61$; $p<0.001$), indicating congruence between the named referents and the generalized “people who are important” to the participant. A weak, but significant negative correlation was found between motivation to comply and subjective norms ($r=-0.25$; $p<0.05$). Thus, when the “people important” to the participant are perceived as being opposed to their engaging in premarital sexual relations there was high motivation to comply, and when they were perceived as promoting sexual relations, there was low motivation to comply.

DISCUSSION

The results of this study indicate that the intention of South African female students to engage in premarital sexual relations is influenced mainly by attitudinal factors, with subjective norms playing a lesser but significant role. These factors explain a large proportion of the variability of the intention scores, confirming the predictive usefulness of the Theory of Reasoned Action. The finding that attitudes proved to be the more

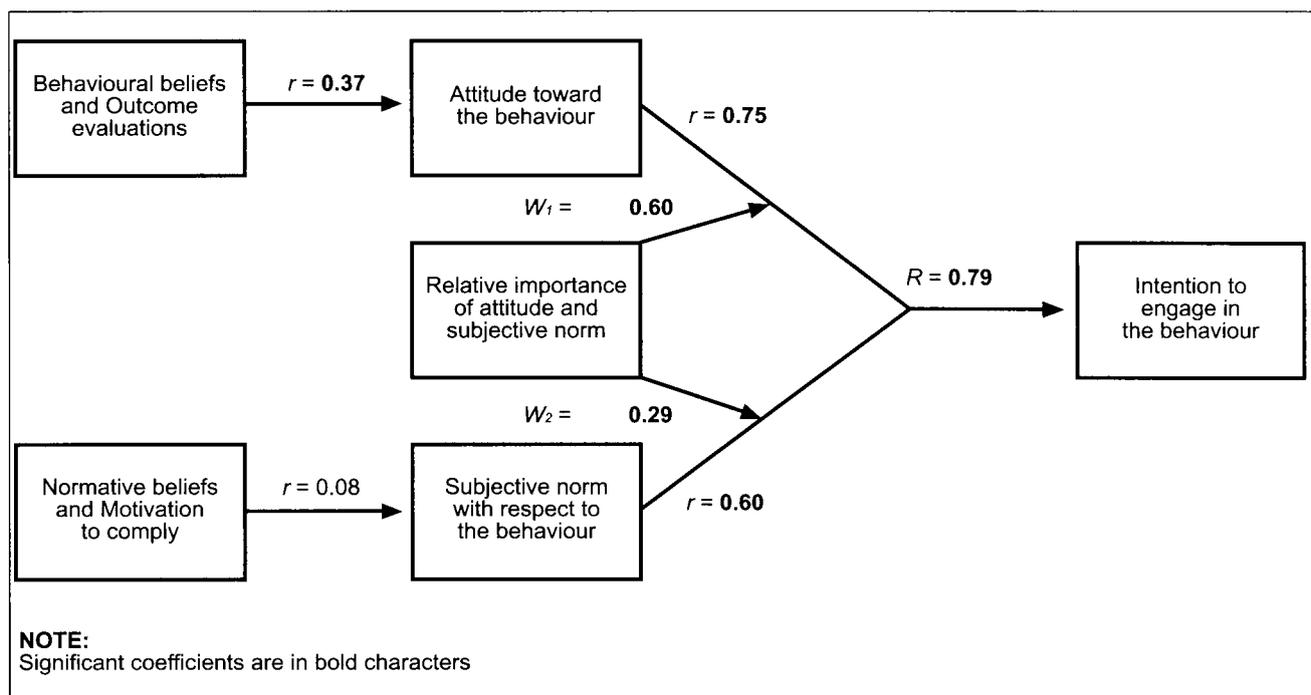


Figure 1. Relationships between beliefs, outcome evaluations, motivation to comply, attitudes, subjective norms and intention to engage in premarital sexual relations

important predictor of behavioural intention relative to the impact of subjective norms has been noted in other research using this model (Bandawe & Foster, 1996; Vallerand *et al.*, 1992).

The theory also makes predictions about the cognitive factors that underlie attitudes and subjective norms. The attitude to the intended behaviour is purportedly determined by the strength of beliefs about the outcomes of the behaviour, together with the value assigned to these outcomes. The basis for the subjective norms is argued to be the perceptions of salient referents' views about the behaviour and the motivation to comply with these referents. The results confirmed that the attitude to premarital sexual intercourse was associated with the *belief outcome strength x outcome evaluation* measure. However, contrary to expectations, there was almost no relationship between the measure of *subjective norms* and the *salient referents x motivation to comply* measure.

Closer examination of the behavioural beliefs revealed that for the whole sample, the primary concerns about premarital sex revolved around the emotional consequences that would result if the relationship were to fail or if they were to feel that they had made an unwise choice. This was closely followed by fears of pregnancy and sexually transmitted diseases. A number of beliefs strongly differentiated the women who intended from those who did not intend to engage in premarital sex. Beliefs related to the transgression of religious teachings, and guilt at the loss of virginity appeared to be of particular concern to those who did not intend to have premarital sexual relations. In contrast, beliefs concerning the role that sex has in enhancing relationships were considered important to those who did intend to have premarital sex.

These findings, though based on intentions, conform to the literature on actual premarital sexual intercourse. Other research has found that individuals who possess high levels of sex-related guilt have low sexual desire and are likely to think that engaging in premarital sexual intercourse is morally wrong (Weis, 1983). Moreover, D'Augelli and D'Augelli (1977) have found guilt to be a significant affective component of the sexual decision-making process. A number of studies have found that religiosity is negatively related to premarital sexual activity (Christopher & Roosa, 1991; Reed & Weinberg, 1984). Carroll, Volk and Hyde (1985) found that most females who engage in sex in stable dating relationships do so for the following reasons: they perceive sex as important for communicating love in a relationship, the happiness of their partner, the expression of their love for their partner, and for feeling loved and needed.

The lack of a relationship between subjective norms and the motivation to comply with salient referents is a matter of some concern. A number of researchers have suggested that the multiplicative procedure (normative belief x motivation to comply) required by the Theory of Reasoned Action could contribute towards the lack of correspondence (Falbo & Becker, 1980; Vallerand *et al.*, 1992). This would appear to be supported by our results, which show that, independently, these factors are related to subjective norms, but their product is not. Miniard and Cohen (1981) and Vallerand *et al.* (1992) also demonstrated that normative beliefs alone were a better predictor of subjective norms than the multiplicative term of normative beliefs and motivation to comply. However, it is also likely that this finding reflects the a-social nature of the theory.

The salient referents identified by the pilot group were close friends and family members. The role of the mass media and

social discourses in defining what is perceived as normative cannot be incorporated into this theory, as their influence is not generally recognized by individuals. Sexual relations, particularly heterosexual relations, are an intrinsic component of many media offerings, including films, television, books, magazines, and music products. Considering the barrage of such material consumed by most individuals, it is almost inevitable that their portrayal of sexuality will filter into individuals' construction of what is normative. This focus on inter-individual and intra-individual factors in decision-making, in particular, in the depiction of referents as central to the formation of subjective norms is an important limitation of the theory.

The study indicated that there was clear awareness of the threat of HIV contamination through sexual activity. Among both the sexually inexperienced and sexually experienced participants, the likelihood of contracting a sexually transmitted disease was perceived as very high. Among the sexually experienced participants, a large proportion indicated they used condoms regularly. Yet, as strong as were the fears about sexually transmitted diseases and an unwanted pregnancy, the fears about emotional distress and rejection by a sexual partner were stronger. This suggests that despite all the advances in women's rights in South Africa, these participants are still defining themselves in terms of their relationships with men. Finding and keeping a partner is seen as more important than health concerns. This has implications for campaigns attempting to prevent HIV transmission.

Many of the HIV/AIDS education programmes aimed at adolescents and young adults include a strong message that premarital sex and sex outside marriage are dangerous. Numerous surveys note the failure of this message (cf. HIV/AIDS Survey Indicators Database, 2003). However, there are some indications that there has been a decrease in premarital and extramarital sex in countries such as Uganda, Zambia and Senegal (de Waal, 2003). De Waal (2003) does, however, argue that this is attributable more to religious and social values than to AIDS prevention messages.

There are complex issues, both psychological and practical, involved in women's decision to have premarital sexual relations (where it is under their volitional control). Many of these are directly connected to women's subordinate position in society. This study has pointed to some of the identity and relational concerns of this sample of young women. The findings suggest that South African women will have to be empowered both socially and personally if they are to have a real say in sexual relations.

CONCLUSION

This study has, to some extent, confirmed the usefulness of the Theory of Reasoned Action in understanding individuals' intentions with respect to premarital sex. The individuals' attitudes to sex, beliefs about the outcome of these relations, and perceived norms are factors that influence their intentions. The results also highlight that for some participants, the importance of fostering relationships with men is a key factor in their sexual decisions. A major criticism of the model was identified as its failure to incorporate the influence of the public discourses that construct the social world. A further limitation to the generalizability of these findings is the sample used. While the sample was ethnically mixed, it consisted of predominantly middle-class students. These women are likely to hold the perception that engaging in sexual intercourse is their decision. Hence, the Theory of Reasoned Action is an appropriate model. However, as discussed earlier, for a large proportion of South

African women this perception would not hold, and the applicability of cognitive models such as the Theory of Reasoned Action or the Theory of Planned Behaviour is questionable. To understand the sexual behaviour and choices of these women, the social and economic context and the power relations between the genders will have to be addressed.

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