

*Using a longitudinal design, this research identified 6 distinct patterns of condom use/non-use for fifty six 16-19 year olds, and suggests ways to increase the consistency of condom use.*

Dr Lester Coleman is a Senior Research Officer for the Trust for the Study of Adolescence (TSA).  
www.tsa.uk.com

## Lester Coleman

# Promoting consistent condom use among young people: comparing intentions with reported behaviour

An in-depth study suggests ways in which teachers and youth workers may be able to increase the consistency of condom use among young people.

***Teenage birth rates in England are higher than any other Western European country...there has also been a steady rise in the first time infection rates for STI...promoting the consistent use of condoms continues to be a public health issue of critical importance.***

The prevention of unintended conception among young people in the United Kingdom is a matter of great concern. Teenage birth rates in England are higher than any other Western European country.<sup>1</sup> In addition, over one-third of all these conceptions has resulted in a termination of pregnancy, a proportion that has remained relatively constant over the last 10 years.<sup>2</sup>

There has also been a steady rise since the early 1990s in the first time infection rates for genital wart virus, herpes simplex virus and chlamydia trachomatis among females aged 16-19 years.<sup>3</sup> The inconsistent use of condoms among young people, as documented by a number of sexual behaviour surveys,<sup>4,8</sup> supports this reported increase. Since condoms offer an effective barrier against these Sexually Transmitted Infections (STI), including HIV,<sup>9-10</sup> promoting the consistent use of condoms among young people continues to be a public health issue of critical importance.

Using a longitudinal design, in this case interviewing the same young people on two separate occasions, this study intends to detail the processes surrounding condom use (and non-use). At the first interviews, young people's intentions towards future condom use will be recorded and then compared with actual reported behaviours during the follow-up interview. It is in this way that the paper will contribute to our greater understanding as to

why some people may use contraception (and specifically condoms) more than others. For example, why a person may report intercourse without using a condom even though he or she had *intended* to do so. Moreover, such an in-depth investigation may identify areas that ultimately increase the consistency of condom use. Sexual health promoters, such as teachers, youth workers and health professionals, may be assisted by following the examples of how *successful* condom use is enacted as well as noting indicators for the non-use of condoms.

### Methods

Fifty-six in-depth interviews were conducted among young people (43 women and 13 men aged 16-19) recruited from a number of sites within the Southampton Community Health NHS Trust: eight young people's family planning clinics, four youth clubs and two youth advisory centres.

At the end of the first interview, all participants were asked to consider a hypothetical scenario of first intercourse with a new partner and whether or not they intended to use a condom on this occasion. The instance of first intercourse with a partner was chosen since it represents an identifiable and notable act of intercourse comparable across the sample. In addition, because contraceptive non-use tends to be more likely on this occasion compared to subsequent acts of intercourse with the same

partner,<sup>11</sup> detailed information on contraceptive non-use (and the potential challenges upon this) would be more likely to be generated.

The reason for assessing the specific use of condoms was based upon the assumption that in all such cases of first intercourse, unless both partners were virgins or had been tested negatively for STI, there would be a potential risk from STI. Moreover, to record intentions and behaviours purely for contraception (as opposed to condoms) could not only overlook the likely potential for STI, but also fail to explore the interactive processes by which partners *negotiate* such precaution on this first occasion of intercourse together.

Following the implications of previous research into intention measurement,<sup>12-13</sup> it was decided to record a measure of behavioural expectation alongside the intention. The intention to use condoms, for this specific encounter, was obtained as follows: "on this occasion of first intercourse with a new partner, would you *want to* or *intend to* use a condom?" The expectation towards condom use was measured by: "on this occasion of first intercourse, do you think that you would *really* or *definitely* manage to use a condom?".

At the start of each interview, each young person was requested to sign a form giving their consent to be interviewed. They were reminded about the absolute confidentiality and anonymity surrounding their responses and they were invited to use fictitious names during the interview, and/or on the consent form, if they preferred. Following this, all respondents were asked if they objected to the interview being tape-recorded; all were content to allow their responses to be recorded in this way.

All interviews were fully transcribed and analysed as follows. The intentions and expectations recorded at interview 1 were essentially highly structured questions and were initially noted as *yes* or *no* responses. Whether condoms were or were not used in the reported intercourses with new partners (in between the interviews) were similarly noted. However, the search for potential explanations from the data, for example, why condoms were or were not used (in light of the intentions and expectations) involved more of a thematic analysis. The themes and meanings focused upon were drawn from the informal and open discussion, during the second or follow-up interview, surrounding the lead up to the recalled instance(s) of first intercourse. This included intrapersonal issues such as moods, reasons for intercourse, perceived vulnerability; interpersonal themes such as verbal and non-verbal communication

between partners, power imbalances and pressures; and contextual themes such as location, alcohol consumption, expectation of intercourse, condom availability. Ultimately, the use and/or non-use of condoms on these recalled instances of intercourse were recorded.

## Results

Of the 56 participants originally interviewed, 22 (18 women and 4 men) of these were successfully recalled for a second interview, between 8 and 10 months after the first. The second interviews were typically between 45 minutes and one hour in duration (marginally longer than those at interview 1). Of the 22 reinterviewed, 14 (11 women and 3 men) had experienced intercourse with a new partner since interview 1; only these participants were able to provide information surrounding their intention and expectation relationship with actual reported behaviour (although they generated a substantial amount of meaningful data).

The analysis revealed six distinct patterns of condom use/non-use, based upon respondents' intentions, expectations, actual reported use and whether they had initiated this use (usually by mentioning condoms or contraception prior to intercourse).

### Pattern 1 - Consistent users

These young people are the most effective contraceptive and condom users, with all their experiences of intercourse (both with steady partners and *one-night stands* or ONS) having included condom use.

For example, *Dave* - aged 19 (fictitious names are provided throughout) had always used condoms with his four lifetime partners and *Karen* (aged 18) had done the same with her seven. They both reported a positive relationship between their intentions, expectations and behaviour. Positive in the sense that they responded *yes* to intention to use, *yes* to expectation of use and *yes* to actual reported use; negative, in contrast, refers to *no* for expectation of use, *no* to actual use, etc.

Both were able to raise the issue of condoms prior to intercourse with their first partner since interview 1 (which were both ONS). With both participants having the foresight to obtain condoms beforehand in the event of what were both unexpected encounters, all conditions were indicative of successful condom use. The clarity and timing of their discussions are illustrated as follows and have been presented alongside their intentions (outlined first) from interview 1.

### ... 'consistent users' are likely to have the foresight and ability to prepare and plan for largely unexpected instances of intercourse by obtaining and carrying condoms in advance.

**Karen:**

" I don't think I'd ever have sex without using some form of contraception, usually a condom. For the first time I'd definitely would use a condom." *interview 1*

" ....we was sort of like getting a bit more into it and I just goes are you going to have sex, are you going to shag me and he goes umm, yeah, and I goes well there's some condoms in a drawer in there... I was so abrupt about it, but he never sort of like said no or whatever..." *condom used - interview 2*

**Dave:**

" I'd be very determined.....so if you're not using one [a condom], we don't do it [intercourse]." *interview 1*

NB. Words placed within the squared brackets were not actually said, but allow the reader to appreciate the context of the discussion.

" I took my wallet out and she said she was on the pill but I said you know, double dutch and sort of you know, may as well use it [a condom] anyway.....she said fair enough you know, she wasn't against it.....she said that's all right, that's good." *condom used - interview 2*

The participants' consistent use of condoms is typified by both their experiences of refusing intercourse unless condoms were to be used. On one occasion this was because a lack of availability and for the other because their partner refused to use one. These two cases are illustrated in turn,

**Karen:**

" I mean there have been times when we haven't had any [condoms] around and he was like are you sure you're not on the pill? No I'm not so you'll wear one anyway mate, you know what I mean, I don't know who you've slept with before me and I'm not risking it.....not unless you've got any!" *interview 2*

**Dave:**

" ...it was back to her car in the car park, the subject of sex came up, I got out the condom as I do, and she didn't want to..she said what's that and she was like no, you know, if you're going to wear one of them we're not doing it. So right, fair enough, I went back to the club." *interview 2*

When examining the transcripts for each of these cases, both exhibit a high self-esteem and confidence (particularly in the ability to discuss condom use with their partners). A partner opposing condom use, or even persuading them to have intercourse when condoms are unavailable, would certainly not influence their behaviour. This confidence is typified as follows,

**Karen:**

" I mean don't get me wrong, if I say no [to intercourse without a condom] and I'm like really gagging for a shag then I'm like why did I say no, why do I have to be so moral, do you know what I mean, but at the end of the day I'm not going to compromise myself in that way.....it's my life, I'm eighteen years old." *interview 2*

It is apparent when examining these 'consistent users' that the ability to openly discuss contraceptive intentions prior to intercourse is highly likely to ensure that these intentions are successfully translated into behaviour. Moreover, the ability and confidence to negotiate their intentions also show more clearly how and why these communication skills are so important in ensuring condom use. The analysis also illustrates that these 'consistent users' are likely to have the foresight and ability to prepare and plan for largely unexpected instances of intercourse by obtaining and carrying condoms in advance. For example, by *Dave* who, when in a recognisable situation of impending intercourse acted accordingly by '*....the subject of sex came up, I got out the condom as I do.....*'.

### Pattern 2 - Converted users

Although these people reported using condoms consistently between interviews, this had not always been the case throughout their sexual careers. *Michelle* (aged 18) and *Becky* (aged 17) had both experienced first intercourse with a new partner without the use of any contraception, but more recently and especially in the time in between interviews, have used condoms consistently. In this way, they have been termed 'converted users'.

Both cases reported positive associations between their intentions, expectations and behaviour. For the experiences of first intercourse with a new partner in between interviews (three new partners for *Michelle* and one for *Becky*), both had talked about condom use with their partners immediately before intercourse. As for the consistent users, both obtained condoms in advance and discussing the issue of condoms beforehand certainly facilitated their use. However, what is particularly interesting about these cases is their contrast in communicative ability and insistence to use condoms when referring back to their first interview. For example, *Michelle* did not use a condom when recalling an occasion of first intercourse in interview 1,

**Michelle:**

" I said to him, because I didn't have any condoms,

have you got any and he said no, we'll be all right, and I said no. I said I might get pregnant, something like and he said no it'll be all right like that. It [intercourse] sort of happened."

*condom not used - interview 1*

Both cases identify specific *triggers* in increasing their self-efficacy and general confidence in using condoms. For *Becky*, it was the trauma of a pregnancy scare that made her really take the issue of contraceptive and condom use more seriously,

**Becky:**

" I don't know it [pregnancy test] takes two minutes I think for it to show up when you're pregnant you know. I just sat there with my friend like looking at the clock and it was just like the seconds were ticking away.....and it was like the worst two minutes of my life so I'm not going through that again, no way." *interview 2*

For *Michelle*, it was the experience of a partner first talking about condoms and from then on it seemed more *natural* to engage in such discussions,

**Michelle:**

" When XXXX said to me before we had sex are we going to use condoms.....and it progressed from there. When you're younger I just, well yeah when I was younger it was more difficult to say that." *interview 2*

This theme of taking the first *step* in talking about condoms was also reported by *Becky*. Following her pregnancy scare (reported above), she had initiated (for the first time) a discussion about condoms with her partner. With this discussion being received positively, the perceived threat of a partner's negative reaction to such discussion had been dispelled and thus her ability to negotiate condom use in future situations had similarly increased,

**Becky:**

" I said if we're going to do this [intercourse] we're going to do it properly.....I always thought it might ruin it, ruin the moment sort of thing, cause that's like go through all the preparation again and that seemed clinical but you know it made everything a bit more comfortable." *interview 2*

### Pattern 3 - Influenced users

Those people whose use of condoms is particularly subject to their partners' actions are termed the 'influenced users'. When examining their positive intention to use a condom alongside the expectation that condom use may not

occur, it could be argued that these cases do not exhibit as much willpower or belief in their own capabilities to use condoms when compared to the consistent and converted users depicted previously. *Jane* (aged 16) and *Kevin* (aged 16) had estimated that they might well not use condoms on their first intercourse with a new partner (despite intending to), but almost to their own surprise had managed to do so. The following example illustrates how *Jane* recorded her expectation (at interview 1) and then reported her actual use of condoms (at interview 2). Her partner's role in ensuring condom use is quite clear,

**Jane:**

" I think it [using a condom] would depend on, like if he looked like a bloke that would just try it on with everybody, cause usually you can tell how forward they are, whether they like do it all the time and if they're really shy then you know that they haven't [got anything to hide] really." *interview 1*

" We was at my house.....I think he just got one [a condom] out, we didn't really talk about it." *interview 2*

*Jane* and *Kevin*, having experienced both use and non-use of condoms in between their interviews, can be classified as influenced users. For both, condoms had always been available at the time of intercourse, so the key difference may well be their partners' preference (and initiative) for condom use or non-use. For example, *Kevin* reports from two ONS where condoms were and were not used respectively,

**Kevin:**

" I started kissing her and that and I said to her, I want sex, and she goes have you got anything, I goes yeah, showed her a johnnie." *interview 2*

" I just carried on [after partner said she did not like condoms]. She said I'm on the pill you know, so didn't bother using them.....there was nothing in the way like, you just feel complete." *interview 2*

In contrast to the previous two patterns of use, the lesser ability to communicate their intentions, to negotiate in scenarios of conflicting intentions, plan and prepare for intercourse results in the 'influenced users' as having less *control* over whether condoms are used. In contrast, it is the sexual partner who takes hold of the interaction and his or her actions are more likely to determine the outcome for these 'influenced users'.

### Pattern 4 - Over-optimists

The next 3 patterns of use ('over-optimists',

the 'resigned' and 'consistent non-users') all refer to cases of intercourse without the use of condoms. Despite rarely using condoms on recalled occasions of intercourse (at interview 1), *Julie* (aged 18) nonetheless estimated that she would use condoms on her next occasion. For this reason, *Julie* is categorised as an 'over-optimist' (although with her partner taking responsibility for condom use on her 4th occasion, suggests she also has traits of an 'influenced user'). From interview 1, she recalls intercourse without the use of a condom,

**Julie:**

" I went over to his new flat that he was painting and it [intercourse] just happened one night.....I thought well he's recently had a baby so I don't think he's likely to have any diseases or anything, I never had anything [ a condom] on me and he didn't either cause you know, neither of us expected it." *interview 1*

Although *Julie* recognises the importance of using condoms, this has not led to consistent preventative behaviour. Given these experiences recorded at interview 1, her expectations were most surprising (or over-optimistic),

**Julie:**

" Well at the end of the day if it's between ruining sex and getting a deadly disease or a disease that can stop me from having kids, then I'd rather say no [to not using a condom].....if he suggested it [condom use] then fair enough, if not I'd bring up the subject.....I'd say to him if you respect me then you will [use condoms]." *interview 1*

She recognises the need for a discussion and is convinced that to initiate one prior to intercourse with a new partner is feasible. However, in between interviews, *Julie* failed to use a condom with her new partner, thus quite in contrast to her expectations recorded earlier. In similar fashion to her earlier experiences, intercourse occurred unexpectedly,

**Julie:**

" .....we went out umm, that's when he had his old car, we had loads of people in his car, we stopped off at the lakeside and went for a walk and just one thing led to another, then it [intercourse] happened.....it [contraception] really slipped my mind." *condom not used - interview 2*

The 'over-optimist' does not lack willpower or belief in his or her capability in using condoms (as shown by their expectations), but does lack the facility (such as communication skills)

to transfer positive intentions and expectations into subsequent behaviour. A lack of planning and preparation is also evident, for example in *Julie's* case (see above) who '*never had anything [a condom] on me*'.

### Pattern 5 - The resigned

The key difference between the 'resigned' and the 'over-optimist' is that the former expresses less willpower and perceives that they are incapable of using condoms and, given their previous behaviours, are perhaps more realistic with this prediction. Those cases categorised as the 'resigned' (*Sarah*, aged 16, *Samantha*, aged 16, *Sue*, aged 18 and *Jo*, aged 17) have regularly failed to use contraception and condoms with their previous partners, for example,

**Sue:**

" I really liked him so I went round there [to his house] and ended up in his bedroom.....it was just like a mad like of the moment type thing, I was umm, a million miles away.....that [contraception] was the last thing on my mind." *interview 1*

Although an awareness of condom use is reflected by their positive intentions to use condoms with future partners, the negative expectations illustrate a lack of determination or belief in their own ability. In line with their previous behaviours, these cases are perhaps more realistic (compared to the 'over-optimists') about their likelihood of using condoms. For example,

**Sarah:**

" I think I would be pretty determined [to use a condom], but then again I might give up in the end and just umm, do it anyway cause I sort of give in quite easily." *interview 1*

When considering their previous behaviours and low expectation of condom use it is of little surprise that, at interview 2, all four cases reported intercourse with a new sexual partner without the use of a condom. It appears that the inability to initiate discussions about condoms may contribute to this lack of use (as for the 'over-optimists'), together with this perceived inability of translating their intentions into practice (unlike the 'over-optimists'). For example,

**Sue:**

" .....I stayed round his house that night basically, it was the first time I'd stayed there so it just kind of happened.....I did sort of think about it [condom

*...the lesser ability to communicate their intentions, to negotiate in scenarios of conflicting intentions, plan and prepare for intercourse results in the 'influenced users' as having less control over whether condoms are used.*

*When considering their previous behaviours and low expectation of condom use it is of little surprise that, at interview 2, all four cases reported intercourse with a new sexual partner without the use of a condom.*

use] but I just didn't do anything about it. It's the fact that we didn't really talk about stuff like that....."  
*condom not used - interview 2*

### Pattern 6 - Consistent non-users

From the 22 number 2 interviews, one participant had not only consistently failed to use a condom on every occasion of intercourse, but had shown no regret about this. *Darren* (aged 18) had always intended to, and indeed had never used a condom. For his 12 partners prior to interview 1, he never felt concerned about using condoms even if his partners were not on the pill. Not only does *Darren* have extremely negative attitudes to condoms, but he also perceives that women share these views,

#### Darren:

" I don't like condoms, they [women] don't either, I don't like the smell of rubber, you know what I mean.....It's the time that it takes to put the condom on. After that, you like you want it there and then you don't want to wait like three minutes, looking for the condoms, opening the packet, breaking the seal around the packet of condoms, opening the condoms, taking them open, putting it on."  
*interview 1*

Later in interview 1, *Darren* expressed his concerns about an impending appointment at the Genito-Urinary Clinic for an HIV test. However, unlike the 'converted users', this experience clearly had no impact upon his future use of condoms. It is perhaps without surprise that *Darren* had failed to use condoms with his two partners reported at interview 2.

Choosing to consistently not use condoms represents the greatest task of those challenged with promoting the sexual health of young people (of course this study cannot infer how representative the consistent non-user seen here is with regard to the wider population). Indeed, it is difficult to explain this behaviour in any obvious way. *Darren* appears confident with sexual partners, is aware of the risks of pregnancy and STI (especially after having an HIV test), but nonetheless still prefers not to use condoms. Having extremely negative attitudes towards condom use appears to stifle any possible increased likelihood of using condoms in the future.

### Discussion

From the detailed qualitative analyses of the 14 cases that had experienced intercourse with a new partner since interview 1, six contrasting patterns of condom use were defined according to the intention-behaviour relationship. The patterns of condom use included two

of consistent use ('consistent users' and 'converted users'), one of inconsistent use ('influenced users') and three of consistent non-use ('over-optimists', the 'resigned' and 'consistent non-users').

These patterns help to identify the actions and processes that lead to the successful use of condoms. For example, the 'consistent users' illustrate the benefit of communication skills and in this way support other studies that have argued this importance.<sup>14-17</sup> Moreover, these most effective condom users illustrate the importance of planning and preparation (i.e. in obtaining condoms, preparing what to say to a partner, etc.). In addition, the 'converted users' demonstrate the relationship between skills enhancement and increased control.<sup>18-20</sup> By ensuring future use, the 'converted users' (and the 'consistent users') also highlight the powerful influence of past upon current behaviour.<sup>17,21</sup>

### Health interventions

The varying patterns of condom use and non-use also illustrate that particular health interventions may well be more relevant to some young people rather than others. For example, resisting pressure or persuasion from the sexual partner, through negotiation as well as assertiveness training, could be the key to transform 'influenced users' into 'consistent users'. Those cases who intended to use condoms but nonetheless expected that they might not (such as the 'resigned') would appear to be the greatest beneficiaries from STI awareness, negotiation strategies and self-efficacy regarding condom use. Planning and rehearsal of these actions could be a means of increasing their self-efficacy.

For those whose expectation towards future use is more positive (as for the 'over-optimists'), it appears that acquiring the necessary skills to translate this expectation into use would be more appropriate, assuming that their will-power (as indicated by their expectations) towards condom use is relatively high. For example, communication skills enhancement interventions enabling them to initiate conversations about condom use prior to intercourse, could help translate these positive expectations into use (as shown by the 'consistent users').

The 'consistent non-users' represent the greatest challenge to interventions aimed at improving the sexual health of young people; they have no interest or intention to use condoms. Raising awareness to the potential for conception and STI (and pathways for prevention), focusing upon the perceived severity and

### *Promoting a greater sense of belief and will-power could then help formulate more positive expectations, at which point communication skills enhancement interventions could follow to foster greater consistency in condom use.*

susceptibility to the health issues associated with condom non-use, together with promoting more positive attitudes towards condoms would appear to be a prerequisite for changing their intentions. Promoting a greater sense of belief and will-power could then help formulate more positive expectations, at which point communication skills enhancement interventions could follow to foster greater consistency in condom use. Furthermore, and as illustrated by this last example, these various patterns of use/non-use may reflect the potential to implement promotion efforts in a sequential manner according, perhaps, to different levels of age or sexual experience (in essence moving people from potential 'consistent non-user's to 'consistent users').

### Sexual health education

The strengths of this research lie in its greater descriptive clarity and explanation surrounding contraceptive use and non-use. Indeed, with several themes unearthed quite inductively, this research clearly may have an important contribution to make upon sexual health education and promotion.

The quotes, included in this paper, could enable sexual health promoters to inform and develop debates with young people. The description of the six patterns of behaviour provide opportunities for young people to reflect on their own sexual health strategies.

However, given the sample size, selection of interviewees and the geographical limitation, it is important to stress that the application of this work must be subject to wider investigation and *verification* by additional, more valid research. This additional research could investigate the condom use patterns of a randomly selected sample and one that is more substantial and geographically and ethnically diverse, allowing it to draw conclusions that are more generalisable. With this in mind, the extent to which the research presented in this paper may contribute to innovative health education and policy must still be subject to further research, which this paper has hopefully been able to stimulate.

#### References

- 1 Social Exclusion Unit. *Teenage Pregnancy*. London: Stationery Office, 1999.
- 2 Office for National Statistics. *Population Trends* 2000. 2001.

- 3 PHLS Communicable Disease Surveillance Centre. *Trends in Sexually Transmitted Infections in the United Kingdom 1990-2000*. 2002.
- 4 Breakwell GM, Fife-Schaw C. Sexual attitudes and preferences in a UK sample of 16-20 year olds. *Archives of Sexual Behavior* 1992; 21: 271-293.
- 5 Ford N. The sexual and contraceptive lifestyles of young people: Part II. *British Journal of Family Planning* 1993; 18: 119-122.
- 6 Ford N, Halliday J, Little J. *Changes in drug use and sexual lifestyles of young people in Somerset 1990-1996*. Department of Geography, University of Exeter, UK: Occasional paper, 1997.
- 7 Wellings K, Field J, Johnson AM, Wadsworth J. *Sexual Behaviour in Britain: The National Study of Sexual Attitudes and Lifestyles*. London: Penguin, 1994.
- 8 Coleman, LM. Comparing contraceptive use surveys of young people in the UK: what can we learn from such a review? *Archives of Sexual Behavior* 1999; 28: 225-264.
- 9 Stone K, Grimes DA, Madger LS. Primary prevention against sexually transmitted diseases: a primer for clinicians. *Journal of the American Medical Association* 1986; 255:1763-1766.
- 10 Henry K, Osterholm M, Macdonald K. Reduction of HIV transmission by use of condoms. *American Journal of Public Health* 1988; 78: 1244.
- 11 West P, Wight D, Macintyre S. Heterosexual behaviour of 18 year olds in the Glasgow area. *Journal of Adolescence* 1993; 16: 367-396.
- 12 Warshaw PR, Davis FD. Disentangling behavioural intention and behavioural expectation. *Journal of Experimental Social Psychology* 1985; 21: 213-228.
- 13 Sheppard BH, Hartwick J, Warshaw PR. The Theory of Reasoned Action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research* 1988; 15: 325-343.
- 14 Barthlow DJ, Horan PF, Diclemante RJ, Lanier MM. Correlates of condom use among incarcerated adolescents in a rural state. *Criminal Justice and Behaviour* 1995; 22: 295-306.
- 15 Detzer MJ, Wendt SJ, Solomon LJ, Dorsch E. Barriers to condom use among women attending planned parenthood clinics. *Women and Health* 1995; 23: 91-102.
- 16 LoConte JS, O'Leary A, Labouvie E. Psychosocial correlates of HIV-related sexual behaviour in an inner city STD clinic. *Psychology and Health* 1997; 12: 589-601.
- 17 Sheeran P, Abraham C, Orbell S. psychosocial correlates of condom use: a meta-analysis. *Psychological Bulletin* 1999; 125: 90-132.
- 18 Abraham CS, Sheeran P. From health beliefs to self-regulation: theoretical advances in the psychology of action control. *Psychology and Health* 1998; 13: 569-591.
- 19 Bandura A. Health promotion from the perspective of social cognitive theory. *Psychology and Health* 1998; 13: 623-649.
- 20 Conner M, Armitage CJ. Extending the Theory of Planned Behaviour: A review and avenues for further research. *Journal of Applied Social Psychology* 1998; 28: 1429-1464.
- 21 Abraham CS, Sheeran P, Abrams D, Spears R. Health beliefs and teenage condom use: A prospective study. *Psychology and Health* 1995; 11: 641-655.