

INTENTION TO HAVE SEXUAL INTERCOURSE WITHOUT A CONDOM

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Abstract. Based on the research of Ajzen & Sheikh (2013), the fundamental objective of this study is to explore the importance of Anticipated Affect and Past Behaviour in the intention to have sexual intercourse without a condom. A questionnaire was applied to a sample of 184 students from the University of Santiago de Compostela. Anticipated affect was measured with regard to having sexual intercourse with and without a condom. The results show that this variable significantly increased the model's explanatory capacity only when the variables from the Theory of Planned Behaviour and the affect are measured in the same sense as the action ($R^2 = 4.0\%$). Past Behaviour is the added variable which explains most variance ($R^2 = 9.0\%$), and are related not only indirectly, but also directly and significantly with this intention respectively. This intention is linked with components of emotions, experience and social influence.

Keywords: anticipated positive affect, anticipated negative affect, past behaviour, theory of planned behaviour, intention to not use a condom

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1. Introduction

Throughout the 1990s, the use of different contraceptive methods among young people increased progressively, with the male condom occupying a prominent position. Owing possibly to its being one of the most accessible, and the one which helps to prevent, with high levels of effectiveness, unwanted pregnancies and/or sexually transmitted diseases, which by the end of the 1980s had reached truly disconcerting levels in Spain.

Nonetheless, in recent years, a number of studies have highlighted a certain drop in the use of this method of contraception in the setting of sexual intercourse which may entail some type of risk (Conde 2004, CIMOP 2005, Real, Oliva, Suárez & Vázquez 2003). According to data for 2012 from the Spanish Ministry

of Health, Social Services and Equality, it is in the 20 to 29 age group, very similar to the one used in this study, where the abortion rate is highest (37.79 per thousand). In recent years use of the so-called morning-after pill has mushroomed and our youngsters are starting to use it as a replacement for the condom, with all the health risks that practices of this type may entail, thus ignoring the condom's prophylactic function. In this regard, there has also been an increase in sexually transmitted diseases over recent years, affecting not only high-risk groups, but also broad sections of the population, such as young people (Lepe, Otero, Blanco, Aznar, & Vázquez 2008).

It is precisely this tendency for young people to expose themselves to risks of this type that has led us to attempt to explain what it is that motivates them to perform behaviours of this type, which are being consolidated in an alarming way. Thus, there is a need to better understand the psychosocial factors that have a bearing on these behaviours with a view to being able to propose specific corrective measures to prevent them.

In the research carried out on the use of condoms, different theoretical models have been applied, including the Health Belief Model (Becker 1974, Rosenstock 1974), the Self-Efficacy Model (Bandura 1977), to the Theory of Reasoned Action (Ajzen & Fishbein 1977, Fishbein 1980, Fishbein & Ajzen 1975) and/or the Theory of Planned Behaviour (Ajzen & Madden 1986, Ajzen 1991, 2002). The final one mentioned, the TPB, is one of the most widely used models for attempting to explain factors that have a bearing on intention, such as in the behaviour of using a condom (Albarracín, Johnson, Fishbein & Muellerleile 2001, Carmack & Lewis-Moss 2009, Groenenboom, Van Weert & van den Putte 2009, Protogerou, Flisher, Aaro & Matheus 2012, Protogerou, Flisher, Wild & Aaro 2013, Rijdsdijk et al 2012, Sheeran & Taylor 1999).

In accordance with the Theory of Planned Behaviour (TPB), the immediate determinant of behaviour is behavioural intention, which is in turn determined by attitude towards the behaviour, the subjective norm and perceived behavioural control. These three variables are based on behavioural, normative and control beliefs, respectively. Nonetheless, as the authors point out, there are factors which can limit the subjects' will to perform a determined behaviour. Accordingly, perceived control, along with intention, will also be considered an immediate determinant of the behaviour. Despite the TPB being one of most widely used theories for predicting a broad range of behaviours, according to a recent meta-analysis by McEachan, Conner, Taylor & Lawton (2011), the explanatory capacity of the TPB in intention to maintain generally healthy behaviour, such as condom use, has not been very high (43.3%), with relationships of moderate or little significance having been found between the different variables. Hence, from a number of different studies, an extension of the model has been proposed, by adding additional variables which may allow its explanatory power to be enhanced.

In the context of condom use, a number of variables have been introduced such as self-efficacy (Beadnell, Wilsdon, Wells, Morison, Gillmore & Hoppe 2007),

perceived risk (Cha, Kim & Patrick 2007), emotions (Caballero, Toro, Sánchez & Carrera 2009, Conner, Graham & Moore 1999, Perugini & Bagozzi 2001, Ravis, Sheeran & Armitage 2009), the moral norm (Conner, Smith & Mcmilla 2003, Godin, Conner & Sheeran 2005, Jellema, Abraham, Schaalma, Gebhardt & Empelen 2013), sexual arousal (Turchik & Gydyez 2012) and/or past conduct (Lugoe & Rise 1999).

With regard to the specific study of the intention to have sexual intercourse without a condom, studies in the scientific literature are hard to find. Indeed, the only ones we have come across which address condom use from a perspective of risk (such as the non-use thereof, as proposed in this study) and not of healthiness are those of Caballero, Toro, Sánchez & Carrera (2009) and Protogerou & Turner-Cobb (2011).

It is precisely the paucity of information and studies on sexual intercourse without the use of a condom from the perspective of risk behaviour and the relationships with such moderate or low significance found from the perspective of healthy behaviours, such as the use thereof, that has led us to consider a study such as the present one, in which we aim not only to enhance the explanatory power of the model, but also to clarify the type of relationships between the variables analysed in the case of a risk behaviour so prevalent among young people.

In this study, it was decided to include Anticipated Affect, as risk behaviours are behaviours with high emotional involvement which are difficult to deal with globally from a basically rational personal model, and Past Behaviour, as it is one of the variables which may be influencing future intentions.

Anticipated Affect

Anticipated affect “refers to the prospect of feeling positive or negative emotions (e.g., exhilaration, regret) after performing or not performing a behavior” (Ravis, Sheeran & Armitage 2009, p. 2987).

As mentioned above, a good number of studies endorse the inclusion of emotional variables into the original model in the setting of risk behaviours in general. In the specific case of condom use, it would seem that the introduction of anticipated affect adds a significant explanation to the prediction of intentions, and owing which it should be taken into account (Glasman & Albarracín 2006).

Even Icek Ajzen himself, working with Sana Sheikh, in a recent study from 2013, also included emotions along with the variables from the TPB. Despite the fact that in said work they did not study the specific intention that concerns us here, they did apply the same to explain intention to perform other risk behaviours, such as those of drinking alcohol and eating fast food. Hence, and taking into account that Ajzen is one of the creators of the TPB, we cannot ignore the contributions made by these authors in this regard. The results of this study show that including anticipated affect, which for them takes the form of regret, pride and concern, only affects the explanatory power of the TPB under very specific measuring conditions; i.e., “Only when anticipated affect is measured with respect to one alternative (action or inaction) and the TPB variables are assessed with

respect to the other alternative do we observe a significant residual effect for anticipated affect” (p. 160).

Despite this conclusion, these authors continue to assert that this variable does not require a specific measurement owing to the fact that this residual effect (approximately 4.02% in relation to intentions) would already be included in the measurement of attitude, this being an evaluation (positive or negative) which includes the probability of a determined action having certain consequences (be they affective or not).

Nonetheless, here it should be pointed out that a number of studies have attempted to explain and dispel the possible overlapping to which Ajzen & Sheikh allude, clearly distinguishing this concept in relation to attitudes (Rappaport & Orbell 2000, Richard, de Vries & van der Pligt 1998) and in relation to behavioural beliefs (Evans and Norman 2003). Thus, while attitude and affective reactions in general comprise the global assessment of individuals and their feelings on the performance of the action, respectively, anticipated emotions refer to the feelings anticipated or predicted after performing or not performing an action. That is, this distinction would be made in terms of temporal perspective (Richard, van der Pligt & de Vries 1996).

In our study, we have included Anticipated Affect measured in relation to having sexual intercourse both with and without a condom. We selected 9 emotions: enthusiasm, happiness, confidence, guilt, fear, regret, anger, shame and sadness. Owing to the difficulty of finding specific studies on the intention to perform this particular risk behaviour, in the choice and selection of these variables we resorted to studies in the scientific literature which incorporated emotional variables into the TPB, to try and explain both intentions to perform some type of risk behaviour, like the one studied herein, and those related with the use of condoms. By way of example, and in relation to risk behaviours, we would single out that by Caballero et al. (2003), which include the emotions of happiness, sadness, fear, guilt, anger and shame; and that of Ajzen & Sheikh (2013) in which they added regret, pride and concern. In relation to the emotions that were introduced into the setting of condom use, we would mention that of Hynie, MacDonald & Marques (2006) in which they studied negative anticipated emotions, such as shame and guilt; that of Conner et al. (1999), where they introduced the emotions of regret, concern, satisfaction and relaxation; that of Abraham, Henderson & Der (2004), in which they focused on regret; and that of Caballero et al. (2009), in which they used happiness, fear and guilt. Thus, practically all the emotions we have selected were included in the various studies referred to above, with the exception of enthusiasm and confidence. Nonetheless, we felt it important to include these two emotions as, on many occasions, it may well be an excess of enthusiasm and/or confidence that is leading our young people to act irresponsibly and imprudently – in this case, not only with their health, but also with their future.

Past Behaviour

The incorporation of the past behaviour variable into the model had already provided grounds for debate in the Theory of Reasoned Action, the precursor of the TPB. Authors such as Bentler & Speckart (1979, 1981), Cialdini, Petty & Cacioppo (1981), Fazio & Zana (1981), Fredicks & Dosset (1983), Cooper & Croyle (1984), Davidson (1985), Echevarria, Paez & Valencia (1988), had already indicated the need to integrate past behaviour to increase the model's predictive power. Here it should be pointed out that for Ajzen & Fishbein (1977, 1980), the prior experience of subjects would have no direct bearing on intention or on behaviour, since the effect of the same would appear in the attitude itself; hence, the inclusion thereof would not increase the model's predictive power. Subsequent research, such as that by Echevarria et al. (1988), has demonstrated that Fishbein & Ajzen's conclusions were not totally accurate, since, in addition to increasing in model's predictive power, the inclusion of prior experience also has a direct effect on behaviour and behavioural intention. Some years later, along the same lines, a large number of authors evinced that past conduct offered an additional explanation to the prediction of intentions (Bagozzi et al 2000, Kidwell & Jewell 2008, Rhodes & Courneya 2003, Smith et al 2007). Nonetheless, Oullette & Wood (1998), and Ajzen himself in collaboration with Bamberg and Smith (2003), affirmed that past behaviour should only be considered when the behaviours in question have been performed frequently in the past. In turn, McEahan et al. (2011), in a recent meta-analysis, concluded that past conduct only contributes an additional 5% in the explanation of intention.

In the setting of condom use, Albarracín, Fishbein & Middlestadt (1998), also added past conduct to the classic TPB variables. In this study they found that incorporating past conduct into the regression equation increased the total variance explained in relation to intention by 4%. In the study by Lugoe & Rise (1999), significant contributions were also found, although these were very modest (2%). More recent studies, such as those by Rijdsdijk et al. (2012), reached the conclusion that the intention to use a condom is motivated by different factors which depend on prior sexual experience.

Despite the fact that in the study by Caballero et al. (2009) the differences between males and females regarding the emotional pattern and sexual experience and inexperience were analysed (with significant effects only being found in the latter), this variable was only used as a criterion to divide the sample, and not as an additional variable to be taken into account in the extended TPB model, as proposed in the present study.

Taking the foregoing into account, the principal objectives of this study can be listed as follows: 1) to ascertain the possible contribution that the variables incorporated into the original model provide in explaining intention to have sexual intercourse without a condom; 2) to ascertain whether emotions have a significant influence on intention when this variable is cross measured (i.e. in the opposite sense of the action), or whether they also have a significant influence in the same

sense as the action; 3) to specify the type of relationship established between these new variables and the variables in the Theory of Planned Behaviour.

2. Method

Participants

The sample comprised N = 184 Psychology students from the University of Santiago de Compostela, aged between 18 and 30, of which 36 were male (19.7%) and 147 female (80.3%). The average age of participants was 23.37, with a standard deviation of 1.44. Of the participants, 92.9 % (n = 171) were sexually active, 56.7 % (n = 97) of whom always used condoms, and 43.3 % (n = 74) of whom had never had sexual intercourse with a condom, or had not used them occasion. Among the latter, all employed alternative contraception methods.

Measures

In order to conduct this research, a questionnaire was constructed on the basis of the instructions specified by Ajzen (2002, 2006) and Ajzen & Sheikh (2013). Accordingly, as indicated by Ajzen, intention has been defined in terms of its elements: Objective, Action, Context and Time (OACT). According to said author, the generality of one or more of the OACT elements can be increased. Thus, in our study, action (having sexual intercourse), objective (without a condom) and the time fraction (in the next 60 days; a period which the author leaves to the joys choice of the researchers are specified, but the context (at home, in a hotel, etc.) are not, given that we are not particularly interested in the specific context. Hence, we can generalise the context element to all relevant contexts, as specified by Ajzen in his considerations on measurement for the TPB.

To measure the variables, 7-point Likert scales have been used, except for attitudes for which a semantic differential was used. The corresponding limits will be specified in each specific case.

To measure *Attitude toward the Behaviour*, we used an item comprising five pairs of adjectives, taking into account the two components in the overall evaluation of the individual, and referred to by Ajzen as an instrumental component (harmful-beneficial) and another more experimental component (pleasant-unpleasant), respectively. The following item was used: “*In my opinion, having sexual intercourse without a condom is..., harmful/beneficial, pleasant/unpleasant, useful/useless, good/bad, fun/boring*”.

To measure the *Subjective Norm*, 3 items were prepared, attempting to include those expectations that the subject believes are held by his/her significant groups: “*Most people who are important to me think that I, (should/shouldn't) have sexual intercourse without a condom during the next 60 days*”. “*The people who are important to me expect me to have sexual intercourse without a condom during the next 60 days*”, (*highly probable/ highly improbable*). “*The people whose opinion I*

value (would approve/would disapprove) of my having sexual intercourse without a condom during the next 60 days”.

According to Ajzen (2001), a direct measurement of *Perceived Behavioural Control* must reflect both the confidence of individuals in their capabilities of performing the behaviour under study (self-efficacy) and individuals' belief that they have control over behaviour; i.e. that the actions have to do with their behaviour or not (controllability). According to these authors, the scale for behavioural control must contain these two types of items. On the bases thereof, 4 items were used. Two are based on self-efficacy: “*In my opinion, having sexual intercourse without using a condom during the next 60 days is...*” (ranging from “totally possible” to “totally impossible”). “*If I wanted to, I could have sexual intercourse without a condom during the next 60 days*” (ranging from “completely true” to “completely false”). And 2 items are based on controllability: “*What control do you think you have over having sexual intercourse without a condom during the next 60 days?*” (ranging from “I have no control” to “I have full control”). “*It depends almost totally on me whether I have sexual intercourse without a condom during the next 60 days*” (ranging from “totally disagree” to “totally agree”).

To ascertain *Intention*, 2 items were used: “*I intend to have sexual intercourse without a condom during the next 60 days*”. “*I shall try to have sexual intercourse without a condom during the next 60 days*”. With the response options ranging from “highly improbable” to “highly probable” for the former, and from “definitively false” to “definitively true” for the latter.

To measure *Anticipated Affect*, 2 items were used, each containing 9 emotions, both positive and negative, which are evaluated, like those referred to above, on a seven-point scale, where 1 = nothing and 7 = totally. In one of these, the question was in the same sense as the action (same direction): “*If in the next 60 days you had sexual intercourse without a condom, you would feel: anger, guilt, enthusiasm, fear, happiness, shame, regret, confidence and sadness*”. In the other, the question was asked in the opposite sense to the action (opposite direction), counterbalancing the adjectives to prevent any effects owing to the order: “*If in the next 60 days you do NOT have sexual intercourse without a condom, you would feel: happiness, guilt, sadness, confidence, users, shame, regret, anger and fear*”.

The final variable, *Past Behaviour* was measured with one single item: “*How often have you had sexual intercourse without using a condom over the last 60 days?*”, ranging from “never” to “always”.

Procedure

The questionnaire was handed out collectively in class time. The anonymity and confidentiality of participants' responses was guaranteed at all times, with the importance of sincerity in responses being stressed.

Statistical analysis

To establish the possible dimensionality of anticipated emotions (in the same and opposite directions), twin confirmatory factor analyses (CFA) were conducted. These showed the existence of two factors: Negative emotions (Anger, Fear, Guilt, Regret) and Positive Emotions (Enthusiasm, Happiness, Confidence.). The fit for both models is acceptable ($\chi^2 = 40.52$; g.l. = 13; χ^2 / g.l. = 3.11; GFI = .940; CFI = .978; RMSEA = .108 [.071- .146]) and ($\chi^2 = 53.16$; g.l. = 13; χ^2 / g.l. = 4.09; GFI = .929; CFI = .931; RMSEA = .130 [.095- .167]), respectively.

Then, once it had been verified that the data complied with the assumption of multivariate normality (symmetry values between .21 and .94, and kurtosis values between .27 and 1.45), an analysis of the α internal consistency coefficients and the correlations between the variables was conducted. Subsequently, four hierarchical regressions were conducted in which the dependent variable was intention to have sexual intercourse without a condom. In Step 1, the TPF variables were analysed. Subsequently, Positive and Negative Anticipated Affect were included and measured, as indicated by Ajzen and Sheikh, in the opposite direction to the aforesaid intention (Step 2), which were replaced in Step 3 by the measurements in the same direction. Lastly (Step 4), Past Conduct was included.

The independence statistics of the residuals were tested using the Durbin-Watson test, obtaining values of 2.18, 2.28 and 2.38, respectively (there is no autocorrelation). Given that the incorporation of the new variables significantly increased the total variance explained in the same sense as the action, it was decided to conduct a *path* analysis, using AMOS 19 software, to ascertain the type of relationships established between all the variables. On seeing nothing, in both the hierarchical regression analysis and the explanatory model, the significant effects of Attitudes and Perceived Behavioural Control were reduced with the incorporation of the new variables, it was decided to study the mediating role of some of the variables, using the Sobel test.

3. Results

Table 1 shows the descriptives, the α internal consistency coefficients and the correlations between variables. The α internal consistency coefficients are all high magnitude (between .82 and .94), except for the Perceived Behaviour Control (PBC), which is moderate (.50). It can also be seen that, except for the correlation between Negative Anticipated Affect (NAA) measured in the opposite direction to intention ($r^2 = .10$), all the variables analysed have significant relationships with the dependent variable. It is worth mentioning the correlations of Past Behaviour (PB) ($r^2 = .74$), Negative Anticipated Affect (NAA) in the same direction and Subjective Norm ($r^2 = -.73$) and Positive Anticipated Affect (in the same direction) ($r^2 = .63$).

Table 1. Means, Standard Deviations, Alphas and Correlations

	M	SD	α	Intention	Attitude	SN	PBC	PAA (same direction)	NAA (same direction)	PAA (opposite direction)	NAA (opposite direction)
Intention	3,09	2,54	,93								
Attitude	3,75	1,47	,88	-,56***							
SN	5,33	1,83	,85	-,73***	,57***						
PBC	5,20	1,24	,50	,55***	-,49***	-,54***					
PAA (same direction)	2,76	1,93	,90	,63***	-,58***	-,65***	,45***				
NAA (same direction)	3,90	,220	,94	-,73***	,66***	,77***	-,59***	-,66***			
PAA (opposite direction)	4,30	1,73	,82	-,28***	,25**	,25**	-,31***	-,06	-,38***		
NAA (opposite direction)	1,44	,94	,84	,10	-,14	-,05	,11	,11	,00	-,27***	
PB	3,11	2,66	---	,74***	-,46***	-,64***	,44***	,54***	-,57***	-,25***	,07

(SN = Subjective Norm; PBC = Perceived Behavioural Control; PAA = Positive Anticipated Affect; NAA = Negative Anticipated Affect; PB = Past Behaviour).

* p = ,05; ** p = ,01; *** p = ,001

With regard to the hierarchical regression data in the prediction of Intentions (Table 2), in Step 1 it is observed that the TPB variables are all significant and account for 59% of the variants ($F_{(3,180)} = 83.46$; $p = .0001$). In Step 2, when introducing the PAA and NAA measured in the opposite direction to Intention, there is no increase in the variance explained with regard to Step 1; hence, these two variables were discarded in the subsequent analyses. In Step 3 the PAA and NAA are introduced, now measured in the same direction as the Intention. In this case, both contributed significantly to the increase in variance of 4% ($F_{(1,178)} = 60.65$; $p = .0001$). In the next step, PB was added to the regression equation as a new predictive variable, once again increasing the variance by 72% ($F_{(1,175)} = 58.87$; $p = .0001$). This last model, in addition to being the one which provides the greatest expansion power, also shows that the three incorporated variables contribute significantly to improving the predictive capacity of the original model. A clear modification in the pattern of influence of the constructs proposed by Ajzen can also be observed, since when they are analysed in conjunction with the emotional variables and past behaviour, only Subjective Norm maintains a significant explanatory role. This could mean that the variables we propose are also playing another role in the determination of the intention to have sexual intercourse without a condom.

Table 2. Hierarchical Regression with TPB variables and Positive/Negative Anticipated Affect (opposite/same direction) and Past Behaviour

	Step 1		Step 2			Step 3			Step 4		
	β	R ²	β	R ²	ΔR^2	β	R ²	ΔR^2	β	R ²	ΔR^2
Attitude	-,167**		-,156*			-,045			-,030		
SN	-,544***		-,542			-,338***			-,177*		
PBC	,180**	,59**	,168**			,124*			,090		
PAA (opposite direction)			-,044		,002						
NAA (opposite direction)			,023	,59**	,001						
PAA (same direction)						,144*		,018**	,076		,019**
NAA (same direction)						-,271**	,63**	,022**	-,244**		,022**
PB									,397***	,72***	,087***

(SN = Subjective Norm; PBC = Perceived Behavioural Control; PAA = Positive Anticipated Affect; NAA = Negative Anticipated Affect; PB = Past Behaviour).

* $p < .05$. ** $p < .01$. *** $p < .001$

Hence, a *path analysis* was performed to help better understand not only the contribution of each one of the variables analysed, but also the type of relationships which were established between them.

In the structural equation model (Figure1), it can be seen that there is a direct influence of PB ($\beta = .40$), NAA ($\beta = -.24$) and SN ($\beta = -.18$) on Intention. NAA exercises a significant indirect influence through the variables in the TPB. PAA exercises a significant indirect influence through Attitude and SN. PB exercises a significant indirect influence through SN. Total variance explained is 72 % and the models fit is good ($\chi^2 = 4.13$; g.l. = 4; $p = .388$; χ^2 / g.l. = 1.034; GFI = .994; CFI = 1.00; RMSEA = .014 [.000– .113]).

Taking the foregoing into account, and adhering to the recommendations of Baron & Kenny (1986), it would seem that part of the possible effect of the variables from the original model may be mediated by the anticipation of affective reactions and the individuals' experience in performing the conduct in the past. The direct influence found between NAA and PB with the intention, already appears to us to be sufficiently relevant in itself to be taken into account. Thus, we have focused solely on the mediating role of the PAA. Accordingly, a mediation analysis was performed taking SN, the only variable from the original model which is significant, as an independent variable, and PAA as the mediating variable, in order to verify their importance in terms of variance explained in the Subjective Norm-Intention relationship. The regression weighting of SN over

Intention ($B_1 = 1.015$) accounts for a variance of 54%. When PAA was included, said weighting fell ($B_1' = .782$), which indicates that the latter acts as a mediating variable in the Subjective Norm-Intention relationship. The Sobel tests (1982) resulted in a significant effect for this mediation ($Z_{(Sobel)} = 7.46$; $p = .0001$). The coefficient $B_1 - B_1' / B_1 = .229$ shows that 22.9 % of the relationship between SN and Intention is explained by the variable PAA, which, from our point of view, has a bearing on the pertinence of its inclusion into the proposed model.

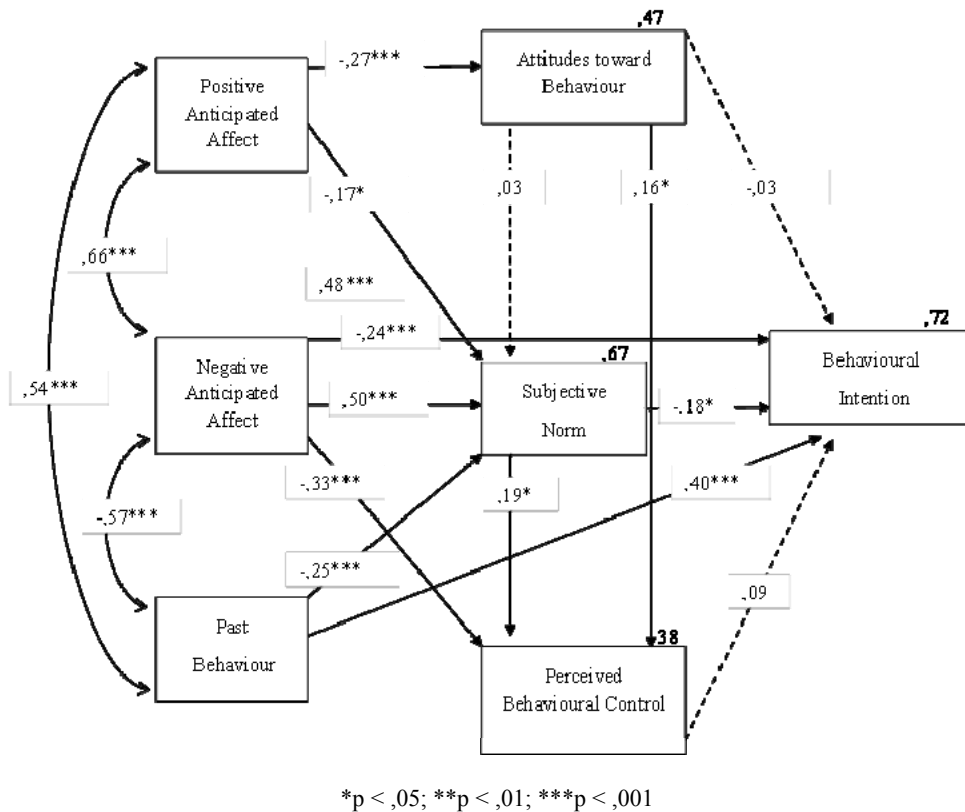


Figure 1. Structural Equation Model of an extended TPB version

4. Discussion

Traditionally, it has been argued whether, as Ajzen proposes, the possible influence of emotions is provided for in the concept of attitude towards behaviour. In our opinion, these results seem to transcend this debate, as not only can one observe the need to differentiate them clearly, but it also highlights that emotions assume part of the role played by Attitude towards behaviour and Subjective Norm in explaining the behavioural Intention. Along the same lines the results obtained

seem to point towards Perceived Behavioural Control, in this case adopted by Negative Anticipated Affect. Thus, the debate to which we have touched upon would not only be clearly limited, since no reference whatsoever is made therein to the behavioural affect-control relationship, but it may also even be artificial, or at the very least questionable, insofar as our data point towards the relevance of the affective component and, hence, would justify the inclusion thereof into a more complete model for predicting risk behaviour such as the one analysed in this study.

One fundamental aim of this work has been to ascertain the possible contribution that emotions (both positive and negative) and past behaviour have on explaining the intention to have sexual intercourse without a condom. From the results of the hierarchical regression and the *path analysis*, a number of different considerations can be extracted. On the one hand, the inclusion of emotional variables and past behaviour is shown to contribute significantly to increasing the variance explained for the proposed model. Hence, those subjects who intend to have sexual intercourse without a condom are those who have previously done so on other occasions and who, moreover, do not anticipate negative emotions (anger, guilt or regret) through performing the aforesaid risk behaviour. The third variable which has a direct relationship with Intention, in this case with a negative sign, is Subjective Norm. This would seem to indicate that our subjects do not perceive the intention to perform this risk conduct as something which is objectionable for their most significant setting.

An important contribution with regard to the second objective of this study, and which distinguishes it from previous studies, is the one related with the results of the research by Ajzen & Sheikh, wherein they assert that the anticipated affect only has a significant influence on intention when it is measured with regard to an alternative (action or interaction) and the variables of the TPB are measured with regard to the opposing alternative. Indeed, these authors affirm that in the literature that they themselves have reviewed those studies conducted to date in which the anticipated affect has been incorporated into the constructs of the TPB, this has been measured in relation to the opposing conduct (Conner et al. 1999). Nonetheless, in this study affect has been found to have a greater contribution when measured in the same direction rather than in the opposite one. Here it should be mentioned that, in the same way as in studies such as those by Ravis, Sheeran & Armitage (2009), negative anticipated affect has a stronger relationship with intention than positive anticipated affect, which is possibly due to it being more difficult to anticipate positive emotions for such an unhealthy action. Hence, the relevance of the emotional component seems to establish the importance of its consideration in the model, irrespective of whether this also already includes an attitudinal measurement.

Past behaviour, as in the study by Protogerou & Turner-Cobb (2011), was the strongest predictor of intention. Moreover, unlike Protogerou, Flisher, Wild & Aarø (2013), our study does seem to provide sufficient support for proposing past behaviour as a predictive variable for this sexual risk behaviour, since the non-use of a condom in the past is one of the three variables which are directly and

significantly associated with the intention of having sexual intercourse without a condom in the future.

Also worthy of note in our work is the importance that Subjective Norm acquires at the expense of the other two variables of the TPB, which, even though they appear with a direct influence on intention, do not contribute significantly. This result is in line with other findings, based upon which it is suggested that the promotion of positive subjective norms in relation to the use of the condom may be much more effective in young, educated populations, such as our sample, amongst which norms are more influential than attitudes (Albarracín et al. 2004).

Nonetheless, the most salient point of the model, from our point of view, is that not only do the variables proposed in this study have an indirect relationship with intention through the constructs of the TPB, as already alluded to by Ajzen in numerous studies, but they also have a direct relationship. Hence these variables cannot be reduced to simple residual and insignificant relationships already included in Attitude and Perceived Behavioural Control. This direct relationship opens up a new field in which to investigate these contributions beyond the TPB model.

This last point enables us to link up with the third of the objectives set for the present work; i.e. that of clarifying the possible relationships between the added variables and the constructs of the TPB. The three variables proposed not only considerably and significantly increase the model's explanatory power, but two of them, Past Behaviour and Negative Anticipated Affect, are also those which have the strongest relationship with the intention to perform the behaviour; and the third, Positive Anticipated Affect, would account for almost a quarter of the effect of the Subjective Norm on the intention to have sexual intercourse without a condom. We could thus assume that the intention to have sexual intercourse without a condom is linked more to components of emotions, experience and social influence than to matters linked with attitude, feelings of efficacy or the controllability of the action.

Aware of the characteristics and limitations of the sample, and that all these results will need to be tested in more extensive samples, one of the major limitations we encountered when conducting this study was that related with a study of affect. There is an enormous degree of heterogeneity when specifying affective evaluations between different studies (Conner 2013). There is a great deal of multiplicity, both in the selection thereof, in the measures employed to evaluate them, and in the temporal perspective (some evoked and others anticipated), which severely hinders any possible comparison which may be established with the results of other research. The same is true for Past Conduct. In the scientific community there is a certain level of discrepancy regarding how to conceptualise and interpret the contribution of this variable. Some researchers see the impact of past behaviour as the result of a measuring error, or as the result of the presence of other factors which have not been taken into account (Ajzen 1991 2002), while others see past behaviour as a significant construction which is too important to ignore (Verplanken & Aarts 1999, Protogerou & Turner-Cobb 2011). Our results are in line with the latter perspective, considering past behaviour as an element

which is sufficiently relevant to be incorporated into the explanatory model of intentions and, very possibly, also into future behaviours.

A further limitation is the fact that the study focuses on behavioural intention and not on the behaviour itself. This is principally because, as Ajzen & Sheikh (2013) has already pointed out in his studies, emotions, if they are related, would be more related with the intention of performing a behaviour than with the behaviour itself. As strong emphasis has been placed on explaining emotions in this work, we have opted for the study of intention. Future research should also include the study of behaviour itself as an important variable to be taken into account and observing what may be happening in such a decisive step as that of the intention-behaviour relationship.

Ascertaining the psycho-social factors that have an influence on this risk behaviour is what will truly provide us with certain guidelines for action and endow us with the suitable tools needed to intervene effectively in the future.

We share the view with Protogerou & Turner-Cobb (2011) that theoretical models with which research approaches the study of a high-risk sexual behaviour, such as the one analysed herein, have blown the importance of the cognitive-rational dimension out of proportion, with the consequential undervaluing of the other elements. In this regard, our data may be of use for designing interventions in this setting. Highlighting the negative feelings that would incite them to have sexual intercourse without a condom, and the positive feelings of performing this conduct in a healthy way, along with increasing the pressure perceived in their immediate environment, would help to make our young people's sexual relations safer. Moreover, these interventions should not focus so much on the prevention of unwanted pregnancies (already taken into account by our subjects with the use of alternative contraceptive methods), as on the condom's protective function, which has clearly been forgotten. All this would help to reduce the progressive increase in sexually transmitted diseases, particularly among young people, to which we referred at the start of this study.

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