

Turnitin Originality Report

Processed on: 14-May-2023 8:35 AM EDT
 ID: 2092648255
 Word Count: 4323
 Submitted: 1

Forest Conservation Behavior in Rural Settlem...
 By Wayan S

Similarity Index	Similarity by Source	
10%	Internet Sources:	9%
	Publications:	8%
	Student Papers:	6%

include quoted exclude bibliography excluding matches < 1% mode: quickview (classic) report print refresh
 download

3% match (Internet from 24-Dec-2015)

<http://www.comices.org>



2% match (student papers from 03-Jun-2019)

[Submitted to Eastern Mediterranean University on 2019-06-03](#)



1% match (Internet from 14-Nov-2022)

<https://www.mdpi.com/1660-4601/18/12/6520/htm>



1% match (Internet from 05-May-2023)

https://digitalcommons.usf.edu/cgi/viewcontent.cgi?params=%2Fcontext%2Fetd%2Farticle%2F5014%2F&path_info=Factors_that_influence_faculty_intentions_to_support_the_community_co



1% match ()

[VanderKooi, Marie M.. "An Evidence-Based Evaluation of Medication Barcode Scanning Acceptance in a Community Hospital", ScholarWorks@GVSU, 2014](#)



1% match (Internet from 22-Sep-2022)

<https://123dok.net/article/adoption-totale-partielle-abandon-table-facteurs.lzg8o6y>



1% match (Internet from 23-Dec-2022)

<https://research.tue.nl/en/publications/rural-electrification-in-indonesia-the-role-of-micro-hydro-power->



1% match (Internet from 07-Feb-2014)

<http://www.nice.org.uk>



1% match (Internet from 22-Aug-2021)

<http://repo.uum.edu.my>



See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/280614693>
 FOREST CONSERVATION BEHAVIOR IN RURAL SETTLEMENTS: VARIABLES THAT INFLUENCE SUBJECTIVE NORMS IN PREDICTING INTENTION TOWARD FOREST CUTTING Conference Paper · November 2010 CITATIONS 0 3 authors, including: Wayan Santika Politeknik Negeri Bali 26 PUBLICATIONS 323 CITATIONS SEE PROFILE READS 159 Cees Midden Eindhoven University of Technology 180 PUBLICATIONS 6,411 CITATIONS SEE PROFILE Some of the authors of this publication are also working on these related projects: Persuasive technology View project A Framework for Translating Sustainable Development Goals into National Energy Planning in Developing Countries View project All content following this page was uploaded by Wayan Santika on 12 December 2022. The user has requested enhancement of the downloaded file. FOREST CONSERVATION BEHAVIOR IN RURAL SETTLEMENTS: VARIABLES THAT INFLUENCE SUBJECTIVE NORMS IN PREDICTING INTENTION TOWARD FOREST CUTTING I Wayan G. SANTIKA1, Cees J. H. MIDDEN2, A. M. C. LEMMENS3 ABSTRACT: The present study aims at finding variables that influenced subjective norms in determining intention toward forest cutting. The theory of planned behavior was used as the model of the research. A questionnaire was developed based on the model. The questionnaire comprised of two questions assessing intention toward forest cutting, five questions assessing attitudes, three questions assessing subjective norms, three questions assessing perceived behavioral control, and eight questions assessing each of the belief and its assessment. 240 questionnaires were randomly distributed to the people at four villages in the rural settlements of Enrekang, South Sulawesi, Indonesia. Multiple regression analyses revealed that intention toward forest cutting was predicted by subjective norms. Attitudes and PBC did not significantly determine intention toward forest cutting. To find out variables that influence subjective norms in predicting intention toward forest cutting, stepwise-backward regression analyses were performed. All components of beliefs and their assessment were simultaneously entered as independent variables. Results revealed that subjective norms toward forest cutting were determined by cost evaluation, benefit evaluation, beliefs about others expectation, perceived barriers, and perceived resources, $\beta = .17$, $p < .01$, $\beta = .34$, $p < .001$, $\beta = .20$, $p < .01$, $\beta = .24$, $p < .001$, $\beta = .18$, $p < .01$, respectively. Those components explained 46% variance in subjective norms. The implications of the results were discussed and some recommendations were drawn at the end of the study. KEYWORDS: theory of planned behavior, forest conservation, forest cutting, beliefs, attitude, subjective norm, perceived behavioral control, intention. 1. INTRODUCTION A study of Santika, Midden, and Lemmens [1] reveals that rural electrification has positive association with concerns toward forest conservation. In this study they compared beliefs, attitudes, norms, perceived control, intention, and past behavior of participants at four villages in rural Indonesia. One village was electrified by micro hydro power (MHP), one village was electrified by the grid, and the other two were considered un-electrified. A questionnaire was developed based on the theory of planned behavior (TPB) [2-4]. Assessing the TPB variables, they found that rural electrification positively correlated with concerns toward forest conservation. They also found that intention toward forest cutting was predominantly predicted by subjective norms. Other variables that determined intention toward forest cutting were past behavior and education level [1]. 1 Teaching staff, State Polytechnic of Bali, Indonesia 2 Professor, Eindhoven University of Technology, The Netherlands 3 Lecturer, Eindhoven University of Technology, The Netherlands The present study is intended to further analyze the data of Santika, et al. [1] in order to find variables that influence subjective norms in predicting intention toward forest cutting. Understanding variables (i.e. beliefs) that influence subjective norms toward forest cutting will give us more in-depth knowledge about beliefs and their underlying components that motivate people to perform forest cutting. The present study adds the data of belief's assessments (i.e. outcome evaluation, motivation to comply, and perceived power), which were ignored in the study of Santika, et al., into consideration [1]. The following section elaborates the theory of planned behavior in more detail followed by the method applied for data collecting. Section four and five provide the readers with results and discussion of the study, respectively. Section six offers some conclusion and recommendation. 2. THEORETICAL BACKGROUND According to TPB, a behavior is best predicted by intention toward the behavior [2-5]. Intention refers to people willingness to perform the behavior in question. Intention is determined by attitudes toward

the behavior, subjective norms, and perceived behavioral control (PBC). Attitudes are the positive or negative evaluations of the behavior in question. For example, people may evaluate forest cutting as a bad thing to do. Subjective norms refer to people perception of what others want them to do (i.e. perceived social pressure to execute or not to execute the behavior). PBC is the difficulty level of performing the behavior in question. Difficult tasks reduce people intention to perform them. Attitudes, subjective norms, and PBC are influenced by sets of beliefs and assessments of those beliefs [2-4]. Attitudes are influenced by behavioral beliefs and outcome evaluation; subjective norms are influenced by normative beliefs and motivation to comply; and PBC are influenced by control beliefs and perceived power. Behavioral beliefs refer to the relevant information about the behavior, while outcome evaluation is the mental evaluation related to the outcomes of the behavior if it is performed. Normative beliefs are perceived approval from (an) important other(s) to perform [the behavior. Motivation to comply refers to the](#) degree one wants [to](#) comply with other's expectation. Control beliefs refer to the beliefs about resources and opportunities (relevant to the behavior) one acquires, while perceived power refers to the degree at which resources or opportunities are likely to facilitate or inhibit the performance of the behavior [3]. Figure 1 shows the schematic diagram [of the theory of planned behavior. The](#) arrows indicate [the](#) directional relationships between variables. The dash-lined arrow indicates that sometimes there is a direct causal effect of PBC toward the behavior. The effect depends on whether the behavior can be performed at will and on the accuracy of the perception of control over the behavior [9]. TPB is applied as the model in explaining forest cutting behavior as it is widely recognized by scholars from broad range of disciplines [6-9]. It has been used to explain various behaviors, ranging from smoking habit to the prediction of voting behavior, or from health related behavior to pro-environmental behavior [2]. The present paper does not directly observe the actual forest cutting behavior but measures people intention toward forest cutting, instead. The following chapter will describe the method used in the present study. 3. METHOD A questionnaire was developed measuring [behavioral beliefs, normative beliefs, control beliefs](#), beliefs' assessments, [attitudes, subjective norms](#), PBC, [and](#) intention toward forest cutting. The survey method was a self-administered questionnaire with fixed responses and was provided in Bahasa Indonesia, the country official language. Target respondents were male, 18 years old or above. The questionnaire applied the disguised technique rather than regular technique common in TPB questionnaire. The disguised technique is more effective for sensitive issues (such as forest cutting) that may evoke responses that socially desirable [2]. Behavioral Beliefs Attitudes toward Outcome Behavior Evaluation Normative Beliefs Subjective Norms Intention Behavior: Motivation to Forest cutting Comply Control Beliefs Perceived Behavioral Control Power Figure 1. Schematic diagram of the theory of planned behavior

Beforehand, a pilot project was conducted to collect and determine 24 most salient beliefs people hold about forest cutting (eight items for each of behavioral, normative, and control beliefs). The pilot project assessed 37 behavioral beliefs about the advantages and disadvantages of forest cutting, 24 normative beliefs that important others approved or disapproved forest cutting, and 15 control beliefs about resources and opportunities that facilitated or inhibited forest cutting. The questionnaire consists of eight questions measuring each of [behavioral beliefs, normative beliefs, control beliefs](#), and [the](#) assessments [of](#) beliefs. Behavioral beliefs were measured with questions such as 'Forest cutting helps people increase their income' and 'Forest cutting causes natural disasters'. A 7-point bipolar scale ranging from strongly agree to strongly disagree were used. Four questions were advantageous behavioral beliefs and four others were disadvantageous ones. Outcome evaluations were measured with questions such as 'Forest cutting that helps people increase their income is....' and 'Forest cutting that causes natural disaster is....' (measured in a 7-point bipolar scale, from very good to very bad). Normative beliefs were measured with questions such as 'Neighbors think that people should not do forest cutting' and 'Forest police rangers think that people should not do forest cutting' (measured in a 7-point bipolar scale, from strongly agree to strongly disagree). Motivation to comply were measured with questions such as 'How much do you think people want to do what their neighbors would like them to do?' and 'How much do you think people want to do what forest police rangers would like them to do?' (measured in a 7-point unipolar scale, from not at all to extremely much). Control beliefs and perceived power were measured with the same questions such as 'The availability of modern tools and sawing machines facilitates forest cutting' and 'Proper education, knowledge and information prevent forest cutting'. The only difference was that control beliefs were measured in a 7-point unipolar scale ranging from never happens to always, whereas perceived power was measured in a 7-point bipolar scale ranging from very likely to very unlikely. Attitudes toward forest cutting were asked in a question: 'In your opinion, cutting trees from forests is...' which was measured in five evaluative semantic differential scales (good-bad, beneficial-harmful, acceptable-unacceptable, pleasant-unpleasant, and foolish-wise). Subjective norms were measured with three questions, i.e. 'People's most important others think that people should do forest cutting', 'People's most important others will approve forest cutting', and 'People's most important others want people to perform forest cutting'. They were measured in a 7-point bipolar scale ranging from very likely to very unlikely. PBC was measured with a question: 'For most people around here, forest cutting is a(n).... thing to do'. It was measured in three 7-point bipolar scales, i.e. easy-difficult, simple-complicated, and effortless- effortful. Intention toward forest cutting was measured with two questions: 'In your opinion, the neighbor near you will do forest cutting within a year' and 'In your opinion, the neighbor near you intends to do forest cutting within a year' (measured in a 7-point bipolar scale ranging from very likely to very unlikely). For additional information, the questionnaire asked some demographic questions, i.e. age, marital status, education, family member, occupation, and monthly income. The questionnaire also measured descriptive norms and past behavior which were not related to present study objectives. 4. RESULTS The study was conducted from April 23 to May 11, 2009. 240 questionnaires were distributed to respondents at four villages in Enrekang District, South Sulawesi, Indonesia, about 250 kilometers north of Makassar. The villages are surrounded by the groups of Bungin River Forest, Pasang River Forest, and Batupali Forest. When the study was conducted, a total of about 3200 inhabitants live at the villages. 236 questionnaires were returned but only 182 of them were answered completely. The age distribution ranged from 18 to 71 years old ($M = 37.4$). Most participants (51% of 236) were elementary school graduates, only 12 participants (5%) were university graduates, 94 participants (40%) were in between, and 9 participants (4%) never attended or finished elementary schools. 215 participants (91%) worked as farmers or in other agricultural sectors and the rests either worked in other sectors or were unemployed. 204 participants (89%) reported that their monthly incomes were IDR 500000,- or less, 11 participants (5%) earned from IDR 500000,- to 1000000,-, and the rests did not give any answer. Since both the present study and the study of Santika et al. shares mostly the same data, the demographic distribution provided here has also been provided in more detail in Santika et al. [1]. 4.1. COMPONENTS OF BELIEFS In order to find the components of beliefs that influence subjective norm in predicting intention toward forest cutting, the components should be determined first. Principle component analyses were performed (executed on SPSS) to find the underlying components of beliefs. The data of behavioral beliefs were executed first. Table 1 shows the correlation matrix produced by SPSS. Item no. 7 of behavioral beliefs was omitted since it was correlated very strongly with items 6 and 8, $r = .90$ and $r = .91$, respectively. The principle component analysis was re-executed without item 7. The results revealed that there are only two components with Eigenvalues greater than one. The two components explained 68% of the total variance. Table 2 shows factor loading of the components. Variables 1, 2, 3, and 4 belonged to component 2 and variables 5, 6, and 8 loaded strongly to component 1. These facts indicated that two components developed behavioral beliefs. The components were named cost beliefs and benefit beliefs. Table 1. Correlation matrix of beliefs

Behavioral Beliefs	1	2	3	4	5	6	7	8
1 Forest cutting helps people increase their income	.34							
2 Forest cutting opens new land for farming	.37							
3 Forest cutting provides firewood	.34	.37						
4 Forest cutting provides wood for housing	.30	.33						
5 Forest cutting damages the forest and nature scenic beauty	.40	.45	.31					
6 Forest cutting causes natural disasters	.52	.52	.10	.43				
7 Forest cutting causes drought and lack of water during dry season	.10	.04	.04	.07	.03			
8 Forest cutting causes landslides	.02	.07	.09	.08	.08	.06	.81	.76
9 Behavioral beliefs Comp. 1	.670	.670	.670	.670	.670	.670	.670	.670
10 Behavioral beliefs Comp. 2	.670	.670	.670	.670	.670	.670	.670	.670
11 Forest cutting helps people increase their income	.670	.670	.670	.670	.670	.670	.670	.670
12 Forest cutting opens new land for farming	.745	.745	.745	.745	.745	.745	.745	.745
13 Forest cutting provides firewood	.713	.713	.713	.713	.713	.713	.713	.713
14 Forest cutting provides wood for housing	.788	.788	.788	.788	.788	.788	.788	.788
15 Forest cutting damages the forest and nature scenic beauty	.906	.906	.906	.906	.906	.906	.906	.906
16 Forest cutting causes natural disasters	.959	.959	.959	.959	.959	.959	.959	.959
17 Forest cutting causes landslides	.931	.931	.931	.931	.931	.931	.931	.931

To find the components of normative beliefs, control beliefs, outcome evaluation, motivation to comply, and perceived power, the same procedure was applied. Most of them were formulated by two underlying components, except normative beliefs which had only one underlying components. Total variance explained by the extracted components varies from 54.4% to 68.2% (Table 3). Each component was provided with a name (see Table 4). Table 3. Extracted components and total variance explained Beliefs [Behavioral Beliefs Outcome](#)

[Evaluation Normative Beliefs Motivation to Comply Control Beliefs Perceived Power](#) Component(s) extracted 2 2 1 2 2 2
Total variance explained 68.2 66.7 64.8 64.7 54.4 54.9 In order to check if the components were consistently explained by the scale (questionnaire), reliability tests were performed [10]. Each component was separately tested. The results are provided in Table 4. The table shows that Cronbach's alpha values were greater than .7 suggesting that the items were reliable in measuring beliefs and their assessments.

4.2. COMPONENTS OF BELIEFS THAT DETERMINE SUBJECTIVE NORMS

Using the same collection of data, Santika et al. found that intention toward forest cutting was determined by subjective norms, past behavior, and education levels [1]. Attitudes and PBC did not significantly predict intention toward forest cutting. Subjective norms, the dominant predictor of intention toward forest cutting, explained nearly 10% of variance in intention [1]. The present study is aimed at finding the components of beliefs that determine subjective norms toward forest cutting. A stepwise-backward regression analysis was conducted with square root 8 -.06 -.07 .02 .73 .88 .91 subjective norms as the dependent variables and components of beliefs as the independent variables. Table 5 shows the summary of the regression analysis. Table 4. Cronbach's alpha values

Concepts	Behavioral Beliefs	Outcome Evaluation	Normative Beliefs	Motivation to Comply	Control Beliefs	Perceived Power
Component names	Beliefs about costs	Beliefs about benefits	Cost evaluation	Benefits evaluation	Beliefs about all referents	expectation
Motive to comply with close referents	Motive to comply with official staffs	Beliefs about barriers	Beliefs about resources	Perceived barriers	Perceived resources	Number of item
3	4	4	4	4	5	3
4	4	4	5	3	5	3
Cronbach's Alpha	.952	.702	.905	.706	.925	.789
.810	.713	.727	.718	.721		

Table 5 indicates that variance in subjective norms toward forest cutting was explained by cost evaluation, benefit evaluation, beliefs about all referents expectation, perceived barriers, and perceived resources $\beta = .17, p < .01, \beta = .34, p < .001, \beta = .20, p < .01, \beta = .24, p < .001, \beta = .18, p < .01$, respectively. They explained 46.4% variance in subjective norms toward forest cutting. An interesting finding is that the first two components that had the highest effects on subjective norms were the component of outcome evaluation and the component of perceived power. Outcome evaluation is considered a direct predictor of attitudes, whereas perceived power is the predecessor of PBC. Direct predecessors of subjective norms (i.e. normative beliefs and motivation to comply) had a weaker effect or no significant effect at all. Table 5. Summary of the regression analysis

B	Std. Error	Beta	t	Sig.	Step	(Constant)
2.584	.042				1	61.244
.000	1	Beliefs about costs	-.023	.045	-.029	-.511
.610	Beliefs about benefits	-.006	.066	-.008	-.097	.923
Cost evaluation	.111	.045	.142	2.480	.014	Benefits evaluation
.277	.064	.349	4.313	.000	Beliefs about all referents	expectation
.149	.051	.186	2.937	.004	Motive to comply with close referents	-.008
.046	-.010	-.168	-.867	.387	Motive to comply with official staffs	-.077
.052	-.095	-1.480	-.140	Beliefs about barriers	-.011	.047
-.013	-.223	.827	Beliefs about resources	-.001	.050	-.001
-.023	.982	Perceived barriers	.192	.053	.232	3.626
.000	Perceived resources	.134	.049	.168	2.718	.007
Step (Constant)	2.584	.042	61.843	.000	7	Cost evaluation
.129	.042	.165	3.054	.003	Benefit evaluation	.271
.046	.341	5.902	.000	Beliefs about all referents expectation	.159	.048
.199	3.341	.001	Perceived barriers	.199	.048	.242
4.134	.000	Perceived resources	.146	.044	.182	3.338
.001	N = 203; R ² = .464 for Step 1, p < .001; $\Delta R^2 = -.007$ for Step 7, p > .05. Step 2 to step 6 are omitted. Sqrt_SN = 5 - (10-SN) ^{1/2} . A higher value indicates more concerns toward forest conservation. Figure 2 shows the summary of the components of beliefs that determine subjective norms in predicting intention toward forest cutting. The arrows indicate the direction of the causal effect, whereas the values indicate the standardized regression coefficients (beta) with t-test values in parentheses. <h4>5. DISCUSSION</h4> <p>The objective of the present study is to find components of beliefs that determine subjective norms in predicting intention toward forest cutting. A study of Santika et al. has found that intention toward forest cutting was predominantly predicted by subjective norms [1]. According to TPB, the three predictors of intention (attitudes, subjective norms, and PBC) are determined by beliefs and belief assessments [2-4]. Thus, finding components of beliefs and belief assessments that influence subjective norms toward forest cutting will increase our understanding about variables that motivate people to perform forest cutting. This knowledge may increase our chance to successfully combat deforestation caused by small farmers and villagers.</p> <p>Evaluation of costs Evaluation of benefits Beliefs about all referents expectation Perceived barriers Perceived resources .17** (3.05) .34*** (5.90) .20** (3.34) .24*** (4.13) .18** (3.34) Subjective Behavioral Norms Intention Figure 2. Components that determine subjective norms (**p < .01, ***p < .001) Results shows that cost evaluation, benefit evaluation, beliefs about all referents expectation, perceived barriers, and perceived resources explain 46.4% variance in subjective norms forest cutting. How the components shaped people perceived social pressure to do or not to do forest cutting is not easily understood. Perhaps, it is related to the tendency that people want to be cognitively efficient. We tend to conserve mental effort when evaluating ourselves and others due to the vast amount of information surrounding us [11]. The situation may induce a condition called false consensus effect. In this false consensus effect we tend to overestimate the degree to which others agree with us [11, 12]. For example, consider evaluation of benefits and perceived barriers as the components of beliefs that predominantly influence subjective norms (see beta values of each component in Table 5; a higher value indicate a more influential component). The more a farmer evaluates forest cutting as beneficial, the more he/she perceives that important others will approve forest cutting. The more he/she perceives the barriers to perform forest cutting, the less he/she perceives that important others will approve forest cutting. The fact that the present study measures intention toward forest cutting, not the actual forest cutting behavior, limits the power of the present study in explaining actual behavior of forest cutting. However some evidence indicated that intention was strongly correlated with actual behavior [2].</p> <h4>6. CONCLUSION AND RECOMMENDATION</h4> <p>Based on the results and discussion sections, we may conclude that subjective norm is influenced by the components of outcome evaluation (i.e. evaluation of costs and evaluation of benefits), normative beliefs, and the components of perceived control (i.e. perceived barriers and perceived resources). Among them, evaluation of benefits and perceived barriers are the components that influence subjective norms the best. Normative beliefs and motivation to comply are not necessarily the best determinants of subjective norms. In the present study, motivation to comply does not explain significant variance in subjective norms. The findings indicate that, in order to combat deforestation caused by small farmers and villagers, altering people beliefs toward forest cutting will be a good start. The government LPG conversion program that converts kerosene to LPG (for cooking) is perhaps a good attempt. Creating more jobs for people living near the forest is also worth trying. Both may alter people evaluation favoring forest cutting as sources of firewood and incomes. The next solution can be the law enforcement. Illegal deforestation activities should be punished or fined severely. Forest police patrols should be performed frequently and regularly. These options will increase perceived barriers to perform forest cutting. We may also provide education and advertisement highlighting social disapproval of forest cutting activities. They may alter beliefs about others expectation toward forest cutting and increase social pressure not to perform forest cutting. Those options are expected to positively alter farmers and villagers' subjective norms toward forest cutting. In turn, subjective norms will decrease people intention toward forest cutting. However, the above recommendation should consider the fact that subjective norms only explained 10% variance in intention [1].</p> <h4>7. ACKNOWLEDGEMENT</h4> <p>The present paper is based on and draws heavily upon the first author's unpublished master thesis. The project was a part of the project initiated by Energy Working Group (EWG) under the Bilateral Energy Cooperation Indonesia Netherlands (BECIN). The first author thanks Ria Overwater for her assists during the preparation and finishing of the project. The author also thanks Sophia Sagala, Nelly Martin, Suyash Jolly, and Joni Hall for the English suggestions. Many thanks are addressed to Nuffic-NESO (Netherlands Education Support Office) Indonesia that provided me with the scholarship for the master program.</p> <h4>8. REFERENCES</h4> <ol style="list-style-type: none"> Santika, J. W. G., Midden, C. J. H., and Lemmens, A. M. C., "Rural Electrification in Indonesia: The Role of Micro Hydro Power in Shaping Forest Conservation Behavior". Proceedings of International Symposium on Sustainable Energy and Environmental Protection (ISSEEP), Yogyakarta, Indonesia, November 23-26, 2009. Ajzen, I., Attitudes, Personality, and Behavior. Second Edition, Open University Press, England, 2005. Ajzen, I., "The Theory of Planned Behavior". <i>Organizational Behavior and Human Decision Processes</i>; Vol. 50, 1991, pp. 179-211. Ajzen, I. and Madden, T. J., "Prediction of Goal-directed Behavior: Attitudes, Intentions, and Perceived Behavioral Control". <i>Journal of Experimental Social Psychology</i>; Vol. 22, 1986, pp. 453-474. Ajzen, I., and Fishbein, M., Understanding Attitudes and Predicting Social Behavior, Prentice-Hall, Inc., New Jersey, 1980. Kaiser, F. G., Hubner, G., and Bogner, F. X., "Contrasting the Theory of Planned Behavior with the Value-Belief-Norm Model in Explaining Conservation Behavior". <i>Journal of Applied Social Psychology</i>; Vol. 35, 2005, pp. 2150-2170. Albarracín, D., Johnson, B. T., Fishbein, M., and Muellerleile, P. A., "Theories of Reasoned Action and Planned Behavior as Models of Condom Use: a Meta-analysis". <i>Psychological Bulletin</i>; Vol. 127, 2001, pp. 142-161. Armitage, C. J., and Conner, M., "Efficacy of the Theory of Planned Behavior: A Meta-analytic Review". <i>British Journal of</i> 					

