Why users share the news: A theory of reasoned action-based study on the antecedents of news-sharing behavior

Abstract

Social media have become an integral part of online news use, affecting how individuals find, consume, and share news. By applying the Theory of Reasoned Action (TRA), this study investigates the effects of motives, attitude, and intention on news-sharing behavior among German social media users (n = 333). Findings show that news-sharing attitude and subjective norms have a positive effect on news-sharing intention, which in turn has a positive effect on actual news-sharing behavior. Taken together, we see that a new media behavior in the early phases of its societal diffusion—like social media news sharing in Germany in 2015—can mainly be explained by a rational choice logic and is rooted in the motives of socializing and information seeking. This finding thus reflects the double nature of social media as a means for both information retrieval and social grooming.

Keywords: news sharing, social networking sites (SNSs), theory of reasoned action

This paper has been accepted for publication in *Communication Research Reports* (published by Taylor & Francis)

Citation: Karnowski, V., Leonhard, L., & Kümpel, A. S. (2018). Why users share the news: A theory of reasoned action-based study on the antecedents of news-sharing behavior. *Communication Research Reports*, *35*(2), 91–100.

https://doi.org/10.1080/08824096.2017.1379984

Why users share the news: A theory of reasoned action-based study on the antecedents of news-sharing behavior

The ways in which people keep up with what is going on globally, nationally, and locally have changed dramatically in the recent past. As many as six in ten Americans got news from social media in 2016 (Gottfried & Shearer, 2016). Accordingly, users increasingly are also taking part in the news flow itself. By liking, sharing, tweeting, or retweeting, social media have provided users with many tools to share news content with their peers. Although it was always possible to share news with one's friends by, for example, simply telling them about some piece of news, the magnitude of user-driven news dissemination has changed dramatically. With more than half of US adult Facebook users having more than 200 friends on Facebook (Smith, 2014), the ratio of effort (one click) to potential reach (possibly hundreds of friends) of news sharing via social media is substantially higher compared to news sharing in the pre-social media era.

We therefore want to dig deeper into the antecedents of this behavior by applying a theory of reasoned action (TRA)-based approach to uncover the antecedents of news sharing behavior. Since recent research has shown that news sharing behavior also goes along with behaviors facilitating participation in civic and political life (Choi & Lee, 2015; Oeldorf-Hirsch & Sundar, 2015), we expand this TRA-based approach by also integrating users' overall political interest. As most of the existing research on news sharing has been conducted in Asia (e.g., Lee & Ma, 2012) and the United States (e.g., Choi, 2016), a European perspective is still missing. In this study, we focus on German social media users that are—compared to Asian and US social media users—still quite reserved when it comes to using social media for news dissemination (Newman, Fletcher, Levy, & Nielsen, 2016). Therefore, a study in the German context can help shed more light on the significance and universality of previously recognized interrelations.

Antecedents of News Sharing Behavior

In our attempt to uncover the role of behavioral intention, behavioral attitudes, behavioral norms, subjective norms, and the role of political interest in affecting new sharing behavior, we will go beyond the scope of previous studies that focus only on the motives or personal attributes of the sharer. Instead, we embed news sharing behavior in the broader theoretical framework of TRA, which allows a nuanced and comprehensive look at the phenomenon.

TRA, developed by Fishbein and Ajzen (1975), assumes that people make rational choices when they decide whether or not to engage in a specific behavior, and that behavior is driven by behavioral intentions. According to TRA, the *behavioral intention* is determined by the *attitude* toward the behavior and the *subjective norms* associated with the behavior. The latter is defined as the perception of the individual of whether her peers think the behavior should be performed, that is, the perceived social pressure to (not) engage in a behavior. This form of social norm is also referred to as an injunctive norm (Interis, 2011). However, this pressure can also be rather indirect, in that a person perceives a need to act in a certain way because her peers are engaging in the behavior. This second form of social norm is also called a descriptive norm (Interis, 2011). In our study, we will analyze the influence of this second and lower-threshold form, that is, the influence of descriptive norms on news sharing behavior.

Existing research concentrating on news sharing motives was mostly conducted in the tradition of the uses and gratifications approach (UGA). Because both are based on the expectancy-value concept (Fishbein, 1967), UGA and TRA are alike in that they try to explain behavior in terms of behavioral intentions. Studies following these approaches (see below) show that sharing behavior is rooted in general media use motivations as well as in basic social needs. First, it is triggered by the need to draw people's attention and thus to attain status among one's

peers or other social network site (SNS) users (*status seeking*, see, Lee & Ma, 2012; Ma, Lee, & Goh, 2011). This need is also reflected in similar motives, labeled one-upmanship (Kang, Lee, You, & Lee, 2013) or getting recognition (Choi, 2016). Second, people share news to socialize with others and achieve a sense of belonging (Choi, 2016; Lee & Ma, 2012; Ma et al., 2011) as well as to satisfy their need for information acquisition (Ma et al., 2011; *information seeking*: Lee & Ma, 2012; *surveillance:* Choi, 2016). Holton et al. (2014) found that linking on Twitter is not only motivated by information seeking, but also by information sharing, that is, by pointing other users to sources of information deemed relevant. Surprisingly, all studies that examine motives such as entertainment or escapism found them to be unrelated with news sharing intentions or actual news sharing behavior (Choi, 2016; Lee & Ma, 2012; Ma et al., 2011). Considering the empirically identified influences of information seeking, socializing, and status seeking on news sharing intention and/or behavior, we assume that these motives, as a first step, will have a positive influence on people's general news sharing attitude. Therefore, we propose the following first hypothesis:

H1: The news sharing motives information seeking, socializing, and status seeking will have a positive influence on news sharing attitude.

Although previous research found the motive of entertainment (as it is understood from traditional UGA research) to be unrelated to news sharing intention or behavior (Choi, 2016; Lee & Ma, 2012; Ma et al., 2011) in the Asian and US contexts, we do not yet have any empirical evidence in a German or European context suggesting any reason not to include this motive. In fact, active news-related communication behavior in (social) online media such as *news commenting* has been linked to entertainment motives in several German studies (see, for example, Springer, 2014, pp. 159–162; Springer, Engelmann, & Pfaffinger, 2015, p. 808;

Ziegele, 2016, p. 268), suggesting that this relationship might also be observed in the context of news sharing. Considering these contradictory results, we pose our first research question:

RQ1: What influence does the news sharing motive of entertainment have on news sharing attitude?

According to TRA (Fishbein & Ajzen, 1975), subjective norms, attitude, and intention work together in predicting behavior. Following these assumptions, both subjective norms and news sharing attitudes assert a positive influence on news sharing intention that—as the next step—will positively influence sharing behavior. Hence, we assume:

H2: Subjective norms will have a positive influence on news sharing intention.

H3: News sharing attitude will have a positive influence on news sharing intention.

H4: News sharing intention will have a positive influence on news sharing behavior.

The TRA models the influence of motives and attitudes on intention and, subsequently, of intention on behavior. Because in 2015 news sharing was still a rather uncommon behavior in Germany (Newman, Levy, & Nielsen, 2015), we concentrated on this rational choice logic to explain behavior in this study. Nonetheless, especially with news sharing becoming more common, this logic is challenged when the behavior in question is subject to habits, emotions, or non-rational behavior—alike various instances of media choice (Hartmann, 2009). In order to uncover at least some hints of less rational behavior, we will therefore also look at the *direct* influence of news sharing motives on behavior, thus investigating which motives might not have an impact on people's general attitude towards news sharing or their intention to exert this behavior, but which directly influence their engaging in news sharing. For example, status seeking might not consciously influence people's plan (i.e., intention) to share news on social media, but nevertheless might exert a direct influence on news sharing behavior. Thus, we

consider the following research question:

RQ2: Are there any direct effects of news sharing motives on news sharing behavior?

Research has repeatedly shown that political interest (PI) and news use correlate with each other (e.g., Delli Carpini, 2004; Strömbäck, Djerf-Pierre, & Shehata, 2013). Employing a longitudinal analysis, Strömbäck et al. (2013) were able to show that the effect of PI on news use has increased between 1986 and 2010, suggesting that the impact of PI on news use has become stronger across time. If PI has a positive influence on news use, it is likely that it also has an influence on news sharing as well. In fact, for the German context, we do know that PI is linked to various social media activities such as commenting, blogging, and tweeting (Vonbun & Schönbach, 2014). In addition, in a recent study, Choi and Lee (2015) found that PI positively regulates the association between news sharing and network heterogeneity: SNS use leads to a more heterogeneous network of contacts when people with moderate or high PI engage in news sharing activities. The authors assume that this is the case because news sharing is a socially engaging activity that "triggers discussions with other users in various ways" (Choi & Lee, 2015, p. 264), and thus is able to produce meaningful individual, interpersonal, and political consequences. The results suggest a positive link between political interest and news sharing behavior. Hence, we propose the following hypothesis:

H5: Political interest will have a positive influence on news sharing behavior.

Method

Design and Sample

Data for the present study were collected through a German language online survey among social media users that were subscribed to the Twitter or Facebook pages of the popular German news outlet *Süddeutsche Zeitung*. The link to the survey was provided by *Süddeutsche*

Zeitung's social media manager via a tweet and a Facebook post. This approach allowed us to collect data from a more diverse sample compared to common student samples, but at the same time obligated us to strictly limit survey length in order to not overstrain or bore *Süddeutsche Zeitung*'s social media users. The survey was conducted in March 2015 and administered via the online survey tool SoSci Survey (Leiner, 2014). After excluding 54 participants because of incomplete answers or response sets, 333 questionnaires were included in the final analysis. Demographic characteristics of the sample included age (M = 31.47, SD = 11.60), gender (63.7% female) and educational level (62.2% with a university degree, 28.2% with a higher education entrance qualification, and 9.6% with lower educational qualifications).

Measures

News Sharing Behavior, Intention, Attitude, and Subjective Norms. All constructs were measured using single items with 5-point Likert-type scales and based on common TRA operationalizations. Although single-item measures are generally inferior to multi-item measures, they also have considerable advantages. While multi-item measures would have burdened participants unnecessarily, single-item measures, due to their elimination of redundancy, can reduce "the fatigue, frustration, and boredom associated with answering highly similar questions repeatedly" (Robins, Hendin, & Trzesniewski, 2001, p. 152), which was of special importance in the setting of our study.

Respondents' actual news sharing behavior was assessed with the question "Thinking about the last week, how often have you shared the link to a news article on social media?"¹ with the scale ranging from 0 = never to 4 = several times a day. News sharing intention was

¹ All questionnaires were administered in German. All items discussed in the method section represent English translations of the original items.

measured using the following question: "Imagine that next week you will encounter a news article that you like. Can you imagine sharing the link to that article on social media?" (scale from 0 = not at all probable to 4 = very probable). News sharing attitude was assessed by measuring the response to the statement "Sharing the link to a news article that I like is..." with the response options ranging from 0 = not good at all to 4 = very good. Last, the subjective norms regarding news sharing behavior were measured with the following statement: "Among my social media friends, it is common to share links to news articles," with the response scale ranging from 0 = strongly disagree to 4 = strongly agree. This operationalization reflects the descriptive norms as discussed above.

News Sharing Motives. We measured the motives information seeking (r = .88, p < .001), socializing (r = .74, p < .001), status seeking (r = .62, p < .001), and entertainment (r = .86, p < .001) based on the wordings used in prior studies on news sharing behavior in the Asian context (Kang et al., 2013; Lee & Ma, 2012; Ma et al., 2011). We used two items for each motive (see correlations above) and measured the level of agreement on a 5-point Likert-type scale, ranging from $0 = strongly \ disagree$ to $4 = strongly \ agree$.

Political Interest. Respondents' interest in politics was assessed using four items with 5point Likert-type scales, ranging from 0 = strongly disagree to 4 = strongly agree. Statements were taken from the short scale political interest (SSPI, Otto & Bacherle, 2011) and included the items "If I notice that I am lacking knowledge on a political topic, I seek the necessary information," "I often think intensely about a political issue," "I observe political events with great interest," as well as "Generally speaking, I'm interested in politics."

Results

To test our hypotheses and research questions, we ran a series of regression analyses, which allowed us to first explain factors influencing news sharing *attitude*, then news sharing *intention*, and—as the final step—news sharing *behavior*.

[Table 1 about here]

Table 1 shows the influence of news sharing motives and political interest on news sharing attitude, as well as the influence of subjective norms and news sharing attitude on news sharing intention. Both models have acceptable F-values and a satisfactory explanatory power with an adjusted R² of 0.33 (news sharing attitude) and 0.54 (news sharing intention).

H1 proposed that the news sharing motives of information seeking, socializing, and status seeking would have a positive influence on news sharing attitude. The data lend support to the influence of information seeking ($\beta = .21, p < .001$) and socializing ($\beta = .48, p < .001$) on news sharing attitude whereas status seeking ($\beta = .04, p = .47$) showed no significant association. Thus, H1 was partly supported. RQ1 asked which influence the motive of entertainment would exert on news sharing attitude. The data show that—as in previous studies in the Asian and US contexts—entertainment had no influence on news sharing attitude ($\beta = .09, p = .06$).

H2 looked at the influence of subjective norms on news sharing intention. In line with our expectations, we found a modest positive influence of subjective norms on news sharing intention ($\beta = .12, p = .01$), thus supporting H2. In the next step, we looked at the influence of news sharing attitude on news sharing intention. As hypothesized, attitude had a substantial and statistically significant effect on news sharing intention ($\beta = .68, p < .001$), which confirms H3.

[Table 2 about here]

Finally, we ran a hierarchical regression stepwise that included the influence of motives and political interest (Model 1), subjective norms and attitude (Model 2), and news sharing intention (Model 3) on news sharing behavior (see Table 2). All models have acceptable F-values and a satisfactory and increasing explanatory power with an adjusted R² of 0.25 (Model 1), 0.33 (Model 2), and 0.39 (Model 3). In accordance with the results identified for H1 to H3, the influence of motives, and—in the second step—attitude, on news sharing behavior decreases from Models 1 to 3 as the influence becomes subsumed under the positive association of news sharing intention with actual news sharing behavior ($\beta = .43$, p < .001). Thus, H4 was also confirmed.

RQ2 was formulated to uncover possible direct effects of news sharing motives on news sharing behavior, but the data show no direct influence of motives on news sharing behavior (see Table 2). H5 addressed the influence of political interest (PI) on news sharing behavior. PI had a modest but significant positive influence on actual news sharing behavior ($\beta = .14, p = .001$). Therefore, H5 was confirmed as well.

Discussion

The present study attempted to explore the factors that influence news sharing behavior on social media such as Facebook or Twitter. As hypothesized, news sharing attitude and subjective norms had a positive effect on news sharing intention, which in turn had a positive effect on actual news sharing behavior. Considering the different news sharing motives, we only found information seeking and socializing to be positively associated with attitude, thus confirming that the results by Choi (2016) and Lee and Ma (2012) in the Asian and US contexts are also valid for the German context. Hence, these motives seem to be influential in a way that is largely independent of cultural context or wider media ecology. In fact, we might argue that

information seeking and socializing seem to be rather *universal* media use motivations as they have been—and still are—identified as relevant factors in predicting such diverse behaviors as television viewing (e.g., Rubin, 1981) or using Facebook groups (e.g., Park, Kee, & Valenzuela, 2009).

The influence of information seeking on news sharing suggests that news stories might be shared both to seek out further information and to retrieve already encountered information. The latter is especially interesting, suggesting that sharing an article serves as a kind of social bookmark in one's personal social media timeline. The influence of socializing, on the other hand, indicates that people not only share news to disseminate and acquire information, but also to interact with other people, possibly with much less emphasis on the content actually shared. As with previous research in the US and Asia (Choi, 2016; Lee & Ma, 2012; Ma et al., 2011), we found no influence of entertainment on news sharing, thus contradicting the results in the context of news commenting among German Internet users (e.g., Springer et al., 2015). Hence, although both behaviors can be considered as an active form of news use, they do not seem to be fueled by the same motivations. The lack of influence, however, might also be attributed to the limitations of our sample (see below). Interestingly, we also found no influence of status seeking, which again might be partly explained by the characteristics of our sample.

Political interest was found to be positively related to news sharing behavior, suggesting that people with higher levels of political interest are more likely to share news in social media. Research has repeatedly shown the strong connection between (passive) news media use and political interest (see, for example, Boulianne, 2015; Holt, Shehata, Strömbäck, & Ljungberg, 2013), a relationship we can also confirm for the active media behavior of news sharing.

Taken together, we can summarize that a new media behavior in the early phases of its societal diffusion such as social media news sharing in Germany in 2015 can be explained by a rational choice logic that is mainly based on the motives of socializing and information seeking. This finding thus reflects the double nature of social media as a means for both information retrieval and social grooming.

The findings, however, should be interpreted with caution due to inherent limitations. First, our analysis is based on a convenience sample of German-speaking social media users subscribed to one specific news outlet, *Süddeutsche Zeitung*. Consequently, our participants are highly interested in both social media and (online) news. Additionally, the sample is skewed towards a high level of political interest as well as female participants. This probably led to a higher amount of political interest as well as an underestimation of the entertainment motive in our sample. In addition, this might also have caused a higher amount of social desirability in answering the questionnaire, which could explain the non-influence of status seeking on news sharing behavior in our study.

Second, we did not consider the sharing of different news types. It is reasonable to assume that the entertainment motive might influence news sharing behavior when it comes to amusing or weird content. Future studies therefore should consider whether there are motivational and attitudinal differences in sharing different types of news. Third, we did not look at the role of habits or automated behaviors that may affect news sharing independent of attitudes, intentions, and subjective norms. As news sharing gets more and more common, we suggest that future studies should take a detailed look at this, possibly also comparing countries that differ in their prevalence of social media news sharing.

References

- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, N.J.: Prentice Hall.
- Boulianne, S. (2011). Stimulating or reinforcing political interest: Using panel data to examine reciprocal effects between news media and political interest. *Political Communication*, 28(2), 147–162. https://doi.org/10.1080/10584609.2010.540305
- Boulianne, S. (2015). Generating political interest with online news. In L. Robinson, S. R.
 Cotten, & J. Schulz (Eds.), *Communication and Information Technologies Annual* (Vol. 9, pp. 53–76). Bingley, UK: Emerald Group Publishing Limited.
- Choi, J. (2016). Why do people use news differently on SNSs? An investigation of the role of motivations, media repertoires, and technology cluster on citizens' news-related activities. *Computers in Human Behavior*, 54, 249–256. https://doi.org/10.1016/j.chb.2015.08.006
- Choi, J., & Lee, J. K. (2015). Investigating the effects of news sharing and political interest on social media network heterogeneity. *Computers in Human Behavior*, 44, 258–266. https://doi.org/10.1016/j.chb.2014.11.029
- Delli Carpini, M. X. (2004). Mediating democratic engagement: The impact of communications on citizens' involvement in political and civic life. In L. L. Kaid (Ed.), *Handbook of Political Communication Research* (pp. 395–434). Mahwah, NJ, USA: Lawrence Erlbaum Associates.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior. An introduction to theory and research*. Reading, MA: Addison-Wesley.

- Hartmann, T. (2009). Action theory, theory of planned behavior and media choice. In T.Hartmann (Ed.), *Media choice: A theoretical and empirical overview* (pp. 32–52). New York: Routledge.
- Holt, K., Shehata, A., Strömbäck, J., & Ljungberg, E. (2013). Age and the effects of news media attention and social media use on political interest and participation: Do social media function as leveller? *European Journal of Communication*, 28(1), 19–34.
 https://doi.org/10.1177/0267323112465369
- Holton, A. E., Baek, K., Coddington, M., & Yaschur, C. (2014). Seeking and sharing:
 Motivations for linking on Twitter. *Communication Research Reports*, *31*(1), 33–40. https://doi.org/10.1080/08824096.2013.843165
- Kang, H., Lee, J. K., You, K. H., & Lee, S. (2013). Does online news reading and sharing shape perceptions of the Internet as a place for public deliberations? *Mass Communication and Society*, *16*(4), 533–556. https://doi.org/10.1080/15205436.2012.746711
- Lee, C. S., & Ma, L. (2012). News sharing in social media: The effect of gratifications and prior experience. *Computers in Human Behavior*, 28, 331–339. https://doi.org/10.1016/j.chb.2011.10.002
- Leiner, D. J. (2014). SoSci Survey (Version 2.5.00-i). Retrieved from https://www.soscisurvey.de
- Ma, L., Lee, C. S., & Goh, D. H.-L. (2011). That's news to me: The influence of perceived gratifications and personal experience on news sharing in social media. In *Proceedings of the 11th Annual International ACM/IEEE Joint Conference on Digital Libraries* (pp. 141–144). New York, NY, USA: ACM. https://doi.org/10.1145/1998076.1998103

- Oeldorf-Hirsch, A., & Sundar, S. S. (2015). Posting, commenting, and tagging: Effects of sharing news stories on Facebook. *Computers in Human Behavior*, 44, 240–249. https://doi.org/10.1016/j.chb.2014.11.024
- Otto, L., & Bacherle, P. (2011). Politisches Interesse Kurzskala (PIKS) Entwicklung und Validierung [Short Scale Political Interest (SSPI) - Development and Validation]. *Politische Psychologie*, 1(1), 19–35.
- Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology & Behavior*, 12(6), 729–733. https://doi.org/10.1089/cpb.2009.0003
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 27(2), 151–161.
- Rubin, A. M. (1981). An examination of television viewing motivations. *Communication Research*, 8(2), 141–165. https://doi.org/10.1177/009365028100800201
- Springer, N. (2014). Beschmutzte Öffentlichkeit? Warum Menschen die Kommentarfunktion auf Online-Nachrichtenseiten als öffentliche Toilettenwand benutzen, warum Besucher ihre Hinterlassenschaften trotzdem lesen, und wie die Wände im Anschluss aussehen. Berlin: Lit.
- Springer, N., Engelmann, I., & Pfaffinger, C. (2015). User comments: motives and inhibitors to write and read. *Information, Communication & Society*, 18(7), 798–815. https://doi.org/10.1080/1369118X.2014.997268

- Strömbäck, J., Djerf-Pierre, M., & Shehata, A. (2013). The dynamics of political interest and news media consumption: A longitudinal perspective. *International Journal of Public Opinion Research*, 25(4), 414–435. https://doi.org/10.1093/ijpor/eds018
- Strömbäck, J., & Shehata, A. (2010). Media malaise or a virtuous circle? Exploring the causal relationships between news media exposure, political news attention and political interest. *European Journal of Political Research*, 49(5), 575–597. https://doi.org/10.1111/j.1475-6765.2009.01913.x
- Ziegele, M. (2016). Nutzerkommentare als Anschlusskommunikation: Theorie und qualitative Analyse des Diskussionswerts von Online-Nachrichten. Wiesbaden: Springer VS.

Tables

Table 1

Multiple OLS regression analyses predicting (1) news sharing attitude from motives and political interest and (2) news sharing intention from subjective norms and attitude

Predictors	(1) News Sharing Attitude	(2) News Sharing Intention		
Motives and political interest				
Information seeking	.21***			
Socializing	.48***			
Entertainment	09			
Status seeking	.04			
Political interest	.02			
Subjective norms and attitude				
Subjective norms		.12**		
News sharing attitude		.68***		
<i>R</i> ² (adj.)	.33	.54		
F	34.30***	192.89***		

Note. n = 333; Coefficients are standardized Beta values; * p < .05; ** p < .01; *** p < .001

Table 2

Hierarchical OLS regression analysis predicting news sharing behavior

News Sharing Behavior						
Мос	Model 1		Model 2		Model 3	
ΔR^2	β	ΔR^2	β	ΔR^2	β	
.26***						
	.19***		.11*		.06	
	.30***		.12*		01	
	01		.02		.01	
	.10		.08		.08	
	.17**		.16**		.14**	
		.08***				
			.08		.07	
			.32***		.11	
				.07***		
					.43***	
.25**	**	.33	***	.3	9***	
	<i>∆R</i> ² .26***	Model I ΔR² β .26*** .19*** .30*** .01 .10 .17**	Model I Model ΔR ² β ΔR ² .26*** .19*** .30*** .01 .10 .17** .08*** .08***	Model I Model 2 ΔR^2 β ΔR^2 β .26*** .19*** .19*** .11* .30*** .12* 01 .02 .10 .08 .17** .16** .08 .32***	Model 1 Model 2 Model ΔR^2 β ΔR^2 β ΔR^2 .26*** .19*** .11* .30*** .12* .30*** .12* .02 .10 .02 .10 .08 .17** .16** .08*** .08 .32*** .07*** .25*** .33*** .3	