Evaluating Implicit Sentiments for Sinners and Sins: A Cross-cultural Investigation

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Abstract

A pencil-and-paper version of the Implicit Association Test was used to evaluate the fluency with which participants could categorize sinful person and sinful behavior concepts with negative and positive words. The research was conducted in Kenya and the United States. Results indicated that participants from both countries were faster when they combined sinful person and sinful behavior concepts with negative words than when they combined sinful person and sinful behavior concepts with positive words. Thus participants from both countries manifested negative implicit sentiment for sinful person and sinful behavior concepts. However, the implicit negativity manifested by Kenyan participants exceeded that of U.S. participants. The research has implications for cultural differences between Kenya and the United States. It also has implications for cognitive theories that describe how implicit sentiments for sinful persons might be represented within an underlying network of cognitive associations.

Keywords: attitudes, implicit, motivations, religion

1. Introduction

Over the past 20 years, several studies have addressed the adage "love the sinner and hate the sin" (e.g., Bassett et al., 2002; Batson, Floyd, Meyer & Winner, 1999; Fulton, Maynard & Gorsuch, 1999; Mak & Tsang, 2008; Rowatt, LaBouff, Johnson, Froese & Tsang, 2009; Veenvliet, 2008). Most of the research has evaluated the degree to which certain religious people, Christians in particular, might be able to do it – maintain positive sentiment for someone who is associated with a behavior that is considered negative, inappropriate, and morally wrong. Usually the research has focused on sexual behaviors that some people consider sinful, whether homosexual or promiscuous heterosexual behaviors. There are studies, however, that evaluated the degree to which participants can manifest favorability for a target person who simply holds beliefs that are contrary to those of the participant. Thus, the beliefs are not necessarily considered sinful (Batson, Denton & Vollmecke, 2008; Batson, Eidelman, Higley & Russell, 2001; Goldfried & Miner, 2002).

Most of these studies have used self-report methodologies, and participants could rely on consciously-controlled cognitive processing to produce their responses. Some, however, have been experimental in nature (Batson et al., 1999; Batson et al., 2001; Batson et al., 2008; Goldfried & Miner, 2002; Mak & Tsang, 2008). But even in these experimental studies, participants had opportunities to rely on consciously-controlled processing to produce their sentiments for either sinful persons or sinful behaviors, and according to some researchers, it is likely they did so (Dovidio & Fazio, 1992; Sedikides & Gebauer, 2010).

The human mind is complex and processes information at two levels of conscious awareness–one conscious, one unconscious. The terms explicit and implicit have been used to describe the processing that occurs at these levels. Explicit processes are those that can be conscious; they tend to be slower and more controlled in nature. Implicit processes operate at the unconscious level; they tend to be more spontaneous and automatic in nature (DeHouwer, Teige-Mocigemba, Spruyt & Moors, 2009; Nosek, Greenwald & Banaji, 2007). Some researchers have argued

that explicit and implicit processes might not operate at different levels, per se. Instead, they operate at different stages of conscious processing (Hofmann, Gschwendner & Schmitt, 2005). Either way, implicit processes occur without conscious awareness.

Processes that occur explicitly are easier to identify and understand, and we generally assume they are the ones that are most important for initiating, maintaining, and controlling behavior. Most people assume implicit processes are secondary and subservient, at best. However, many researchers have emphasized that implicit processes are much more important than we realize. Such processes influence our perceptions of people and situations, initiate goals, and influence behaviors (Aarts, Custers & Marien, 2008; Dijksterhuis, Chartrand & Aarts, 2007; Wegner, 2002). As noted by Bargh and Chartrand (1999, p. 462), "most of a person's everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance."

Loving the sinner and hating the sin can be considered in a variety of ways. At minimum, we believe the statement means that a person is maintaining positive sentiment for someone who is engaged in, or associated with, a behavior for which they have negative sentiment. We also believe the positive sentiment for the person and the negative sentiment for the behavior must be considered implicitly, at a level or stage without conscious awareness.

The most popular task for evaluating implicit attitudes and beliefs has been the Implicit Association Test – hereafter IAT (Greenwald, McGhee, & Schwartz, 1998; Nosek et al., 2007). The IAT is a speed task in which participants respond very quickly to a variety of words that fit into four separate categories. When participants need to respond in the same way to words that fit into two closely related categories (using the same response key at a computer), it is easier than when they need to respond in the same way to words that fit into two less-related categories.

1.1 Current Investigation

The current research was designed to evaluate the degree to which people can simultaneously manifest positive implicit sentiment for sinful persons and negative implicit sentiment for sinful behaviors. To our knowledge, there is only one study that has considered a similar comparison. (Note 1) Wenger and Daniels (2006) used an IAT to evaluate implicit attitudes for sinful persons compared to sinful behaviors. But their research is limited in two ways. First, their research was conducted at a university in a relatively religious, and primarily Christian, part of United States – the southeastern part of the U.S. So it is unclear how their results might generalize to other populations. Second, and more importantly, their methodology did not provide a legitimate evaluation of love the sinner tendencies.

During one phase, their participants categorized sinful person concepts (e.g., cheater, liar, thief) with positive words and sinful behavior concepts (e.g., steal, rape, kill) with negative words. During another phase, their participants categorized sinful person concepts with negative words and sinful behavior concepts with positive words. Thus, participants were always manifesting implicit sentiment for sinful persons relative to sinful behaviors. Since sinful behavior concepts are probably considered extremely negative (e.g., steal, rape, kill), it should be fairly easy to manifest implicit favorability for almost anything else, in comparison. This is what happened. Virtually all the participants in Wenger and Daniels' (2006) research manifested positive implicit sentiment for sinful person concepts relative to sinful behavior concepts.

The primary purpose of the current research was to evaluate participants' implicit sentiments for sinful persons without the direct comparison to sinful behaviors. There were two parts to our research that are similar to two separate IAT's. During one part (one IAT comparison), participants only responded to sinful person concepts with negative and positive words. During another part (another IAT comparison), participants only responded to the sinful behavior concepts with negative and positive words. We assumed all participants would find it fairly easy to combine sinful behavior concepts with negative words and rather difficult to combine sinful behavior concepts with positive words, thus manifesting implicit negativity for sinful behaviors. Such a result would be compatible with previous research (Wenger & Daniels, 2006).

The question is how might participants perform during the part in which they respond to only sinful person concepts? One hypothesis is that participants will find it easier to combine sinful person concepts with positive words than negative words. If this occurs, they will have manifested implicit favorability for sinful persons, and the result will be compatible with that of Wenger and Daniels (2006). Another hypothesis is that participants will find it easier to combine sinful person concepts with negative words than positive words. If this occurs, they will have manifested implicit negativity for sinful persons. Such a result would be contrary to that of Wenger and Daniels, and it would raise questions about who can indeed love sinners and hate sins, at least implicitly.

The second purpose of the current research was to evaluate if implicit sentiments for sinful persons might depend on where the research was conducted. As noted, Wenger and Daniels (2006) conducted their research at a university in a primarily Christian part of United States. We conducted our research in two very different settings: Kenya which is considered a collectivist culture and the United States which is considered an individualistic culture (Ma & Schoeneman, 1997). There are competing hypotheses. Some researchers suggest participants from a collectivist culture tend to be more dependent on each other and less likely to see themselves as unique (e.g., Balcetis, Dunning & Miller, 2008; Ma & Schoeneman, 1997; Markus & Kitayama, 1991). Thus, they might be able to manifest more favorable sentiment for sinful persons compared to participants from an individualistic culture like the United States, and this favorability might show up implicitly. However, some researchers (Izugbara, Otsola & Chika Ezeh, 2009) suggest participants from a country like Kenya have stronger attitudes toward behaviors that are considered morally wrong. Thus, they might manifest more negative sentiment for persons who violate those behaviors, compared to participants from a country like the United States.

1.2 Variations of the IAT

Since the original IAT, researchers have developed several variations. The basic IAT involves having participants respond to concepts in four different categories, two of which are target categories and two are negative and positive categories. During one phase, participants pair instances from one of the target categories with negative instances while pairing instances from the other target category with positive instances. During another phase, the target categories are reversed, relative to the negative and positive categories. Thus, participants are always manifesting an implicit favorability or negativity for one category relative to another category (Nosek et al., 2007).

Recently, several researchers have been using a variation termed the Single-Category IAT (Bohner, Siebler, Gonzales, Haye & Schmidt, 2008; Friese, Bluemke & Wanke, 2007; Houben & Wiers, 2009; Karpinski & Steinman, 2006; Penke, Eichstaedt, & Asendorpf, 2006; Siebler et al., 2010; for a discussion of the reliability and validity of such IAT's, see Bluemke & Friese, 2008). In these IAT's, participants only categorize instances from one target category at a time, with either negative or positive instances. Thus, implicit favorability or negativity is manifested without comparison to another category. Also, most IAT's are administered via a computer. However, there are variations in which participants respond by using a pencil to check locations on paper (Lane, Mitchell, Banaji, 2005; Lowery, Hardin & Sinclair, 2001; Teachman, Gapinski, Brownell, Rawlins & Jeyaram, 2003; for a discussion of reliability and validity of such IAT's, see Lemm, Lane, Sattler, Khan, & Nosek, 2008).

The current experiment utilized a Single-Category IAT patterned after that of Karpinski and Steinman (2006). There were two parts, one that involved evaluating sentiments toward sinful persons and one that involved evaluating sentiments toward sinful behaviors. Also, the IAT was administered via pencil and paper. The reason was twofold. First, the availability of computer technology is limited in western Kenya (where the current research was conducted). Thus, some participants would not feel competent or comfortable performing a speed task via a computer, and Nosek et al. (2007) advise caution in using computer-based IAT's with "populations that are unfamiliar or unskilled with computers" (p. 271). Second, we chose a paper-and-pencil variation of the IAT to reduce the influence of individual differences in experience with computers across Kenyan and U.S. participants. Specifically, we patterned our IAT after that of Lowery et al. (2001), and we included practice phases similar to those used in traditional computer-based IAT's (Nosek et al., 2007). Many of the other pencil-and-paper IAT's were designed with fewer practice phases so data can be collected efficiently in non-laboratory settings.

2. Method

2.1 Participants

This research was conducted at two institutions. One was a public university in western Kenya. One was a public community college in southeastern Pennsylvania, United States. All participants were recruited from introductory psychology classes. Participants from Kenya received a small amount of money for participation. Participants from the United States received a small amount of course credit for participation.

From the Kenyan university, there were 78 participants (35 Females, 43 Males) with mean age 21.1 (SD = 1.67). Two participants either reported low confidence in using the English language or failed to complete the experiment; their data were excluded from all analyses. From the U.S. institution, there were 82 participants (52 females, 30 males) with mean age 23.0 (SD = 6.37). Three participants either reported low confidence in using the English language or failed to complete the experiment; their data were excluded from all analyses.

2.2 Procedure

After an informed consent procedure, all participants performed a paper-and-pencil version of the IAT, provided demographic information, and completed a survey evaluating religious orientations. (Note 2) Participants were evaluated in group sessions lasting 30-45 minutes with 3 to 12 people per group.

The IAT was administered via 9-page packets. On each page and during each phase, a sequence of target words was presented vertically. Participants placed a checkmark to the left or right of each word, progressing from top to bottom, to identify the category to which each word belonged. Categories were listed at the top of each sequence, either to the left or right as appropriate. This way of presenting stimuli and recording responses is identical to that of Lowery et al. (2001). During practice phases, participants were encouraged to respond as quickly and accurately as possible. During test phases, participants were timed to see how many words they could categorize correctly within a certain amount of time.

There were 20 target words in four categories – negative words, positive words, sinful person concepts, and sinful behavior concepts. The negative words were *bad, rotten, useless, filthy, and evil*. The positive words were *good, proper, healthy, valid, and worthy*. The sinful person concepts were *burglar, cheater, liar, murderer, and thief*. The sinful behavior concepts were *deceive, molest, kill, steal, and rape*. These words are identical to those used by Wenger and Daniels (2006). The negative and positive words are similar to those used in previous research (e.g., Greenwald et al., 1998).

During the first phase, participants simply practiced categorizing the 10 negative and positive words by placing a checkmark to the left of each word that was negative and to the right of each word that was positive. The words were repeated so there were 20 total words. The mapping of negative-to-the-left and positive-to-the-right remained the same throughout the experiment for all participants. This mapping is consistent with negative-to-positive sequencing on number lines.

During phases 2, 4, 6, and 8, participants practiced categorizing 15 words in three categories – negative words, positive words, and either sinful person concepts or sinful behavior concepts. Each target word was presented once. Half of the participants categorized sinful person concepts (with negative or positive words) in phases 2 and 4, and sinful behavior words (with negative or positive words) in phases 6 and 8. The order of pairings with negative or positive words was counterbalanced across participants. For the other half of participants, the sinful person to sinful behavior order was reversed, and counterbalancing occurred in the same way. All practice phases included basic instructions to assure understanding.

Phases 3, 5, 7, and 9 were test phases, and they corresponded with preceding practice phases. During each test phase, 35 target words were presented, and participants tried to correctly categorize as many as possible in 18 seconds. In Lowery et al.'s (2001) research, participants were given 20 seconds to categorize 40 words. The reason 35 words were presented was because each valence word (negative or positive) was presented two times, and each sinful concept (either person or behavior) was presented three times. This ratio of valence word to target concept is identical to that of Bluemke and Friese (2008).

3. Results

Overall, participants averaged responding to 22.55 words per test phase ($SD = 4.35$). Thus, the average response time per word during test phases was .80 s. In Wenger and Daniels' (2006) research, participants averaged .83 s per response during test phases. All subsequent analyses were conducted with only correct categorizations (Lowery et al., 2001). An alpha level of .05 was used for judgments of statistical significance.

On average, participants correctly categorized 20.51 words during each test phase ($SD = 4.92$). We conducted a three-way mixed model ANOVA to evaluate if Kenyan and U.S. participants responded differently when combining sinful person concepts, with negative or positive words, compared to combining sinful behavior concepts, with negative or positive words. Concept type (sinful behavior vs. sinful person) and valence (negative vs. positive) constituted within-participant factors. Location (Kenya vs. U.S.) constituted the between-participants factor. Results are depicted in Figure 1.
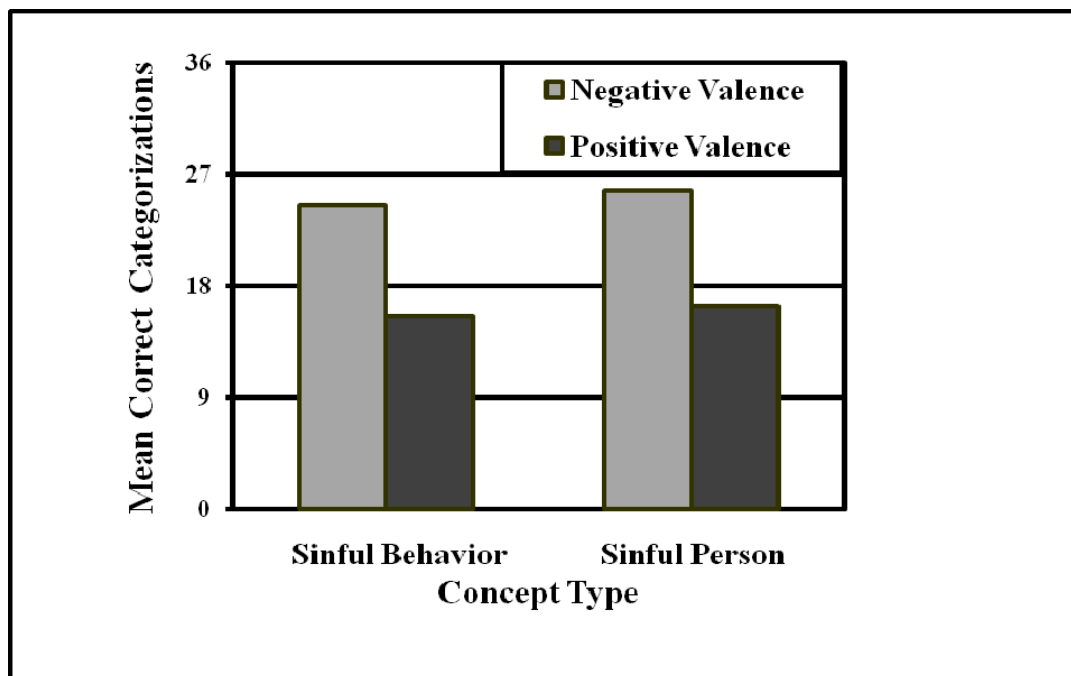
Figure 1. Mean correct categorizations as a function of concept type and valence

The main effect of concept type was not significant, $F < 1.0$. However, the main effect of valence was significant, $F(1, 153) = 221.36$, $p < .001$, $\eta^2 = .58$. Participants categorized more words correctly when combining sinful behavior or sinful person concepts with negative words than when combining sinful behavior or sinful person concepts with positive words. The main effect of location was also significant, $F(1, 153) = 12.31$, $p < .01$, $\eta^2 = .08$. Participants from the U.S. categorized more words correctly per test phase ($M = 22.28$, $SD = 4.62$) than participants from Kenya ($M = 18.67$, $SD = 4.48$). Even though Kenyan participants reported moderate-to-high comfort in using the English language, 58% reported that English was not their primary language. (Note 3) Finally, none of the interactions in this analysis approached significance, all ps > .10. A corresponding ANOVA involving number of errors produced the same pattern of results.

3.1 Focused Analyses

To further evaluate the comparison between Kenyan participants and U.S. participants, we conducted focused analyses with increased sensitivity. First, we log-transformed the number of correct categorizations for each test phase to stabilize variance (Greenwald et al., 1998). Second, we calculated implicit sentiment scores for each type of concept (Czopp, Monteith, Zimmerman & Lynam, 2004). For each participant, we subtracted log-transformed number of correct categorizations during phases with sinful person concepts and negative words from log-transformed number of correct categorizations during phases with sinful person concepts and positive words. A positive difference reflects positive implicit sentiment for sinful persons. A negative difference reflects negative implicit sentiment for sinful persons. Likewise, we subtracted log-transformed number of correct categorizations during phases with sinful behavior concepts and negative words from log-transformed number of correct categorizations during phases with sinful behavior concepts and positive words. A negative difference reflects negative implicit sentiment for sinful behaviors.

We conducted a *t*-test to compare Kenyan participants' implicit sentiment scores for sinful persons with U.S. participants' implicit sentiment scores for sinful persons. Kenyan participants manifested more negative implicit sentiment for sinful persons ($M = -9.78$, $SD = 6.05$) than U.S. participants ($M = -8.53$, $SD = 5.44$), and the difference was significant, $t(153) = 2.98$, $p < .01$, $r_{pb}^2 = .06$. To identify how this difference might correspond with implicit sentiment scores for sinful behavior concepts, we conducted a two-way mixed model ANOVA. The main effect of concept type was not significant, $F < 1.0$. Overall, participants manifested the same amount of negative implicit sentiment for sinful persons and sinful behaviors. The main effect of location was significant, $F(1, 153) = 16.33$, $p < .01$, $\eta^2 = .09$. Participants from Kenya manifested more negative implicit sentiment for both sinful person and sinful behavior concepts compared to participants from the United States. The interaction

between concept type and location was not significant, $F < 1.0$.

4. Discussion

In this study, participants from Kenya and the United States were faster when they combined sinful person and sinful behavior concepts with negative words, compared to when they combined sinful person and sinful behavior concepts with positive words. Thus, participants from both countries manifested negative implicit sentiment for sinful person and sinful behavior concepts. Focused analyses revealed that the implicit sentiment manifested by Kenyan participants, for both sinful persons and sinful behaviors, exceeded that of U.S. participants.

This research extends the current literature in two ways. First, it addresses the love the sinner, hate the sin possibility by tapping into the implicit level (or stage) of awareness, and it used a methodology that provides a legitimate evaluation of implicit sentiments for sinful persons. The results of Wenger and Daniels' (2006) research suggested virtually all participants can manifest implicit favorability for sinful persons. The current results suggest the opposite, and the results raise questions about who can indeed love sinners and hate sins, implicitly.

Second, this research included a comparison of participants from two very different cultures – Kenya and the United States. Perhaps participants from collectivist cultures like Kenya are more dependent on each other and less likely to see themselves as unique (Balcetis et al., 2008; Ma & Schoeneman, 1997; Markus & Kitayama, 1991). The current results suggest such conceptions do not include envisioning sinful persons in favorable ways, at least not implicitly. Instead the results suggest participants from a country like Kenya have stronger attitudes toward behaviors that are considered morally wrong (Izugbara et al., 2009) compared to participants from a country like the United States. Apparently, those attitudes can be manifested implicitly, and they extend to persons associated with the behaviors.

4.1 Implications for Associative Network Theories

There are a variety of associative network theories that can be used to explain the current results (e.g., Anderson, 1992; Greenwald et al., 2002; Kruglanski, 1996; Olson & Fazio, 2008). All of them describe how aspects of attitudes and beliefs are housed within underlying networks of cognitive associations. In such networks, the activation of one concept readily spreads to other concepts that are closely related. Thus, closely related concepts can be activated together or in close succession. It is likely the concepts for sinful persons and corresponding behaviors are closely related. Whenever the concept of *thief* is activated, it is likely the concept of *steal* is also activated, either simultaneously or in close succession. This suggests it would be difficult to implicitly separate the two – the sinner and the corresponding sin.

There are two theories that are particularly relevant to the current research. They both specify how negative and positive sentiments could be represented within an underlying network of associations. In Fazio's (1990; Olson & Fazio, 2008) MODE model, implicit attitudes are represented via connections between various objects and their corresponding evaluations. This suggests negative and positive sentiments could be represented in a similar manner. For individuals to maintain positive sentiment for sinful persons and negative sentiment for corresponding behaviors, they would need to have positive valence closely connected to the sinful person concepts and negative valence closely connected to the sinful behavior concepts. So positive valence would need to be closely connected to thief and negative valence would need to be connected to steal, yet thief and steal would need to be closely connected to each other. Based on the current results, this seems unlikely. Instead, negative valence would be connected, either separately or jointly, to both the sinful person and sinful behavior concepts.

In Greenwald et al.'s (2002; Cvencek, Greenwald & Meltzoff, 2012) unified theory of social cognition, concepts are also connected within an underlying network of associations. What is different is that negative and positive valences are depicted at opposite ends of the network, not as individual nodes within the network. Negative sentiment would be represented at one end and positive sentiment at the other end. For individuals to maintain positive sentiment for sinful persons and negative sentiment for corresponding behaviors, they would need to have sinful person concepts and sinful behavior concepts connected to opposite ends of the network. If this were the case, it would be very difficult, if not impossible, to have a specific sinful person concept (thief) closely connected to its corresponding behavior concept (steal). The current results suggest that within Greenwald et al.'s theory, sinful person and sinful behavior concepts would be closely connected to each other and both would be connected to the negative side.

4.2 Conclusion and Future Directions

Many studies have addressed the adage, "love the sinner, hate the sin," and each has identified at least one group of people who appear to be able to do it, at least to some degree. The current research is different. The results suggest no one can do it, at least implicitly. However, it should be noted that the concepts used in the current research represented very egregious, value-violating behaviors, and the persons associated with those behaviors (e.g., molest, kill, rape & burglar, cheater, murderer). How might participants respond on an IAT if asked to categorize less extreme value-violating behaviors and the persons associated with those behaviors? Also, the current results suggest that participants from a country like Kenya have stronger attitudes toward such behaviors and corresponding persons. How might this depend on the value-violating natures of both concepts?

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Notes

Note 1. Tsang and Rowatt (2007) used an IAT to evaluate the implicit attitudes certain religious individuals have toward homosexuals and hetereosexuals, but they did not compare those attitudes for target persons with corresponding behaviors. So they did not evaluate participants' attitudes for sinners and sins, per se, if indeed participants considered homosexuality sinful.

Note 2. Most of the research addressing the love the sinner, hate the sin possibility has evaluated whether Christians who report certain religious orientations might be more likely or less likely to do it. The orientations include intrinsic religiousness, extrinsic religiousness, fundamentalism, and religion as quest. For a review, see Wenger and Daniels (2006). In their research, none of these factors interacted with participants' implicit tendencies. We also evaluated participants across these four religious orientations. The pattern of results was similar to Wenger and Daniels. None of the interactions between implicit sentiment and a religious orientation approached significance, all $ps > .10$.

Note 3. Our Kenyan participants were recruited from an English-language university. All non-language courses are taught in English, and all university communications occur in English. Also, participants were recruited in English, and the consent procedure occurred in English.