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GAY MEN REMEMBERED: THE BIASING ROLE OF STEREOTYPES IN MEMORY

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ABSTRACT

Differences in recognition memory among students exposed to a narrative characterizing two men as either straight or gay were investigated. Three-way factorial ANOVAs revealed the influences of sexual orientation of stimuli, cognitive load, and time delay on correct and incorrect, biased memory. Participants who read a gay version of an otherwise neutral narrative incorrectly recognized more biased items than those who read a straight version. Processing capacity and time delay in memory reporting were associated with lower correct recognition scores and higher biased recognition scores. Attitudes about gay men were not associated with differences in memory.

INTRODUCTION

While we may like to think that we objectively and reasonably evaluate what occurs in the surrounding world, the manipulation of minor details in our interactions with others could have a strong influence on our memory (Emptor, 1998). Numerous studies to assessed the role of attitudes on memory (Read & Rosson, 1982; Ross, McFarland, & Fletcher, 1981; Sanbonmatzu & Fazio, 1990). However, few researchers (e.g., Snyder & Uranowitz, 1978) have examined the role of negative attitudes on memory for gay men. Thus, one goal of the present study is to examine the effects of negative attitudes and stereotypes about gay men on memory for an event that occurs between two men. In addition, we investigated the influences of processing capacity and time delay on memory performance. We argue that a change in memory would serve as the basis for changes in perceptions and subsequent judgments of others.

Stereotypes simplify complex life experiences and social interactions by creating generalizations about certain groups of people (i.e., outgroups) different from the person making the attribution, and one particular group of people that has been commonly stereotyped in American society has been gay men (Herek, 1988). Walker and Antaki (1986) demonstrated that participants with negative attitudes toward gay men categorized remarks as based on the sexual orientation of the speaker significantly more than participants not demonstrating negative attitudes. They found that participants with negative attitudes toward gay men made more attribution errors when both individuals were gay or straight, suggesting that sexual orientation was used as a schema to group all comments made by gay men and all comments made by straight men. It should be noted that Walker and Antaki did not assess memory performance, but rather they examined perceptions and attributions about gay men, presumably after memory was distorted from prior experiences.

In a study by Snyder and Uranowitz (1978), participants learned of a woman named Betty who was described as either living a gay or straight lifestyle. In a later memory test, participants recognized incorrect "facts" about Betty in a way that corresponded to their original interpretations of her lifestyle (i.e., gay or straight). In other words, participants tended to characterize other aspects of Betty's life in ways that were more *inconsistent* with the narrative, and that were based instead on their prevailing stereotypes of either straight or gay. Again, such cognitive distortions of person perception (i.e., characterizations of Betty) presume changes in memory due to prior information.

Given that sexual orientation seems to be a characteristic that can sway perceptions of others (cf. Snyder & Uranowitz, 1978; Walker & Antaki, 1986), it was assumed that the characterization of sexual orientation would be associated with differences in memory performance. The first hypothesis, therefore, was that participants' who read a narrative about a gay man would correctly recognize fewer test items than those who read the straight narrative. We also examined test item responses that were biased toward gay stereotypes. Therefore, we hypothesized that participants who read the gay narrative would incorrectly recognize more biased test items than those who read the straight narrative.

Another factor that influences the accuracy of memory reports is the extent to which an individual is also preoccupied with performing another task at the same time. Sherman and

Bessenoff (1999) suggested that memory reporting is intentional and effortful, and requires significant cognitive resources. Furthermore, situations that prevent adequate processing capacity may increase the reliance on more readily accessible information. When participants were put under a cognitive load to limit their processing capacity (by having to keep a digit-span in memory), they relied more on prevailing stereotypes for a target individual identified as either a "skinhead" or "priest" than on individuating characteristics put forth in the original behaviors attributed to the target. In other words, participants remembered the stereotypical behaviors performed by either a "skinhead" or a "priest" in lieu of the actual behaviors of the target. We examined cognitive load in the present study because if diminished processing capacity is shown to be associated with stereotypical memory reports, we expected that participants with limited cognitive resources might resort to accessing gay stereotypes when searching their memories for men depicted as gay. In the present study, we predicted that the imposition of processing capacity task would make memory reports more stereotypical in nature, as reflected by more recognition of incorrect, biased test items. Moreover, an interaction was predicted between the type of narrative and processing capacity, such that incorrect recognition of biased test items would be greater after reading the gay narrative under cognitive load conditions than under normal (no-load) conditions.

When a delay occurs between initial encoding and retrieval of complex stimuli, individuating information, whether inconsistent or irrelevant in regard to prevailing schemas, is either forgotten or reconstructed in a way to match one's prevailing world-knowledge schema (Tuckey & Brewer, 2003). In other words, over time, memory becomes based more on schemas, attitudes, and stereotypes, and less based on specific details from the original event. In a study by Read and Rosson (1982) participants revealed their views on nuclear power, and then read a narrative about a fire at a nuclear power plant. They performed a recognition test about the incident either immediately, one week later, or two weeks later. Read and Rosson found that as time passed, individuals with positive attitudes toward nuclear power remembered the article in a way that presented the nuclear power plant in a better light than individuals with negative attitudes toward nuclear power. Read and Rosson concluded that participants relied increasingly more on their attitudes as memory for the passage deteriorated with time. Similarly, Higgins, Rhodes, and Jones (1977) examined the effect of time delay in memory for events in a target individual's life based on previous exposure to personality trait terms used to describe the individual. Participants retained in memory several words, some of which were character traits, then read an ambiguous paragraph about a man named Donald who could be characterized one way (e.g., independent) or another (e.g., aloof). Higgins et al. found that not only did participants use trait categories that had been previously activated to characterize Donald, but the tendency for this effect increased with the delay in testing (i.e., 10-14 days later). With regard to time delay in memory reporting, we hypothesized that memory in all conditions would be less accurate one month after testing. Furthermore, in the gay narrative condition, individuals should recognize more biased, stereotypic test items after one month (Time 2) than after an immediate memory test (Time 1). We also predicted an interaction between narrative type and time delay, such that more biased, stereotypic test items would be recognized after a delay after reading the gay narrative than after reading the straight narrative.

Because it has been shown that attitude can be a predictor of memory (e.g., Sanbonmatsu & Fazio, 1990; Walker & Antaki, 1986), we predicted that participants with negative attitudes

toward gay men who read the gay narrative would demonstrate a positive relationship between scores on the ATLG-S and correct recognition, such that low scores on the ATGL-S, indicating higher levels of homonegativity, would be related to lower correct recognition scores. Likewise, we predicted a negative relationship for scores on the ATGL-S and incorrect, biased recognition, such that low scores on the ATGL-S would be related to high biased, stereotypic recognition scores. We did not predicted such relationships with the straight narrative because there is no prior evidence to suggest that attitudes toward gay men (or even straight men) would influence memory about straight men.

METHOD

Participants

Participants included 108 undergraduate students from a small, Jesuit university in the mid-Atlantic region of the United States who fulfilled a requirement for their introductory psychology course. Twenty-seven students participated in a pilot study of the stimulus and testing materials, and 81 students participated in the final study. Of the 81 who participated, 54 completed both immediate and delayed memory tests. All participants were tested in groups of 10 to 25 students.

Materials

Questionnaires

Materials for this experiment included a packet containing a demographic questionnaire which included questions such as gender of participant, year in school, and major. The packet also included the *Michigan Alcoholism Screening Test*, (MAST; Selzer, 1971), the *Ambivalent Sexism Inventory* (ASI; Glick & Fiske, 1997), and the *Attitudes Toward Lesbians and Gay Men Scale* (ATLG-S; Herek, 1994). The MAST and ASI served as a filler tasks in this study in order to mask the true purpose of the ATLG-S as the main questionnaire measure in the study. The order of the questionnaires in the packets for all participants was: (1) demographic questionnaire; (2) MAST; (3) ATLG-S; and (4) ASI.

The ATLG-S (Herek, 1994) is a brief measure of attitudes toward gay men and women and contains 10 items which are rated on a 5-point Likert scale, with responses ranging from "strongly agree" to "strongly disagree." Higher scores indicate more positive attitudes toward gay individuals, and lower scores indicate more homonegative attitudes. Five items pertain to homonegativity toward females, and five items measure homonegativity toward males. Herek found the ATLG-S to be significantly correlated with the Traditional Family Ideology (TFI) scale and the Religious Ideology Scale (RIS), (r = .73-.93 and .69-.90, respectively). Estrada (2002) established its validity to be .75 when scores on the scale were correlated with factors such as trust, acceptance and comfort. For the purpose of this study, we used only the subscale for attitudes toward gay men.

Gay and Straight Narratives

The narratives contained biography and interaction scenarios describing two individuals, Donald and Scott. The gay narrative contained a biography and interaction scenario which characterized Donald and Scott as gay, according to the pronouns attributed to the people they are dating (see Appendix A). The straight narrative contained an identical biography and interaction scenario, except that the pronouns attributed to the people Donald and Scott are dating characterized them as straight (see Appendix B).

To establish that the different versions of the narrative of Donald and Scott created differences in the extent to which the two were viewed, a pilot study was performed with 27 participants. Thirteen participants read the gay narrative, and 14 participants read the straight narrative. After reading the materials, participants received a 5-point Likert-type rating scale which contained a series of questions regarding Donald and Scott (see Appendix C). The first six questions asked participants to rate the extent to which Donald and Scott portrayed certain characteristics or behaviors that were believed to be stereotypical of gay men. Ratings ranged from 1 (*never*) to 5 (*extremely*) and were averaged for each participant to get an overall stereotype rating for Donald and Scott. While there was not a significant difference between mean ratings for the group that read the straight narrative ($M = 2.82$, $SD = 0.68$) and the group that read the gay narrative ($M = 3.28$, $SD = 0.66$), a trend was seen in that direction, $t(25) = 1.79$, $p = .085$. The last three questions asked participants to rate Donald and Scott on a continuum in terms of their behavior, conversation, and overall presentation, from 1 (*heterosexual*) to 5 (*homosexual*). For each of these three questions, participants' rated the gay narrative as significantly more "homosexual" than the straight narrative (see Table 1). Therefore, we felt confident that the narratives created for the present study were sufficiently distinctive as gay and straight narratives.

Table 1. Results from Pilot Study of Narratives, Survey Items 7-9.

	Gay Narrative		Straight Narrative		
	M	*SD*	*M*	*SD*	*t*
Survey Item					
Behavior	1.57	0.76	4.31	1.32	*t* (25) = 6.67, *p* < .05
Conversation	1.36	0.63	4.85	0.38	*t* (25) = 17.26, *p* < .05
Overall Rating	1.64	0.84	4.92	0.28	*t* (25) = 13.39, *p* < .05

Cognitive Load Task

Participants listened to an audio taped recording asking them to perform a variety of mathematical problems, such as completing number sequences and performing computations, as they proceeded through the questions of the recognition test (see Appendix D) [1].

Recognition Test

There were two versions of the memory test. Each version contained questions that pertained to the gender of Donald's and Scott's dates, as described in whichever narrative participants read (see Appendix E). The memory test contained 27 questions which measured participants'

memory for information contained in the narrative. Sixteen target questions pertained to stereotypes of gay and straight individuals and were incorrect responses. Each target question contained a forced-choice format containing three responses, one that was the correct answer, one which was an incorrect answer biased toward negative gay stereotypes, and one which was an incorrect, nonbiased answer. The remaining 11 questions were filler items that could be answered correctly from the narrative; these item were designed to keep participants from realizing the true purpose of the study. All test items were arranged randomly.

Procedure

All participants were informed that they would be taking part in a study to assess the relationship among various attitudes and memory performance. Participants were randomly assigned to read either the gay or straight narrative. All participants first completed the questionnaires then read either the gay or straight narrative. After all participants read the narrative, all information was collected by the experimenter in order to prevent participants from referring back to it while completing the recognition test. Participants in the no-load condition performed only the recognition test at their own pace, whereas participants in the cognitive load condition performed the processing capacity task and completed the recognition test simultaneously.

One month later, all participants were asked to return and complete a short follow-up to the study. Upon arrival, they received the same memory test that they received one month earlier. Twenty-nine of the participants in the gay narrative condition and 25 participants from the straight narrative condition returned at Time 2.

Design

The resultant design was a 2 x 2 x 2 (Narrative Type x Processing capacity x Time of Testing) mixed factorial design was used, with Time as a within-subjects factor. The dependent variables included the proportion of correctly recognized items (out of the 16 target test items) and the proportion of incorrect, stereotypic items recognized (out of the 16 target test items, at Immediate and Delayed testing times). Participants who scored higher on the stereotypic items, therefore chose incorrect answers from the recognition test that were based on stereotypes about gay men. Because ATGL-S scores did not significantly correlate with the various memory measures, ATGL-S scores were not entered into the aforementioned ANOVAs as a covariate, Correct Recognition (Immediate): r (80) = .11, *ns*; Stereotype Recognition (Immediate): r (80) = .02, *ns*; Correct Recognition (Delayed): r (53) = .01, *ns*; Stereotype Recognition (Delayed): r (80) = -.04, *ns*. Instead, use of the ATGL-S as a continuous variable led to examination of the relationships between memory measures and attitudes across experimental conditions.

RESULTS

Recognition of Biased, Stereotypic Test Items

A 2 x 2 x 2 (Narrative x Processing Capacity x Time of Testing) ANOVA was performed with the biased, stereotype recognition scores (see Table 2). There was a significant main effect for Narrative Type, in which individuals who read the gay narrative (M = .19, SD = .11) inaccurately

recognized more stereotypic items than individuals who read the straight narrative (*M* = .14, *SD* = .10), *F* (1, 50) = 5.37, *p* < .05, *Eta-squared* = .10. The main effect for Narrative may be qualified by a marginally significant Narrative by Processing capacity interaction, *F* (1, 50) = 3.83, *p* = .056, *Eta-squared* = .07. Individuals who read the straight narrative under no-load conditions (*M* = .09, *SD* = .17) endorsed slightly fewer stereotypic items than individuals who read the gay narrative under the no-load condition (*M* = .20, *SD* = .15), whereas there appeared to be no difference in recognition of stereotypic items under cognitive load conditions for individuals who read gay (*M* = .19, *SD* = .19) or straight (*M* = .18, *SD* = .19) narratives.

Table 2. Mean Proportions and Standard Deviations of Incorrect Recognition of Biased, Stereotypic Response Options in Narrative x Processing Capacity x Time of Testing Conditions

	Processing Capacity					
	No-Load			Load		
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Immediate)	.13	.06	18	.11	.08	11
(Delayed)	.26	.10	18	.26	.12	11
Straight Narrative						
(Immediate)	.08	.04	14	.11	.06	11
(Delayed)	.11	.07	14	.24	.24	11

Contrary to the prediction that participants who read the gay narrative would have a higher stereotype recognition score when placed under Cognitive load, there was no significant main effect for Processing Capacity, *F* (1, 50) = 2.55, *p* > .05 (Load: *M* = .18, *SD* = .09; No-Load: *M* = .15, *SD* = .11). However, these results only include data from participants who completed both immediate and delayed recognition tests (*n* = 54).

In a separate 2 x 2 (Narrative x Processing Capacity) univariate ANOVA for stereotype recognition scores at Time 1 only (*n* = 81), there was a significant main effect for Narrative, in which participants who read the gay narrative (*M* = .14, *SD* = .10) incorrectly recognized significantly more biased, stereotypic response items than participants who read the straight narrative (*M* = .09, *SD* = .06), *F* (1, 77) = 5.72, *p* < .05, *Eta-squared* = .07. There was also a significant main effect for Processing Capacity, in which participants under the load condition (*M* = .15, *SD* = .10) recognized significantly more biased, stereotypic response items than participants under no-load conditions (*M* = .10, *SD* = .07), *F* (1, 77) = 5.72, *p* < .05, *Eta-squared* = .07. There was no significant Narrative Type by Processing Capacity interaction, *F* < 1.

There was a significant main effect for time of testing, in which participants inaccurately recognized more stereotypic items at Time 2 (*M* = .22, *SD* = .15) than at Time 1 (*M* = .11, *SD* = .06), *F* (1, 50) = 36.83, *p* < .001, *Eta-squared* = .42. Interestingly, Time did not interact with Narrative Type or Processing Capacity conditions, *F*s (1, 50) = 2.49 and 2.10, *p*s > .05, respectively. It appears that regardless of whether participants read straight or gay narratives under load or no-load conditions, memory for the narrative became less accurate and more

stereotypic over time (see Table 1). Time also did not yield any significant higher order interactions with Narrative Type, Processing Capacity, or Attitude, all Fs < 1.

In an attrition analysis of participants who completed the memory test at Time 1 ($n = 27$) only versus participants who completed both Time 1 and Time 2 memory tests ($n = 54$), two significant results emerged. In a 2 x 2 x 2 (Attrition x Narrative x Processing Capacity) ANOVA of stereotype recognition scores for Time 1 only, there was a significant main effect for Attrition, in which participants who completed memory tests at both Time 1 and Time 2 ($M = 12$, $SD = .15$) recognized significantly fewer biased, stereotypic response items than participants who completed only Time 1 measure and did not return for Time 2 testing ($M = 10$, $SD = .11$), F (1, 73) = 6.69, $p < .05$. This effect was further qualified by a significant Attrition x Processing Capacity interaction, F (1, 73) = 4.15, $p < .05$. Participants who completed only the memory test at Time 1 recognized significantly more biased, stereotype responses when under cognitive load conditions ($M = .19$, $SD = .13$) than participants under no-load conditions ($M = .08$, $SD = .11$), t (25) = 2.39, $p < .05$. On the other hand, participants who completed both memory tests at Time 1 and Time 2 showed no difference in recognition of biased, stereotype responses whether under cognitive load or no-load conditions ($M = .11$, $SD = .07$ and $M = .11$, $SD = .06$, respectively), t (25) = 0.47, $p > .05$. In addition, participants in the cognitive load conditions and completed the Time 1 memory test only recognized more stereotypic responses ($M = .19$, $SD = .13$) than participants who completed both Time 1 and Time 2 memory tests ($M = .11$, $SD = .07$), t (25) = 2.36, $p < .05$, but no difference was found for no-load participants, t (25) = 2.36, $p > .05$. These results suggest that participants who remained in the study in its entirety remembered fewer stereotypic responses than those who dropped from the study before Time 2 testing, but only when those participants were under cognitive load conditions. No other significant effects or interactions were found, and all results of the attrition analysis for stereotype recognition scores are found in Appendix F.

Correct Recognition

A 2 x 2 x 2 (Narrative x Processing Capacity x Time of Testing) ANOVA was performed with the correct recognition scores (see Table 3). There was no significant main effect for Narrative, F (1, 50) = 1.09, $p > .05$ (Gay Narrative: $M = .68$, $SD = .11$; Straight Narrative: $M = .70$, $SD = .11$). Regarding Processing Capacity, participants in no-load conditions ($M = .71$, $SD = .11$) correctly recognized slightly more items than participants in load conditions ($M = .65$, $SD = .11$), however this was only marginally significant, F (1, 50) = 3.10, $p = .085$. There was no significant Narrative x Processing Capacity interaction, $F < 1$. There was a significant main effect for Time of Testing, in which participants correctly recognized fewer items after a 2-week delay ($M = .60$, $SD = .16$) than during immediate testing ($M = .76$, $SD = .11$), F (1, 50) = 59.87, $p < .05$, *Eta-squared* = .55. This decrease in accuracy from immediate to delayed testing was qualified by a Time of Testing x Narrative interaction, F (1, 50) = 4.46, $p < .05$, *Eta-squared* = .08. Participants who read the straight narrative demonstrated a larger decrease in correct recognition performance from immediate ($M = .80$, $SD = .11$) to delayed testing ($M = .58$, $SD = .16$), compared to participants to read the gay narrative (Immediate: $M = .72$, $SD = .11$; Delayed: $M = .60$, $SD = .16$). No other interactions between Narrative, Processing Capacity, and Time of Testing were found, all F's < 1.

Table 3. Mean Proportions and Standard Deviations of Correct Recognition in Narrative x Processing Capacity x Time of Testing Conditions

	Processing Capacity					
	No-Load			Load		
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Immediate)	.74	.12	18	.70	.13	11
(Delayed)	.61	.11	18	.60	.13	11
Straight Narrative						
(Immediate)	.83	.09	14	.77	.10	11
(Delayed)	.64	.11	14	.53	.26	11

In a separate 2 x 2 (Narrative x Processing Capacity) univariate ANOVA for correct recognition scores at Time 1 only ($n = 81$), there was a significant main effect for Narrative, in which participants who read the gay narrative ($M = .71$, $SD = .15$) correctly recognized significantly fewer items than participants who read the straight narrative ($M = .80$, $SD = .11$), $F (1, 77) = 9.59$, $p < .05$, *Eta-squared* = .11. There was also a significant main effect for Processing Capacity, in which participants under the load condition ($M = .70$, $SD = .15$) correctly recognized significantly fewer items than participants under no-load conditions ($M = .80$, $SD = .12$), $F (1, 77) = 10.45$, $p < .05$, *Eta-squared* = .07. There was no significant Narrative Type by Processing Capacity interaction, $F < 1$. There was no significant Narrative x Processing Capacity interaction, $F < 1$.

For correct recognition, an attrition analysis of participants who completed the memory test at Time 1 ($n = 27$) only versus participants who completed both Time 1 and Time 2 memory tests ($n = 54$) revealed no significant differences between attrition groups across several results from the 2 x 2 x 2 (Attrition x Narrative x Processing Capacity) ANOVA of Time 1 correct recognition scores. All results are reported in Appendix F.

Incorrect Recognition of Filler Items

A 2 x 2 x 2 (Narrative x Processing Capacity x Time of Testing) ANOVA was performed with the incorrect recognition of filler items (see Table 4). There was no significant main effect for Narrative, $F (1, 50) = 1.84$, $p > .05$ (Gay Narrative: $M = .15$, $SD = .06$; Straight Narrative: $M = .17$, $SD = .07$). There was no significant main effect for Processing Capacity, $F < 1$ (Cognitive-Load: $M = .17$, $SD = .06$; No-Load: $M = .15$, $SD = .06$). There was no significant Narrative x Processing Capacity interaction, $F (1, 50) = 1.06$, $p > .05$. There was a significant main effect for Time of Testing, in which participants chose more filler items after delayed testing ($M = .18$, $SD = .10$) than after immediate testing ($M = .13$, $SD = .09$), $F (1, 50) = 12.37$, $p < .05$. Interestingly, this effect was qualified by a significant Time x Narrative interaction, $F (1, 50) = 22.93$, $p < .05$. Participants who read the gay narrative showed no difference the proportion of filler items incorrectly recognized from immediate ($M = .15$, $SD = .10$) to delayed testing ($M = .13$, $SD = .06$), $t (28) = .79$, $p > .05$. However, for those who read the straight narrative, participants incorrectly recognized significantly more filler items after delayed testing ($M = .10$, $SD = .07$)

than after immediate testing ($M = .24$, $SD = .10$), t (28) = 5.40, $p < .05$. Time did not interact with Processing Capacity, F (1, 50) = 1.79, $p > .05$, and there was no significant three-way interaction, $F < 1$.

Table 4. Mean Proportions and Standard Deviations of Incorrect Recognition of Filler Items in Narrative x Processing Capacity x Time of Testing Conditions

	Processing Capacity					
	No-Load			Load		
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Immediate)	.13	.09	18	.18	.10	11
(Delayed)	.13	.06	18	.14	.06	11
Straight Narrative						
(Immediate)	.09	.08	14	.11	.05	11
(Delayed)	.25	.08	14	.22	.13	11

For incorrect recognition of filler items, an attrition analysis of participants who completed the memory test at Time 1 ($n = 27$) only versus participants who completed both Time 1 and Time 2 memory tests ($n = 54$) revealed no significant differences between attrition groups across several results from the 2 x 2 x 2 (Attrition x Narrative x Processing Capacity) ANOVA of Time 1 correct recognition scores. All results are reported in Appendix F.

Attitudes

Pearson bivariate correlations between ATGL-S subscale scores for male homonegativity and recognition memory scores were conducted across various testing conditions using alpha of .05 and two-tailed significance tests (see Tables 5 and 6 in Appendix G). There we no significant correlations, all p's > .05. It should be noted that the sample sizes in each of the conditions was quite low, which may have led to nonsignificant results due to lack of statistical power.

DISCUSSION

Our hypothesis that individuals would inaccurately recognize more biased, stereotypically gay items after reading a gay versus a straight narrative was confirmed and supports similar research on the effects of attitudes on person perception (Walther & Antaki, 1986) and memory performance (Sanbonmatsu & Fazio, 1990; Snyder & Uranowitz, 1978). Participants did differ between narrative conditions in correct recognition performance but only after immediate testing. The prediction that application of a cognitive load task would result in more recognition of biased items was partially confirmed, in that we found such an effect (compared to no-load conditions) only with immediate testing; this effect was accompanied by by lower correct recognition scores upon immediate testing. Furthermore, the predicted interaction between narrative type and processing capacity was marginally significant ($p = .056$), suggesting that participants who read the gay narrative were slightly more likely to incorrectly recognize biased

items when under cognitive load conditions than when under no-load conditions. These results also are in line with Sherman and Bessenoff's (1999) research, in which testing was immediate and under cognitive load conditions, participants relied more on memory for stereotypical behaviors rather than actual behaviors portrayed in a studied narrative.

Interestingly, and contrary to our predictions, participants chose more incorrect, biased items after a delay, regardless of the type of narrative read, suggesting that participants' memories became more biased with a delay. One explanation may be that the 33% attrition rate may account for the unexpected effects of the delayed recognition test, in that participants who chose to continue to participate may be more prone to biased stereotypes of gay men. This was partially supported by an attrition analysis of Time 1 scores, in that individuals whose processing capacity was diminished with the implementation of our cognitive-load task and who completed both immediate and delayed memory testing, recognized fewer biased, stereotypic answers. Alternatively, an interaction between narrative type and time of testing for correct recognition suggests that participants who read the straight narrative chose fewer correct answers after a delay, and these answers included more biased than unbiased filler items. This was confirmed by a narrative x time of testing interaction for incorrect recognition of filler items, in which individuals who read the straight narrative chose more filler items after a delay. Furthermore, participants who read the gay narrative, in which gay stereotypes may have been activated, continued to endorse biased items after a delay such that they did not change their incorrect, biased answers to incorrect filler item answers after a delay. Such results are consistent with Higgins et al.' (1977), who found that previously activated traits used to characterize individuals increased with a delay.

Although it may appear that our effect sizes between conditions for both types of recognition memory tests may be small, Snyder and Uranowitz (1978) reported a mean difference of 13.5% in recognition test errors between a lesbian-labeled story and a heterosexual-labeled story. Although slightly larger than our effect sizes, Snyder and Uranowitz conducted their recognition test 1 week after exposure to the story, whereas our effect sizes primarily reflect mean differences upon immediate memory testing, suggesting that even upon immediate testing we see evidence for the impact of induced stereotypes on memory performance. Unlike Sherman and Bessenhoff (1999) who found that the effects of Processing Capacity only interacted with other factors in their study, we found effects of processing capacity in immediate memory testing for biased items and correct items in terms of both main effects and interactions. Again, our study assessed immediate testing, whereas Sherman and Bessenhoff tested participants 24 hours later. In summary, we believe our results are statistically meaningful, in that even upon immediate memory testing we see evidence for changes in memory based on prior exposure to gay or straight information and processing capacity.

Unfortunately, our measure of explicit attitudes of gay men did not yield any meaningful results. The lack of any other significant results may be due to a small and unequal sample sizes between conditions. In addition, the ATGL-S we used was limited to five items, all of which arguably tap into explicit attitudes about gay men. In contrast, an implicit attitude measure (such as the Implicit Association Test; see Banse, Seise, & Zerbes, 2001) might more accurately assess participants' attitudes toward gay men, since individuals might actively inhibit negative views about gay men in order to appear more socially acceptable to researchers. Another short-coming

of the study is that we did not assess sexual orientation of our participants. Jellison, McConnell, and Gabriel (2004) demonstrated that heterosexual males were likely to be motivated to control prejudices against gays and explicit measures of attitudes about sexual orientation. They did not find this relationship using implicit measures, suggesting that use of implicit measures may be less prone to issues regarding social desirability among participants.

In summary, the results of our experiment confirmed that participants who read about gay men remembered them in a different way than when the same men were described as straight. Over time, memory for the men became more biased toward gay stereotypes, regardless of prior exposure to either gay or straight narrative information about the men. In terms of the items used in the current study, the gay men were "remembered" as being more interested in superficiality, more concerned with their body image, and as having more sexual encounters with others. This effect has the potential for frightening consequences in the way that gay men are characterized in the eyes of society. For example, Walker and Antaki (1986) suggested that gay men are at greater risk for suicide and are more emotionally unstable than the rest of the population, so this group may be particularly vulnerable to memory distortions. The fact that explicit attitudes about gay men was not associated with differences in memory performance for those who read the gay narrative suggests that even those with neutral or positive attitudes about gay may are capable of allowing gay stereotypes to influence their memory. Because we rely on our memory of past encounters to guide us in current situations and future decision-making processes, the biasing effect of memory has the potential to influence many of the instances in which we come into contact with gay men and are called to make judgments about them.

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APPENDIX A

Gay Narrative – Biography and Interaction Scenario

Instructions:
The following information will describe the lives of two business partners, Donald and Scott. Please read the biographical information about Donald and Scott, and then turn the page.

Donald

Donald is 24 years old. He attended New York University, where he got his degree in marketing and public relations. Donald is originally from Florida, but left for New York when he went to college. Because he is so busy, he does not get to go back home much, but says that he misses Florida, the warm weather, and the great beaches. He and Scott are planning to take a trip to Florida together if they are able to land an important business deal that they have coming up, so Donald is excited.

Donald's birthday is right before Christmas, and ever since he was little it has upset him because it meant that many relatives would give him a joint Christmas-birthday present which Donald never felt was adequate enough to suffice for two holidays. His parents, Joan and Martin, were both in their late-forties when they had Donald, and subsequently spent a good deal of time at

work. Due to this fact, Donald can attribute much of his upbringing to his elder siblings. Donald's sister, Deborah, is ten years older than Donald and lives in Milwaukee with her husband and their children. She is a pediatric nurse. Donald also has two older brothers, Mark and Jonathon, who are twins. Despite the families attempts to bring the two up similarly, they asserted their individual personalities and refused to do the same things, as each wanted to be remembered as his own person. Both brothers still live in the Florida area, and Mark went to law school while Jonathon does advertising.

In terms of his personal life, Donald is not married but has a serious boyfriend whom he has been dating for about five years. He met him while attending college in New York, but his boyfriend moved to Boston last year to pursue a graduate degree, and the two have been apart since that time. When the two are able to get together, Donald enjoys spending time with him. While Donald's boyfriend, Jerry, majored in business at NYU as well, he now attends school for interior decorating. Donald loves his boyfriend very much and considers Jerry's best quality to be his sense of humor. Donald looks forward to talking to him every night before bed, when the two have long, intimate conversations.

In his free time, Donald likes to hang out with his friends. Donald has made many friends in the city and has found that they have been helpful in making his "big city" lifestyle more accommodating. They see movies regularly, go to shows in the city, and get together at Donald's apartment to shoot the breeze, because it is the nicest. They also spend a good deal of time at the gym. Donald likes to work out and maintain a healthy diet, because he considers his physical well-being to be rather important to him.

Scott

Scott is 24 years old. Scott met Donald at NYU when both were pursuing degrees in business there. Scott and Donald became rather good friends and decided to become roommates their senior year. It was when living together that they came up with an idea for a joint corporation selling various types of herbal teas from differing cultures. Scott has always lived in New York City, and looks forward to the possibility of going to Florida for the very first time with his good friend and business partner, Donald, so he can learn how to surf.

Scott had a rocky upbringing. His mother was a heroin addict who had sex with Scott's father, a dealer, in exchange for drugs. Born addicted himself, doctors had Scott undergo intense therapy sessions when young to kick the addiction he was born with. After returning home, his life did not get much better. His mother had the sole responsibility of raising him since she did not know the father and was unable to track him down after he impregnated her. She often left Scott unattended while she was out "working" to get money for the two of them. At the age of ten, Scott was removed from his mother's care by a social service agency, and placed in foster care. Scott spent the next five years bouncing around from one foster family to the next, in attempt to find one with which he was satisfied. Having not attended school, he was behind academically. However, private tutors worked with him and pushed him to go to college. His amazing life story was the topic of his entrance essay for New York University, and he was accepted.

Scott has never had a serious boyfriend; instead, he usually bounces from one relationship to the next. His philosophy is that if you haven't had any luck finding the guy you are meant to be with, you might as well have fun while you are out in the dating world. That is why he enjoys keeping his options open when it comes to dating. He never lets his relationships get serious because he is afraid a serious relationship might close him off from meeting the guy he is meant to be with, whom he has not found yet. His idea of the perfect date includes dinner and dancing, to be followed by coffee and midnight conversation back at his apartment.

In his free time, Scott also likes to work out and go clubbing, but enjoys reading most. He enjoys having an active social life and goes out to the bars and clubs for at least a little while almost every night. He has numerous social contacts, but unlike Donald, he usually does not spend time with them during the day, opting instead for evening activities. During the day, when he is not at work Donald also has a small dog which he enjoys taking on walks in Central Park. He likes to meet exciting new people, but looks forward to finding the man of his dreams.

Instructions:

Please read the following scenario containing conversation between Donald and Scott. As stated earlier, Donald and Scott have been business partners for several years. They are involved in the distribution and sales of various types of herbal tea. While they have been involved in their business for several years now, they are thinking about branching out and merging with a company that sells different types of flavored tea over the internet. Donald and Scott are in negotiations with this company, Teatime, and have been discussing their daily interactions with members of this company. On the following page is their discussion at the end of a business day, about various topics relating to their personal lives and their day at work. After you have finished reading, bring this packet to the administrator.

Donald: I've been trying to get in contact with Ms. Morrison.
Scott: Is she the marketing director of Teatime? Why don't you go straight for the president?
Donald: I know these things, Scott. You have to go for the underdog first, and then work your way up. I don't want to turn their company off to us from the beginning, or else we will never be able to do any business with them.
Scott: Ah, just give up and try again tomorrow. C'mon, you've had a long day. Isn't it time for you to take a break already?
Donald: What do you mean?
Scott: You are going to give yourself a heart attack! And at such a ripe age. You work too hard.
Donald: That's easy for you to say. All you do for our company is spend five minutes at the end of the day counting. I do all the dirty work.

Donald laughs as he says this, and Scott appears to be slightly offended, and gets defensive at first, before shrugging off Donald's remark.

Scott: It's not my fault I don't have enough to count. If you were doing your job right, I would have a lot more counting to do, you know.
Donald (laughing): This is true. So now you are *trying* to give me a heart attack?
Scott: Let's go out for a drink. Forget about all this mess until tomorrow.

Donald: Alright, you're on. But I can only stay for one drink; I have to clean my apartment tonight, then talk to the landlord about looking at some plumbing issues in the bathroom.
Scott: You said this landlord is a jerk, right?
Donald: Yeah, that's the one.
Scott: Alright, well we won't stay long. Get your stuff together and I'll go grab us a taxi.

Scott and Donald leave the office and eventually arrive at The Golden Oak Lounge*, a seedy karaoke club in Times Square with a large balcony overlooking the street.* The Golden Oak *attracted mainly an artsy-type of crowd that tended to come from the theatre part of the town. It was one of Scott's favorite places to hang out because he enjoyed the interesting mix of people that tended to congregate there. Scott and Donald chat for a while as they drink their beers.*

Donald: So what's new in your life? It seems like it's been forever since I've really had a chance to catch up with you.
Scott: I don't know, really. Same old stuff I guess. I had my third date this week last night, so I guess that's pretty exciting. I don't know, it seems like I've been pretty busy in the dating department this week.
Donald (*laughs*): Well which one do you like the most?
Scott (*pauses; it appears that he is thinking*): Hmmm; I would have to say the guy I went out with Monday night was probably the hottest.
Donald: Well then I want to hear about him.
Scott: Well, he's a dancer, so he has a great body. He's tall, with dark features.
Donald: What did you guys do on your date?
Scott: Well he wanted to teach me how to salsa, so we went to his studio for a bit. I wasn't really getting it but I tried. We ended up going across the street for ice cream to cool off afterward. We ended up talking for awhile.
Donald: You? *Talk* on a first date?
Scott: Yeah, he really opened me up I guess, which was what I liked most about him. What I liked *least* about him was the fact that he doesn't even have enough money to buy a car. Plus, he is really close with his mom and wouldn't stop talking about her all evening. Then he told me that she could see us together with a house and the whole nine yards. I am way too young for that. I tried to change the topic of conversation as quickly as possible.
Donald: Any plans for seeing him again soon?
Scott: Well I think I screwed things up when I asked him back up to my apartment.
Donald (*laughs*): No surprise there.
Scott: Hey, I will figure out my dating "issues" in due time. Besides, I like things in my life to be a little hectic. It's a sign that I'm alive.
Donald (*laughs*): Don't give me all that psychological junk.
Scott: Alright, alright. Enough about me anyway; tell me what's so great about your life right now?
Donald: Well I don't know about that, but I *can* tell you what sucks. For one, Teresa, from my building, is a freakin' psycho. I don't exactly know what she's doing in her apartment at all hours of the night but it sounds like she's killing several wild animals with her bare hands. The biggest problem I have is that I have to take my dog to the vet again. Oh, and as if that isn't enough, my parents keep harassing me about never getting a chance to go visit them.   No matter what I do, I can't win.

Scott: I think you should shut up. You let way too much bother you.
Donald: Alright. From now on I am just going to listen to your advice, and just *watch* my life get better.
Scott: Yes. And you can start by having another drink. Have a vodka tonic with me?
Donald: No, I think I'll settle for a beer.
Scott: What are your plans for tomorrow?
Donald: I am going to the gym; I figure that will be a good way to de-stress.
Scott: True. I would say I would go with you, but last time I went I think I overdid it. I mean really overdid it because it was a week ago and I'm still sore. I really do need to work on my abs though, because I seem to be getting a bit flabby. At least that's what my date last night said.
Donald (punches him in the stomach): Yeah, he's right.

Donald and Scott finish their drink and head out into the night. Donald stops Scott before they go their separate ways and pats him on the back, congratulating him on surviving the end of a busy week at work. The two talk for a few minutes about their upcoming plans for their Florida trip, which Scott lets on that he is really looking forward to. Then their separate taxis drive off into the foggy night, taking them to their residences.
END OF SCRIPT

APPENDIX B

Straight Narrative – Biography and Interaction Scenario

Instructions:
The following information will describe the lives of two business partners, Donald and Scott. Please read the biographical information about Donald and Scott, and then turn the page.

Donald

Donald is 24 years old. He attended New York University, where he got his degree in marketing and public relations. Donald is originally from Florida, but left for New York when he went to college. Because he is so busy, he does not get to go back home much, but says that he misses Florida, the warm weather, and the great beaches. He and Scott are planning to take a trip to Florida together if they are able to land an important business deal that they have coming up, so Donald is excited.

Donald's birthday is right before Christmas, and ever since he was little it has upset him because it meant that many relatives would give him a joint Christmas-birthday present which Donald never felt was adequate enough to suffice for two holidays. His parents, Joan and Martin, were both in their late-forties when they had Donald, and subsequently spent a good deal of time at work. Due to this fact, Donald can attribute much of his upbringing to his elder siblings. Donald's sister, Deborah, is ten years older than Donald and lives in Milwaukee with her husband and their children. She is a pediatric nurse. Donald also has two older brothers, Mark and Jonathon, who are twins.   Despite the families attempts to bring the two up similarly, they asserted their individual personalities and refused to do the same things, as each wanted to be

remembered as his own person. Both brothers still live in the Florida area, and Mark went to law school while Jonathon does advertising.

In terms of his personal life, Donald is not married but has a serious girlfriend whom he has been dating for about five years. He met her while attending college in New York, but his girlfriend moved to Boston last year to pursue a graduate degree, and the two have been apart since that time. When the two are able to get together, Donald enjoys spending time with her. While Donald's girlfriend, Gerry, majored in business at NYU as well, she now attends school for interior decorating. Donald loves his girlfriend very much and considers Gerry's best quality to be her sense of humor. Donald looks forward to talking to her every night before bed, when the two have long, intimate conversations.

In his free time, Donald likes to hang out with his friends. Donald has made many friends in the city and has found that they have been helpful in making his "big city" lifestyle more accommodating. They see movies regularly, go to shows in the city, and get together at Donald's apartment to shoot the breeze, because it is the nicest. They also spend a good deal of time at the gym. Donald likes to work out and maintain a healthy diet, because he considers his physical well-being to be rather important to him.

Scott

Scott is 24 years old. Scott met Donald at NYU when both were pursuing degrees in business there. Scott and Donald became rather good friends and decided to become roommates their senior year. It was when living together that they came up with an idea for a joint corporation selling various types of herbal teas from differing cultures. Scott has always lived in New York City, and looks forward to the possibility of going to Florida for the very first time with his good friend and business partner, Donald, so he can learn how to surf.

Scott had a rocky upbringing. His mother was a heroin addict who had sex with Scott's father, a dealer, in exchange for drugs. Born addicted himself, doctors had Scott undergo intense therapy sessions when young to kick the addiction he was born with. After returning home, his life did not get much better. His mother had the sole responsibility of raising him since she did not know the father and was unable to track him down after he impregnated her. She often left Scott unattended while she was out "working" to get money for the two of them. At the age of ten, Scott was removed from his mother's care by a social service agency, and placed in foster care. Scott spent the next five years bouncing around from one foster family to the next, in attempt to find one with which he was satisfied. Having not attended school, he was behind academically. However, private tutors worked with him and pushed him to go to college. His amazing life story was the topic of his entrance essay for New York University, and he was accepted.

In terms of his personal life, Scott has never had a serious girlfriend; instead, he usually bounces from one relationship to the next. His philosophy is that if you haven't had any luck finding the girl you are meant to be with, you might as well have fun while you are out in the dating world. That is why he enjoys keeping his options open when it comes to dating. He never lets his relationships get serious, because he is afraid a serious relationship might close himself off from meeting the girl he is meant to be with, whom he has not found yet. His idea of the perfect date

includes dinner and dancing, to be followed by coffee and midnight conversation back at his apartment.

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Scott: Well, she's a dancer, so she has a great body. She's tall, with dark features.
Donald: What did you guys do on your date?
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Scott: Yeah, she really opened me up I guess, which was what I liked most about her. What I liked *least* about her was the fact that she doesn't even have enough money to buy a car. Plus, she is really close with her mom and wouldn't stop talking about her all evening. Then she told me that she could see us together with a house and the whole nine yards. I am way too young for that. I tried to change the topic of conversation as quickly as possible.
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Scott: Alright, alright. Enough about me anyway; tell me what's so great about your life right now?
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Scott: I think you should shut up. You let way too much bother you.
Donald: Alright. From now on I am just going to listen to your advice, and just *watch* my life get better.
Scott: Yes. And you can start by having another drink. Have a vodka tonic with me?
Donald: No, I think I'll settle for a beer.

Scott: What are your plans for tomorrow?
Donald: I am going to the gym; I figure that will be a good way to de-stress.
Scott: True. I would say I would go with you, but last time I went I think I overdid it. I mean really overdid it because it was a week ago and I'm still sore. I really do need to work on my abs though, because I seem to be getting a bit flabby. At least that's what my date last night said.
Donald (punches him in the stomach): Yeah, she's right.

Donald and Scott finish their drink and head out into the night. Donald stops Scott before they go their separate ways and pats him on the back, congratulating him on surviving the end of a busy week at work. The two talk for a few minutes about their upcoming plans for their Florida trip, which Scott lets on that he is really looking forward to. Then their separate taxis drive off into the foggy night, taking them to their residences.
END OF SCRIPT

APPENDIX C

Pilot Study Survey

Directions: Following is a list of questions concerning the characters in the narrative you just read. Please rate the first six questions on a 5-point scale of (1 = never true, 2 = rarely true, 3 = sometimes true, 4 = often true, 5 = always true) by circling the best answer. Then turn the page for the directions to the last two questions.

1. To what extent are Donald and Scott concerned only with themselves?

2. To what extent are Donald and Scott interested in primarily superficial matters?

3. To what extent are Donald and Scott gossipy?

4. To what extent are Donald and Scott catty?

5. To what extent do Donald and Scott behave promiscuously?

6. To what extent are Donald and Scott sexually deviant?

Directions: The following questions refer more specifically to the sexuality of Scott and Donald. Please rate the following questions on a 5-point scale from 1 (Heterosexual) to 5 (Homosexual)

7. How did the behavior between Donald and Scott present them in terms of their sexuality?

8. How did the conversation between Donald and Scott present them in terms of their sexuality?

9. Finally, please give an overall rating to the sexuality of Scott and Donald, taking all elements of the biographies and scenario into consideration:

APPENDIX D

Cognitive Load Task

The following directions and series of questions were read over an audio recording to the participants in the cognitive load condition:

 Please listen carefully to the following directions.   This tape recording will ask you to complete a series of mathematical computations. As each question is asked, you will be asked to complete the corresponding question on the memory questionnaire at the same time. There will be very little time, so please work as quickly and as efficiently as possible to answer both the question on the recording and the question on the answer sheet at the same time for question 1, for question 2, etc.. You will record both answers in the desired space on the answer sheet.

1: Please find the square root of 225.

2. Find the product of 96 and 7.

3. What is 147 divided by 3?

4. Which is bigger: 12 times 7 or 16 times 5?

5. How many seconds are there in five and a half minutes?

6. Find three numbers that, when multiplied together, equal 110.

7. What is 39 squared?

8. What is 129 divided by 6?

9. Find the sum of the following numbers: 2, 3, 10, 145, 6, and 13.

10. List the first six prime numbers, starting with 1.

11. What is 33 times 27?

12. How many days are there in two and a half years?

13. What is the square root of 225?

14. Which of the following three number has a square root that is not a whole number: 81, 99, 196, 441

15. Which quantity is bigger: 19 times 13, or 39 times 6?

16. How much money would you have if you found a nickel, two quarters, three pennies, and four dimes?

17. Between the numbers 11 and 999, how many numbers read the same forward and backward?

18. If Jane Doe is 47 and she had a son when she was 23, how old is her son?

19. Which is bigger: 13 times 16 or 12 times 17?

20. How many leap years have there been since the leap year 1952, not counting that year?

21. How many minutes are there in four weeks?

22. What is 27 squared?

23. How many prime numbers are there between 23 and 67?

24. How many inches are in five and a half feet?

25. What is 341 times 4?

26. Add up the following numbers: 12 plus 22 plus 3 plus 19 plus 35.

27. What is 1300 squared?

Okay, turn your answer sheets over quickly please (Pause). Now pass them to the front. Thank you for your time.

APPENDIX E

Recognition Memory Test

The 16 target items included items 3, 5, 6, 9, 10, 11, 12, 13, 14, 17, 19, 20, 21, 24, 25, and 26 Pronouns used in the items were modified to accompany the narrative read by each participant (i.e., use of female pronouns indicated participants read the straight narrative and use of male pronouns indicated participants read the gay narrative). Choice items with a + sign indicate correct answers, and choice items with an asterisk (*) sign indicate biased, stereotypic answers.

Directions: Choose one answer to each of the questions below.

1. Where is Donald originally from?
__ Pennsylvania
__ New York
+_ Florida

2. When is Donald's birthday?
+_ Right before Christmas
__ Right before New Year's
__ Right before Easter

3. How does Donald feel about his girlfriend/boyfriend?
+_ He loves spending time with her/him
*_ He likes having a girl/boyfriend but enjoys the freedom of being apart
__ He does not love her/him, but is leading her/him on

4. How many siblings does Donald have?
__ One
__ Two
+_ Three

5. What is Donald's favorite thing about his girlfriend/boyfriend?
+_ Having intimate conversations with her/him over the phone every night
*_ That s/he, like him, is interested in working out and having a great body
__ Her/his sense of humor

6. What is something that Donald and Scott have in common?
+_ Their age
*_ The fact that both are quite sexually promiscuous
__ The fact that both are involved in serious relationships

7. Where is Scott originally from?
__ Pennsylvania
__ Florida
+_ New York

8. How many siblings does Scott have?
__ One
__ Two
+_ The narrative did not say

9. What is Scott's main reason for wanting to go to Florida with Donald?
*_ To get to know Donald on a closer level
+_ To go surfing
__ To meet exciting new people

10. Why does Scott never let his relationships get serious?
+_ So he can be ready for a relationship when he meets the girl/boy of his dreams
*_ Because he only wants to meet people for self-fulfilling purposes, like sex
__ Because his dates lose interest in him

11. What is Scott's idea of the perfect date?

+_ Dinner and dancing
*_ Coffee and sex back at his apartment
__ Bowling

12. What is Scott's favorite thing to do in his free time?
*_ Go clubbing
+_ Read
__ Work

13. Why did Scott ask Donald to go out for a drink?
+_ To relax after a long day at the office
__ To meet up with friends
*_ To get to know him better

14. Why did Donald say he had to clean his apartment?
*_ Because he is expecting an important "visitor"
__ Because his landlord told him he had to
+_ He didn't say why

15. How did Donald and Scott get to the bar?
__ They took a bus
__ They took the subway
+_ They took a taxi

16. Where was the bar located?
__ Just outside of Central Park
+_ In Times Square
__ In Chelsea

17. What kind of bar was the Golden Oak Lounge?
__ A sports bar
+_ A karaoke club
*_ A gay bar

18. How many dates did Scott say he had that week?
+_ Three
__ Five
__ Six

19. What did Scott say he did on his Monday night date?
+_ Went dancing and then out for ice cream
*_ Went dancing and then out for a drink
__ Went dancing and then out to a movie

20. What did Scott say he liked *most* about the girl/guy he dated?

__ Her/his honesty
*_ Her/his "hot body"
+_ The way s/he opened him up

21. Why did Scott say he did not want "the house and the whole nine yards"?
+_ He is too young for that
*_ He doesn't ever want so serious of a relationship
__ He would rather settle down in an apartment

22. What did Donald say was the "biggest" of his problems?
+_ His dog, whom he has to take to the vet
__ Teresa, the "psycho" from his building
__ His parents, who complain he does not visit them

23. What drink does Scott suggest Donald order?
__ A diet soda
+_ A vodka tonic
__ A beer

24. What drink does Donald actually "settle for"?
__ A diet soda
*_ A vodka tonic
+_ A beer

25. Why was Donald looking forward to going to the gym?
+_ To de-stress
*_ To work on his "abs"
__ To kill some time

26. How do Donald and Scott end their evening?
+_ With a pat on the back and discussion of the Florida trip
__ With a high five and a discussion of the Florida trip
*_ With a warm embrace and a discussion of the Florida trip

27. What was the weather like when they were leaving?
__ It was raining
__ It was snowing
+_ It was foggy

APPENDIX F

Descriptive Statistics and ANOVA Results for Attrition Analysis (Time 1 Only versus Time 1 and 2) of Stereotype Recognition Scores by Narrative and Processing Capacity Conditions

| | Processing Capacity | | | | | |
| | No-Load | | | Load | | |
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Time 1 Only)	.08	.12	6	.21	.14	12
(Time 1 and 2)	.13	.06	18	.11	.08	11
Straight Narrative						
(Time 1 Only)	.06	.08	4	.13	.06	5
(Time 1 and 2)	.08	.04	14	.11	.06	11

Attrition	$F < 1$
Attrition x Processing Capacity	$F (1, 73) = 4.15, p < .05$
Attrition x Narrative	$F < 1$
Attrition x Processing Capacity x Narrative	$F < 1$

Descriptive Statistics and ANOVA Results for Attrition Analysis (Time 1 Only versus Time 1 and 2) of Correct Recognition Scores by Narrative and Processing Capacity Conditions

| | Processing Capacity | | | | | |
| | No-Load | | | Load | | |
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Time 1 Only)	.83	.12	6	.61	.18	12
(Time 1 and 2)	.74	.12	18	.70	.13	11
Straight Narrative						
(Time 1 Only)	.86	.20	4	.74	.08	5
(Time 1 and 2)	.83	.09	14	.77	.10	11

Attrition	$F < 1$
Attrition x Processing Capacity	$F (1, 73) = 3.91, p > .05$
Attrition x Narrative	$F < 1$
Attrition x Processing Capacity x Narrative	$F < 1$

Descriptive Statistics and ANOVA Results for Attrition Analysis (Time 1 Only versus Time 1 and 2) of Incorrect Recognition of Filler Items by Narrative and Processing Capacity Conditions

| | Processing Capacity | | | | | |
| | No-Load | | | Load | | |
	M	*SD*	*n*	*M*	*SD*	*n*
Narrative Type						
Gay Narrative						
(Time 1 Only)	.08	.06	6	.18	.08	12
(Time 1 and 2)	.13	.09	18	.18	.10	11
Straight Narrative						
(Time 1 Only)	.08	.12	4	.14	.08	5
(Time 1 and 2)	.09	.08	14	.11	.05	11
Attrition			$F < 1$			
Attrition x Processing Capacity			$F < 1$			
Attrition x Narrative			$F < 1$			
Attrition x Processing Capacity x Narrative			$F < 1$			

APPENDIX G
Table 5. Pearson Bivariate Correlations, Means (*M*), Standard Deviations (*SD*), & Sample Sizes (*n*) between ATGL-S & Recognition Memory Scores for the No-Load Conditions.

	Stereotype Recognition (Immediate)	Correct Recognition (Immediate)	Incorrect Filler Recognition (Immediate)	ATGL-S Scores
ATGL-S Scores				
Condition				
Gay Narrative/No-Load	$r = .06$	$r = -.12$	$r = .12$	
M	.12	.77	.12	10.29
SD	.08	.12	.09	5.09
n	24	24	24	24
Straight Narrative/No-Load	$r = .36$	$r = -.15$	$r = -.03$	
M	.07	.84	.09	12.61
SD	.05	.11	.08	5.30
n	18	18	18	18
	Stereotype Recognition (Delayed)	Correct Recognition (Delayed)	Incorrect Filler Recognition (Delayed)	
Gay Narrative/No-Load	$r = .20$	$r = -.13$	$r = -.10$	
M	.26	.61	.13	
SD	.10	.11	.06	
n	18	18	18	
Straight Narrative/No-Load	$r = .35$	$r = -.35$	$r = .18$	
M	.11	.64	.25	
SD	.07	.11	.08	
n	14	14	14	

Table 6. Pearson Bivariate Correlations, Means (*M*), Standard Deviations (*SD*), & Sample Sizes (*n*) between ATGL-S and Recognition Memory Scores for the Cognitive-Load Conditions.

	Stereotype Recognition (Immediate)	Correct Recognition (Immediate)	Incorrect Filler Recognition (Immediate)	ATGL-S Scores
ATGL-S Scores				
Condition				
Gay Narrative/Cognitive Load	*r* = .11	*r* = -.04	*r* = -.07	
M	.17	.65	.18	9.57
SD	.12	.16	.09	4.09
n	23	23	23	23
Straight Narrative/Cognitive Load	*r* = .03	*r* = .31	*r* = .42	
M	.12	.76	.12	10.38
SD	.06	.09	.06	3.91
n	16	16	16	16
	Stereotype Recognition (Delayed)	Correct Recognition (Delayed)	Incorrect Filler Recognition (Delayed)	
Gay Narrative/Cognitive Load	*r* = .29	*r* = -.17	*r* = -.27	
M	.26	.60	.14	
SD	.12	.13	.06	
n	11	11	11	
Straight Narrative/Cognitive Load	*r* = -.29	*r* = -.18	*r* = .18	
M	.24	.53	.22	
SD	.24	.26	.13	
n	11	11	11	

ENDNOTES

[1] Participants used scratch paper to complete the cognitive load mathematics problems, as opposed to systematically recording their answers. Consequently, these data were not amenable to analyses.

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