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Running Head: Self-Monitoring and Audience

The Effects of Self-Monitoring and an Audience on Cognitive Dissonance

By

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ABSTRACT

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This study investigates the connection between self-monitoring and cognitive dissonance as moderated by the number of people present when projecting counter-attitudinal beliefs. Subjects were asked to complete Snyder's (1974) Self-Monitoring Scale and write a counter-attitudinal essay about Union College's academic calendar. Participants in either of the two experimental conditions- sessions run with either three (condition 2) or six (condition 3) participants— were led to believe that their essay could be chosen to be read aloud to the rest of the group. Participants in the control condition were told their essays would remain confidential. Lastly, all participants filled out a campus issues questionnaire to assess attitude change concerning the school's academic calendar. It was hypothesized that high self-monitoring individuals would experience more dissonance in the experimental conditions while low self-monitoring individuals would experience more dissonance in the control condition. Contrary to the hypothesis, the pattern of means suggested that low self-monitoring individuals experienced more dissonance than high self-monitoring individuals in the two experimental conditions.

On January 15, 1934, the province of Bihar, India experienced a severe earthquake. While many villages felt the violent tremors, severe damages were contained to a small area. As noted in Aronson (1992), immediately following the earthquake psychologist Jamuna Prasad collected rumors that circulated throughout the villages where the shock of the quake had been felt, but no visible damage occurred. The rumors suggested that another natural disaster would transpire in the near future that would cause more damage than the recent quake.

Prasad (as stated in Festinger, 1957) noticed that the victims who felt the shock of the quake but saw no actual destruction were fearful long after it ended. These victims' fearful reaction to the earthquake was inconsonant with what they could see of their environment, which was that it was virtually unchanged in spite of the powerful tremors. The dissonance these victims experienced as a result of feeling fearful after they saw the earthquake had not affected them was then reduced by their acceptance of the circulating rumors that provided them with cognitions consonant with being afraid. As such, when social psychologist Leon Festinger analyzed Prasad's study several years later, he suggested these victims saw the rumors spreading word of a more destructive disaster not as "anxiety provoking," but instead, "anxiety justifying" (Festinger, 1957, p. 238). By this he meant that the victims' drive to reconcile their inconsistent cognitions (fear of impending disaster and knowing that they had previously been unaffected by disaster) was satisfied by the rumors suggesting that they should, indeed, be fearful. Thus Festinger's prominent theory of cognitive dissonance was born.

Cognitive dissonance, according to Festinger (1957), is a psychological state of being in which one holds two cognitions (beliefs, attitudes, or opinions) that are inconsonant with one another. Within the theory of cognitive dissonance, Festinger's (1957) basic hypothesis was that dissonance motivates one to reduce one's psychological discomfort and attain consistency in attitudes and behaviors, a state he calls consonance. As noted by Cooper (2007), Festinger described the need to reduce this uncomfortable feeling as a drive, much like the biological drives to reduce hunger or thirst. In the earthquake study mentioned above, the victims experienced dissonance because they saw that their fearful feelings did not match the essentially benign outcome of the earthquake. According to Festinger (1957), they were driven to reduce this dissonance, so when given the opportunity to believe rumors that predicted a more destructive impending disaster, they felt more at ease with being afraid.

Festinger (1957) further hypothesized that people will avoid situations in which feelings of dissonance may be increased. Festinger (1957) wrote, "...persons are not always successful in explaining away or in rationalizing inconsistencies to themselves. For one reason or another, attempts to achieve consistency may fail. The inconsistency then simply continues to exist." (p. 2). In his 1957 book, Festinger described three ways one can reduce or eliminate dissonance. One way is to change your behavior. Once you have already performed some behavior that induced dissonance, however, it is difficult or even impossible to undo it. Another way to reduce dissonance is to add cognitions that are in line with one of your preexisting cognitions, therefore overpowering the obverse cognitions resulting in consonance.

The most common way to reduce dissonance is to change one's attitude. By changing your attitude to fit your behavior, two previously inconsistent cognitions have been reconciled, thus relieving dissonance.

Many researchers have followed Festinger's lead and have continued to conduct studies of cognitive dissonance. Festinger and a colleague, James M. Carlsmith furthered the first author's research in their 1959 paper. The two researchers used an induced-compliance paradigm to study the reduction of dissonance when offering varying degrees of rewards to participants for telling other participants that the menial tasks they performed were interesting and worthwhile. It was predicted that the smaller the reward for lying about their interest in the menial task, the larger the opinion change at the conclusion of the study. More specifically, one would be more inclined to say one liked the tasks the study demanded if the compensation received was insignificant.

The participants were asked to complete two boring tasks for a total of one hour's time. At the end of the hour, the experimenter told each participant that there were two conditions in the experiment; in one condition, the participant's assigned condition, there is no introduction to the study. In the other, subjects would hear that it was worthwhile and interesting from a confederate posing as a subject who had supposedly just completed the study. The participant was then asked whether he would endorse this study to another subject in the waiting room who was to take part in the study. In telling the other subject that the task was interesting, a feeling of discomfort (cognitive dissonance) would be induced. Participants were either told that they would be compensated with one dollar or twenty dollars. After speaking

with the future subject, who was actually a confederate posing as a potential participant, the real participant was brought back into the experimental room to answer questions about the study, such as how enjoyable he found the tasks. The experimenter ensured that these questions were not part of the study, and were for the Psychology Department to evaluate all the experiments being conducted.

It was predicted that the smaller the reward given to the subject, the greater the attitude change at the conclusion of the study. The results of the study provide evidence for the hypothesis, as those who were paid only one dollar rated the tasks as more enjoyable than those who were given 20 dollars. An explanation for the lower levels of satisfaction in those who received \$20 is that those in this condition were compensated considerably for their time and effort. Their sufficient external justification of payment enabled them to attribute the \$20 as a reason for having lied to the confederate about the menial task. Those in the \$1 condition needed to reconcile their behavior (telling the confederate that the task was worthwhile) and their true attitudes (that it was boring). Those who were given only \$1 unconsciously used one of the three dissonance reduction techniques described by Festinger (1957): they changed their attitudes about the task to match what they told the confederate. Aronson (1962) expressed another explanation for the researchers' findings in this study, which will be described later in this paper.

Aronson and Carlsmith (1963) conducted a study with similar principles using a younger population of children. In this experiment, known as a forbidden toy-paradigm (Harmon-Jones & Mills, 1999), young children were asked to rate the attractiveness of certain toys. They ranked five toys from most attractive to least

attractive. The experimenter then told each child that he had to leave for a few minutes and invited the child to play with the toys. He forbade the child to play with the second best rated toy. The children were either told that the experimenter would be “annoyed” (mild threat condition) or that he would be “very angry” (severe threat condition). Upon the experimenter’s return to the room, he once again asked the child to rate the toys. Dissonance was created because while all of the children wanted very much to play with the forbidden toy, children in both conditions refrained because of the threat of punishment.

It was predicted that those in the mild punishment (in which the experimenter would be merely annoyed) would devalue their opinion of the forbidden toy while those in the severe punishment condition would not. Results were consistent with the hypothesis. Those in the mild threat condition tended to devalue their opinion of the forbidden toy, meaning they found it less attractive than the first time they rated it, while those in the severe threat condition indicated no attitude change about the toy. The researchers speculated that, “in the severe threat condition an individual's cognition that he did not play with an attractive toy was consonant with his cognition that he would have been severely punished if he had played with the toy” (Aronson and Carlsmith 1963, p. 587). That is, those who were expecting to be severely punished for playing with the forbidden toy had good reason not to play with it. When in the mild threat condition, however, where the punishment was only “annoying” they experimenter, the children experienced dissonance. The researchers’ explanation for the cause of these children’s dissonance was that the children did not play with the toy they rated as very attractive. In an effort to reduce their dissonance,

the children devalued the toy's rating. The children's change in attitudes is consistent with Festinger's technique of reducing dissonance.

The studies reported thus far have been concerned with dissonance in settings wherein the participants are isolated after their attitude change. Other studies show that dissonance is felt when in social settings, such as one conducted by Matz and Wood (2005). The authors of this article claim, as did Festinger (1957), that cognitive dissonance can result from social group interaction. The authors of this paper predict that the drive to reduce cognitive dissonance within a group setting stems from the desire to avoid conflict with others and "social sanctions" (p. 23). They cite Stone and Cooper (2001; 2003) as finding that dissonance can arise when people see their behavior as deviant from the norm. With these ideas in mind, the authors examined whether known differing attitudes within a group are enough to induce cognitive dissonance in the group members. They hypothesized that participants in a group with disagreeing others would report stronger feelings of dissonance than those in a group with others who agree. They also explored whether the amount of dissonance felt would increase with pressure to agree with others in the group. They expected to see the greatest amount of dissonance in group members who were told to reach a consensus with disagreeing group members.

The participants were assigned to groups of four to six and were told that they were helping to study the accuracy with which people are able to predict the course of a group discussion. The three conditions included a discussion condition, a consensus condition, and a no-interaction condition. In the discussion condition they were told that one item from an attitude survey they were given would be chosen for the topic

of a later discussion. Participants in the consensus condition were given the same survey and were told that after the later discussion, the group would have to try to reach a consensus on the chosen topic from the attitude survey. In the third condition (no-interaction), the participants were told that they would be taking the survey but no subsequent discussion and consensus attempt was mentioned.

In all conditions, participants filled out an attitude survey (a 9-point Likert scale on topics ranging from capital punishment to a law to outlaw flag burning) in individual cubicles. Upon completion of the survey each subject's responses were used to choose the topics of the discussions. Subjects were given a sheet that had a chosen topic and the other group members' judgments of that topic. The judgments were completely fabricated by the experimenters to induce dissonance in the participants. In the agreement level, the others' judgments were similar to the participants'. In the disagreement level, the others' judgments were in opposition to the participants'. This ensured that those in the agreement condition believed they would be discussing a topic that was agreed upon by all group members, and those in the disagreement condition believed there was disagreement within the group on the selected topic of discussion. All participants were also given a survey to assess feelings of dissonance discomfort, positive feelings, and negative self-evaluation. This survey was comprised of 24 words and short phrases that they rated on a 7-point scale ranging from "does not apply at all" to "applies very much." Examples of words in this survey include "guilty," "critical," "happy," "energetic," "uneasy," and "uncomfortable."

The results of this study showed that when grouped with others who hold differing opinions, dissonance is induced. As the researchers expected, those in the disagreement condition experienced far more dissonance than those in the agreement condition. Dissonance was shown to increase when participants knew that others disagreed with them, when they expected to have to hold a discussion with disagreeing others, and when they expected to have to reach a consensus with disagreeing others.

Elliot Aronson, a student of Leon Festinger's during the development of cognitive dissonance theory, offered new insight into the theory (Aronson, 1992). While Festinger suggests that any two disparate cognitions one holds will induce dissonance, Aronson says that dissonance can only be induced when the incongruent cognitions one holds are relevant to one's own self-concept. A self-concept is one's thoughts and feelings about oneself. This generally includes personality traits, skills and abilities, occupation, etc. Aronson argues that "dissonance theory makes its strongest predictions when an important element of the self-concept is threatened, typically when a person performs a behavior that is inconsistent with his or her sense of self" (Aronson, 1960, cited in Harmon-Jones and Mills 1999, p. 110). Aronson's self-consistency theory suggests that people have a need to see themselves as inherently "good, competent, and moral" (Aronson, 1968, cited in Cooper 2003, p. 96). In Aronson's view, an additional reason exists as to why participants may have experienced dissonance in Festinger and Carlsmith's 1959 study. Aronson would suggest that one cause of dissonance was that the participants held negative feelings about the menial tasks they were asked to complete, yet they told the participant in the

waiting room that it was interesting and worthwhile. To reduce the dissonance caused by the deliberate deception, the participants who had no external justification for completing the tasks (i.e. those who received \$1) changed their attitudes towards them. The participants wanted to maintain the feeling of their own morality in order to keep a positive self-concept, and in doing so, their opinion of the task shifted from menial and boring to interesting and worthwhile. This demonstrates Aronson's claim that when dissonance exists, it is usually because the self-concept is at odds with an individual's behavior.

Aronson and Carlsmith conducted a study to test this hypothesis in 1962. The researchers gave female participants at Harvard University the task of looking at one hundred pairs of photographs of male university students and determining which picture of each pair was of a schizophrenic. In actuality, all of the pictures came from a Harvard University yearbook and the students pictured had no known diagnosis of schizophrenia. The 100 pairs were divided among five sections, giving the experimenter time to pretend to compare the participant's score to an answer key and relay feedback on their abilities to the participant in between each of the first four sections. Half of the participants were given (false) positive feedback, meaning they were told that they were very successful at picking the photograph of the schizophrenic. The other half were given (false) negative feedback that they were not good at recognizing the schizophrenic. The feedback each participant received after each trial of judging the two photographs helped them to build up "consistent performance expectancy" (either positive or negative) of their ability in the task (Aronson and Carlsmith, 1962, p. 180). After the fifth section, the experimenter gave

the participant the answer key and asked her to calculate her own score. This score was also false, as the experimenter had recorded each participant's answers such that she would get a prearranged score.

The participants were randomly assigned to one of four conditions. On the first four sections of the test, half the participants were led to believe that they were very good at distinguishing the schizophrenic, and thus developed high performance expectancy. The other half developed low performance expectancy after being led to believe that they were often unable to identify the schizophrenic. On the fifth section of the test, one half of each group received a high score of 17, while the other received a low score of five. Consequently on this section of the test, 10 participants received a high score that was consistent with their performance expectancy, 10 received a high score that was inconsistent with their performance expectancy, 10 received a low score that was consistent with their performance expectancy, and 10 received a low score that was inconsistent with their performance expectancy.

After the participants calculated their own score on the fifth and final section of the test, the experimenter pretended to have forgotten to time the trials. He then asked each participant to re-take the last section of the test as if they had not seen the photos before. This allowed the researchers to measure each participant's reaction to her performance by observing how many of the responses she changed. The number of responses changed "served as an operational definition of the subject's discomfort with her performance on the fifth section of the test" (Aronson and Carlsmith, 1962, 180).

The results supported Aronson's supposition that when people's behaviors are at odds with their self-concept they experience dissonance. As predicted, those who had developed high performance expectancy and received a high score on the last round did not change their answers when they retook the fifth section. Those who developed the same high performance expectancy but received a low score on the last round changed their answers so as to be consistent with their previous high performance level. Those that had developed low performance expectancy but had received a high score on the last section changed their answers so as to receive a lower score that was consistent with their poor performance record. And finally, those that had developed low performance expectancy and received a low score on the fifth section chose the same answers on the retake so as to maintain their low score that was consistent with their poor performance. These results show that when something that was once consistent with one's self-concept becomes inconsistent (such as one's expectations of performance quality), the subsequent dissonance experienced is strong enough to cause a change in behavior so as to reinstate consistency with the self-concept.

Another study detailing how one's self-concept affects dissonance was conducted by Nel, Helmreich, and Aronson in 1969. These researchers recognized that when participants are told to follow directions, such as telling a potential subject that a boring task is interesting, their self-concepts may not be threatened because they felt they had no choice. In their study, they wanted to test the effects of giving participants choice in addition to monetary incentive to make a counter-attitudinal video tape about the legalization of marijuana for people over the age of 21. A

further point of their paper involved the possibility that the audience viewing the videotape might be persuaded by the argument they hear. The researchers proposed this hypothesis: participants in the low financial inducement condition would experience more dissonance than those in the high financial inducement condition when addressing a persuasive audience. The researchers' reasoning for this prediction is that they believe the presenters will feel that they are having a harmful effect on the audience, which will in turn violate their self-concepts of being good people.

Participants were 42 female students at the University of Texas at Austin who had indicated on a pre-test administered several weeks prior to the study that they were strongly opposed to the statement, "there should be no legal restrictions on the use of marijuana for those over 21" (Nel, Helmreich, and Aronson, 1969, p. 120). Upon reporting to the experimental room, they were told that they would be taking a new survey that measured values. A few minutes into the survey another experimenter interrupted and asked if the subject would participate in a second study, as the originally scheduled participant had canceled. All participants agreed, and took the values survey to the second experimenter's room. The values survey contained 18 of the pre-test questions as well as a question concerning the legalization of marijuana, located on the second page. Because it was crucial that the marijuana question be answered after the manipulation, the survey was prepared such that the first page "accidentally" appeared twice, causing an interruption in the study. This allowed time for the participant to complete the second part of the study while the first experimenter fixed the survey.

In this second part of the study, the second experimenter explained to the participants that they would be making a video to persuade an audience that marijuana should be legalized for those over the age of 21. Participants were randomly assigned to one of six conditions; they received either high or low monetary incentives (five dollars or 50 cents) and addressed one of three types of audiences: strongly pro-marijuana legalization, strongly against marijuana legalization, or an audience who was uncommitted to a particular position on the issue. Participants in each condition were told that the researcher was looking to find out about students' opinion of marijuana use. The researcher told those in the uncommitted audience condition that the purpose of the video was to persuade the audience that marijuana should be legalized for those over 21. He said that they would measure the audience's attitude change after viewing the participant's video to judge the persuasiveness of the video. Those in the pro-legalization audience condition were given the same information with the exception that the audience already believed that marijuana should be legal for those over 21. The purpose, the researcher said, was to persuade this audience even more that marijuana should be legalized. Participants in the con audience condition were given the same information as was given to those in the uncommitted audience condition with the exception that they were told that the audience was strongly opposed to the legalization of marijuana for those over 21. To stress freedom of choice, the experimenter asked each participant before beginning recording the video if she really wanted to participate.

Participants in each condition were instructed to state their name, class year, major, and hometown so as to give strong identifying information. They were all

given a few points to cover in their promotional videos, on which they were to expand and add their own comments. After each participant recorded her video, the experimenter immediately played them back for the participants to rate their own sincerity and persuasiveness. They were then thanked and returned to experimenter one to finish the values survey which contained the dependent variable- the question asking them their attitude towards the legalization of marijuana.

The results supported the hypothesis, as they revealed that subjects in the uncommitted audience condition who received only 50 cents displayed the strongest attitude change. These participants' paltry compensation and feeling as though they had the potential to do the most harm to the audience by persuading them to align their views with the "wrong" position, they change their attitudes so as to reflect these views, which reduced their subsequent dissonance.

To the extent that dissonance occurs when one violates one's self-concept, it may be possible to identify different conditions under which different people experience dissonance. One lead we might have in predicting who is more prone to feel dissonance is a person's propensity for self-monitoring. Mark Snyder introduced his theory of self-monitoring in 1972. Self-monitoring is a term used to describe the degree to which people monitor their behavior in the presence of others. There are two levels: High self-monitoring individuals are extremely concerned with how others perceive them, and are prone to change their behavior in order to fit in and be typified as "normal" in various social situations; low self-monitoring individuals are less likely to be influenced by how they perceive they are being received by others and tend to act in ways consistent with their sense of self.

Snyder's aim in his initial 1974 study was to examine his new theory of self-monitoring. He said "the self-monitoring individual is one who, out of a concern for social appropriateness, is particularly sensitive to the expression and self-presentation of others in social situations and used these cues as guidelines for monitoring his own self-presentation" (1974, p. 528). In this study he compared groups of people he predicted to have high or low propensity for self-monitoring behavior, including fraternity men, stage actors, psychiatric patients, and in-patient hospital staff members.

Snyder determined whether there is a difference between his theorized self-monitoring and the previously studied "need for approval," which is measured by the Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1964). Snyder's goal was to expand the research done on behavior alteration in social settings. To do this he created the Self-Monitoring Scale, composed of a battery of true-false self-descriptive statements

The 1986 revision of the Self-Monitoring Scale, composed of 18 true-false self-descriptive statements was given to 192 Stanford University students. Examples of statements included in the scale are "at parties and social gatherings, I do not attempt to do or say things that others will like" and "When I am uncertain how to act in social situations, I look to the behavior of others for cues" (1974, p. 529). Half of the 18 statements apply to high self-monitoring individuals and half apply to low self-monitor individuals. Snyder (1974) found that, with a correlation of $-.14$, scores on the Marlowe-Crowne's social desirability scale have no relation to those on his own

Self-Monitoring Scale. This means that there is no link between one's ability to monitor his self-presentation and his need for the approval of others.

The scale is tested for validity in several experiments. The first involved self-monitoring and peer ratings. Snyder predicted that a person who is good at controlling his facial expressions and observable behavior and who is good at deciphering social cues should be rated by his peers as being able to see his own self-presentation in myriad social situations. This sample for this study was composed of 16 fraternity men at Stanford University. Each participant was given the Self-Monitoring Scale and the Marlowe-Crown Social Desirability Scale. They were then asked to complete a person perception task, meaning they told to rate the other men in the experimental session on several self-monitoring statements as "very true," "mostly true," "somewhat true," or "not at all true." As predicted, high self-monitoring attributes were seen as more true of high self-monitoring individuals than of low self-monitoring individuals.

The second validity test involved stage actors (a set of people known to be good at controlling their behavior) and psychiatric patients (a set of people not known to be good at controlling their behavior). Since the livelihood of stage actors depends on their ability to put on a certain face for an audience, they are likely to be, in Snyder's terms, high self-monitors. Conversely, the psychiatric patients are likely to be more in-tuned with their own thoughts and beliefs than those of others around them. The same procedure was used as in study one, with supportive results. As predicted, the actors scored higher on the Self-Monitoring Scale than the psychiatric

patients. It should also be noted that the actors scored higher than the non-actors from the first study.

To account for variance in setting and individual differences, Snyder conducted the same study with patients and staff in an inpatient psychiatric ward. Following the results of the previous studies, he hypothesized that patients would be less inclined to engage in self-monitoring behavior than “nonhospitalized normals,” (the staff) (Snyder, 1974, p. 533). The results showed that for patients, individual differences accounted for more variance than setting differences. This could be because patients who are hospitalized in a psychiatric ward are less capable or motivated to monitor their behavior and self-presentation in varying social settings. For staff members the opposite effect was found, that individual differences accounted for less variance than setting differences. This can be attributed to the fact that they are more equipped to manage the appropriateness of their behavior in a variety of social situations.

Next, Snyder tested the validity of self-monitoring and the expression of emotion. The aim of this study was to see if high self-monitoring individuals, who have expressive self-control, would be able to communicate a random emotion (anger, happiness, etc.) in a nonverbal way more accurately than low self-monitoring individuals. Results showed that high self-monitors were, as predicted, better able to communicate emotions to a naïve judge than low self-monitors. The judges were more often able to correctly identify emotions performed by high self-monitors than by low self-monitors.

The final validation study examines self-monitoring and attention to social comparison information. Snyder predicted that in a situation in which social cues can be found, high self-monitors are more likely to seek them out than low self-monitors. To investigate this prediction, he instructed participants (each tested separately) to fill out a survey composed of self-descriptive true-false personality questions to prepare for a subsequent discussion of how people answer ambiguous test questions. Each participant was given a “majority response sheet” which showed the modal responses for each of the personality questions as answered by an introductory psychology class. Each participant was allowed to consult this sheet as often as he liked so as to see how others had answered the questions. The number of times a participant consulted the sheet was recorded by an observer who was hidden in an observation room. Results were consistent with the prediction. High self-monitoring individuals looked more frequently than low self-monitoring individuals at the majority response sheet and can thus be said to seek out social comparison information. This collection of studies provides evidence for the conclusion that high self-monitoring individuals are more likely and better able to control their expressive behavior, learn what is socially appropriate, create the impressions they want, and seek out social cues from others than low self-monitoring individuals.

A self-monitoring study that draws in cognitive dissonance was conducted by Snyder along with a colleague, Elizabeth Tanke (1976). This study explored the link between a person’s attitudes and outward behavior. According to these researchers, the relationship between people’s attitudes and their observable behavior has been found to be subtle and sporadic (Snyder and Tanke, 1976). Prior research has also

shown that changes in either attitudes or behavior seem to adjust independently of one another (Festinger, 1964). Snyder and Tanke (1976) also suggest that trait measures are also a poor way to predict behavior. This finding helped to deter researchers from thinking that there was a clear link between attitudes and behavior.

In spite of the evidence against the behavior-attitudes link, some researchers kept searching for a connection. They turned to self-monitoring as an explanation. There is evidence that people's attitudes differ in their sensitivity to external, situational factors based on their level of self-monitoring (Snyder, 1972). There is a difference also in the extent to which their behaviors can be predicted from trait measures. Research has suggested that high self-monitoring individuals, those who use others' social cues to determine the "correct" behavior in a given situation, will show that their behavior differs from situation to situation (Snyder, 1972). Their behavior is highly inconsistent because their actions are predicated on whom they anticipate to be their audience and how they think that audience will want them to behave. Thus, with different audiences, high self-monitoring individuals alter their behavior. Conversely, low self-monitors, those whose behaviors are always consistent with their own personal beliefs, show less response to external, situational cues, and act solely on their own prerogative.

Given the above information, the Snyder and Tanke (1976) study focused on how the attitude-behavior link and the behavior-attitude link is dependant on self-monitoring. They hypothesized that low self-monitoring individuals, after choosing to behave in a counter-attitudinal manner, would be likely to describe their behavior as a representative of their true attitudes. On the other hand, high self-monitoring

individuals, who know that they change their behavior in order to be consistent with the majority, are likely to be unchanged by behaving in a counter-attitudinal manner.

Snyder and Tanke (1976) borrowed their procedure from Snyder and Ebbesen (1972), including the use of the same attitude topic: “student control over university curriculum” (Snyder and Tanke, 1976). One hundred and fifty-six participants were randomly assigned to one of two choice conditions (Choice or No-Choice) and one of four salience conditions: Nothing Salient, Attitude Salient, Behavior Salient, and Both Attitude and Behavior Salient. There was also a no-essay condition, which measured baseline attitudes. All participants took the Self-Monitoring Scale so as to be classified as high, moderate, or low. The students were then asked to write counter-attitudinal essays in favor of students having little to no say in the courses included in the curriculum of the University of Minnesota. Students wrote their essays under either the Choice condition or the No-Choice condition. Those in the Control condition were asked to fill out only the post-test attitude questionnaire. Those in the No-Choice and Choice conditions were then exposed to the different manipulations.

Participants in the Attitude Salient and Both Salient conditions were asked to think about their views on the issue of student control over the University of Minnesota curriculum. Subjects in the Choice condition were asked to write an essay that favored either control over the university curriculum or no control over the university curriculum. It was emphasized that the choice of which position they would argue was theirs to make. However, a separate sheet of paper told these participants that the researchers had collected enough pro-control essays and asked

them to write “anti-control” essays. This statement told the participants that the researchers would “appreciate it” if as many participants as possible would argue for the no-control position. Those in the No Choice condition were instructed to argue in favor of students having little to no control over the university curriculum. Those in the Behavior Salient and Both Salient conditions saw at the bottom of the page on which they wrote their essay a 61-point scale labeled in 15-point increments anchored by “Strongly PRO-Student Control” to “Strongly ANTI-Student Control.” This was added to ensure the salience of the topic on which the participants had just written.

After all participants completed their essays, they completed the same dependent measures. All participants in each of the experimental conditions ranked on a 61-point scale (anchored by “No Control” and “Complete Control”) how much control they believed they should have over their university’s curriculum. A similar scale was given to measure participants’ perceived freedom of choice.

The results of this study showed that after participants in the choice condition wrote the counter-attitudinal essay, those with lower self-monitoring scores were more likely than those with moderate or high scores to report that their attitudes corresponded with their counter-attitudinal behavior. This is because their self-concepts include the fact that they act in accordance with their beliefs. Low self-monitoring individuals’ self-concepts were violated when they were forced to write the anti-control essay. Thus, to reduce dissonance, they changed their attitudes so as to match them with the argument set down in their essay. High self-monitors attributed their arguments to the external factor of the experimenter asking for anti-control essays, not to their internal attitudes. Arguing for the anti-control position did

not cause them to feel dissonance because it did not violate their self-concepts, which include the fact that they frequently change their attitudes to suit differing situations.

From this line of research it stands to reason to consider if there are any situations in which high self-monitoring individuals violate their self-concepts. One possibility is when they are inconsonant with a group. Snyder, Klein and Livingston (2004) examined this question in terms of prejudice. According to the authors, it has become the norm across the United States to criticize the expression of prejudice. Researchers have suggested that the pervasiveness of these norms could affect the suppression of prejudice in two distinct ways: first, they claim that people could internalize the norms and thereby suppress their prejudice, especially if the norms are salient. Second, they could externalize the norms, and refrain from expressing prejudice for fear of losing the approval of others and to protect their self-image. The authors of this study wanted to explore whether people would conform more to a tolerant audience or an intolerant one, depending on their level of self-monitoring. They expected that subjects would show lower levels of prejudice when in the presence of a tolerant audience than when in the presence of a prejudiced one. Additionally, they predicted that the high self-monitors would express the standard attitude (prejudiced or not) depending on what type of audience was present. Specifically, they thought that high self-monitoring individuals would express more feelings of prejudice when in the prejudiced audience and little to no feelings of prejudice while in the tolerant audience. Conversely, they expected to see low-self monitoring individuals' attitudes consistent across all audiences (i.e. a tolerant low

self-monitor will be tolerant when in the presence of both the tolerant and prejudiced audience).

The researchers studied 98 undergraduate students from an introductory psychology class at the University of Minnesota. The participants were given the Snyder Self-Monitoring Scale embedded with other measures, including a measure of prejudice towards homosexuals. Three weeks after the Self-Monitoring Scale was administered, the participants were asked back to take part in a (supposedly) unrelated study. This second part of the study was run in groups by different experimenters than those who had administered the first survey. The cover story informed the participants that the researchers wanted to assess perceptions of couples. They defined couples as “heterosexual married couples but also boyfriend-girlfriend, best friends, gay couples and lesbian couples” (2004, p. 303). There were two experimental conditions and a control condition in this part of the study. In both of the experimental conditions participants were told that they would discuss their opinions with the group. The experimental conditions were identical with one exception: one group was said to have positive attitudes towards homosexuals, and the other was said to have negative attitudes towards homosexuals. The participants in the control condition were not told about a discussion but instead were guaranteed that their answers would remain confidential.

Results of the study showed that high self-monitoring individuals were indeed more likely to express attitudes consistent with their audiences than low self-monitoring individuals. It was supported that high self-monitors “adapt the group attitudes they are willing to publicly endorse to fit their audience’s attitudes” (2004,

p. 310). It was shown that low self-monitoring individuals, as hypothesized, remained consistent in their attitudes throughout the study.

Kulik and Taylor's 1981 study gives further evidence that high self-monitoring individuals rely on others' attitudes to form their own opinions and manage their behaviors. The authors of the present study examined how individual differences in self-monitoring behavior relate to the use of consensus information. Consensus information is described as the behavior of a population (Kulik and Taylor, 1981). High self-monitoring individuals relative to low self-monitoring individuals adapt their behavior so as to be appropriate within social situations and are more aware of others' expressive cues. With this information in mind, the authors of this study predicted that high self-monitors would utilize consensus information more than their low self-monitoring counterparts when predicting both their own behavior and the behavior of others. Moreover, they predicted that low self-monitors would rely on self-based consensus- the tendency to regard one's own behavior as normative and discount information to the contrary.

The study utilized 60 participants who read descriptions of the Darley and Latané (1968) helping experiment. All subjects read that there were 15 experimental participants in the Darley and Latané (1968) study, all college students aged 17 to 22 years old. These participants discussed personal problems over an intercom system from separate rooms. A confederate who acted as a participant told the group that he was struggling with his adjustment to college and often suffered from epileptic seizures. Once every participant had spoken and it was again the confederate's turn to speak, he pretended to have a seizure, which the other participants could hear clearly

over the intercom. The experimenter recorded how long it took for the participants to help.

After reading this experiment, participants in the present study predicted their own helping behavior and that of a target person (i.e. "Joe H., a twenty-one year old student selected at random from the original 15 participants") by checking one of six helping behavior categories: would help as soon as the victim began stuttering; would help when the victim asked for help; would help when the victim stammered he had a seizure coming on; would help by the end of the victim's speech; would never help (Kulik and Taylor, 1981, p. 78). The rating of one's own behavior helped determine whether or not the frequency with which low self-monitoring individuals use self-based consensus is more than high self-monitoring individuals.

Subjects were assigned to one of two conditions. In the socially undesirable consensus condition they were shown the true results of the helping experiment. They read that of the 15 participants, zero helped as soon as the victim began stuttering, zero helped when the victim asked for help, one helped when the victim stammered he had a seizure coming on, three helped by the end of the victim's speech, five helped within four minutes after the end of the victim's speech, and six never helped. Those in the socially desirable consensus condition were shown the same study but were given results that were directly opposite of the undesirable condition. After receiving this information, participants were asked to make predictions about their own and the target person's behavior again using the same behavior categories. They were then asked to recall the number of people in the helping experiment in each of the six helping categories. In the last part of the study,

participants were asked to fill out a “representativeness scale,” an eleven-point scale asking them to rate how representative the participants in the helping experiment were of the present participants.

The results showed that the consensus effects were indeed greater for high self-monitors than low self-monitors. Furthermore, when the consensus information was undesirable, high self-monitors predicted that their own and others’ helping would be slower than did low self-monitors. Conversely, when in the socially desirable consensus condition, high self-monitors predicted that their own and others’ helping would be faster than low self-monitors, though this was not significant. Low and high self-monitors did not rate the representativeness of the helping study participants differently. This study shows that high self-monitors are more responsive than low self-monitors to others’ opinions.

It has been shown that high self-monitoring individuals respond more to social cues to form attitudes and manage their behaviors than to their own intuitively held beliefs, as do low self-monitoring individuals (Snyder, 1974; Klein et al., 2004; Kulik and Taylor, 1981; DeBono, 1987). DeBono (1987) says that, according to functional theory, all attitudes serve different functions. He borrows two functions from functional theory: social-adjustive and value-expressive. Social adjustive function is served by attitudes that form on the basis of how well they allow individuals to tailor their attitudes and behaviors to be appropriate in varying social settings. The value-expressive function is served by attitudes that allow individuals to express their personally held values. DeBono (1987) explored how social-adjustive as opposed to value-expressive messages affect attitude change in high and low self-monitoring

individuals. Specifically, this study examined what type of message, social-adjustive or value-expressive, persuades high and low self-monitoring individuals to change their attitudes towards the institutionalization of the mentally ill. It was hypothesized that high and low self-monitoring individuals would respond to different messages such that high self-monitoring individuals respond to social-adjustive messages and that low self-monitors respond to value-expressive messages. This follows the research that high self-monitoring individuals are sensitive to the attitudes of others and value consensus information (Kulik and Taylor, 1981) whereas low self-monitoring individuals value the opportunity to reflect on their own personally held beliefs (DeBono, 1987).

It was also hypothesized that high and low self-monitoring individuals would exert differing amounts of cognitive effort depending on which message they listened to. Furthermore, it was expected that high self-monitoring individuals would exert more cognitive effort in thinking of pros and cons of the argument to which he listened if it was presented in a social-adjustive message, whereas low self-monitoring individuals were expected to exert more cognitive effort in deliberating about pros and cons if they were presented in a value-expressive message. A third and final hypothesis was that, after a delay period, high self-monitors would recall more information about the pros and cons of the argument after hearing them from the social-adjustive perspective, and that low self-monitoring individuals would recall more of the pros and cons of the argument after hearing them from the value-expressive message.

Participants were 120 undergraduate students in introductory psychology courses at the University of Minnesota. Participants had completed Snyder's Self-Monitoring Scale and the instrumental-value section of Rokeach's value survey. Subjects were chosen for the present study based on their responses to certain questions on the value scale, specifically, those who "listed the values *responsible* and *loving* as relatively important to them as guides to their behavior and the values *courageous* and *imaginative* as relatively unimportant" (DeBono, 1987, p. 281). Participants were randomly assigned to a control condition or one of two experimental conditions: the value-expressive condition or the social-adjustive condition. Participants in both of the experimental conditions were told that the psychology department was planning a mental health week during which they would host leaders in the field of psychology from around the country as speakers. They were also told that they would later be participating in discussions about mental health issues. The experimenter instructed the subjects to listen to an audiotape of a sample of one of the psychologist's talks to get an idea of what would ensue throughout the week. Participants in each of the experimental conditions heard different messages.

Those in the value-expressive condition heard a message in which the psychologist described research he had conducted on attitudes towards the care and housing of the mentally ill. He informed them that he was interested in "the values that underlie favorable attitudes towards institutionalization of the mentally ill, and furthermore, he had discovered that favorable attitudes towards this position were highly associated with valuing being a responsible and loving person" (DeBono,

1987, p. 281). In addition, the message relayed that favorable attitudes towards deinstitutionalization of the mentally ill were correlated with valuing being a courageous and imaginative person. At that point the psychologist on the tape listed the pros and cons of the two sides of the issue and said that he did not believe one side to be better than the other.

Those in the social-adjustive condition were told that a study conducted with college students from the upper Midwest had found that 70% of the undergraduates sampled favored institutionalization, while 23% expressed favorable attitudes towards deinstitutionalization, and seven percent had no opinion. They then heard the same pro and con arguments that were heard by those in the value-expressive condition, and again that one side of the issue was not better than the other.

Those in the control group heard neither story of the psychologists' visit to the school nor of the psychology department hosting a mental health week. They were exposed to the pro and con arguments the two experimental conditions heard on the end of their respective tapes. Their only task was to fill out an attitude questionnaire.

After participants in the experimental conditions had finished listening to the tapes, they were asked to write down all thoughts and feelings they had had throughout the listening period, regardless of whether they were relevant to the messages they heard. This acted as the cognitive response measure. They then completed a survey to measure their attitudes towards housing and care of the mentally ill. After completing this survey, the participants were led to believe that they were finished with time left to spare. The experimenter suggested that they help another researcher with a separate study. All agreed, and were asked questions about

personal advertisement. This acted as a filler task to distract the participants before they completed a recall task. After finishing what they thought was the separate study, the experimenter asked them to recall as many pro and con arguments as possible from the tapes they had listened to earlier.

The results of this study were consistent with all hypotheses. As predicted, high and low self-monitoring individuals were influenced in their attitude change based on the type of message they heard. High self-monitoring individuals expressed more favorable attitudes towards the institutionalization of the mentally ill after listening to the social-adjustive message than to the value-expressive message. This follows the research that high self-monitoring individuals' attitudes are greatly influenced by their peers' opinions, as they changed their attitudes only after hearing that their peers' favored institutionalization. Additionally, high self-monitoring individuals in this condition expressed more favorable attitudes towards institutionalization than their high self-monitoring counterparts in the control condition after listening to the social-adjustive message, but not after the value-expressive message. Conversely, and as predicted, low self-monitoring individuals expressed more favorable attitudes towards the institutionalization of the mentally ill after exposure to the value-expressive message than after the social-adjustive. This change in attitudes by low self-monitoring individuals suggests that they rely on their beliefs about their own dispositions. Furthermore, low self-monitoring individuals in this condition were expressed more favorable attitudes towards institutionalization than their counterparts in the control condition after hearing the value-expressive message but not the social-adjustive message.

The results supported the second hypothesis that high self-monitoring individuals would be more likely to exert cognitive energy towards the pros and cons of the institutionalization of the mentally ill after hearing the social-adjustive message and that low self-monitoring individuals would be more likely to exert cognitive energy towards the pros and cons of the institutionalization of the mentally ill after hearing the value-expressive message. The task in which the participants were asked to write down their thoughts about the messages they had listened to revealed that high self-monitoring individuals listed more message-relevant thoughts in response to the social-adjustive message than to the value-expressive message. Low self-monitoring individuals on the other hand did not list more message-relevant thoughts in response to the value-expressive message than the social-adjustive message, though they did list more in response to this message than did high self-monitoring individuals. After more careful consideration of the participants' listed thoughts, the researcher calculated a high correlation with the number of pro and con thoughts listed and participants' subsequent attitudes towards the institutionalization of the mentally ill. He found that "the more favorable self-generated thoughts were towards institutionalization, the more favorable postmessage attitudes were towards institutionalization" (DeBono, 1987, p. 283).

The third hypothesis, that individuals would recall message facts differently depending on the functional relevance of the message, was supported. High self-monitoring individuals recalled more information favorable towards the institutionalization of the mentally ill after hearing the social-adjustive message than the value-expressive message. They also recalled more information in favor of

institutionalization after exposure to the social-adjustive message than low self-monitoring individuals. This may be because they are more attuned to listening to the opinions of others to interpret what is appropriate in a given social situation. While low self-monitoring individuals did not express more favorable attitudes towards institutionalization after listening to the value-expressive message than after the social-adjustive message, the results approached significance. This may be because they called their attitudes towards institutionalization of the mentally ill into question after they were told there was an attitude that better reflected a core value.

From the research presented on self-monitoring, it is safe to say that for high self-monitors, behaving in accordance with norms and the beliefs of others appears to be a part of their self-concepts. Therefore they should be especially likely to experience dissonance when they knowingly advocate a position contrary to the group norm. Furthermore, the larger the group, the more dissonance should be experienced. The question the present research will answer is if the number of people in an audience will have an effect on the amount of cognitive dissonance experienced (therefore causing attitudinal change), by high and low self-monitoring individuals.

In the present study, participants will be led to believe that they are sharing their attitudes towards certain campus issues, specifically, their opinion of Union College's use of the trimester academic calendar. They will write essays detailing why Union should change its calendar to the semester system, a position that was found to be counter-attitudinal for the majority of Union students. Participants in the experimental conditions will write their essays under the threat of having to read them aloud to the rest of the group, consisting of either 2 or 5 other students. Those in the

control condition will have no such threat. It was predicted that in the control group low-self monitoring individuals would experience cognitive dissonance leading to attitudinal change because they would disagree with their own personally held position- that Union College should remain on the trimester system. Conversely, high-self monitoring individuals would most likely experience little attitudinal change in this condition because their essays remained confidential and anonymous. For the experimental conditions, the reverse effects were expected. In these two conditions, it was hypothesized that the high self-monitoring individuals would experience an increase in the amount of attitudinal change because they were under threat of having to read their essays aloud to the other participants, whose position on the topic is known to be *against* a change in the academic calendar. It was expected that the amount of attitudinal change experienced by low self-monitoring individuals would remain the same from the baseline condition to the two experimental conditions. In terms of the differences expected between conditions 2 (the group of three students) and 3 (the group of six students), it was predicted that with the increase in the audience size an increase in the amount of attitudinal change would be found only among the high self-monitoring individuals. It was expected that the low self-monitoring individuals' attitudes would remain constant regardless of the audience size.

Method

Participants

One hundred and one undergraduates from Union College participated in this study for credit in their introductory or research methods psychology course or for

four dollars. Participants were randomly assigned to a control condition (n=44) or one of two experimental conditions (condition 2, n=27 and condition 3, n=30). Based on a code split, there were 36 high self-monitoring individuals and 65 low self-monitoring individuals.

Materials

Cover Stories. Participants in the control condition read the following cover story:

“Thank you for participating in my study. I am interested in learning student attitudes about various campus issues. I am especially interested in your views of the Union College academic calendar. Many other colleges and universities across the country employ a semester system. The semester system divides the academic year into two semesters of 15 weeks each. The two semesters together constitute 30 weeks of instruction. The trimester system, which is the current system used by Union College, breaks the academic year into three semesters of 10 weeks each, also yielding 30 weeks of instruction.

Recently Union College has been questioning the costs and benefits of being on a trimester system. Recent polling has found that the vast majority of Union students prefer the trimester system to any other academic calendar. I would like to collect more in-depth arguments for both a trimester and semester system and how each would benefit Union College’s students.

At this time, as you might expect, we have collected enough pro-trimester system arguments and are lacking in pro-semester system arguments. Please take a minute to organize your thoughts on what the benefits would be if Union College

adopted a semester system. When you are ready, please write a brief essay detailing your thoughts. Once you have completed your essay, you will be given a survey about your opinions on various campus issues.”

Conditions two and three were identical except for that condition two was run with three participants and condition three was run with six. Participants assigned to either of these conditions read the same cover story as above with this additional paragraph of information:

“Once all students in this session have completed their essays and the subsequent questionnaire, one student’s essay will be randomly selected to be read aloud to the group. After this student has read his or her essay, we encourage the group to engage in discussion and offer feedback on the essay. This feedback will hopefully lead to further ideas about why Union should or should not consider utilizing a semester system.”

Script. After reading the cover story, the following script was read aloud to all participants:

“As you might expect, we have plenty of participants who choose to write pro-trimester essays. However, we still need essays that favor the semester system. In order to ensure that we have enough essays that favor the semester system, we are randomly assigning one person from each experimental session to write a pro-semester essay. In accordance with this policy, one person in this group has been randomly assigned to write an essay in favor of changing Union’s academic calendar from the trimester to the semester system. The others in the group may write according to their true opinion of the issue.”

Personal Reaction Inventory. Snyder's Self-Monitoring Scale was used to determine whether participants were high or low self-monitors. Participants indicated True or False for each of the 18 questions. Sample questions include "I guess I put on a show to impress or entertain others" and "I would not change my opinion or the way I do things in order to please someone or win their favor." Of the total 18 questions, seven are true for high self-monitoring individuals and 11 are true for low self-monitoring individuals. Given this, each participant's score was obtained by giving them one point for each answer they indicated that was consistent with being a high self-monitoring individual and zero points for each answer they chose that was consistent with being a low self-monitoring individual. For example, if a participant indicated "True" to the question, 'In different situations and with different people I often act like very different persons,' he would receive one point. If a participant indicated "true" to the question, 'I would not change my opinion or the way I do things in order to please someone or win their favor,' he would receive zero points. The total number of points each participant earned indicated his self-monitoring level. Participants who earned 11 or more points were classified as high self-monitoring individuals while those who received ten or fewer points were classified as low self-monitoring individuals.

Campus Issues Questionnaire. To assess attitude change and thus to infer dissonance, participants filled out the Campus Issues Questionnaire. This four-point Likert scale survey asked participants to rank their opinion from 1-4 (1=strongly agree, 4= strongly disagree) on 18 questions about various campus issues. Sample questions from this survey include "Union College should consider using a semester

academic calendar instead of a trimester calendar” and “Union students are too into the “party scene.” Embedded in this survey were three questions concerning their opinion of the academic calendar employed by Union College. Higher scores on these three questions concerning the academic calendar indicated attitude change.

Procedure

Participants met for a study concerned with personality and attitudes about campus issues. After reading and signing the informed consent, all participants were given Snyder’s Self-Monitoring Scale under the name Personal Reaction Inventory. Upon completion of this survey, they were randomly assigned to one of two experimental conditions or a control condition. Participants read one of two cover stories, depending on the condition to which they were assigned. (See Appendices C and D for cover stories.) Both cover stories asked the participants to write an essay detailing why Union College should switch from the trimester academic calendar it currently uses to a semester system. Participants in the control condition were told that their essays would remain anonymous and confidential. Conditions 2 and 3 were identical except for that Condition 2 was run with three participants and Condition 3 was run with six. Participants assigned to either of these conditions were told in the cover story that one of the participants’ essays would be randomly chosen to be read aloud so the group could discuss it and offer feedback to the author. All participants in each condition were led to believe that they were the one chosen to write the pro-semester essay. After reading their respective cover story, a script was read to reiterate the (false) fact that one person had been chosen to write a pro-semester essay while the others in the group could write according to their true opinion. Participants

were then given five minutes to compose an essay detailing why Union College should switch from a trimester academic calendar to a semester one. After the allotted five minutes of writing time, participants were given a second questionnaire in which were embedded the dependent variables- questions asking their opinion of the trimester system. Their answers to these questions indicated any attitude change. This survey also included questions that asked their opinions of different campus issues ranging from the formulation of the curriculum to the amount of time students spend partying. Once all participants finished this questionnaire they were fully debriefed and compensated for their time.

RESULTS

It was predicted that high self-monitoring individuals would experience more cognitive dissonance than low self-monitoring individuals in the two experimental conditions while low self-monitoring individuals would experience more cognitive dissonance than high self-monitoring individuals in the control condition. The mean post-manipulation attitude scores are presented in Table 1. (Items were keyed so that higher scores indicated attitude change). To test reliability, the dependent measures were collapsed across each question, producing a Chronbach's alpha coefficient of .84. This suggests that the items have relatively high internal consistency. Attitude scores were then submitted to a 3 x 2 (condition, self-monitoring propensity) analysis of variance (ANOVA). This analysis revealed an insignificant main effect for condition, $F(2,95)= 6.98$, $p= .297$, suggesting that, contrary to the hypothesis, the effect of condition did not affect the amount of dissonance experienced. An

insignificant main effect for self-monitoring was also found, $F(1, 95) = 13.58$, $p = .125$, signifying that a participant's propensity for self-monitoring behavior also had no effect on the amount of dissonance experienced. The analysis also revealed an insignificant interaction, $F(2, 95) = 5.737$, $p = .605$, suggesting that the effect of condition did not differ among high and low self-monitoring individuals.

Though the interactions were not found to be statistically significant, the pattern of means showed opposite results of what was originally predicted. Low self-monitoring individuals in Condition 2 were more prone to experience cognitive dissonance ($M = 7.43$) than high self-monitoring individuals ($M = 6.0$). The control condition yielded no significant differences in means, with low self-monitoring individuals not showing significantly more attitude change ($M = 5.97$) than high self-monitoring individuals ($M = 5.73$). Similarly in Condition 3, low self-monitoring individuals did not show significantly more attitude change ($M = 6.23$) than high self-monitoring individuals ($M = 5.3$).

DISCUSSION

Previous research has shown that high self-monitoring individuals are more likely to seek out and follow cues for socially appropriate behavior while low self-monitoring individuals look more to their internally held beliefs to direct their attitudes and behavior (Snyder, 1974; Klein et al., 2004; Kulik and Taylor, 1981; DeBono, 1987). Therefore it was predicted that high self-monitoring individuals would display more cognitive dissonance than low self-monitoring individuals when they were led to believe that they alone were arguing in favor of the semester system, which was known to be counter-attitudinal for the majority of the Union College

student body. Additionally, it was predicted that low self-monitoring individuals would experience more dissonance than high self-monitoring individuals in the Control Condition, in which they were contradicting their own attitudes.

The results of this study did not support the hypothesis, and in fact showed a pattern of means that suggest the opposite finding. Low self-monitoring individuals are more likely than high self-monitoring individuals to experience and consequently try to reduce cognitive dissonance when under threat of sharing counter-attitudinal beliefs with a group. One explanation for this finding, which contradicted the proposed hypothesis, is that low self-monitoring individuals' self-concepts include the fact that they are consistent in their attitudes and are averse to changing those attitudes for the purpose of following socially appropriate cues. Therefore, upon contradicting their normally consistent attitudes about Union College's academic calendar, especially in the conditions in which they were under threat of revealing to the group that their beliefs were inconsistent, they experienced dissonance. They reduced this dissonance by changing their previously held attitudes that were favorable towards the trimester system to match those outlined in their essays, in which they argued for the semester system.

High self-monitoring individuals on the other hand, who were predicted to experience the most attitude change, experienced little cognitive dissonance. An explanation for this could be that, by nature, high self-monitoring individuals are inclined to change their attitudes to match those of their surrounding company so as to show themselves in the best light. Their natural proclivity for monitoring their behavior is highlighted in this experiment. High self-monitoring individuals

experienced little dissonance because they were acting as they normally would in any social situation. They wrote their counter-attitudinal essay with no consequence of dissonance because they are used to changing their attitudes at will. They are comfortable with the fact that their attitudes are constantly in flux. It did not hurt their self-concepts as it did the low self-monitors' because their self-concepts include their tendency to have ever-changing attitudes.

An explanation for why the low self-monitors showed a spike in dissonance in the experimental conditions only is that they were uncomfortable sharing to the group that they were contradicting their normally consistent attitudes. Low self-monitors generally take pride in the fact that they cannot be persuaded to change their beliefs to match those of others who hold contrary attitudes. They do not attempt to show other individuals that they hold similar attitudes if they truly do not, as do high self-monitoring individuals. Therefore, when their self-concepts were threatened by writing the counter-attitudinal essay and they were under threat of revealing to the rest of the group that their essays contained arguments that were inconsonant with their previously held beliefs, they experienced dissonance. They reduced this discomforting feeling by changing their attitudes to match those in their essays. In the control condition these individuals experienced less dissonance because, while their self-concepts were still hurt, they were told that their essays would remain anonymous and confidential, ensuring that the others in the group would never know that they were contradicting their attitudes about Union College's academic calendar.

Limitations

There are a few limitations to this study, the first and most significant of which is that participants did not have a choice in subject topic for their essay. While the study was voluntary and all participants read and signed the informed consent forms, they were all asked to argue against the trimester system, the overwhelmingly popular academic calendar that Union College employs. Prior studies have examined the significance of choice in experiencing cognitive dissonance, and each showed that less dissonance is experienced if participants feel they had no choice in completing a counter-attitudinal task (Snyder and Tanke, 1976). It has been shown that participants in forced compliance paradigms do not necessarily violate their self-concepts when they follow directions to complete counter-attitudinal tasks. This is because they can attribute their contrary behavior to an external factor, the experimenter asking them to follow strict directions, rather than their internal unstable cognitions. Because participants in the present research were in the forced compliance paradigm of following directions to write the counter-attitudinal essay, their self-concepts were still intact.

A second limitation of the present study is that it was assumed that the participants' original attitudes towards the trimester system were positive. While the majority of the Union student body holds this position, there was no pre-test of the participants' attitudes before inducing cognitive dissonance. Researchers of future studies that use a similar methodology may consider pre-testing participants for their initial attitudes. While this may take more time, it would greatly reduce the chance of error.

A further limitation to this study is the fact that the campus issues questionnaire, in addition to not giving participants the option to indicate neutral opinions, did not have enough points on the Likert scale to measure participants attitudes as accurately as possible. This forced participants to pick extreme measures, which may have caused floor or ceiling effects. This in turn could have skewed the distribution of the data from forming a natural distribution with variability, and therefore could have limited the possibility of finding any effects.

Implications and Directions for Future Research

Future studies can be conducted to expand on the results of the present study and to further explore the link between self-monitoring and cognitive dissonance. In terms of expanding the present research, the same basic methodology could be used with the addition of pre-testing the participants on their attitudes. This would ensure that the induced compliance task is indeed counter-attitudinal and would thus reduce the probability of error.

Additionally, considering the number of conditions in the study (six), recruiting a larger sample might produce statistically significant results. Furthermore, a more heterogeneous sample may also contribute to producing significant results. The liberal arts atmosphere from which all participants were recruited could have influenced the participants' propensity for self-monitoring behavior. Individualism both within the classroom and outside of it is encouraged of the student body by professors and administrators alike. This in turn persuades students to formulate their own opinions and not base them off of peers', professors', or anyone else's attitudes.

This may have contributed to the fact that there were limited numbers of high self-monitoring individuals in the sample.

This study has implications for students at all grade levels as well as professionals whose jobs include making presentations. At the school level, this study could be conducted with the added variables of age and sex, to see if different grades and the different compositions of an audience would affect students' experienced dissonance when making presentations in front of their classes. If significant results were found, class composition could be restructured. To test the effects of sex, the study could be conducted in single-sex schools (both female and male-only) and in coeducational schools to see which atmosphere leads students to experience greater dissonance in presentations in front of their peers. Similarly in testing for age, comparing samples of middle school, high school, and college students would likely yield the result that students in different grade levels experience different amounts of dissonance when performing in front of their peers. This could help teachers and professors when grading students on the quality of their presentations.

In professional settings, the same variables could be tested to see under what circumstances workers are more productive and feel less dissonance when presenting in front of their colleagues. With multiple generations in the workforce, the study could potentially reveal ways in which firms can structure their office personnel so as to induce as little dissonance as possible in their workers and increase productivity. A complication that these studies would face is that they would have to be conducted in schools and in firms so as to get accurate readings of attitude change. Laboratory

research would yield inauthentic data, and thus would not make a valuable contribution to this field of research.

Conclusion

While the results did not support their hypothesis, the pattern of means revealed some interesting findings. Low self-monitoring individuals as opposed to high self-monitoring individuals were found to experience more dissonance and thus changed their attitudes towards Union College's trimester system in both of the experimental conditions, though more so in Condition 2. An explanation for this finding is that they violated their self-concepts after writing a pro-semester essay detailing reasons why Union College should adopt this calendar system. These ideas were inconsonant with their original attitudes towards it, and therefore caused feelings of dissonance that led to attitude change. The high self-monitors, on the other hand, did not violate their self-concepts- in fact, they were satisfying their self-concepts when they wrote contrary to their original attitudes about the trimester system. Therefore, these individuals did not experience cognitive dissonance, and were not influenced to change their attitudes. This research can be expanded upon to eventually be applied to school and professional settings so as to see if different audience compositions affect dissonance when individuals make presentations on controversial topics.

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Table 1.

Mean Scores and Standard Deviations for Attitude Change

Condition	Self-Monitoring Level	
	Low	High
	Attitude Change	
Control		
M	5.97	5.73
SD	2.56	1.58
N	29	15
Condition 2		
M	7.43	6.00
SD	2.57	2.35
N	14	13
Condition 3		
M	6.23	5.50
SD	2.74	1.31
N	22	8

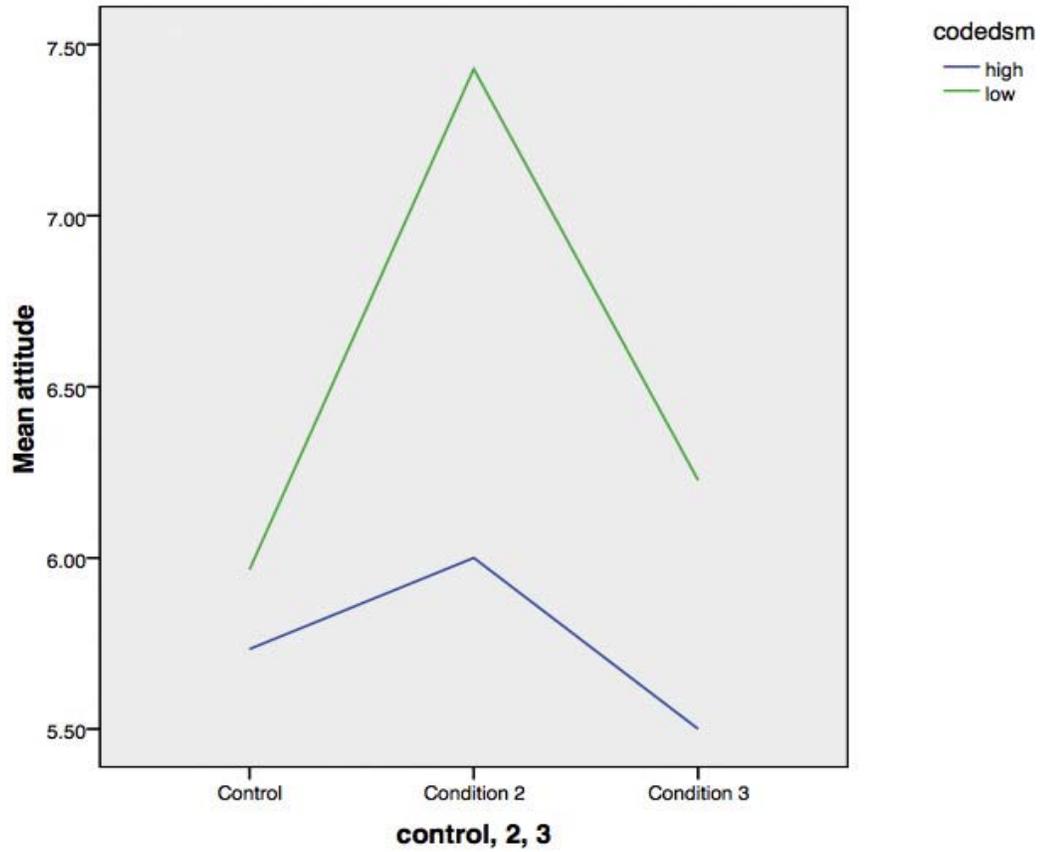


Figure 1. This figure illustrates the attitude change in high and low self-monitoring individuals in each of the three conditions.

Appendix A

Campus Issues Questionnaire 2

Directions: The statements below concern your personal opinions on a number of different campus issues. No two statements are exactly alike, so consider each statement carefully before answering. Please circle the answer that best represents your beliefs about each statement.

1. Union students should be more involved in on-campus events.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

2. When applying to Union College, I considered the trimester system a negative feature of the school.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

3. I think Union students should be more concerned about events happening outside of the “Union bubble.”

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

4. Union College should consider using a semester academic calendar instead of a trimester calendar.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

5. Union students put too much emphasis on parties.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

6. The term abroad programs Union offers do not sufficiently meet the students’ needs.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

7. The Union student body should be more involved in making decisions about the formulation of the curriculum.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

8. Union should not have General Education requirements.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

9. The trimester system is too fast paced and students would feel more relaxed if a semester system was adopted.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

10. Union should allow students to go on term abroad programs organized by other schools.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

11. Union students are apathetic to causes outside of campus life.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

12. The Minerva program helps bring together academics and social life for Union students and faculty.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

13. I already have to take General Education requirements so I don't think that Clusters should be required also.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

14. Changing the Union College academic calendar from a trimester one to a semester one would affect me in a negative way.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

15. Union students are too into the "party scene."

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

16. Union should consider requiring students to complete a certain amount of community service hours.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

17. The school should reconsider the kegless policy.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

18. As students, we should have more control over the structure of the curriculum.

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

Appendix B

Personal Reaction Inventory

Directions: The statements below concern your personal reactions to a number of different situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is TRUE or MOSTLY TRUE as applied to you, fill in the T, and if the statement is FALSE or MOSTLY FALSE as applied to you, fill in the F, (e.g. (T) (F))

- (T) (F) 1. I find it hard to imitate the behavior of other people.
- (T) (F) 2. At parties and social gatherings I do not attempt to do or say things that others will like.
- (T) (F) 3. I can only argue for ideas that I already believe.
- (T) (F) 4. I can make impromptu speeches even on topics about which I have almost no information.
- (T) (F) 5. I guess I put on a show to impress or entertain others.
- (T) (F) 6. I would probably make a good actor or actress.
- (T) (F) 7. In a group of people I am rarely the center of attention.
- (T) (F) 8. In different situations and with different people I often act like very different persons.
- (T) (F) 9. I am not particularly good at making other people like me.
- (T) (F) 10. I'm not always the person I appear to be.
- (T) (F) 11. I would not change my opinion or the way I do things in order to please someone or win their favor.
- (T) (F) 12. I have considered being an entertainer.
- (T) (F) 13. I have never been good at games like charades or improvisational acting.
- (T) (F) 14. I have no trouble changing my behavior to suit different people and different situations.
- (T) (F) 15. At a party I let others keep the jokes and stories going.
- (T) (F) 16. I feel a bit awkward in public and do not show up quite as well as I should.
- (T) (F) 17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
- (T) (F) 18. I may deceive people by being friendly when I really dislike them.

Appendix C

Cover Story for Control Condition

Thank you for participating in my study. I am interested in learning student attitudes about various campus issues. I am especially interested in your views of the Union College academic calendar. Many other colleges and universities across the country employ a semester system. The semester system divides the academic year into two semesters of 15 weeks each. The two semesters together constitute 30 weeks of instruction. The trimester system, which is the current system used by Union College, breaks the academic year into three semesters of 10 weeks each, also yielding 30 weeks of instruction.

Recently Union College has been questioning the costs and benefits of being on a trimester system. Recent polling has found that the vast majority of Union students prefer the trimester system to any other academic calendar. I would like to collect more in-depth arguments for both a trimester and semester system and how each would benefit Union College's students.

At this time, as you might expect, we have collected enough pro-trimester system arguments and are lacking in pro-semester system arguments. Please take a minute to organize your thoughts on what the benefits would be if Union College adopted a semester system. When you are ready, please write a brief essay detailing your thoughts. Once you have completed your essay, you will be given a survey about your opinions on various campus issues.

Appendix D

Cover Story for Experimental Conditions

Thank you for participating in my study. I am interested in learning student attitudes about various campus issues. I am especially interested in your views of the Union College academic calendar. Many other colleges and universities across the country employ a semester system. The semester system divides the academic year into two semesters of 15 weeks each. The two semesters together constitute 30 weeks of instruction. The trimester system, which is the current system used by Union College, breaks the academic year into three semesters of 10 weeks each, also yielding 30 weeks of instruction.

Recently Union College has been questioning the costs and benefits of being on a trimester system. Recent polling has found that the vast majority of Union students prefer the trimester system to any other academic calendar. I would like to collect more in-depth arguments for both a trimester and semester system and how each would benefit Union College's students.

At this time, as you might expect, we have collected enough pro-trimester system arguments and are lacking in pro-semester system arguments. Once you have finished reading the instructions, please take a minute to organize your thoughts on what the benefits would be if Union College adopted a semester system. When you are ready, please write a brief essay detailing your thoughts. After writing your essay, you will be given a survey about your opinions of various campus issues.

Once all students in this session have completed their essays and the subsequent questionnaire, one student's essay will be randomly selected to be read aloud to the group. After this student has read his or her essay, we encourage the group to engage in discussion and offer feedback on the essay. This feedback will hopefully lead to further ideas about why Union should or should not consider utilizing a semester system.

Appendix E

Script

“As you might expect, we have plenty of participants who choose to write pro-trimester essays. However, we still need essays that favor the semester system. In order to ensure that we have enough essays that favor the semester system, we are randomly assigning one person from each experimental session to write a pro-semester essay. In accordance with this policy, one person in this group has been randomly assigned to write an essay in favor of changing Union’s academic calendar from the trimester to the semester system. The others in the group may write according to their true opinion of the issue.”