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The Relationship Between Personality Characteristics and Acceptance of Minority Influence



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As early as the 1930's, psychologists have been interested in how people are persuaded by others (Sherif, 1935). At this early point in social psychology, scientists realized that individual's perceptions of their environments are in fact influenced by other people's perceptions. Asch (1951) designed a study in which participants, along with confederates, sat in a room and were asked to pair line segments with other line segments that they believed to be equal in length. He found that when the confederates were unanimous in their decision, even when wrong, the participants were much more inclined to agree with the confederates. This phenomenon had become known as the conformity effect and for a long time it was equivalent in meaning with that of social influence (Maass & Clark, 1984). In these cases, researchers have defined conformity as those instances where individuals side with whichever cause has the greater number of people supporting it (Allen, 1965; Maass & Clark, 1984; Nemeth & Wachtler, 1983).

Moscovici (1969, 1980) challenged the view that social influence and conformity were synonymous with one-another and demonstrated that minority groups were also strong sources of social influence (Smith & Tindale, 2010). Majority and minority viewpoints refer to the number of people who possess a given viewpoint regarding a subject (Nemeth, 1986). Hence, majority viewpoints are the opinions, ideas, and perspectives held by the greater number of individuals, the "majority," in a group context, as where minority viewpoints are held by the lesser number of individuals, the "minority." Researchers found that individuals who are exposed to minority sources of influence may be effected in a variety of ways that differ significantly from majority influence, such as showing an increase in divergent thought, thinking about issues from multiple viewpoints, and/or considering aspects of the problem that were previously overlooked (Nemeth, 1986; Nemeth & Wachtler, 1983; Smith, 2008;

Smith & Tindale, 2010; Wood, Lundgran, Ouellette, Busceme, & Blackstone, 1994).

The research on minority influences is quite extensive (Maass & Clark, 1984; Nemeth, 1986; Smith, 2008; Smith & Tindale, 2010; Trost, Maass & Kendrick, 1992; Wood, 1999, 2000; Wood et al., 1994). However, researchers have not systematically looked at how personality characteristics may predispose individuals to be more susceptible to minority sources of influence. Thus, it is the contention of this study to examine how personality differences affect the degree to which individuals will be influenced by a minority source. However, first, we will review the existing literature that explains the differences between majority and minority viewpoints and how these social influence processes could possibly be related to individual personality characteristics.

Compliance vs. Acceptance, Direct vs. Indirect

Many researchers have found that there is a distinguishable difference between those forms of influence that create public compliance to a proposed position and those that create a private acceptance (Nemeth, 1986; Nemeth & Wachtler, 1983; Peterson & Nemeth, 1996; Wood et al., 1994). Public compliance is a transitory and possibly superficial change in behavior and attitudes in response to coercion, peer pressure and/or requests (Hogg & Vaughan, 2008; Wood, 1999). However, compliant behavior does not determine whether the request was actually accepted at the individual level. Hence, private acceptance, also called internalization, is a change in attitude that may or may not be overtly expressed (Manstead & Hewstone, 1996).

According to Moscovici's (1980) dual process theory, the behavior induced by majorities is compliance behavior, while the behavior induced by minorities is conversion behavior (i.e., trying to convert the majority members to a minority position). While he contends

that both forms of influence result in a posed conflict, the conflict that occurs is resolved in different ways (Moscovici, 1980; Nemeth, 1986).

These influence processes can also be either direct or indirect (Nemeth, 1986; Smith, 2008). Direct social influence occurs in those instances where members from one faction prevail over members of another (Nemeth, 1986). Past research indicates that majority influence is most often direct in nature. However, minority influence can be direct as well. For example, research indicates that minorities can potentially exert more influence when their counter-normative point of view is linked to a related notion widely held; that is, when the minority view is framed within a widely accepted principle (Smith & Tindale, 2010). Smith, Dykema-Engblade, Walker, Niven, and McGough (2000) conducted a study comparing minorities arguing either in favor of or against the death penalty and found that in instances where participants could identify with other participants via shared values, minorities could better validate their counter-normative position and in fact had greater influence. For instance, in this particular study, minorities arguing against the death penalty used religion to justify their position, and because the majority of participants in this study were Christian, their shared Christian identities were made salient. Even though the majority of Americans are in favor of capital punishment, the participants who found a shared identity (religion) were able to influence the majority with their arguments. These findings lead Smith et al. (2000) to the conclusion that when shared values are consistent with minority viewpoints, the minority may exert more influence than the majority. In this particular study, the minority did not out-influence the majority. The minority members who framed were more influential than the minority members who did not frame. Meaning the minority members who framed their argument in a way that made salient the participants shared Christian values, had more influence than the minority members who did not frame the argument in this way.

Although direct minority influence is found in a variety of contexts, much of

the minority influence research indicates the effects of indirect minority influence (Nemeth, 1986). According to Nemeth (1986), minorities show their influence at a latent level, rather than at the manifest level. This latent level processing is often not as immediately apparent as majority influence, but it does seem to be a deeper and longer lasting process than the manifest processing exerted by majority influence.

Creativity & Divergent Thinking

It has been well established from the research that exposure to minority influences results in an increase in divergent thinking (DeDreu & DeVries, 1993; Nemeth, 1986; Nemeth & Kwan, 1985; Smith & Tindale, 2010). For example, sources of indirect minority influence may prompt majority members to think about the issue more abstractly, from multiple-perspectives or perhaps consider aspects of the problem that were previously overlooked (Nemeth, 1986; Smith et al., 2000; Smith & Tindale, 2010). Guilford (1956) first defined divergent thinking (DT) as having more ideas (i.e., fluency) and more classes of ideas (i.e., flexibility). This is best illustrated with a classic prompt for divergent thinking that involves asking people to name the various “uses for a brick” (Nemeth, 1986). If a person were to narrow their classification of ideas to “building,” then perhaps they would generate such uses as building a home, fireplace, or patio. Although these are all separate ideas, they still fall within the classification of “building.” However, if someone were to suggest that one use the brick as a missile by throwing it through a window to make a point, this would be considered a separate classification of ideas. The more fluency and flexibility that occurs, the more divergent thinking that is taking place (Nemeth, 1986; Nemeth & Kwan, 1985).

Other than being a measure of indirect minority influence, DT is also known to be a measure of creativity (Nemeth & Kwan, 1985; Kenworth, Hewstone, Levine, Martin, & Willis, 2008; Smith et al., 2000). Creativity can be defined in a multitude of ways. However, the most widely accepted definition involves developing solutions to problems that are novel and original (Batey & Furnham, 2006). Hence, highly

creative individuals may illustrate more DT ability than low creative individuals. From this, we hypothesize that these highly creative individuals may also be more likely to entertain minority points of view, that is, they may be more likely to accept the minority viewpoint. Thus, in cases of indirect minority influence, individuals may still show compliance behavior and not accept the minority viewpoint at the public level but will be more likely to entertain minority points of view at the private level instead. If creative people share this link with minority influence as predicted, than perhaps other personality characteristics will share a similar link as well; specifically, it is hypothesized that certain personality characteristics may be associated with a stronger tendency to entertain minority points of view.

Openness to Experience

Researchers have been able to establish relatively consistent findings regarding the relationship between creativity and certain personality characteristics, especially those that contain novelty or originality as key components (Batey & Furnham, 2006; Batey, Furnham, & Safiullina, 2010). George and Zhou (2001) examined the extent to which the personality traits of the Five-Factor Model predicted an individual’s creative behavior. They found that openness to experience had a strong relationship with creativity in their sample and that the presence of the trait positively encouraged creative behavior. McCrae (1987) also postulated that creativity would be linked to openness to experience. Openness to experience (OE) was defined as the degree to which individuals are independent thinkers, curious, imaginative, and amenable to novel ideas and unconventional perspectives (McCrae, 1996; McCrae & Costa, 1997; George & Zhou, 2001).

Interestingly, despite the obvious link between divergent thinking and creativity, no study has explored the extent to which this link extends to minority influences, being that creativity and DT are often the by-product of minority source influence. It is possible that individuals who possess certain personality characteristics (e.g., openness to experience), will also view the source of minority influence as creative,

and therefore will be more attracted to/ consider more seriously the point of view. Hence, an individual's personality characteristics may be a determinant of the degree to which they will be influenced by a minority source.

McCrae (1987) examined the relationship between creativity, divergent thinking, and openness to experience and found that DT and OE may be equally necessary conditions for creativity; however, they are not independent predictors of creativity by themselves. It is well established that DT is often the byproduct of minority source influence (DeDreu & DeVries, 1993; Nemeth, 1986; Nemeth & Kwan, 1985; Smith & Tindale, 2010) and because DT and OE do not predict creativity independently, it is likely the way DT and OE interact that produces creative acts. Hence, individuals who rank high in OE may be influenced to a higher degree by minority source due to the association they share with DT. If this is the case, other personality characteristics may also influence how individuals are affected by minority viewpoints, and these individuals may think more divergently as a result.

Need for Cognition

Need for cognition is a personality characteristic defined by individuals who engage in and enjoy effortful thinking (Cacioppo & Petty, 1982). Those individuals who are high in NFC may also have greater cognitive abilities, enabling the generation of creative ideas (Ivcevic & Mayer, 2007). A study conducted by Butler, Scherer, and Reiter-Palmon (2003), examined the relationship between NFC and elicitation aids (i.e. tools and techniques problem solvers used to foster ideation). They found that the effects of elicitation aids were reliant on characteristics (i.e., NFC) of the problem solver. Their results also show a significant relationship between DT and NFC, and that individuals high in NFC generated more solutions and more categories of solutions than individuals lower in this trait. Therefore, we see that the problem solvers' individual differences (regarding NFC) had a bearing on how participants were influenced by the elicitation aids.

Ivcevic & Mayer (2007) investigated this relationship in further detail and found that evaluation abilities are also significantly correlated with NFC. They concluded that DT abilities are accessed during the idea generation process and that evaluation abilities are accessed to judge the appropriateness of the generated product. It seems that DT is associated with NFC and OE in a similar fashion. Thus, we hypothesize that individuals who score high in need for cognition and openness to experience would be more influenced by a minority source of influence than would individuals who scored relatively lower on these two measures. That is, we imagined that individuals high in openness and need for cognition might be more inclined to construe the minority source of influence as a source of creative thinking and therefore gravitate towards the point of view expressed by the minority.

Tolerance for Ambiguity

Tolerance for ambiguity (TA) corresponds to how individuals perceive and deal with ambiguous situations or stimuli (Furham, 1994; Furnham & Ribchester, 1995). Zenasni, Besancon, and Lubart (2008), conducted a study to test the relationship between creativity and tolerance for ambiguity using three separate measures of creativity (e.g., DT task, a story-writing task, and a self-evaluation of creative attitudes and beliefs) and two self-report scales for TA. They found that there was a significant positive relation between TA and creativity. It is hypothesized that this relationship occurs because ambiguous situations often require creative thinking and that those individuals that can work through the problem solving of that situation may foster more creativity (Zenasni, Besancon, & Lubart, 2008). This relationship between TA and creativity suggests that creative individuals are more tolerant of ambiguous situations and that this creativity fostered divergent thinking. Therefore, we can posit that individuals that score higher in TA may be more likely to entertain minority viewpoints as they are already predisposed to think more divergently.

Need for Cognitive Closure

Need for cognitive closure (NCC) has been defined as the "desire for a quick firm answer, any answer, to a question" (Chirumbolo, Livi, Mannetti, Pierro, & Kruglanski, 2004; Kruglanski & Webster, 1996; Webster & Kruglanski, 1998). A study by Chirumbolo, Livi, Mannetti, Pierro, and Kruglanski (2004) examined the effects of NCC on creativity in a group context. They postulated that individuals under high (versus low) NCC would express less ideational fluency (an important component of both individual and group creativity). Thus, creativity and NCC would be negatively correlated. Previous research posits that this relationship exists because NCC limits the generation of alternative solutions and information processing, which are essential components of creativity (Maysless & Kruglanski, 1987; Webster, Richter, & Kruglanski, 1996). Chirumbolo et al. (2004) found results consistent with their hypothesis that NCC and creativity were negatively correlated. From this we may predict that individuals low in NCC would be more likely to entertain minority viewpoints because their ideational fluency would be higher than those individuals high in this trait.

Primed Effectiveness of Argument

Aside from manipulating whether participants were exposed to majority or minority influence, we also manipulated the stated effectiveness of the argument. Meaning, participants were told that the minority viewpoint was viewed as either successful or unsuccessful by other individuals. There is little research that examines the effects minority source influence has on individuals when the stated effectiveness of the source has been primed. Thus, this study has the potential to reveal possible relationships between primed effectiveness of an argument and minority influence. Therefore, we hypothesize that individuals in either condition would be more likely to entertain minority points of view when the minority faction is considered successful rather than unsuccessful.

Overview of the Present Study

In the present study, we examined the possibility that entertaining and accepting minority points of view might be, in part, related to a variety of personality characteristics. Past literature suggests a relationship exists between the aforementioned personality characteristics and acceptance of minority influence with DT as the linking component. Current literature examining the relationship between minority influence and DT, as a function of personality characteristics, has been somewhat equivocal in nature, but we believe that this study will positively contribute to the body of research on minority influence that currently exists and will assist in clearing up any present ambiguities.

Methods

Participants

Participants were gathered from both the Introductory Psychology pool and other higher-level psychology classes via an online sign-up process in which students received class credit for their participation. Fifty-five subjects participated in this study (N=55). Participants were randomly assigned to one of four experimental conditions: minority-successful (N=14), minority-unsuccessful (N=14), majority-successful (N=15), or majority-unsuccessful (N=12).

Procedure & Materials

Participants were told that the purpose of this study was to examine the effects of certain individual differences on one's social behavior. Each participant was asked to complete a survey packet. The first section of the packet required participants to read a short vignette and answer the questions that followed. The vignette they read described the school newspaper's dilemma in deciding how much space should be allotted to each article in the next issue of the paper. There were three possible article lengths: full page, half page and quarter page. Participants then read a short synopsis about each of the different article topics, which included: student transportation to campus, new graduate programs, and a

newly designed foreign language proposal that would require students to complete two years, or four semesters, of a foreign language before graduation. We chose to use the foreign language proposal as our main item of interest because we reasoned that participants would form a counter attitudinal opinion towards the proposal. Similar studies have used the comprehensive final exam paradigm to achieve the same results (Mucchi-Faina & Cicoletti, 2006; Petty, Cacioppo, & Goldman, 1981; Trost, Maass, & Kenrick, 1992).

Participants were then exposed to the experimental manipulations. Participants were told that a reporter for the newspaper had interviewed several students and faculty members at other universities to see what they thought about the foreign language proposal that had already been implemented at those universities. The first manipulation occurred when subjects were told that either 85% (majority) or 15% (minority) of students were in favor of the foreign language proposal. They were also told that the effectiveness of the proposal was rated by the interviewees as either successful or unsuccessful.

After reviewing each article, participants were to choose which article should be allotted how much space (front page, half page, or quarter page) in the next issue of the paper (only one length could be selected for each article, so that each article would be assigned a different length). This measure was used to gauge how much attention participants were willing to give to each of the article topics and in doing so, they ranked ordered them by importance. Thus the topics they ranked as front page material were more important to them than the article they ranked at quarter of a page. This was followed by a five-item questionnaire regarding the foreign language proposal. Participants were then asked to what degree they were in favor of the foreign language proposal, which was measured using a scale from -40 (extremely against) to 40 (in favor) with five-point increments in-between. This was issued as our direct measure of influence in the context of this study.

The second section of the survey was comprised of a thought-listing task that served as our indirect measure of influence.

Participants were asked to list all of the thoughts they had regarding the foreign language proposal. Then participants were directed to place all of their thoughts in favor of the proposal in the "In Favor" column and all of their thoughts against the proposal in the "Against" column.

The third section of the packet consisted of our measure of personality variables, which were chosen based upon the known relationships they share with creativity and divergent thinking. We chose to use known and previously tested measures of these personality characteristics to ensure reliability.

Openness to experience. A 39-item openness to experience scale was administered to participants that measured degree to which individuals are independent thinkers, curious, imaginative, and amenable to novel ideas and unconventional perspectives (George & Zhou, 2001; Goldberg, 1999; McCrae, 1996; McCrae & Costa, 1997). Items were rated on a 5-point Likert scale and were added together to produce a total scale score.

Need for cognition. An 18-item need for cognition scale was administered to participants that measured the degree to which individuals engage in and enjoy effortful cognitive activity (Cacioppo & Petty, 1982; Cacioppo, Petty, & Kao, 1984). Items were rated on a 5-point Likert scale and were added together to produce a total scale score.

Tolerance for ambiguity. A 22-item tolerance for ambiguity scale was administered to participants that measured the extent to which individuals are tolerant of ambiguous situations and stimuli (McLain, 1993). Items were rated on a 7-point Likert scale and were added together to produce a total scale score.

Need for cognitive closure. A 42-item need for closure scale was administered to participants that measured an individual's desire for

cognitive closure opposed to enduring ambiguity (Kruglanski, Webster, & Klem, 1993). Items were rated on a 6-point Likert scale and were added together to produce a total scale score.

Results

The data were analyzed via a 2 (Status: Minority/Majority) X 2 (Primed Effectiveness: Success/Failure) X 2 (Personality Variable [Need for Cognition and Openness to Experience] High/Low) analyses of variance. We began our analysis by dichotomizing the personality variables in our design, which allowed us to differentiate between those individuals who were either high or low in each trait. This was done by finding the median of each personality data set and ranking everyone below the median as being low in the personality trait and everyone above the median as being high in the personality trait. There were also two independent coders who counted the number of arguments in each column of the divergent thinking task, and inter-rater reliability (percent agreement) was calculated by comparing their results, $\alpha=.97$. Results indicated that no significant relationship was found between the dependent variables in our design and need for closure or tolerance for ambiguity. However, analysis of the personality variable NFC revealed two main effects. Main effects were found for both the number of thoughts generated in favor of the foreign language proposal [$F(1)=5.403$, $p=.025$; Figure 1] and total fluency during the divergent thinking task [$F(1)=4.204$, $p=.046$; Figure 2]. These results coincide with prior literature, and it is not surprising that individuals, who have higher need for cognition, also generate more thoughts during a divergent thinking task.

A significant interaction was also found between source status and stated effectiveness regarding the dependent variable number of arguments generated against the foreign language proposal [$F(1)=3.94$, $p=.05$; Figure 3]. This interaction between source status and stated effectiveness reveals that individuals in the majority condition generated more thoughts against the foreign language proposal when it was deemed successful rather than unsuccessful and

that the inverse was true of those in the minority condition. Thus, individuals in the minority condition generated more arguments against the proposal when it was deemed unsuccessful rather than successful. A significant 3-way interaction was also found between source status, stated effectiveness, and dichotomization of the variable NFC [$F(1)=6.185$, $p=.017$; Figure 4]. The relationship found for the status by stated effectiveness also held true in the 3-way interaction for those individuals that were low in need for cognition. However, those individuals who were high in NFC generated more thoughts against the foreign language proposal when it was deemed successful in both the majority and minority conditions.

It is not surprising that marginally significant relationships were also found between some of the dependent variables in our design and OE. There was a marginally significant interaction found between source status and stated effectiveness regarding the dependent variable and the number of arguments generated against the foreign language proposal [$F(1)=3.36$, $p=.074$; Figure 5]. This relationship was similar to the source by effectiveness interaction illustrated in regard to need for cognition. Those individuals in the majority condition generated more thoughts against the proposal when it was deemed successful versus unsuccessful and the inverse was true of the minority condition.

A marginally significant 3-way interaction was also found for source status by stated effectiveness by dichotomization of the variable OE regarding the dependent variable "Issue 1," which was the questionnaire used as the direct measure of influence that gauged participants' overall acceptance of the foreign language proposal [$F(1)=3.82$, $p=.057$; Figure 6]. The results indicate that those individuals who were low in openness we more likely to accept the foreign language proposal if it was deemed unsuccessful rather than successful. Those individuals who were high in openness and in the majority condition also responded similarly, and in all three cases they viewed the foreign language proposal positively. However, those individuals who were high in openness to experience were more accepting of the

proposal when it was viewed as successful, rather than unsuccessful, and actually viewed the proposal negatively when it was viewed as unsuccessful.

This study was a promising first step at exploring how certain personality variables can help explain acceptance of minority influence. However, our results were somewhat inconsistent with our hypothesis. We hypothesized individuals would differ to the degree in which they entertained minority points of view, based on how low or high they scored on measures of certain personality characteristics, namely need for closure, tolerance for ambiguity, need for cognition, and openness to experience. Our results indicated that individuals who scored high in NFC were indeed more likely to entertain minority points, and that individuals who scored high on openness to experience were also influenced to a greater extent by minority sources. However, we did not find any significant relationships between the other personality characteristics of interest and acceptance of minority influence in this study.

Discussion

This study was a promising first step at exploring how certain personality variables can help explain acceptance of minority influence. However, our results were somewhat inconsistent with our hypotheses. We hypothesized individuals would differ to the degree in which they entertained minority points of view, based on how low or high they scored on measures of certain personality characteristics, namely need for closure, tolerance for ambiguity, need for cognition, and openness to experience. Our results indicated that individuals who scored high in NFC were indeed more likely to entertain minority points and that individuals who scored high on openness to experience were also influenced to a greater extent by minority sources. However, we did not find any significant relationships between the other personality characteristics of interest and acceptance of minority influence in this study.

We also hypothesized that individuals would be more accepting of the foreign language proposal and be more likely to entertain minority point of view if their arguments were primed as successful,

rather than unsuccessful. However, this hypothesis did not prove to be true in a variety of cases and our results regarding this manipulation were mixed.

Main effects for NFC were found for the independent variables number of thoughts in favor of the foreign language proposal and overall fluency, both of which are measures of DT. This is in line with previous research (Butler, Scherer, and Reiter-Palmon, 2003; Ivcevic & Mayer, 2007) examining the relationship between NFC and DT. A significant source by status interaction was also found for NCF, where individuals in the majority condition generated more arguments against the foreign language proposal when it was deemed successful versus unsuccessful. However, the inverse was true of the minority condition, as individuals generated more arguments against the proposal when it was deemed unsuccessful rather than successful. A similar marginally significant interaction was found for OE as well regarding these same independent variables. These relationships, once more, coincide with prior literature on minority influence in that there were some conditions in which individuals' group identity was threatened (Wood, 1999). Those individuals in the majority-successful and minority-unsuccessful had their group identities threatened; the majority condition was told that the minority faction was indeed successful or the minority condition was told that the minority viewpoint was not successful. In either case individuals generated more arguments against the proposal to help ensure their in-group identity was maintained.

We also found a significant 3-way interaction between source status, stated effectiveness, and dichotomization of the variable NFC, regarding the dependent variable number of thought against the foreign language proposal. For those individuals that were low in NFC, we see a similar relationship that we saw with the status by success interaction. However, for those individuals high in NFC, we see that in both the majority and minority condition, there were more arguments generated against the foreign language proposal when deemed successful rather than unsuccessful. This result is curious

because we would expect those individuals high in NFC to be more accepting of the minority viewpoints and hence less likely to generate more arguments against a successful versus an unsuccessful proposal.

A marginally significant 3-way interaction was also found between source status, stated effectiveness, and dichotomization of the variable OE, regarding the dependent variable overall acceptance of the foreign language proposal. The results indicate that individuals who were high in openness in the minority condition, were more likely to accept the proposal if it was deemed successful versus unsuccessful. However, we also found that individuals low in openness, in either status condition, were more likely to accept the foreign language proposal if it was previously deemed unsuccessful versus successful, and the same held true for those individuals who were high in openness and in the majority condition. This is also a curious result that does not coincide with the existing literature.

Implications & Future Research

Although our statistical power was weak, our results suggest that a definite relationship exists between these social influences processes and NFC and OE. Past research indicates insufficient findings regarding the interpretation of social influences as a reflection of possible motivational orientations (Wood, 1999). However, the implications of this study suggest that this link between social influences and identity motivations does exist and aligns nicely with past research regarding the formation of social group identity (Tajfel & Turner, 1979; Wood, 1999). In fact, social identity theory supports the possibility that influence originates, in part, from the motivation to align oneself with personally valued reference groups where individuals share similar views regarding topics (Tajfel, 1981, 1982; Tajfel & Turner, 1979; Wood, 1999).

Perhaps future research can examine the extent to which these similar viewpoints, that in-group members' share, relate to measurements of certain personality characteristics, such as NFC and OE. These findings would strengthen

the argument that identity motivations may contribute to the alignment of the self with a minority position and that personality variables affect the degree to which individuals will accept minority viewpoints.

Future studies should also look at the relationship between individual personality characteristics and acceptance of minority influence in contexts where the minority argument has been primed to be successful or unsuccessful. This further examination may help us better understand the unpredicted results that we achieved from our 3-way interactions. Thus, we would be better able to understand how minority sources of influence, personality, and primed effectiveness interact with one another.

Main Effect NFC has on # Thoughts in Favor

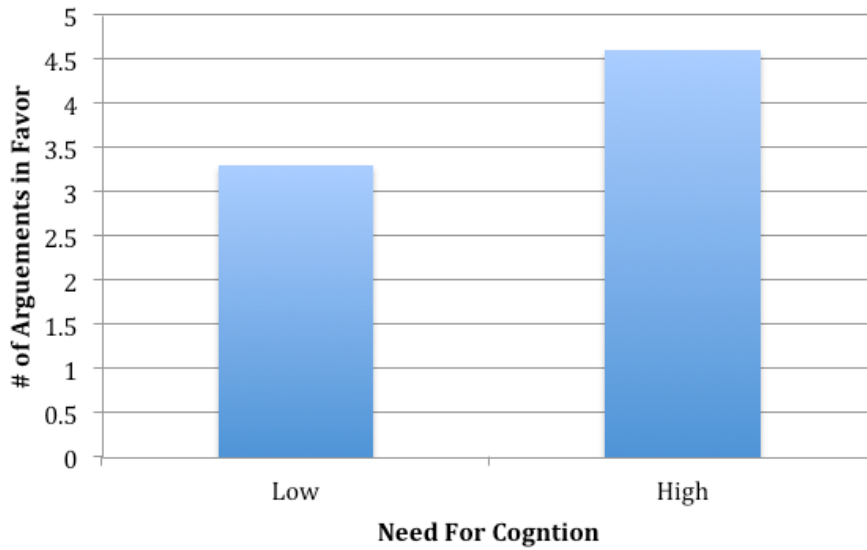


Figure 1. Main Effect NFC has on # of Thoughts in Favor. A main effect was found for the number of thoughts generated in favor of the foreign language proposal [$F(1)=5.403, p=.025$].

Main Effect NFC has on Fluency

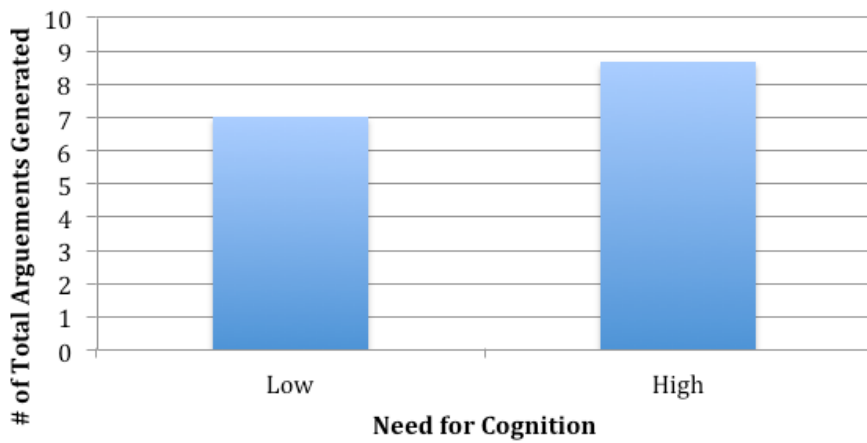


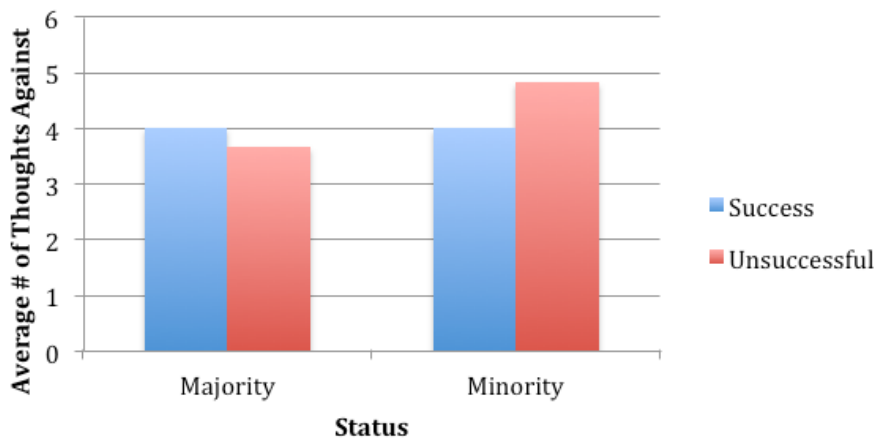
Figure 2. Main Effect NFC has on Fluency. A main effect was also found for total fluency during the divergent thinking task [$F(1)=4.204, p=.046$]. This figure illustrates the relationship that exists between the variables NFC and total fluency.

Interaction of Status*Success



Figure 3. Status by success interaction for NFC. A significant interaction was also found between source status and stated effectiveness regarding the dependent variable number of arguments generated against the foreign language proposal [$F(1)=3.94, p=.05$].

Low Need for Cognition



High Need For Cognition

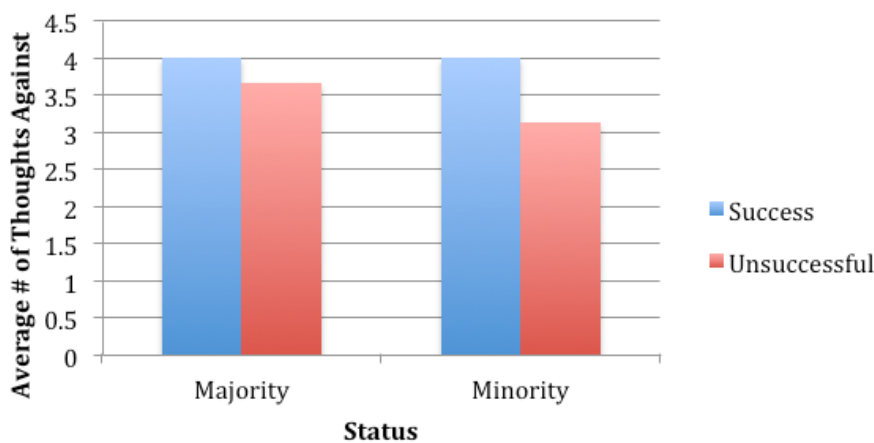


Figure 4. A status X success X dichotomization of the variable NFC three-way interaction. A significant 3-way interaction was also found between source status, stated effectiveness, and dichotomization of the variable NFC [$F(1)=6.185, p=.017$].

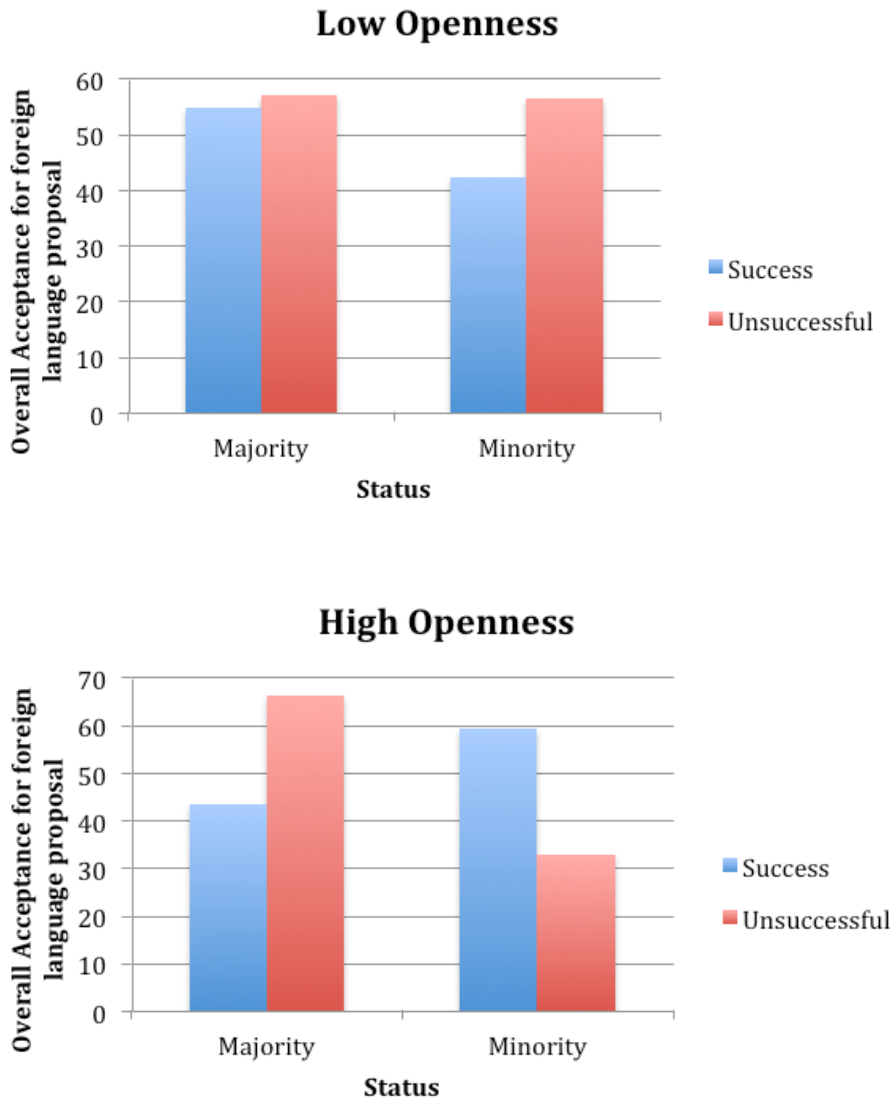


Figure 5. A status X success X Dichotomization of the variable OE three-way interaction. There was a marginally significant interaction found between source status and stated effectiveness regarding the dependent variable the number of arguments generated against the foreign language proposal [$F(1) = 3.36, p = .074$].

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