

## ABSTRACT

Title of Document: Keep it the same: Need for closure and the allure of homogeneous groups with impermeable boundaries.

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The Need for (cognitive) Closure has been found to predict a “syndrome” of group-centric behaviors in numerous experiments (Kruglanski et al., 2006). This is theorized to be due to a strong desire for social reality, which groups can provide. The present research investigates the requisite conditions in which groups can fulfill this desire for a firm social reality, specifically group boundary impermeability and group homogeneity. It was found that Need for Closure predicted greater liking for the group only when the group was both homogeneous in composition and had impermeable boundaries, but not when only one of these conditions was met. These findings are explained using lay epistemic theory (Kruglanski, 1989).

Keep it the same: Need for closure and the allure of homogeneous groups with impermeable boundaries.

By

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Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Master of Arts  
2007

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## Dedication

To my wife Lauren, whose love and support have made this work possible.

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## Chapter 1: Introduction

Throughout their lives, people are given many choices of what groups to be a part of. In pre-school and kindergarten we choose our group of new friends, a process that continues throughout grade school. Later we choose what school organizations to be a part of, whether it be the football team or computer club. As we become adults, we can choose civic or religious groups to be a part of. Once we are of voting age, we can choose to join a political party or even a specific candidate's campaign. Selecting groups to be a part of is a constant feature of normal human social life.

What attracts people to some groups but not others? There are many reasons that have generated considerable research, but how the group is composed may be a strong determinant to people with certain motivations and needs. One motivational variable, the Need for Cognitive Closure (NFC), has particular utility in this case when understood in conjunction with group processes and dynamics. Specifically, this paper will describe the role of the group in providing social reality to its members, describe the Need for Closure construct and its relevance to this topic, how need for closure can lead to group-centrism, and demonstrate how the present research specifies the conditions under which need for closure can lead to an increase in liking for the group, which is one element of group-centrism.

*The Group as provider of shared social reality.*

The idea that groups provide individual members information about the world, or constructing a shared “social reality” as it is often called, is neither new nor controversial. Festinger's (1954) Social Comparison Theory viewed the purpose of



communication in general as understanding reality. Sherif's (1936) work concerning norms provided evidence that the opinions of others could powerfully shape your opinion. Asch's (1955) studies on conformity demonstrated the extent to which the opinions of others could sway someone away from even an obvious, commonsense answer. In the 50 years since, this central assumption has not been challenged in the psychology literature. Summing up the state of past and present theory on this topic, Kruglanski, Pierro, Mannetti, and De Grada (2006, p.84) asserted that "Construction of shared realities has been hailed as a fundamental feature of the group process", and that "a conceptual theme implicit in most definitions [of groups] refers to a sharing of beliefs by members about varied aspects of their worlds" (p.85).

Kruglanski et al. (2006) believe that while other features of groups exist (such as interdependence and shared goals between members), the sharing of beliefs constitutes a central aspect of "groupness". They further posit that groups differ in the extent of their groupness, depending on the "degree to which the group's objectives and/or other characteristics personally mattered to its members." (p.85) What we would like to draw attention to is that this definition suggests a functional element; groups should differ on how well certain characteristics satisfy diverse needs and desires individuals have. This suggests that some groups will serve the needs of certain types of members better than others.

#### *Need for closure*

Information seeking, like most other human activities, is dependent on some motivation to initiate and sustain it. Kruglanski (1989) discussed two distinct types of motivation in regards to information seeking: the need for a *specific* closure, and the

need for a *nonspecific* closure. Seeking specific closure can be seen as looking for a particular answer to a question (wanting to know that your investments are doing well), and has received plenty of research attention in the area of self-esteem. Seeking nonspecific closure, on the other hand, suggests any answer is desirable so long as it is definite (wanting to know if the company luncheon is scheduled for 12:00 or 12:30).

This nonspecific need for closure (NFC) is assumed to vary across people (disposition) as well as across situations. For instance, someone's need for closure should increase situationally as a task becomes more tedious or laborious, when there is environmental noise, when the individual is more distracted or fatigued, or any circumstance in which cognitive capacity has been depleted and processing has become difficult. Another way need for closure can be raised situationally is when closure is valued by significant others or when there is an external deadline for a decision to be made. Heightened need for closure is predicted to have two major consequences on information processing: the urgency tendency, "seizing" on early-appearing information, and the permanence tendency, "freezing" on the judgments that those cues imply (Kruglanski & Webster, 1996). Thus, individuals high in the need for cognitive closure can be categorized as generally "avoidant of uncertainty" compared to those low in the need, and comparatively "closed-minded" once closure is obtained.

#### *Need for Closure and the Group*

It is not difficult to see what function the group should serve to individuals with high need for closure. If indeed groups do uphold shared realities, they should

be especially attractive for those seeking to “seize” on a closure (if none is held) and to “freeze” on it once held. But seeing the group more favorably is not the only effect; a syndrome of behaviors have been identified that indicate a group-centric outlook for those high in the need for closure. This syndrome of behaviors include the desire for opinion uniformity (Kruglanski, Webster, and Klem, 1993), endorsement of centralized group authority who fits a prototype of features common to the group (De Grada, Kruglanski, Mannetti, and Pierro, 1999), increased favoritism toward the group and derogation toward outsiders (Shah, Kruglanski, & Thompson, 1998), rejection of opinion deviates (Shah, Kruglanski, & Thompson, 1998), and various strategies taken to prevent or reduce change (for further discussion, see Kruglanski et al., 2006).

*Conditions necessary for social reality within the group*

How do groups provide social reality? We posit that the feature of groups that provides the stable, firm social reality craved by those needing closure is the group *consensus* on relevant topics. However, it seems axiomatic that not all groups have high levels of consensus in them. Families, one type of group, often disagree over many issues, including how to spend money, where to go for vacations, and—for those with minor children—how much freedom the children have. Work groups can be deeply divided on what is the best way to pursue a given goal, or even whether that goal is the correct one to be pursued. Citizens in a national group often vary considerably on political philosophy and priorities. It seems unlikely that groups like these could immediately exhibit consensus; yet, there are experiments demonstrating that “group” effects can take place even in apparently consensus-lacking groups that

are not comprised solely of persons high in the need for closure. Take for example the classic minimal group “Klee/Kandinsky” experiment (Tajfel, Flament, Billig and Bundy, 1971), demonstrating that mere categorization in a group is enough to produce in-group favoritism. The only similarity between the members of each group was an ostensible shared preference for art—which in reality was not true, anyway.

We propose that there are two variables that jointly determine the group's consensus: group member *homogeneity* and group boundary *permeability*.

Homogeneity of members on relevant characteristics such as beliefs, values, and goals will increase the likelihood that there is a consensus; impermeable boundaries to enter or exit will effect permanence on that group's composition and ensure that it remains homogeneous, so consensus will not be in jeopardy from outside. A group's consensus will only be complete and secure if that group is both homogeneous and impermeable.

One of these variables has already been empirically investigated. In a recent unpublished study conducted at the University of Groningen, Dechesne investigated the interactive role of group boundary permeability and need for closure on liking for the group. After filling out the Dutch translation of the Need for Closure Scale, university students were presented with a newspaper article that they were told was from a respected and widely circulated Dutch newspaper. This article informed them that either it was very difficult to transfer to a different university (impermeable boundary condition) or it was not difficult to transfer (permeable boundary condition), giving one-sided reasons why it was/was not difficult to transfer. Participants were then asked a series of questions designed to measure their level of

affiliation with and liking for the university. It was found that high need for closure participants liked the group more in the impermeable condition than in the permeable condition, but no differences were found between the conditions for those low in the need for closure. This suggests that impermeable boundaries are one of the features of a group that makes it more desirable to those who desire closure.

Although this study did not look at the homogeneity of the group—in this case, the university—we assume that this two-way interaction (of permeability and need for closure) could predict liking only because homogeneity of the group was assumed in the minds of the students. Theoretically speaking, if a group is not sufficiently homogeneous so as to provide a degree of consensus then it will not matter how much the group's membership may change because there is no group consensus to be threatened by it. Thus, to conclusively answer the question of whether both permeability and homogeneity are required, further research was necessary.

## Chapter 2: Method

### *Overview*

In line with the foregoing discussion, the current research was focused on establishing that homogeneity and impermeable boundaries of the group are both necessary to provide a stable social reality in a group, leading to the group-centric effect described earlier where need for closure does predict group liking.

Demonstrating this point was best suited for the lab setting, where a common identity (residents of the metropolitan D.C. Area) could be assumed, conditions of homogeneity and permeability could be manipulated using vignettes, and causality

could be determined. This way, we could manipulate different combinations of conditions that may be confounded in people's minds; for example, those high in the need for closure may be motivated to believe that their groups are relatively homogeneous and impermeable, making those who are high in the need for closure but do not believe that their groups are impermeable and homogeneous difficult to find for a field experiment or a survey study. Thus, we will be able to test whether the predicted function of need for closure increasing liking occurs only for the homogeneous-impermeable condition.

*Experiment: The necessity of impermeability and homogeneity*

After completing a measure of Need for Closure, participants read two short articles describing the homogeneity (high or low) of the Washington, D.C. Metropolitan Area and recent hiring trends of recent University of Maryland graduates (diffuse vs. mostly in the Washington area). While it may seem odd to use a metropolitan area as a group, it should be remembered that regional loyalties can be strong and that the Washington area has many cultural icons, museums, and sports teams—with large fan followings—specific to itself. These things can foster a strong sense of identification and community. Once participants finished reading the two articles, they indicated the extent to which they liked the Washington area, how much they would enjoy staying there after graduation, and how strongly they identified with it.

*Method*

*Participants.* Participants were 150 University of Maryland undergraduates who received partial course credit for participating.

*Design.* This experiment was based on a 2 (permeability) x 2 (homogeneity) between-subjects factorial design, with a third variable (need for closure) measured independently. The dependent variables were participants' ratings of the extent to which they liked, enjoyed staying in, and personally identified with the Washington, D.C. Area (of which the University of Maryland is a part).

*Materials and Procedure.* Participants signed up for the experiment via the university's online system. Upon arrival in the lab, they were greeted by an experimenter who briefly explained the procedure of the study. Participants were then led to an individual cubicle, and seated behind a computer. The experimenter informed participants that the instructions will be presented on a computer, but the experimenter would be available nearby if there were questions.

The first screen informed participants that we were going to ask them some questions about themselves in order to get to know them better. This was followed by the shortened (14-item,  $\alpha = .731$ ,  $N = 141$ ; see Appendix) version of Webster & Kruglanski's (1996) Need for Closure Scale, with two lie scale items included. Participants were then told that they would be reading two short articles with a few multiple-choice questions to follow. The topic of Article 1 was the hiring placement of recent Maryland graduates. For participants in the impermeability condition, the article read:

“A recent survey of UMD graduates indicates that while some students do find their first post-graduation job outside the Washington, D.C. area, many more find jobs in the city. This is probably due to a number of reasons. First, although a number of job markets around the country are growing, the D.C. area is experiencing

significant job market expansion as well. Second, the perceived difficulties of moving to a new area for a career are often underestimated by students, making moving much more difficult than expected. Third, developing social networks in college will often lead to job recommendations from friends who are also in the D.C. area. Fourth, the University's partnerships with businesses for job and research training often give students exposure to corporations and agencies that have local offices, thus providing a link to jobs available nearby. Finally, since most students come to the University from nearby locations, many want to stay close to home to find jobs. In conclusion, there appear to be numerous reasons for why many UMD students find their first post-graduation job in the Washington, D.C. area.”

In contrast, the article in the permeability condition read:

“A survey of recent UMD graduates indicates that while some students do find their first post-graduation job in the Washington, D.C. area, many more find jobs in other cities. This is probably due to a number of reasons. First, although the D.C. job market is growing significantly, there are other areas of the country experiencing job market expansion as well. Second, the perceived difficulties of moving to a new area for a career are often overestimated by students, making moving much easier than expected. Third, developing social networks in college will often lead to job recommendations from friends who have moved elsewhere in the country. Fourth, the University's partnerships with businesses for job and research training often give students exposure to corporations and agencies that are global or national, thus providing a link to many jobs that open all over the country. Finally, since students come to the University from many different areas around the country, many want to



return home after school to find jobs. In conclusion, there appear to be numerous reasons for why many UMD students find their first post-graduation job outside the Washington, D.C. area.”

Both articles were presented in segments of no more than two sentences at a time in an attempt to ensure careful reading by the participants.

Participants were then told that Article 2 discussed the demographics of the Washington area. In the homogeneous condition, the article read:

“Data suggest that the D.C. area is among the most similar metropolitan areas in the country. While all cities have some diversity of ethnic groups, religions, and cultures, the D.C. area scores below the median on all of these categories. More importantly, differences between groups tend to be superficial, with only slight contrasts in ideologies and the importance ascribed to certain cultural values. Unlike certain other cities, D.C. residents usually speak the same primary language, which could contribute to the (merely) small and superficial differences noted earlier. This could also help explain the finding that members of different groups feel that they do understand the points of view of people in other groups. In conclusion, the D.C. area is not very dissimilar compared to other metropolitan areas.”

In contrast, participants in the heterogeneous condition read:

“Data suggest that the D.C. area is among the most dissimilar metropolitan areas in the country. While all cities have some diversity of ethnic groups, religions, and cultures, the D.C. area scores above the median on all of these categories. More importantly, differences between groups tend to be substantial, with clear contrasts in ideologies and the importance ascribed to certain cultural values.

Unlike certain other cities, D.C. residents often speak different primary languages, which could contribute to the deep and enduring differences between groups noted earlier. This could also help explain the finding that members of different groups do not feel that they understand the points of view of people in other groups. In conclusion, the D.C. area is very dissimilar compared to other metropolitan areas.”

Following the second article, participants were presented with three response items, each followed by a five-point Likert scale:

1. (Liking) “How much would you say that you like being part of the Washington, D.C. metropolitan area?” (strongly dislike—strongly like)
2. (Enjoy staying) “I would enjoy staying in the Washington area for some time after I graduate.” (strongly disagree-strongly agree)
3. (Identification) “How strongly do you identify yourself as a member of the D.C. area?” (do not identify—strongly identify)

Participants were then debriefed regarding the information given to them, given the promised partial course credit, thanked for participation, and were given an opportunity to have any further questions answered.

## Chapter 3: Results

*Correlation of dependent measures.* The three dependent variables were strongly correlated (all  $p < .01$ ), but did differ enough to be usefully analyzed independently. Liking was correlated  $r = .573$  with Enjoy Staying and  $r = .463$  with Identification, while Enjoy Staying and Identification were correlated  $r = .377$ . Since Enjoy Staying is a future projection of current Liking, it makes sense that these two

were correlated most strongly. However, Identification deals with more than a positivity/negativity judgment toward the group; this variable also incorporates how you see your self in terms of the group, and thus tapped a fundamentally different construct (which was reflected in the smaller relationships between Identification and the other two variables).

*Overall analysis.* The results of this experiment were examined using a permeability X homogeneity X need for closure multiple regression (*Impermeable* and *Homogeneous* conditions were coded as positive). Six participants were excluded from the analysis due to high scores on the lie scale, and 3 participants were excluded due to computer error. For the Liking variable, the overall model was significant,  $R^2 = .124$ ,  $F(7,134) = 2.705$ ,  $p < .012$ , and the three-way interaction was significant,  $\beta = .347$ ,  $t(140) = 2.774$ ,  $p < .006$ . The overall model for the Enjoy Staying variable was also significant,  $R^2 = .164$ ,  $F(7,134) = 3.759$ ,  $p < .001$ , with its three-way interaction term  $\beta = .504$ ,  $t(140) = 3.141$ ,  $p < .001$ . The overall model for the Identification variable was not significant,  $R^2 = .072$ ,  $F(7) = 1.390$ ,  $p < .215$ , although the three-way interaction was marginally significant,  $\beta = .397$ ,  $t(140) = 1.766$ ,  $p < .080$ .

*Main effects.* Main effects were also analyzed using regression, and no significant effects were found. Permeability (*Impermeable* is coded positively) showed no main effect for Liking ( $\beta = .106$ ,  $t(140) = 1.593$ ,  $p < .113$ ), Enjoy Staying ( $\beta = .006$ ,  $t(140) = .067$ ,  $p < .947$ ), and Identification ( $\beta = -.120$ ,  $t(140) = -1.100$ ,  $p < .273$ ). Homogeneity (*Homogeneous* coded positively) also showed no main effects

for Liking ( $\beta = .056$ ,  $t(140) = .845$ ,  $p < .400$ ), Enjoy Staying ( $\beta = .106$ ,  $t(140) = 1.209$ ,  $p < .229$ ), and Identification ( $\beta = -.014$ ,  $t(140) = -.128$ ,  $p < .898$ ).

*Planned contrasts.* Consistent with our prediction, in the Homogeneous-Impermeable condition need for closure positively predicted Liking of ( $\beta = .469$ ,  $t(34) = 2.544$ ,  $p < .016$ ), Perceived Enjoyment of Staying in ( $\beta = .311$ ,  $t(34) = 1.307$ ,  $p < .200$ , marginal), and Identification with ( $\beta = .780$ ,  $t(34) = 2.369$ ,  $p < .024$ ) the Washington, DC area. This was not true in the Homogeneous-Permeable condition for Liking ( $\beta = -.042$ ,  $t(35) = -.169$ ,  $p < .867$ ), Enjoy Staying ( $\beta = -.152$ ,  $t(35) = -.372$ ,  $p < .712$ ), or Identification ( $\beta = -.184$ ,  $t(35) = -.406$ ,  $p < .678$ ), nor was it the case in the Heterogeneous-Impermeable condition for Liking ( $\beta = .469$ ,  $t(34) = 2.544$ ,  $p < .016$ ) or Identification ( $\beta = -.151$ ,  $t(33) = -.348$ ,  $p < .730$ ), while Enjoy Staying showed a trend in the opposite direction ( $\beta = -.797$ ,  $t(1) = -2.593$ ,  $p < .014$ ). Surprisingly, need for closure *did* have a significant and positive effect in the Heterogeneous-Permeable condition for Liking ( $\beta = .768$ ,  $t(35) = 2.383$ ,  $p < .023$ ) and Enjoy Staying ( $\beta = .758$ ,  $t(35) = 2.322$ ,  $p < .026$ ), but not for Identification ( $\beta = .345$ ,  $t(35) = .725$ ,  $p < .473$ ). See Table 1 and Figures 1-3 for graphical presentation of this information.

*Table 1: Effect of Need for Closure within conditions*

Condition	N	Liking	Enjoy Staying	Identification
Impermeable-Homogeneous	35	$\beta = .469, t(34) = 2.544, p < .016$	$\beta = .311, t(34) = 1.307, p < .200$	$\beta = .780, t(34) = 2.369, p < .024$
Impermeable-Heterogeneous	34	$\beta = -.109, t(33) = -.454, p < .653$	$\beta = -.797, t(33) = -2.593, p < .014$	$\beta = -.151, t(33) = -.348, p < .730$
Permeable-Homogeneous	36	$\beta = -.042, t(35) = -.169, p < .867$	$\beta = -.152, t(35) = -.372, p < .712$	$\beta = -.184, t(35) = -.406, p < .678$
Permeable-Heterogeneous	36	$\beta = .768, t(35) = 2.383, p < .023$	$\beta = .758, t(35) = 2.322, p < .026$	$\beta = .345, t(35) = .725, p < .473$

*Figure 1: Effect on Need for Closure on Liking*

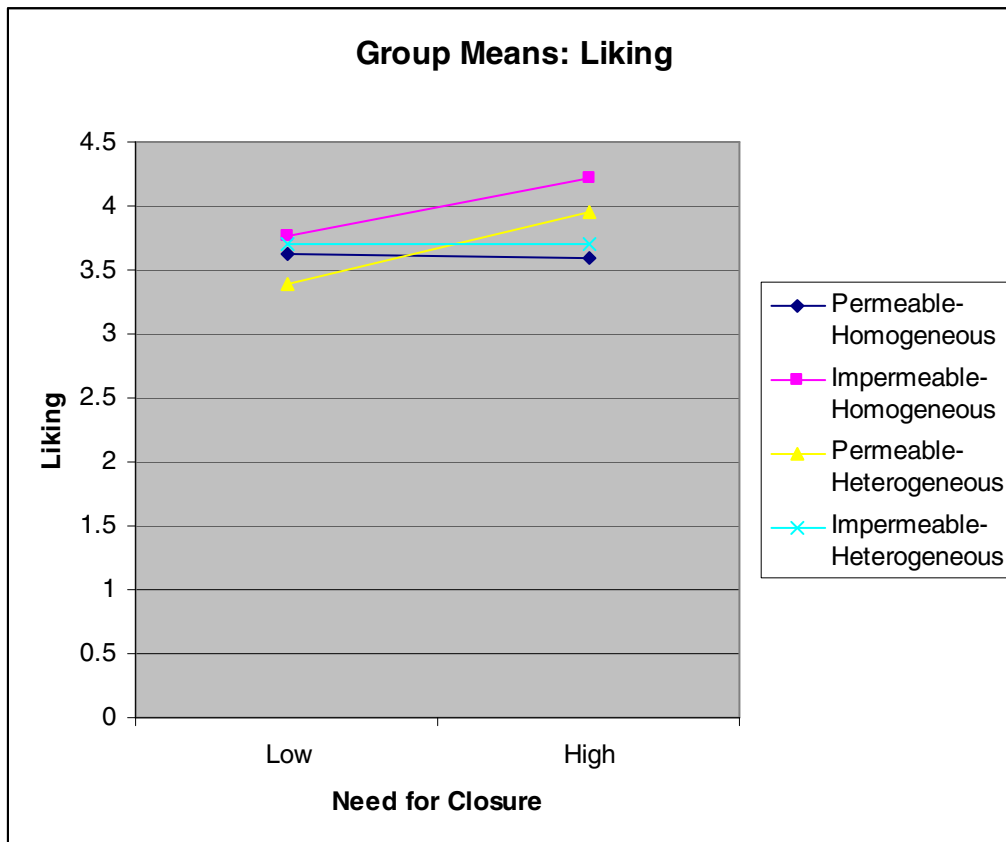


Figure 2: Effect of Need for Closure on Enjoy Staying

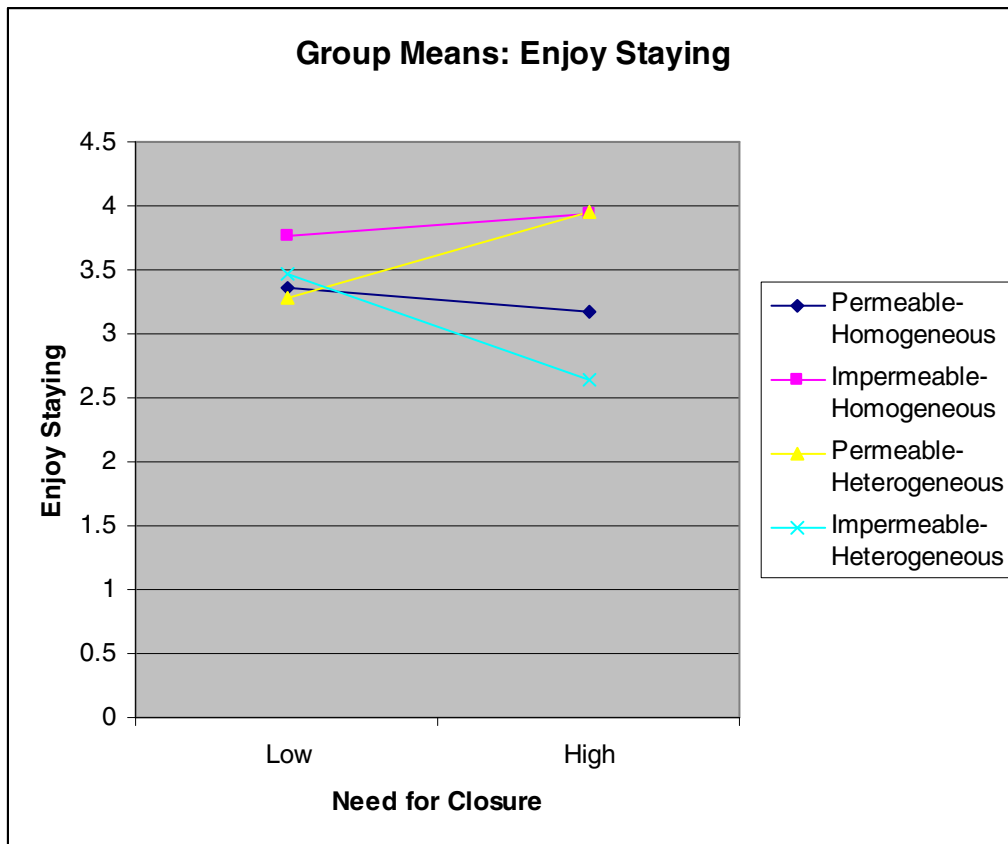
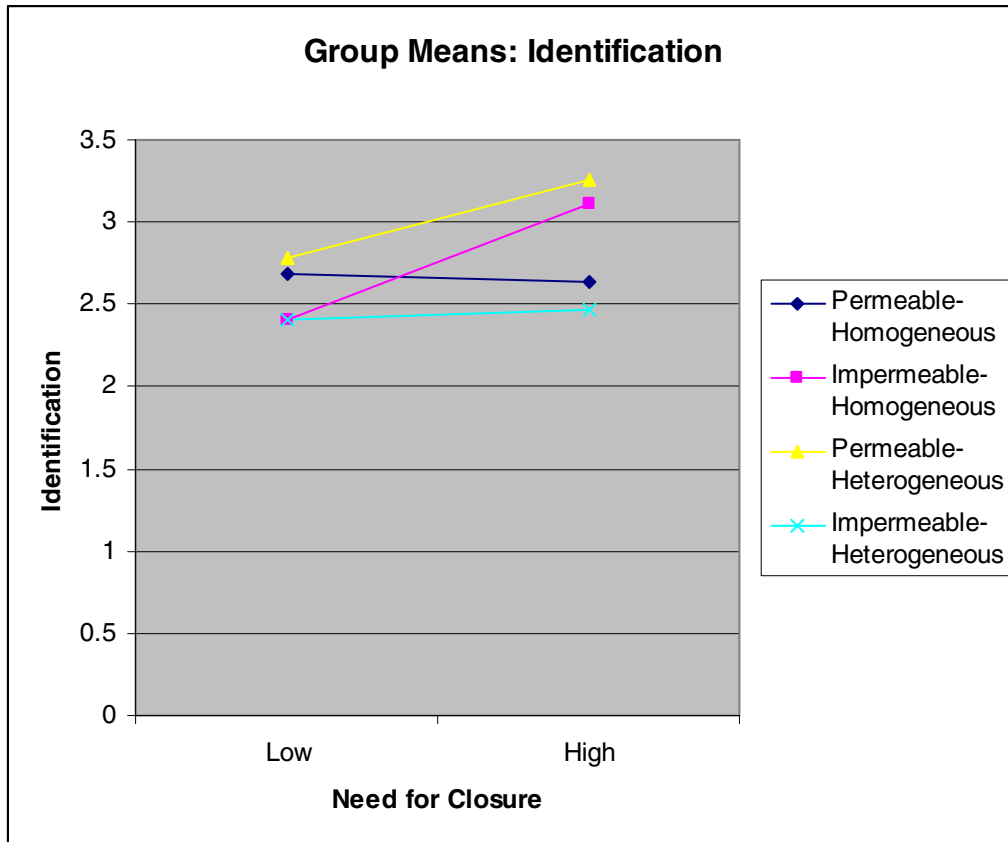


Figure 3: *Effect of Need for Closure on Identification*



## Chapter 4: Discussion

These results suggest that homogeneity and impermeability are prerequisites for the consensus desired by individuals high in the need for closure. The combination of both group homogeneity and boundary impermeability was required in order for need for closure to predict greater liking for the group, while neither of

those factors predicted liking independently. However, a number of questions were raised by the results of this study.

One question that this study raised is why the Identification variable failed to consistently produce meaningful results, when stronger identification with one's group is an important component of group-centrism. An explanation of this failure is that participants came into the lab with their own differing levels of identification with the Washington area, which could have caused considerable error variance contributing to the non-significant result. The way to get past this drawback would be to measure level of identification with the group being studied before (or without) any experimental manipulation, which future research should address.

Another question concerns why need for closure positively predicted Liking for those in the Heterogeneous-Permeable group, which our theory did not suggest. A possible explanation is that persons high in the need for closure may perceive the heterogeneity of large groups as easy classifications into other (smaller) groups, which could be desirable because of the lack of ambiguity these classifications provide, a clearly definable "us" and "them". However, this arrangement could be unnerving if persons felt trapped in this diverse larger society and felt that their subgroup was not sufficiently doing its job providing social reality, and thus this arrangement would only be desirable if one felt it was easy to leave (heterogeneous and permeable). It is also notable that need for closure did not predict Identification in this condition, whereas need for closure did predict Identification in the Homogeneous-Impermeable condition; it seems logical that those high in the need for closure would identify more with a group that appears to have consensus, but not a



group that is internally divided. Yet another explanation for the unexpected findings in the Heterogeneous-Permeable condition could be that our participants have accepted a widely held **social norm** that diversity is good (thus heterogeneity of the area is culturally accepted as desirable), and high need for closure participants may hold to this norm even more strongly than lows (they have “seized and frozen” on it). This does threaten the group’s broader consensus, but paradoxically strengthens the consensus view that diversity is good. With no specific threats to other consensus beliefs emerging at the moment, those high in the need for closure may have been quite happy to view that this norm being strengthened represents better consensus. However, if there were concerns about *not being able* to go elsewhere if this diversity undermines consensus on larger issues (if boundaries are impermeable), then this would not be seen as a positive development; only permeable boundaries that permit the individual a safe escape would allow this condition to be seen positively.

#### *Societal implications and questions for further research*

The present research shows promise for presenting a new angle on the immigration debate going on not only in the United States, but also in many countries in Europe as well. Future research could investigate a number of predictions. First, need for closure, perceptions of group homogeneity and boundary impermeability should result in greater patriotism/liking for the national group. Second, NFC and homogeneity should result in the desire for impermeable boundaries (strict immigration policy) since the consensus seems possible due to the composition of the group but is not yet secure, which strong entrance boundaries would fix. Third, NFC and homogeneity should result in greater desire for the cultural assimilation of

immigrants already in the host country, and would support policies to effect that (such as mandatory learning of the host country's language). This could also take the form of dislike for immigrants that fail to assimilate.

Another question raised by this research concerns the possible co-occurrence of need for closure and perceived group homogeneity. Since high NFC person are motivated to have a firm and stable social reality available to them, they could perceive their groups to be more homogeneous than those low in the need for closure. This could be due to a combination of self-selection into groups that are more homogeneous than those low in NFC choose to be a part of, or could be due to motivated distortion on the part of high NFC persons. The reason why this is interesting is because it could bring to light why in-group favoritism has been found even for minimal groups; perhaps homogeneity is assumed unless the (merely trivial) similarities of those groups are called to participants' attention, or possibly in-group favoritism has been routinized and will continue unless evidence is available that the group is not homogeneous. Indeed, the present research hints that past research (Kruglanski et al., 2006) showing that need for closure causes group-centric behavior was conducted with participants who were not only high in the need for closure, but also were acting as if they believed their groups to be homogeneous and impermeable. This would be an interesting possibility to investigate.

## Appendix

(shortened 14-item Need for Closure Scale, #s 3 and 12 lie scale items)

### ATTITUDES, BELIEFS, AND EXPERIENCES SURVEY

Read each of the following statements and decide how much you would agree with each according to your attitudes, beliefs and experiences. Please respond according to the following scale, using only one number for each statement.

1 = Strongly disagree  
2 = Moderately disagree  
3 = Slightly disagree

4 = Slightly agree  
5 = Moderately agree  
6 = Strongly agree

1	In case of uncertainty, I prefer to make an immediate decision, whatever it may be.	1 2 3 4 5 6
2	When I find myself facing various, potentially valid, alternatives, I decide in favor of one of them quickly and without hesitation.	1 2 3 4 5 6
3	I never been late for work or for an appointment	1 2 3 4 5 6
4	I prefer to decide on the first available solution rather than to ponder at length what decision I should make.	1 2 3 4 5 6
5	I get very upset when things around me aren't in their place.	1 2 3 4 5 6
6	Generally, I avoid participating in discussions on ambiguous and controversial problems.	1 2 3 4 5 6
7	When I need to confront a problem, I do not think about it too much and I decide without hesitation	1 2 3 4 5 6
8	When I need to solve a problem, I generally do not waste time in considering diverse points of view about it.	1 2 3 4 5 6
9	I prefer to be with people who have the same ideas and tastes as myself.	1 2 3 4 5 6
10	Generally, I do not search for alternative solutions to problems for which I already have a solution available.	1 2 3 4 5 6
11	I feel uncomfortable when I do not manage to give a quick response to problems that I face.	1 2 3 4 5 6
12	I have never hurt another person's feelings	1 2 3 4 5 6
13	Any solution to a problem is better than remaining in a state of uncertainty.	1 2 3 4 5 6
14	I prefer activities where it is always clear what is to be done and how it need to be done.	1 2 3 4 5 6
15	After having found a solution to a problem I believe that it is a useless waste of time to take into account diverse possible solutions.	1 2 3 4 5 6
16	I prefer things to which I am used to those I do not know, and cannot predict.	1 2 3 4 5 6

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