# Relocation choice for different homophily preferences: hybrid scenarios for Schelling Model

Rocco PaolilloAndreas Flache **HERE** SOME NOTES TO BEAR IN MIND **Fig** 4 shows ß secondary = ß

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**Abstract**

Rocco: 200 words, 3-5 keywords Schelling's model of residential segregation famously showed how high levels of residential segregation can emerge as unintended outcome of the interplay of individual relocations of actors who hold relatively mild ethnic preferences. Most of the work building on this model neglected two forms of heterogeneity which seem to become increasingly important empirically in contemporary societies. First, there is considerable heterogeneity of residential preferences not only between but also within ethnic groups, with especially younger, higher educated and more wealthy individuals having less strong preferences for ethnic homophily. Second, most of the research following Schelling focuses on ethnic similarity as relevant to residential preferences. However, recent theoretical and empirical research on spatial sorting emphasizes multidimensionality, as individuals prefer similar others not only regarding ethnicity, but also for social distinctions as shared values or shared status. Extending recent work (Paolillo et Lorenz, 2018), we explore the interplay of heterogeneity in both forms of homophily preferences for ethnicity and shared values. Using a discrete choice version of Schelling's model, in which agents differ in their relative weights for ethnic and value similarity in relocation moves, we explore the consequences of deterministic or random relocation choice of agents Andreas: do we really vary randomness?, in addition to structural conditions of relative group sizes of ethnic and value groups. We find in particular that hybrid segregation patterns can emerge in which ethnically mixed but value homogeneous neighborhoods arise alongside ethnically segregated neighborhoods populated by agents driven more by ethnic homophily. Importantly and contrary to Schelling's model, we show how partial ethnic mixing can arise even if everyone has a preference for more co-ethnics in her neighborhood, all other things being equal.

## Introduction

Ethnic or racial residential segregation appears still a critical topic of multi-ethnic cities all over the world (Charles, 2003). Many possible and interconnected explanations for segregation have been proposed, such as discrimination by landlords (Ahmed and Hammarstedt, 2008), the sorting mechanisms built into housing markets (Bailey, 2012), or income inequality in combination with features of urban geography (Pais, 2017). Prominently, Schelling (1969, 1971)Schelling's contribution was to demonstrate (Schelling, 1969, 1971) with a formal computational model that segregation can be a self-organizing phenomenon (unorganized segregation) that emerges from the interaction of people satisfying their "discriminatory individual choice" (Schelling, 1969, p. 488) (Schelling, 1969, p. 488) within spatial limited constraints[1]. Essential to Schelling's model, and focus of this paper, is the concept of "preference dynamics" (Clark and Fossett, 2008), i.e. the empirically plausible assumption that people typically want at least a certain minimal fraction of co-ethnics nearby, even if they are content with living in a mixed neighborhood. One key insight from a large number of formal modelling studies is the robustness of the main results of the model (Flache and de Matos Fernandes, 2020), also if people hold "integrationist" preferences (Zhang, 2004) or randomness is included in residential choices of agents (Bruch and Mare, 2006; Van de Rijt et al., 2009; Bruch and Mare, 2009). The robustness of segregation due to individual preferences persists also when additional parameters are taken into account such as relocation costs they are combined with additional parameters as housing pricing and income differences (Fossett, 2006), relative group sizes (Bruch, 2014) or empirically realistic spatial structures of real cities (Benenson et al., 2009).

[1] Essentially the same mechanism proposed by Schelling was independently developed and formalized earlier by Sakoda (1971), see Hegselmann (2017)

Yet, despite the strong theoretical and empirical evidence that preference dynamics might suffice to generate robust and high levels of ethnic segregation, recent trends in residential segregation suggest a somewhat different and more complex picture from the ~~one that can be derived by the results of Schellingmodel. For what concerns~~ premises of Schelling's original model. As regards ethnic segregation, not only do U.S. studies point to declining levels in recent decades (e.g. Glaeser and Vigdor (2012)) ~~,~~compared to the 60's/70's urban landscape (Clark, 2015) Schelling referred to (Schelling, 1969), but also mixed neighborhoods increasingly start to arise in multi-ethnic cities (Clark, 2015; Lee et al., 2012). This pattern is also reflected in studies from Europe (Blokland and Van Eijk, 2010). ~~This scenario can be due to two reasons. Firstly, urban societies are nowadays more racially diverse compared to decades ago (Lee et al., 2012). Second~~In addition to deeply variegated society (Lee et al., 2012), it has been suggested that this pattern can be attributed to changes in residential preferences~~and how they vary within the population~~. Goldman (2012)~~Rocco: never found this ref, can you pass?~~, for example, finds evidence of reduced racial prejudice in the society as a whole, a trend that seems to extend to residential ethnic preferences (Xie and Zhou, 2012). Furthermore, residential preferences can vary ~~depending on~~ according to socio-demographic characteristics~~of individuals~~. On the whole, it appears that younger (Clark et al., 2018; Clark, 2009), more highly educated and higher income citizens have increasingly more tolerant ethnic preferences (Clark and Brazil, 2019; Crowder et al., 2012; Clark, 2009; Xie and Zhou, 2012) when it comes to residential choice. A common trait of modern societies is that these socio-demographic characteristics and the social preference associated ~~might vary not only between members of different~~ are differently distributed both within (Clark, 2002; Crul et al., 2017) and between ethnic groups (Clark, 2009; Crowder et al., 2012)~~, but also between members of the same ethnic group (Clark, 2002; Crul et al., 2017)~~. Thus, differently from Schelling, it becomes a both theoretically and empirically plausible scenario that ~~the~~ members of the same ethnic group experience ~~a~~ different degree of integration or segregation along diverse dimensions in addition to ethnicity~~Andreas: not correct if you consider the bounded neighborhood model~~. In this paper, we are interested in this aspect we refer to as "hybrid segregation" and we ~~propose~~ aim at modeling possible scenarios of how it can come to be.

Formal models of Schelling-type preferences dynamics have recently started to incorporate the insight that individuals differ in the degree of tolerance to local ethnic diversity. These models imposed heterogeneity in the desired neighborhood proportion of co-ethnics (Xie and Zhou, 2012; Hatna and Benenson, 2015). Interestingly, these studies found that - similar to empirical patterns observed in modern multi-ethnic cities - preference dynamics could give rise to a division between ethnically mixed and segregated neighborhoods co-existing in the same city, together with a selection of more tolerant agents into the mixed neighborhoods. However, there is another important form of preference heterogeneity these models have not taken into account and which could profoundly affect dynamics of segregation. Shared values, defined as common beliefs, preferences or expectations on acceptable behavior induce perceptions of similarity across the boundaries of ethnicity (Wimmer, 2013; Bail, 2008). In modern societies where individuals differ along many and different social distinctions (Vertovec, 2007), shared values can become even more important than ethnicity itself. Recent empirical studies, indeed, suggest that a preference for value-similar neighbors may sometimes even dominate preferences for ethnic similarity. For instance,van Gent et al. (2019) ~~find~~ show how similarity with neighbors in ~~terms of~~ sociocultural dispositions (~~in their case traditional or modern arrangemens of gender contribution to household income, plus education~~i.e. gender balance in household tenure) is a better predictor ~~of the intention to remain in~~ to leave the neighborhood, compared to ethnic membership and income similarity. In a similar vein, research on homophily in social networks recently has moved forward to recognize the importance of multidimensional similarity for the formation of social relationships (Block and Grund, 2014; Hooijsma et al., 2020). This research shows that dissimilarity in ethnicity might not negatively affect the formation of relationships when compensated for by salient similarities individuals perceive in other categories.

While recent empirical studies seem to adopt the interplay of ethnicity with other social distinctions to explain hybrid segregation in diverse societies, this seems rarely the case in modeling literature~~drawing on Schelling's framework~~. Yet, we argue that this work points to an intriguing new possibility for residential segregation dynamics and hybrid segregation scenarios. The seemingly unstoppable march towards segregation that Schelling-type preference dynamics induce may not only be stopped by higher levels of ethnic tolerance, as suggested by Xie and Zhou (2012) or Hatna and Benenson (2015). It may also be stopped in a world where individuals still prefer being among co-ethnics, but at the same time hold an even stronger preference for having neighbors with similar values who also happen to be members of other ethnic groups. Given that ~~stronger preference for shared social distinctions~~ such a predominance of value-orientation in residential preferences ~~rather than ethnicity~~ appears to some extent to be correlated with ~~socio-characteristics as~~ education, income or age, this possibility would offer a new explanation in the framework of Schelling-type ~~dynamics for nowadays residential trends.~~

Rocco: just to break the sentence too longAn example is preference dynamics of why well-off younger generations appear to increasingly move to more affluent and more ethnically mixed neighborhoods (Clark et al., 2018; Clark, 2002). It would also help to understand why low-income strata seem to become increasingly segregated through generations, meaning that their neighborhoods become progressively both ethnically and economically segregated (Clark, 2002).

In this paper, we propose a formal computational model of Schelling-type preference dynamics that incorporates the interplay of both ethnic and value similarity for neighborhood composition. Our study builds on and advances recent modelling work of Paolillo and Lorenz (2018) which, to best of our knowledge, first introduced value similarity within a Schelling-type threshold model. In their model, two ethnic groups relocated in a lattice, each ethnic group being equally divided into intolerant ethnicity-oriented agents and tolerant value-oriented agents. While intolerant agents subscribed to the original Schelling's model considering ethnic similarity and ignoring value similarity, tolerant agents only considered value similarity, indifferent to the ethnicity of other agents. The authors explored the consequences of different desired concentrations of agents considered as similar and for conditions of different relative ethnic sizes. Their results showed a general decrease in ethnic segregation compared to a world populated only by agents with ethnic preference. But they also showed more complex patterns, especially a by-product effect for ethnicity-oriented agents belonging to minority group in the minority condition who found attractive ethnically mixed neighborhoods formed by tolerant value-oriented agents, due to higher chance to find co-ethnics. In-flows of intolerant minority co-ethnics caused such neighborhoods to decrease in value segregation and increase ethnic homogeneity. The authors observed until when tolerant agents would not what threshold value-oriented agents of both ethnic groups would tolerate the increasing concentration of conservativesethnicity-oriented agents and then leave, so to leave the neighborhood, which would become eventually ethnically concentrated, due to presence of conservative minority. Andreas: generally a bit lengthy here, could be moved to separate theory section. Rocco: now shortened and rephrase, checking the likelihood of that neighborhood to become more ethnically and value homogeneous, with concentration of conservative co-ethnics.

We want to build on the contribution potential of Paolillo and Lorenz (2018) to reproduce hybrid segregation patterns through multidimensional homophily. To this aim, we ameliorate some unrealistic assumptions of their model and extend other features. Andreas: highlight more the contribution of this paper, we make the model more a First, we relax the assumption that agents can only hold preference for value or ethnic homogeneity: we rather allow residential choice to be driven by a mix of both and focus on the heterogeneity of agents ' preferences for the two types of similarityRocco: redefine "heterogeneity": it is not referred to distribution of preference within populati Second, we implement a random utility model for discrete choice, following recent advances in agent-based modelling of residential mobility (Bruch and Mare, 2006, 2012), substituting threshold behavior with a linear utility function. This approach let us better model the decisional process of agents . A linear utility function lets as model the and sensitivity to change in neighborhood composition (Van de Rijt et al., 2009)compared to a threshold behavior Rocco: review: you can have a decisional process with threshold function: what is the usefulness of linear function over thresho We systematically explore how the interaction of the two types of preference can generate hybrid segregation patterns, combining ethnically homogeneous and ethnically heterogeneous neighborhoods with segregation or integration for value similarity. Moreover, we We further explore how segregation patterns would change when not only ethnic relative size are taken into consideration as in Paolillo and Lorenz (2018), but also different distributions distribution of value types within agents' population.

Rocco: add: discrete choice and linear utility function to observe scenarios not possible in threshold and deterministic behavior, because agents would be not happy and some conditions not stand, e.g. threshold = 100 was not possible in Paolillo and Lorenz (2018) Andreas: dont think we need this is intro. it s already on the long end, consider splitting into intro proper and some sort of the

## Modeling relocation choice with random utility models Rocco: divide: why rum and utility within Introduction: contribution of the paper, formalization with logistic function in the model description

Rocco: this in general will disappear/be rewritten (see AF and RP comments)Rocco: divide: why rum and utility within Introd

Random utility models for discrete choice have a long history in housing research (Frankhauser and Ansel, 2016) and in recent years they have been applied in the agent-based modeling framework (Bruch and Mare, 2006, 2012). Stemming from the utility maximization paradigm, these ~~models~~ model assume that the ~~decision~~ decisional process underlying the choice of economic actors is unknown, and it can be deduced by observed ~~choice~~preferences, i.e. how selection of respondents differ for attributes of the options available (Hess et al., 2018), e.g. different neighborhood composition. So, aim of regression models comparing choices of the sample is to estimate vector parameters that quantify the likelihood to select one option over the other depending on the difference in their attributes (Manski, 1977). Utility in this context is defined as the attractiveness for each characteristic the options differ for and ~~its formalization~~ it is based on the response curve of the respondent (Bruch and Atwell, 2015; Train, 2009) ~~. Random~~ imposed based on the theoretical model of the analyst. Nevertheless, random utility models divide between a systematic component of utility, i.e. observable differences between options based on their utility, and a random term, representing all unknown factors associated with selection of that options, might they depend on other characteristics of the option, characteristics of the selector or an interaction of both. ~~In~~ Compared to our model, random utility for a generic neighborhood is:

$$U = \beta_e U_e + \beta_v U_v + \epsilon \tag{1}$$

where:
$\beta_e$ = weight parameter for ethnic similarity, with $\beta_e[0, \infty)$
$U_e$ = ethnic utility of neighborhood
$\beta_v$ = weight parameter for value similarity, with $\beta_v[0, \infty)$
$U_v$ = value utility of neighborhood
$\epsilon$ = random term

While parameters $\beta_e$ and $\beta_v$ can be estimated through regression models, the random term $\epsilon$ remains unknown. The conditional logit model introduced by McFadden (1994) is a specific type of discrete choice model that allow to quantify the effect of systematic utility over random component, though remaining the latter unknown. Assuming the random term $\epsilon$ follows a type I extreme value distribution, e.g. Gumbel distribution, the probability to select neighborhood $j$ out of options $k$ in choice set $C$ is:
~~Andreas: lenghty, reads more like dissertation. Shorten.~~~~Rocco: added a note, not sure how in computation, but to take back in~~

$$P_{j j \in C} = \frac{exp(\beta_e U_j^e + \beta_v U_j^v)}{\sum_{k \in C} exp(\beta_e U_k^e + \beta_v U_k^v)} \tag{2}$$

~~where $j$ and $k$ are two options available in the choice set $C$.~~

In this computation of probability, parameters $\beta_e$ and $\beta_v$ ~~represent~~ become the weight of how much the systematic component of utility for that dimension matters in the selection of the option compared to the random component represented by the unknown random term. The higher $\beta_e$ or $\beta_v$, the higher the likelihood that the option with highest utility for that dimension will be selected, the lower $\beta_e$ or $\beta_v$, the higher the chance that ~~the choice among options will occur randomly~~ an option is selected randomly for that dimension. With both $\beta_e$ and $\beta_v$ equal 0, the all options have equal probability to be selected, since the choice is totally stochastic, i.e. dependent on ~~the~~ random term.

Implementation of discrete choice in agent-based modelling has ~~some~~ a number of peculiarities compared to empirical regression models. First and above all, estimated preferences in regression models depend on a the comparison of a limited set of observed cases that can profoundly affect results. ~~Andreas: generally this section can be shortened a lot. jms readers can be expected to know most of this and for much of the ir~~ Moreover, utility remains a random variable estimated through parameters $\beta$ and computation of probability to select one option. Probability to select one option over the others as behavioral response to change in their attributes is the equivalent to utility. As ~~Bruch and Mare (2009)~~ (Bruch and Mare, 2009) stress out, agent-based modeling ~~is~~ are deeply different in this aspect, allowing to model independently and quantify the elements of the conditional logit based on a theoretical model. Researchers can impose different combinations of utility function for all ranges of neighborhood characteristics and parameters $\beta$ in the relocation decisions of agents to observe their aggregated results. Additionally, modellers can include other elements that contribute to the dynamics of emerging spatial segregation, such as diverse heterogeneous distributions of preferences (see (Xie and Zhou, 2012)) or population structures that can influence neighborhood composition (Bruch, 2014).

Also agent-based modelling can benefit from the implementation of discrete choice models, not only for the formalization of the decisional process of agents and calibration with parameters $\beta$ estimated (Bruch and Mare, 2006), but also for the inclusion of the stochastic random term. Randomness is useful

to both test robustness of observed phenomena in complex systems and increase their realism through inclusion of random fluctuations against deterministic behavior. A traditional way to include randomness in the dynamics of an agent-based model is as an external noise, for instance in Schelling's model, with a percentage of agents, or additional agents, forced to randomly relocate by the researcher. Implementation of discrete choice allows to include randomness as an endogenous component in the relocation decision of individual agents through the random term compared to parameters of determinism. Useful to our interest in the interplay of value and ethnic preferences, the parameter $\beta$ can ~~be attributed based~~ vary as a local variable of agents, so to sort out differences in the ratio between deterministic and random relocation depending on characteristics of agents~~that simulate their socio-demographics~~. We build on this ~~aspect~~ peculiarity of random utility models to ~~investigate how strength of preferences for either value orientationor ethnicity,~~ test how random behavior of a specific type of agents for value orientation, ethnicity or a combination of both ~~, along structural composition of the population can contribute to~~ can influence the emergence of stable equilibria of hybrid segregation. We can moreover explore the interdependence between different types of agents and how determinism of agents would react to different distributions of the two characteristics of ethnicity and value orientation in the population. In the next section we describe our ~~model~~ extension of Paolillo and Lorenz (2018) and how we implemented random utility discrete choice.

# Model Description

We developed our model in NetLogo 6.1.1 (Wilensky, 1999) extending Paolillo and Lorenz (2018).[2] The model and its parameters are shortly described in Tab: 1. Agents represent households who relocate in a regular square grid of dimension 51 times 51 with periodic boundary conditions, i.e. a tours world. As in Paolillo and Lorenz (2018), each agent is described by two ~~state~~ static variables: ethnicity modeled ~~through a~~ though color tag and value orientation modeled through ~~a~~ shape tag (see fig: 1). ~~Given two levels for each dimension, 4 group-type of agents interacts. For sake of illustration we label them as conservative majority (blue square) , liberal majority (blue circle), conservative minority (orange square) , liberal minority (orange~~ Both dimensions have a twofold distinction: for ethnicity ethnic majority (color blue) or ethnic minority (color orange), while for value orientation conservative group (shape square) or liberal group (shape circle). Value orientation of agents represent shared beliefs or opinions that people can share independently of their ethnic membership and that can rather correlate with other social distinctions, such as education, social class or political views.

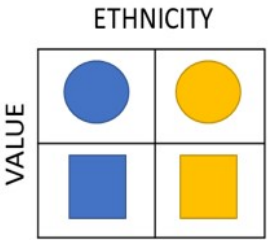


Figure 1: Group-type of agents

In our model value orientation of agents is relevant for two reasons. First, it determines an additional dimension of similarity which is independent of ethnicity: liberals can recognize as similar value-oriented also liberals of the other ethnic group, so as to recognize of different value orientation conservatives of both ethnic groups[3]. Additionally, value orientation matters in defining the strength of ethnic or value similarity in the relocation decision of agents. In Paolillo and Lorenz (2018) agents randomly relocated to an empty ~~cell~~ node according to a threshold function, based on ethnic composition for ethnicity-oriented agents and value composition for value-oriented agents. We substitute this behavior with a binary random utility discrete choice model. At each time step, a random agent selects a random empty ~~cell~~ node and compares its neighborhood composition to that of its current ~~cell~~node. By neighborhood of the agent we refer to the Moore ~~distance with~~ neighborhood of radius 1 of the ~~cell, i.e. 8 surrounding nodes. Ethnic utility and value utility for the neighborhood composition is modeled through a linear function~~agent

[2]Model available at https://github.com/RoccoPaolillo/ethnic-value_multinomial.git
[3]Equally, also conservatives recognize similar value-oriented conservatives of both ethnic groups

selected; similarly, the alternative neighborhood is the Moore neighborhood of radius 1 of an empty cell. We substitute the threshold function in Paolillo and Lorenz (2018) with a continuous linear function for both ethnic and value neighborhood composition:

$$U_j^e = \frac{x_j^e}{X_j} \quad ; \quad U_j^v = \frac{x_j^v}{X_j} \tag{3}$$

where:
$U_j^e$: ethnic utility of neighborhood $j$
$x_j^e$: number of agents in neighborhood $j$ with same ethnicity
$X_j$: total number agents in neighborhood $j$
$U_j^v$: value utility of neighborhood $j$
$x_j^v$: number of agents in neighborhood $j$ with same value
$X_j$: total number agents in neighborhood $j$

Both utilities can range [0,1]. Utility of a neighborhood is set to 0 if $X_j = 0$, i.e. not agents are in the neighborhood. The probability for an agent to choose the alternative neighborhood over the current one is modeled with a logistic function as:

$$P_{al} = \frac{exp(\beta_e U_{al}^e + \beta_v U_{al}^v)}{1 + exp((\beta_e U_{cr}^e + \beta_v U_{cr}^v) - (\beta_e U_{al}^e + \beta_v U_{al}^v))} \tag{4}$$

where:
$\beta_e$: weight for ethnic preference
$\beta_v$: weight for value preference
$U_{al}^e$: ethnic utility of alternative neighborhood
$U_{cr}^e$: ethnic utility of current neighborhood
$U_{al}^v$: value utility of alternative neighborhood
$U_{cr}^v$: value utility of current neighborhood
~~Andreas: this can be integrated more with equation 2 and text around it.~~

The higher $\beta_e$ or $\beta_v$, the higher the option with higher ethnic or value utility is likely to be selected, the lower $\beta_e$ or $\beta_v$, the higher the chance that selection is random for that dimension. ~~Andreas: repetition~~ With both $\beta_e = 0$ and $\beta_v = 0$, the choice is totally random and $P_{al} = P_{cr} = 0.5$. This formula is a transformation of Eq: 2 for a binary choice with probability to relocate to alternative neighborhood[4]. ~~Andreas: shorten this~~ Probability computed is compared to a random number ranging between 0 and 1. If probability is higher than random number, then the agent moves to the alternative neighborhood, leaving its cell empty. So, the logistic function serves as a simplified version of the roulette wheel selection [5].
~~Andreas: implementation details like these can go to online appendix, online repository containing model code (open abm)~~

We opted for a binary choice to ease computational power required. As tested, due to iterations of the model results would not change with selection between more options. We opted for a continuous linear function because default assumption in utility maximization and sensitive to changes in neighborhood compositions, which is strategic to our aim (Van de Rijt et al., 2009). Moreover, it lets behavior of agents differ only for parameters of determinism $\beta_e$ and $\beta_v$, so to allow us to disentangle the effect of either ethnic or value similarity preferences on emerging segregation. Rocco: next paragraph: I mean that potentially one can span the parameters so to have ethnic liberal > ethnic conservative. We impose preferences as I describe because of theoretical consistency with our research goal
~~Andreas: here (next paragraph rp) we say what we do, but not really why we do it. this has also not been said very clearly furt~~
We vary $\beta_e$ and $\beta_v$ depending on the value orientation of agents and in our experiments impose differences in heterogeneous preferences between the two types of agents. Liberal agents, considered as more prone to ethnic tolerance, hold higher value preferences: weight for ethnic similarity cannot exceed their weight for value similarity ($\beta_v^L \geq \beta_e^L \beta_v^\circ \geq \beta_e^\circ$). Conservative agents hold higher ethnic preferences: weight for value similarity cannot exceed their weight for ethnic similarity ($\beta_e^C \geq \beta_v^C \beta_e^\square \geq \beta_v^\square$). Moreover, the heterogeneity between conservative and liberal agents exists so that ethnic preferences of liberals do not exceed those of conservatives ($\beta_e^C \geq \beta_e^L \beta_e^\square \geq \beta_e^\circ$), and value preferences of conservatives do not exceed those of liberals ($\beta_v^L \geq \beta_v^C \beta_v^\circ \geq \beta_v^\square$).

[4]The equivalence between logistic function and conditional logit for two options is valid since the difference between random terms that are assumed to have a Gumbel distributions has a logistic distribution. The logistic function in Eq: 4 is transformation of Eq: 2 written as $P_{al} = \frac{exp(U_{al})}{exp(U_{al} - U_{cr})}$, resulting from division of numerator and denominator by numerator $exp(U_{al})$, with $exp(U_{cr})/exp(U_{al}) = exp(U_{cr}) - exp(U_{al})$ (see (Train, 2009, p.39) for ~~details~~detailss)

[5]see Bruch and Mare (2012) for an example of roulette wheel selection

As outcome of the model, we report the index of exposure for both ethnic and value segregation of agents who have at least one neighbor. This is the classic measure of segregation in Schelling and is equivalent to the fraction of agents of same ethnicity or value orientation in the neighborhood, indifferent to the actual number of neighbors. Nevertheless, we consider this a best fir to our interest in hybrid segregation scenarios. Since the measure is collected for all agents who have at least one neighbor, an index equal 0 means assimilation of the agent for that dimension, i.e. exposed only to agents of different ethnicity or value orientation. An index equal to 0.5 means that the agent is perfectly integrated for that dimension, being exposed to agents of different ethnicity or value orientation. An index equal 1 means total segregation, i.e. exposure only to similar agents for that dimension. Thus, the 2 indexes can be easily compared to visualize if agents are assimilated, integrated or segregated for one dimension and differently for the other.

| **Agent definition** | ~~Tag~~**Range** |
|---|---|
| Ethnicity (*color*) | Blue (majority), Orange (minority) |
| Value orientation (*shape*) | Square (conservative~~C~~), Circle (liberal~~L~~) |
| ~~**Group-type level Parameters Range**~~ Determinism ethnic utility ($\beta_e$) | [0, inf) ~~$\beta_e^C \geq \beta_v^C$ ; $\beta_e^C \geq \beta_e^L$~~ $\beta_e^{\square} \geq \beta_v^{\square}$ |
| Determinism value utility ($\beta_v$) | [0, inf) ~~$\beta_v^L \geq \beta_e^L$ ; $\beta_v^L \geq \beta_v^C$~~ $\beta_v^{\circ} \geq \beta_e^{\circ}$ ; |
| **Global Parameters** | **Range** |
| Population density | [0, 0.99] |
| Ethnic ratio majority/minority | [0, 1] |
| Value ratio conservative/liberal majority | [0, 1] |
| Value ratio conservative/liberal minority | [0, 1] |
| **Output measure** | **Range** |
| Ethnic neighborhood exposure | [0, 1] |
| Value neighborhood exposure | [0, 1] |

Table 1: Model parameters

# Results

## Baseline Conditions

We run our simulations for 1000 discrete time steps and ~~repeated~~ run each condition 20 times. We collected data for the last time step as interested in the emerged equilibria resulting from relocation preferences, population composition and degree of determinism.

In this first section, we report results for symmetric conditions ~~, where agents are equally distributed in each group-type. This is the simplest scenario to investigate~~ so to understand the key mechanisms of the model~~deriving from changes in the strength of ethnic and value preferences~~. At initialization, each agent has 50% probability to be assigned to either majority or minority ethnic group (equal ethnic size) and within each ethnic group, 50% probability to be assigned to either conservative or liberal value orientation. In short, each group-type represents 25% of the population. Density of the ~~population, i.e. the percentage of cells on the grid occupied by agents~~ grid inhabited is kept at 70% with initial random distribution. Fig. 2 shows the parameter space we explore in this baseline scenario ~~generated by the two parameters of determinism of dominant and secondary preference of agents, with~~ and the figures associated Rocco: figures-experiment match to be updated in the end. ~~Dominant preference of conservative agents is ethnic similarity, while secondary preference is value similarity. Dominant preference of liberal agents is value similarity, while secondary preference is ethnic similarity. The aim of the figure is also to show visually the segregation scenarios that emerge within the parameter space and that we plot in each figure. We describe later each picture and motivation in details. Rocco: including more description of space model Fig. 2, for matching figures, in the endThe origin of the axes equals to all agents holding $\beta = 0$, i.e. extreme randomness, for both dominant and secondary preference in their relocation decision, so to relocate randomly from the initial distribution and generate no segregation. Moving along the diagonal, dominant preference of agents is equal to secondary preference (Fig.3), showing clustering between the 4 group-type as determinism increases. Fig. 6 occurs along the diagonal as well, but with either liberals or conservatives in each condition holding $\beta$ *dominant* equal to $\beta$ *secondary*. Moving along the vertical axis ($\beta$ *dominant*), all agents~~

~~hold only dominant preference in their relocation decision, not taking into account their secondary preference ($\beta$ *secondary* = 0) Rocco: by-product(Fig. 4). The result is the division of society in three clusters: liberals ethnically integrated and value segregated, and two clusters each formed by conservatives of one ethnic group. In the same region Fig. 5 occurs, but with liberals and conservatives holding different levels of $\beta$ *dominant* Finally, moving along the horizontal axis, all agents hold constant level of $\beta$ *dominant* and increase secondary preference. Fig. 7 explores this region, though under the assumption of $\beta$ *dominant* $\leq \beta$ *secondary*~~

As measure of segregation, for both ethnic and value similarity, we compute an index of exposure in the Moore neighborhood of agents who have at least one neighbor. The index reports on average the fraction of other agents of same ethnicity or same value orientation in the local neighborhood of each agent. It ranges between 0, i.e. exposure to out-groups to 1, i.e. full segregation, with 0.5 equal to integration between the two groups. We report the index for ethnic exposure ($E_i$) and value exposure ($V_i$) for each group-type:

$$E_i = \frac{x_i^e}{X_i} \quad ; \quad V_i = \frac{x_i^v}{X_i} \tag{5}$$

where:

$x_i^v$: number of other co-value agents in the Moore neighborhood of agent $i$

$x_i^e$: number of other co-ethnic agents in the Moore neighborhood of agent i

$X_i$: total number agents in neighborhood of agent $i$

We report additionally the average density of the neighborhood agents form, calculated as the fraction of inhabited grid cells in the Moore neighborhood of agents. We are interested in density as indicator of clustering of agents and how it relates to segregation patterns.

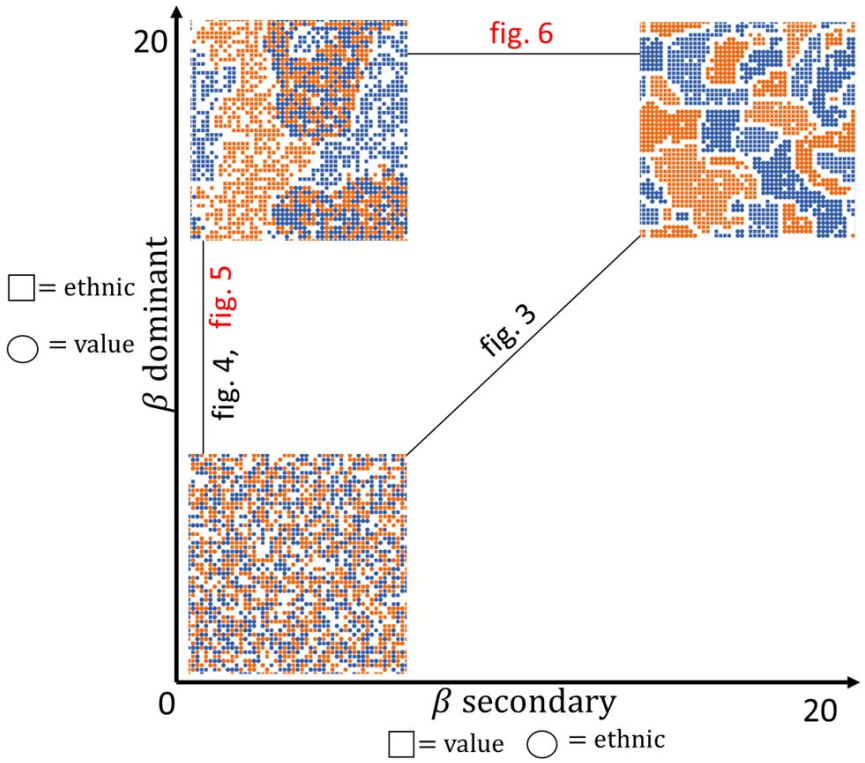


Figure 2: Preference model space parameter and figure associated. Figure reference label: black color means liberals and conservatives hold same level of ß parameter (though with different definition of similarity). Red color means they hold different level of either dominant or secondary preference.Match figure-label to check/change in the end

Fig. 3 represents the baseline condition we compare results to. Agents hold same preference for both ethnic and value segregation, i.e. they want to live close to agents of the same group-type. On the

x-axis, agents of both value-orientation increase their determinism (parameter $\beta$). The graph shows how ethnic and value segregation follow the same curve. Segregation increases monotonically from $\beta = 0$ until $\beta = 7$ where full segregation is reached. Density of neighborhoods remains basically unaltered from initial random distribution, though slight increase when full segregation emerges at $\beta = 7$. Results mean that the size of neighborhoods of agents is unaffected by increase of determinism, while their composition changes.

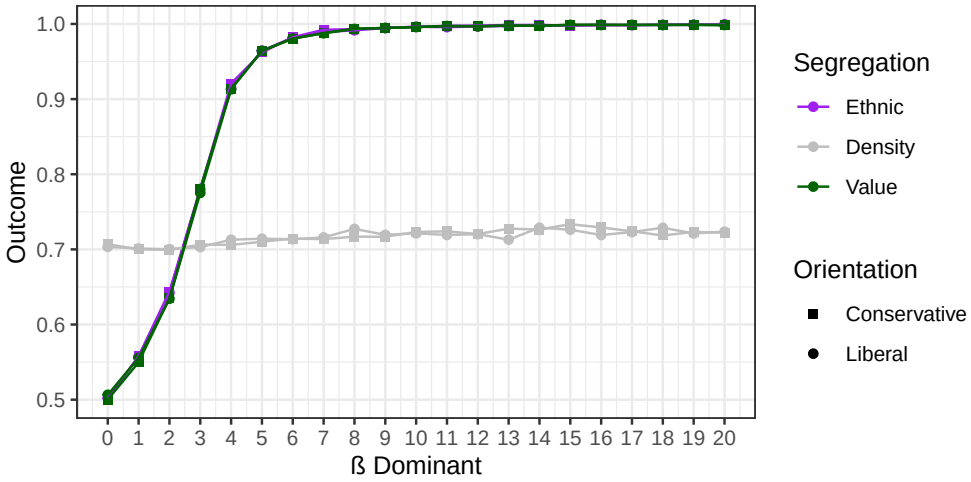


Figure 3: Baseline condition. Each group-type represents 25% of population. ß dominant = ß secondary

In Fig. 4, we investigate the scenario where agents hold only to their dominant preference. Differently from previous condition where agents would prefer someone with own identical characteristics, liberals would relocate close to other liberals of different ethnic group, as well as conserative try to maximize on ethnic utility with liberal co-ethnics. This is ideal to investigate effects of different preferences. For each type of agent, $\beta$ *dominant* increases on the x-axis, while $\beta$ *secondary* $= 0$ The figure shows how liberal agents remain ethnically integrated, which is coherent with their random relocation for ethnic dimension of neighborhoods (secondary preference $\beta_e = 0$) with almost full value segregation. For conservative agents, ethnic segregation is higher than value segregation of their value counterpart, with full ethnic segregation reached with highest determinism. What is unexpected is that also value segregation emerges with increase in determinism, while their value preference is imposed to $\beta_v = 0$.

~~Rocco:~~

~~Baseline condition, ß secondary as function of ß dominant. Comparison increase in ß ethnic liberal or ß value conservative~~

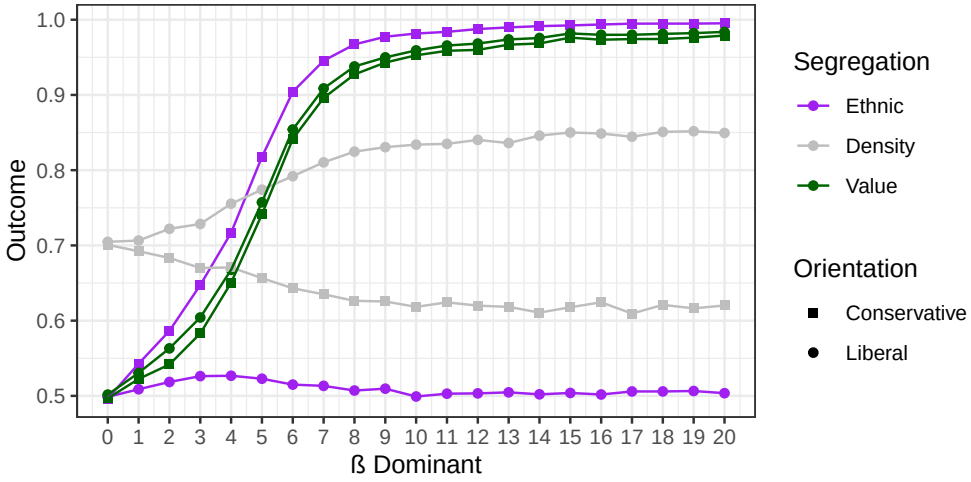


Figure 4: Baseline condition, ß dominant preference (ethnic for conservative, value for liberals on the x-axis), ß secondary preference (value conservative, ethnic liberal) equal to 0

Value segregation of conservatives occurs as a by-product effect of value preference of liberals, due to the different definition of similarity in spatial sorting. Due to symmetric condition, both conservatives and liberals could potentially consider half of the population as similar to maximize homophily preferences (population equally split into two ethnic groups and two value orientations). However, though conservatives would relocate close to liberal co-ethnics, they would be rejected by the latter who would prefer a neighborhood with other liberals, while both conservatives and liberals of the other ethnic group would be rejected based on the own ethnic preference. In short, conservatives of each ethnic group can only count on other conservatives of their own ethnicity to form stable neighborhood, equal to 25% of the population. On the other side, liberals would relocate close to co-values of both their own and the other ethnic group, so to count on 50% of the population to maximize value utility, i.e. the double of percentage available to conservatives. The result is that liberals form denser neighborhoods compared to conservatives, because they have more similar agents to relocate close to. Looking at Fig. 4, as determinism increases, density of neighborhood of liberals increases from the initial distribution, while conservatives' falls below it. By-product occurs because liberals, avoiding conservatives of both ethnic groups and forming denser neighborhood, reduces the space available on the grid where conservatives of both groups can relocate, so to break also their neighborhoods. Additionally, conservatives would sort with conservatives of their own ethnic group.

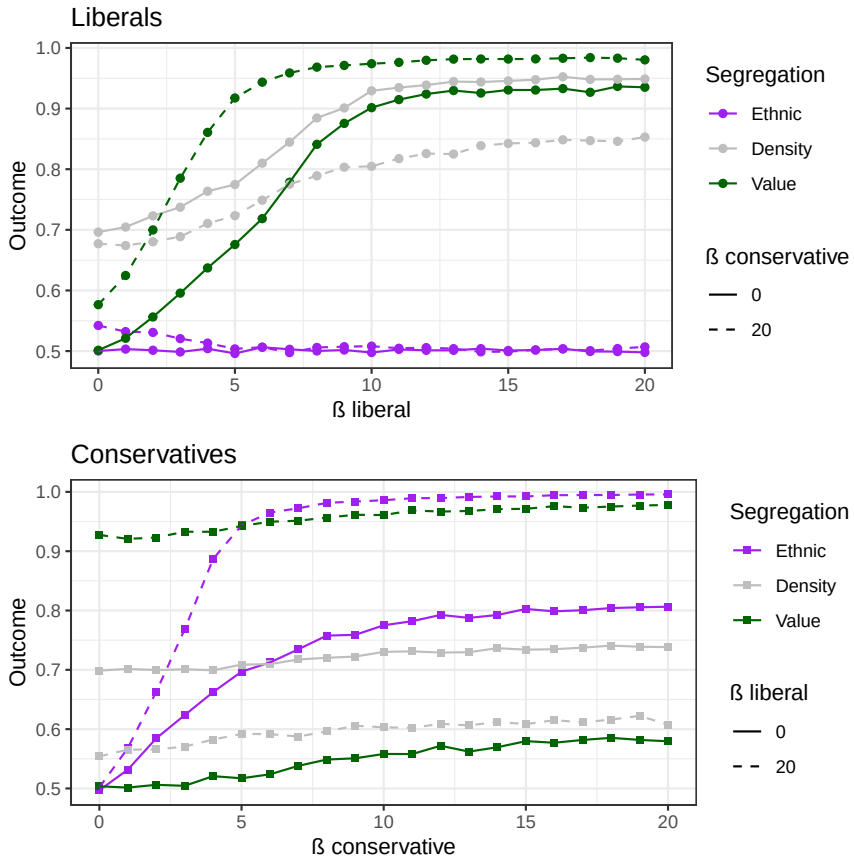


Figure 5: Baseline condition, for each value-orientation type, how its patterns are influenced by determinism of the other group. Secondary preference in each condition is equal to 0. Top panel liberals: ß value liberals on x-axis, linetype: ß ethnic conservative equal 0 or 20; Bottom panel: ß ethnic conservative on x-axis, linetype: ß value liberal.

Fig. 5 clarifies how the segregation patterns of each group-type liberals and conservative depends on their dominant preference or it is influenced by preferences of other group-type as by-product. On top panel, results for liberals are reported. On x-axis, liberals increase determinism ß value in their relocations, linetype shows the conditions due to behavior of conservatives: total random relocation ß = 0, or extreme determinism ß = 20. The picture shows how the density of neighborhoods liberals form increases with increase of ß value, though i shows lower levels when conservatives hold max ß ethnic, compared to Fig. 4. While ethnic integration is unaltered by ethnic preference of conservatives, as no difference is evident. On the contrary, value segreation seems higher when conservative cluster together until ß conservative = 20. Likely with ß = 0 they would randomnly relocate into neighborhoods of liberals, thus to decrease their value utility. The difference is higher for lower determinism area. The bottom panel repeats for conservative agents influenced by behavior of liberals. With ß liberal = 0, a slight increase emerges for higher determinism of conservatives, i.e. they can cluster only with other conservatives of their ethnic group, and taking adavantage of liberal co-ethnics who randomly relocate. With ß value liberals = 20, the by-product is evident and strong: value segregation basically does not increase for all levels of ß ethnic conservative and remains high. In short, the value segregation of conservatives is very minimally due to clustering due to ethnic preference. Neighborhood density remains equal to initial distribution with ß value liberal = 0, meaning conservatives do not form denser neighborhoods as liberals, which can be related to have lower ethnic segregation compared to value segregation of liberals when conservative hold ß ethnic = 0. Neighborhood density decreases and remains constant when ß value liberals = 20, being their space in the grid limited by neighborhoods formed by liberals and forming conservatives less dense neighborhoods. However, though neighborhoods are less dense, the ethnic exposure for conservatives reaches full segregation.

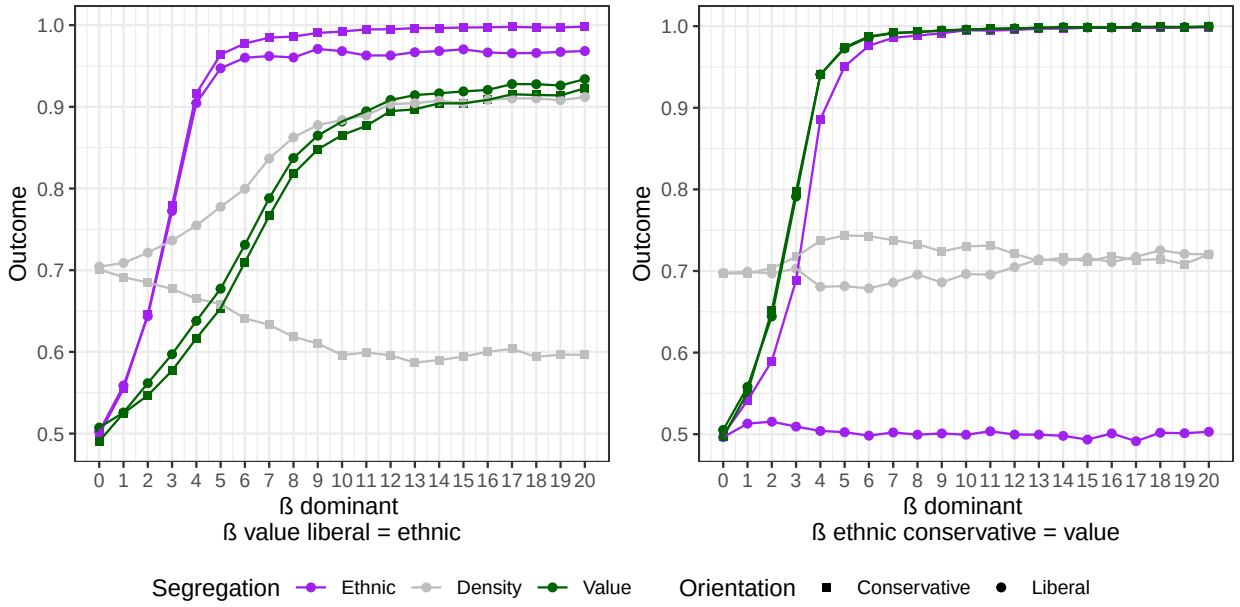


Figure 6: Baseline condition, Effect of agents holding ß dominant = ß secondary, comparison of different preferences. On the x-axis, increase ß dominant for all agent. Left panel: liberals hold value preference (dominant) equal to ethnic preference (secondary); left panel: conservatives subscribe only to ethnic preference. Right panel: liberals hold ethnic preference (dominant) equal to value preference (secondary)

Fig. 6 repeats Fig. 4 but with the difference that conservatives and liberals hold secondary preference equal to dominant preference. The aim is to compare with Fig. 3 and Fig. 4: how they would change if also secondary preferences are taken into consideration, and allow to observe how degree of determinism influences the process. This was the best solution to include all into feasible picture so far. Lower value segregation of conservatives as by-product, as they are more accepted by liberals and shift in density neighborhood of conservatives. To think about.

Heatmap in Fig. 7 shows instead other combinations that would not be included in Fig. 6: e.g. fix one level of determinism ß value and increase ß ethnic of liberals. However, all agents hold same degree of determinism, which obscures whether agents cluster because of increase in secondary preference, or because of by-product e.g. for areas of high determinism.

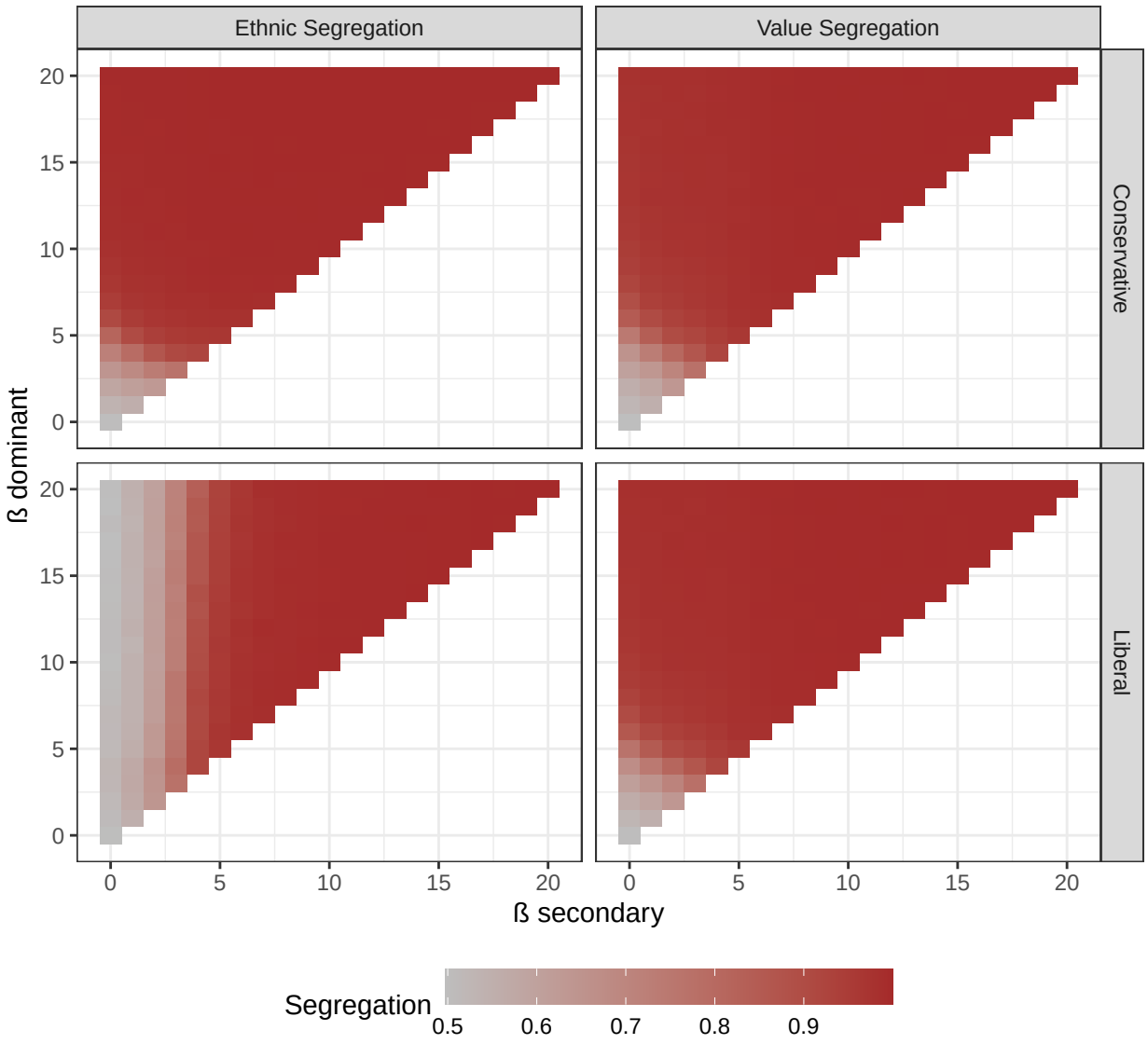


Figure 7: Basic condition. Heatmap generated by ß dominant preference (ethnic for conservative, value for liberals) and secondary preference (value for conservatives, ethnic for liberals). Liberals and conservatives hold same level of ß dominant and ß secondary in each condition (global parameter)

## Asymmetric Conditions

The main focus is on scenario with secondary ß = 0 (Fig: 4), since it shows most interesting results as by-product. In this section we want to show how segregation scenarios that in the previous section depended on different homophily preferences can vary if agents hold similar preferences but distribution in population composition differ (e.g. majority influences more than minority, ceteris paribus). The main focus for simplicity is on preference of liberals majority vs liberals minority, since they enact mechanisms as by-product and represent new introduction to Schelling's model (see figures in details). So also for increase of secondary ß For simplicity of visualization and to focus on preferences of agents, 80% ethnic ratio is considered in the experiments. For value orientation, as in the asymmetric condition, each ethnic group equally split into liberals and conservatives (i.e. 50% of population is liberal, and 50% conservative, but more chance of both conservative and liberal to belong to ethnic majority). Fig:12 and Fig: 13 are to show how results would change in the full conditions due to joint distribution ethnic ratio and distribution

of liberals which affect population composition. In particular distribution of liberals is of interest because it allows to break the ethnic unbalance between liberal majority and minority, how conservatives of both groups react to increase of liberals in the population, and how effective change in the minority population would be, if an ethnic critical mass is not reached. Basically in all conditions majority remains split 50% into liberals and conservatives, but both changes in minority population are more interesting to relate to change into the integration/segregation continuum.

In ethnic asymmetric conditions, we use the spatial relocation index to measure whether segregation occurs from initial random distribution. Local exposure can be computed from it, but it is not intuitive to reader in my view. In the tables in appendix, the reader can see for each condition what local exposure matches spatial clustering of agents.

$$E_i^c = \frac{\left(x_i^e / X_i\right)}{\left(N_i^e / N\right)} \quad ; \quad V_i^c = \frac{\left(x_i^v / X_i\right)}{\left(N_i^v / N\right)} \tag{6}$$

where:
$x_i^e$: number of co-ethnics neighbors of agent $i$
$x_i^v$: number of co-values neighbors of agent $i$
$X_i$: number of neighbors of agent $i$
$N_i^e$: number of agents in the population with same ethnicity of agent $i$
$N_i^v$: number of agents in the population with same value of agent $i$
$N$: total number of agents in the population

Fig: 8 wants to inform the reader of what is the direct effect of different ethnic ratio and how spatial clustering relates to local exposure. It replicates Fig: 4 comparing the condition of ethnic equal size (50%) vs majority/minority condition used in this section (80%). Results show given the same ethnic preference, conservative minority have higher need to cluster to satisfy ethnic utility, resulting in higher spatial clustering, 5 times the initial random distribution, with increase of local ethnic exposure to 1 (0.2*5). While for conservative majority, similar full ethnic exposure is reached with lower spatial clustering, since there is more chance to find co-ethnics in the population. For both liberals majority and liberals minority full value segregation is reached with value spatial clustering equal 2, i.e. full local value exposure equal 1. Ethnic segregation does not occur in terms of spatial clustering from initial distribution for both liberals majority and liberals minority, meaning higher ethnic exposure of liberals majority to 80% and ethnic assimilation for liberals minority 20%

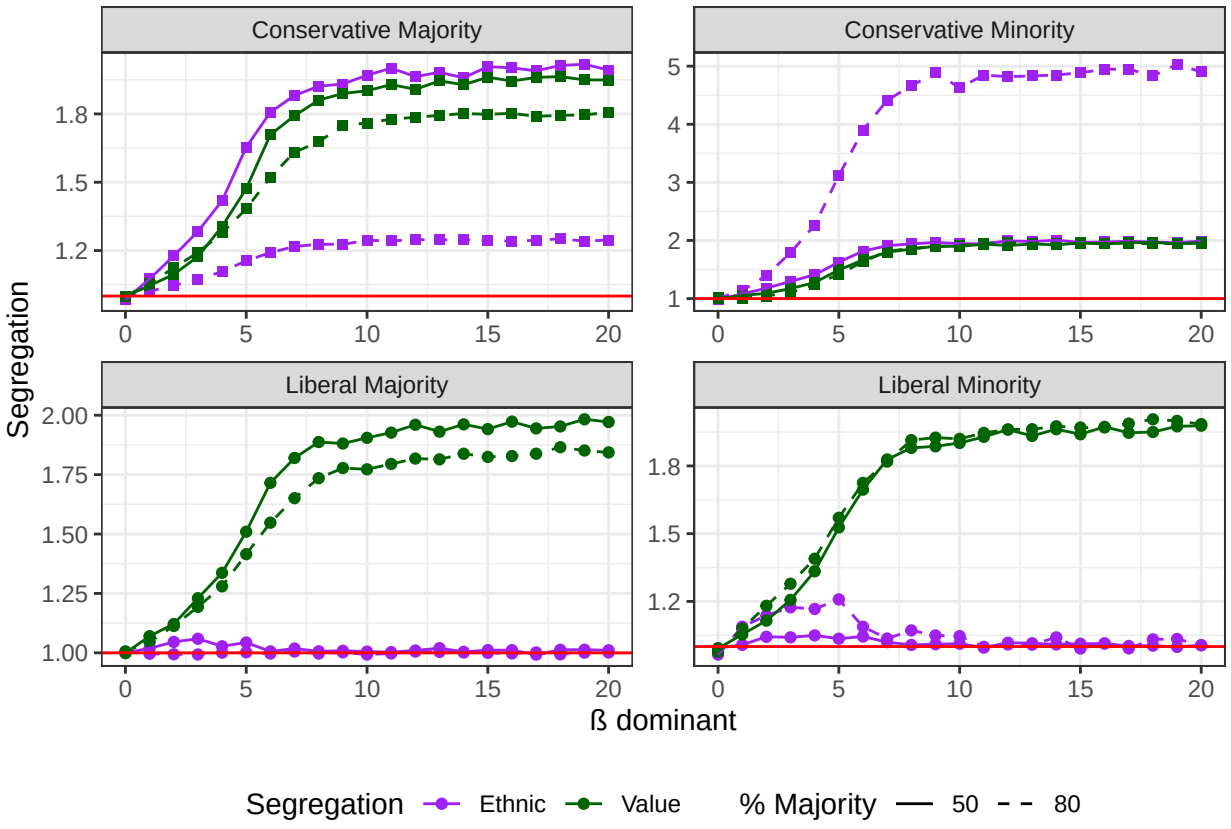


Figure 8: Baseline ethnic asymmetric condition. Each panel reports the segregation pattern of each group-type (ethnicityXvalue). X-axis: ß dominant (ethnic for conservative, value for liberals), Y-axis: dislocation index. Agents hold only dominant preference: ß secondary = 0. Linetype: comparison equal ethnic size (50 %) vs majority/minority condition (80%).

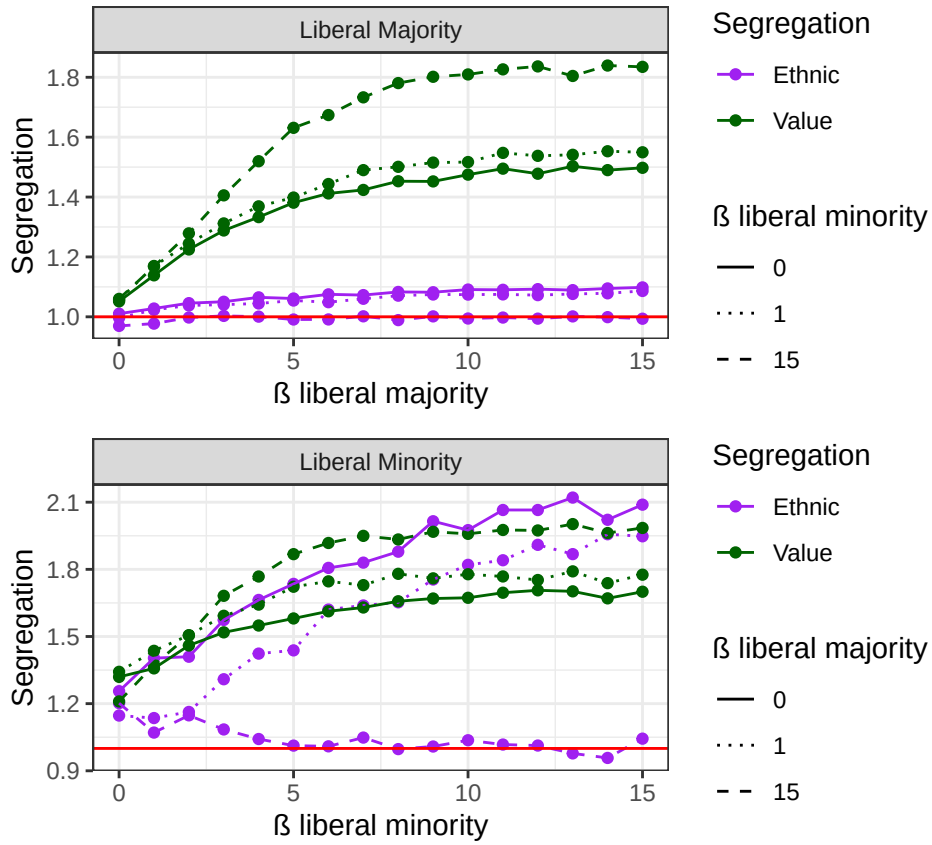


Figure 9: Ethnic asymmetric: effect dominant preference (ß value) liberals minority over liberals majority (top panel) vs effect liberals majority over liberals minority (bottom panel). For each panel, on x-axis increase ß value preference of group-type, linetype: ß value preference of out-group counterpart. Conservative agents hold to dominant ethnic preference ß = 15. Secondary preference for both conservative and liberals = 0

Fig: 9 first explores how liberals majority and minority influence each other, basically to explore whether ethnic integration at local exposure can be reached as due to different value preferences of either group, or ethnic assimilation of minority and value segregation of both in Fig: 8 would be affected. Each panel shows results of liberals majority (top) and liberals minority (bottom). For each graph, results show changes due to ethnic counterpart having no preference at all (ß = 0), low value determinism (ß = 1) or high value determinism (ß = 15). In all conditions, conservatives of both ethnic groups hold ß ethnic = 15, so to have stable ethnic segregation pattern from their behavior.

Liberals majority are lower affected by value preference of liberals minority for what concerns ethnic segregation. Basically if the other group doesn't care about value homophily, the agents can relocate only close to liberal co-ethnics. For liberals majority not much change in spatial clustering occurs because of majority condition, while for liberal minority the same condition leads from ethnic assimilation to ethnic segregation, though ethnic preference is not involved. Even a small amount of determinism of liberals majority is enough to increase value segregation of liberals minority (see bttom panel with ß liberal minority equal 0). However, in top panel, higher value segregation is reached by liberals majority for higher determinism if liberal minority hold high ß value = 15

I included ß = 0 of ethnic counterpart as theoretical baseline: what happens if there no preference at all in the ethnic counterpart. Methodologically is correct to include in my view, though difference with ß=1 is not that stricking. We could think of cutting off if the figure is too complicated.

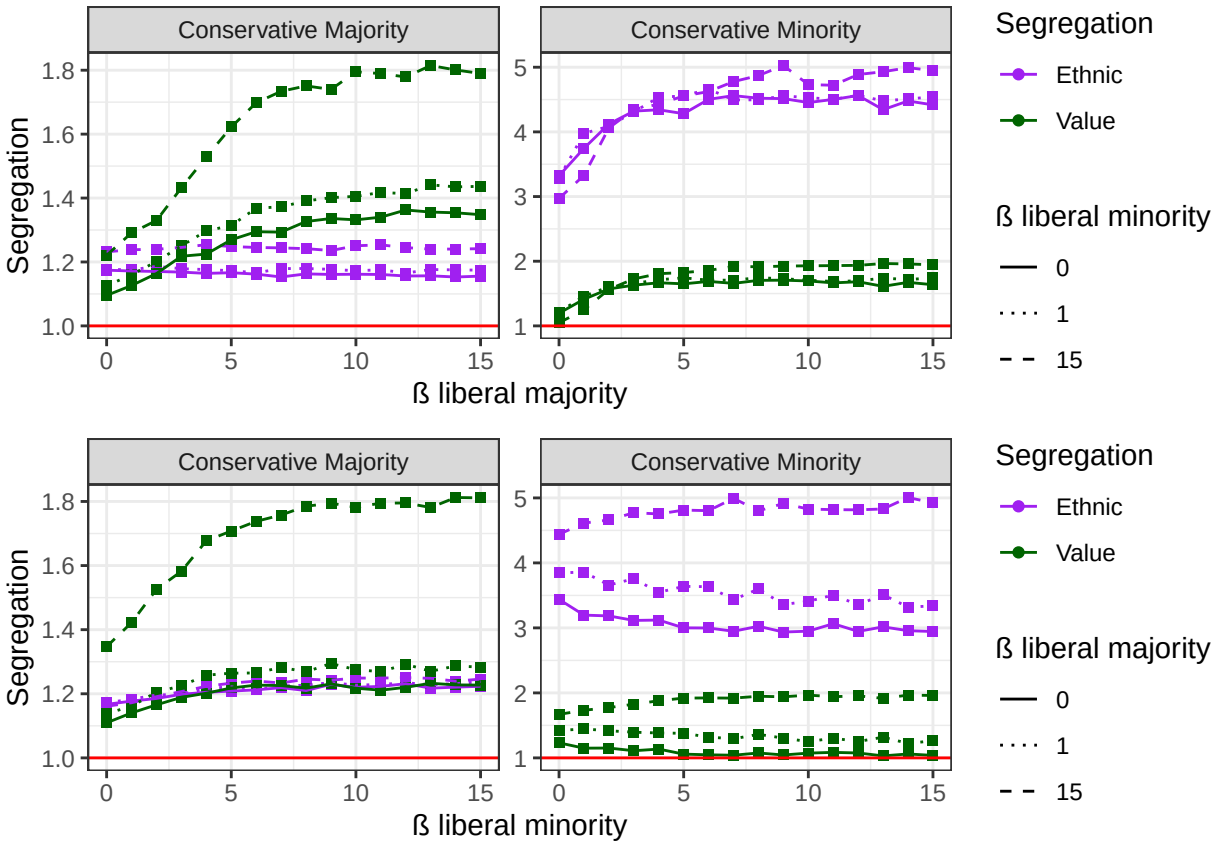


Figure 10: Ethnic asymmetric: effect of ß value liberals majority or liberals minority over conservatives majority and conservatives minority. Each panel reports pattens of conservative majority (left) or conservative minority (right). Top panel: effect of ß value liberals majority (on x-axis), linetype: changes due to different levels of ß value liberal minority. Bottom panel: effect of ß value liberlas minority (on x-axis), linetype: changes due to different levels of ß value liberal majority. Conservative agents hold to dominant ethnic preference ß = 15. Secondary preference for both conservative and liberals = 0

Fig: 10 focuses on effect of liberals majority and liberals minority over conservatives. The idea is to observe how the effect of liberals can vary depending on the value preference of ethnic counterpart, and how conservatives can differently being affected due to ethnic asymmetry. Expected: liberals majority have more influence than liberals minority, conservative majority are less affected than conservative minority.

The picture shows influence of liberals majority on top panel, liberals minority on bottom panel. If too complicated, we could split. Also here, ß liberals ethnic counterpart as baseline, if too complex we could get it off.

Value segregation of conservative majority show similar patterns whether value of liberals minority is swept or liberals majority. Ethnic segregation (spatial clustering) of conservative minority is already high due to ethnic minority as Fig: 8 has shown, but it increases as liberal majority increase ß value, as effect of rejection and limiting their space of relocation. This can be considered a by-product by ethnic asymmetry, compared to by-product by value in symmetric condition. Looking at bottom panel, for lower ß liberal majority, increase in ß liberal minority seems to slightly decrease ethnic segregation of conservative minority. Likely liberals of both ethnic groups form dense, value homogeneous neighborhoods with few liberals majority who are not sensitive to conservatives because of lower determinism, while liberals minority because value utility maximization is preserved, since few conservative minority. So, conservative minority can maximize ethnic utility at cost of living close to few liberals of majority group, which decreases the spatial clustering. As ß liberal majority = 15, increase in ß liberal minority is associated with higher ethnic clustering of conservative minority as in the top panel.

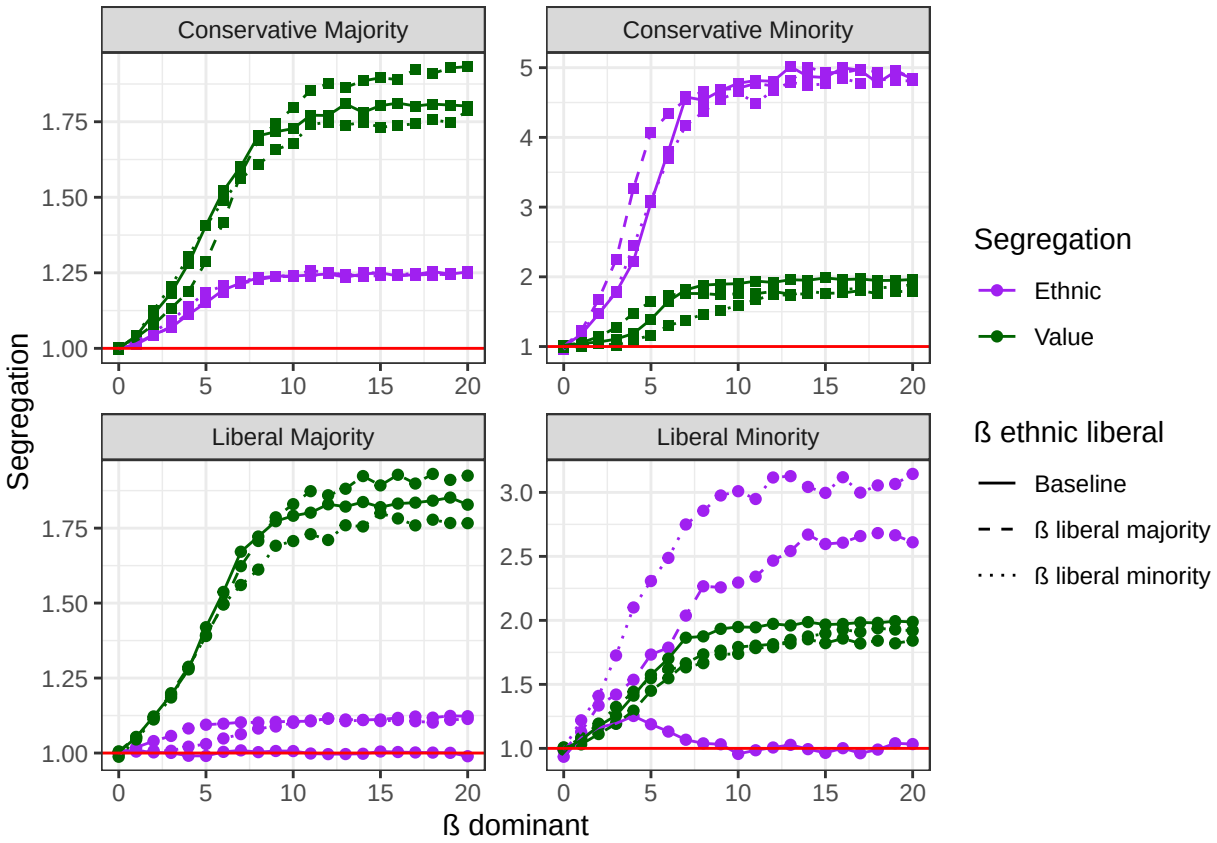


Figure 11: Ethnic asymmetric: effect of ß ethnic of liberals (secondary) equal to ß value liberals (dominant. x-axis: increase dominant preference for all agents (global parameter). Each panel reports segregation patterns of each group-type (ethnicXvalue). Linetype represents conditions compared: baseline: liberals of both ethnic groups hold only to dominant preference (ß secondary = 0); ß liberal majority = liberals majority hold same ethnic and value preference (liberals minority hold only to value preference), ß liberal minority = liberals minorty hold same ethnic and value preference (liberals majority hold only to value preference)

Finally, Fig: 11 shows effect of liberals majority or liberal minority holding both ethnic and value preference. Compared to Fig: 6, we observe how ethnic asymmetry interacts with degree of determinism. Each panel reports result for one group-type and compares a baseline where agents only subscribe to ß dominant (ß secondary = 0), to liberals majority subscribing also to ß ethnic or liberals minority doing so.

Generally to interpret deeper. Liberals majority holding also ethnic preference increases the value by-product for conservative majority for high determinism compared to baseline, lower for higher randomness. For conservative minority, liberals majority holding also ethnic preference increases ethnic segregation compared to baseline for higher randomness are, liberals minority holding also ethnic preference shows no difference from baseline. Differences between conditions disappear for high determinism. For value segregation of conservative minority, lower value segregation as by-product occurs if liberals minority hold also ethnic preference in higher randomness area, it increases for liberals majority holding also ethnic preference. For higher determinism, differences between liberals majority and liberals minority disappear, with baseline showing (very slight) higher value.

For liberals majority, slight difference in value segregation occurs for high determinism, with higher value segregation of liberals majority if they hold also to ethnic preference, lower if liberals minority hold also ethnic preference. Slightly decrease in ethnic segregation for higher randomness if liberals majority hold also to ethnic preference. For liberals minority differences are more evident: value segregation decreases compared to baseline equally if liberals majority or liberals minority increase hold also ethnic preference. If liberals majority hold ethnic preference, ethnic segregation of liberals minority increases as they increase ß value preference, since they can count only on liberals co-ethnics to maximize value utility. If also minority were to hold ethnic preference, ethnic segregation would be even higher, as direct effect of

their preference, decreasing value segregation because they would accept more co-ethnic conservatives.

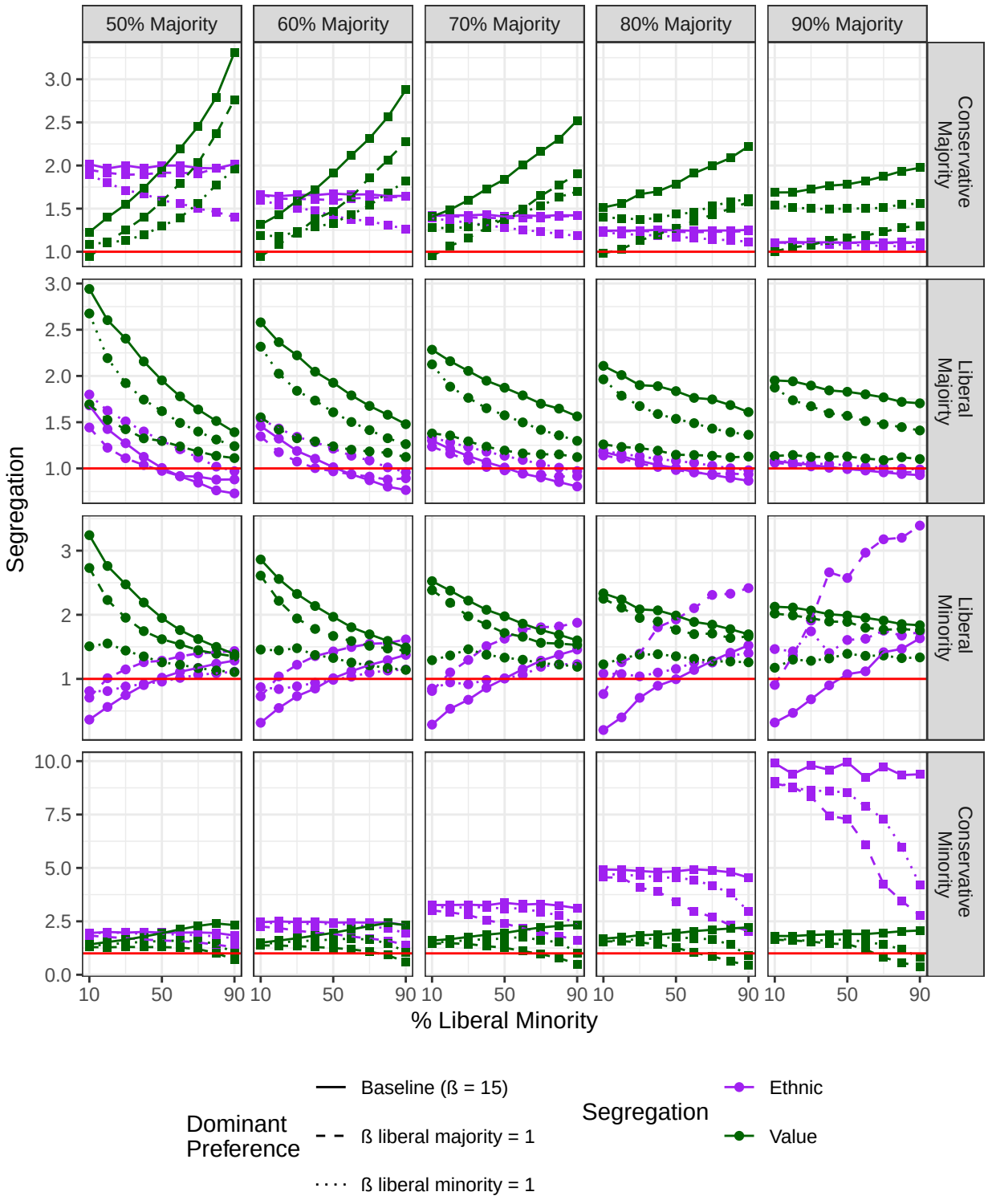


Figure 12: Comparison of lower determinism in liberals majority or liberals minority, effect of ethnic size and distribution of liberals. X-axis: pecentage of liberals of ethnic minority, column: ethnic ratio majority/minority. Each row reports the behavior of specific group-type. Linetype: conditions compared. Baseline: all agents hold dominant preference ß = 15, secondary preference ß = 0; ß liberal majority = 1: liberals majority have minimum determinism (liberals minority hold to ß value = 15); ß liberal minority = 1: liberals minority have minimum determinism (liberals majority hold to ß value = 15). Conservatives of both ethnic groups hold to ß ethnic = 15 in all conditions

Fig: 12 compares baseline dominant ß = 15 to either lower value determinis (ß = 1) of either liberals minority and liberals majority, and highlights differences due to population composition due to ethnic asymmetry and distribution of liberals.

I have to think about more. More interesting result is liberal majority falling into ethnic assimilation because of value preference, provided a critical mass is reached between ethnic ratio and distribution of liberals. Even if liberals minority increases, but their ethnic group is underrepresented, homophily based on value similarity will not make a difference. I think there are insights for the majority-minority paradigm and diverse societies here, with due limits. Anyway, I have to think of for the specific conditions.

I include 90% conclusion for completeness. However, this creates an extreme condition where segregation/assimilation occurs mostly for ethnic asymmetry, it is too unbalanced and value to extreme compared to others. However, we can decide about later.

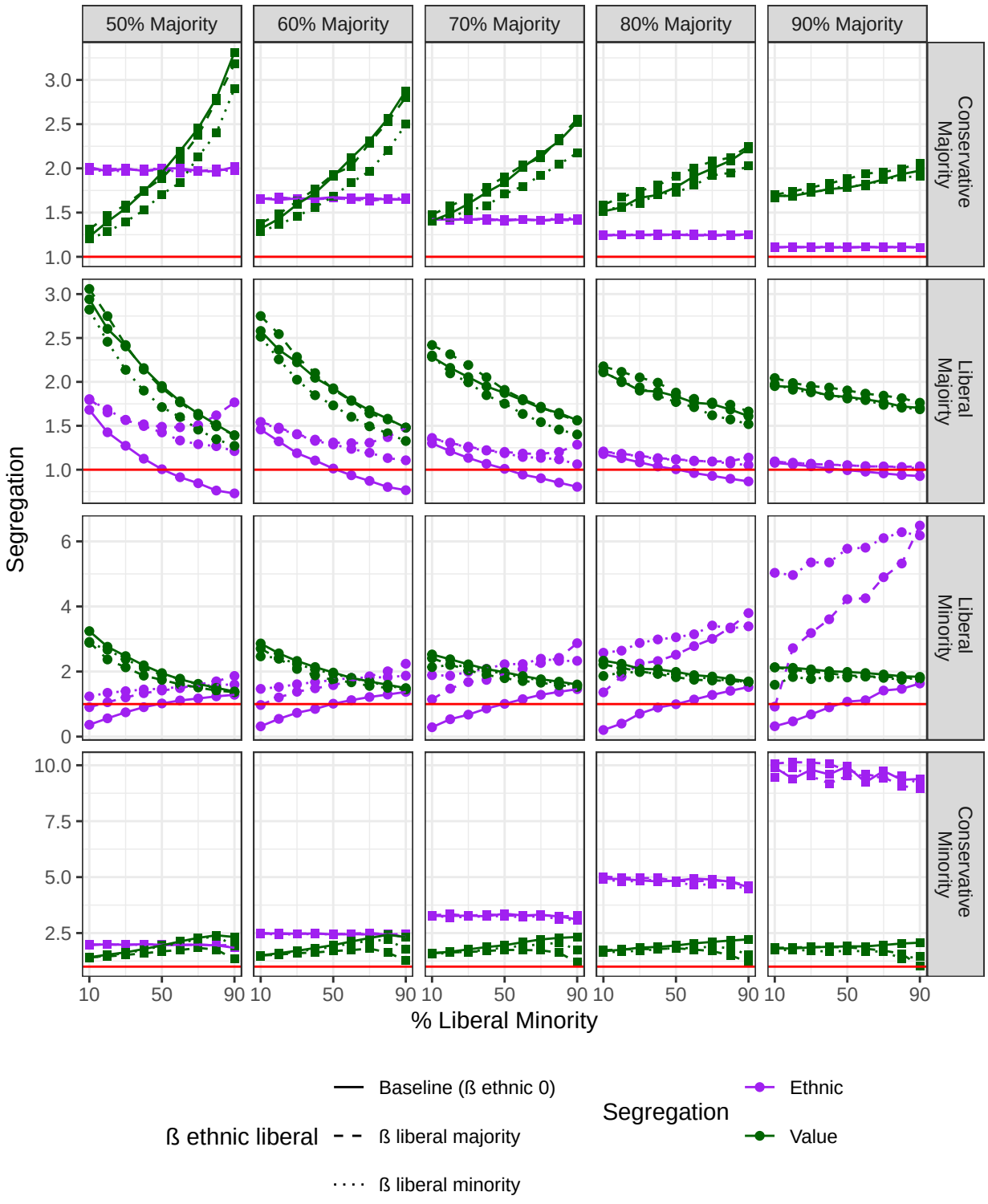


Figure 13: Comparison of liberals holding both ethnic and value preference, effect of ethnic size and distribution of liberals. Linetype: conditions compared. Conservatives of both ethnic groupd hold ß ethnic = 15 and ß secondary (value) = 0. Baseline: both liberals and conservatives hold dominant preference ß = 15 and sercondary ß = 0; ß liberal majority = liberals majority hold both ethnic and value preference ß = 15 (liberals minority hold ß value = 15 and ß ethnic = 0); ß liberals minority = liberals minority hold both ethnic and value preference ß = 15 (liberals majority hold ß value = 15 and ß ethni = 0)

Fig: 13, same as Fig: 12 for liberals holding also to ethnic preference, how segregation will differ from baseline ß = 15 and for combination ethnic size and distribution of liberals. Seems less changes, but it has to be thought about.

# Discussion and Conclusions (working on)

Rocco: more to the point: societies show lower ethnic segregation, increasing other dimensions (e.g. ses), and literature shows other characteristics matter > acs2018 > now discrete choice and other extension, in medias res; results similar to Paolillo and Lorenz (2018)

Schelling's model is often cited to describe how high levels of spatial ethnic segregation can persist in society even if people hold slight preference to live close to co-ethnics. However, the high complexity of current society challenge some assumption of the model. In particular, people belong to different categories, both within and between ethnic groups, and literature suggesting ethnicity could be less relevant than other categories to define similarity preferences in relocation choice. In this paper we wanted to extend Schelling to these scenario. We built on Paolillo and Lorenz (2018) extension of Schelling to the scenario of members of the same ethnic group sharing common attributes with out-groups and holding higher preference for either ethnic membership or secondary characteristics. We extend the model to discrete choice random utility models, testing on effect of different weights (level of randomness) of agents and letting agents hold both ethnic and value preference. Our results confirm some peculiarities of value similarity based on shared attributes across ethnic membership despite our change to the decisional process of agents. First, value similarity can induce a by-product segregation of conservatives who do not care about secondary attributes. Second, value similarity form denser neighborhoods due to inclusion of co-values from both ethnic groups; neighborhoods become more resilient to fluctuations in neighborhood composition. As already observed in Paolillo and Lorenz (2018) the tendency is to form robust neighborhood value homogeneous but ethnically integrated.

Most results are similar to Paolillo and Lorenz (2018) because a thereshold = 0 equals to randomness $\beta = 0$ in terms of relocation decision of agents and aggregated results. However, inclusion of randomness, along with preference for both ethnic and value similarity, and senstivity to different group size, show different highlights on the segregation process.

Our results show who the definition of similarity based on shared characteristics might be not sufficient to guarantee spatial integration between groups. If people care about both ethnic and value similarity, full segregation for both dimension would lead to division of society in four group-types. However, lower determinism in the relocation choice can decrease segregation. If liberals become more ethnically conservatives, they would need higher preference to reach full ethnic segregation, as long as conservatives not care about secondary preference. On the contrary, value segregation of conservatives would not increase if they were to increase value preference, as long as liberals are enough to enact by-product value-segregation. This could explain why segregation by ses seems stronger than ethnic segregation Rocco: costs to be considered and ethnic homogeneous neighborhoods are often also ses and educational homogeneous Rocco: link to double segregation in Fossett, not because of affordability, but because of by-product of other classes wanting to segregate. Sensitivity analysis shows the role of relative sizes. First, effects due to majority are higher, this is evident from liberals majority who can cause more changes in the model. Even if liberals minority could cause the same mechanism, they don't reach a critical mass to do so. Relative size show how same preference in terms of weights can have different effect: for majority remaining in high ethnic exposure though not spatially segregating, while for minority higher spatial clustering emerges to satisfy even low preference. Segregation patterns of liberals: even if liberals of two ethnic groups recognize each other as similar, this would not translate into integrated neighborhoods because of relative sizes. The result shows ethnic assimilation of liberals minority separated from their co-ethnics with different secondary attributes. Only if distribution of liberals increases to a certain critical mass, the ethnic exposure of majority as effect of value similarity would diminish We show how integration can emerge from the condition where majority increase ethnic preference, through adaptation between liberals and conservatives of minority group and the spatial configurations formed.

Rocco: to compare with Schelling: how segregation is a stable results, when and why in our model integration can emerge

In Schelling, segregation as unstable condition results from all agents holding the same threshold (hold same preference) within spatial constraints and cascades that change neighborhood composition. In our results, segregation would equally emerge if agents hold high deterministic preference (higher $\beta$) for both dimensions. Integration will persist if agents hold random behavior for either or both dimensions, and the structural conditions of ethnic sizes and value distribution

Limits: a mix of linear combinations, all can be predicted, once the model is understood.

Next steps: to overcome tendency to segregation, a first step is to change the shape of utility function, along with the two-dimensional homophily behavior. Rocco: This links to the literature showing how segregation emerges also for integrationist preferences (Zhang, Van Rijt etc.) third paper of the dissertation I am working on

# Annex: Robustness Analysis

Table 2: $\beta$ dominant = liberal

| | Conservatives | | | | | | Liberals | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | Value | | Density | | Ethnic | | Value | | Density | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.502 | 0.009 | 0.500 | 0.015 | 0.707 | 0.012 | 0.502 | 0.010 | 0.506 | 0.015 | 0.703 | 0.010 |
| 1 | 0.558 | 0.010 | 0.550 | 0.014 | 0.700 | 0.010 | 0.557 | 0.008 | 0.556 | 0.013 | 0.701 | 0.009 |
| 2 | 0.644 | 0.010 | 0.635 | 0.015 | 0.699 | 0.008 | 0.643 | 0.017 | 0.634 | 0.012 | 0.700 | 0.013 |
| 3 | 0.780 | 0.021 | 0.781 | 0.020 | 0.706 | 0.007 | 0.780 | 0.012 | 0.775 | 0.021 | 0.703 | 0.012 |
| 4 | 0.921 | 0.014 | 0.914 | 0.009 | 0.706 | 0.012 | 0.914 | 0.014 | 0.913 | 0.009 | 0.713 | 0.010 |
| 5 | 0.962 | 0.009 | 0.964 | 0.007 | 0.710 | 0.014 | 0.964 | 0.009 | 0.964 | 0.007 | 0.714 | 0.012 |
| 6 | 0.982 | 0.003 | 0.980 | 0.003 | 0.714 | 0.008 | 0.982 | 0.005 | 0.981 | 0.003 | 0.713 | 0.011 |
| 7 | 0.992 | 0.003 | 0.988 | 0.002 | 0.714 | 0.011 | 0.989 | 0.004 | 0.988 | 0.003 | 0.716 | 0.010 |
| 8 | 0.993 | 0.003 | 0.994 | 0.002 | 0.717 | 0.015 | 0.991 | 0.004 | 0.993 | 0.002 | 0.727 | 0.010 |
| 9 | 0.995 | 0.002 | 0.995 | 0.001 | 0.717 | 0.016 | 0.995 | 0.003 | 0.995 | 0.001 | 0.719 | 0.019 |
| 10 | 0.996 | 0.001 | 0.996 | 0.002 | 0.723 | 0.012 | 0.996 | 0.001 | 0.996 | 0.001 | 0.721 | 0.015 |
| 11 | 0.997 | 0.002 | 0.997 | 0.001 | 0.724 | 0.019 | 0.996 | 0.002 | 0.997 | 0.001 | 0.719 | 0.011 |
| 12 | 0.998 | 0.002 | 0.997 | 0.001 | 0.720 | 0.008 | 0.997 | 0.002 | 0.997 | 0.001 | 0.720 | 0.013 |
| 13 | 0.999 | 0.001 | 0.998 | 0.001 | 0.728 | 0.011 | 0.997 | 0.002 | 0.998 | 0.001 | 0.713 | 0.016 |
| 14 | 0.999 | 0.001 | 0.998 | 0.001 | 0.726 | 0.022 | 0.998 | 0.001 | 0.997 | 0.001 | 0.729 | 0.012 |
| 15 | 0.998 | 0.001 | 0.999 | 0.001 | 0.734 | 0.017 | 0.998 | 0.001 | 0.999 | 0.001 | 0.726 | 0.015 |
| 16 | 0.998 | 0.002 | 0.999 | 0.001 | 0.729 | 0.014 | 0.999 | 0.001 | 0.999 | 0.001 | 0.719 | 0.010 |
| 17 | 0.998 | 0.002 | 0.999 | 0.001 | 0.724 | 0.017 | 0.998 | 0.001 | 0.999 | 0.001 | 0.723 | 0.013 |
| 18 | 0.999 | 0.001 | 0.999 | 0.001 | 0.719 | 0.011 | 0.999 | 0.001 | 0.999 | 0.001 | 0.729 | 0.013 |
| 19 | 0.999 | 0.001 | 0.999 | 0.001 | 0.723 | 0.015 | 0.999 | 0.002 | 0.999 | 0.001 | 0.721 | 0.010 |
| 20 | 0.999 | 0.001 | 0.998 | 0.001 | 0.722 | 0.014 | 1.000 | 0.001 | 0.999 | 0.001 | 0.724 | 0.012 |

Table 3: $\beta$ secondary = 0

| | Conservatives | | | | | | Liberals | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | Value | | Density | | Ethnic | | Value | | Density | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.496 | 0.009 | 0.497 | 0.015 | 0.701 | 0.009 | 0.499 | 0.009 | 0.502 | 0.013 | 0.705 | 0.007 |
| 1 | 0.543 | 0.009 | 0.522 | 0.010 | 0.692 | 0.009 | 0.509 | 0.010 | 0.531 | 0.019 | 0.707 | 0.009 |
| 2 | 0.586 | 0.008 | 0.542 | 0.010 | 0.683 | 0.013 | 0.518 | 0.008 | 0.563 | 0.014 | 0.722 | 0.010 |
| 3 | 0.647 | 0.006 | 0.583 | 0.011 | 0.670 | 0.008 | 0.526 | 0.010 | 0.604 | 0.015 | 0.728 | 0.009 |
| 4 | 0.717 | 0.014 | 0.650 | 0.013 | 0.671 | 0.013 | 0.527 | 0.013 | 0.668 | 0.010 | 0.755 | 0.008 |
| 5 | 0.818 | 0.014 | 0.741 | 0.022 | 0.657 | 0.013 | 0.523 | 0.011 | 0.757 | 0.015 | 0.774 | 0.016 |
| 6 | 0.904 | 0.014 | 0.841 | 0.013 | 0.643 | 0.010 | 0.515 | 0.007 | 0.854 | 0.013 | 0.792 | 0.012 |
| 7 | 0.946 | 0.009 | 0.896 | 0.016 | 0.635 | 0.009 | 0.513 | 0.010 | 0.909 | 0.011 | 0.810 | 0.008 |
| 8 | 0.967 | 0.006 | 0.927 | 0.014 | 0.626 | 0.015 | 0.507 | 0.006 | 0.938 | 0.011 | 0.825 | 0.013 |
| 9 | 0.977 | 0.003 | 0.943 | 0.005 | 0.626 | 0.012 | 0.510 | 0.009 | 0.950 | 0.005 | 0.831 | 0.009 |
| 10 | 0.982 | 0.004 | 0.953 | 0.009 | 0.618 | 0.006 | 0.499 | 0.009 | 0.959 | 0.008 | 0.834 | 0.013 |
| 11 | 0.984 | 0.003 | 0.959 | 0.006 | 0.624 | 0.009 | 0.503 | 0.008 | 0.966 | 0.004 | 0.835 | 0.010 |
| 12 | 0.988 | 0.002 | 0.960 | 0.005 | 0.620 | 0.011 | 0.503 | 0.009 | 0.968 | 0.005 | 0.840 | 0.011 |
| 13 | 0.990 | 0.003 | 0.967 | 0.007 | 0.618 | 0.014 | 0.505 | 0.009 | 0.974 | 0.006 | 0.836 | 0.011 |
| 14 | 0.991 | 0.003 | 0.968 | 0.004 | 0.611 | 0.013 | 0.502 | 0.011 | 0.976 | 0.003 | 0.846 | 0.014 |
| 15 | 0.992 | 0.003 | 0.976 | 0.004 | 0.618 | 0.012 | 0.504 | 0.009 | 0.982 | 0.003 | 0.850 | 0.013 |
| 16 | 0.994 | 0.002 | 0.973 | 0.005 | 0.624 | 0.013 | 0.502 | 0.007 | 0.980 | 0.005 | 0.849 | 0.010 |
| 17 | 0.995 | 0.002 | 0.974 | 0.005 | 0.609 | 0.016 | 0.506 | 0.011 | 0.980 | 0.004 | 0.844 | 0.015 |
| 18 | 0.995 | 0.002 | 0.974 | 0.006 | 0.621 | 0.009 | 0.506 | 0.004 | 0.981 | 0.004 | 0.851 | 0.017 |
| 19 | 0.995 | 0.002 | 0.976 | 0.005 | 0.616 | 0.011 | 0.506 | 0.009 | 0.982 | 0.004 | 0.852 | 0.009 |
| 20 | 0.995 | 0.001 | 0.979 | 0.003 | 0.620 | 0.009 | 0.504 | 0.008 | 0.984 | 0.003 | 0.849 | 0.013 |

Table 4: Referred to Fig: 5

| Liberals Segregation | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ß conservative = 0 | | | | | | ß conservative = 20 | | | | | |
| | Ethnic | | Value | | Density | | Ethnic | | Value | | Density | |
| ß liberal | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.500 | 0.007 | 0.501 | 0.012 | 0.696 | 0.009 | 0.542 | 0.011 | 0.577 | 0.010 | 0.677 | 0.010 |
| 1 | 0.503 | 0.009 | 0.521 | 0.010 | 0.705 | 0.013 | 0.532 | 0.014 | 0.625 | 0.008 | 0.674 | 0.011 |
| 2 | 0.501 | 0.010 | 0.556 | 0.014 | 0.723 | 0.005 | 0.531 | 0.010 | 0.700 | 0.012 | 0.680 | 0.013 |
| 3 | 0.499 | 0.011 | 0.596 | 0.018 | 0.737 | 0.010 | 0.521 | 0.011 | 0.785 | 0.014 | 0.689 | 0.009 |
| 4 | 0.504 | 0.007 | 0.637 | 0.018 | 0.764 | 0.010 | 0.513 | 0.011 | 0.861 | 0.012 | 0.711 | 0.013 |
| 5 | 0.496 | 0.009 | 0.676 | 0.017 | 0.775 | 0.005 | 0.504 | 0.008 | 0.917 | 0.012 | 0.723 | 0.013 |
| 6 | 0.506 | 0.009 | 0.718 | 0.012 | 0.810 | 0.007 | 0.506 | 0.008 | 0.944 | 0.006 | 0.749 | 0.011 |
| 7 | 0.503 | 0.010 | 0.779 | 0.013 | 0.845 | 0.015 | 0.497 | 0.008 | 0.959 | 0.006 | 0.775 | 0.012 |
| 8 | 0.500 | 0.010 | 0.841 | 0.020 | 0.885 | 0.015 | 0.506 | 0.011 | 0.968 | 0.005 | 0.789 | 0.011 |
| 9 | 0.502 | 0.006 | 0.876 | 0.012 | 0.901 | 0.013 | 0.507 | 0.008 | 0.971 | 0.003 | 0.803 | 0.012 |
| 10 | 0.498 | 0.009 | 0.901 | 0.008 | 0.929 | 0.007 | 0.508 | 0.008 | 0.974 | 0.005 | 0.805 | 0.017 |
| 11 | 0.503 | 0.009 | 0.915 | 0.008 | 0.935 | 0.007 | 0.505 | 0.006 | 0.976 | 0.006 | 0.817 | 0.008 |
| 12 | 0.501 | 0.011 | 0.924 | 0.006 | 0.939 | 0.007 | 0.506 | 0.007 | 0.980 | 0.003 | 0.826 | 0.012 |
| 13 | 0.501 | 0.007 | 0.930 | 0.008 | 0.944 | 0.004 | 0.504 | 0.010 | 0.982 | 0.003 | 0.825 | 0.015 |
| 14 | 0.504 | 0.010 | 0.926 | 0.008 | 0.944 | 0.005 | 0.499 | 0.007 | 0.982 | 0.003 | 0.839 | 0.012 |
| 15 | 0.501 | 0.010 | 0.931 | 0.010 | 0.946 | 0.007 | 0.499 | 0.011 | 0.982 | 0.003 | 0.842 | 0.015 |
| 16 | 0.502 | 0.008 | 0.931 | 0.009 | 0.948 | 0.007 | 0.502 | 0.006 | 0.982 | 0.002 | 0.844 | 0.012 |
| 17 | 0.504 | 0.009 | 0.933 | 0.007 | 0.952 | 0.008 | 0.504 | 0.005 | 0.983 | 0.002 | 0.848 | 0.014 |
| 18 | 0.499 | 0.004 | 0.927 | 0.009 | 0.948 | 0.006 | 0.501 | 0.007 | 0.984 | 0.003 | 0.847 | 0.008 |
| 19 | 0.499 | 0.005 | 0.937 | 0.007 | 0.948 | 0.006 | 0.504 | 0.013 | 0.983 | 0.004 | 0.846 | 0.011 |
| 20 | 0.498 | 0.011 | 0.935 | 0.007 | 0.949 | 0.006 | 0.507 | 0.008 | 0.980 | 0.003 | 0.853 | 0.008 |

| Conservatives Segregation | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ß liberal = 0 | | | | | | ß liberal = 20 | | | | | |
| | Ethnic | | Value | | Density | | Ethnic | | Value | | Density | |
| ß cons | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.497 | 0.007 | 0.504 | 0.011 | 0.699 | 0.010 | 0.502 | 0.012 | 0.927 | 0.009 | 0.554 | 0.009 |
| 1 | 0.532 | 0.009 | 0.501 | 0.019 | 0.702 | 0.007 | 0.568 | 0.009 | 0.921 | 0.014 | 0.565 | 0.014 |
| 2 | 0.584 | 0.006 | 0.506 | 0.014 | 0.700 | 0.008 | 0.663 | 0.015 | 0.923 | 0.009 | 0.566 | 0.011 |
| 3 | 0.624 | 0.010 | 0.504 | 0.015 | 0.701 | 0.007 | 0.768 | 0.017 | 0.933 | 0.007 | 0.571 | 0.012 |
| 4 | 0.662 | 0.009 | 0.521 | 0.011 | 0.699 | 0.014 | 0.887 | 0.012 | 0.933 | 0.008 | 0.582 | 0.011 |
| 5 | 0.697 | 0.014 | 0.517 | 0.014 | 0.709 | 0.012 | 0.944 | 0.009 | 0.943 | 0.005 | 0.592 | 0.014 |
| 6 | 0.712 | 0.012 | 0.524 | 0.011 | 0.710 | 0.011 | 0.965 | 0.006 | 0.950 | 0.007 | 0.592 | 0.012 |
| 7 | 0.735 | 0.010 | 0.538 | 0.019 | 0.718 | 0.010 | 0.972 | 0.003 | 0.951 | 0.008 | 0.588 | 0.015 |
| 8 | 0.758 | 0.013 | 0.549 | 0.015 | 0.720 | 0.010 | 0.982 | 0.004 | 0.957 | 0.008 | 0.596 | 0.013 |
| 9 | 0.759 | 0.009 | 0.551 | 0.011 | 0.722 | 0.005 | 0.984 | 0.004 | 0.961 | 0.008 | 0.606 | 0.012 |
| 10 | 0.775 | 0.013 | 0.558 | 0.016 | 0.730 | 0.011 | 0.986 | 0.003 | 0.961 | 0.010 | 0.603 | 0.008 |
| 11 | 0.782 | 0.009 | 0.558 | 0.011 | 0.731 | 0.010 | 0.989 | 0.003 | 0.969 | 0.005 | 0.602 | 0.020 |
| 12 | 0.793 | 0.013 | 0.572 | 0.012 | 0.729 | 0.011 | 0.990 | 0.002 | 0.967 | 0.005 | 0.609 | 0.012 |
| 13 | 0.788 | 0.012 | 0.562 | 0.014 | 0.730 | 0.011 | 0.991 | 0.003 | 0.968 | 0.004 | 0.606 | 0.011 |
| 14 | 0.792 | 0.008 | 0.569 | 0.007 | 0.736 | 0.009 | 0.992 | 0.003 | 0.971 | 0.006 | 0.612 | 0.012 |
| 15 | 0.803 | 0.012 | 0.580 | 0.009 | 0.734 | 0.004 | 0.992 | 0.002 | 0.972 | 0.006 | 0.608 | 0.015 |
| 16 | 0.799 | 0.016 | 0.577 | 0.025 | 0.735 | 0.009 | 0.994 | 0.002 | 0.976 | 0.004 | 0.615 | 0.013 |
| 17 | 0.801 | 0.005 | 0.582 | 0.013 | 0.737 | 0.015 | 0.995 | 0.001 | 0.973 | 0.003 | 0.611 | 0.014 |
| 18 | 0.804 | 0.015 | 0.585 | 0.015 | 0.741 | 0.006 | 0.995 | 0.002 | 0.975 | 0.006 | 0.616 | 0.013 |
| 19 | 0.805 | 0.009 | 0.582 | 0.016 | 0.739 | 0.017 | 0.996 | 0.002 | 0.977 | 0.003 | 0.622 | 0.011 |
| 20 | 0.806 | 0.014 | 0.580 | 0.016 | 0.738 | 0.010 | 0.996 | 0.002 | 0.978 | 0.005 | 0.608 | 0.015 |

Table 5: Sensitivity secondary preference by type-group

| | Conservatives | | | | | | Liberals | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | Value | | Density | | Ethnic | | Value | | Density | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **ß value liberal = ethnic** | | | | | | | | | | | | |
| 0 | 0.499 | 0.012 | 0.491 | 0.015 | 0.701 | 0.008 | 0.502 | 0.006 | 0.507 | 0.015 | 0.704 | 0.007 |
| 1 | 0.555 | 0.009 | 0.525 | 0.017 | 0.692 | 0.010 | 0.559 | 0.010 | 0.526 | 0.018 | 0.709 | 0.009 |
| 2 | 0.646 | 0.014 | 0.547 | 0.015 | 0.685 | 0.009 | 0.644 | 0.012 | 0.562 | 0.015 | 0.722 | 0.007 |
| 3 | 0.779 | 0.013 | 0.577 | 0.015 | 0.677 | 0.012 | 0.773 | 0.015 | 0.597 | 0.012 | 0.736 | 0.010 |
| 4 | 0.917 | 0.007 | 0.617 | 0.010 | 0.665 | 0.010 | 0.905 | 0.006 | 0.638 | 0.013 | 0.755 | 0.008 |
| 5 | 0.964 | 0.008 | 0.653 | 0.011 | 0.659 | 0.009 | 0.947 | 0.012 | 0.677 | 0.008 | 0.777 | 0.010 |
| 6 | 0.977 | 0.005 | 0.710 | 0.014 | 0.641 | 0.013 | 0.960 | 0.005 | 0.731 | 0.009 | 0.800 | 0.009 |
| 7 | 0.985 | 0.004 | 0.766 | 0.009 | 0.633 | 0.008 | 0.962 | 0.012 | 0.788 | 0.009 | 0.837 | 0.007 |
| 8 | 0.986 | 0.002 | 0.818 | 0.015 | 0.618 | 0.017 | 0.960 | 0.007 | 0.837 | 0.008 | 0.863 | 0.013 |
| 9 | 0.990 | 0.003 | 0.848 | 0.021 | 0.610 | 0.008 | 0.971 | 0.007 | 0.865 | 0.014 | 0.878 | 0.012 |
| 10 | 0.992 | 0.002 | 0.865 | 0.015 | 0.596 | 0.012 | 0.968 | 0.009 | 0.882 | 0.014 | 0.884 | 0.010 |
| 11 | 0.995 | 0.002 | 0.877 | 0.010 | 0.599 | 0.012 | 0.963 | 0.009 | 0.895 | 0.008 | 0.890 | 0.010 |
| 12 | 0.995 | 0.003 | 0.895 | 0.017 | 0.596 | 0.013 | 0.963 | 0.006 | 0.908 | 0.014 | 0.903 | 0.013 |
| 13 | 0.996 | 0.001 | 0.897 | 0.015 | 0.587 | 0.010 | 0.967 | 0.008 | 0.914 | 0.010 | 0.904 | 0.010 |
| 14 | 0.996 | 0.001 | 0.904 | 0.009 | 0.590 | 0.012 | 0.968 | 0.005 | 0.917 | 0.010 | 0.907 | 0.007 |
| 15 | 0.997 | 0.002 | 0.904 | 0.014 | 0.594 | 0.013 | 0.970 | 0.005 | 0.919 | 0.013 | 0.905 | 0.008 |
| 16 | 0.997 | 0.001 | 0.909 | 0.016 | 0.600 | 0.010 | 0.967 | 0.005 | 0.921 | 0.014 | 0.909 | 0.014 |
| 17 | 0.998 | 0.001 | 0.915 | 0.014 | 0.604 | 0.013 | 0.966 | 0.006 | 0.928 | 0.012 | 0.910 | 0.009 |
| 18 | 0.997 | 0.002 | 0.914 | 0.009 | 0.594 | 0.014 | 0.966 | 0.007 | 0.928 | 0.010 | 0.910 | 0.009 |
| 19 | 0.997 | 0.002 | 0.914 | 0.012 | 0.597 | 0.014 | 0.967 | 0.008 | 0.926 | 0.009 | 0.908 | 0.010 |
| 20 | 0.998 | 0.002 | 0.923 | 0.011 | 0.596 | 0.008 | 0.968 | 0.006 | 0.934 | 0.010 | 0.912 | 0.010 |
| **ß ethnic conservative = value** | | | | | | | | | | | | |
| 0 | 0.499 | 0.007 | 0.497 | 0.015 | 0.697 | 0.009 | 0.496 | 0.008 | 0.505 | 0.014 | 0.698 | 0.008 |
| 1 | 0.541 | 0.008 | 0.551 | 0.012 | 0.697 | 0.008 | 0.513 | 0.011 | 0.558 | 0.016 | 0.699 | 0.009 |
| 2 | 0.590 | 0.011 | 0.651 | 0.019 | 0.703 | 0.009 | 0.515 | 0.006 | 0.644 | 0.009 | 0.697 | 0.011 |
| 3 | 0.689 | 0.012 | 0.798 | 0.013 | 0.717 | 0.007 | 0.509 | 0.008 | 0.791 | 0.013 | 0.703 | 0.015 |
| 4 | 0.886 | 0.011 | 0.940 | 0.009 | 0.737 | 0.010 | 0.504 | 0.011 | 0.941 | 0.008 | 0.681 | 0.013 |
| 5 | 0.951 | 0.004 | 0.974 | 0.004 | 0.743 | 0.012 | 0.502 | 0.011 | 0.973 | 0.005 | 0.681 | 0.009 |
| 6 | 0.976 | 0.005 | 0.987 | 0.002 | 0.743 | 0.015 | 0.498 | 0.009 | 0.987 | 0.002 | 0.679 | 0.011 |
| 7 | 0.986 | 0.004 | 0.992 | 0.002 | 0.738 | 0.015 | 0.502 | 0.009 | 0.991 | 0.002 | 0.686 | 0.014 |
| 8 | 0.988 | 0.002 | 0.993 | 0.002 | 0.733 | 0.011 | 0.499 | 0.013 | 0.993 | 0.002 | 0.696 | 0.018 |
| 9 | 0.991 | 0.003 | 0.995 | 0.002 | 0.724 | 0.017 | 0.501 | 0.010 | 0.995 | 0.002 | 0.686 | 0.012 |
| 10 | 0.995 | 0.002 | 0.996 | 0.001 | 0.730 | 0.011 | 0.499 | 0.007 | 0.996 | 0.001 | 0.696 | 0.014 |
| 11 | 0.995 | 0.003 | 0.997 | 0.001 | 0.731 | 0.011 | 0.504 | 0.010 | 0.997 | 0.001 | 0.695 | 0.013 |
| 12 | 0.995 | 0.002 | 0.997 | 0.001 | 0.721 | 0.013 | 0.500 | 0.008 | 0.997 | 0.001 | 0.705 | 0.016 |
| 13 | 0.997 | 0.002 | 0.998 | 0.001 | 0.712 | 0.005 | 0.499 | 0.010 | 0.998 | 0.001 | 0.714 | 0.009 |
| 14 | 0.997 | 0.002 | 0.999 | 0.001 | 0.716 | 0.013 | 0.498 | 0.010 | 0.999 | 0.001 | 0.712 | 0.010 |
| 15 | 0.998 | 0.001 | 0.998 | 0.001 | 0.712 | 0.013 | 0.493 | 0.005 | 0.998 | 0.001 | 0.716 | 0.011 |
| 16 | 0.998 | 0.001 | 0.999 | 0.001 | 0.718 | 0.013 | 0.501 | 0.010 | 0.998 | 0.001 | 0.711 | 0.011 |
| 17 | 0.998 | 0.002 | 0.999 | 0.001 | 0.713 | 0.011 | 0.491 | 0.013 | 0.999 | 0.001 | 0.717 | 0.009 |
| 18 | 0.998 | 0.001 | 0.999 | 0.001 | 0.714 | 0.014 | 0.502 | 0.009 | 0.999 | 0.001 | 0.725 | 0.010 |
| 19 | 0.998 | 0.001 | 0.999 | 0.001 | 0.708 | 0.012 | 0.501 | 0.010 | 0.999 | 0.001 | 0.721 | 0.016 |
| 20 | 0.998 | 0.001 | 0.999 | 0.001 | 0.720 | 0.011 | 0.503 | 0.006 | 0.999 | 0.001 | 0.720 | 0.014 |

Table 6: Referred to Fig: 8. 50% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.985 | 0.017 | 0.495 | 0.008 | 1.00 | 0.014 | 0.495 | 0.012 | 0.983 | 0.018 | 0.489 | 0.014 | 0.995 | 0.015 | 0.493 | 0.018 |
| 1 | 1.075 | 0.020 | 0.530 | 0.009 | 1.05 | 0.024 | 0.525 | 0.017 | 1.081 | 0.014 | 0.548 | 0.011 | 1.053 | 0.040 | 0.529 | 0.020 |
| 2 | 1.176 | 0.026 | 0.587 | 0.013 | 1.10 | 0.031 | 0.547 | 0.015 | 1.179 | 0.026 | 0.591 | 0.016 | 1.091 | 0.027 | 0.545 | 0.016 |
| 3 | 1.284 | 0.031 | 0.644 | 0.014 | 1.17 | 0.025 | 0.595 | 0.019 | 1.297 | 0.035 | 0.646 | 0.021 | 1.172 | 0.032 | 0.595 | 0.025 |
| 4 | 1.419 | 0.035 | 0.710 | 0.015 | 1.31 | 0.037 | 0.656 | 0.025 | 1.409 | 0.032 | 0.704 | 0.016 | 1.277 | 0.047 | 0.642 | 0.029 |
| 5 | 1.654 | 0.033 | 0.819 | 0.010 | 1.47 | 0.049 | 0.736 | 0.018 | 1.629 | 0.031 | 0.822 | 0.019 | 1.493 | 0.040 | 0.747 | 0.023 |
| 6 | 1.807 | 0.063 | 0.908 | 0.011 | 1.71 | 0.036 | 0.851 | 0.022 | 1.816 | 0.050 | 0.903 | 0.012 | 1.665 | 0.075 | 0.829 | 0.022 |
| 7 | 1.881 | 0.036 | 0.948 | 0.007 | 1.79 | 0.038 | 0.898 | 0.014 | 1.910 | 0.047 | 0.946 | 0.009 | 1.797 | 0.056 | 0.900 | 0.020 |
| 8 | 1.922 | 0.043 | 0.965 | 0.006 | 1.86 | 0.057 | 0.932 | 0.006 | 1.942 | 0.051 | 0.965 | 0.007 | 1.852 | 0.056 | 0.928 | 0.013 |
| 9 | 1.931 | 0.039 | 0.974 | 0.005 | 1.89 | 0.040 | 0.937 | 0.013 | 1.965 | 0.050 | 0.973 | 0.006 | 1.900 | 0.038 | 0.943 | 0.008 |
| 10 | 1.970 | 0.041 | 0.978 | 0.006 | 1.90 | 0.051 | 0.947 | 0.014 | 1.946 | 0.031 | 0.979 | 0.004 | 1.898 | 0.056 | 0.945 | 0.009 |
| 11 | 2.001 | 0.048 | 0.984 | 0.004 | 1.93 | 0.026 | 0.959 | 0.008 | 1.942 | 0.040 | 0.986 | 0.003 | 1.936 | 0.024 | 0.963 | 0.006 |
| 12 | 1.964 | 0.033 | 0.989 | 0.003 | 1.91 | 0.026 | 0.963 | 0.010 | 1.995 | 0.037 | 0.990 | 0.004 | 1.913 | 0.042 | 0.966 | 0.009 |
| 13 | 1.983 | 0.036 | 0.992 | 0.003 | 1.95 | 0.048 | 0.966 | 0.009 | 1.981 | 0.035 | 0.990 | 0.003 | 1.939 | 0.047 | 0.963 | 0.007 |
| 14 | 1.959 | 0.032 | 0.991 | 0.003 | 1.93 | 0.044 | 0.969 | 0.006 | 2.005 | 0.030 | 0.990 | 0.004 | 1.925 | 0.037 | 0.967 | 0.006 |
| 15 | 2.008 | 0.038 | 0.994 | 0.002 | 1.96 | 0.026 | 0.972 | 0.010 | 1.967 | 0.037 | 0.993 | 0.002 | 1.958 | 0.047 | 0.970 | 0.010 |
| 16 | 2.002 | 0.044 | 0.994 | 0.003 | 1.94 | 0.063 | 0.976 | 0.006 | 1.974 | 0.045 | 0.993 | 0.002 | 1.940 | 0.056 | 0.974 | 0.005 |
| 17 | 1.989 | 0.038 | 0.994 | 0.002 | 1.96 | 0.046 | 0.972 | 0.007 | 1.986 | 0.038 | 0.993 | 0.002 | 1.960 | 0.044 | 0.972 | 0.010 |
| 18 | 2.013 | 0.057 | 0.995 | 0.002 | 1.96 | 0.035 | 0.975 | 0.007 | 1.973 | 0.054 | 0.996 | 0.001 | 1.968 | 0.034 | 0.977 | 0.004 |
| 19 | 2.018 | 0.031 | 0.995 | 0.002 | 1.95 | 0.042 | 0.980 | 0.004 | 1.962 | 0.032 | 0.995 | 0.002 | 1.941 | 0.044 | 0.976 | 0.008 |
| 20 | 1.993 | 0.046 | 0.995 | 0.002 | 1.95 | 0.060 | 0.976 | 0.007 | 1.990 | 0.044 | 0.995 | 0.001 | 1.960 | 0.070 | 0.982 | 0.007 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 1.000 | 0.025 | 0.503 | 0.017 | 0.999 | 0.017 | 0.504 | 0.019 | 0.993 | 0.023 | 0.494 | 0.012 | 0.991 | 0.019 | 0.500 | 0.012 |
| 1 | 1.019 | 0.018 | 0.503 | 0.012 | 1.070 | 0.028 | 0.533 | 0.017 | 1.008 | 0.020 | 0.511 | 0.015 | 1.054 | 0.031 | 0.525 | 0.022 |
| 2 | 1.046 | 0.021 | 0.522 | 0.013 | 1.121 | 0.026 | 0.561 | 0.015 | 1.043 | 0.015 | 0.523 | 0.008 | 1.115 | 0.024 | 0.558 | 0.016 |
| 3 | 1.059 | 0.033 | 0.532 | 0.015 | 1.230 | 0.036 | 0.606 | 0.015 | 1.041 | 0.021 | 0.518 | 0.017 | 1.207 | 0.033 | 0.595 | 0.014 |
| 4 | 1.028 | 0.026 | 0.514 | 0.015 | 1.337 | 0.044 | 0.665 | 0.013 | 1.049 | 0.027 | 0.524 | 0.020 | 1.333 | 0.032 | 0.663 | 0.010 |
| 5 | 1.043 | 0.036 | 0.517 | 0.020 | 1.510 | 0.038 | 0.754 | 0.017 | 1.035 | 0.031 | 0.523 | 0.019 | 1.528 | 0.046 | 0.763 | 0.009 |
| 6 | 1.006 | 0.035 | 0.506 | 0.028 | 1.715 | 0.047 | 0.860 | 0.006 | 1.044 | 0.031 | 0.520 | 0.025 | 1.695 | 0.035 | 0.850 | 0.015 |
| 7 | 1.018 | 0.025 | 0.514 | 0.017 | 1.820 | 0.054 | 0.907 | 0.009 | 1.019 | 0.027 | 0.505 | 0.020 | 1.829 | 0.049 | 0.912 | 0.014 |
| 8 | 1.006 | 0.030 | 0.506 | 0.017 | 1.887 | 0.041 | 0.941 | 0.006 | 1.007 | 0.020 | 0.501 | 0.018 | 1.880 | 0.038 | 0.937 | 0.010 |
| 9 | 1.009 | 0.031 | 0.509 | 0.018 | 1.881 | 0.036 | 0.947 | 0.009 | 1.010 | 0.022 | 0.501 | 0.017 | 1.887 | 0.036 | 0.950 | 0.005 |
| 10 | 1.005 | 0.036 | 0.499 | 0.019 | 1.905 | 0.045 | 0.956 | 0.009 | 1.013 | 0.022 | 0.510 | 0.016 | 1.902 | 0.047 | 0.954 | 0.007 |
| 11 | 1.003 | 0.021 | 0.494 | 0.015 | 1.927 | 0.028 | 0.968 | 0.005 | 0.995 | 0.030 | 0.506 | 0.022 | 1.929 | 0.027 | 0.969 | 0.005 |
| 12 | 1.010 | 0.034 | 0.508 | 0.017 | 1.960 | 0.037 | 0.970 | 0.006 | 1.017 | 0.032 | 0.505 | 0.016 | 1.961 | 0.030 | 0.971 | 0.003 |
| 13 | 1.020 | 0.026 | 0.510 | 0.014 | 1.931 | 0.047 | 0.971 | 0.007 | 1.015 | 0.037 | 0.507 | 0.023 | 1.933 | 0.048 | 0.972 | 0.004 |
| 14 | 1.004 | 0.037 | 0.508 | 0.015 | 1.962 | 0.044 | 0.975 | 0.004 | 1.009 | 0.028 | 0.498 | 0.018 | 1.963 | 0.047 | 0.975 | 0.004 |
| 15 | 1.011 | 0.026 | 0.501 | 0.012 | 1.941 | 0.044 | 0.979 | 0.006 | 1.012 | 0.038 | 0.511 | 0.022 | 1.940 | 0.036 | 0.978 | 0.007 |
| 16 | 1.011 | 0.024 | 0.502 | 0.017 | 1.973 | 0.067 | 0.981 | 0.005 | 1.013 | 0.046 | 0.510 | 0.023 | 1.973 | 0.070 | 0.981 | 0.004 |
| 17 | 0.993 | 0.036 | 0.496 | 0.021 | 1.945 | 0.041 | 0.979 | 0.005 | 1.003 | 0.030 | 0.502 | 0.018 | 1.947 | 0.047 | 0.980 | 0.006 |
| 18 | 1.013 | 0.022 | 0.501 | 0.020 | 1.953 | 0.033 | 0.983 | 0.005 | 1.004 | 0.035 | 0.507 | 0.015 | 1.950 | 0.032 | 0.982 | 0.005 |
| 19 | 1.013 | 0.029 | 0.499 | 0.013 | 1.983 | 0.039 | 0.985 | 0.003 | 0.998 | 0.015 | 0.506 | 0.010 | 1.975 | 0.040 | 0.981 | 0.007 |
| 20 | 1.011 | 0.037 | 0.505 | 0.023 | 1.972 | 0.066 | 0.982 | 0.005 | 1.006 | 0.041 | 0.504 | 0.026 | 1.978 | 0.054 | 0.986 | 0.006 |

Table 7: Referred to Fig: 8. 80%Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 0.995 | 0.006 | 0.800 | 0.009 | 1.00 | 0.017 | 0.507 | 0.015 | 1.01 | 0.088 | 0.198 | 0.023 | 1.02 | 0.029 | 0.518 | 0.013 |
| 1 | 1.021 | 0.010 | 0.814 | 0.014 | 1.05 | 0.026 | 0.527 | 0.022 | 1.14 | 0.108 | 0.230 | 0.024 | 1.00 | 0.040 | 0.503 | 0.029 |
| 2 | 1.047 | 0.010 | 0.837 | 0.013 | 1.12 | 0.019 | 0.556 | 0.010 | 1.40 | 0.151 | 0.280 | 0.026 | 1.04 | 0.042 | 0.517 | 0.025 |
| 3 | 1.072 | 0.009 | 0.861 | 0.011 | 1.19 | 0.026 | 0.599 | 0.012 | 1.79 | 0.179 | 0.353 | 0.032 | 1.10 | 0.040 | 0.555 | 0.024 |
| 4 | 1.108 | 0.013 | 0.883 | 0.006 | 1.28 | 0.038 | 0.634 | 0.020 | 2.26 | 0.138 | 0.459 | 0.031 | 1.24 | 0.068 | 0.615 | 0.033 |
| 5 | 1.155 | 0.015 | 0.923 | 0.008 | 1.38 | 0.044 | 0.698 | 0.023 | 3.12 | 0.207 | 0.625 | 0.034 | 1.42 | 0.054 | 0.716 | 0.031 |
| 6 | 1.191 | 0.010 | 0.953 | 0.008 | 1.52 | 0.032 | 0.761 | 0.014 | 3.90 | 0.340 | 0.776 | 0.043 | 1.63 | 0.079 | 0.816 | 0.036 |
| 7 | 1.218 | 0.015 | 0.974 | 0.004 | 1.63 | 0.045 | 0.810 | 0.013 | 4.41 | 0.212 | 0.883 | 0.032 | 1.81 | 0.069 | 0.900 | 0.030 |
| 8 | 1.228 | 0.012 | 0.983 | 0.003 | 1.68 | 0.030 | 0.845 | 0.012 | 4.66 | 0.191 | 0.928 | 0.015 | 1.86 | 0.056 | 0.940 | 0.018 |
| 9 | 1.227 | 0.011 | 0.990 | 0.002 | 1.75 | 0.032 | 0.874 | 0.012 | 4.88 | 0.202 | 0.943 | 0.024 | 1.90 | 0.063 | 0.946 | 0.024 |
| 10 | 1.245 | 0.010 | 0.989 | 0.003 | 1.76 | 0.034 | 0.875 | 0.016 | 4.63 | 0.176 | 0.949 | 0.014 | 1.91 | 0.048 | 0.950 | 0.012 |
| 11 | 1.242 | 0.018 | 0.993 | 0.001 | 1.78 | 0.040 | 0.884 | 0.010 | 4.85 | 0.293 | 0.969 | 0.008 | 1.95 | 0.057 | 0.972 | 0.013 |
| 12 | 1.248 | 0.014 | 0.994 | 0.001 | 1.78 | 0.031 | 0.892 | 0.009 | 4.82 | 0.211 | 0.978 | 0.006 | 1.96 | 0.045 | 0.980 | 0.006 |
| 13 | 1.247 | 0.014 | 0.995 | 0.001 | 1.79 | 0.048 | 0.894 | 0.010 | 4.83 | 0.179 | 0.974 | 0.009 | 1.95 | 0.052 | 0.974 | 0.012 |
| 14 | 1.248 | 0.010 | 0.996 | 0.001 | 1.80 | 0.053 | 0.901 | 0.010 | 4.85 | 0.188 | 0.976 | 0.008 | 1.95 | 0.052 | 0.975 | 0.011 |
| 15 | 1.246 | 0.015 | 0.997 | 0.002 | 1.80 | 0.036 | 0.897 | 0.013 | 4.89 | 0.206 | 0.975 | 0.012 | 1.95 | 0.038 | 0.974 | 0.011 |
| 16 | 1.241 | 0.011 | 0.996 | 0.001 | 1.80 | 0.040 | 0.899 | 0.014 | 4.95 | 0.213 | 0.975 | 0.013 | 1.95 | 0.041 | 0.973 | 0.015 |
| 17 | 1.245 | 0.018 | 0.997 | 0.001 | 1.79 | 0.041 | 0.898 | 0.011 | 4.95 | 0.244 | 0.982 | 0.010 | 1.96 | 0.050 | 0.982 | 0.009 |
| 18 | 1.252 | 0.010 | 0.997 | 0.001 | 1.79 | 0.036 | 0.907 | 0.010 | 4.83 | 0.138 | 0.982 | 0.007 | 1.94 | 0.036 | 0.982 | 0.007 |
| 19 | 1.242 | 0.015 | 0.998 | 0.000 | 1.80 | 0.040 | 0.904 | 0.009 | 5.03 | 0.271 | 0.985 | 0.004 | 1.95 | 0.044 | 0.983 | 0.007 |
| 20 | 1.246 | 0.009 | 0.997 | 0.001 | 1.81 | 0.051 | 0.904 | 0.010 | 4.90 | 0.152 | 0.978 | 0.006 | 1.95 | 0.065 | 0.977 | 0.011 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| Dominant | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| 0 | 1.004 | 0.006 | 0.807 | 0.010 | 1.01 | 0.019 | 0.496 | 0.017 | 0.964 | 0.077 | 0.189 | 0.015 | 0.977 | 0.032 | 0.481 | 0.016 |
| 1 | 0.996 | 0.008 | 0.794 | 0.016 | 1.05 | 0.024 | 0.523 | 0.017 | 1.088 | 0.106 | 0.220 | 0.019 | 1.080 | 0.041 | 0.539 | 0.023 |
| 2 | 0.994 | 0.006 | 0.794 | 0.011 | 1.11 | 0.014 | 0.562 | 0.013 | 1.137 | 0.064 | 0.228 | 0.013 | 1.181 | 0.034 | 0.596 | 0.020 |
| 3 | 0.993 | 0.008 | 0.797 | 0.010 | 1.19 | 0.021 | 0.593 | 0.015 | 1.174 | 0.082 | 0.232 | 0.014 | 1.278 | 0.044 | 0.635 | 0.015 |
| 4 | 1.001 | 0.011 | 0.798 | 0.014 | 1.28 | 0.028 | 0.644 | 0.014 | 1.167 | 0.083 | 0.237 | 0.019 | 1.389 | 0.044 | 0.699 | 0.023 |
| 5 | 1.002 | 0.011 | 0.801 | 0.016 | 1.42 | 0.041 | 0.701 | 0.017 | 1.209 | 0.075 | 0.243 | 0.020 | 1.570 | 0.054 | 0.778 | 0.026 |
| 6 | 0.997 | 0.012 | 0.798 | 0.017 | 1.55 | 0.033 | 0.774 | 0.010 | 1.088 | 0.074 | 0.217 | 0.015 | 1.725 | 0.064 | 0.862 | 0.017 |
| 7 | 1.005 | 0.011 | 0.804 | 0.009 | 1.65 | 0.042 | 0.831 | 0.010 | 1.035 | 0.112 | 0.207 | 0.019 | 1.819 | 0.049 | 0.916 | 0.015 |
| 8 | 0.997 | 0.009 | 0.798 | 0.010 | 1.74 | 0.044 | 0.860 | 0.008 | 1.072 | 0.080 | 0.213 | 0.018 | 1.914 | 0.047 | 0.949 | 0.011 |
| 9 | 1.002 | 0.013 | 0.808 | 0.012 | 1.78 | 0.048 | 0.889 | 0.011 | 1.049 | 0.075 | 0.203 | 0.014 | 1.925 | 0.047 | 0.964 | 0.008 |
| 10 | 0.993 | 0.016 | 0.789 | 0.015 | 1.77 | 0.038 | 0.891 | 0.013 | 1.046 | 0.065 | 0.215 | 0.012 | 1.920 | 0.037 | 0.965 | 0.008 |
| 11 | 0.997 | 0.012 | 0.797 | 0.016 | 1.79 | 0.035 | 0.901 | 0.009 | 0.999 | 0.100 | 0.200 | 0.023 | 1.946 | 0.036 | 0.977 | 0.007 |
| 12 | 1.005 | 0.010 | 0.801 | 0.004 | 1.82 | 0.038 | 0.909 | 0.006 | 1.009 | 0.087 | 0.205 | 0.016 | 1.961 | 0.039 | 0.981 | 0.005 |
| 13 | 1.004 | 0.013 | 0.801 | 0.013 | 1.81 | 0.039 | 0.909 | 0.010 | 1.008 | 0.087 | 0.203 | 0.020 | 1.963 | 0.048 | 0.983 | 0.005 |
| 14 | 1.001 | 0.018 | 0.799 | 0.012 | 1.84 | 0.052 | 0.917 | 0.007 | 1.041 | 0.079 | 0.210 | 0.016 | 1.976 | 0.054 | 0.986 | 0.006 |
| 15 | 1.000 | 0.009 | 0.800 | 0.010 | 1.82 | 0.050 | 0.914 | 0.011 | 0.991 | 0.104 | 0.198 | 0.024 | 1.970 | 0.049 | 0.987 | 0.005 |
| 16 | 0.998 | 0.007 | 0.801 | 0.008 | 1.83 | 0.042 | 0.916 | 0.010 | 1.014 | 0.072 | 0.200 | 0.016 | 1.971 | 0.044 | 0.987 | 0.004 |
| 17 | 1.002 | 0.011 | 0.802 | 0.018 | 1.84 | 0.041 | 0.915 | 0.009 | 0.992 | 0.098 | 0.197 | 0.020 | 1.988 | 0.041 | 0.989 | 0.003 |
| 18 | 0.994 | 0.007 | 0.792 | 0.007 | 1.86 | 0.046 | 0.921 | 0.008 | 1.032 | 0.085 | 0.210 | 0.018 | 2.007 | 0.045 | 0.991 | 0.002 |
| 19 | 1.001 | 0.013 | 0.805 | 0.016 | 1.85 | 0.035 | 0.919 | 0.007 | 1.034 | 0.103 | 0.203 | 0.026 | 1.999 | 0.039 | 0.992 | 0.003 |
| 20 | 1.002 | 0.012 | 0.802 | 0.010 | 1.84 | 0.055 | 0.920 | 0.008 | 1.006 | 0.048 | 0.201 | 0.011 | 1.985 | 0.065 | 0.991 | 0.005 |

Table 8: Referred to Fig: 9. Focus on liberals majority

| | Ethnic | | | | Value | | | |
|---|---|---|---|---|---|---|---|---|
| | Clustering | | Exposure | | Clustering | | Exposure | |
| ß lib maj | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **ß liberal minority = 0** | | | | | | | | |
| 0 | 1.010 | 0.007 | 0.806 | 0.007 | 1.05 | 0.026 | 0.521 | 0.021 |
| 1 | 1.028 | 0.011 | 0.819 | 0.012 | 1.14 | 0.017 | 0.565 | 0.015 |
| 2 | 1.046 | 0.011 | 0.833 | 0.013 | 1.23 | 0.018 | 0.608 | 0.011 |
| 3 | 1.050 | 0.008 | 0.841 | 0.008 | 1.29 | 0.032 | 0.646 | 0.014 |
| 4 | 1.065 | 0.012 | 0.850 | 0.010 | 1.33 | 0.024 | 0.663 | 0.012 |
| 5 | 1.061 | 0.015 | 0.844 | 0.013 | 1.38 | 0.020 | 0.687 | 0.011 |
| 6 | 1.075 | 0.008 | 0.861 | 0.010 | 1.41 | 0.026 | 0.705 | 0.017 |
| 7 | 1.073 | 0.008 | 0.865 | 0.009 | 1.42 | 0.032 | 0.706 | 0.012 |
| 8 | 1.083 | 0.008 | 0.866 | 0.011 | 1.45 | 0.045 | 0.728 | 0.011 |
| 9 | 1.082 | 0.011 | 0.865 | 0.010 | 1.45 | 0.031 | 0.732 | 0.011 |
| 10 | 1.091 | 0.014 | 0.869 | 0.012 | 1.48 | 0.033 | 0.736 | 0.014 |
| 11 | 1.090 | 0.007 | 0.872 | 0.015 | 1.50 | 0.027 | 0.737 | 0.012 |
| 12 | 1.092 | 0.007 | 0.877 | 0.012 | 1.48 | 0.022 | 0.748 | 0.011 |
| 13 | 1.089 | 0.011 | 0.869 | 0.009 | 1.50 | 0.025 | 0.743 | 0.009 |
| 14 | 1.095 | 0.014 | 0.875 | 0.011 | 1.49 | 0.029 | 0.747 | 0.015 |
| 15 | 1.098 | 0.012 | 0.876 | 0.008 | 1.50 | 0.029 | 0.743 | 0.014 |
| **ß liberal minority = 1** | | | | | | | | |
| 0 | 0.996 | 0.014 | 0.798 | 0.016 | 1.06 | 0.014 | 0.534 | 0.009 |
| 1 | 1.023 | 0.014 | 0.824 | 0.011 | 1.17 | 0.015 | 0.580 | 0.007 |
| 2 | 1.038 | 0.009 | 0.826 | 0.010 | 1.25 | 0.020 | 0.627 | 0.010 |
| 3 | 1.041 | 0.009 | 0.833 | 0.009 | 1.31 | 0.031 | 0.654 | 0.016 |
| 4 | 1.045 | 0.012 | 0.839 | 0.013 | 1.37 | 0.033 | 0.688 | 0.013 |
| 5 | 1.054 | 0.011 | 0.848 | 0.007 | 1.40 | 0.036 | 0.707 | 0.012 |
| 6 | 1.049 | 0.010 | 0.849 | 0.008 | 1.44 | 0.034 | 0.725 | 0.011 |
| 7 | 1.060 | 0.009 | 0.847 | 0.009 | 1.49 | 0.033 | 0.738 | 0.010 |
| 8 | 1.071 | 0.008 | 0.853 | 0.013 | 1.50 | 0.050 | 0.752 | 0.010 |
| 9 | 1.074 | 0.011 | 0.859 | 0.008 | 1.51 | 0.027 | 0.757 | 0.011 |
| 10 | 1.074 | 0.012 | 0.860 | 0.010 | 1.52 | 0.031 | 0.760 | 0.012 |
| 11 | 1.075 | 0.011 | 0.859 | 0.009 | 1.55 | 0.028 | 0.767 | 0.014 |
| 12 | 1.072 | 0.009 | 0.861 | 0.011 | 1.54 | 0.035 | 0.764 | 0.008 |
| 13 | 1.076 | 0.007 | 0.857 | 0.010 | 1.54 | 0.023 | 0.778 | 0.011 |
| 14 | 1.079 | 0.011 | 0.861 | 0.010 | 1.55 | 0.027 | 0.776 | 0.012 |
| 15 | 1.086 | 0.016 | 0.867 | 0.013 | 1.55 | 0.041 | 0.778 | 0.009 |
| **ß liberal minority = 15** | | | | | | | | |
| 0 | 0.970 | 0.008 | 0.773 | 0.007 | 1.06 | 0.017 | 0.530 | 0.014 |
| 1 | 0.977 | 0.013 | 0.778 | 0.017 | 1.17 | 0.022 | 0.583 | 0.011 |
| 2 | 0.998 | 0.014 | 0.798 | 0.017 | 1.28 | 0.020 | 0.638 | 0.010 |
| 3 | 1.003 | 0.009 | 0.801 | 0.016 | 1.41 | 0.038 | 0.707 | 0.013 |
| 4 | 1.001 | 0.016 | 0.795 | 0.017 | 1.52 | 0.027 | 0.760 | 0.009 |
| 5 | 0.991 | 0.010 | 0.791 | 0.013 | 1.63 | 0.053 | 0.813 | 0.018 |
| 6 | 0.991 | 0.010 | 0.793 | 0.010 | 1.67 | 0.021 | 0.845 | 0.011 |
| 7 | 1.002 | 0.013 | 0.802 | 0.010 | 1.73 | 0.045 | 0.873 | 0.011 |
| 8 | 0.989 | 0.011 | 0.794 | 0.014 | 1.78 | 0.042 | 0.887 | 0.012 |
| 9 | 1.001 | 0.010 | 0.808 | 0.009 | 1.80 | 0.037 | 0.891 | 0.015 |
| 10 | 0.994 | 0.011 | 0.792 | 0.009 | 1.81 | 0.047 | 0.906 | 0.007 |
| 11 | 0.998 | 0.008 | 0.793 | 0.007 | 1.83 | 0.034 | 0.910 | 0.009 |
| 12 | 0.994 | 0.014 | 0.795 | 0.011 | 1.84 | 0.042 | 0.909 | 0.012 |
| 13 | 1.001 | 0.016 | 0.805 | 0.015 | 1.80 | 0.034 | 0.913 | 0.012 |
| 14 | 0.999 | 0.013 | 0.802 | 0.018 | 1.84 | 0.043 | 0.918 | 0.010 |
| 15 | 0.994 | 0.009 | 0.797 | 0.009 | 1.83 | 0.047 | 0.913 | 0.010 |

Table 9: Referred to . Focus on liberals minority

| | Ethnic | | | | Value | | | |
|---|---|---|---|---|---|---|---|---|
| | Clustering | | Exposure | | Clustering | | Exposure | |
| ß lib min | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **ß liberal majority = 0** | | | | | | | | |
| 0 | 1.256 | 0.133 | 0.247 | 0.026 | 1.32 | 0.042 | 0.663 | 0.023 |
| 1 | 1.403 | 0.080 | 0.280 | 0.015 | 1.36 | 0.036 | 0.685 | 0.019 |
| 2 | 1.410 | 0.144 | 0.280 | 0.026 | 1.46 | 0.031 | 0.728 | 0.015 |
| 3 | 1.574 | 0.149 | 0.315 | 0.032 | 1.52 | 0.034 | 0.757 | 0.020 |
| 4 | 1.663 | 0.116 | 0.333 | 0.023 | 1.55 | 0.043 | 0.782 | 0.018 |
| 5 | 1.735 | 0.088 | 0.347 | 0.020 | 1.58 | 0.056 | 0.795 | 0.014 |
| 6 | 1.807 | 0.131 | 0.361 | 0.029 | 1.61 | 0.040 | 0.804 | 0.018 |
| 7 | 1.830 | 0.125 | 0.370 | 0.018 | 1.63 | 0.040 | 0.811 | 0.022 |
| 8 | 1.879 | 0.156 | 0.367 | 0.032 | 1.66 | 0.035 | 0.829 | 0.016 |
| 9 | 2.015 | 0.089 | 0.414 | 0.011 | 1.67 | 0.039 | 0.829 | 0.020 |
| 10 | 1.975 | 0.133 | 0.394 | 0.025 | 1.67 | 0.050 | 0.842 | 0.020 |
| 11 | 2.065 | 0.218 | 0.412 | 0.041 | 1.70 | 0.058 | 0.838 | 0.013 |
| 12 | 2.065 | 0.182 | 0.422 | 0.031 | 1.71 | 0.051 | 0.849 | 0.007 |
| 13 | 2.121 | 0.177 | 0.414 | 0.025 | 1.70 | 0.050 | 0.845 | 0.017 |
| 14 | 2.021 | 0.092 | 0.403 | 0.019 | 1.67 | 0.046 | 0.845 | 0.010 |
| 15 | 2.089 | 0.125 | 0.417 | 0.020 | 1.70 | 0.042 | 0.849 | 0.015 |
| **ß liberal majority = 1** | | | | | | | | |
| 0 | 1.147 | 0.100 | 0.229 | 0.025 | 1.34 | 0.039 | 0.672 | 0.022 |
| 1 | 1.136 | 0.125 | 0.226 | 0.031 | 1.44 | 0.060 | 0.718 | 0.038 |
| 2 | 1.163 | 0.083 | 0.239 | 0.021 | 1.51 | 0.063 | 0.754 | 0.034 |
| 3 | 1.309 | 0.048 | 0.259 | 0.012 | 1.59 | 0.058 | 0.796 | 0.015 |
| 4 | 1.424 | 0.145 | 0.291 | 0.035 | 1.64 | 0.046 | 0.829 | 0.015 |
| 5 | 1.438 | 0.095 | 0.291 | 0.022 | 1.72 | 0.078 | 0.851 | 0.024 |
| 6 | 1.620 | 0.121 | 0.315 | 0.025 | 1.75 | 0.030 | 0.864 | 0.018 |
| 7 | 1.639 | 0.126 | 0.332 | 0.033 | 1.73 | 0.068 | 0.865 | 0.021 |
| 8 | 1.653 | 0.118 | 0.332 | 0.029 | 1.78 | 0.060 | 0.882 | 0.016 |
| 9 | 1.755 | 0.088 | 0.362 | 0.013 | 1.76 | 0.039 | 0.881 | 0.017 |
| 10 | 1.820 | 0.139 | 0.363 | 0.028 | 1.78 | 0.047 | 0.880 | 0.018 |
| 11 | 1.841 | 0.118 | 0.367 | 0.020 | 1.77 | 0.031 | 0.885 | 0.014 |
| 12 | 1.910 | 0.115 | 0.389 | 0.030 | 1.75 | 0.044 | 0.881 | 0.018 |
| 13 | 1.868 | 0.115 | 0.373 | 0.020 | 1.79 | 0.050 | 0.894 | 0.018 |
| 14 | 1.957 | 0.068 | 0.391 | 0.021 | 1.74 | 0.040 | 0.886 | 0.014 |
| 15 | 1.948 | 0.119 | 0.400 | 0.025 | 1.78 | 0.056 | 0.887 | 0.018 |
| **ß liberal majority = 15** | | | | | | | | |
| 0 | 1.202 | 0.120 | 0.244 | 0.024 | 1.21 | 0.069 | 0.606 | 0.036 |
| 1 | 1.071 | 0.124 | 0.212 | 0.027 | 1.37 | 0.049 | 0.681 | 0.036 |
| 2 | 1.148 | 0.151 | 0.228 | 0.030 | 1.50 | 0.044 | 0.758 | 0.019 |
| 3 | 1.085 | 0.079 | 0.214 | 0.015 | 1.68 | 0.053 | 0.832 | 0.025 |
| 4 | 1.042 | 0.096 | 0.209 | 0.018 | 1.77 | 0.037 | 0.893 | 0.017 |
| 5 | 1.013 | 0.093 | 0.204 | 0.019 | 1.87 | 0.037 | 0.933 | 0.011 |
| 6 | 1.009 | 0.077 | 0.205 | 0.018 | 1.92 | 0.031 | 0.952 | 0.009 |
| 7 | 1.048 | 0.106 | 0.204 | 0.020 | 1.95 | 0.088 | 0.968 | 0.009 |
| 8 | 0.997 | 0.065 | 0.202 | 0.013 | 1.93 | 0.045 | 0.972 | 0.007 |
| 9 | 1.009 | 0.091 | 0.200 | 0.016 | 1.97 | 0.021 | 0.981 | 0.003 |
| 10 | 1.037 | 0.097 | 0.211 | 0.022 | 1.96 | 0.047 | 0.983 | 0.006 |
| 11 | 1.017 | 0.085 | 0.206 | 0.016 | 1.98 | 0.075 | 0.983 | 0.004 |
| 12 | 1.013 | 0.063 | 0.206 | 0.012 | 1.97 | 0.033 | 0.985 | 0.003 |
| 13 | 0.978 | 0.069 | 0.198 | 0.020 | 2.00 | 0.044 | 0.986 | 0.006 |
| 14 | 0.957 | 0.065 | 0.187 | 0.013 | 1.96 | 0.029 | 0.986 | 0.004 |
| 15 | 1.044 | 0.068 | 0.208 | 0.022 | 1.99 | 0.040 | 0.991 | 0.004 |

Table 10: Referred to Fig: 10: effect of liberal majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| ß liberal majority | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **ß liberal minority = 0** | | | | | | | | | | | | | | | | |
| 0 | 1.17 | 0.008 | 0.937 | 0.007 | 1.09 | 0.024 | 0.552 | 0.021 | 3.32 | 0.149 | 0.671 | 0.020 | 1.20 | 0.062 | 0.603 | 0.025 |
| 1 | 1.17 | 0.013 | 0.934 | 0.005 | 1.13 | 0.026 | 0.567 | 0.018 | 3.75 | 0.248 | 0.759 | 0.038 | 1.41 | 0.104 | 0.711 | 0.054 |
| 2 | 1.17 | 0.013 | 0.932 | 0.004 | 1.16 | 0.019 | 0.586 | 0.013 | 4.12 | 0.244 | 0.836 | 0.016 | 1.57 | 0.053 | 0.791 | 0.017 |
| 3 | 1.17 | 0.013 | 0.936 | 0.007 | 1.22 | 0.019 | 0.607 | 0.016 | 4.32 | 0.208 | 0.859 | 0.024 | 1.63 | 0.066 | 0.812 | 0.025 |
| 4 | 1.16 | 0.008 | 0.929 | 0.010 | 1.23 | 0.027 | 0.615 | 0.017 | 4.34 | 0.227 | 0.874 | 0.020 | 1.67 | 0.048 | 0.837 | 0.018 |
| 5 | 1.17 | 0.013 | 0.927 | 0.010 | 1.27 | 0.023 | 0.638 | 0.015 | 4.28 | 0.260 | 0.875 | 0.022 | 1.65 | 0.066 | 0.829 | 0.030 |
| 6 | 1.16 | 0.011 | 0.931 | 0.007 | 1.29 | 0.033 | 0.648 | 0.014 | 4.50 | 0.232 | 0.894 | 0.023 | 1.69 | 0.061 | 0.845 | 0.021 |
| 7 | 1.15 | 0.006 | 0.930 | 0.009 | 1.29 | 0.024 | 0.652 | 0.017 | 4.56 | 0.235 | 0.882 | 0.017 | 1.66 | 0.050 | 0.835 | 0.015 |
| 8 | 1.16 | 0.013 | 0.930 | 0.007 | 1.33 | 0.027 | 0.661 | 0.020 | 4.52 | 0.230 | 0.904 | 0.020 | 1.70 | 0.057 | 0.849 | 0.021 |
| 9 | 1.16 | 0.008 | 0.928 | 0.008 | 1.34 | 0.026 | 0.662 | 0.015 | 4.51 | 0.215 | 0.903 | 0.011 | 1.71 | 0.051 | 0.846 | 0.026 |
| 10 | 1.16 | 0.017 | 0.925 | 0.005 | 1.33 | 0.020 | 0.667 | 0.020 | 4.45 | 0.273 | 0.903 | 0.020 | 1.70 | 0.109 | 0.847 | 0.033 |
| 11 | 1.16 | 0.011 | 0.928 | 0.008 | 1.34 | 0.020 | 0.679 | 0.012 | 4.50 | 0.236 | 0.900 | 0.020 | 1.66 | 0.060 | 0.843 | 0.023 |
| 12 | 1.16 | 0.013 | 0.928 | 0.007 | 1.36 | 0.031 | 0.672 | 0.014 | 4.56 | 0.244 | 0.896 | 0.015 | 1.68 | 0.061 | 0.830 | 0.026 |
| 13 | 1.16 | 0.013 | 0.923 | 0.010 | 1.36 | 0.015 | 0.685 | 0.014 | 4.34 | 0.243 | 0.875 | 0.024 | 1.61 | 0.064 | 0.814 | 0.032 |
| 14 | 1.15 | 0.010 | 0.922 | 0.009 | 1.35 | 0.041 | 0.675 | 0.012 | 4.48 | 0.158 | 0.895 | 0.015 | 1.67 | 0.070 | 0.834 | 0.027 |
| 15 | 1.16 | 0.006 | 0.922 | 0.008 | 1.35 | 0.030 | 0.679 | 0.012 | 4.42 | 0.242 | 0.890 | 0.031 | 1.64 | 0.102 | 0.824 | 0.047 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 0 | 1.18 | 0.014 | 0.943 | 0.008 | 1.13 | 0.027 | 0.556 | 0.021 | 3.29 | 0.233 | 0.653 | 0.030 | 1.21 | 0.053 | 0.599 | 0.028 |
| 1 | 1.18 | 0.014 | 0.946 | 0.005 | 1.16 | 0.022 | 0.584 | 0.013 | 3.98 | 0.243 | 0.774 | 0.039 | 1.46 | 0.080 | 0.736 | 0.046 |
| 2 | 1.19 | 0.014 | 0.944 | 0.004 | 1.20 | 0.034 | 0.596 | 0.015 | 4.09 | 0.151 | 0.834 | 0.027 | 1.60 | 0.063 | 0.795 | 0.036 |
| 3 | 1.18 | 0.016 | 0.944 | 0.007 | 1.25 | 0.027 | 0.627 | 0.016 | 4.31 | 0.255 | 0.856 | 0.023 | 1.66 | 0.051 | 0.830 | 0.024 |
| 4 | 1.18 | 0.010 | 0.945 | 0.005 | 1.30 | 0.031 | 0.645 | 0.017 | 4.54 | 0.314 | 0.889 | 0.023 | 1.71 | 0.062 | 0.852 | 0.037 |
| 5 | 1.17 | 0.013 | 0.943 | 0.008 | 1.31 | 0.027 | 0.650 | 0.017 | 4.56 | 0.229 | 0.891 | 0.017 | 1.74 | 0.046 | 0.861 | 0.019 |
| 6 | 1.17 | 0.010 | 0.944 | 0.005 | 1.37 | 0.031 | 0.680 | 0.018 | 4.66 | 0.091 | 0.886 | 0.020 | 1.71 | 0.050 | 0.848 | 0.024 |
| 7 | 1.18 | 0.012 | 0.942 | 0.005 | 1.37 | 0.031 | 0.692 | 0.011 | 4.49 | 0.222 | 0.903 | 0.011 | 1.71 | 0.041 | 0.860 | 0.025 |
| 8 | 1.18 | 0.014 | 0.939 | 0.009 | 1.39 | 0.026 | 0.693 | 0.024 | 4.50 | 0.321 | 0.912 | 0.018 | 1.75 | 0.055 | 0.869 | 0.023 |
| 9 | 1.18 | 0.013 | 0.941 | 0.007 | 1.40 | 0.024 | 0.701 | 0.014 | 4.56 | 0.197 | 0.911 | 0.013 | 1.73 | 0.049 | 0.866 | 0.028 |
| 10 | 1.17 | 0.011 | 0.938 | 0.007 | 1.40 | 0.034 | 0.701 | 0.011 | 4.53 | 0.255 | 0.902 | 0.019 | 1.71 | 0.063 | 0.851 | 0.028 |
| 11 | 1.18 | 0.011 | 0.939 | 0.007 | 1.42 | 0.037 | 0.714 | 0.010 | 4.50 | 0.136 | 0.905 | 0.022 | 1.69 | 0.076 | 0.850 | 0.027 |
| 12 | 1.16 | 0.014 | 0.936 | 0.006 | 1.41 | 0.019 | 0.711 | 0.014 | 4.57 | 0.284 | 0.895 | 0.018 | 1.70 | 0.031 | 0.853 | 0.023 |
| 13 | 1.18 | 0.009 | 0.936 | 0.012 | 1.44 | 0.026 | 0.713 | 0.010 | 4.48 | 0.272 | 0.912 | 0.016 | 1.74 | 0.059 | 0.860 | 0.019 |
| 14 | 1.18 | 0.015 | 0.938 | 0.004 | 1.44 | 0.031 | 0.718 | 0.013 | 4.51 | 0.218 | 0.906 | 0.014 | 1.72 | 0.048 | 0.859 | 0.022 |
| 15 | 1.17 | 0.011 | 0.937 | 0.011 | 1.44 | 0.036 | 0.714 | 0.020 | 4.54 | 0.311 | 0.915 | 0.019 | 1.74 | 0.061 | 0.866 | 0.033 |
| **ß liberal minority = 15** | | | | | | | | | | | | | | | | |
| 0 | 1.23 | 0.007 | 0.982 | 0.003 | 1.22 | 0.025 | 0.611 | 0.014 | 2.97 | 0.114 | 0.601 | 0.024 | 1.05 | 0.075 | 0.524 | 0.034 |
| 1 | 1.24 | 0.014 | 0.985 | 0.003 | 1.29 | 0.033 | 0.647 | 0.023 | 3.33 | 0.273 | 0.678 | 0.035 | 1.25 | 0.104 | 0.625 | 0.047 |
| 2 | 1.24 | 0.010 | 0.992 | 0.002 | 1.33 | 0.031 | 0.667 | 0.012 | 4.06 | 0.222 | 0.811 | 0.023 | 1.56 | 0.045 | 0.785 | 0.025 |
| 3 | 1.25 | 0.019 | 0.994 | 0.002 | 1.43 | 0.041 | 0.712 | 0.021 | 4.35 | 0.253 | 0.874 | 0.030 | 1.73 | 0.060 | 0.858 | 0.031 |
| 4 | 1.25 | 0.015 | 0.996 | 0.001 | 1.53 | 0.030 | 0.764 | 0.016 | 4.43 | 0.278 | 0.909 | 0.025 | 1.81 | 0.065 | 0.903 | 0.029 |
| 5 | 1.25 | 0.015 | 0.996 | 0.001 | 1.62 | 0.047 | 0.813 | 0.023 | 4.55 | 0.208 | 0.918 | 0.013 | 1.82 | 0.046 | 0.915 | 0.016 |
| 6 | 1.25 | 0.011 | 0.996 | 0.001 | 1.70 | 0.033 | 0.841 | 0.013 | 4.62 | 0.171 | 0.923 | 0.021 | 1.86 | 0.055 | 0.920 | 0.022 |
| 7 | 1.24 | 0.017 | 0.996 | 0.002 | 1.73 | 0.034 | 0.860 | 0.015 | 4.78 | 0.258 | 0.950 | 0.021 | 1.92 | 0.062 | 0.952 | 0.020 |
| 8 | 1.24 | 0.016 | 0.996 | 0.001 | 1.75 | 0.042 | 0.878 | 0.013 | 4.87 | 0.271 | 0.959 | 0.015 | 1.91 | 0.048 | 0.960 | 0.014 |
| 9 | 1.24 | 0.012 | 0.997 | 0.001 | 1.74 | 0.046 | 0.879 | 0.016 | 5.03 | 0.183 | 0.971 | 0.006 | 1.92 | 0.036 | 0.972 | 0.007 |
| 10 | 1.25 | 0.013 | 0.996 | 0.001 | 1.79 | 0.041 | 0.895 | 0.011 | 4.73 | 0.179 | 0.960 | 0.008 | 1.93 | 0.052 | 0.962 | 0.006 |
| 11 | 1.25 | 0.009 | 0.996 | 0.001 | 1.79 | 0.044 | 0.898 | 0.012 | 4.72 | 0.165 | 0.969 | 0.010 | 1.93 | 0.041 | 0.969 | 0.011 |
| 12 | 1.25 | 0.013 | 0.996 | 0.002 | 1.78 | 0.055 | 0.897 | 0.013 | 4.89 | 0.200 | 0.974 | 0.011 | 1.94 | 0.051 | 0.976 | 0.012 |
| 13 | 1.24 | 0.007 | 0.996 | 0.002 | 1.81 | 0.055 | 0.896 | 0.014 | 4.93 | 0.137 | 0.968 | 0.009 | 1.97 | 0.059 | 0.970 | 0.014 |
| 14 | 1.24 | 0.019 | 0.996 | 0.001 | 1.80 | 0.029 | 0.902 | 0.014 | 4.99 | 0.295 | 0.979 | 0.008 | 1.96 | 0.036 | 0.980 | 0.009 |
| 15 | 1.24 | 0.010 | 0.996 | 0.001 | 1.79 | 0.048 | 0.898 | 0.013 | 4.95 | 0.182 | 0.977 | 0.010 | 1.94 | 0.060 | 0.976 | 0.011 |

Table 11: Referred to Fig: 10: effect of liberal minority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| ß liberal minority | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **ß liberal majority = 0** | | | | | | | | | | | | | | | | |
| 0 | 1.17 | 0.008 | 0.937 | 0.006 | 1.11 | 0.026 | 0.551 | 0.010 | 3.44 | 0.251 | 0.675 | 0.040 | 1.23 | 0.096 | 0.612 | 0.052 |
| 1 | 1.18 | 0.009 | 0.942 | 0.005 | 1.14 | 0.014 | 0.565 | 0.019 | 3.20 | 0.220 | 0.637 | 0.042 | 1.15 | 0.102 | 0.569 | 0.049 |
| 2 | 1.18 | 0.010 | 0.950 | 0.006 | 1.17 | 0.039 | 0.584 | 0.015 | 3.18 | 0.238 | 0.632 | 0.041 | 1.15 | 0.103 | 0.577 | 0.053 |
| 3 | 1.20 | 0.016 | 0.958 | 0.005 | 1.19 | 0.033 | 0.596 | 0.024 | 3.12 | 0.273 | 0.623 | 0.041 | 1.11 | 0.116 | 0.555 | 0.048 |
| 4 | 1.21 | 0.010 | 0.963 | 0.006 | 1.20 | 0.028 | 0.595 | 0.017 | 3.12 | 0.193 | 0.623 | 0.022 | 1.14 | 0.067 | 0.562 | 0.033 |
| 5 | 1.21 | 0.012 | 0.967 | 0.008 | 1.22 | 0.025 | 0.605 | 0.021 | 3.00 | 0.217 | 0.598 | 0.031 | 1.06 | 0.062 | 0.525 | 0.036 |
| 6 | 1.21 | 0.008 | 0.970 | 0.006 | 1.23 | 0.022 | 0.615 | 0.013 | 3.00 | 0.113 | 0.598 | 0.017 | 1.05 | 0.024 | 0.525 | 0.017 |
| 7 | 1.22 | 0.009 | 0.972 | 0.004 | 1.23 | 0.027 | 0.615 | 0.018 | 2.95 | 0.075 | 0.596 | 0.026 | 1.04 | 0.060 | 0.522 | 0.034 |
| 8 | 1.21 | 0.014 | 0.973 | 0.003 | 1.22 | 0.028 | 0.608 | 0.021 | 3.02 | 0.110 | 0.591 | 0.031 | 1.08 | 0.044 | 0.537 | 0.021 |
| 9 | 1.23 | 0.012 | 0.977 | 0.004 | 1.23 | 0.024 | 0.620 | 0.018 | 2.94 | 0.098 | 0.603 | 0.026 | 1.04 | 0.056 | 0.526 | 0.033 |
| 10 | 1.22 | 0.014 | 0.976 | 0.004 | 1.22 | 0.032 | 0.604 | 0.019 | 2.95 | 0.187 | 0.588 | 0.025 | 1.07 | 0.050 | 0.533 | 0.025 |
| 11 | 1.22 | 0.013 | 0.978 | 0.006 | 1.21 | 0.025 | 0.612 | 0.013 | 3.06 | 0.271 | 0.611 | 0.029 | 1.08 | 0.062 | 0.549 | 0.039 |
| 12 | 1.23 | 0.023 | 0.978 | 0.003 | 1.22 | 0.029 | 0.613 | 0.020 | 2.95 | 0.152 | 0.603 | 0.034 | 1.07 | 0.051 | 0.540 | 0.031 |
| 13 | 1.22 | 0.010 | 0.979 | 0.003 | 1.23 | 0.033 | 0.620 | 0.018 | 3.02 | 0.214 | 0.589 | 0.037 | 1.03 | 0.101 | 0.518 | 0.051 |
| 14 | 1.22 | 0.015 | 0.977 | 0.003 | 1.23 | 0.016 | 0.606 | 0.016 | 2.96 | 0.182 | 0.589 | 0.027 | 1.06 | 0.048 | 0.523 | 0.025 |
| 15 | 1.22 | 0.009 | 0.979 | 0.003 | 1.23 | 0.028 | 0.614 | 0.019 | 2.94 | 0.182 | 0.587 | 0.023 | 1.04 | 0.082 | 0.519 | 0.041 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 0 | 1.17 | 0.012 | 0.938 | 0.006 | 1.14 | 0.021 | 0.568 | 0.013 | 3.85 | 0.274 | 0.764 | 0.033 | 1.42 | 0.075 | 0.710 | 0.036 |
| 1 | 1.18 | 0.012 | 0.948 | 0.007 | 1.16 | 0.026 | 0.581 | 0.027 | 3.86 | 0.306 | 0.764 | 0.029 | 1.45 | 0.107 | 0.722 | 0.044 |
| 2 | 1.20 | 0.011 | 0.950 | 0.010 | 1.21 | 0.017 | 0.601 | 0.014 | 3.66 | 0.272 | 0.750 | 0.041 | 1.42 | 0.107 | 0.706 | 0.047 |
| 3 | 1.20 | 0.008 | 0.961 | 0.006 | 1.23 | 0.026 | 0.612 | 0.016 | 3.76 | 0.173 | 0.742 | 0.037 | 1.40 | 0.076 | 0.697 | 0.043 |
| 4 | 1.22 | 0.014 | 0.967 | 0.005 | 1.26 | 0.041 | 0.622 | 0.018 | 3.55 | 0.334 | 0.723 | 0.052 | 1.38 | 0.105 | 0.684 | 0.053 |
| 5 | 1.22 | 0.016 | 0.974 | 0.005 | 1.26 | 0.023 | 0.639 | 0.017 | 3.64 | 0.216 | 0.736 | 0.029 | 1.38 | 0.056 | 0.697 | 0.037 |
| 6 | 1.21 | 0.009 | 0.977 | 0.004 | 1.26 | 0.021 | 0.639 | 0.013 | 3.63 | 0.150 | 0.706 | 0.031 | 1.32 | 0.082 | 0.667 | 0.035 |
| 7 | 1.23 | 0.012 | 0.977 | 0.003 | 1.28 | 0.040 | 0.640 | 0.019 | 3.44 | 0.322 | 0.692 | 0.040 | 1.29 | 0.109 | 0.647 | 0.060 |
| 8 | 1.23 | 0.016 | 0.980 | 0.004 | 1.27 | 0.044 | 0.639 | 0.013 | 3.60 | 0.391 | 0.719 | 0.047 | 1.36 | 0.100 | 0.687 | 0.061 |
| 9 | 1.24 | 0.012 | 0.980 | 0.003 | 1.29 | 0.017 | 0.646 | 0.013 | 3.36 | 0.185 | 0.693 | 0.031 | 1.30 | 0.068 | 0.651 | 0.033 |
| 10 | 1.23 | 0.016 | 0.982 | 0.004 | 1.27 | 0.028 | 0.644 | 0.014 | 3.41 | 0.232 | 0.679 | 0.049 | 1.25 | 0.115 | 0.632 | 0.060 |
| 11 | 1.23 | 0.013 | 0.984 | 0.002 | 1.27 | 0.032 | 0.634 | 0.020 | 3.51 | 0.204 | 0.699 | 0.034 | 1.30 | 0.096 | 0.651 | 0.046 |
| 12 | 1.23 | 0.011 | 0.983 | 0.004 | 1.29 | 0.019 | 0.642 | 0.016 | 3.36 | 0.228 | 0.682 | 0.027 | 1.25 | 0.070 | 0.622 | 0.032 |
| 13 | 1.23 | 0.012 | 0.983 | 0.005 | 1.27 | 0.021 | 0.636 | 0.010 | 3.51 | 0.318 | 0.699 | 0.046 | 1.32 | 0.093 | 0.660 | 0.049 |
| 14 | 1.23 | 0.016 | 0.985 | 0.003 | 1.29 | 0.031 | 0.630 | 0.014 | 3.32 | 0.255 | 0.663 | 0.053 | 1.22 | 0.110 | 0.600 | 0.060 |
| 15 | 1.24 | 0.011 | 0.983 | 0.004 | 1.28 | 0.023 | 0.642 | 0.011 | 3.34 | 0.248 | 0.685 | 0.036 | 1.26 | 0.094 | 0.632 | 0.051 |
| **ß liberal majority = 15** | | | | | | | | | | | | | | | | |
| 0 | 1.16 | 0.012 | 0.925 | 0.008 | 1.35 | 0.045 | 0.672 | 0.022 | 4.44 | 0.109 | 0.902 | 0.026 | 1.67 | 0.079 | 0.833 | 0.033 |
| 1 | 1.17 | 0.009 | 0.940 | 0.007 | 1.42 | 0.039 | 0.717 | 0.022 | 4.61 | 0.152 | 0.914 | 0.014 | 1.73 | 0.087 | 0.872 | 0.019 |
| 2 | 1.19 | 0.013 | 0.953 | 0.007 | 1.53 | 0.030 | 0.757 | 0.020 | 4.66 | 0.299 | 0.926 | 0.020 | 1.77 | 0.052 | 0.880 | 0.022 |
| 3 | 1.21 | 0.017 | 0.967 | 0.007 | 1.58 | 0.042 | 0.799 | 0.014 | 4.77 | 0.308 | 0.941 | 0.021 | 1.83 | 0.075 | 0.921 | 0.026 |
| 4 | 1.22 | 0.012 | 0.978 | 0.003 | 1.68 | 0.049 | 0.830 | 0.015 | 4.75 | 0.224 | 0.951 | 0.011 | 1.88 | 0.049 | 0.930 | 0.017 |
| 5 | 1.23 | 0.011 | 0.985 | 0.003 | 1.71 | 0.029 | 0.854 | 0.013 | 4.81 | 0.176 | 0.968 | 0.008 | 1.92 | 0.029 | 0.961 | 0.007 |
| 6 | 1.24 | 0.008 | 0.988 | 0.002 | 1.74 | 0.034 | 0.875 | 0.008 | 4.80 | 0.132 | 0.973 | 0.003 | 1.92 | 0.045 | 0.968 | 0.008 |
| 7 | 1.23 | 0.009 | 0.993 | 0.002 | 1.76 | 0.055 | 0.883 | 0.015 | 4.99 | 0.156 | 0.972 | 0.011 | 1.92 | 0.071 | 0.964 | 0.014 |
| 8 | 1.25 | 0.013 | 0.993 | 0.002 | 1.78 | 0.044 | 0.887 | 0.012 | 4.80 | 0.198 | 0.973 | 0.010 | 1.95 | 0.050 | 0.968 | 0.012 |
| 9 | 1.24 | 0.011 | 0.995 | 0.001 | 1.79 | 0.034 | 0.900 | 0.018 | 4.91 | 0.170 | 0.976 | 0.006 | 1.94 | 0.038 | 0.972 | 0.010 |
| 10 | 1.25 | 0.011 | 0.995 | 0.001 | 1.78 | 0.037 | 0.887 | 0.015 | 4.83 | 0.155 | 0.979 | 0.007 | 1.97 | 0.049 | 0.978 | 0.007 |
| 11 | 1.25 | 0.018 | 0.995 | 0.002 | 1.79 | 0.059 | 0.900 | 0.014 | 4.82 | 0.301 | 0.974 | 0.011 | 1.94 | 0.067 | 0.973 | 0.012 |
| 12 | 1.25 | 0.010 | 0.996 | 0.001 | 1.79 | 0.029 | 0.899 | 0.014 | 4.82 | 0.172 | 0.979 | 0.011 | 1.95 | 0.040 | 0.978 | 0.011 |
| 13 | 1.25 | 0.018 | 0.996 | 0.001 | 1.78 | 0.053 | 0.903 | 0.013 | 4.83 | 0.274 | 0.972 | 0.008 | 1.92 | 0.046 | 0.971 | 0.008 |
| 14 | 1.24 | 0.007 | 0.997 | 0.001 | 1.81 | 0.047 | 0.901 | 0.012 | 5.01 | 0.136 | 0.980 | 0.009 | 1.97 | 0.025 | 0.977 | 0.009 |
| 15 | 1.25 | 0.018 | 0.997 | 0.001 | 1.81 | 0.027 | 0.906 | 0.009 | 4.92 | 0.277 | 0.979 | 0.010 | 1.96 | 0.045 | 0.981 | 0.012 |

Table 12: Referred to Fig: 11: focus on conservatives

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| ß dom | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline (ß ethnic liberal = 0)** | | | | | | | | | | | | | | | | |
| 0 | 0.997 | 0.008 | 0.796 | 0.011 | 0.999 | 0.020 | 0.502 | 0.011 | 0.998 | 0.051 | 0.201 | 0.013 | 1.007 | 0.031 | 0.506 | 0.020 |
| 1 | 1.015 | 0.008 | 0.812 | 0.011 | 1.042 | 0.019 | 0.521 | 0.009 | 1.174 | 0.084 | 0.235 | 0.015 | 1.045 | 0.023 | 0.523 | 0.021 |
| 2 | 1.046 | 0.008 | 0.835 | 0.005 | 1.114 | 0.024 | 0.564 | 0.018 | 1.467 | 0.115 | 0.295 | 0.026 | 1.064 | 0.016 | 0.539 | 0.015 |
| 3 | 1.069 | 0.012 | 0.859 | 0.008 | 1.183 | 0.023 | 0.593 | 0.014 | 1.776 | 0.179 | 0.348 | 0.038 | 1.107 | 0.045 | 0.555 | 0.030 |
| 4 | 1.112 | 0.015 | 0.888 | 0.007 | 1.281 | 0.046 | 0.642 | 0.023 | 2.226 | 0.130 | 0.449 | 0.036 | 1.187 | 0.067 | 0.595 | 0.025 |
| 5 | 1.151 | 0.013 | 0.924 | 0.008 | 1.407 | 0.038 | 0.707 | 0.017 | 3.064 | 0.154 | 0.603 | 0.034 | 1.390 | 0.083 | 0.698 | 0.037 |
| 6 | 1.194 | 0.012 | 0.950 | 0.006 | 1.522 | 0.039 | 0.754 | 0.020 | 3.803 | 0.196 | 0.774 | 0.037 | 1.650 | 0.075 | 0.818 | 0.031 |
| 7 | 1.216 | 0.013 | 0.976 | 0.004 | 1.602 | 0.040 | 0.810 | 0.015 | 4.580 | 0.269 | 0.901 | 0.026 | 1.814 | 0.080 | 0.917 | 0.028 |
| 8 | 1.233 | 0.012 | 0.982 | 0.002 | 1.704 | 0.043 | 0.846 | 0.018 | 4.534 | 0.152 | 0.924 | 0.020 | 1.882 | 0.050 | 0.935 | 0.019 |
| 9 | 1.239 | 0.013 | 0.987 | 0.002 | 1.717 | 0.036 | 0.865 | 0.013 | 4.672 | 0.220 | 0.947 | 0.016 | 1.894 | 0.041 | 0.954 | 0.009 |
| 10 | 1.240 | 0.015 | 0.990 | 0.003 | 1.727 | 0.027 | 0.870 | 0.015 | 4.777 | 0.302 | 0.958 | 0.015 | 1.902 | 0.044 | 0.958 | 0.016 |
| 11 | 1.242 | 0.008 | 0.992 | 0.001 | 1.772 | 0.042 | 0.885 | 0.014 | 4.816 | 0.115 | 0.967 | 0.012 | 1.938 | 0.055 | 0.967 | 0.011 |
| 12 | 1.246 | 0.017 | 0.994 | 0.002 | 1.771 | 0.043 | 0.893 | 0.014 | 4.805 | 0.234 | 0.970 | 0.016 | 1.920 | 0.055 | 0.969 | 0.016 |
| 13 | 1.235 | 0.014 | 0.995 | 0.002 | 1.809 | 0.031 | 0.900 | 0.015 | 5.015 | 0.265 | 0.972 | 0.010 | 1.958 | 0.041 | 0.975 | 0.011 |
| 14 | 1.246 | 0.015 | 0.995 | 0.001 | 1.781 | 0.037 | 0.897 | 0.014 | 4.873 | 0.239 | 0.978 | 0.006 | 1.951 | 0.040 | 0.982 | 0.006 |
| 15 | 1.250 | 0.015 | 0.997 | 0.001 | 1.803 | 0.048 | 0.895 | 0.016 | 4.859 | 0.237 | 0.983 | 0.007 | 1.984 | 0.069 | 0.984 | 0.009 |
| 16 | 1.240 | 0.018 | 0.996 | 0.001 | 1.812 | 0.024 | 0.902 | 0.012 | 5.000 | 0.334 | 0.976 | 0.008 | 1.961 | 0.032 | 0.976 | 0.009 |
| 17 | 1.244 | 0.010 | 0.997 | 0.001 | 1.802 | 0.048 | 0.900 | 0.009 | 4.959 | 0.188 | 0.983 | 0.010 | 1.969 | 0.041 | 0.983 | 0.013 |
| 18 | 1.254 | 0.016 | 0.997 | 0.001 | 1.808 | 0.035 | 0.905 | 0.010 | 4.781 | 0.237 | 0.976 | 0.007 | 1.947 | 0.037 | 0.974 | 0.013 |
| 19 | 1.246 | 0.007 | 0.998 | 0.001 | 1.805 | 0.038 | 0.907 | 0.014 | 4.943 | 0.124 | 0.982 | 0.010 | 1.949 | 0.038 | 0.979 | 0.013 |
| 20 | 1.253 | 0.015 | 0.998 | 0.001 | 1.802 | 0.042 | 0.900 | 0.011 | 4.843 | 0.228 | 0.982 | 0.006 | 1.962 | 0.050 | 0.980 | 0.006 |
| **ß value liberal majority = ethnic** | | | | | | | | | | | | | | | | |
| 0 | 0.999 | 0.006 | 0.797 | 0.013 | 1.004 | 0.014 | 0.502 | 0.009 | 0.999 | 0.062 | 0.202 | 0.017 | 1.016 | 0.038 | 0.508 | 0.020 |
| 1 | 1.013 | 0.009 | 0.808 | 0.008 | 1.036 | 0.017 | 0.512 | 0.019 | 1.220 | 0.082 | 0.248 | 0.018 | 1.054 | 0.043 | 0.521 | 0.027 |
| 2 | 1.043 | 0.006 | 0.835 | 0.006 | 1.078 | 0.020 | 0.540 | 0.013 | 1.678 | 0.163 | 0.333 | 0.032 | 1.141 | 0.044 | 0.572 | 0.025 |
| 3 | 1.072 | 0.014 | 0.853 | 0.010 | 1.133 | 0.018 | 0.569 | 0.011 | 2.243 | 0.167 | 0.458 | 0.033 | 1.272 | 0.048 | 0.639 | 0.024 |
| 4 | 1.118 | 0.012 | 0.893 | 0.009 | 1.188 | 0.019 | 0.596 | 0.013 | 3.272 | 0.227 | 0.655 | 0.034 | 1.477 | 0.052 | 0.741 | 0.033 |
| 5 | 1.156 | 0.010 | 0.929 | 0.008 | 1.288 | 0.041 | 0.644 | 0.019 | 4.072 | 0.196 | 0.799 | 0.039 | 1.651 | 0.058 | 0.827 | 0.042 |
| 6 | 1.184 | 0.011 | 0.947 | 0.007 | 1.418 | 0.030 | 0.704 | 0.020 | 4.337 | 0.174 | 0.867 | 0.028 | 1.736 | 0.069 | 0.862 | 0.025 |
| 7 | 1.214 | 0.016 | 0.968 | 0.004 | 1.578 | 0.035 | 0.784 | 0.020 | 4.542 | 0.220 | 0.919 | 0.021 | 1.761 | 0.067 | 0.875 | 0.035 |
| 8 | 1.227 | 0.011 | 0.980 | 0.003 | 1.688 | 0.036 | 0.838 | 0.011 | 4.665 | 0.178 | 0.938 | 0.019 | 1.760 | 0.050 | 0.873 | 0.022 |
| 9 | 1.237 | 0.016 | 0.986 | 0.003 | 1.745 | 0.042 | 0.874 | 0.011 | 4.685 | 0.216 | 0.950 | 0.013 | 1.741 | 0.063 | 0.872 | 0.028 |
| 10 | 1.238 | 0.013 | 0.987 | 0.003 | 1.796 | 0.046 | 0.900 | 0.014 | 4.705 | 0.160 | 0.951 | 0.012 | 1.758 | 0.052 | 0.881 | 0.025 |
| 11 | 1.239 | 0.018 | 0.990 | 0.003 | 1.854 | 0.041 | 0.927 | 0.011 | 4.773 | 0.241 | 0.956 | 0.015 | 1.757 | 0.059 | 0.878 | 0.021 |
| 12 | 1.248 | 0.017 | 0.993 | 0.002 | 1.876 | 0.036 | 0.929 | 0.008 | 4.739 | 0.246 | 0.966 | 0.006 | 1.790 | 0.052 | 0.886 | 0.017 |
| 13 | 1.245 | 0.019 | 0.994 | 0.002 | 1.864 | 0.034 | 0.932 | 0.011 | 4.810 | 0.292 | 0.966 | 0.010 | 1.751 | 0.042 | 0.875 | 0.026 |
| 14 | 1.238 | 0.013 | 0.996 | 0.001 | 1.885 | 0.020 | 0.949 | 0.011 | 5.008 | 0.229 | 0.974 | 0.010 | 1.756 | 0.030 | 0.884 | 0.021 |
| 15 | 1.241 | 0.016 | 0.996 | 0.001 | 1.896 | 0.046 | 0.943 | 0.015 | 4.931 | 0.215 | 0.970 | 0.011 | 1.764 | 0.071 | 0.877 | 0.025 |
| 16 | 1.244 | 0.015 | 0.996 | 0.002 | 1.889 | 0.058 | 0.951 | 0.009 | 4.926 | 0.242 | 0.976 | 0.007 | 1.768 | 0.049 | 0.890 | 0.022 |
| 17 | 1.242 | 0.010 | 0.997 | 0.001 | 1.924 | 0.053 | 0.951 | 0.008 | 4.979 | 0.179 | 0.982 | 0.007 | 1.802 | 0.054 | 0.890 | 0.015 |
| 18 | 1.245 | 0.009 | 0.998 | 0.001 | 1.910 | 0.035 | 0.957 | 0.011 | 4.938 | 0.157 | 0.981 | 0.007 | 1.759 | 0.055 | 0.882 | 0.018 |
| 19 | 1.244 | 0.009 | 0.998 | 0.001 | 1.928 | 0.049 | 0.956 | 0.005 | 4.962 | 0.170 | 0.981 | 0.005 | 1.788 | 0.039 | 0.886 | 0.013 |
| 20 | 1.252 | 0.010 | 0.998 | 0.001 | 1.932 | 0.032 | 0.961 | 0.007 | 4.849 | 0.179 | 0.983 | 0.004 | 1.791 | 0.039 | 0.891 | 0.024 |
| **ß value liberal minority = ethnic** | | | | | | | | | | | | | | | | |
| 0 | 1.001 | 0.006 | 0.799 | 0.009 | 0.996 | 0.012 | 0.498 | 0.013 | 0.958 | 0.059 | 0.194 | 0.015 | 0.983 | 0.028 | 0.492 | 0.020 |
| 1 | 1.024 | 0.010 | 0.816 | 0.011 | 1.042 | 0.015 | 0.527 | 0.019 | 1.224 | 0.097 | 0.249 | 0.025 | 1.002 | 0.036 | 0.506 | 0.019 |
| 2 | 1.053 | 0.007 | 0.844 | 0.010 | 1.127 | 0.022 | 0.557 | 0.016 | 1.479 | 0.130 | 0.293 | 0.027 | 1.045 | 0.027 | 0.517 | 0.022 |
| 3 | 1.093 | 0.011 | 0.874 | 0.008 | 1.205 | 0.039 | 0.606 | 0.021 | 1.791 | 0.117 | 0.358 | 0.028 | 1.021 | 0.046 | 0.514 | 0.027 |
| 4 | 1.138 | 0.010 | 0.911 | 0.007 | 1.305 | 0.032 | 0.658 | 0.012 | 2.446 | 0.253 | 0.486 | 0.035 | 1.090 | 0.040 | 0.550 | 0.028 |
| 5 | 1.186 | 0.012 | 0.947 | 0.008 | 1.405 | 0.035 | 0.713 | 0.008 | 3.100 | 0.276 | 0.622 | 0.047 | 1.164 | 0.067 | 0.591 | 0.042 |
| 6 | 1.207 | 0.012 | 0.968 | 0.005 | 1.488 | 0.026 | 0.754 | 0.012 | 3.690 | 0.166 | 0.731 | 0.032 | 1.298 | 0.055 | 0.657 | 0.028 |
| 7 | 1.221 | 0.014 | 0.982 | 0.004 | 1.563 | 0.033 | 0.783 | 0.020 | 4.171 | 0.193 | 0.816 | 0.038 | 1.380 | 0.062 | 0.691 | 0.024 |
| 8 | 1.234 | 0.010 | 0.989 | 0.003 | 1.607 | 0.013 | 0.804 | 0.013 | 4.366 | 0.172 | 0.864 | 0.019 | 1.462 | 0.052 | 0.731 | 0.025 |
| 9 | 1.238 | 0.018 | 0.994 | 0.001 | 1.657 | 0.022 | 0.838 | 0.015 | 4.547 | 0.248 | 0.894 | 0.017 | 1.521 | 0.080 | 0.768 | 0.037 |
| 10 | 1.242 | 0.014 | 0.996 | 0.002 | 1.679 | 0.056 | 0.843 | 0.021 | 4.653 | 0.263 | 0.920 | 0.009 | 1.589 | 0.051 | 0.798 | 0.024 |
| 11 | 1.257 | 0.016 | 0.997 | 0.001 | 1.740 | 0.054 | 0.863 | 0.018 | 4.480 | 0.247 | 0.926 | 0.018 | 1.669 | 0.077 | 0.828 | 0.036 |
| 12 | 1.251 | 0.014 | 0.998 | 0.001 | 1.749 | 0.047 | 0.856 | 0.018 | 4.677 | 0.197 | 0.945 | 0.015 | 1.746 | 0.079 | 0.854 | 0.028 |
| 13 | 1.241 | 0.007 | 0.998 | 0.001 | 1.738 | 0.045 | 0.871 | 0.019 | 4.791 | 0.153 | 0.939 | 0.015 | 1.735 | 0.049 | 0.869 | 0.023 |
| 14 | 1.251 | 0.017 | 0.999 | 0.001 | 1.749 | 0.041 | 0.869 | 0.016 | 4.745 | 0.312 | 0.952 | 0.014 | 1.802 | 0.054 | 0.896 | 0.024 |
| 15 | 1.249 | 0.019 | 0.999 | 0.001 | 1.732 | 0.026 | 0.878 | 0.013 | 4.769 | 0.287 | 0.952 | 0.014 | 1.756 | 0.078 | 0.890 | 0.034 |
| 16 | 1.243 | 0.011 | 0.998 | 0.000 | 1.738 | 0.040 | 0.873 | 0.007 | 4.845 | 0.173 | 0.953 | 0.005 | 1.820 | 0.052 | 0.915 | 0.024 |
| 17 | 1.249 | 0.014 | 0.999 | 0.001 | 1.743 | 0.035 | 0.868 | 0.009 | 4.780 | 0.217 | 0.955 | 0.010 | 1.833 | 0.057 | 0.912 | 0.018 |
| 18 | 1.242 | 0.012 | 0.998 | 0.001 | 1.757 | 0.052 | 0.877 | 0.008 | 4.839 | 0.211 | 0.947 | 0.015 | 1.841 | 0.056 | 0.919 | 0.023 |
| 19 | 1.247 | 0.019 | 0.999 | 0.001 | 1.748 | 0.043 | 0.870 | 0.018 | 4.814 | 0.308 | 0.955 | 0.009 | 1.856 | 0.032 | 0.924 | 0.020 |
| 20 | 1.249 | 0.021 | 1.000 | 0.000 | 1.787 | 0.043 | 0.879 | 0.011 | 4.810 | 0.309 | 0.957 | 0.014 | 1.888 | 0.072 | 0.928 | 0.020 |

Table 13: Referred to Fig: 11: focus on liberals

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| ß dom | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline (ß ethnic liberal = 0)** | | | | | | | | | | | | | | | | |
| 0 | 1.000 | 0.005 | 0.799 | 0.011 | 1.003 | 0.019 | 0.499 | 0.015 | 0.934 | 0.070 | 0.188 | 0.016 | 0.99 | 0.041 | 0.493 | 0.023 |
| 1 | 1.008 | 0.008 | 0.806 | 0.012 | 1.052 | 0.008 | 0.526 | 0.013 | 1.081 | 0.086 | 0.217 | 0.025 | 1.06 | 0.045 | 0.532 | 0.028 |
| 2 | 1.002 | 0.008 | 0.801 | 0.008 | 1.122 | 0.020 | 0.554 | 0.014 | 1.162 | 0.066 | 0.234 | 0.014 | 1.18 | 0.032 | 0.580 | 0.019 |
| 3 | 1.000 | 0.004 | 0.804 | 0.009 | 1.193 | 0.019 | 0.595 | 0.014 | 1.194 | 0.064 | 0.234 | 0.016 | 1.26 | 0.042 | 0.626 | 0.022 |
| 4 | 0.991 | 0.010 | 0.791 | 0.012 | 1.279 | 0.033 | 0.637 | 0.023 | 1.253 | 0.095 | 0.252 | 0.020 | 1.41 | 0.039 | 0.704 | 0.019 |
| 5 | 0.990 | 0.008 | 0.795 | 0.010 | 1.420 | 0.030 | 0.706 | 0.019 | 1.188 | 0.089 | 0.234 | 0.016 | 1.57 | 0.052 | 0.783 | 0.025 |
| 6 | 1.004 | 0.012 | 0.799 | 0.013 | 1.537 | 0.044 | 0.775 | 0.018 | 1.131 | 0.069 | 0.231 | 0.018 | 1.70 | 0.031 | 0.858 | 0.017 |
| 7 | 1.009 | 0.013 | 0.810 | 0.016 | 1.671 | 0.035 | 0.826 | 0.015 | 1.067 | 0.094 | 0.211 | 0.022 | 1.86 | 0.040 | 0.921 | 0.012 |
| 8 | 1.003 | 0.010 | 0.798 | 0.011 | 1.722 | 0.048 | 0.866 | 0.014 | 1.039 | 0.092 | 0.212 | 0.020 | 1.88 | 0.045 | 0.943 | 0.008 |
| 9 | 1.007 | 0.015 | 0.802 | 0.014 | 1.773 | 0.037 | 0.879 | 0.012 | 1.032 | 0.104 | 0.210 | 0.025 | 1.93 | 0.051 | 0.959 | 0.008 |
| 10 | 1.007 | 0.011 | 0.804 | 0.012 | 1.791 | 0.049 | 0.888 | 0.011 | 0.957 | 0.102 | 0.192 | 0.019 | 1.95 | 0.042 | 0.966 | 0.009 |
| 11 | 0.998 | 0.014 | 0.798 | 0.008 | 1.802 | 0.040 | 0.901 | 0.009 | 0.985 | 0.058 | 0.198 | 0.011 | 1.95 | 0.045 | 0.973 | 0.006 |
| 12 | 0.996 | 0.013 | 0.795 | 0.015 | 1.829 | 0.037 | 0.906 | 0.015 | 1.007 | 0.081 | 0.204 | 0.023 | 1.97 | 0.039 | 0.977 | 0.009 |
| 13 | 0.997 | 0.013 | 0.803 | 0.015 | 1.822 | 0.039 | 0.915 | 0.011 | 1.027 | 0.067 | 0.200 | 0.019 | 1.96 | 0.034 | 0.984 | 0.005 |
| 14 | 0.998 | 0.010 | 0.797 | 0.013 | 1.837 | 0.046 | 0.912 | 0.012 | 0.994 | 0.064 | 0.200 | 0.015 | 1.99 | 0.043 | 0.986 | 0.003 |
| 15 | 1.005 | 0.005 | 0.801 | 0.010 | 1.820 | 0.060 | 0.915 | 0.009 | 0.965 | 0.084 | 0.196 | 0.021 | 1.97 | 0.063 | 0.989 | 0.002 |
| 16 | 1.003 | 0.013 | 0.807 | 0.016 | 1.832 | 0.045 | 0.919 | 0.009 | 1.001 | 0.069 | 0.196 | 0.020 | 1.97 | 0.038 | 0.989 | 0.002 |
| 17 | 1.002 | 0.011 | 0.803 | 0.011 | 1.835 | 0.039 | 0.917 | 0.006 | 0.962 | 0.068 | 0.191 | 0.016 | 1.98 | 0.049 | 0.992 | 0.003 |
| 18 | 1.001 | 0.013 | 0.797 | 0.016 | 1.842 | 0.042 | 0.919 | 0.006 | 0.990 | 0.078 | 0.203 | 0.023 | 1.98 | 0.045 | 0.989 | 0.004 |
| 19 | 1.001 | 0.010 | 0.802 | 0.009 | 1.852 | 0.043 | 0.921 | 0.010 | 1.040 | 0.079 | 0.207 | 0.014 | 1.99 | 0.039 | 0.992 | 0.004 |
| 20 | 0.989 | 0.011 | 0.788 | 0.010 | 1.828 | 0.038 | 0.914 | 0.009 | 1.033 | 0.067 | 0.210 | 0.018 | 1.99 | 0.050 | 0.994 | 0.003 |
| **ß value liberal majority = ethnic** | | | | | | | | | | | | | | | | |
| 0 | 1.001 | 0.006 | 0.799 | 0.011 | 1.006 | 0.018 | 0.502 | 0.011 | 0.985 | 0.079 | 0.200 | 0.027 | 1.01 | 0.025 | 0.504 | 0.014 |
| 1 | 1.019 | 0.007 | 0.812 | 0.010 | 1.054 | 0.020 | 0.533 | 0.013 | 1.129 | 0.074 | 0.229 | 0.017 | 1.03 | 0.031 | 0.521 | 0.016 |
| 2 | 1.040 | 0.011 | 0.833 | 0.010 | 1.118 | 0.012 | 0.558 | 0.013 | 1.335 | 0.078 | 0.265 | 0.020 | 1.11 | 0.064 | 0.555 | 0.032 |
| 3 | 1.057 | 0.011 | 0.841 | 0.011 | 1.199 | 0.020 | 0.597 | 0.014 | 1.420 | 0.109 | 0.290 | 0.022 | 1.19 | 0.040 | 0.593 | 0.024 |
| 4 | 1.082 | 0.011 | 0.865 | 0.010 | 1.288 | 0.023 | 0.641 | 0.015 | 1.536 | 0.101 | 0.308 | 0.018 | 1.29 | 0.054 | 0.644 | 0.023 |
| 5 | 1.094 | 0.014 | 0.880 | 0.010 | 1.390 | 0.039 | 0.694 | 0.016 | 1.733 | 0.058 | 0.340 | 0.016 | 1.45 | 0.052 | 0.724 | 0.018 |
| 6 | 1.098 | 0.010 | 0.878 | 0.009 | 1.497 | 0.046 | 0.753 | 0.013 | 1.787 | 0.211 | 0.357 | 0.038 | 1.55 | 0.064 | 0.779 | 0.024 |
| 7 | 1.102 | 0.014 | 0.879 | 0.010 | 1.623 | 0.045 | 0.817 | 0.011 | 2.037 | 0.193 | 0.413 | 0.037 | 1.66 | 0.065 | 0.838 | 0.020 |
| 8 | 1.102 | 0.011 | 0.880 | 0.009 | 1.707 | 0.031 | 0.860 | 0.012 | 2.266 | 0.115 | 0.456 | 0.028 | 1.74 | 0.051 | 0.873 | 0.022 |
| 9 | 1.104 | 0.014 | 0.880 | 0.012 | 1.786 | 0.050 | 0.891 | 0.007 | 2.258 | 0.181 | 0.458 | 0.039 | 1.76 | 0.051 | 0.880 | 0.011 |
| 10 | 1.106 | 0.010 | 0.882 | 0.004 | 1.830 | 0.039 | 0.913 | 0.014 | 2.295 | 0.159 | 0.464 | 0.021 | 1.79 | 0.047 | 0.894 | 0.013 |
| 11 | 1.106 | 0.017 | 0.884 | 0.010 | 1.873 | 0.047 | 0.936 | 0.009 | 2.342 | 0.242 | 0.469 | 0.047 | 1.80 | 0.035 | 0.901 | 0.016 |
| 12 | 1.115 | 0.011 | 0.887 | 0.009 | 1.860 | 0.041 | 0.938 | 0.007 | 2.467 | 0.118 | 0.503 | 0.026 | 1.81 | 0.037 | 0.915 | 0.010 |
| 13 | 1.112 | 0.014 | 0.888 | 0.007 | 1.881 | 0.033 | 0.941 | 0.008 | 2.542 | 0.099 | 0.512 | 0.030 | 1.82 | 0.047 | 0.910 | 0.014 |
| 14 | 1.110 | 0.008 | 0.894 | 0.008 | 1.924 | 0.045 | 0.955 | 0.009 | 2.670 | 0.147 | 0.520 | 0.029 | 1.85 | 0.053 | 0.920 | 0.014 |
| 15 | 1.112 | 0.012 | 0.893 | 0.008 | 1.892 | 0.061 | 0.950 | 0.011 | 2.597 | 0.164 | 0.511 | 0.028 | 1.82 | 0.051 | 0.915 | 0.011 |
| 16 | 1.117 | 0.008 | 0.895 | 0.007 | 1.928 | 0.054 | 0.956 | 0.010 | 2.607 | 0.147 | 0.517 | 0.028 | 1.86 | 0.073 | 0.921 | 0.014 |
| 17 | 1.122 | 0.011 | 0.900 | 0.007 | 1.899 | 0.032 | 0.960 | 0.007 | 2.659 | 0.129 | 0.525 | 0.028 | 1.82 | 0.034 | 0.920 | 0.013 |
| 18 | 1.118 | 0.006 | 0.896 | 0.008 | 1.931 | 0.037 | 0.962 | 0.009 | 2.682 | 0.139 | 0.533 | 0.019 | 1.84 | 0.029 | 0.918 | 0.008 |
| 19 | 1.124 | 0.009 | 0.901 | 0.007 | 1.911 | 0.053 | 0.962 | 0.004 | 2.665 | 0.161 | 0.527 | 0.032 | 1.82 | 0.055 | 0.917 | 0.010 |
| 20 | 1.123 | 0.013 | 0.895 | 0.009 | 1.925 | 0.016 | 0.967 | 0.005 | 2.610 | 0.113 | 0.530 | 0.029 | 1.84 | 0.039 | 0.925 | 0.012 |
| **ß value liberal minority = ethnic** | | | | | | | | | | | | | | | | |
| 0 | 0.998 | 0.008 | 0.796 | 0.008 | 0.988 | 0.026 | 0.494 | 0.023 | 0.999 | 0.065 | 0.202 | 0.016 | 1.00 | 0.032 | 0.501 | 0.024 |
| 1 | 1.005 | 0.007 | 0.801 | 0.016 | 1.045 | 0.020 | 0.517 | 0.018 | 1.219 | 0.053 | 0.247 | 0.011 | 1.08 | 0.040 | 0.535 | 0.027 |
| 2 | 1.008 | 0.012 | 0.808 | 0.009 | 1.112 | 0.013 | 0.562 | 0.012 | 1.410 | 0.111 | 0.279 | 0.026 | 1.19 | 0.048 | 0.603 | 0.027 |
| 3 | 1.007 | 0.010 | 0.806 | 0.011 | 1.185 | 0.028 | 0.589 | 0.014 | 1.726 | 0.060 | 0.346 | 0.021 | 1.32 | 0.039 | 0.658 | 0.025 |
| 4 | 1.021 | 0.012 | 0.817 | 0.015 | 1.284 | 0.023 | 0.636 | 0.015 | 2.101 | 0.170 | 0.419 | 0.031 | 1.44 | 0.041 | 0.714 | 0.015 |
| 5 | 1.030 | 0.015 | 0.823 | 0.013 | 1.393 | 0.025 | 0.686 | 0.009 | 2.307 | 0.089 | 0.464 | 0.023 | 1.55 | 0.039 | 0.762 | 0.028 |
| 6 | 1.049 | 0.014 | 0.841 | 0.008 | 1.495 | 0.028 | 0.738 | 0.010 | 2.488 | 0.144 | 0.493 | 0.032 | 1.62 | 0.048 | 0.800 | 0.023 |
| 7 | 1.063 | 0.013 | 0.855 | 0.010 | 1.560 | 0.044 | 0.778 | 0.014 | 2.749 | 0.162 | 0.537 | 0.019 | 1.63 | 0.060 | 0.814 | 0.023 |
| 8 | 1.082 | 0.008 | 0.867 | 0.006 | 1.612 | 0.037 | 0.805 | 0.008 | 2.856 | 0.066 | 0.566 | 0.023 | 1.66 | 0.039 | 0.832 | 0.019 |
| 9 | 1.088 | 0.013 | 0.874 | 0.007 | 1.691 | 0.041 | 0.836 | 0.010 | 2.976 | 0.121 | 0.586 | 0.022 | 1.73 | 0.045 | 0.857 | 0.022 |
| 10 | 1.101 | 0.013 | 0.882 | 0.006 | 1.707 | 0.042 | 0.849 | 0.016 | 3.009 | 0.189 | 0.595 | 0.030 | 1.74 | 0.066 | 0.865 | 0.025 |
| 11 | 1.109 | 0.010 | 0.879 | 0.013 | 1.730 | 0.046 | 0.871 | 0.018 | 2.949 | 0.165 | 0.609 | 0.017 | 1.78 | 0.061 | 0.898 | 0.021 |
| 12 | 1.114 | 0.009 | 0.889 | 0.015 | 1.710 | 0.046 | 0.872 | 0.013 | 3.116 | 0.195 | 0.629 | 0.021 | 1.79 | 0.053 | 0.913 | 0.017 |
| 13 | 1.106 | 0.012 | 0.889 | 0.009 | 1.760 | 0.026 | 0.878 | 0.016 | 3.127 | 0.163 | 0.613 | 0.030 | 1.85 | 0.053 | 0.922 | 0.025 |
| 14 | 1.110 | 0.011 | 0.886 | 0.011 | 1.755 | 0.043 | 0.882 | 0.012 | 3.042 | 0.232 | 0.611 | 0.038 | 1.87 | 0.059 | 0.942 | 0.018 |
| 15 | 1.107 | 0.014 | 0.885 | 0.009 | 1.800 | 0.032 | 0.887 | 0.011 | 2.996 | 0.198 | 0.598 | 0.022 | 1.90 | 0.037 | 0.935 | 0.022 |
| 16 | 1.110 | 0.009 | 0.892 | 0.008 | 1.782 | 0.038 | 0.886 | 0.007 | 3.118 | 0.160 | 0.613 | 0.024 | 1.93 | 0.060 | 0.958 | 0.017 |
| 17 | 1.106 | 0.007 | 0.885 | 0.012 | 1.759 | 0.037 | 0.883 | 0.008 | 2.998 | 0.163 | 0.599 | 0.018 | 1.91 | 0.031 | 0.958 | 0.011 |
| 18 | 1.102 | 0.016 | 0.886 | 0.011 | 1.778 | 0.038 | 0.889 | 0.010 | 3.055 | 0.112 | 0.598 | 0.018 | 1.94 | 0.058 | 0.969 | 0.011 |
| 19 | 1.110 | 0.018 | 0.889 | 0.012 | 1.767 | 0.038 | 0.887 | 0.015 | 3.066 | 0.195 | 0.609 | 0.034 | 1.93 | 0.051 | 0.967 | 0.014 |
| 20 | 1.114 | 0.019 | 0.891 | 0.016 | 1.766 | 0.047 | 0.897 | 0.009 | 3.144 | 0.245 | 0.625 | 0.032 | 1.92 | 0.056 | 0.974 | 0.009 |

Table 14: Referred to Fig: 12, 50% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 2.02 | 0.039 | 0.991 | 0.002 | 1.228 | 0.021 | 0.860 | 0.016 | 1.95 | 0.036 | 0.991 | 0.002 | 1.416 | 0.021 | 0.992 | 0.002 |
| 20 | 1.97 | 0.027 | 0.991 | 0.004 | 1.397 | 0.042 | 0.903 | 0.017 | 2.00 | 0.026 | 0.993 | 0.003 | 1.533 | 0.025 | 0.991 | 0.003 |
| 30 | 2.00 | 0.043 | 0.990 | 0.004 | 1.547 | 0.032 | 0.936 | 0.013 | 1.97 | 0.041 | 0.994 | 0.002 | 1.636 | 0.024 | 0.989 | 0.004 |
| 40 | 1.97 | 0.059 | 0.992 | 0.003 | 1.736 | 0.025 | 0.958 | 0.016 | 2.00 | 0.056 | 0.994 | 0.002 | 1.787 | 0.027 | 0.985 | 0.004 |
| 50 | 2.00 | 0.052 | 0.992 | 0.004 | 1.952 | 0.048 | 0.973 | 0.011 | 1.97 | 0.054 | 0.992 | 0.002 | 1.946 | 0.048 | 0.970 | 0.005 |
| 60 | 2.00 | 0.048 | 0.994 | 0.002 | 2.196 | 0.043 | 0.980 | 0.004 | 1.97 | 0.045 | 0.991 | 0.004 | 2.124 | 0.058 | 0.948 | 0.019 |
| 70 | 1.97 | 0.036 | 0.992 | 0.004 | 2.454 | 0.081 | 0.980 | 0.007 | 1.98 | 0.048 | 0.981 | 0.008 | 2.286 | 0.099 | 0.912 | 0.022 |
| 80 | 1.97 | 0.046 | 0.991 | 0.005 | 2.792 | 0.049 | 0.980 | 0.008 | 1.95 | 0.045 | 0.968 | 0.013 | 2.399 | 0.095 | 0.842 | 0.038 |
| 90 | 2.02 | 0.035 | 0.989 | 0.003 | 3.312 | 0.100 | 0.976 | 0.007 | 1.84 | 0.069 | 0.936 | 0.021 | 2.324 | 0.222 | 0.686 | 0.066 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.95 | 0.049 | 0.980 | 0.005 | 0.942 | 0.025 | 0.657 | 0.022 | 1.83 | 0.048 | 0.910 | 0.011 | 1.292 | 0.023 | 0.902 | 0.012 |
| 20 | 1.92 | 0.061 | 0.967 | 0.007 | 1.108 | 0.030 | 0.722 | 0.021 | 1.77 | 0.078 | 0.872 | 0.010 | 1.285 | 0.032 | 0.837 | 0.017 |
| 30 | 1.89 | 0.049 | 0.959 | 0.007 | 1.250 | 0.038 | 0.750 | 0.028 | 1.71 | 0.037 | 0.845 | 0.012 | 1.303 | 0.020 | 0.781 | 0.013 |
| 40 | 1.90 | 0.045 | 0.953 | 0.007 | 1.399 | 0.051 | 0.768 | 0.019 | 1.65 | 0.038 | 0.821 | 0.013 | 1.292 | 0.030 | 0.710 | 0.020 |
| 50 | 1.92 | 0.042 | 0.953 | 0.007 | 1.581 | 0.042 | 0.795 | 0.019 | 1.60 | 0.023 | 0.804 | 0.010 | 1.296 | 0.044 | 0.651 | 0.018 |
| 60 | 1.92 | 0.031 | 0.963 | 0.008 | 1.795 | 0.034 | 0.814 | 0.016 | 1.57 | 0.042 | 0.782 | 0.016 | 1.269 | 0.042 | 0.575 | 0.020 |
| 70 | 1.91 | 0.043 | 0.964 | 0.006 | 2.032 | 0.073 | 0.809 | 0.018 | 1.51 | 0.024 | 0.748 | 0.018 | 1.200 | 0.064 | 0.478 | 0.030 |
| 80 | 1.97 | 0.032 | 0.973 | 0.006 | 2.369 | 0.053 | 0.820 | 0.014 | 1.40 | 0.042 | 0.709 | 0.020 | 1.009 | 0.097 | 0.349 | 0.034 |
| 90 | 1.96 | 0.037 | 0.980 | 0.005 | 2.764 | 0.111 | 0.815 | 0.021 | 1.29 | 0.089 | 0.646 | 0.041 | 0.702 | 0.143 | 0.207 | 0.044 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.89 | 0.072 | 0.942 | 0.013 | 1.088 | 0.019 | 0.768 | 0.015 | 1.95 | 0.056 | 0.974 | 0.003 | 1.342 | 0.020 | 0.947 | 0.006 |
| 20 | 1.80 | 0.053 | 0.908 | 0.009 | 1.108 | 0.018 | 0.715 | 0.017 | 1.96 | 0.051 | 0.970 | 0.004 | 1.421 | 0.019 | 0.916 | 0.009 |
| 30 | 1.71 | 0.038 | 0.871 | 0.013 | 1.130 | 0.034 | 0.674 | 0.024 | 1.97 | 0.030 | 0.967 | 0.005 | 1.483 | 0.033 | 0.885 | 0.013 |
| 40 | 1.67 | 0.036 | 0.828 | 0.014 | 1.197 | 0.040 | 0.652 | 0.018 | 1.91 | 0.033 | 0.963 | 0.006 | 1.542 | 0.032 | 0.840 | 0.012 |
| 50 | 1.59 | 0.039 | 0.800 | 0.007 | 1.296 | 0.053 | 0.645 | 0.018 | 1.91 | 0.043 | 0.951 | 0.012 | 1.578 | 0.028 | 0.787 | 0.024 |
| 60 | 1.56 | 0.029 | 0.779 | 0.014 | 1.394 | 0.044 | 0.633 | 0.016 | 1.88 | 0.039 | 0.939 | 0.008 | 1.599 | 0.057 | 0.727 | 0.019 |
| 70 | 1.50 | 0.052 | 0.752 | 0.021 | 1.564 | 0.046 | 0.627 | 0.023 | 1.86 | 0.070 | 0.923 | 0.015 | 1.565 | 0.063 | 0.627 | 0.023 |
| 80 | 1.46 | 0.044 | 0.731 | 0.017 | 1.777 | 0.041 | 0.618 | 0.026 | 1.79 | 0.044 | 0.895 | 0.013 | 1.455 | 0.078 | 0.506 | 0.028 |
| 90 | 1.40 | 0.043 | 0.704 | 0.018 | 1.956 | 0.067 | 0.593 | 0.025 | 1.71 | 0.064 | 0.851 | 0.030 | 0.995 | 0.098 | 0.301 | 0.022 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.682 | 0.035 | 0.827 | 0.012 | 2.94 | 0.122 | 0.880 | 0.012 | 0.364 | 0.047 | 0.185 | 0.022 | 3.24 | 0.152 | 0.970 | 0.011 |
| 20 | 1.426 | 0.035 | 0.719 | 0.019 | 2.60 | 0.064 | 0.920 | 0.013 | 0.562 | 0.037 | 0.279 | 0.017 | 2.76 | 0.087 | 0.976 | 0.005 |
| 30 | 1.272 | 0.037 | 0.630 | 0.018 | 2.40 | 0.050 | 0.950 | 0.009 | 0.746 | 0.042 | 0.377 | 0.023 | 2.47 | 0.058 | 0.977 | 0.007 |
| 40 | 1.125 | 0.035 | 0.567 | 0.022 | 2.16 | 0.059 | 0.967 | 0.010 | 0.904 | 0.032 | 0.448 | 0.017 | 2.19 | 0.053 | 0.982 | 0.005 |
| 50 | 1.005 | 0.013 | 0.499 | 0.015 | 1.95 | 0.043 | 0.979 | 0.007 | 1.018 | 0.021 | 0.513 | 0.016 | 1.95 | 0.047 | 0.977 | 0.003 |
| 60 | 0.914 | 0.032 | 0.455 | 0.025 | 1.78 | 0.026 | 0.984 | 0.003 | 1.111 | 0.030 | 0.559 | 0.022 | 1.76 | 0.030 | 0.974 | 0.008 |
| 70 | 0.846 | 0.026 | 0.426 | 0.017 | 1.64 | 0.038 | 0.983 | 0.003 | 1.172 | 0.024 | 0.582 | 0.015 | 1.62 | 0.038 | 0.973 | 0.005 |
| 80 | 0.763 | 0.028 | 0.384 | 0.015 | 1.51 | 0.019 | 0.982 | 0.005 | 1.237 | 0.017 | 0.613 | 0.014 | 1.50 | 0.021 | 0.973 | 0.006 |
| 90 | 0.730 | 0.045 | 0.358 | 0.025 | 1.39 | 0.025 | 0.981 | 0.004 | 1.285 | 0.020 | 0.654 | 0.012 | 1.39 | 0.021 | 0.977 | 0.005 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.443 | 0.038 | 0.726 | 0.017 | 1.69 | 0.083 | 0.511 | 0.018 | 0.707 | 0.068 | 0.351 | 0.033 | 2.73 | 0.072 | 0.824 | 0.032 |
| 20 | 1.224 | 0.042 | 0.619 | 0.035 | 1.52 | 0.046 | 0.531 | 0.016 | 1.011 | 0.062 | 0.500 | 0.041 | 2.23 | 0.123 | 0.776 | 0.041 |
| 30 | 1.111 | 0.027 | 0.563 | 0.017 | 1.42 | 0.062 | 0.569 | 0.017 | 1.148 | 0.037 | 0.566 | 0.023 | 1.95 | 0.054 | 0.781 | 0.014 |
| 40 | 1.036 | 0.036 | 0.521 | 0.022 | 1.32 | 0.024 | 0.597 | 0.016 | 1.260 | 0.049 | 0.627 | 0.027 | 1.75 | 0.031 | 0.786 | 0.017 |
| 50 | 0.974 | 0.034 | 0.485 | 0.016 | 1.30 | 0.034 | 0.645 | 0.013 | 1.284 | 0.018 | 0.645 | 0.020 | 1.62 | 0.039 | 0.804 | 0.019 |
| 60 | 0.918 | 0.021 | 0.461 | 0.013 | 1.24 | 0.027 | 0.677 | 0.011 | 1.350 | 0.029 | 0.672 | 0.016 | 1.54 | 0.025 | 0.841 | 0.009 |
| 70 | 0.911 | 0.031 | 0.461 | 0.018 | 1.18 | 0.024 | 0.711 | 0.019 | 1.399 | 0.032 | 0.691 | 0.011 | 1.45 | 0.021 | 0.870 | 0.010 |
| 80 | 0.879 | 0.018 | 0.434 | 0.009 | 1.14 | 0.013 | 0.743 | 0.008 | 1.415 | 0.027 | 0.715 | 0.011 | 1.39 | 0.017 | 0.910 | 0.005 |
| 90 | 0.881 | 0.028 | 0.440 | 0.011 | 1.11 | 0.027 | 0.783 | 0.013 | 1.434 | 0.038 | 0.717 | 0.011 | 1.35 | 0.033 | 0.951 | 0.006 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.799 | 0.058 | 0.897 | 0.010 | 2.67 | 0.113 | 0.786 | 0.015 | 0.809 | 0.059 | 0.406 | 0.039 | 1.51 | 0.136 | 0.444 | 0.043 |
| 20 | 1.624 | 0.039 | 0.819 | 0.012 | 2.19 | 0.058 | 0.779 | 0.018 | 0.810 | 0.049 | 0.401 | 0.025 | 1.55 | 0.106 | 0.551 | 0.036 |
| 30 | 1.509 | 0.043 | 0.768 | 0.024 | 1.92 | 0.056 | 0.775 | 0.014 | 0.882 | 0.061 | 0.433 | 0.032 | 1.44 | 0.071 | 0.582 | 0.032 |
| 40 | 1.400 | 0.038 | 0.693 | 0.015 | 1.74 | 0.041 | 0.794 | 0.012 | 0.920 | 0.037 | 0.465 | 0.016 | 1.35 | 0.026 | 0.615 | 0.015 |
| 50 | 1.299 | 0.047 | 0.653 | 0.026 | 1.62 | 0.049 | 0.812 | 0.019 | 0.958 | 0.041 | 0.477 | 0.027 | 1.26 | 0.024 | 0.631 | 0.014 |
| 60 | 1.207 | 0.030 | 0.603 | 0.017 | 1.49 | 0.030 | 0.814 | 0.014 | 1.015 | 0.027 | 0.509 | 0.017 | 1.22 | 0.022 | 0.666 | 0.016 |
| 70 | 1.116 | 0.031 | 0.560 | 0.015 | 1.40 | 0.029 | 0.838 | 0.012 | 1.065 | 0.023 | 0.530 | 0.022 | 1.17 | 0.027 | 0.699 | 0.012 |
| 80 | 1.020 | 0.030 | 0.510 | 0.020 | 1.31 | 0.027 | 0.856 | 0.010 | 1.087 | 0.028 | 0.543 | 0.020 | 1.13 | 0.023 | 0.737 | 0.007 |
| 90 | 0.970 | 0.021 | 0.487 | 0.018 | 1.24 | 0.021 | 0.865 | 0.008 | 1.112 | 0.022 | 0.554 | 0.014 | 1.11 | 0.014 | 0.771 | 0.013 |

Table 15: Referred to Fig: 12, 60% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.66 | 0.021 | 0.994 | 0.002 | 1.315 | 0.026 | 0.867 | 0.014 | 2.46 | 0.048 | 0.986 | 0.002 | 1.499 | 0.021 | 0.987 | 0.003 |
| 20 | 1.64 | 0.018 | 0.992 | 0.003 | 1.430 | 0.040 | 0.884 | 0.023 | 2.50 | 0.052 | 0.988 | 0.004 | 1.599 | 0.041 | 0.988 | 0.004 |
| 30 | 1.66 | 0.027 | 0.992 | 0.002 | 1.592 | 0.034 | 0.921 | 0.015 | 2.46 | 0.054 | 0.991 | 0.005 | 1.708 | 0.037 | 0.988 | 0.007 |
| 40 | 1.66 | 0.029 | 0.993 | 0.002 | 1.722 | 0.045 | 0.928 | 0.014 | 2.48 | 0.061 | 0.993 | 0.002 | 1.832 | 0.037 | 0.988 | 0.002 |
| 50 | 1.67 | 0.023 | 0.994 | 0.002 | 1.909 | 0.035 | 0.954 | 0.007 | 2.44 | 0.056 | 0.991 | 0.003 | 1.961 | 0.039 | 0.979 | 0.008 |
| 60 | 1.66 | 0.031 | 0.992 | 0.002 | 2.118 | 0.047 | 0.964 | 0.009 | 2.45 | 0.066 | 0.987 | 0.003 | 2.124 | 0.069 | 0.967 | 0.009 |
| 70 | 1.67 | 0.027 | 0.995 | 0.002 | 2.315 | 0.060 | 0.968 | 0.007 | 2.44 | 0.055 | 0.982 | 0.008 | 2.278 | 0.085 | 0.953 | 0.016 |
| 80 | 1.65 | 0.032 | 0.993 | 0.003 | 2.561 | 0.054 | 0.973 | 0.007 | 2.44 | 0.074 | 0.968 | 0.015 | 2.422 | 0.093 | 0.920 | 0.024 |
| 90 | 1.65 | 0.033 | 0.993 | 0.001 | 2.877 | 0.117 | 0.973 | 0.004 | 2.33 | 0.092 | 0.923 | 0.015 | 2.320 | 0.187 | 0.786 | 0.073 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.66 | 0.039 | 0.990 | 0.002 | 0.945 | 0.033 | 0.625 | 0.026 | 2.26 | 0.080 | 0.912 | 0.010 | 1.370 | 0.030 | 0.907 | 0.012 |
| 20 | 1.61 | 0.026 | 0.977 | 0.003 | 1.087 | 0.032 | 0.671 | 0.015 | 2.18 | 0.054 | 0.861 | 0.010 | 1.366 | 0.028 | 0.843 | 0.012 |
| 30 | 1.61 | 0.032 | 0.971 | 0.006 | 1.214 | 0.030 | 0.700 | 0.019 | 2.06 | 0.064 | 0.820 | 0.006 | 1.341 | 0.040 | 0.772 | 0.014 |
| 40 | 1.61 | 0.024 | 0.967 | 0.005 | 1.379 | 0.023 | 0.741 | 0.012 | 1.96 | 0.058 | 0.782 | 0.016 | 1.298 | 0.039 | 0.698 | 0.023 |
| 50 | 1.60 | 0.021 | 0.964 | 0.003 | 1.470 | 0.021 | 0.746 | 0.013 | 1.91 | 0.056 | 0.757 | 0.015 | 1.250 | 0.039 | 0.634 | 0.021 |
| 60 | 1.62 | 0.033 | 0.963 | 0.005 | 1.632 | 0.046 | 0.759 | 0.018 | 1.79 | 0.048 | 0.722 | 0.018 | 1.190 | 0.049 | 0.554 | 0.027 |
| 70 | 1.63 | 0.037 | 0.970 | 0.006 | 1.861 | 0.052 | 0.779 | 0.012 | 1.70 | 0.059 | 0.683 | 0.015 | 1.078 | 0.055 | 0.452 | 0.018 |
| 80 | 1.63 | 0.031 | 0.977 | 0.005 | 2.064 | 0.071 | 0.788 | 0.024 | 1.59 | 0.059 | 0.637 | 0.027 | 0.916 | 0.112 | 0.350 | 0.042 |
| 90 | 1.64 | 0.029 | 0.985 | 0.004 | 2.275 | 0.067 | 0.771 | 0.021 | 1.40 | 0.106 | 0.562 | 0.051 | 0.594 | 0.100 | 0.202 | 0.035 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.60 | 0.028 | 0.963 | 0.007 | 1.188 | 0.024 | 0.777 | 0.015 | 2.43 | 0.070 | 0.966 | 0.004 | 1.449 | 0.017 | 0.947 | 0.007 |
| 20 | 1.54 | 0.035 | 0.929 | 0.007 | 1.181 | 0.033 | 0.727 | 0.022 | 2.42 | 0.078 | 0.960 | 0.008 | 1.491 | 0.031 | 0.918 | 0.007 |
| 30 | 1.51 | 0.016 | 0.909 | 0.010 | 1.232 | 0.025 | 0.706 | 0.014 | 2.43 | 0.070 | 0.961 | 0.010 | 1.577 | 0.034 | 0.904 | 0.013 |
| 40 | 1.48 | 0.029 | 0.877 | 0.016 | 1.288 | 0.045 | 0.697 | 0.022 | 2.35 | 0.080 | 0.955 | 0.007 | 1.595 | 0.041 | 0.864 | 0.015 |
| 50 | 1.41 | 0.026 | 0.856 | 0.015 | 1.331 | 0.046 | 0.675 | 0.016 | 2.41 | 0.092 | 0.947 | 0.010 | 1.657 | 0.035 | 0.841 | 0.019 |
| 60 | 1.38 | 0.023 | 0.828 | 0.013 | 1.431 | 0.024 | 0.661 | 0.023 | 2.34 | 0.054 | 0.931 | 0.011 | 1.685 | 0.046 | 0.778 | 0.021 |
| 70 | 1.35 | 0.027 | 0.811 | 0.011 | 1.537 | 0.024 | 0.653 | 0.014 | 2.27 | 0.092 | 0.911 | 0.017 | 1.647 | 0.051 | 0.700 | 0.024 |
| 80 | 1.31 | 0.013 | 0.788 | 0.011 | 1.685 | 0.051 | 0.638 | 0.013 | 2.16 | 0.083 | 0.859 | 0.014 | 1.476 | 0.141 | 0.559 | 0.054 |
| 90 | 1.27 | 0.014 | 0.761 | 0.013 | 1.818 | 0.066 | 0.613 | 0.018 | 1.95 | 0.071 | 0.776 | 0.027 | 1.059 | 0.160 | 0.357 | 0.051 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.457 | 0.024 | 0.873 | 0.016 | 2.58 | 0.054 | 0.879 | 0.013 | 0.316 | 0.062 | 0.127 | 0.025 | 2.86 | 0.060 | 0.976 | 0.008 |
| 20 | 1.322 | 0.018 | 0.798 | 0.019 | 2.37 | 0.092 | 0.902 | 0.013 | 0.546 | 0.059 | 0.216 | 0.024 | 2.56 | 0.092 | 0.975 | 0.008 |
| 30 | 1.188 | 0.032 | 0.710 | 0.014 | 2.22 | 0.059 | 0.936 | 0.009 | 0.731 | 0.040 | 0.294 | 0.016 | 2.33 | 0.050 | 0.979 | 0.008 |
| 40 | 1.105 | 0.019 | 0.662 | 0.011 | 2.05 | 0.045 | 0.942 | 0.012 | 0.850 | 0.038 | 0.341 | 0.021 | 2.14 | 0.056 | 0.984 | 0.004 |
| 50 | 1.013 | 0.027 | 0.601 | 0.013 | 1.93 | 0.037 | 0.964 | 0.005 | 1.010 | 0.032 | 0.410 | 0.013 | 1.97 | 0.041 | 0.984 | 0.006 |
| 60 | 0.936 | 0.019 | 0.559 | 0.017 | 1.79 | 0.045 | 0.974 | 0.006 | 1.120 | 0.041 | 0.451 | 0.014 | 1.81 | 0.033 | 0.983 | 0.004 |
| 70 | 0.872 | 0.029 | 0.521 | 0.023 | 1.68 | 0.039 | 0.974 | 0.006 | 1.216 | 0.026 | 0.490 | 0.017 | 1.70 | 0.032 | 0.985 | 0.005 |
| 80 | 0.803 | 0.023 | 0.485 | 0.018 | 1.58 | 0.025 | 0.979 | 0.004 | 1.293 | 0.032 | 0.512 | 0.011 | 1.59 | 0.022 | 0.987 | 0.003 |
| 90 | 0.766 | 0.019 | 0.462 | 0.015 | 1.48 | 0.029 | 0.978 | 0.002 | 1.374 | 0.023 | 0.546 | 0.014 | 1.49 | 0.032 | 0.985 | 0.004 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.347 | 0.042 | 0.802 | 0.021 | 1.55 | 0.035 | 0.525 | 0.022 | 0.728 | 0.141 | 0.295 | 0.060 | 2.61 | 0.099 | 0.882 | 0.033 |
| 20 | 1.175 | 0.021 | 0.711 | 0.014 | 1.42 | 0.035 | 0.544 | 0.021 | 1.038 | 0.075 | 0.410 | 0.031 | 2.22 | 0.061 | 0.849 | 0.024 |
| 30 | 1.074 | 0.020 | 0.647 | 0.017 | 1.33 | 0.027 | 0.562 | 0.017 | 1.220 | 0.063 | 0.485 | 0.025 | 1.94 | 0.050 | 0.823 | 0.023 |
| 40 | 1.003 | 0.022 | 0.603 | 0.014 | 1.29 | 0.028 | 0.598 | 0.010 | 1.355 | 0.021 | 0.540 | 0.014 | 1.78 | 0.041 | 0.823 | 0.017 |
| 50 | 0.969 | 0.022 | 0.585 | 0.015 | 1.24 | 0.033 | 0.610 | 0.015 | 1.429 | 0.065 | 0.566 | 0.027 | 1.67 | 0.038 | 0.822 | 0.010 |
| 60 | 0.936 | 0.028 | 0.558 | 0.017 | 1.20 | 0.011 | 0.643 | 0.006 | 1.497 | 0.036 | 0.605 | 0.018 | 1.59 | 0.026 | 0.850 | 0.011 |
| 70 | 0.911 | 0.019 | 0.544 | 0.010 | 1.18 | 0.019 | 0.687 | 0.012 | 1.548 | 0.026 | 0.624 | 0.019 | 1.52 | 0.024 | 0.880 | 0.011 |
| 80 | 0.879 | 0.027 | 0.527 | 0.016 | 1.17 | 0.029 | 0.722 | 0.015 | 1.558 | 0.036 | 0.625 | 0.012 | 1.47 | 0.026 | 0.910 | 0.006 |
| 90 | 0.894 | 0.025 | 0.536 | 0.020 | 1.12 | 0.023 | 0.742 | 0.014 | 1.616 | 0.028 | 0.646 | 0.012 | 1.44 | 0.017 | 0.951 | 0.005 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.535 | 0.033 | 0.923 | 0.006 | 2.32 | 0.053 | 0.802 | 0.009 | 0.871 | 0.134 | 0.347 | 0.056 | 1.46 | 0.105 | 0.504 | 0.035 |
| 20 | 1.432 | 0.039 | 0.862 | 0.016 | 2.02 | 0.072 | 0.778 | 0.015 | 0.841 | 0.091 | 0.334 | 0.036 | 1.45 | 0.081 | 0.556 | 0.038 |
| 30 | 1.342 | 0.026 | 0.810 | 0.019 | 1.84 | 0.049 | 0.784 | 0.010 | 0.884 | 0.072 | 0.350 | 0.028 | 1.48 | 0.077 | 0.631 | 0.031 |
| 40 | 1.284 | 0.029 | 0.762 | 0.012 | 1.73 | 0.044 | 0.794 | 0.016 | 0.938 | 0.060 | 0.381 | 0.019 | 1.37 | 0.043 | 0.629 | 0.020 |
| 50 | 1.214 | 0.032 | 0.735 | 0.019 | 1.61 | 0.023 | 0.792 | 0.016 | 0.985 | 0.046 | 0.388 | 0.020 | 1.33 | 0.041 | 0.653 | 0.018 |
| 60 | 1.137 | 0.020 | 0.684 | 0.015 | 1.50 | 0.047 | 0.807 | 0.008 | 1.035 | 0.029 | 0.413 | 0.017 | 1.25 | 0.026 | 0.675 | 0.012 |
| 70 | 1.086 | 0.023 | 0.650 | 0.022 | 1.41 | 0.032 | 0.813 | 0.013 | 1.097 | 0.035 | 0.440 | 0.018 | 1.21 | 0.022 | 0.696 | 0.010 |
| 80 | 1.011 | 0.018 | 0.610 | 0.020 | 1.33 | 0.023 | 0.824 | 0.014 | 1.130 | 0.023 | 0.448 | 0.013 | 1.17 | 0.019 | 0.726 | 0.013 |
| 90 | 0.959 | 0.022 | 0.577 | 0.023 | 1.26 | 0.021 | 0.836 | 0.015 | 1.146 | 0.036 | 0.457 | 0.011 | 1.14 | 0.016 | 0.756 | 0.012 |

Table 16: Referred to Fig: 12, 70% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.42 | 0.017 | 0.994 | 0.002 | 1.407 | 0.019 | 0.865 | 0.012 | 3.26 | 0.084 | 0.979 | 0.004 | 1.598 | 0.027 | 0.983 | 0.004 |
| 20 | 1.42 | 0.018 | 0.995 | 0.002 | 1.489 | 0.030 | 0.875 | 0.009 | 3.27 | 0.112 | 0.979 | 0.005 | 1.666 | 0.033 | 0.980 | 0.007 |
| 30 | 1.42 | 0.019 | 0.995 | 0.001 | 1.599 | 0.035 | 0.891 | 0.012 | 3.28 | 0.126 | 0.985 | 0.007 | 1.770 | 0.054 | 0.986 | 0.008 |
| 40 | 1.43 | 0.020 | 0.996 | 0.002 | 1.727 | 0.049 | 0.907 | 0.011 | 3.25 | 0.114 | 0.988 | 0.006 | 1.874 | 0.045 | 0.984 | 0.007 |
| 50 | 1.41 | 0.032 | 0.995 | 0.002 | 1.841 | 0.031 | 0.921 | 0.007 | 3.37 | 0.214 | 0.983 | 0.008 | 1.955 | 0.034 | 0.979 | 0.010 |
| 60 | 1.42 | 0.021 | 0.995 | 0.002 | 2.008 | 0.037 | 0.940 | 0.013 | 3.28 | 0.115 | 0.985 | 0.007 | 2.092 | 0.041 | 0.979 | 0.010 |
| 70 | 1.41 | 0.030 | 0.995 | 0.001 | 2.161 | 0.077 | 0.945 | 0.009 | 3.32 | 0.157 | 0.979 | 0.005 | 2.214 | 0.102 | 0.968 | 0.009 |
| 80 | 1.42 | 0.021 | 0.995 | 0.001 | 2.307 | 0.048 | 0.955 | 0.006 | 3.24 | 0.100 | 0.975 | 0.007 | 2.286 | 0.082 | 0.946 | 0.019 |
| 90 | 1.42 | 0.022 | 0.995 | 0.002 | 2.522 | 0.067 | 0.960 | 0.008 | 3.11 | 0.120 | 0.933 | 0.023 | 2.322 | 0.120 | 0.883 | 0.030 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.42 | 0.024 | 0.993 | 0.002 | 0.952 | 0.020 | 0.592 | 0.016 | 3.01 | 0.139 | 0.904 | 0.010 | 1.451 | 0.031 | 0.902 | 0.012 |
| 20 | 1.41 | 0.020 | 0.989 | 0.003 | 1.066 | 0.039 | 0.627 | 0.020 | 2.92 | 0.081 | 0.878 | 0.017 | 1.475 | 0.030 | 0.868 | 0.018 |
| 30 | 1.40 | 0.025 | 0.984 | 0.003 | 1.157 | 0.026 | 0.647 | 0.021 | 2.79 | 0.118 | 0.828 | 0.021 | 1.438 | 0.041 | 0.803 | 0.026 |
| 40 | 1.39 | 0.012 | 0.978 | 0.004 | 1.278 | 0.040 | 0.681 | 0.018 | 2.55 | 0.065 | 0.761 | 0.020 | 1.338 | 0.044 | 0.713 | 0.024 |
| 50 | 1.39 | 0.023 | 0.974 | 0.005 | 1.386 | 0.042 | 0.688 | 0.015 | 2.39 | 0.101 | 0.712 | 0.017 | 1.262 | 0.058 | 0.627 | 0.027 |
| 60 | 1.39 | 0.028 | 0.975 | 0.005 | 1.495 | 0.054 | 0.706 | 0.021 | 2.18 | 0.141 | 0.652 | 0.030 | 1.109 | 0.098 | 0.524 | 0.055 |
| 70 | 1.40 | 0.008 | 0.976 | 0.004 | 1.649 | 0.029 | 0.710 | 0.015 | 2.00 | 0.089 | 0.602 | 0.027 | 0.962 | 0.080 | 0.414 | 0.034 |
| 80 | 1.41 | 0.020 | 0.978 | 0.003 | 1.775 | 0.045 | 0.726 | 0.013 | 1.81 | 0.105 | 0.552 | 0.037 | 0.779 | 0.072 | 0.319 | 0.034 |
| 90 | 1.42 | 0.029 | 0.985 | 0.003 | 1.903 | 0.081 | 0.717 | 0.023 | 1.63 | 0.103 | 0.493 | 0.021 | 0.499 | 0.115 | 0.188 | 0.043 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.39 | 0.025 | 0.974 | 0.004 | 1.280 | 0.015 | 0.797 | 0.017 | 3.18 | 0.133 | 0.949 | 0.008 | 1.503 | 0.026 | 0.935 | 0.012 |
| 20 | 1.36 | 0.018 | 0.952 | 0.004 | 1.272 | 0.031 | 0.746 | 0.014 | 3.14 | 0.103 | 0.942 | 0.011 | 1.549 | 0.036 | 0.909 | 0.014 |
| 30 | 1.34 | 0.019 | 0.936 | 0.009 | 1.286 | 0.017 | 0.721 | 0.017 | 3.15 | 0.090 | 0.947 | 0.007 | 1.617 | 0.044 | 0.906 | 0.012 |
| 40 | 1.31 | 0.020 | 0.916 | 0.007 | 1.335 | 0.030 | 0.705 | 0.017 | 3.16 | 0.139 | 0.944 | 0.014 | 1.665 | 0.041 | 0.879 | 0.017 |
| 50 | 1.28 | 0.017 | 0.896 | 0.007 | 1.377 | 0.033 | 0.695 | 0.012 | 3.09 | 0.087 | 0.926 | 0.011 | 1.688 | 0.063 | 0.851 | 0.019 |
| 60 | 1.25 | 0.016 | 0.878 | 0.013 | 1.456 | 0.058 | 0.681 | 0.022 | 3.12 | 0.105 | 0.929 | 0.023 | 1.776 | 0.048 | 0.831 | 0.030 |
| 70 | 1.23 | 0.013 | 0.863 | 0.008 | 1.531 | 0.045 | 0.676 | 0.020 | 2.92 | 0.073 | 0.878 | 0.020 | 1.606 | 0.099 | 0.709 | 0.037 |
| 80 | 1.21 | 0.015 | 0.847 | 0.009 | 1.635 | 0.043 | 0.665 | 0.019 | 2.79 | 0.120 | 0.833 | 0.033 | 1.530 | 0.105 | 0.623 | 0.046 |
| 90 | 1.18 | 0.018 | 0.827 | 0.009 | 1.698 | 0.043 | 0.644 | 0.016 | 2.33 | 0.103 | 0.702 | 0.037 | 1.020 | 0.175 | 0.387 | 0.067 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.300 | 0.020 | 0.910 | 0.011 | 2.28 | 0.058 | 0.879 | 0.007 | 0.287 | 0.050 | 0.086 | 0.016 | 2.52 | 0.052 | 0.972 | 0.011 |
| 20 | 1.211 | 0.011 | 0.848 | 0.012 | 2.16 | 0.052 | 0.889 | 0.009 | 0.534 | 0.069 | 0.161 | 0.024 | 2.38 | 0.077 | 0.978 | 0.011 |
| 30 | 1.134 | 0.022 | 0.793 | 0.016 | 2.05 | 0.070 | 0.909 | 0.007 | 0.675 | 0.058 | 0.203 | 0.020 | 2.22 | 0.069 | 0.982 | 0.006 |
| 40 | 1.067 | 0.021 | 0.742 | 0.018 | 1.95 | 0.041 | 0.924 | 0.011 | 0.862 | 0.050 | 0.263 | 0.021 | 2.08 | 0.051 | 0.985 | 0.006 |
| 50 | 1.010 | 0.015 | 0.714 | 0.012 | 1.87 | 0.030 | 0.935 | 0.006 | 1.006 | 0.050 | 0.294 | 0.018 | 1.98 | 0.035 | 0.987 | 0.005 |
| 60 | 0.944 | 0.014 | 0.660 | 0.009 | 1.79 | 0.031 | 0.952 | 0.011 | 1.151 | 0.039 | 0.345 | 0.013 | 1.86 | 0.022 | 0.990 | 0.003 |
| 70 | 0.903 | 0.015 | 0.636 | 0.015 | 1.70 | 0.056 | 0.955 | 0.006 | 1.284 | 0.047 | 0.380 | 0.025 | 1.76 | 0.056 | 0.990 | 0.003 |
| 80 | 0.852 | 0.014 | 0.596 | 0.012 | 1.65 | 0.025 | 0.964 | 0.005 | 1.375 | 0.038 | 0.414 | 0.020 | 1.69 | 0.022 | 0.989 | 0.003 |
| 90 | 0.805 | 0.012 | 0.563 | 0.015 | 1.56 | 0.029 | 0.968 | 0.004 | 1.458 | 0.034 | 0.437 | 0.015 | 1.60 | 0.028 | 0.991 | 0.002 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.235 | 0.009 | 0.864 | 0.014 | 1.38 | 0.040 | 0.521 | 0.018 | 0.812 | 0.189 | 0.244 | 0.059 | 2.38 | 0.101 | 0.901 | 0.037 |
| 20 | 1.159 | 0.023 | 0.811 | 0.012 | 1.36 | 0.032 | 0.559 | 0.018 | 1.101 | 0.145 | 0.331 | 0.046 | 2.19 | 0.078 | 0.900 | 0.014 |
| 30 | 1.089 | 0.020 | 0.766 | 0.017 | 1.29 | 0.044 | 0.570 | 0.011 | 1.296 | 0.097 | 0.384 | 0.028 | 1.98 | 0.061 | 0.872 | 0.017 |
| 40 | 1.016 | 0.013 | 0.713 | 0.009 | 1.24 | 0.038 | 0.577 | 0.019 | 1.512 | 0.075 | 0.451 | 0.020 | 1.85 | 0.043 | 0.863 | 0.015 |
| 50 | 0.979 | 0.016 | 0.688 | 0.015 | 1.19 | 0.024 | 0.601 | 0.021 | 1.627 | 0.057 | 0.485 | 0.029 | 1.72 | 0.037 | 0.863 | 0.013 |
| 60 | 0.948 | 0.016 | 0.664 | 0.022 | 1.16 | 0.034 | 0.613 | 0.019 | 1.771 | 0.095 | 0.531 | 0.028 | 1.66 | 0.048 | 0.874 | 0.010 |
| 70 | 0.934 | 0.009 | 0.653 | 0.009 | 1.15 | 0.021 | 0.656 | 0.015 | 1.805 | 0.072 | 0.542 | 0.017 | 1.56 | 0.031 | 0.889 | 0.011 |
| 80 | 0.913 | 0.020 | 0.635 | 0.018 | 1.15 | 0.017 | 0.680 | 0.010 | 1.818 | 0.077 | 0.553 | 0.019 | 1.55 | 0.029 | 0.916 | 0.009 |
| 90 | 0.916 | 0.018 | 0.637 | 0.019 | 1.12 | 0.031 | 0.699 | 0.018 | 1.876 | 0.085 | 0.569 | 0.017 | 1.53 | 0.037 | 0.952 | 0.009 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.335 | 0.019 | 0.936 | 0.008 | 2.12 | 0.089 | 0.801 | 0.012 | 0.849 | 0.237 | 0.252 | 0.059 | 1.29 | 0.189 | 0.487 | 0.071 |
| 20 | 1.283 | 0.016 | 0.898 | 0.006 | 1.88 | 0.038 | 0.778 | 0.019 | 0.945 | 0.078 | 0.284 | 0.027 | 1.37 | 0.105 | 0.565 | 0.048 |
| 30 | 1.231 | 0.018 | 0.861 | 0.017 | 1.76 | 0.056 | 0.774 | 0.011 | 0.916 | 0.113 | 0.275 | 0.031 | 1.46 | 0.065 | 0.642 | 0.022 |
| 40 | 1.181 | 0.022 | 0.828 | 0.016 | 1.65 | 0.027 | 0.779 | 0.010 | 0.985 | 0.070 | 0.294 | 0.025 | 1.38 | 0.057 | 0.650 | 0.024 |
| 50 | 1.137 | 0.020 | 0.795 | 0.015 | 1.57 | 0.033 | 0.780 | 0.013 | 1.009 | 0.048 | 0.303 | 0.021 | 1.33 | 0.042 | 0.660 | 0.027 |
| 60 | 1.092 | 0.019 | 0.766 | 0.011 | 1.50 | 0.035 | 0.796 | 0.012 | 1.061 | 0.074 | 0.316 | 0.019 | 1.30 | 0.039 | 0.691 | 0.027 |
| 70 | 1.047 | 0.019 | 0.732 | 0.011 | 1.42 | 0.020 | 0.791 | 0.012 | 1.189 | 0.056 | 0.357 | 0.017 | 1.25 | 0.014 | 0.695 | 0.013 |
| 80 | 1.008 | 0.024 | 0.707 | 0.019 | 1.36 | 0.028 | 0.805 | 0.008 | 1.227 | 0.038 | 0.366 | 0.011 | 1.22 | 0.028 | 0.725 | 0.016 |
| 90 | 0.971 | 0.017 | 0.678 | 0.019 | 1.30 | 0.018 | 0.806 | 0.010 | 1.230 | 0.036 | 0.371 | 0.016 | 1.19 | 0.018 | 0.738 | 0.005 |

Table 17: Referred to Fig: 12, 80% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.25 | 0.019 | 0.998 | 0.001 | 1.514 | 0.041 | 0.877 | 0.014 | 4.93 | 0.278 | 0.975 | 0.008 | 1.689 | 0.022 | 0.978 | 0.009 |
| 20 | 1.25 | 0.011 | 0.998 | 0.001 | 1.558 | 0.038 | 0.870 | 0.015 | 4.91 | 0.180 | 0.976 | 0.007 | 1.753 | 0.032 | 0.979 | 0.007 |
| 30 | 1.25 | 0.012 | 0.996 | 0.002 | 1.667 | 0.035 | 0.878 | 0.012 | 4.86 | 0.184 | 0.971 | 0.012 | 1.848 | 0.050 | 0.973 | 0.013 |
| 40 | 1.25 | 0.018 | 0.997 | 0.001 | 1.699 | 0.036 | 0.888 | 0.013 | 4.81 | 0.256 | 0.981 | 0.005 | 1.880 | 0.035 | 0.982 | 0.006 |
| 50 | 1.25 | 0.018 | 0.996 | 0.001 | 1.787 | 0.048 | 0.898 | 0.010 | 4.84 | 0.245 | 0.976 | 0.010 | 1.945 | 0.052 | 0.977 | 0.010 |
| 60 | 1.24 | 0.020 | 0.997 | 0.001 | 1.910 | 0.064 | 0.908 | 0.008 | 4.93 | 0.306 | 0.974 | 0.012 | 2.041 | 0.060 | 0.970 | 0.012 |
| 70 | 1.25 | 0.018 | 0.997 | 0.001 | 1.998 | 0.038 | 0.925 | 0.015 | 4.89 | 0.279 | 0.976 | 0.015 | 2.105 | 0.053 | 0.974 | 0.017 |
| 80 | 1.25 | 0.013 | 0.995 | 0.001 | 2.086 | 0.042 | 0.924 | 0.007 | 4.80 | 0.199 | 0.967 | 0.016 | 2.165 | 0.081 | 0.959 | 0.025 |
| 90 | 1.25 | 0.018 | 0.995 | 0.002 | 2.223 | 0.061 | 0.924 | 0.010 | 4.55 | 0.222 | 0.934 | 0.031 | 2.217 | 0.137 | 0.921 | 0.043 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.24 | 0.014 | 0.997 | 0.001 | 0.981 | 0.021 | 0.572 | 0.012 | 4.56 | 0.202 | 0.904 | 0.012 | 1.553 | 0.027 | 0.905 | 0.010 |
| 20 | 1.24 | 0.015 | 0.995 | 0.001 | 1.029 | 0.025 | 0.577 | 0.021 | 4.54 | 0.286 | 0.885 | 0.017 | 1.575 | 0.037 | 0.882 | 0.019 |
| 30 | 1.24 | 0.016 | 0.989 | 0.003 | 1.130 | 0.032 | 0.606 | 0.018 | 4.08 | 0.300 | 0.828 | 0.024 | 1.518 | 0.059 | 0.814 | 0.027 |
| 40 | 1.23 | 0.009 | 0.989 | 0.004 | 1.200 | 0.035 | 0.627 | 0.025 | 3.90 | 0.225 | 0.769 | 0.035 | 1.417 | 0.077 | 0.740 | 0.038 |
| 50 | 1.23 | 0.014 | 0.984 | 0.003 | 1.275 | 0.034 | 0.635 | 0.023 | 3.42 | 0.247 | 0.686 | 0.042 | 1.266 | 0.121 | 0.630 | 0.057 |
| 60 | 1.23 | 0.017 | 0.982 | 0.005 | 1.356 | 0.030 | 0.651 | 0.013 | 2.96 | 0.265 | 0.587 | 0.042 | 1.032 | 0.080 | 0.496 | 0.042 |
| 70 | 1.23 | 0.013 | 0.986 | 0.002 | 1.429 | 0.042 | 0.667 | 0.019 | 2.71 | 0.193 | 0.538 | 0.041 | 0.863 | 0.076 | 0.403 | 0.033 |
| 80 | 1.23 | 0.013 | 0.986 | 0.002 | 1.500 | 0.025 | 0.656 | 0.018 | 2.32 | 0.163 | 0.465 | 0.038 | 0.628 | 0.115 | 0.274 | 0.051 |
| 90 | 1.24 | 0.011 | 0.990 | 0.003 | 1.575 | 0.063 | 0.668 | 0.022 | 2.04 | 0.204 | 0.408 | 0.033 | 0.434 | 0.143 | 0.184 | 0.062 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.22 | 0.012 | 0.984 | 0.004 | 1.400 | 0.037 | 0.816 | 0.023 | 4.77 | 0.212 | 0.932 | 0.010 | 1.593 | 0.032 | 0.928 | 0.012 |
| 20 | 1.21 | 0.017 | 0.969 | 0.005 | 1.387 | 0.031 | 0.773 | 0.010 | 4.64 | 0.271 | 0.910 | 0.018 | 1.603 | 0.037 | 0.893 | 0.020 |
| 30 | 1.20 | 0.018 | 0.959 | 0.004 | 1.376 | 0.039 | 0.737 | 0.014 | 4.67 | 0.234 | 0.921 | 0.018 | 1.669 | 0.066 | 0.894 | 0.022 |
| 40 | 1.19 | 0.011 | 0.948 | 0.005 | 1.390 | 0.024 | 0.717 | 0.020 | 4.55 | 0.238 | 0.921 | 0.020 | 1.698 | 0.067 | 0.876 | 0.022 |
| 50 | 1.17 | 0.019 | 0.936 | 0.007 | 1.437 | 0.031 | 0.708 | 0.021 | 4.54 | 0.251 | 0.917 | 0.019 | 1.766 | 0.054 | 0.869 | 0.023 |
| 60 | 1.16 | 0.013 | 0.926 | 0.006 | 1.455 | 0.027 | 0.699 | 0.020 | 4.44 | 0.175 | 0.893 | 0.016 | 1.693 | 0.061 | 0.813 | 0.017 |
| 70 | 1.14 | 0.010 | 0.909 | 0.009 | 1.532 | 0.052 | 0.693 | 0.008 | 4.18 | 0.250 | 0.854 | 0.032 | 1.661 | 0.155 | 0.752 | 0.072 |
| 80 | 1.13 | 0.012 | 0.905 | 0.010 | 1.576 | 0.030 | 0.691 | 0.017 | 3.81 | 0.280 | 0.767 | 0.052 | 1.406 | 0.170 | 0.618 | 0.083 |
| 90 | 1.12 | 0.011 | 0.892 | 0.010 | 1.616 | 0.043 | 0.684 | 0.016 | 2.96 | 0.287 | 0.593 | 0.067 | 0.883 | 0.148 | 0.374 | 0.064 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.178 | 0.012 | 0.944 | 0.010 | 2.11 | 0.032 | 0.887 | 0.012 | 0.203 | 0.053 | 0.040 | 0.011 | 2.33 | 0.065 | 0.982 | 0.015 |
| 20 | 1.131 | 0.015 | 0.906 | 0.009 | 2.01 | 0.048 | 0.887 | 0.010 | 0.400 | 0.083 | 0.079 | 0.016 | 2.24 | 0.054 | 0.988 | 0.006 |
| 30 | 1.084 | 0.012 | 0.866 | 0.011 | 1.90 | 0.053 | 0.899 | 0.006 | 0.704 | 0.069 | 0.141 | 0.013 | 2.08 | 0.067 | 0.985 | 0.006 |
| 40 | 1.036 | 0.010 | 0.824 | 0.011 | 1.89 | 0.048 | 0.902 | 0.009 | 0.892 | 0.061 | 0.183 | 0.015 | 2.07 | 0.053 | 0.987 | 0.003 |
| 50 | 1.005 | 0.010 | 0.802 | 0.016 | 1.84 | 0.048 | 0.913 | 0.009 | 0.995 | 0.065 | 0.202 | 0.024 | 1.99 | 0.060 | 0.988 | 0.006 |
| 60 | 0.962 | 0.014 | 0.771 | 0.012 | 1.76 | 0.050 | 0.923 | 0.007 | 1.140 | 0.086 | 0.226 | 0.025 | 1.89 | 0.058 | 0.989 | 0.003 |
| 70 | 0.930 | 0.010 | 0.743 | 0.014 | 1.75 | 0.041 | 0.938 | 0.010 | 1.281 | 0.076 | 0.256 | 0.014 | 1.85 | 0.034 | 0.991 | 0.003 |
| 80 | 0.897 | 0.009 | 0.716 | 0.013 | 1.68 | 0.032 | 0.938 | 0.004 | 1.407 | 0.036 | 0.284 | 0.015 | 1.77 | 0.033 | 0.989 | 0.002 |
| 90 | 0.867 | 0.013 | 0.689 | 0.014 | 1.61 | 0.038 | 0.940 | 0.006 | 1.523 | 0.050 | 0.313 | 0.018 | 1.70 | 0.038 | 0.990 | 0.004 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.141 | 0.012 | 0.914 | 0.007 | 1.26 | 0.022 | 0.526 | 0.014 | 0.764 | 0.284 | 0.151 | 0.056 | 2.25 | 0.067 | 0.939 | 0.016 |
| 20 | 1.107 | 0.014 | 0.890 | 0.011 | 1.23 | 0.029 | 0.542 | 0.007 | 1.260 | 0.221 | 0.246 | 0.045 | 2.11 | 0.075 | 0.928 | 0.015 |
| 30 | 1.053 | 0.015 | 0.839 | 0.016 | 1.22 | 0.020 | 0.566 | 0.013 | 1.394 | 0.121 | 0.283 | 0.025 | 1.95 | 0.053 | 0.904 | 0.021 |
| 40 | 1.016 | 0.016 | 0.815 | 0.016 | 1.19 | 0.028 | 0.569 | 0.010 | 1.805 | 0.089 | 0.356 | 0.016 | 1.89 | 0.052 | 0.904 | 0.017 |
| 50 | 0.983 | 0.013 | 0.785 | 0.013 | 1.15 | 0.039 | 0.576 | 0.019 | 1.927 | 0.126 | 0.387 | 0.032 | 1.76 | 0.049 | 0.886 | 0.018 |
| 60 | 0.956 | 0.010 | 0.766 | 0.015 | 1.14 | 0.015 | 0.595 | 0.013 | 2.103 | 0.144 | 0.416 | 0.018 | 1.70 | 0.054 | 0.882 | 0.010 |
| 70 | 0.943 | 0.011 | 0.756 | 0.012 | 1.14 | 0.022 | 0.606 | 0.016 | 2.310 | 0.080 | 0.458 | 0.016 | 1.71 | 0.028 | 0.909 | 0.011 |
| 80 | 0.943 | 0.011 | 0.754 | 0.011 | 1.12 | 0.022 | 0.630 | 0.012 | 2.329 | 0.125 | 0.466 | 0.027 | 1.64 | 0.031 | 0.921 | 0.009 |
| 90 | 0.937 | 0.011 | 0.749 | 0.012 | 1.13 | 0.023 | 0.650 | 0.018 | 2.416 | 0.080 | 0.486 | 0.016 | 1.66 | 0.023 | 0.956 | 0.011 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.190 | 0.013 | 0.957 | 0.008 | 1.96 | 0.062 | 0.819 | 0.018 | 1.083 | 0.349 | 0.212 | 0.069 | 1.23 | 0.124 | 0.511 | 0.045 |
| 20 | 1.157 | 0.018 | 0.929 | 0.014 | 1.79 | 0.035 | 0.790 | 0.012 | 1.076 | 0.173 | 0.211 | 0.032 | 1.32 | 0.097 | 0.583 | 0.039 |
| 30 | 1.132 | 0.013 | 0.908 | 0.008 | 1.68 | 0.040 | 0.776 | 0.014 | 1.039 | 0.110 | 0.205 | 0.019 | 1.38 | 0.085 | 0.639 | 0.042 |
| 40 | 1.102 | 0.012 | 0.879 | 0.008 | 1.59 | 0.043 | 0.768 | 0.010 | 1.098 | 0.126 | 0.223 | 0.028 | 1.38 | 0.050 | 0.670 | 0.022 |
| 50 | 1.082 | 0.012 | 0.863 | 0.014 | 1.54 | 0.035 | 0.780 | 0.008 | 1.155 | 0.179 | 0.233 | 0.035 | 1.35 | 0.070 | 0.687 | 0.031 |
| 60 | 1.060 | 0.015 | 0.847 | 0.013 | 1.49 | 0.041 | 0.773 | 0.007 | 1.256 | 0.076 | 0.253 | 0.016 | 1.31 | 0.055 | 0.682 | 0.024 |
| 70 | 1.029 | 0.006 | 0.819 | 0.009 | 1.43 | 0.016 | 0.783 | 0.016 | 1.255 | 0.101 | 0.257 | 0.020 | 1.27 | 0.039 | 0.697 | 0.022 |
| 80 | 1.002 | 0.008 | 0.801 | 0.007 | 1.39 | 0.034 | 0.781 | 0.009 | 1.364 | 0.051 | 0.274 | 0.013 | 1.27 | 0.044 | 0.713 | 0.023 |
| 90 | 0.981 | 0.010 | 0.784 | 0.010 | 1.36 | 0.024 | 0.786 | 0.013 | 1.400 | 0.060 | 0.280 | 0.020 | 1.26 | 0.019 | 0.726 | 0.012 |

Table 18: Referred to Fig: 12, 90% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.11 | 0.009 | 0.999 | 0.001 | 1.69 | 0.031 | 0.899 | 0.010 | 9.90 | 0.861 | 0.961 | 0.010 | 1.814 | 0.036 | 0.967 | 0.009 |
| 20 | 1.11 | 0.009 | 0.999 | 0.001 | 1.69 | 0.038 | 0.899 | 0.009 | 9.39 | 0.584 | 0.961 | 0.015 | 1.811 | 0.037 | 0.964 | 0.013 |
| 30 | 1.11 | 0.007 | 0.999 | 0.001 | 1.73 | 0.038 | 0.898 | 0.011 | 9.80 | 0.588 | 0.965 | 0.009 | 1.862 | 0.043 | 0.968 | 0.010 |
| 40 | 1.11 | 0.009 | 0.999 | 0.001 | 1.77 | 0.045 | 0.896 | 0.011 | 9.59 | 0.976 | 0.954 | 0.020 | 1.885 | 0.065 | 0.956 | 0.020 |
| 50 | 1.10 | 0.009 | 0.998 | 0.001 | 1.78 | 0.040 | 0.896 | 0.011 | 9.95 | 0.761 | 0.953 | 0.018 | 1.906 | 0.053 | 0.959 | 0.019 |
| 60 | 1.11 | 0.009 | 0.998 | 0.001 | 1.82 | 0.044 | 0.900 | 0.016 | 9.24 | 0.628 | 0.940 | 0.022 | 1.904 | 0.043 | 0.941 | 0.024 |
| 70 | 1.11 | 0.009 | 0.998 | 0.001 | 1.88 | 0.059 | 0.902 | 0.010 | 9.75 | 0.916 | 0.945 | 0.031 | 1.966 | 0.081 | 0.946 | 0.032 |
| 80 | 1.11 | 0.011 | 0.998 | 0.001 | 1.94 | 0.049 | 0.901 | 0.015 | 9.35 | 0.965 | 0.945 | 0.035 | 2.033 | 0.074 | 0.947 | 0.037 |
| 90 | 1.11 | 0.006 | 0.998 | 0.001 | 1.97 | 0.048 | 0.906 | 0.013 | 9.38 | 0.678 | 0.929 | 0.075 | 2.070 | 0.153 | 0.949 | 0.062 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.11 | 0.007 | 0.998 | 0.001 | 1.01 | 0.015 | 0.540 | 0.016 | 8.94 | 0.704 | 0.877 | 0.019 | 1.642 | 0.072 | 0.880 | 0.019 |
| 20 | 1.10 | 0.010 | 0.998 | 0.001 | 1.05 | 0.021 | 0.556 | 0.016 | 8.79 | 0.698 | 0.847 | 0.022 | 1.604 | 0.052 | 0.848 | 0.024 |
| 30 | 1.10 | 0.006 | 0.996 | 0.001 | 1.08 | 0.018 | 0.559 | 0.015 | 8.32 | 0.591 | 0.805 | 0.031 | 1.552 | 0.077 | 0.803 | 0.030 |
| 40 | 1.11 | 0.010 | 0.995 | 0.001 | 1.13 | 0.031 | 0.575 | 0.015 | 7.46 | 0.654 | 0.754 | 0.034 | 1.459 | 0.064 | 0.742 | 0.029 |
| 50 | 1.11 | 0.007 | 0.994 | 0.002 | 1.16 | 0.021 | 0.585 | 0.016 | 7.28 | 0.680 | 0.733 | 0.053 | 1.430 | 0.100 | 0.720 | 0.050 |
| 60 | 1.10 | 0.007 | 0.991 | 0.002 | 1.19 | 0.033 | 0.583 | 0.014 | 6.10 | 1.078 | 0.605 | 0.098 | 1.186 | 0.221 | 0.582 | 0.106 |
| 70 | 1.10 | 0.008 | 0.991 | 0.002 | 1.23 | 0.019 | 0.586 | 0.014 | 4.24 | 0.632 | 0.428 | 0.074 | 0.810 | 0.155 | 0.387 | 0.077 |
| 80 | 1.10 | 0.006 | 0.991 | 0.002 | 1.28 | 0.027 | 0.608 | 0.017 | 3.45 | 0.518 | 0.345 | 0.049 | 0.570 | 0.119 | 0.271 | 0.058 |
| 90 | 1.10 | 0.006 | 0.993 | 0.002 | 1.30 | 0.037 | 0.594 | 0.016 | 2.78 | 0.527 | 0.282 | 0.057 | 0.380 | 0.151 | 0.174 | 0.069 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.10 | 0.010 | 0.993 | 0.003 | 1.55 | 0.036 | 0.843 | 0.020 | 9.06 | 0.768 | 0.917 | 0.023 | 1.680 | 0.038 | 0.916 | 0.023 |
| 20 | 1.10 | 0.008 | 0.986 | 0.003 | 1.51 | 0.036 | 0.800 | 0.022 | 8.74 | 0.554 | 0.880 | 0.021 | 1.643 | 0.043 | 0.870 | 0.021 |
| 30 | 1.09 | 0.009 | 0.982 | 0.003 | 1.50 | 0.032 | 0.784 | 0.020 | 8.63 | 0.722 | 0.839 | 0.039 | 1.572 | 0.082 | 0.820 | 0.037 |
| 40 | 1.08 | 0.009 | 0.976 | 0.003 | 1.49 | 0.037 | 0.756 | 0.012 | 8.59 | 0.515 | 0.849 | 0.032 | 1.635 | 0.077 | 0.827 | 0.032 |
| 50 | 1.08 | 0.006 | 0.974 | 0.004 | 1.50 | 0.022 | 0.750 | 0.011 | 8.54 | 0.742 | 0.833 | 0.036 | 1.646 | 0.103 | 0.821 | 0.038 |
| 60 | 1.07 | 0.008 | 0.965 | 0.007 | 1.50 | 0.019 | 0.731 | 0.026 | 7.88 | 0.527 | 0.778 | 0.041 | 1.540 | 0.139 | 0.747 | 0.041 |
| 70 | 1.07 | 0.008 | 0.962 | 0.006 | 1.51 | 0.031 | 0.723 | 0.010 | 7.29 | 0.874 | 0.727 | 0.096 | 1.412 | 0.184 | 0.677 | 0.092 |
| 80 | 1.06 | 0.007 | 0.952 | 0.007 | 1.55 | 0.021 | 0.716 | 0.013 | 5.98 | 0.762 | 0.618 | 0.079 | 1.190 | 0.240 | 0.551 | 0.115 |
| 90 | 1.06 | 0.006 | 0.949 | 0.007 | 1.56 | 0.036 | 0.703 | 0.018 | 4.21 | 1.201 | 0.427 | 0.121 | 0.807 | 0.126 | 0.364 | 0.056 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.077 | 0.009 | 0.972 | 0.006 | 1.95 | 0.042 | 0.911 | 0.009 | 0.319 | 0.251 | 0.031 | 0.024 | 2.13 | 0.046 | 0.992 | 0.007 |
| 20 | 1.060 | 0.007 | 0.951 | 0.007 | 1.94 | 0.027 | 0.908 | 0.009 | 0.469 | 0.103 | 0.048 | 0.012 | 2.11 | 0.045 | 0.988 | 0.008 |
| 30 | 1.039 | 0.008 | 0.936 | 0.008 | 1.90 | 0.035 | 0.909 | 0.010 | 0.682 | 0.124 | 0.068 | 0.014 | 2.07 | 0.040 | 0.991 | 0.005 |
| 40 | 1.014 | 0.006 | 0.913 | 0.006 | 1.84 | 0.042 | 0.908 | 0.010 | 0.899 | 0.218 | 0.089 | 0.018 | 2.01 | 0.046 | 0.989 | 0.006 |
| 50 | 0.994 | 0.009 | 0.899 | 0.013 | 1.83 | 0.036 | 0.908 | 0.011 | 1.074 | 0.160 | 0.103 | 0.015 | 1.99 | 0.039 | 0.987 | 0.006 |
| 60 | 0.978 | 0.010 | 0.878 | 0.013 | 1.80 | 0.046 | 0.911 | 0.013 | 1.118 | 0.198 | 0.114 | 0.020 | 1.95 | 0.043 | 0.988 | 0.004 |
| 70 | 0.958 | 0.008 | 0.864 | 0.011 | 1.77 | 0.047 | 0.916 | 0.008 | 1.416 | 0.148 | 0.138 | 0.013 | 1.91 | 0.055 | 0.989 | 0.003 |
| 80 | 0.939 | 0.009 | 0.844 | 0.014 | 1.72 | 0.043 | 0.918 | 0.011 | 1.468 | 0.081 | 0.149 | 0.012 | 1.85 | 0.041 | 0.990 | 0.006 |
| 90 | 0.928 | 0.007 | 0.836 | 0.008 | 1.70 | 0.031 | 0.922 | 0.011 | 1.633 | 0.136 | 0.161 | 0.013 | 1.84 | 0.033 | 0.993 | 0.002 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.061 | 0.006 | 0.956 | 0.007 | 1.14 | 0.022 | 0.526 | 0.017 | 0.906 | 0.516 | 0.089 | 0.052 | 2.02 | 0.064 | 0.935 | 0.031 |
| 20 | 1.043 | 0.008 | 0.942 | 0.008 | 1.14 | 0.027 | 0.540 | 0.015 | 1.361 | 0.317 | 0.130 | 0.027 | 1.99 | 0.079 | 0.937 | 0.025 |
| 30 | 1.022 | 0.006 | 0.923 | 0.008 | 1.12 | 0.013 | 0.542 | 0.015 | 1.909 | 0.404 | 0.186 | 0.043 | 1.95 | 0.038 | 0.938 | 0.016 |
| 40 | 1.007 | 0.010 | 0.905 | 0.009 | 1.13 | 0.026 | 0.553 | 0.016 | 2.662 | 0.513 | 0.269 | 0.042 | 1.90 | 0.036 | 0.931 | 0.013 |
| 50 | 0.995 | 0.006 | 0.894 | 0.007 | 1.13 | 0.012 | 0.560 | 0.015 | 2.574 | 0.253 | 0.260 | 0.023 | 1.89 | 0.079 | 0.936 | 0.013 |
| 60 | 0.984 | 0.009 | 0.886 | 0.010 | 1.11 | 0.018 | 0.564 | 0.014 | 2.968 | 0.333 | 0.295 | 0.032 | 1.80 | 0.040 | 0.914 | 0.021 |
| 70 | 0.968 | 0.005 | 0.871 | 0.008 | 1.09 | 0.019 | 0.571 | 0.010 | 3.178 | 0.222 | 0.320 | 0.021 | 1.77 | 0.049 | 0.925 | 0.014 |
| 80 | 0.959 | 0.007 | 0.863 | 0.009 | 1.12 | 0.019 | 0.589 | 0.009 | 3.201 | 0.240 | 0.320 | 0.022 | 1.78 | 0.040 | 0.933 | 0.011 |
| 90 | 0.962 | 0.008 | 0.864 | 0.010 | 1.10 | 0.030 | 0.598 | 0.020 | 3.391 | 0.414 | 0.343 | 0.043 | 1.76 | 0.031 | 0.953 | 0.007 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.088 | 0.013 | 0.977 | 0.007 | 1.87 | 0.064 | 0.852 | 0.017 | 1.465 | 0.726 | 0.150 | 0.074 | 1.17 | 0.284 | 0.535 | 0.133 |
| 20 | 1.070 | 0.005 | 0.962 | 0.004 | 1.74 | 0.058 | 0.817 | 0.014 | 1.430 | 0.377 | 0.144 | 0.034 | 1.30 | 0.100 | 0.611 | 0.039 |
| 30 | 1.054 | 0.009 | 0.951 | 0.008 | 1.67 | 0.052 | 0.800 | 0.018 | 1.742 | 0.211 | 0.170 | 0.019 | 1.28 | 0.072 | 0.614 | 0.045 |
| 40 | 1.046 | 0.006 | 0.942 | 0.008 | 1.60 | 0.033 | 0.788 | 0.014 | 1.403 | 0.257 | 0.139 | 0.023 | 1.32 | 0.070 | 0.651 | 0.034 |
| 50 | 1.036 | 0.006 | 0.935 | 0.008 | 1.57 | 0.029 | 0.785 | 0.008 | 1.607 | 0.393 | 0.156 | 0.032 | 1.39 | 0.031 | 0.696 | 0.022 |
| 60 | 1.018 | 0.009 | 0.917 | 0.008 | 1.51 | 0.055 | 0.775 | 0.004 | 1.626 | 0.247 | 0.161 | 0.025 | 1.36 | 0.081 | 0.697 | 0.035 |
| 70 | 1.010 | 0.006 | 0.909 | 0.008 | 1.48 | 0.025 | 0.769 | 0.008 | 1.752 | 0.211 | 0.175 | 0.024 | 1.36 | 0.061 | 0.710 | 0.029 |
| 80 | 0.997 | 0.008 | 0.894 | 0.008 | 1.45 | 0.030 | 0.778 | 0.006 | 1.676 | 0.276 | 0.173 | 0.025 | 1.32 | 0.061 | 0.712 | 0.030 |
| 90 | 0.989 | 0.006 | 0.889 | 0.009 | 1.41 | 0.038 | 0.773 | 0.010 | 1.731 | 0.241 | 0.175 | 0.022 | 1.33 | 0.062 | 0.731 | 0.024 |

Table 19: Referred to Fig: 13, 50% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 2.02 | 0.039 | 0.991 | 0.002 | 1.23 | 0.021 | 0.860 | 0.016 | 1.95 | 0.036 | 0.991 | 0.002 | 1.42 | 0.021 | 0.992 | 0.002 |
| 20 | 1.97 | 0.027 | 0.991 | 0.004 | 1.40 | 0.042 | 0.903 | 0.017 | 2.00 | 0.026 | 0.993 | 0.003 | 1.53 | 0.025 | 0.991 | 0.003 |
| 30 | 2.00 | 0.043 | 0.990 | 0.004 | 1.55 | 0.032 | 0.936 | 0.013 | 1.97 | 0.041 | 0.994 | 0.002 | 1.64 | 0.024 | 0.989 | 0.004 |
| 40 | 1.97 | 0.059 | 0.992 | 0.003 | 1.74 | 0.025 | 0.958 | 0.016 | 2.00 | 0.056 | 0.994 | 0.002 | 1.79 | 0.027 | 0.985 | 0.004 |
| 50 | 2.00 | 0.052 | 0.992 | 0.004 | 1.95 | 0.048 | 0.973 | 0.011 | 1.97 | 0.054 | 0.992 | 0.002 | 1.95 | 0.048 | 0.970 | 0.005 |
| 60 | 2.00 | 0.048 | 0.994 | 0.002 | 2.20 | 0.043 | 0.980 | 0.004 | 1.97 | 0.045 | 0.991 | 0.004 | 2.12 | 0.058 | 0.948 | 0.019 |
| 70 | 1.97 | 0.036 | 0.992 | 0.004 | 2.45 | 0.081 | 0.980 | 0.007 | 1.98 | 0.048 | 0.981 | 0.008 | 2.29 | 0.099 | 0.912 | 0.022 |
| 80 | 1.97 | 0.046 | 0.991 | 0.005 | 2.79 | 0.049 | 0.980 | 0.008 | 1.95 | 0.045 | 0.968 | 0.013 | 2.40 | 0.095 | 0.842 | 0.038 |
| 90 | 2.02 | 0.035 | 0.989 | 0.003 | 3.31 | 0.100 | 0.976 | 0.007 | 1.84 | 0.069 | 0.936 | 0.021 | 2.32 | 0.222 | 0.686 | 0.066 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.99 | 0.055 | 0.994 | 0.002 | 1.31 | 0.019 | 0.912 | 0.010 | 2.00 | 0.054 | 0.996 | 0.001 | 1.41 | 0.016 | 0.984 | 0.003 |
| 20 | 1.99 | 0.027 | 0.993 | 0.003 | 1.47 | 0.039 | 0.954 | 0.015 | 1.98 | 0.025 | 0.993 | 0.001 | 1.45 | 0.031 | 0.946 | 0.010 |
| 30 | 1.99 | 0.058 | 0.991 | 0.003 | 1.59 | 0.024 | 0.957 | 0.008 | 1.98 | 0.055 | 0.992 | 0.003 | 1.52 | 0.012 | 0.919 | 0.009 |
| 40 | 1.97 | 0.046 | 0.991 | 0.004 | 1.74 | 0.038 | 0.958 | 0.016 | 1.99 | 0.041 | 0.992 | 0.002 | 1.59 | 0.031 | 0.874 | 0.013 |
| 50 | 1.98 | 0.031 | 0.986 | 0.004 | 1.89 | 0.028 | 0.947 | 0.013 | 1.98 | 0.028 | 0.993 | 0.002 | 1.68 | 0.037 | 0.844 | 0.020 |
| 60 | 1.98 | 0.033 | 0.983 | 0.005 | 2.10 | 0.073 | 0.952 | 0.011 | 1.97 | 0.033 | 0.990 | 0.003 | 1.74 | 0.035 | 0.788 | 0.025 |
| 70 | 1.97 | 0.038 | 0.983 | 0.004 | 2.37 | 0.111 | 0.950 | 0.009 | 1.99 | 0.039 | 0.992 | 0.004 | 1.84 | 0.102 | 0.735 | 0.020 |
| 80 | 1.99 | 0.050 | 0.983 | 0.005 | 2.77 | 0.078 | 0.960 | 0.011 | 1.95 | 0.043 | 0.987 | 0.008 | 1.76 | 0.117 | 0.611 | 0.045 |
| 90 | 1.98 | 0.040 | 0.992 | 0.003 | 3.18 | 0.172 | 0.961 | 0.013 | 1.97 | 0.040 | 0.979 | 0.010 | 1.33 | 0.119 | 0.403 | 0.035 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.98 | 0.023 | 0.994 | 0.003 | 1.21 | 0.016 | 0.842 | 0.008 | 1.99 | 0.024 | 0.988 | 0.002 | 1.40 | 0.016 | 0.976 | 0.003 |
| 20 | 1.97 | 0.026 | 0.993 | 0.003 | 1.28 | 0.025 | 0.836 | 0.015 | 1.99 | 0.019 | 0.988 | 0.002 | 1.49 | 0.027 | 0.974 | 0.010 |
| 30 | 1.97 | 0.031 | 0.992 | 0.002 | 1.40 | 0.032 | 0.839 | 0.012 | 1.99 | 0.033 | 0.986 | 0.003 | 1.61 | 0.021 | 0.967 | 0.008 |
| 40 | 1.99 | 0.043 | 0.992 | 0.002 | 1.53 | 0.020 | 0.838 | 0.013 | 1.97 | 0.037 | 0.985 | 0.002 | 1.74 | 0.039 | 0.956 | 0.010 |
| 50 | 2.00 | 0.040 | 0.992 | 0.003 | 1.71 | 0.042 | 0.839 | 0.013 | 1.96 | 0.037 | 0.985 | 0.005 | 1.93 | 0.038 | 0.949 | 0.009 |
| 60 | 1.95 | 0.028 | 0.989 | 0.003 | 1.84 | 0.032 | 0.843 | 0.011 | 1.99 | 0.029 | 0.981 | 0.007 | 2.04 | 0.082 | 0.933 | 0.025 |
| 70 | 1.98 | 0.031 | 0.990 | 0.002 | 2.13 | 0.045 | 0.846 | 0.020 | 1.96 | 0.035 | 0.978 | 0.005 | 2.25 | 0.105 | 0.891 | 0.027 |
| 80 | 1.96 | 0.045 | 0.987 | 0.002 | 2.40 | 0.075 | 0.838 | 0.017 | 1.95 | 0.044 | 0.966 | 0.006 | 2.35 | 0.122 | 0.820 | 0.030 |
| 90 | 1.99 | 0.043 | 0.987 | 0.002 | 2.90 | 0.096 | 0.863 | 0.008 | 1.86 | 0.057 | 0.935 | 0.017 | 1.94 | 0.329 | 0.579 | 0.104 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.682 | 0.035 | 0.827 | 0.012 | 2.94 | 0.122 | 0.880 | 0.012 | 0.364 | 0.047 | 0.185 | 0.022 | 3.24 | 0.152 | 0.970 | 0.011 |
| 20 | 1.426 | 0.035 | 0.719 | 0.019 | 2.60 | 0.064 | 0.920 | 0.013 | 0.562 | 0.037 | 0.279 | 0.017 | 2.76 | 0.087 | 0.976 | 0.005 |
| 30 | 1.272 | 0.037 | 0.630 | 0.018 | 2.40 | 0.050 | 0.950 | 0.009 | 0.746 | 0.042 | 0.377 | 0.023 | 2.47 | 0.058 | 0.977 | 0.007 |
| 40 | 1.125 | 0.035 | 0.567 | 0.022 | 2.16 | 0.059 | 0.967 | 0.010 | 0.904 | 0.032 | 0.448 | 0.017 | 2.19 | 0.053 | 0.982 | 0.005 |
| 50 | 1.005 | 0.013 | 0.499 | 0.015 | 1.95 | 0.043 | 0.979 | 0.007 | 1.018 | 0.021 | 0.513 | 0.016 | 1.95 | 0.047 | 0.977 | 0.003 |
| 60 | 0.914 | 0.032 | 0.455 | 0.025 | 1.78 | 0.026 | 0.984 | 0.003 | 1.111 | 0.030 | 0.559 | 0.022 | 1.76 | 0.030 | 0.974 | 0.008 |
| 70 | 0.846 | 0.026 | 0.426 | 0.017 | 1.64 | 0.038 | 0.983 | 0.003 | 1.172 | 0.024 | 0.582 | 0.015 | 1.62 | 0.038 | 0.973 | 0.005 |
| 80 | 0.763 | 0.028 | 0.384 | 0.015 | 1.51 | 0.019 | 0.982 | 0.005 | 1.237 | 0.017 | 0.613 | 0.014 | 1.50 | 0.021 | 0.973 | 0.006 |
| 90 | 0.730 | 0.045 | 0.358 | 0.025 | 1.39 | 0.025 | 0.981 | 0.004 | 1.285 | 0.020 | 0.654 | 0.012 | 1.39 | 0.021 | 0.977 | 0.005 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.804 | 0.045 | 0.903 | 0.008 | 3.06 | 0.089 | 0.928 | 0.008 | 0.904 | 0.093 | 0.450 | 0.036 | 2.91 | 0.102 | 0.882 | 0.025 |
| 20 | 1.652 | 0.026 | 0.823 | 0.012 | 2.75 | 0.088 | 0.958 | 0.010 | 1.056 | 0.044 | 0.530 | 0.018 | 2.37 | 0.102 | 0.826 | 0.025 |
| 30 | 1.568 | 0.041 | 0.780 | 0.009 | 2.42 | 0.048 | 0.960 | 0.008 | 1.203 | 0.042 | 0.604 | 0.014 | 2.13 | 0.064 | 0.845 | 0.014 |
| 40 | 1.517 | 0.027 | 0.762 | 0.012 | 2.14 | 0.068 | 0.963 | 0.011 | 1.334 | 0.043 | 0.664 | 0.017 | 1.87 | 0.055 | 0.844 | 0.011 |
| 50 | 1.489 | 0.038 | 0.741 | 0.013 | 1.93 | 0.043 | 0.960 | 0.010 | 1.416 | 0.031 | 0.711 | 0.019 | 1.74 | 0.036 | 0.869 | 0.010 |
| 60 | 1.483 | 0.035 | 0.735 | 0.013 | 1.77 | 0.049 | 0.966 | 0.008 | 1.489 | 0.031 | 0.750 | 0.016 | 1.61 | 0.054 | 0.878 | 0.008 |
| 70 | 1.507 | 0.048 | 0.754 | 0.021 | 1.62 | 0.051 | 0.967 | 0.009 | 1.602 | 0.039 | 0.800 | 0.015 | 1.51 | 0.037 | 0.903 | 0.008 |
| 80 | 1.619 | 0.054 | 0.799 | 0.012 | 1.49 | 0.019 | 0.975 | 0.008 | 1.698 | 0.022 | 0.859 | 0.015 | 1.41 | 0.020 | 0.923 | 0.006 |
| 90 | 1.767 | 0.056 | 0.887 | 0.023 | 1.39 | 0.030 | 0.969 | 0.012 | 1.865 | 0.044 | 0.928 | 0.013 | 1.37 | 0.027 | 0.953 | 0.007 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.794 | 0.023 | 0.903 | 0.010 | 2.82 | 0.076 | 0.852 | 0.012 | 1.235 | 0.054 | 0.614 | 0.028 | 2.88 | 0.163 | 0.870 | 0.042 |
| 20 | 1.686 | 0.029 | 0.849 | 0.017 | 2.46 | 0.071 | 0.852 | 0.012 | 1.345 | 0.065 | 0.668 | 0.028 | 2.67 | 0.116 | 0.926 | 0.038 |
| 30 | 1.565 | 0.022 | 0.788 | 0.011 | 2.14 | 0.046 | 0.852 | 0.010 | 1.397 | 0.041 | 0.693 | 0.016 | 2.38 | 0.071 | 0.948 | 0.011 |
| 40 | 1.497 | 0.052 | 0.746 | 0.020 | 1.90 | 0.044 | 0.857 | 0.009 | 1.448 | 0.039 | 0.726 | 0.018 | 2.11 | 0.028 | 0.953 | 0.012 |
| 50 | 1.424 | 0.032 | 0.708 | 0.013 | 1.71 | 0.034 | 0.870 | 0.012 | 1.472 | 0.021 | 0.740 | 0.009 | 1.90 | 0.043 | 0.964 | 0.005 |
| 60 | 1.332 | 0.039 | 0.676 | 0.018 | 1.60 | 0.022 | 0.866 | 0.011 | 1.528 | 0.022 | 0.753 | 0.011 | 1.78 | 0.028 | 0.964 | 0.011 |
| 70 | 1.290 | 0.031 | 0.647 | 0.013 | 1.46 | 0.029 | 0.878 | 0.011 | 1.550 | 0.020 | 0.773 | 0.012 | 1.60 | 0.015 | 0.963 | 0.009 |
| 80 | 1.268 | 0.036 | 0.640 | 0.017 | 1.35 | 0.021 | 0.876 | 0.013 | 1.591 | 0.028 | 0.788 | 0.007 | 1.48 | 0.017 | 0.962 | 0.006 |
| 90 | 1.212 | 0.033 | 0.601 | 0.013 | 1.27 | 0.020 | 0.892 | 0.007 | 1.599 | 0.028 | 0.805 | 0.005 | 1.37 | 0.024 | 0.962 | 0.008 |

Table 20: Referred to Fig: 13, 60% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.66 | 0.021 | 0.994 | 0.002 | 1.31 | 0.026 | 0.867 | 0.014 | 2.46 | 0.048 | 0.986 | 0.002 | 1.50 | 0.021 | 0.987 | 0.003 |
| 20 | 1.64 | 0.018 | 0.992 | 0.003 | 1.43 | 0.040 | 0.884 | 0.023 | 2.50 | 0.052 | 0.988 | 0.004 | 1.60 | 0.041 | 0.988 | 0.004 |
| 30 | 1.66 | 0.027 | 0.992 | 0.002 | 1.59 | 0.034 | 0.921 | 0.015 | 2.46 | 0.054 | 0.991 | 0.005 | 1.71 | 0.037 | 0.988 | 0.007 |
| 40 | 1.66 | 0.029 | 0.993 | 0.002 | 1.72 | 0.045 | 0.928 | 0.014 | 2.48 | 0.061 | 0.993 | 0.002 | 1.83 | 0.037 | 0.988 | 0.002 |
| 50 | 1.67 | 0.023 | 0.994 | 0.002 | 1.91 | 0.035 | 0.954 | 0.007 | 2.44 | 0.056 | 0.991 | 0.003 | 1.96 | 0.039 | 0.979 | 0.008 |
| 60 | 1.66 | 0.031 | 0.992 | 0.002 | 2.12 | 0.047 | 0.964 | 0.009 | 2.45 | 0.066 | 0.987 | 0.003 | 2.12 | 0.069 | 0.967 | 0.009 |
| 70 | 1.67 | 0.027 | 0.995 | 0.002 | 2.31 | 0.060 | 0.968 | 0.007 | 2.44 | 0.055 | 0.982 | 0.008 | 2.28 | 0.085 | 0.953 | 0.016 |
| 80 | 1.65 | 0.032 | 0.993 | 0.003 | 2.56 | 0.054 | 0.973 | 0.007 | 2.44 | 0.074 | 0.968 | 0.015 | 2.42 | 0.093 | 0.920 | 0.024 |
| 90 | 1.65 | 0.033 | 0.993 | 0.001 | 2.88 | 0.117 | 0.973 | 0.004 | 2.33 | 0.092 | 0.923 | 0.015 | 2.32 | 0.187 | 0.786 | 0.073 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.65 | 0.020 | 0.996 | 0.002 | 1.38 | 0.026 | 0.914 | 0.012 | 2.51 | 0.053 | 0.997 | 0.002 | 1.49 | 0.017 | 0.989 | 0.005 |
| 20 | 1.67 | 0.041 | 0.994 | 0.002 | 1.48 | 0.029 | 0.934 | 0.015 | 2.45 | 0.090 | 0.993 | 0.002 | 1.54 | 0.025 | 0.967 | 0.004 |
| 30 | 1.66 | 0.037 | 0.993 | 0.002 | 1.63 | 0.036 | 0.947 | 0.009 | 2.48 | 0.081 | 0.989 | 0.002 | 1.60 | 0.030 | 0.932 | 0.008 |
| 40 | 1.65 | 0.029 | 0.993 | 0.002 | 1.76 | 0.036 | 0.957 | 0.009 | 2.48 | 0.067 | 0.988 | 0.003 | 1.63 | 0.038 | 0.884 | 0.013 |
| 50 | 1.66 | 0.020 | 0.992 | 0.002 | 1.93 | 0.044 | 0.957 | 0.010 | 2.45 | 0.043 | 0.987 | 0.003 | 1.70 | 0.054 | 0.840 | 0.013 |
| 60 | 1.65 | 0.027 | 0.990 | 0.003 | 2.02 | 0.044 | 0.941 | 0.010 | 2.48 | 0.068 | 0.988 | 0.004 | 1.74 | 0.054 | 0.808 | 0.024 |
| 70 | 1.63 | 0.022 | 0.989 | 0.002 | 2.29 | 0.070 | 0.945 | 0.012 | 2.50 | 0.047 | 0.986 | 0.005 | 1.80 | 0.095 | 0.746 | 0.028 |
| 80 | 1.66 | 0.026 | 0.989 | 0.003 | 2.52 | 0.068 | 0.963 | 0.008 | 2.44 | 0.053 | 0.982 | 0.008 | 1.63 | 0.085 | 0.621 | 0.029 |
| 90 | 1.65 | 0.030 | 0.992 | 0.002 | 2.80 | 0.080 | 0.963 | 0.014 | 2.46 | 0.080 | 0.977 | 0.010 | 1.27 | 0.164 | 0.437 | 0.052 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.65 | 0.027 | 0.995 | 0.002 | 1.29 | 0.016 | 0.848 | 0.014 | 2.47 | 0.066 | 0.982 | 0.003 | 1.47 | 0.022 | 0.967 | 0.005 |
| 20 | 1.66 | 0.021 | 0.995 | 0.002 | 1.36 | 0.021 | 0.845 | 0.017 | 2.44 | 0.047 | 0.979 | 0.003 | 1.55 | 0.027 | 0.963 | 0.005 |
| 30 | 1.66 | 0.012 | 0.995 | 0.002 | 1.46 | 0.031 | 0.838 | 0.018 | 2.45 | 0.032 | 0.980 | 0.004 | 1.67 | 0.039 | 0.962 | 0.006 |
| 40 | 1.66 | 0.016 | 0.995 | 0.001 | 1.56 | 0.048 | 0.836 | 0.014 | 2.46 | 0.034 | 0.981 | 0.004 | 1.78 | 0.024 | 0.952 | 0.008 |
| 50 | 1.66 | 0.033 | 0.995 | 0.002 | 1.68 | 0.034 | 0.843 | 0.014 | 2.44 | 0.062 | 0.979 | 0.007 | 1.89 | 0.044 | 0.945 | 0.015 |
| 60 | 1.65 | 0.039 | 0.994 | 0.003 | 1.84 | 0.071 | 0.842 | 0.007 | 2.47 | 0.104 | 0.976 | 0.006 | 2.04 | 0.076 | 0.937 | 0.012 |
| 70 | 1.66 | 0.032 | 0.994 | 0.003 | 1.97 | 0.047 | 0.832 | 0.008 | 2.44 | 0.060 | 0.975 | 0.007 | 2.15 | 0.061 | 0.908 | 0.025 |
| 80 | 1.65 | 0.027 | 0.993 | 0.002 | 2.20 | 0.076 | 0.841 | 0.016 | 2.45 | 0.059 | 0.976 | 0.008 | 2.20 | 0.097 | 0.841 | 0.045 |
| 90 | 1.67 | 0.025 | 0.994 | 0.002 | 2.50 | 0.086 | 0.851 | 0.012 | 2.31 | 0.091 | 0.935 | 0.023 | 1.78 | 0.223 | 0.608 | 0.078 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.457 | 0.024 | 0.873 | 0.016 | 2.58 | 0.054 | 0.879 | 0.013 | 0.316 | 0.062 | 0.127 | 0.025 | 2.86 | 0.060 | 0.976 | 0.008 |
| 20 | 1.322 | 0.018 | 0.798 | 0.019 | 2.37 | 0.092 | 0.902 | 0.013 | 0.546 | 0.059 | 0.216 | 0.024 | 2.56 | 0.092 | 0.975 | 0.008 |
| 30 | 1.188 | 0.032 | 0.710 | 0.014 | 2.22 | 0.059 | 0.936 | 0.009 | 0.731 | 0.040 | 0.294 | 0.016 | 2.33 | 0.050 | 0.979 | 0.008 |
| 40 | 1.105 | 0.019 | 0.662 | 0.011 | 2.05 | 0.045 | 0.942 | 0.012 | 0.850 | 0.038 | 0.341 | 0.021 | 2.14 | 0.056 | 0.984 | 0.004 |
| 50 | 1.013 | 0.027 | 0.601 | 0.013 | 1.93 | 0.037 | 0.964 | 0.005 | 1.010 | 0.032 | 0.410 | 0.013 | 1.97 | 0.041 | 0.984 | 0.006 |
| 60 | 0.936 | 0.019 | 0.559 | 0.017 | 1.79 | 0.045 | 0.974 | 0.006 | 1.120 | 0.041 | 0.451 | 0.014 | 1.81 | 0.033 | 0.983 | 0.004 |
| 70 | 0.872 | 0.029 | 0.521 | 0.023 | 1.68 | 0.039 | 0.974 | 0.006 | 1.216 | 0.026 | 0.490 | 0.017 | 1.70 | 0.032 | 0.985 | 0.005 |
| 80 | 0.803 | 0.023 | 0.485 | 0.018 | 1.58 | 0.025 | 0.979 | 0.004 | 1.293 | 0.032 | 0.512 | 0.011 | 1.59 | 0.022 | 0.987 | 0.003 |
| 90 | 0.766 | 0.019 | 0.462 | 0.015 | 1.48 | 0.029 | 0.978 | 0.002 | 1.374 | 0.023 | 0.546 | 0.014 | 1.49 | 0.032 | 0.985 | 0.004 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.544 | 0.022 | 0.931 | 0.006 | 2.75 | 0.063 | 0.927 | 0.010 | 0.972 | 0.100 | 0.386 | 0.043 | 2.70 | 0.125 | 0.912 | 0.032 |
| 20 | 1.479 | 0.024 | 0.879 | 0.020 | 2.54 | 0.084 | 0.942 | 0.011 | 1.203 | 0.104 | 0.487 | 0.032 | 2.39 | 0.077 | 0.886 | 0.015 |
| 30 | 1.405 | 0.028 | 0.843 | 0.010 | 2.28 | 0.076 | 0.954 | 0.007 | 1.379 | 0.053 | 0.551 | 0.022 | 2.08 | 0.059 | 0.868 | 0.009 |
| 40 | 1.342 | 0.015 | 0.808 | 0.012 | 2.10 | 0.031 | 0.961 | 0.009 | 1.483 | 0.059 | 0.591 | 0.025 | 1.88 | 0.036 | 0.861 | 0.011 |
| 50 | 1.310 | 0.025 | 0.782 | 0.015 | 1.91 | 0.051 | 0.964 | 0.006 | 1.581 | 0.059 | 0.637 | 0.024 | 1.74 | 0.044 | 0.875 | 0.017 |
| 60 | 1.302 | 0.023 | 0.782 | 0.016 | 1.78 | 0.038 | 0.953 | 0.007 | 1.714 | 0.065 | 0.684 | 0.017 | 1.67 | 0.034 | 0.892 | 0.010 |
| 70 | 1.306 | 0.024 | 0.791 | 0.010 | 1.64 | 0.053 | 0.961 | 0.008 | 1.854 | 0.030 | 0.731 | 0.016 | 1.56 | 0.035 | 0.913 | 0.008 |
| 80 | 1.370 | 0.031 | 0.819 | 0.019 | 1.57 | 0.031 | 0.972 | 0.005 | 2.007 | 0.074 | 0.807 | 0.022 | 1.50 | 0.027 | 0.926 | 0.005 |
| 90 | 1.477 | 0.046 | 0.889 | 0.018 | 1.48 | 0.032 | 0.972 | 0.012 | 2.239 | 0.064 | 0.890 | 0.019 | 1.45 | 0.024 | 0.952 | 0.006 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.540 | 0.020 | 0.927 | 0.006 | 2.51 | 0.070 | 0.855 | 0.009 | 1.467 | 0.088 | 0.583 | 0.036 | 2.47 | 0.095 | 0.840 | 0.043 |
| 20 | 1.463 | 0.018 | 0.875 | 0.008 | 2.26 | 0.071 | 0.857 | 0.009 | 1.524 | 0.046 | 0.613 | 0.013 | 2.42 | 0.102 | 0.919 | 0.023 |
| 30 | 1.402 | 0.020 | 0.840 | 0.011 | 2.02 | 0.063 | 0.860 | 0.010 | 1.608 | 0.050 | 0.645 | 0.018 | 2.23 | 0.065 | 0.948 | 0.013 |
| 40 | 1.328 | 0.022 | 0.798 | 0.012 | 1.85 | 0.035 | 0.858 | 0.014 | 1.675 | 0.047 | 0.668 | 0.011 | 2.06 | 0.053 | 0.956 | 0.008 |
| 50 | 1.287 | 0.027 | 0.770 | 0.012 | 1.73 | 0.031 | 0.864 | 0.009 | 1.740 | 0.056 | 0.698 | 0.017 | 1.93 | 0.041 | 0.964 | 0.010 |
| 60 | 1.237 | 0.031 | 0.746 | 0.023 | 1.60 | 0.040 | 0.866 | 0.011 | 1.804 | 0.084 | 0.714 | 0.014 | 1.80 | 0.061 | 0.972 | 0.006 |
| 70 | 1.193 | 0.021 | 0.717 | 0.017 | 1.49 | 0.023 | 0.862 | 0.007 | 1.814 | 0.035 | 0.724 | 0.012 | 1.68 | 0.038 | 0.969 | 0.009 |
| 80 | 1.132 | 0.025 | 0.681 | 0.019 | 1.42 | 0.031 | 0.873 | 0.012 | 1.828 | 0.048 | 0.729 | 0.012 | 1.56 | 0.040 | 0.965 | 0.008 |
| 90 | 1.107 | 0.016 | 0.660 | 0.010 | 1.33 | 0.017 | 0.874 | 0.011 | 1.872 | 0.032 | 0.756 | 0.009 | 1.47 | 0.030 | 0.967 | 0.006 |

Table 21: Referred to Fig: 13, 70% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.42 | 0.017 | 0.994 | 0.002 | 1.41 | 0.019 | 0.865 | 0.012 | 3.26 | 0.084 | 0.979 | 0.004 | 1.60 | 0.027 | 0.983 | 0.004 |
| 20 | 1.42 | 0.018 | 0.995 | 0.002 | 1.49 | 0.030 | 0.875 | 0.009 | 3.27 | 0.112 | 0.979 | 0.005 | 1.67 | 0.033 | 0.980 | 0.007 |
| 30 | 1.42 | 0.019 | 0.995 | 0.001 | 1.60 | 0.035 | 0.891 | 0.012 | 3.28 | 0.126 | 0.985 | 0.007 | 1.77 | 0.054 | 0.986 | 0.008 |
| 40 | 1.43 | 0.020 | 0.996 | 0.002 | 1.73 | 0.049 | 0.907 | 0.011 | 3.25 | 0.114 | 0.988 | 0.006 | 1.87 | 0.045 | 0.984 | 0.007 |
| 50 | 1.41 | 0.032 | 0.995 | 0.002 | 1.84 | 0.031 | 0.921 | 0.007 | 3.37 | 0.214 | 0.983 | 0.008 | 1.96 | 0.034 | 0.979 | 0.010 |
| 60 | 1.42 | 0.021 | 0.995 | 0.002 | 2.01 | 0.037 | 0.940 | 0.013 | 3.28 | 0.115 | 0.985 | 0.007 | 2.09 | 0.041 | 0.979 | 0.010 |
| 70 | 1.41 | 0.030 | 0.995 | 0.001 | 2.16 | 0.077 | 0.945 | 0.009 | 3.32 | 0.157 | 0.979 | 0.005 | 2.21 | 0.102 | 0.968 | 0.009 |
| 80 | 1.42 | 0.021 | 0.995 | 0.001 | 2.31 | 0.048 | 0.955 | 0.006 | 3.24 | 0.100 | 0.975 | 0.007 | 2.29 | 0.082 | 0.946 | 0.019 |
| 90 | 1.42 | 0.022 | 0.995 | 0.002 | 2.52 | 0.067 | 0.960 | 0.008 | 3.11 | 0.120 | 0.933 | 0.023 | 2.32 | 0.120 | 0.883 | 0.030 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.43 | 0.012 | 0.996 | 0.002 | 1.48 | 0.048 | 0.911 | 0.020 | 3.29 | 0.061 | 0.995 | 0.002 | 1.60 | 0.026 | 0.990 | 0.004 |
| 20 | 1.42 | 0.018 | 0.995 | 0.002 | 1.57 | 0.048 | 0.932 | 0.012 | 3.35 | 0.098 | 0.992 | 0.003 | 1.64 | 0.030 | 0.969 | 0.006 |
| 30 | 1.43 | 0.024 | 0.994 | 0.002 | 1.67 | 0.020 | 0.945 | 0.012 | 3.27 | 0.152 | 0.988 | 0.004 | 1.65 | 0.031 | 0.935 | 0.011 |
| 40 | 1.41 | 0.022 | 0.994 | 0.002 | 1.78 | 0.035 | 0.950 | 0.007 | 3.33 | 0.123 | 0.984 | 0.004 | 1.70 | 0.030 | 0.907 | 0.015 |
| 50 | 1.42 | 0.019 | 0.995 | 0.002 | 1.91 | 0.041 | 0.950 | 0.008 | 3.29 | 0.109 | 0.984 | 0.004 | 1.75 | 0.042 | 0.870 | 0.019 |
| 60 | 1.42 | 0.024 | 0.994 | 0.002 | 2.04 | 0.052 | 0.952 | 0.010 | 3.26 | 0.095 | 0.982 | 0.007 | 1.74 | 0.049 | 0.814 | 0.023 |
| 70 | 1.41 | 0.017 | 0.992 | 0.003 | 2.12 | 0.060 | 0.943 | 0.015 | 3.30 | 0.104 | 0.974 | 0.010 | 1.73 | 0.063 | 0.768 | 0.024 |
| 80 | 1.42 | 0.022 | 0.992 | 0.002 | 2.34 | 0.072 | 0.953 | 0.009 | 3.24 | 0.124 | 0.971 | 0.014 | 1.62 | 0.101 | 0.662 | 0.038 |
| 90 | 1.41 | 0.020 | 0.993 | 0.002 | 2.56 | 0.090 | 0.962 | 0.011 | 3.27 | 0.130 | 0.965 | 0.018 | 1.19 | 0.265 | 0.450 | 0.106 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.42 | 0.016 | 0.998 | 0.001 | 1.41 | 0.046 | 0.873 | 0.020 | 3.30 | 0.082 | 0.979 | 0.005 | 1.55 | 0.019 | 0.957 | 0.012 |
| 20 | 1.44 | 0.027 | 0.997 | 0.002 | 1.45 | 0.028 | 0.851 | 0.007 | 3.18 | 0.114 | 0.977 | 0.011 | 1.62 | 0.036 | 0.954 | 0.016 |
| 30 | 1.42 | 0.018 | 0.997 | 0.001 | 1.52 | 0.040 | 0.862 | 0.015 | 3.23 | 0.087 | 0.970 | 0.009 | 1.67 | 0.028 | 0.944 | 0.012 |
| 40 | 1.42 | 0.029 | 0.996 | 0.001 | 1.58 | 0.029 | 0.844 | 0.009 | 3.23 | 0.169 | 0.969 | 0.012 | 1.75 | 0.043 | 0.936 | 0.017 |
| 50 | 1.42 | 0.022 | 0.997 | 0.002 | 1.71 | 0.037 | 0.858 | 0.015 | 3.27 | 0.145 | 0.968 | 0.007 | 1.86 | 0.068 | 0.931 | 0.017 |
| 60 | 1.43 | 0.016 | 0.997 | 0.001 | 1.80 | 0.033 | 0.846 | 0.016 | 3.20 | 0.100 | 0.961 | 0.013 | 1.93 | 0.058 | 0.907 | 0.027 |
| 70 | 1.41 | 0.019 | 0.997 | 0.002 | 1.92 | 0.047 | 0.843 | 0.014 | 3.26 | 0.088 | 0.950 | 0.013 | 2.00 | 0.096 | 0.875 | 0.043 |
| 80 | 1.44 | 0.016 | 0.998 | 0.001 | 2.04 | 0.042 | 0.832 | 0.017 | 3.12 | 0.111 | 0.954 | 0.016 | 2.07 | 0.157 | 0.841 | 0.060 |
| 90 | 1.43 | 0.017 | 0.997 | 0.001 | 2.18 | 0.048 | 0.836 | 0.015 | 3.08 | 0.121 | 0.934 | 0.020 | 1.76 | 0.099 | 0.675 | 0.046 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.300 | 0.020 | 0.910 | 0.011 | 2.28 | 0.058 | 0.879 | 0.007 | 0.287 | 0.050 | 0.086 | 0.016 | 2.52 | 0.052 | 0.972 | 0.011 |
| 20 | 1.211 | 0.011 | 0.848 | 0.012 | 2.16 | 0.052 | 0.889 | 0.009 | 0.534 | 0.069 | 0.161 | 0.024 | 2.38 | 0.077 | 0.978 | 0.011 |
| 30 | 1.134 | 0.022 | 0.793 | 0.016 | 2.05 | 0.070 | 0.909 | 0.007 | 0.675 | 0.058 | 0.203 | 0.020 | 2.22 | 0.069 | 0.982 | 0.006 |
| 40 | 1.067 | 0.021 | 0.742 | 0.018 | 1.95 | 0.041 | 0.924 | 0.011 | 0.862 | 0.050 | 0.263 | 0.021 | 2.08 | 0.051 | 0.985 | 0.006 |
| 50 | 1.010 | 0.015 | 0.714 | 0.012 | 1.87 | 0.030 | 0.935 | 0.006 | 1.006 | 0.050 | 0.294 | 0.018 | 1.98 | 0.035 | 0.987 | 0.005 |
| 60 | 0.944 | 0.014 | 0.660 | 0.009 | 1.79 | 0.031 | 0.952 | 0.011 | 1.151 | 0.039 | 0.345 | 0.013 | 1.86 | 0.022 | 0.990 | 0.003 |
| 70 | 0.903 | 0.015 | 0.636 | 0.015 | 1.70 | 0.056 | 0.955 | 0.006 | 1.284 | 0.047 | 0.380 | 0.025 | 1.76 | 0.056 | 0.990 | 0.003 |
| 80 | 0.852 | 0.014 | 0.596 | 0.012 | 1.65 | 0.025 | 0.964 | 0.005 | 1.375 | 0.038 | 0.414 | 0.020 | 1.69 | 0.022 | 0.989 | 0.003 |
| 90 | 0.805 | 0.012 | 0.563 | 0.015 | 1.56 | 0.029 | 0.968 | 0.004 | 1.458 | 0.034 | 0.437 | 0.015 | 1.60 | 0.028 | 0.991 | 0.002 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.361 | 0.019 | 0.950 | 0.008 | 2.42 | 0.060 | 0.926 | 0.016 | 1.145 | 0.163 | 0.346 | 0.053 | 2.41 | 0.078 | 0.921 | 0.023 |
| 20 | 1.304 | 0.019 | 0.917 | 0.009 | 2.31 | 0.062 | 0.942 | 0.011 | 1.475 | 0.168 | 0.438 | 0.052 | 2.22 | 0.084 | 0.902 | 0.013 |
| 30 | 1.262 | 0.019 | 0.880 | 0.013 | 2.19 | 0.042 | 0.951 | 0.009 | 1.676 | 0.133 | 0.507 | 0.030 | 2.04 | 0.029 | 0.884 | 0.015 |
| 40 | 1.222 | 0.018 | 0.861 | 0.012 | 2.05 | 0.041 | 0.956 | 0.005 | 1.743 | 0.098 | 0.515 | 0.024 | 1.90 | 0.066 | 0.884 | 0.017 |
| 50 | 1.203 | 0.012 | 0.843 | 0.011 | 1.91 | 0.052 | 0.957 | 0.008 | 1.934 | 0.066 | 0.579 | 0.012 | 1.79 | 0.043 | 0.900 | 0.012 |
| 60 | 1.184 | 0.016 | 0.827 | 0.009 | 1.80 | 0.027 | 0.960 | 0.008 | 2.087 | 0.102 | 0.628 | 0.030 | 1.71 | 0.027 | 0.909 | 0.007 |
| 70 | 1.180 | 0.015 | 0.832 | 0.013 | 1.72 | 0.029 | 0.953 | 0.013 | 2.263 | 0.093 | 0.668 | 0.020 | 1.66 | 0.022 | 0.919 | 0.008 |
| 80 | 1.202 | 0.024 | 0.841 | 0.007 | 1.63 | 0.025 | 0.963 | 0.008 | 2.420 | 0.044 | 0.726 | 0.024 | 1.58 | 0.028 | 0.934 | 0.008 |
| 90 | 1.285 | 0.034 | 0.905 | 0.014 | 1.56 | 0.028 | 0.972 | 0.010 | 2.871 | 0.077 | 0.848 | 0.029 | 1.53 | 0.028 | 0.952 | 0.007 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.345 | 0.019 | 0.946 | 0.008 | 2.30 | 0.066 | 0.877 | 0.017 | 1.888 | 0.129 | 0.561 | 0.047 | 2.13 | 0.125 | 0.814 | 0.042 |
| 20 | 1.307 | 0.021 | 0.905 | 0.013 | 2.10 | 0.072 | 0.864 | 0.006 | 1.872 | 0.132 | 0.573 | 0.021 | 2.20 | 0.100 | 0.907 | 0.032 |
| 30 | 1.249 | 0.017 | 0.874 | 0.008 | 2.00 | 0.052 | 0.866 | 0.015 | 1.989 | 0.092 | 0.596 | 0.018 | 2.15 | 0.074 | 0.934 | 0.016 |
| 40 | 1.218 | 0.024 | 0.852 | 0.015 | 1.85 | 0.035 | 0.858 | 0.009 | 2.083 | 0.119 | 0.624 | 0.026 | 2.03 | 0.052 | 0.942 | 0.016 |
| 50 | 1.188 | 0.024 | 0.835 | 0.011 | 1.75 | 0.051 | 0.872 | 0.013 | 2.225 | 0.061 | 0.661 | 0.022 | 1.93 | 0.042 | 0.960 | 0.014 |
| 60 | 1.145 | 0.012 | 0.801 | 0.014 | 1.64 | 0.046 | 0.865 | 0.011 | 2.230 | 0.101 | 0.670 | 0.021 | 1.82 | 0.050 | 0.964 | 0.010 |
| 70 | 1.135 | 0.020 | 0.804 | 0.017 | 1.54 | 0.037 | 0.865 | 0.013 | 2.394 | 0.118 | 0.697 | 0.021 | 1.72 | 0.044 | 0.967 | 0.013 |
| 80 | 1.118 | 0.027 | 0.775 | 0.020 | 1.46 | 0.032 | 0.863 | 0.010 | 2.325 | 0.082 | 0.712 | 0.020 | 1.64 | 0.034 | 0.972 | 0.011 |
| 90 | 1.062 | 0.023 | 0.740 | 0.014 | 1.40 | 0.030 | 0.862 | 0.009 | 2.328 | 0.038 | 0.706 | 0.016 | 1.58 | 0.026 | 0.971 | 0.005 |

Table 22: Referred to Fig: 13, 80% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.25 | 0.019 | 0.998 | 0.001 | 1.51 | 0.041 | 0.877 | 0.014 | 4.93 | 0.278 | 0.975 | 0.008 | 1.69 | 0.022 | 0.978 | 0.009 |
| 20 | 1.25 | 0.011 | 0.998 | 0.001 | 1.56 | 0.038 | 0.870 | 0.015 | 4.91 | 0.180 | 0.976 | 0.007 | 1.75 | 0.032 | 0.979 | 0.007 |
| 30 | 1.25 | 0.012 | 0.996 | 0.002 | 1.67 | 0.035 | 0.878 | 0.012 | 4.86 | 0.184 | 0.971 | 0.012 | 1.85 | 0.050 | 0.973 | 0.013 |
| 40 | 1.25 | 0.018 | 0.997 | 0.001 | 1.70 | 0.036 | 0.888 | 0.013 | 4.81 | 0.256 | 0.981 | 0.005 | 1.88 | 0.035 | 0.982 | 0.006 |
| 50 | 1.25 | 0.018 | 0.996 | 0.001 | 1.79 | 0.048 | 0.898 | 0.010 | 4.84 | 0.245 | 0.976 | 0.010 | 1.95 | 0.052 | 0.977 | 0.010 |
| 60 | 1.24 | 0.020 | 0.997 | 0.001 | 1.91 | 0.064 | 0.908 | 0.008 | 4.93 | 0.306 | 0.974 | 0.012 | 2.04 | 0.060 | 0.970 | 0.012 |
| 70 | 1.25 | 0.018 | 0.997 | 0.001 | 2.00 | 0.038 | 0.925 | 0.015 | 4.89 | 0.279 | 0.976 | 0.015 | 2.10 | 0.053 | 0.974 | 0.017 |
| 80 | 1.25 | 0.013 | 0.995 | 0.001 | 2.09 | 0.042 | 0.924 | 0.007 | 4.80 | 0.199 | 0.967 | 0.016 | 2.16 | 0.081 | 0.959 | 0.025 |
| 90 | 1.25 | 0.018 | 0.995 | 0.002 | 2.22 | 0.061 | 0.924 | 0.010 | 4.55 | 0.222 | 0.934 | 0.031 | 2.22 | 0.137 | 0.921 | 0.043 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.24 | 0.016 | 0.997 | 0.001 | 1.59 | 0.043 | 0.911 | 0.011 | 5.03 | 0.251 | 0.993 | 0.003 | 1.73 | 0.052 | 0.993 | 0.004 |
| 20 | 1.25 | 0.011 | 0.997 | 0.002 | 1.67 | 0.050 | 0.928 | 0.011 | 4.97 | 0.189 | 0.991 | 0.003 | 1.76 | 0.037 | 0.979 | 0.007 |
| 30 | 1.25 | 0.013 | 0.997 | 0.001 | 1.74 | 0.053 | 0.938 | 0.012 | 4.96 | 0.228 | 0.990 | 0.006 | 1.78 | 0.057 | 0.959 | 0.009 |
| 40 | 1.24 | 0.016 | 0.996 | 0.001 | 1.81 | 0.025 | 0.943 | 0.010 | 4.96 | 0.282 | 0.982 | 0.005 | 1.78 | 0.051 | 0.931 | 0.019 |
| 50 | 1.25 | 0.014 | 0.996 | 0.002 | 1.91 | 0.040 | 0.942 | 0.008 | 4.84 | 0.212 | 0.976 | 0.009 | 1.82 | 0.065 | 0.897 | 0.023 |
| 60 | 1.25 | 0.009 | 0.996 | 0.001 | 2.01 | 0.047 | 0.946 | 0.007 | 4.81 | 0.141 | 0.964 | 0.010 | 1.76 | 0.064 | 0.831 | 0.027 |
| 70 | 1.24 | 0.016 | 0.996 | 0.001 | 2.08 | 0.052 | 0.951 | 0.010 | 4.86 | 0.215 | 0.956 | 0.018 | 1.69 | 0.063 | 0.773 | 0.024 |
| 80 | 1.24 | 0.022 | 0.996 | 0.001 | 2.12 | 0.045 | 0.952 | 0.010 | 4.81 | 0.319 | 0.950 | 0.021 | 1.51 | 0.107 | 0.676 | 0.049 |
| 90 | 1.25 | 0.017 | 0.995 | 0.002 | 2.25 | 0.051 | 0.952 | 0.010 | 4.61 | 0.217 | 0.927 | 0.037 | 1.20 | 0.210 | 0.507 | 0.096 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.24 | 0.015 | 0.998 | 0.001 | 1.53 | 0.032 | 0.887 | 0.013 | 4.91 | 0.224 | 0.967 | 0.006 | 1.62 | 0.039 | 0.942 | 0.012 |
| 20 | 1.25 | 0.014 | 0.999 | 0.001 | 1.56 | 0.036 | 0.873 | 0.014 | 4.80 | 0.212 | 0.968 | 0.009 | 1.68 | 0.033 | 0.936 | 0.016 |
| 30 | 1.25 | 0.013 | 0.999 | 0.001 | 1.61 | 0.025 | 0.874 | 0.010 | 4.83 | 0.220 | 0.966 | 0.009 | 1.70 | 0.035 | 0.926 | 0.020 |
| 40 | 1.24 | 0.014 | 0.998 | 0.001 | 1.71 | 0.030 | 0.881 | 0.011 | 4.90 | 0.213 | 0.958 | 0.009 | 1.78 | 0.034 | 0.916 | 0.016 |
| 50 | 1.25 | 0.018 | 0.998 | 0.001 | 1.73 | 0.062 | 0.867 | 0.021 | 4.78 | 0.282 | 0.957 | 0.015 | 1.83 | 0.066 | 0.917 | 0.020 |
| 60 | 1.26 | 0.013 | 0.999 | 0.001 | 1.81 | 0.047 | 0.874 | 0.014 | 4.64 | 0.172 | 0.947 | 0.021 | 1.83 | 0.123 | 0.883 | 0.050 |
| 70 | 1.25 | 0.016 | 0.999 | 0.001 | 1.92 | 0.045 | 0.867 | 0.017 | 4.69 | 0.218 | 0.934 | 0.021 | 1.90 | 0.100 | 0.857 | 0.038 |
| 80 | 1.25 | 0.016 | 0.999 | 0.000 | 1.95 | 0.078 | 0.858 | 0.011 | 4.65 | 0.280 | 0.934 | 0.016 | 1.82 | 0.140 | 0.800 | 0.063 |
| 90 | 1.25 | 0.017 | 0.999 | 0.001 | 2.03 | 0.046 | 0.855 | 0.011 | 4.47 | 0.333 | 0.894 | 0.035 | 1.52 | 0.249 | 0.643 | 0.100 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.178 | 0.012 | 0.944 | 0.010 | 2.11 | 0.032 | 0.887 | 0.012 | 0.203 | 0.053 | 0.040 | 0.011 | 2.33 | 0.065 | 0.982 | 0.015 |
| 20 | 1.131 | 0.015 | 0.906 | 0.009 | 2.01 | 0.048 | 0.887 | 0.010 | 0.400 | 0.083 | 0.079 | 0.016 | 2.24 | 0.054 | 0.988 | 0.006 |
| 30 | 1.084 | 0.012 | 0.866 | 0.011 | 1.90 | 0.053 | 0.899 | 0.006 | 0.704 | 0.069 | 0.141 | 0.013 | 2.08 | 0.067 | 0.985 | 0.006 |
| 40 | 1.036 | 0.010 | 0.824 | 0.011 | 1.89 | 0.048 | 0.902 | 0.009 | 0.892 | 0.061 | 0.183 | 0.015 | 2.07 | 0.053 | 0.987 | 0.003 |
| 50 | 1.005 | 0.010 | 0.802 | 0.016 | 1.84 | 0.048 | 0.913 | 0.009 | 0.995 | 0.065 | 0.202 | 0.024 | 1.99 | 0.060 | 0.988 | 0.006 |
| 60 | 0.962 | 0.014 | 0.771 | 0.012 | 1.76 | 0.050 | 0.923 | 0.007 | 1.140 | 0.086 | 0.226 | 0.025 | 1.89 | 0.058 | 0.989 | 0.003 |
| 70 | 0.930 | 0.010 | 0.743 | 0.014 | 1.75 | 0.041 | 0.938 | 0.010 | 1.281 | 0.076 | 0.256 | 0.014 | 1.85 | 0.034 | 0.991 | 0.003 |
| 80 | 0.897 | 0.009 | 0.716 | 0.013 | 1.68 | 0.032 | 0.938 | 0.004 | 1.407 | 0.036 | 0.284 | 0.015 | 1.77 | 0.033 | 0.989 | 0.002 |
| 90 | 0.867 | 0.013 | 0.689 | 0.014 | 1.61 | 0.038 | 0.940 | 0.006 | 1.523 | 0.050 | 0.313 | 0.018 | 1.70 | 0.038 | 0.990 | 0.004 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.207 | 0.015 | 0.968 | 0.004 | 2.18 | 0.084 | 0.927 | 0.008 | 1.361 | 0.302 | 0.269 | 0.060 | 2.21 | 0.095 | 0.943 | 0.027 |
| 20 | 1.182 | 0.011 | 0.946 | 0.003 | 2.11 | 0.050 | 0.940 | 0.009 | 1.848 | 0.315 | 0.368 | 0.055 | 2.11 | 0.067 | 0.939 | 0.013 |
| 30 | 1.158 | 0.014 | 0.927 | 0.009 | 2.05 | 0.071 | 0.946 | 0.012 | 2.246 | 0.242 | 0.448 | 0.045 | 2.00 | 0.077 | 0.924 | 0.016 |
| 40 | 1.132 | 0.013 | 0.907 | 0.010 | 1.99 | 0.044 | 0.951 | 0.007 | 2.322 | 0.222 | 0.461 | 0.044 | 1.93 | 0.044 | 0.921 | 0.017 |
| 50 | 1.119 | 0.010 | 0.893 | 0.006 | 1.88 | 0.041 | 0.952 | 0.007 | 2.516 | 0.134 | 0.508 | 0.024 | 1.83 | 0.034 | 0.926 | 0.014 |
| 60 | 1.103 | 0.012 | 0.882 | 0.010 | 1.81 | 0.036 | 0.954 | 0.007 | 2.781 | 0.216 | 0.557 | 0.038 | 1.75 | 0.034 | 0.923 | 0.011 |
| 70 | 1.092 | 0.014 | 0.877 | 0.004 | 1.76 | 0.043 | 0.957 | 0.007 | 3.004 | 0.126 | 0.592 | 0.027 | 1.73 | 0.043 | 0.936 | 0.010 |
| 80 | 1.099 | 0.013 | 0.881 | 0.009 | 1.74 | 0.040 | 0.958 | 0.008 | 3.354 | 0.235 | 0.662 | 0.021 | 1.72 | 0.040 | 0.945 | 0.011 |
| 90 | 1.138 | 0.019 | 0.908 | 0.010 | 1.66 | 0.024 | 0.959 | 0.010 | 3.796 | 0.203 | 0.763 | 0.032 | 1.67 | 0.030 | 0.961 | 0.007 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.198 | 0.011 | 0.961 | 0.004 | 2.12 | 0.072 | 0.891 | 0.011 | 2.577 | 0.269 | 0.509 | 0.059 | 1.86 | 0.168 | 0.781 | 0.062 |
| 20 | 1.178 | 0.014 | 0.940 | 0.005 | 2.00 | 0.042 | 0.882 | 0.012 | 2.641 | 0.159 | 0.533 | 0.025 | 1.97 | 0.086 | 0.869 | 0.039 |
| 30 | 1.153 | 0.013 | 0.922 | 0.009 | 1.94 | 0.050 | 0.882 | 0.009 | 2.877 | 0.230 | 0.575 | 0.039 | 1.99 | 0.092 | 0.904 | 0.031 |
| 40 | 1.121 | 0.013 | 0.901 | 0.010 | 1.84 | 0.048 | 0.893 | 0.010 | 2.986 | 0.126 | 0.585 | 0.030 | 1.94 | 0.066 | 0.938 | 0.021 |
| 50 | 1.115 | 0.014 | 0.891 | 0.007 | 1.77 | 0.057 | 0.880 | 0.016 | 3.053 | 0.194 | 0.612 | 0.031 | 1.92 | 0.060 | 0.957 | 0.014 |
| 60 | 1.097 | 0.018 | 0.872 | 0.013 | 1.71 | 0.036 | 0.884 | 0.010 | 3.145 | 0.232 | 0.642 | 0.035 | 1.85 | 0.056 | 0.956 | 0.024 |
| 70 | 1.094 | 0.013 | 0.876 | 0.014 | 1.62 | 0.039 | 0.888 | 0.014 | 3.414 | 0.232 | 0.680 | 0.025 | 1.76 | 0.034 | 0.967 | 0.010 |
| 80 | 1.070 | 0.018 | 0.854 | 0.013 | 1.57 | 0.032 | 0.879 | 0.012 | 3.325 | 0.122 | 0.670 | 0.029 | 1.73 | 0.059 | 0.965 | 0.014 |
| 90 | 1.052 | 0.014 | 0.841 | 0.014 | 1.52 | 0.034 | 0.877 | 0.009 | 3.390 | 0.171 | 0.680 | 0.020 | 1.68 | 0.028 | 0.971 | 0.008 |

Table 23: Referred to Fig: 13, 90% Majority

| | Conservative Majority | | | | | | | | Conservative Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.11 | 0.009 | 0.999 | 0.001 | 1.69 | 0.031 | 0.899 | 0.010 | 9.90 | 0.861 | 0.961 | 0.010 | 1.81 | 0.036 | 0.967 | 0.009 |
| 20 | 1.11 | 0.009 | 0.999 | 0.001 | 1.69 | 0.038 | 0.899 | 0.009 | 9.39 | 0.584 | 0.961 | 0.015 | 1.81 | 0.037 | 0.964 | 0.013 |
| 30 | 1.11 | 0.007 | 0.999 | 0.001 | 1.73 | 0.038 | 0.898 | 0.011 | 9.80 | 0.588 | 0.965 | 0.009 | 1.86 | 0.043 | 0.968 | 0.010 |
| 40 | 1.11 | 0.009 | 0.999 | 0.001 | 1.77 | 0.045 | 0.896 | 0.011 | 9.59 | 0.976 | 0.954 | 0.020 | 1.88 | 0.065 | 0.956 | 0.020 |
| 50 | 1.10 | 0.009 | 0.998 | 0.001 | 1.78 | 0.040 | 0.896 | 0.011 | 9.95 | 0.761 | 0.953 | 0.018 | 1.91 | 0.053 | 0.959 | 0.019 |
| 60 | 1.11 | 0.009 | 0.998 | 0.001 | 1.82 | 0.044 | 0.900 | 0.016 | 9.24 | 0.628 | 0.940 | 0.022 | 1.90 | 0.043 | 0.941 | 0.024 |
| 70 | 1.11 | 0.009 | 0.998 | 0.001 | 1.88 | 0.059 | 0.902 | 0.010 | 9.75 | 0.916 | 0.945 | 0.031 | 1.97 | 0.081 | 0.946 | 0.032 |
| 80 | 1.11 | 0.011 | 0.998 | 0.001 | 1.94 | 0.049 | 0.901 | 0.015 | 9.35 | 0.965 | 0.945 | 0.035 | 2.03 | 0.074 | 0.947 | 0.037 |
| 90 | 1.11 | 0.006 | 0.998 | 0.001 | 1.97 | 0.048 | 0.906 | 0.013 | 9.38 | 0.678 | 0.929 | 0.075 | 2.07 | 0.153 | 0.949 | 0.062 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.11 | 0.009 | 0.999 | 0.001 | 1.70 | 0.034 | 0.923 | 0.007 | 10.08 | 0.785 | 0.993 | 0.005 | 1.83 | 0.034 | 0.996 | 0.004 |
| 20 | 1.11 | 0.007 | 0.999 | 0.001 | 1.74 | 0.049 | 0.922 | 0.015 | 10.14 | 0.588 | 0.990 | 0.007 | 1.86 | 0.039 | 0.984 | 0.012 |
| 30 | 1.11 | 0.008 | 0.998 | 0.001 | 1.78 | 0.040 | 0.927 | 0.009 | 10.12 | 0.605 | 0.983 | 0.007 | 1.87 | 0.049 | 0.974 | 0.009 |
| 40 | 1.11 | 0.007 | 0.998 | 0.001 | 1.83 | 0.035 | 0.935 | 0.008 | 10.06 | 0.622 | 0.980 | 0.009 | 1.87 | 0.055 | 0.957 | 0.020 |
| 50 | 1.11 | 0.011 | 0.997 | 0.001 | 1.88 | 0.031 | 0.941 | 0.006 | 9.76 | 0.940 | 0.972 | 0.009 | 1.86 | 0.054 | 0.931 | 0.031 |
| 60 | 1.11 | 0.009 | 0.998 | 0.001 | 1.94 | 0.019 | 0.947 | 0.013 | 9.59 | 0.668 | 0.961 | 0.016 | 1.80 | 0.091 | 0.877 | 0.042 |
| 70 | 1.11 | 0.011 | 0.998 | 0.001 | 1.96 | 0.046 | 0.945 | 0.005 | 9.46 | 0.875 | 0.953 | 0.017 | 1.72 | 0.077 | 0.828 | 0.045 |
| 80 | 1.11 | 0.009 | 0.998 | 0.001 | 2.00 | 0.024 | 0.947 | 0.009 | 9.08 | 0.717 | 0.926 | 0.033 | 1.57 | 0.092 | 0.746 | 0.042 |
| 90 | 1.10 | 0.007 | 0.997 | 0.002 | 2.06 | 0.038 | 0.945 | 0.009 | 8.95 | 1.080 | 0.859 | 0.079 | 1.03 | 0.382 | 0.473 | 0.180 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.11 | 0.006 | 1.000 | 0.000 | 1.67 | 0.031 | 0.899 | 0.015 | 9.46 | 0.486 | 0.959 | 0.013 | 1.73 | 0.042 | 0.932 | 0.011 |
| 20 | 1.11 | 0.009 | 0.999 | 0.001 | 1.71 | 0.030 | 0.898 | 0.008 | 9.89 | 0.664 | 0.951 | 0.018 | 1.75 | 0.026 | 0.919 | 0.018 |
| 30 | 1.11 | 0.008 | 0.999 | 0.001 | 1.73 | 0.039 | 0.897 | 0.009 | 9.52 | 0.574 | 0.947 | 0.017 | 1.72 | 0.070 | 0.889 | 0.033 |
| 40 | 1.11 | 0.009 | 0.999 | 0.001 | 1.76 | 0.030 | 0.899 | 0.010 | 9.19 | 0.763 | 0.923 | 0.028 | 1.67 | 0.098 | 0.853 | 0.053 |
| 50 | 1.11 | 0.007 | 1.000 | 0.001 | 1.81 | 0.028 | 0.900 | 0.013 | 9.52 | 0.701 | 0.939 | 0.016 | 1.70 | 0.067 | 0.847 | 0.039 |
| 60 | 1.11 | 0.008 | 0.999 | 0.001 | 1.80 | 0.050 | 0.892 | 0.013 | 9.56 | 0.668 | 0.938 | 0.015 | 1.69 | 0.096 | 0.836 | 0.050 |
| 70 | 1.11 | 0.007 | 1.000 | 0.000 | 1.88 | 0.059 | 0.896 | 0.017 | 9.43 | 0.681 | 0.924 | 0.033 | 1.67 | 0.161 | 0.795 | 0.074 |
| 80 | 1.11 | 0.008 | 1.000 | 0.000 | 1.90 | 0.043 | 0.890 | 0.014 | 9.52 | 0.596 | 0.919 | 0.055 | 1.36 | 0.264 | 0.637 | 0.123 |
| 90 | 1.11 | 0.012 | 0.999 | 0.001 | 1.91 | 0.035 | 0.886 | 0.016 | 9.15 | 1.164 | 0.881 | 0.059 | 1.46 | 0.255 | 0.675 | 0.112 |

| | Liberal Majority | | | | | | | | Liberal Minority | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Ethnic | | | | Value | | | | Ethnic | | | | Value | | | |
| | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | | Clustering | | Exposure | |
| % liberal min | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| **Baseline** | | | | | | | | | | | | | | | | |
| 10 | 1.077 | 0.009 | 0.972 | 0.006 | 1.95 | 0.042 | 0.911 | 0.009 | 0.319 | 0.251 | 0.031 | 0.024 | 2.13 | 0.046 | 0.992 | 0.007 |
| 20 | 1.060 | 0.007 | 0.951 | 0.007 | 1.94 | 0.027 | 0.908 | 0.009 | 0.469 | 0.103 | 0.048 | 0.012 | 2.11 | 0.045 | 0.988 | 0.008 |
| 30 | 1.039 | 0.008 | 0.936 | 0.008 | 1.90 | 0.035 | 0.909 | 0.010 | 0.682 | 0.124 | 0.068 | 0.014 | 2.07 | 0.040 | 0.991 | 0.005 |
| 40 | 1.014 | 0.006 | 0.913 | 0.006 | 1.84 | 0.042 | 0.908 | 0.010 | 0.899 | 0.218 | 0.089 | 0.018 | 2.01 | 0.046 | 0.989 | 0.006 |
| 50 | 0.994 | 0.009 | 0.899 | 0.013 | 1.83 | 0.036 | 0.908 | 0.011 | 1.074 | 0.160 | 0.103 | 0.015 | 1.99 | 0.039 | 0.987 | 0.006 |
| 60 | 0.978 | 0.010 | 0.878 | 0.013 | 1.80 | 0.046 | 0.911 | 0.013 | 1.118 | 0.198 | 0.114 | 0.020 | 1.95 | 0.043 | 0.988 | 0.004 |
| 70 | 0.958 | 0.008 | 0.864 | 0.011 | 1.77 | 0.047 | 0.916 | 0.008 | 1.416 | 0.148 | 0.138 | 0.013 | 1.91 | 0.055 | 0.989 | 0.003 |
| 80 | 0.939 | 0.009 | 0.844 | 0.014 | 1.72 | 0.043 | 0.918 | 0.011 | 1.468 | 0.081 | 0.149 | 0.012 | 1.85 | 0.041 | 0.990 | 0.006 |
| 90 | 0.928 | 0.007 | 0.836 | 0.008 | 1.70 | 0.031 | 0.922 | 0.011 | 1.633 | 0.136 | 0.161 | 0.013 | 1.84 | 0.033 | 0.993 | 0.002 |
| **ß liberal majority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.091 | 0.009 | 0.983 | 0.002 | 2.04 | 0.042 | 0.933 | 0.007 | 0.921 | 0.659 | 0.090 | 0.063 | 2.13 | 0.072 | 0.974 | 0.025 |
| 20 | 1.080 | 0.007 | 0.974 | 0.004 | 1.99 | 0.040 | 0.933 | 0.014 | 2.719 | 0.866 | 0.266 | 0.083 | 2.05 | 0.065 | 0.962 | 0.024 |
| 30 | 1.065 | 0.007 | 0.962 | 0.004 | 1.95 | 0.038 | 0.937 | 0.009 | 3.183 | 1.006 | 0.308 | 0.091 | 2.00 | 0.045 | 0.960 | 0.016 |
| 40 | 1.056 | 0.006 | 0.953 | 0.004 | 1.94 | 0.048 | 0.945 | 0.006 | 3.606 | 0.470 | 0.353 | 0.053 | 1.95 | 0.050 | 0.950 | 0.015 |
| 50 | 1.052 | 0.009 | 0.946 | 0.004 | 1.90 | 0.028 | 0.950 | 0.006 | 4.223 | 0.420 | 0.422 | 0.038 | 1.88 | 0.062 | 0.940 | 0.022 |
| 60 | 1.037 | 0.007 | 0.933 | 0.007 | 1.87 | 0.042 | 0.955 | 0.009 | 4.252 | 0.447 | 0.426 | 0.035 | 1.85 | 0.048 | 0.948 | 0.016 |
| 70 | 1.037 | 0.007 | 0.932 | 0.007 | 1.84 | 0.037 | 0.953 | 0.005 | 4.899 | 0.256 | 0.496 | 0.036 | 1.83 | 0.048 | 0.948 | 0.013 |
| 80 | 1.031 | 0.009 | 0.926 | 0.010 | 1.81 | 0.022 | 0.954 | 0.008 | 5.320 | 0.496 | 0.543 | 0.038 | 1.82 | 0.026 | 0.958 | 0.009 |
| 90 | 1.039 | 0.012 | 0.939 | 0.007 | 1.76 | 0.025 | 0.954 | 0.008 | 6.486 | 0.570 | 0.625 | 0.063 | 1.78 | 0.034 | 0.965 | 0.009 |
| **ß liberal minority = 1** | | | | | | | | | | | | | | | | |
| 10 | 1.094 | 0.008 | 0.983 | 0.003 | 1.97 | 0.072 | 0.908 | 0.010 | 5.033 | 0.988 | 0.513 | 0.107 | 1.59 | 0.179 | 0.734 | 0.087 |
| 20 | 1.073 | 0.009 | 0.969 | 0.007 | 1.91 | 0.038 | 0.907 | 0.006 | 4.965 | 0.937 | 0.476 | 0.075 | 1.83 | 0.141 | 0.869 | 0.057 |
| 30 | 1.068 | 0.010 | 0.961 | 0.006 | 1.88 | 0.036 | 0.906 | 0.009 | 5.353 | 0.700 | 0.532 | 0.051 | 1.77 | 0.159 | 0.852 | 0.077 |
| 40 | 1.055 | 0.010 | 0.948 | 0.006 | 1.85 | 0.034 | 0.905 | 0.011 | 5.352 | 0.556 | 0.538 | 0.044 | 1.83 | 0.074 | 0.892 | 0.036 |
| 50 | 1.049 | 0.007 | 0.945 | 0.009 | 1.81 | 0.039 | 0.910 | 0.009 | 5.775 | 0.646 | 0.569 | 0.049 | 1.82 | 0.090 | 0.913 | 0.036 |
| 60 | 1.041 | 0.006 | 0.939 | 0.005 | 1.79 | 0.036 | 0.904 | 0.010 | 5.807 | 0.432 | 0.571 | 0.045 | 1.84 | 0.062 | 0.930 | 0.022 |
| 70 | 1.035 | 0.007 | 0.933 | 0.008 | 1.74 | 0.048 | 0.910 | 0.016 | 6.101 | 0.452 | 0.598 | 0.034 | 1.80 | 0.067 | 0.945 | 0.029 |
| 80 | 1.027 | 0.009 | 0.928 | 0.008 | 1.71 | 0.033 | 0.907 | 0.011 | 6.283 | 0.526 | 0.606 | 0.039 | 1.75 | 0.045 | 0.930 | 0.022 |
| 90 | 1.017 | 0.006 | 0.918 | 0.010 | 1.69 | 0.050 | 0.903 | 0.011 | 6.181 | 0.680 | 0.595 | 0.029 | 1.81 | 0.036 | 0.969 | 0.015 |

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