Social Inclusion, Identity, & Conflict Adaptation

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Abstract

In this study we examine whether feelings of inclusion are correlated with identity integration, and if so, what effect this interaction might have on conflict adaptation. Our first hypothesis is that we will find a positive relationship between identity integration (II) and conflict adaptation. Our second hypothesis is that we will see a positive relationship between II and feelings of inclusion. Our third hypothesis is that we will see a relationship between feelings of inclusion and conflict adaptation. Our fourth hypothesis is that the relationship between II and conflict adaptation is moderated by feelings of inclusion; we predict that individuals who self-report feelings of marginalization will show an interaction between inclusion and conflict adaptation. Fifty-seven participants from an Introductory Psychology course (who each self-identified as marginalized) were asked to complete a Prime-Probe task and two surveys which assessed their perceptions of campus climate and II (using the General Identity Integration Scale). The results did not support hypothesis one; we found no significant relationship between II and conflict adaptation, which is contrary to what has been shown in previous studies. Results supported our second hypothesis; we found a significant relationship between II and conflict adaptation. For our third hypothesis we found a marginally significant positive relationship; which is the opposite direction of our initial hypothesis. Finally, results supported - with significance, that the relationship between inclusion and conflict adaptation is moderated by identity integration (II), such that, II acts as a buffer against feelings of marginalization. Future studies will measure the varying levels of inclusion on populations who do not self-identify as marginalized and the relationship between inclusion and conflict adaptation within this population.

Keywords: Social Exclusion, Inclusion, Marginalization, Identity Integration, Conflict Adaptation, CSE

Social Inclusion, Identity, & Conflict Adaptation

It is very difficult to be considered as "odd" or "different," especially when these feelings might contribute to the way that one is treated or received by others. In addition to the conflict associated with perceptions of not being treated fairly (e.g., stress, doubt, fear), someone might question their own identity. During this struggle for developing a sense of identity, one can be faced with perceptions of discrimination and feel socially excluded from peer groups (Cuyjet, 1998). Research on the effects of social exclusion, also referred to as marginalization, has focused on many different aspects of this phenomenon ranging from gender to race (Furlong, 2013). Cuyjet (1998) showcased how perceptions of social exclusion were processed by African-Americans - who attended predominantly white universities (PWUs) - and highlighted the ways in which they rated more negative perceptions of the campus environment than Whites did. These negative perceptions of campus climate can lead African-American students to feel socially excluded in various ways, such as, not having access to resources, to failing to bond with fellow peer groups (Reid, & Radhakrishnan, Phanikiran, 2003). Baumeister, Nuss, & Twenge (2002) found that feelings of social exclusion (also referred to as marginalization) have the potential to result in cognitive impairments, and have been shown (in some cases) to reduce intellectual ability.

The experiences of social exclusion should not be interpreted as an issue that only impacts those with observable traits, such as, gender, disabilities, and race. According to previous research on Third Culture Kids, feelings of social exclusion can play a significant role in the development of their identities, such that, TCKs who reported greater feelings of social exclusion had difficulties in developing a sense of identity (Fail, Thompson, & Walker, 2004). TCKs (also known as "global cosmopolitans" or "global nomads") are people who do not

identify with one culture in particular - due to their time spent living among various cultural groups - and as a result can experience conflict when integrating these various identities (Cheng, Lee, Benet-Martinez, & Huynh, 2014; Fail et al., 2004).

Among the many effects that social exclusion can have on an individual, the impacts on one's sense of identity and cognitive abilities are among the most crucial to investigate and understand. As mentioned earlier, when integrating one's various identities certain conflicts can arise, especially when one feels socially excluded (Fail et al., 2004). Since these feelings of social exclusion have been shown to impact one's sense of identity, it may be of interest to discover whether they can directly affect one's ability to adapt to conflict (Cuyjet, 1998; Fail et al., 2004). Previous research has shown that the ability to integrate one's various identities is a key aspect to influencing better performance on the cognitive skill of conflict adaption (Jackson, Santhanagopolan, Huff, Weissman, & Lee, 2014). In this study, we will use the reverse of social exclusion (inclusion), as we examine how feelings of inclusion and identity integration interact to influence conflict adaptation.

Identity Integration

Identity may be defined as a combination of many selves that one can use to represent who they are at any one point in time (Benet-Martínez, Leu, Lee, & Morris, 2002). For example, if a person is a doctor, when she is "on the job" she will likely assume the identity of professionalism, knowledge, charisma, and strength. The person of authority that she must become requires her full attention and dedication to that role; otherwise, colleagues and patients might not trust her expertise or commitment to the important task at hand. In a similar way, this same person takes on a different identity outside of work. For example, she may have a spouse at home, and in this case, she will take on the identity of a wife. If she has children, then her

identity now becomes a mother. If the person in this scenario were capable of fluidly switching between her various identities (doctor, wife, mother) with minimal conflict, she would be referred to as having high identity integration (Benet-Martínez et al., 2002). On the other hand, if she experienced significant conflict when switching between these identities - such that she feels a strong separation from one identity to the other - she would be referred to as having low identity integration (Benet-Martínez et al., 2002).

The degree, to which one is capable of integrating these various identities, whether low or high, has many connections to social inclusion. For example, Third Culture Kids are a group that is well known for negotiating identity management. Research on these individuals has highlighted the complex nature associated with integrating one's identity after belonging to numerous cultural environments (Fail et al., 2004). Due to the fact that they are constantly moving from one culture to another - learning to adapt to a new host culture, and repeating the process - these individuals gain a sense of ambiguity about which cultural identity to claim as their own (Fail et al., 2004). Referring to themselves as "cosmopolitan people who feel comfortable in a variety of environments but lack a sense of belonging in any one," they find it challenging to feel as if they belong to any individual culture in particular (Fail et al., 2004, p. 323). Constantly feeling as if they do not belong - due to the conflicts present when switching between their cultural identities - forces them to adapt to different ways of handling social inclusion (Fail et al., 2004). According to Fail and colleagues (2004) there are two ways in which Third Culture Kids can handle their lack of inclusion referred to as "encapsulated marginality" and" "constructive marginality." Encapsulated marginality refers to the concept that one can allow his lack of social inclusion to make him feel isolated, thus he retreats and resist attempts to incorporate his identity with that of his host culture (Fail et al., 2004). On the other hand,

constructive marginality, refers to one who is able to adapt to the requirements of his host culture, and thus learns how to relate to others which allows him reach higher levels of inclusion (Fail et al., 2004). The reasons these individuals choose between *encapsulated* and *constructive* styles of identity management have not been fully determined, but it has been suggested that one's "home life" plays a crucial role (Fail et al., 2004). Third Culture Kids are just one example of the many groups who are faced with the task of integrating their identities while resisting the conflicts associated with social inclusion.

There has been much research on bicultural individuals, who may not be as culturally diverse as Third Culture Kids, but still struggle with the conflict of integrating or remaining loyal to one identity (Cheng et al., 2014). Biculturals can be loosely defined as individuals who belong to at least two dominant cultures (Cheng et al., 2014). Most research on biculturals focuses on individuals who belong to East Asian or North American cultures and then integrate into the opposite culture (Cheng et al., 2014). The reason that "special attention" is paid to this specific bicultural group is because cultural norms and habits are nearly reversed in these cultures, which makes it much easier to observe conflicts when they are switching from one cultural identity to the other (Cheng et al., 2014).

There are four styles that a bicultural individual can use when managing their opposing cultural identities. The first is "integration," a term which refers to an individual who is able to maintain the traditions and values of the host culture, while still participating in the new one (Berry, 1990). The second is "assimilation," which means that an individual completely adopts the new culture while discarding any traces of their previous culture (Berry, 1990). Next, is "separation" which is essentially the opposite of assimilation, such that, they hold on to their host culture while refusing to accept the new culture (Berry, 1990). Lastly, is "marginalization,"

which occurs when an individual does not hold on to the traditions and values of their original

culture and yet refuses to integrate into the new culture (Berry, 1990). Focusing on the integrated

group is one example of how one can adapt to conflict while maintaining a strong sense of

cultural identity. However, in the marginalization group individuals find it more difficult to

resolve the conflict associated between their merging cultural identities. Learning the

relationship between these two adaptation styles could be an essential method for understanding

how one is able to adapt to the conflict associated with integrating one's identities.

Social Exclusion (Marginalization)

Sometimes the marginalization that one endures is not out of refusing to accept either of

their cultural identities, but rather, by being "forcefully" outcast by the culture to which they

currently belong. The concept of social exclusion has taken on many different meanings and

definitions over the decades (Burchart, Grand, & Piachuad, 1999). The earliest known research,

which coined the usage of this term, was proposed to have originated in France, where they

examined a population of individuals who had been administratively excluded from the state's

social insurance system (Burchart et al., 1999). From then, the term has been used in many

different ways but it is often found when referring to marginalized groups who have been

excluded from society, due to imbalanced economic structures (Czapiński, & Panek, 2011;

Furlong, 2013).

Another, more interpersonal, definition of social exclusion, is described as "the lack of

engaging in significant social interaction with family [and] friends, [or] identifying with a

cultural group or community" (Burchart et al., 1999). This definition is most useful when

identifying the internal conflict associated with not feeling included or engaged in one's current

culture or community. When assessing the importance of human socialization, Baumeister and

colleges (2002) argued that it nearly surpasses intelligence, when it comes to the importance of developing one's cultural growth and well being in society. Research has also shown that social exclusion is the largest contributor to anxiety, even more so than "fear of bodily harm" (Baumeister & Tice, 1990). In a subsequent study, participants were deceived into believing that they were doomed to "end up alone" later in life, and then given a simple IQ test. The results showed that they had significantly reduced performance on the test than those who were given positive fortunes or even fortunes warning them of a fatal accident (Baumeister et al., 2002). Research, which highlights the magnitude of being excluded from other peers and social groups, raise questions as to what needs to be done to better understand and resolve this phenomenon.

The terms social exclusion and marginalization are commonly used interchangeably. According to research on the usages of these two terms, there are subtle distinctions between them that should be noted when considering these concepts (Furlong, 2013). For example, when someone is marginalized they have been separated from society based on specific characteristics, such as disability, gender, sexuality, race, or ethnicity, whereas social exclusion takes the concept of marginalization a step further and occurs after prolonged experiences of marginalization (Furlong, 2013). Therefore, in this study, we will base our concept of social exclusion on someone who is able to embody such feelings of marginalization for prolonged periods of time (Furlong, 2013).

In addition to understanding the usage of the term (social exclusion) it is also important to understand the application of the concept. Many think of social exclusion from the context that it affects sub-populations, such as, ethnic minorities or members of the LBGT community, but in this case we examine social exclusion from a broader context. For example, on college campuses many students come from different social classes, ethnicities, nationalities, and genders, which

can contribute to various experiences within any population of students. This variance in cultural backgrounds among students leaves room for in-group members to feel excluded based on unobservable differences, such as one's gender, religion, or foreigner status. Tracing back to the study on Third Culture Kids, we learned that feelings of social exclusion do not necessarily correlate with observable characteristics (Fail et al., 2004). Therefore, it may not be unreasonable to assume that someone from a lower-class Caucasian family is capable of feeling marginalized in an environment with his more wealthy counter-parts. Now that we have an understanding of social exclusion, from this point forward we will center our discussion on the opposite side of the same concept - social inclusion - and its relationship to identity integration and conflict adaptation.

Campus Climate

After conceptualizing identity integration, social inclusion, and the consequences of feeling that one does not belong in their cultural environment, it is beneficial to determine how one might actually measure feelings of inclusion. Research has shown that perceptions of campus climate can be used as a measure of inclusion; in these studies feelings of inclusion have been correlated with outcomes, such as, academic success, GPA, and graduation rates (Edman & Bradzil, 2008). Perceptions of one's environment and the internalization of social discrimination are critical aspects to understanding the concept of campus climate (Cujet 1998). While there is no agreed upon consensus as to what the actual definition of campus climate is, many researchers tend to attribute its properties to focusing on the perceptions of individuals from a particular gender or race (Hart & Fellabaum, 2008). One study may focus on perceptions of discrimination among blacks, while another may focus on the marginalization of transgender males, but few have taken measures to provide data for campus wide perceptions (Hart & Fellbaum, 2008). This

method of focusing on a specific characteristic has been criticized for its failure to consider the many variations within a single population (Hart & Fellbaum, 2008). When a researcher focuses on a single characteristic (i.e., gender), they fail to account for the many different perceptual experiences within that studied demographic, such as, one's sexual orientation, ethnicity, or religion (Hart & Fellabaum, 2008). In addition, there is an interaction between different identities and using such a focused approach on only one aspect of identity (e.g., gender) ignores the intersectional nature between the two identities (Cole, 2009). For example, an African American woman, may not only identify as a woman, because her experiences as an African American woman are different from that of a woman from another ethnicity (Cole, 2009). Neither is she only an African American, because her experiences as a woman are different from the experiences of an African American male (Cole, 2009). The place where these two identities converge is the intersection where her gender identity as African American woman becomes united (Cole, 2009). Therefore, using a more inclusive approach when assessing campus climate can provide perspectives from those who may not feel included, although they belong to the dominant group on campus (i.e. a white male, at a predominantly white university, that also identifies as homosexual).

Conflict Adaptation

In order to manage multiple identities, individuals may have to undergo constant adaptation and conflict between these identities. An aspect that may further complicate this process is feelings of social exclusion. In the current project, we were interested in measuring these relationships. One way in which conflict adaptation has been measured is through a basic cognitive process known of as the congruency sequence effect (CSE).

A real-world example of this effect can be derived from the Cocktail Party Problem (Cherry, 1953). This problem showcases how our attention can stay focused on one conversation (the person we are talking to) regardless of the many surrounding people who are also engaged in conversations at a cocktail party (Cherry, 1953). CSE takes this concept a step further by examining the cost of being interrupted from attending to a particular stimulus, and comparing that cost to the potential gains of being prepared for another interruption (Weissman et al., 2015).

Using our cocktail party scenario, picture that someone is talking to a person in front of him or her and suddenly their attention is disrupted by a new singer on the microphone. After this brief interruption it may take them a few seconds before they are able to refocus on the conversation that they were initially having. However, after that person manages to regain their attention to the conversation with the person in front of them, the next time they are interrupted by a new singer, it will not take them as long to refocus to their conversation. This effect of sudden attentional sharpening occurs as if they are better prepared to handle this new distraction, based on the previous interruption that occurred.

The CSE is a measure of this attentional sharpening, which occurs after someone is exposed to a previously interrupting (new) stimulus during a distractor interference task (Weissman et al., 2015). It can be more scientifically described as an algorithm, which combines the differences in attentional response times (for incongruent and congruent trails) during a distractor interference task (Weissman, Egner, & Link, 2015). After these times have been subtracted from each other, the researcher can then compare that time to those shown during a typical congruency effect (Merian & Kessler, 2008). The congruency effect is the precursor, in theory, to the congruency sequence effect - which basically states that the response times for a repeated stimulus will be faster than the response times shown after one is introduced to a

conflicting (new) stimulus (Merian & Kessler, 2008). The result of these measured reaction times is what we use to determine how efficient one is at adapting to conflict.

The Present Study

In this study, we examine the relationship between feelings of inclusion and identity integration in a sample that self-identifies as feeling marginalized. We measure social inclusion using perceptions of campus climate. In addition, we investigate whether the influence of social inclusion might impact one's ability to integrate multiple identities and to adapt to conflict. Previous work has shown a positive relationship between identity integration and conflict adaptation, such that, the more integrated an individual's identity is, the better they are at conflict adaptation (Jackson, Santhanagopolan, Huff, Weissman, & Lee, 2014). Therefore in this study, we would expect to see a relationship between identity integration and conflict adaptation, such that, individuals with greater identity integration will show better performance in conflict adaptation. Second. we would expect to see a relationship between feelings of inclusion and identity integration, where individuals who report higher levels of inclusion will have greater identity integration (Fail et al., 2004). Third, based on research which has shown a relationship between feelings of inclusion and cognitive abilities; we expect to find a positive relationship between inclusion and conflict adaptation, such that, the higher levels of inclusion reported by an individual, the better they will be at conflict adaptation (Baumeister et al., 2002). Finally, we would expect to see that the relationship between identity integration and conflict adaptation is moderated by feelings of inclusion.

<div align="center">**Methods**</div>

Participants

Fifty-seven college students in the Introductory Psychology course were recruited from the subject pool and received course credit for their participation. Participants were allowed to register for the study based upon the pretense that they had recently experienced feelings of marginalization (or social exclusion). There were 29 male and 26 female participants with 2 additional subjects self-identifying (i.e., other) as "A-gender." Ages ranged from 18 - 23 (M_{age} = 18.9, SD_{age} = 1.2). Ethnic backgrounds of participants were 38 White, 6 African American, 1 Hispanic, 5 Middle Eastern, 7 East Asian, 5 South Asian, and 1 Other. Each participant signed a consent form that was approved by the Institutional Review Board at the University of Michigan.

Procedure

The participant was greeted by the researcher and asked to sit at the computer. He would then be notified that the study was testing attention and identity and then asked to read over and sign the consent form. The researcher then explained that the subject would be required to complete a Prime-Probe task (Figure 1) on the computer and a survey at the end. There was only one participant in the room during each session.

Each participant was secured into a chin rest approximately 50cm away from the computer screen before starting the task. The researcher then explained the Prime-Probe task to the participant (See Figure 1). The prime-probe task consisted of three words stacked on top of each other in a smaller font, followed by a single word in a larger font. The words would sequentially flash in the center of the screen. Participants were instructed to ignore the first three words, and respond as quickly as possible to the large word. They were then instructed to place their hands on the keyboard and to indicate the identity of the large word by pressing the corresponding key on the keyboard (F for left, G for right, J for up, and N for down). Participants were then informed that if they pressed the wrong key, an error message would briefly flash onto

the center of the screen, but to ignore the error message and to continue responding to the next

trail. Participants were then given a practice block to become familiarized with the controls

before the task, which contained 24 trials.

 After the participant appeared comfortable with the task, the researcher then explained

that the task included 8 separate blocks - lasting approximately 3 minutes each, and then a brief

respite between blocks was allowed. He then explained that he would be in the other room

(watching their progress through a two-way mirror) and if the participant needed anything, to

raise his hand.

After completion of the Prime-Probe task, the participant was then asked to complete the

survey portion of the experiment. The researcher explained that there were no right or wrong

answers but to answer as honestly as possible. They were also informed that their answers would

remain anonymous. While the participant completed the survey, the researcher watched from the

other room and waited for the participant to signal that they were finished with the survey. Upon

verifying that they had completed the survey, the researcher then asked the participant a set of

debriefing questions related to the study. The participant was then debriefed and allowed the

opportunity to inquire about the purpose of the study.

Measures

Prime-Probe Task. The prime-probe task, developed by Daniel Weismann, was used to

measure conflict adaptation (Weissman et al., 2015). The task was composed of 8 blocks, with

97 trials per block. Each block lasted about 3 three minutes, with the entire task lasting

approximately 24 minutes.

Stimuli. In the task, three stimuli (i.e., distracter, blank screen, target) were presented

within rapid succession for each trial. A single trial lasted 2 seconds and was comprised of a

distracter (133 ms), followed by a blank screen (33 ms), the target (133 ms), and a blank screen (1700ms) between each trial. Distracter stimuli contained three identical words, stacked vertically, in the center of the screen (48 pt. font). Target stimuli were one single word, of a larger font, presented in the center of the screen (77 pt. font). Each target and distracter included a variation between the following words: "Left", "Right", "Up", or "Down." Participants were instructed to indicate the identity of the target stimuli (large word) using one of four keys on the keyboard. To indicate the identity of the stimuli, participants had to press one of four keys on the keyboard: "F" (left middle finger) corresponded to "Left", "G" (left index finger) corresponded to "Right", "J" (right middle finger) corresponded to "Up", and "N" (right index finger) corresponded to "Down". Trials were either congruent (Left-Left-Left/Left) or incongruent (Left-Left-Left/Right) and were presented an equal amount of times throughout the task (50/50) (See Figure 1 for a visual representation of the task).

Data Analysis. Before analyzing response time (RT) data, practice trials and outliers were discarded. The primary measure of conflict adaptation, in this experiment, was the congruency sequence effect (i.e., CSE). The formula for the congruency sequence effect can be calculated as CSE = (cI - cC) – (iI - iC), where cI = current trial is incongruent when previous trail was congruent; cC = current trial is congruent and previous trail congruent; iI = current trail is incongruent and previous trail incongruent; and iC = current trail is congruent and previous trail incongruent. The total difference of the RT's from (cI – cC) – (iI – iC) is the aggregate used to determine CSE.

Surveys. Participants completed three surveys in the lab, which were programed and distributed through Qualtrics. The surveys consisted of the Campus Climate Scale (Reid et al., 2003; Flanagan et al., 2007), the General Identity Integration Scale (Hanek, Lee, & Brannen,

2014), and Demographics. The Campus Climate Scale was used to measure feelings of inclusion. The General Identity Integration Scale was used to measure the extent to which individuals see their identities as overlapping or conflicting and/or separate.

Campus Climate. The scale contained 25 items, which were used to test perceptions of inclusion. It was a 5-point Likert-type scale with responses ranging from "Strongly Disagree" to "Strongly Agree." Sample items include, "In general, I fit in with other students here," "In general, people pull together to help each other," "People trust each other regardless of ethnicity," "I feel left out of things here at the university" (reverse coded) and "I have been treated unfairly on this campus" (reverse coded) (α = .70). Some items were reverse coded such that higher values indicated greater feelings of inclusion.

General Identity Integration (GII). The scale includes 10 items and is used to measure how individuals manage their different selves. It is a 7-point Likert-type scale with responses ranging from "Strongly Disagree" to "Strongly Agree." Sample items include, "I feel comfortable having many selves," "Different selves can blend together seamlessly," "It is possible for people to feel comfortable having many selves," "Having different selves creates tension" (reverse coded) and "I am often conflicted between my different selves" (reverse coded) (α = .67). Some items were reverse coded such that higher values indicated greater feelings of integration between multiple identities.

Results

All analyses were conducted using SPSS. We first computed correlations between all relevant variables to test hypotheses 1-3 (See Table 1). Previous data had shown that individuals who reported higher levels of identity integration were better at conflict adaptation. Contrary to previous studies on the relationship between identity integration and conflict adaptation, we did

not find a significant correlation to support our first hypothesis (r = -.04, p = .75). To test our

second hypothesis, we tested the correlation between identity integration and perceptions of

campus climate; we found a significant correlation, such that, feelings of social inclusion were

positively correlated with identity integration (r = .33, p = .012). Third, we found that individuals

who reported higher levels of inclusion actually performed worse at conflict adaptation. We

predicted that individuals, who reported higher levels of social inclusion, would perform better

on the conflict adaptation task; however, we found a marginally significant effect, in the opposite

direction of our initial hypothesis (r = -.25, p = .06). Finally, we used a multiple linear regression

analysis to examine the relationship between identity integration and conflict adaptation (as

measured by CSE) when moderated by inclusion (See Table 2). We found that the interaction

between identity integration and feelings of inclusion significantly predicted conflict adaptation

(*beta* = -.02, t = -2.15, p = .03). This interaction shows that the relationship between identity

integration and conflict adaptation is moderated by feelings of inclusion (See Figure 2). For

individuals with lower levels of identity integration, there is little variation in conflict adaptation

as a result of feelings of inclusion. However, for individuals high in identity integration, conflict

adaptation is highest in individuals who report lower inclusion, whereas conflict adaptation is

diminished in individuals who report higher inclusion.

Discussion

The current study examined whether there was a relationship between identity

integration, feelings of inclusion, and conflict adaptation. We found that individuals who rated

higher levels of identity integration also rated higher levels of social inclusion. This result is

consistent with previous studies on Third Culture Kids, which showed a correlation between

feelings of inclusion and identity integration (Fail et al., 2004). It is possible that our results

shared similarities to those found in Third Culture Kids, due to the fact that we recruited based on self-reported marginalized status, however, it is also possible that similar effects will be found in a general population of non-marginalized students.

Contrary to our primary hypothesis, identity integration, as an independent variable, showed no significant relationship to conflict adaptation. However, when moderated by feelings of inclusion, we found a significant relationship between high identity integration (II) and conflict adaptation, such that, the lower the levels of inclusion reported by high II individuals, the better they performed at conflict adaptation; conversely, the higher levels of inclusion reported by high II individuals, the worse they performed at conflict adaptation. Low identity integration showed no significant relationship to conflict adaption when moderated by feelings of inclusion (For a visual representation of this interaction see Figure 2). This suggests that identity integration may act as a buffer against feelings of marginalization. One possible reason for this interaction can be found in the relationship between identity integration and feelings of inclusion. In this relationship it may be that the more included someone feels the less "trained" they are at adapting to conflict; whereas, those who are more accustomed to conflict are better prepared to handle conflict - due to the constant levels of conflict associated with low levels of inclusion. For example, if someone works a muscle every day and the event occurs when they are required to use that muscle, they would be better prepared to handle the stress associated with that task – as opposed to someone who rarely trains that muscle. Using this example in relation to our study, the worked "muscle" would be conflict adaption for individuals who are constantly battling the cognitive conflict associated with low levels of social inclusion (Baumeister et al., 2002). Likewise the unworked "muscle" would be those who are high on inclusion and therefore have no need for conflict adaptation.

Limitations

We had a few limitations in this study, beginning with our sample. We had a fairly small

amount of participants (57) to collect our data from. Our findings would have been more

generalizable if we had recruited more participants but were unable to do so because of time

constraints. Also, with participants self-identifying as marginalized (from the subject pool), it

raises questions as to whether there were a few who did not pay attention to pre-screening

qualifications. In addition, our campus climate survey was only one scale out of many and it is

possible that other scales predict feelings of inclusion more accurately. Lastly, the prime-probe

task was an instrument used to measure conflict adaption in normal populations but was not

specifically designed to measure conflict in marginalized groups. It is possible that if the task

were re-programmed specifically to measure conflict in groups who self identify as marginalized

(e.g. using less trials, shorter blocks, different stimuli) it could be more accurate at assessing

conflict in these populations.

Implications

If the results found in this study can be replicated, it would change many perceptions

about what it means to be socially included. For this data to implicate that someone having faced

more conflict than others could give one a "cognitive edge" in conflict adaptation is contrary to

what many studies on low inclusion (marginalized) groups would have us assume. It also brings

us to question the impact of identity integration in this process of conflict adaptation. As

mentioned earlier, it is assumed that high levels of identity integration can act as a buffer for

feelings of marginalization. This means that individuals who are high in identity integration are

able to resist the negative effects associated with low inclusion. The method as to how or why

this occurs still stands to be tested. It could have something to do with genetic influences, such as

those found in the influence of inherited chemical balances on social behavior (Skuse &

Gallagher, 2011). Another possibility is that high identity integration/low inclusion individuals

have greater resilience, such that, they manage stress in ways that are more effective than those

in the other two groups – low identity integration and high identity integration/high inclusion

(Wexler, DiFluvio, & Burke, 2009). Future studies could address this question by incorporating

measures of stress hormones, such as cortisol.

Despite the fact that this result was not consistent with our original hypothesis, it raises

questions as to whether feelings of inclusion are able to moderate cognitive abilities in other

cognitive tasks. For example, one study found a correlation between feelings of inclusion and

increased selective attention (DeWall, Maner, & Rouby, 2009). In the study, a group of

participants were threatened with the possibility of a *future alone* and then given a Visual Search

test to measure whether they would be able to identify smiling faces - from a crowd of

conflicting (angry/neutral) faces - faster than those in the control groups – *future belonging* and

misfortune (DeWall et al., 2009). They did this to test whether individuals lacking inclusion were

faster at identifying positive images, due to their possible desire for social acceptance (DeWall et

al., 2009). The *future alone* groups significantly identified smiling faces at response times faster

than controls (DeWall et al., 2009). These findings suggest a similar phenomenon where feelings

of inclusion were able to show a significant correlation to "enhanced" performance on a

cognitive conflict task.

Future Directions

Now that we have preliminary data to support the connection between feelings of

inclusion, identity integration, and conflict adaptation, it would be beneficial to measure the

varying levels of inclusion in a "normal" non-marginalized sample. This would allow us to better

examine the strength of the interaction between the variables within the general population. It would also allow us to determine whether the relationship found between these variables are specific to a population who self identifies as marginalized. Additionally, it would be of importance to find out if the pre-established relationship between identity integration and conflict adaptation – without being moderated by inclusion – returns in a non-marginalized sample. If we were able to further understand the connection between identity integration, inclusion, and conflict adaptation, it would generate greater interest in the often-stigmatized marginal populations on campuses, in cities, and around the world.

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Appendix A

Table 1

Summary of Intercorrelations, Means, and Standard Deviations for Scores on the Campus

Climate and Identity Integration as Function of CSE

Measure		M	S	1	2	3
1	Campus Climate	3.38	0.30	----	.33*	-.25[a]
2	Identity Integration	4.57	0.71	.33*	----	-.04
3	Conflict Adaptation	0.25	239772	-.25	-.04	----

*Note. N = 57 ***p < .001, **p<.01, *p<.05 [a]p<.10*

Table 2

Predictors of Conflict Adaptation

Variable	*B*	*SE(B)*	*t*	β	*p*
Constant	.02	.00	8.59		.04
Campus Climate	-.02	.01	-2.11	-.28	.04
Identity Integration	-2.82	.00	-.00	-.00	.99
Campus Climate x Identity Integration	-.02	.01	-2.15	-.28	.03
R^2	.14				
F	2.88				
p	.04				

Note. *n*=57

Congruent Trial
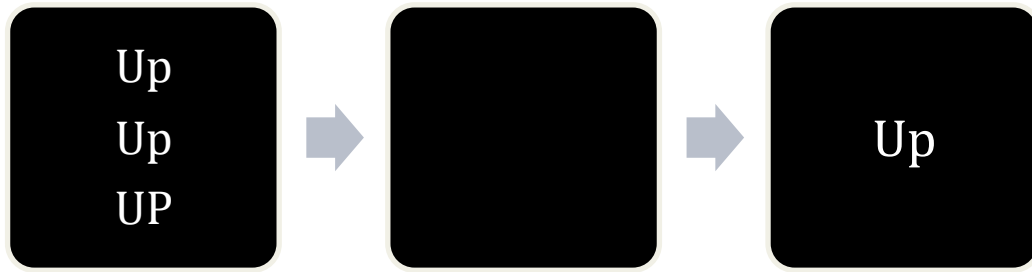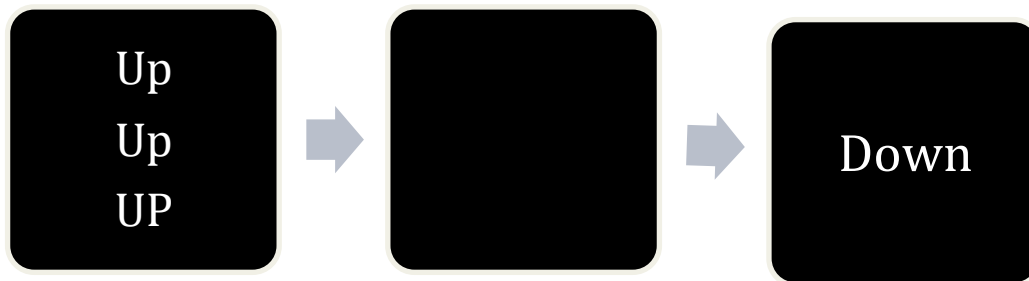

Incongruent Trial

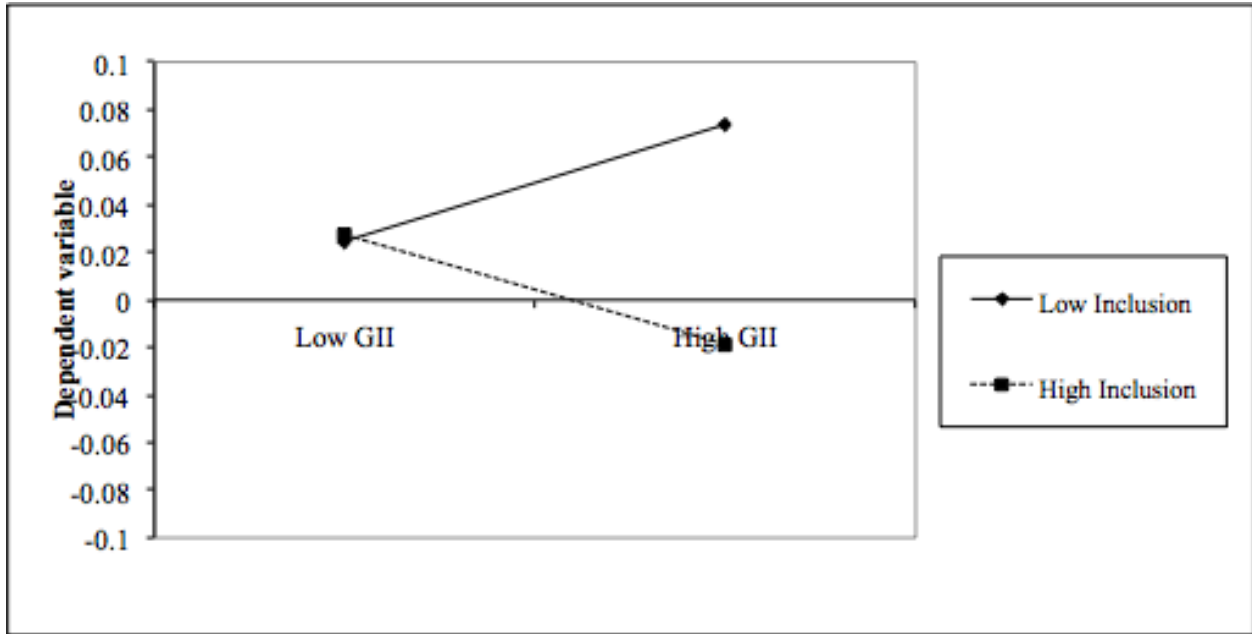*Figure 1*. Visual representation of the Prime-Probe Task

Figure 2. Graph showing the interaction between identity integration and conflict adaptation when moderated by feelings of social inclusion

Appendix B

Full Survey Measures

Campus Climate (adapted from Reid, & Radhakrishnan, Phanikiran, 2003; Flanagan et al., 2007)

This section will be used to evaluate your perspective on the campus environment. Your opinions are completely confidential, so please answer all questions as honestly as possible.

1. In general, I fit in with other students here.

2. If I had to do it all over again, I would still attend the university.

3. I have found the atmosphere at this university to be very friendly.

4. I feel left out of things here at the university.

5. I feel my instructors show little interest in my opinions.

6. In general, my instructors help me feel confident of my abilities.

7. The advisors here are sensitive to student needs.

8. My work is evaluated fairly.

9. I feel comfortable approaching my instructors for advice and assistance.

10. I feel free to participate in class by asking questions or making comments.

11. Other students make fun of me sometimes.

12. I have had instructors encourage me to major in their field.

13. When I try to speak up in class, I am sometimes interrupted or ignored.

14. I have been treated unfairly on this campus.

15. There are people I can ask for help when I need it.

16. Most people try to make this a good environment for all students to learn.

17. People trust each other regardless of ethnicity.

18. You can count on other students for help

19. Most people feel safe regardless of their ethnicity.

20. In general, people on campus work together to solve problems.

21. In general, people pull together to help each other.

22. You can ask university officials to get a problem solved.

23. When ethnic minority students move here, people make them feel welcome.

24. When ethnic minority students move here, people are pretty nice to them.

25. You can easily associate with students belonging to different ethnic groups.

General Identity Integration Scale (Hanek, Lee, & Brannen, 2014)

What is your opinion on how you generally manage your different selves? Please indicate the extent to which you agree or disagree with the following statements:

1. I am often conflicted between my different selves.

2. My different selves blend together seamlessly.

3. I can be described by all my different selves.

4. I keep my different selves separate.

5. In any given situation, I only have one dominant self.

6. I feel comfortable having many selves.

7. I am often torn between my different selves.

8. My different selves give me an edge in life.

9. Having different selves creates tension.

10. I am best described by a blend of all my different selves.

Demographics

Please answer the following questions. For some questions, you will be prompted to indicate your answer by selecting among a number of options, whereas for others you will be prompted to type your answer into a text box.

Gender:

- Male

- Female

- Other

- I prefer not to say

Year:

- Freshman

- Sophmore

- Junior

- Senior

- Other*:*

What is your age?

What year were you born?

What is your major/intended area of study?

What is your current GPA?

Where were you born? (city, and state or country)

What is/are your native language(s)? (the languages you speak at home)

Rate your overall English language ability, using the following 5-point scale.

- Poor

- Fair

- Good

- Very

- Good

- Excellent

What is your country of citizenship?

What is your racial/ethnic background? (Check all that apply).

- White/Caucasian

- African-American

- Hispanic

- Middle Eastern

- East Asian

- South Asian

- Other

How long have you been living in the United States?

- Less than 10

- 0-1 years

- 2-3 years

- 3-4 years

- 4-5 years

- Entire Life

What is your family's annual household income?

- less than $40,000

- $40,000-69,999

- $70,000-99,999

- $100,000-149,999

- $150,000-200,000

- $200,000-300,000

- more than $300,000

Please indicate your father's racial/ethnic background (check all that apply):

- White/Caucasian African

- African-American

- Hispanic

- Middle Eastern

- East Asain

- South Asain

- Other

Please indicate your mother's racial/ethnic background (check all that apply):

- White/Caucasian African

- African-American

- Hispanic

- Middle Eastern

- East Asain

- South Asain

- Other

What is your father's occupation?

What is your mother's occupation?

What is your father's native language?

What is your mother's native language?