

Differentiating Implicit and Explicit Identity Safety Cues

A dissertation submitted by

Mi'Lexus N. Milton

in fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Psychology

Tufts University

May 2025

Adviser and Chair:

Dr. Samuel Sommers

Committee Members:

Dr. Aerielle Allen, Dr. Sapna Cheryan, & Dr. Jessica Remedios

Abstract

This dissertation examines the influence of identity safety cues (ISCs) on the sense of belonging and safety among individuals from marginalized communities. Previous research has underscored the effectiveness of ISCs in organizational, academic, and medical settings, emphasizing their role in enhancing diversity, equity, and inclusion efforts through increasing a sense of belonging. This investigation proposes a higher-level grouping of ISCs utilizing an implicit-explicit framework. This suggested categorization aims to better understand the unconscious and conscious influences of ISCs on individuals' sense of belonging, providing further insights into the efficacy of different cues. Study 1 examines these potential effects by way of varying the ISCs included throughout a video description of a proposed course. Study 2 then tests this effect through a design that has been found effective in the literature—profiles with ISCs embedded within them. Finally, Study 3 was conducted to better understand how our definitions of implicit-explicit ISCs measure up against different examples of cues posed to a broader audience, further testing the basis of the suggested framework and allowing for more clarity on how to define it moving forward.

Keywords: Identity Safety Cues; Implicit; Explicit; Sense of Belonging; Diversity

Acknowledgements

I would like to first and foremost dedicate this dissertation to Sam. Without you, I know I wouldn't be writing this right now. The first half of my grad school experience was filled with misunderstanding, anxiety, and many nights questioning whether or not I was cut out for this. Working with you changed my whole perspective on research, what was possible, and what I was capable of. Your support as a mentor in uplifting my desires and creativity within my research was unparalleled. Your approach to mentoring always led with unwavering support for my ideas, combined with a gentle but firm push to think critically and deepen my engagement with my work. As successful as you were in your own right as a researcher, you never imposed your own research agenda on me; instead, you challenged me to develop my own unique projects and research questions, always showing complete confidence in my abilities and providing the resources to make those things a reality. But your mentorship wasn't just about academic success—it was about creating an environment where I felt empowered to follow my passions. You made seemingly impossible and overwhelming tasks more manageable with your steady presence—often having the vision and confidence in my work before I did. Thank you for everything, Sam. Thank you for your truth and your character. I will never forget the meetings leading up to the 2024 election and seeing how motivated you were to write letters to voters and do everything you could, given your privilege in society, to show up for the people you love, your daughters, your wife, your students, many of whom look like me. I already miss your 1am emails. I miss having you to match my need for speed. I miss you, Sam. Thank you for, of course, the academic and research support, and for helping me land my first job outside of grad school, but most of all thank you for all of our talks and little bets on baseball and football and

everything in between. So, one final time for you, Go Yankees and Go Blue! I hope this dissertation makes you proud, and that my future work continues to honor your legacy.

To my mom, there will never be the right words. The only thing I can say is I love you and thank you for being the best mom you knew how to be. Thank you for sitting on FaceTime with me for hours at a time my first year because of how hard my circumstances were, and for always challenging me to look for the good in every unfortunate situation. I hope you know that this accomplishment is yours as much as it is mine. To my brothers, you guys are a pain in my butt, but I love you to death. Thank you for always looking out for your sister and trying your best to cheer me up when I needed it most. To the rest of my family, my aunts and my uncles, thank you guys for always being there to support me and being my biggest fans throughout this process, as well. Also, I apologize to my cousins for the constant “well, look at what Lex is doing” comments that you will continue to endure.

Jake thank you for being a safe space and someone I could be completely unhinged with as we were both constantly unravelling at the seams every time we talked.

To Luzdelia, you quite literally already know how thankful I am for the ways in which you showed up for me. But again, thank you for your constant support every single day and helping me see this thing through. I got through the hard days because I had our routine to look forward to. When in doubt, I knew talking to you would always be a bright spot in my day. Although I still try to minimize it, you have helped me realize what an accomplishment this truly is. Thank you for celebrating me and helping me recognize all the work that I put into this—making sure I that I take a second to relish in this moment.

Sapna, it has been a long time coming, but 10 years later, and everything has come full circle. Thank you for taking me in as a know-nothing undergrad who just wanted a chance. I got

thrown into research my means of applying to the McNair program on a whim. I had no idea what I would be getting myself into and how it would shape the trajectory of my working life, but I am so glad I had you there to get me off to such a strong start. I keep telling everyone, I wouldn't have ever applied to Tufts if it weren't per your suggestion. I am forever grateful for your thoughtfulness in your mentorship over me as it has brought me some of my closest friends, including the chance to work with Sam. You are one of the best PI's and mentors anyone could ask for. Thank you.

Thank you to my other committee members Jess and Elle. I really wish I had the opportunity to work with you more on projects and get additional mentorship from you both as researchers, but know that I appreciate you both so much.

To my friends and cohort, specifically Gauri and Keturah, thank you both for making sure I felt a part of the experience as much as possible when I made the decision to finish remotely. All of our laughs (even the times you were laughing at me and not with me), all of the genuine support, and effort to show up for me when it would've been easier not to—thank you. Thank you all for everything.

Table of Contents

<i>Introduction</i>	1
Identity Safety Cues	4
<i>Current Typologies of ISCs</i>	7
<i>What We Don't Understand and How An Implicit-Explicit Framework May Help</i>	8
<i>Overview of Research</i>	15
<i>Study 1</i>	15
Method	16
Participants and Design	16
Measures	17
Procedure	19
Results	20
Confirmatory Analyses	20
Exploratory Analyses	24
Discussion	28
Limitations and Future Directions	30
<i>Study 2</i>	31
Method	33
Participants and Design	33
Measures	34
Procedure	34
Results	35
Confirmatory Analyses	35
Exploratory Analyses	38
Discussion	43
Limitations and Future Directions	46
<i>Study 3</i>	47
Method	48
Participants and Design	48
Measures	49
Procedure	50
Results	51
Implementation	51
Sense of Belonging	52
Influence	53
Effort	53
Discussion	54

Limitations and Future Directions	57
<i>General Discussion</i>	<i>58</i>
 Implications.....	60
 Limitations and Future Directions.....	61
<i>References</i>	<i>64</i>
<i>Appendices.....</i>	<i>70</i>

List of Tables

Table 1: <i>Factor Analysis- Performative/ Dishonesty and Genuine Effort Items (Study 1)</i>	18
Table 2: <i>Average sense of belonging ratings (Study 1)</i>	21
Table 3: <i>Average Other Rankings by Cluster (Study 1)</i>	26
Table 4: <i>Average Self Rankings by Cluster (Study 1)</i>	27
Table 5: <i>Average Other Rankings by Cluster(Study 2)</i>	37
Table 6: <i>Average Self Rankings by Cluster (Study 2)</i>	38

List of Figures

Figure 1: <i>Study 1 Sense of Belonging Levels</i>	21
Figure 2: <i>Mapping Sense of Belonging by Genuine Effort</i>	23
Figure 3: <i>Mapping Sense of Belonging by Racial Group Identification (GroupID)</i>	24
Figure 4: <i>Mapping Sense of Belonging by Performative Efforts</i>	28
Figure 5: <i>Study 2 Sense of Belonging Levels</i>	34
Figure 6: <i>Scatter Plots of Self Ranking vs. Sense of Belonging</i>	39
Figure 7: <i>Mapping Sense of Belonging by Stigma Consciousness</i>	41
Figure 8: <i>Average Ratings for All Aspects by Race</i>	50

Introduction

In a diverse classroom, an instructor notices that several students from marginalized backgrounds hesitate to contribute during discussions. Despite the compositional diversity of this class, these students may still feel that their identities are not fully accepted or valued, which can inhibit their engagement—especially if their marginalized identity is a minority identity in the classroom. To address this issue of classroom climate, the instructor may attempt to implement tactics which signal that all identities are respected and valued. Assuming the participation improves, the instructor may reflect: What specific challenges do these students face in feeling accepted? How can I effectively foster such acceptance among all students? These questions highlight the ongoing struggles of marginalized students in educational environments, where concerns about acceptance and safety can impede their engagement. This dissertation aims to provide a conceptual framework for empirically examining these issues, focusing on the role of tactics known as identity safety cues (ISCs) in promoting inclusivity and belonging in classrooms.

Much research has been done to better understand why people from marginalized communities feel unwelcome and unsafe in different environments (Major & O'Brien, 2005; Frost, 2011; Allen et al., 2021). Broadly, social identity threat theory provides one set of explanations, asserting that when one is aware that some aspect of their identity is likely to elicit awareness of negative stereotypes or feelings of devaluation, this can have a negative impact on their psychological well-being (e.g., stress, anxiety; Emerson & Murphy, 2014; Steele, 1997). For instance, a Black person has awareness of a salient negative stereotype, like the belief that Black people are naturally more deviant when it comes to something such as disobeying driving law. This awareness leads Black individuals to perceive that they are (and will be)

disproportionately targeted by law enforcement in comparison to their White peers in anticipation of being unfairly singled out, causing them to feel devalued (Martiny & Nikitin, 2019; Steele, 1997). This sense of devaluation can create anxiety and may manifest in their interactions with police, where they engage in behaviors meant to counteract the assumed threat, attempting to appear less threatening, or in this example, disobedient. This stress can negatively impact their psychological well-being as they act inauthentically or adopt strategies like derogation or concealment to mitigate the threat, which, beyond being mentally taxing, further amplifies their feelings of marginalization (Petriglieri, 2011).

Social identity threat also impacts one's sense of belonging. Defined by Allen et al. (2021), a sense of belonging is a subjective feeling of deep connection with social groups, environments, and experiences. When individuals experience social identity threat, their sense of belonging is often disrupted, as the awareness of being devalued or stereotyped can create feelings of alienation within these groups. Research demonstrates that disruptions to this sense of belonging weighs heavily on individuals, and that belonging to social groups is a basic human need (Baumeister & Leary, 2017; Maslow, 1943). While measuring someone's sense of belonging is inherently subjective, the need to belong is undeniably intertwined with socio-cultural and environmental structures (Allen, 2020). These structures help guide one's understanding of what is considered acceptable or unacceptable within a given context, which influences whether one feels a sense of belonging or alienation. In this way, our sense of belonging is facilitated by our larger social structures in which we exist (Allen, 2020). Consequently, failing to attain a sense of belonging, and therefore experiencing a disconnect from important cultural experiences within social groups, can impede our ability to reach our higher-level needs (i.e., esteem and self-actualization; Gorman, 2010). When this sense of

belonging is lacking, it is detrimental to one's sense of self and leads to loneliness and a lack of connection (Allen et al., 2021). Such challenges to a sense of belonging may be even more pronounced among members of racially minoritized and historically marginalized groups who find themselves in predominantly White settings (Goodwin et al., 2010; Janke et al., 2024).

Complementary to the literature on *why* people feel uncomfortable when their identity is threatened or devalued, there have been efforts in research to determine *how* to effectively cultivate safe, welcoming, and inclusive spaces by fostering a sense of belonging. In recent years, there has been an expansion of diversity, equity, and inclusion (DEI) efforts in a variety of spaces— corporate offices, medical offices, academic institutions (e.g., Gonzales et al., 2021; Bersted et al., 2023; Foy, 2021). DEI efforts strive to eradicate disparities based on characteristics such as socioeconomic status, gender, and race in a given environment (Angel et al. 2021). There are numerous examples of successful DEI interventions, including research on the use of ISCs as a potential strategy to combat threats to belonging that stem from the devaluation of identities underrepresented persons encounter in their daily lives. However, despite the prosocial intentions of these efforts, research has documented that ISCs can come across as performative or deceptive, and generally fall short of their goal (Gonzales et al., 2021). The remainder of this introduction will explore the current literature on ISCs, including the typical implementation and types of ISCs, and propose a new way to categorize them utilizing an implicit and explicit framework. This framework could provide a deeper understanding of ISC mechanisms, which would inform future research by helping researchers better understand the functionality of ISCs and how to maximize the benefits from them when looking for ways to foster belonging.

With this knowledge and the need to continue improving DEI initiatives, in this dissertation, I propose a new way to categorize ISCs utilizing an implicit and explicit framework and an empirical exploration of this possibility across 3 experiments. This dissertation will test how ISCs in an academic setting can impact feelings of belongingness and engagement among students with marginalized identities. The studies will attempt to highlight a potential distinction between the efficacy of implicit and explicit ISCs. Study 1 was designed to provide insight on initial trends regarding this distinction. Study 1 implements various ISCs through videos describing a proposed course, in the effort to test their effect on prospective students' sense of belonging. Study 2 serves as a follow-up to Study 1; however, its design closely aligns with methodologies used in previous literature (e.g., using profiles as stimuli). This will be done by having participants give evaluations based on profiles of individuals with ISCs embedded in order to test their effect on sense of belonging. Finally, in Study 3, we further evaluate the difference by examining how implicit and explicit cues map out onto different aspects we believe lie at the core of this distinction. This allows us to better understand the empirical narrative set by Studies 1 and 2, providing a clearer path forward to grasp the mechanisms at play.

Identity Safety Cues

ISCs take many different forms and serve as indicators of safety for a marginalized group, while also mitigating threats to belongingness associated with experiencing social identity threat. Here, safety refers to the support of marginalized identities through limitation of potential discrimination (Kruk & Matsick, 2021). As mentioned above, social identity threat can cause awareness of negative stereotypes surrounding any given aspect of one's identity and cause feelings of devaluation. For example, if a student is the only student of color in an advanced level course, they could assume the reason is due to negative stereotypes associated with their

race (i.e., students of color are not high achieving students). An identity safety cue, such as posters of inventors from a variety of different racial backgrounds in the classroom, could signal that the student will not be discriminated against because of their race, thus easing the worry that they do not belong and increasing the sense of safety.

When utilizing ISCs, the degree of effectiveness is usually determined through measuring a sense of belonging—since effective ISCs foster a greater sense of belonging—but there are other noteworthy downstream effects that also occur (Howansky et al., 2022; Kruk & Matsick, 2021). For example, ISCs have been studied primarily in organizational and academic settings, and although these domains have differences in the main purpose that they serve (e.g., academic settings serve as a space *primarily* for learning; organizational spaces *primarily* serve as a space for performance), the broader goals of such efforts, regardless of setting, are often similar. In both cases, these efforts are marked by desires to improve diversity, equity, and inclusion goals (e.g., sense of belonging), which have been shown to improve the performance of employees and students (Howansky et al., 2022; Kray & Shirako, 2009). Additionally, when an individual's sense of belonging is improved through means of valuing their various identities, social identity threat is stifled, leading to more positive relationships and better overall health (Allen et al., 2021).

In organizational settings, one commonly studied example of ISCs that can lead to an increase in the sense of belonging among workers is allyship (Johnson & Pietri, 2022). Allyship is when a non-minority individual supports marginalized individuals through advocating for the end of discrimination and prejudice on their behalf, not only offering support but also taking an active role in challenging the status quo (Kutlaca & Radke, 2023; Salter & Migliaccio, 2019). Findings have highlighted that allyship (when acknowledged by bystanders) can be effective in

establishing injunctive and descriptive norms— communicating that bias is not accepted nor commonplace, and in turn, increase the confidence of those from marginalized communities, which can lead to higher levels of productivity, satisfaction, and overall well-being (Hildebrand et al., 2020). This work shows how allyship can be utilized as an impactful ISC despite previous literature where targeted group members perceive allies unfavorably due to their social standing (i.e., inability to fully recognize inequities; Brown & Ostrove, 2013).

Additional research has explored other impacts of ISCs in organizational spaces, such as the ability for one cue (e.g., gender focused ISC) to have a transferable impact on an unrelated identity-incongruent cues (e.g., race; Chaney, Sanchez, & Remedios, 2016; Pietri, Johnson, & Ozgumus, 2018). That is, ISCs can have a broader impact beyond their target identity (e.g., Black men acting as an ISC for White women) by serving as a reflection of a company's larger diversity philosophy. This means that an ISC designed to address one type of identity (e.g., race) may also influence how individuals from different marginalized identities perceive the organization's stance on inclusion and equality. The ability of ISCs focusing on one type of identity to impact those with a different marginalized identity demonstrates the importance and potential strength of ISCs when they are able to function as an influence on an individual's perceived organizational ideology (i.e., diversity philosophy) surrounding social dominance (i.e., influencing the belief that an organization might hold preferential bias for one group over another; Chaney et al., 2016). In other words, ISCs could signal that an organization values diversity and equality across various dimensions of identity, such as race, gender, and sexuality. In this manner, an organization's ideologies or governing philosophies about diversity and inclusion can serve as an ISC. These findings are encouraging and show that although there might not be a one-size-fits-all approach to implementing ISCs, the inevitable intersection of

multiple identities different individuals may possess opens the door to many possible routes for ISC to be effective.

The scope of research on ISCs in organizational settings is similar to what has been studied in academic settings, including the effect belongingness has on performance and belongingness. Much of the research on college students has focused on how efforts to combat negative gender and racial stereotypes through inducing a sense of belonging can impact which majors are pursued by means of increasing student engagement and expectations of success, and overall academic performance in the classroom (e.g., better test performance of women or Black people in STEM courses; Cheryan et al., 2009; Crittle, 2020; Howansky et al., 2022; Murphy et al., 2007).

In addition to organizational and academic settings, the impact of ISCs has also been studied in the medical field. In the medical space, ISCs (e.g., posters showing a diverse group of patients) were effective in reducing the levels of perceived racial bias and increased patients' level of comfort and trust in their provider (Cipollina & Sanchez, 2023). This is an important step given the dangerous disparities in the medical field and the life-or-death implications of patients not trusting their primary care doctors, however, this does not speak to the systemic issues that still plague the practice of medicine (Cipollina & Sanchez, 2023). Taken together, a variety of environments have utilized ISCs in many different ways to help build a space that embodies belonging for marginalized individuals.

Current Typologies of ISCs

Having reviewed some of the mechanisms by which ISCs influence individuals and the various domains in which they have been studied, we will now consider the wide variety of cues that may signal identity safety in more concrete terms. A recent review of ISCs conducted by

Kruk and Matsick (2021) identified four categories of ISC: minority representation, diversity philosophies and programming or policies, environmental features, and identity-safe information. Minority representation is defined as “manipulating the presence of marginalized groups” visually (e.g., posters), describing company personnel demographics, or highlighting them in high status roles. They define diversity philosophies and programming as messaging emphasizing dedication to inclusivity, respect, and acknowledgement of various social identities. This is often seen via mission statements or advertisements. Additionally, Kruk and Matsick (2021) describe environmental features as items (e.g., posters or flags) in an environment that sends messages about values or norms with the intent to actively limit stereotypical images and promote the idea of inclusivity. Lastly, identity-safety information cues occur when information is explicitly shared to dampen any assumed relevance of negative stereotypes (e.g., telling women college students about other successful women already in a STEM major so they feel more capable in their abilities in applying). Additionally, some ISCs may have attributes that pull from the different categories (e.g., posters)—these specific ISCs, therefore, are not mutually exclusive and categorizing them depends on their function. For example, posters could serve as an environmental cue (i.e., images in that reduce stereotypes), but they could also serve as a minority representation cue (e.g., having Black students or employees featured on the poster).

What We Don't Understand and How An Implicit-Explicit Framework May Help

The different implementations of ISCs have demonstrated positive effects across many studies in terms of predicting better performance in academic and organizational spaces, by means of promoting DEI. However, oftentimes researchers run into the issue of not knowing which cue (when multiple are used at once), or which aspect of a given cue (e.g., the way it is implemented) are driving the outcome. In an experiment by Howansky and colleagues (2022),

multiple cues from different categories (e.g., symbols, statements, pronouns) were included in their intervention all at once, which makes it difficult to parse out the extent each cue supports a sense of belonging. This exemplifies how the consequences and moderators of different types of ISCs (e.g., strength of group identification, cultural values, prior intergroup experience), as described by Kruk and Matsick (2021) more broadly, remain in question when it comes to what actually results given their individual mechanisms. It is necessary to comb through the similarities and differences between ISCs so they can be implemented in the most effective manner. One potential avenue to provide clarity could come through adapting what we understand about the influence of implicit and explicit norms.

Implicit and explicit frameworks have been used throughout psychological research to help identify the different ways we are influenced unconsciously and consciously across a variety of domains including attitudes, memory, and learning through norms (Hofmann et al., 2005; Rutland et al, 2005). These frameworks are particularly useful for understanding how social norms, both implicit and explicit, shape our behaviors and interactions within groups. For example, implicit group norms are norms that exist and are accepted but are unspoken (e.g., when a class has lunch, each student will typically sit in the same seat each day; Burnett & Bonnici, 2003). Conversely, explicit group norms are often discussed and there is some form of acknowledgement that group members understand those norms (Burnett & Bonnici, 2003). One example would be classroom expectations that are discussed at the beginning of the school year. By distinguishing between implicit and explicit norms, we gain insight into the various ways group behavior is regulated, sometimes without individuals even realizing it. Taken together, understanding group norms through this lens allows for better understanding of how group

behaviors come about and what influences (i.e., implicit or explicit attitudes) guide the way different groups interact with one another (Rutland et al., 2005; Savani et al., 2022).

Following this line of thought, I propose that the ISC groupings outlined by Kruk and Matsick (2021) may also be grouped into two larger categories of implicit and explicit ISCs. This proposed grouping will allow for us to not only define the type of ISC, but also better understand the psychological function of an ISC. Specifically, I define implicit ISCs (I-ISCs) as cues that operate on an unconscious level of influence (i.e., impacting sense of belonging without one being aware an ISC is being implemented) for those being targeted with the cue (e.g., a student with a marginalized identity), as they are concurrently subtly present and not overtly or directly highlighted, such as a professor writing their pronouns on the syllabus or hanging a flag in a classroom without drawing direct attention to it out loud or adding additional visual attention (e.g., bold lettering, highlighting). With I-ISCs there is no guarantee that a target of the ISC is aware of the implementation, because the implementation is subtle and less salient. Instead, the burden to notice and understand the intention of what is being done is placed on the target to recognize the cue. Explicit ISCs (E-ISCs) are cues that are expressed overtly or referenced directly with clear intent, making the target consciously aware of the effort to spotlight safety (i.e., belonging). E-ISCs leave no room for doubt that the person enacting the cue intends to foster identity safety and dispel any sort of threat to said safety; that is, the cue is implemented overtly. An example of an E-ISC might be a math professor noting that people of all genders have typically performed well in the class— despite the stereotype that women would not perform as well (McIntyre et al., 2003). Based on these definitions, one can group many environmental features and examples of minority representation as I-ISCs, and many examples of identity-safe information and diversity philosophies and programming as E-ISCs. I would also argue that there

are surely exceptions within each of the four sub-categories, but generally common examples for each tend to fall in their respective implicit or explicit grouping. The chart below provides you with a visual of my proposed grouping.

IMPLICIT ISCs	EXPLICIT ISCs
<ul style="list-style-type: none"> ● <u>Environmental features</u> - Non-human items or features that communicate norms and values (posters) ● <u>Minority representation</u> - Presence of stigmatized groups (e.g., poster, another employee or student) 	<ul style="list-style-type: none"> ● <u>Diversity philosophies + programing</u> - an individual's or organization's stated claims or policies that directly highlight their valuing of diversity (e.g., mission statements) ● <u>Identity- safe information</u> - Providing stigmatized groups with explicit non-threatening info that conveys fair and positive expectations (e.g., statistics about efforts made to ensure diversity or the success of those from diverse backgrounds)

Utilizing a framework of I-ISCs and E-ISCs could lead to better understandings of the efficacy and influence ISCs have on a person's sense of belonging. Identifying the specific ways in which different types of cues impact individuals allow us to more effectively increase one's sense of belonging, providing a downstream of benefits for everyone involved (e.g., when one has a higher sense of belonging, that could lead to better work productivity). This framework could help us address whether or not targets being consciously aware that ISCs are being implemented influences their level of belonging more than cues operating on an unconscious level (i.e., not being consciously or actively aware that cues are being implemented). Generally, evaluating ISCs in this manner is important in addressing the current approach where multiple types of ISCs are used in a single study giving way to the issue noted above– the lack of clarity around which specific ISCs are driving which outcomes. ISC research must also be more

intentional about how studies are designed so more informed judgments can be made about the broader implications of ISCs. One of those implications is the ways in which understanding how to use cues effectively can lead to better support of students from diverse backgrounds, leading to improved academic performance and sense of belonging (Walton & Cohen, 2011). Better implementation of ISCs can contribute to more inclusive and supportive work environments where workers are more likely to be engaged and more productive (Shore, Cleveland, & Sanchez, 2018). In both spaces, when individuals feel safe and as if they belong, this can enhance creativity and problem-solving efforts in their respective regards (Page, 2007). Importantly, implications go beyond the classroom and workplace and can broadly help policymakers in other domains (e.g., city council, state legislatures) construct more inclusive policies and social justice efforts by centering needs and experiences of marginalized groups—leading to a more equitable society for all (Kruk & Matsick, 2021; Laiduc, 2023). To this point, do I-ISCs and E-ISCs make marginalized individuals feel just as safe, if not safer, than E-ISCs?

Additionally, thinking of ISCs through this dichotomy of I-ISCs and E-ISCs has great potential to advance DEI efforts in many ways. For example, exploring ISCs in this manner could help combat concerns surrounding performative allyship. Some of those concerns include the ways in which performative allyship involves tokenistic actions that provide minimal benefit to marginalized communities and can erode trust between marginalized communities and those who claim to support them (Halvorsen, 2023; Blankschaen, 2016). Additionally, performative allyship can have negative psychological impacts on marginalized groups, and ultimately, reinforce existing power structures by allowing individuals or organizations to maintain the status quo while appearing to support change (Blankschaen, 2016; Collier-Spruel & Ryan, 2024; De Souza & Schmader, 2024; Kalina., 2020). With this in mind, we can ask ourselves, do I-ISCs

seem less performative? If so, does that mean they are also generally more effective in providing a sense of belonging than E-ISCs?

Another interesting point to consider is the ways in which research on attitudes, persuasion, and message characteristics offer valuable insights into how individuals perceive and evaluate different types of messages, and how this may relate to the effectiveness of implicit and explicit ISC. Studies have demonstrated that implicit messages can be more persuasive and enduring than explicit messages. For example, subtle health communication strategies, such as those that provide contextual cues or gently frame healthy behaviors without directly instructing individuals, have been shown to lead to more long-term behavior change compared to explicit, directive messages, and this principle may extend to ISCs as well (Wagner, Howland, & Mann, 2015). I-ISCs, when subtly integrated into the environment (e.g., inclusive visuals or background messaging), could foster a greater sense of belonging without feeling intrusive or forced. This is particularly important when considering that individuals from marginalized communities may be more sensitive to E-ISCs that can potentially feel tokenizing or come across as performative allyship. I-ISCs, therefore, may feel more natural and less coercive, allowing for a stronger and more authentic connection to the environment, which in turn could enhance the sense of belonging.

On the other hand, explicit ISCs are clear and direct in their intent, but can sometimes trigger resistance or even skepticism, particularly if they are perceived as superficial or as a disingenuous DEI effort. Literature on persuasive communication suggests that when messages are overtly explicit, they can be seen as more manipulative or insincere, potentially leading to reactance from the target group (Brehm, 1966; Miller, 2015). In the context of ISCs, explicit cues—such as direct statements of inclusion or diversity—may feel insincere, especially if the

individuals being targeted are already expecting superficial diversity efforts. For example, an explicit statement from a professor saying, “We value diversity in this class, and everyone belongs here,” might be met with skepticism if the classroom environment does not reflect these values in other, more subtle ways, leading the target to react negatively to the statement.

Drawing on theories of persuasion and message framing, in this instance, where the classroom does not reflect diversity, I-ISCs may be more effective. In trying to increase the sense of belonging, I-ISCs could be more effective if they are less likely to feel performative or contrived. Although, it is important to note that this work has not directly been studied as it relates to ISCs. However, this potential difference in how implicit-explicit ISCs might be viewed is further cause for exploring if a) this framework is in fact valid, and b) what are the implications and underlying mechanisms that contribute to the differences in efficacy between I-ISCs and E-ISCs providing a sense of belonging.

By integrating the principles of implicit and explicit messaging into the framework of ISCs, we can better understand how to implement them in a way that fosters a sense of belonging for marginalized individuals. Taking this into account, if a difference between I-ISCs and E-ISCs exists, we can consider if I-ISCs are likely to be perceived as more genuine, increase sense of belonging, and less likely to trigger reactance, relative to E-ISCs because they operate in a less overt way. However, E-ISCs can still play a crucial role, especially when clear, direct cues are necessary to be direct in ensuring individuals from marginalized groups know that inclusion is a priority. Together, the I-ISC and E-ISC framework allows for a more nuanced approach to promoting belonging, where they can be strategically combined based on context and the nature of the environment, to ensure efforts to increase sense of belonging is maximized and done efficiently.

Overview of Research

The primary objective of the current research is to explore the plausibility of an implicit-explicit framework for categorizing ISCs. Specifically, here we explore if this framework could be utilized to better understand the underlying mechanisms of ISCs. Study 1 looked to explore the potential of this proposed framework through implementing various ISCs through videos about a proposed course. Study 2 will serve as a follow-up to Study 1; however, the design of the study was more closely aligned with designs implemented by previous literature (i.e., profiles on individuals reviewed by participants). Finally, in Study 3 we look at the foundation of our guiding definitions that differentiate implicit and explicit cues, further testing the underpinnings of the suggested implicit-explicit ISC framework.

Study 1

In Study 1, I examined how I-ISCs and E-ISCs might differ in their effectiveness of promoting a sense of belonging. This was done by asking participants to give feedback on a proposed course that a psychology department was hoping to incorporate during the following school year. The course was explained in a short video which consisted of I- ISCs, E- ISCs, or no ISCs. I hypothesized that participants who were exposed to the E-ISC would experience a stronger sense of belonging, followed by those who were exposed to an I-ISC, with the control group experiencing the least sense of belonging. I believe in this setting E-ISC would elicit more of a sense of belonging because it will take less mental work to identify the cue and intention. If this exposure lasted longer than the course of this study, I-ISC would be more effective in promoting sense of belonging as they would come across more genuine over time, aligning with the argument above.

I also tested whether or not someone implementing implicit versus explicit cues comes across as more or less performative in their efforts to promote DEI (i.e., diversity dishonesty). That is, do participants think the motives are more or less performative if the cues are implicit versus explicit? Some might think the course with E-ISCs would induce a stronger sense of belonging; however, I hypothesized it would also come across as the most performative, and his reasoning is largely based on the idea of performative allyship and diversity dishonesty (Wilton, 2020).

Method

Participants and Design

For Study 1, I specifically recruited Black and/or Hispanic participants from the online platform Prolific. I utilized Prolific's filter for American participants of color, as the cues implemented were geared towards race, and it was important to center the perceptions of racial minorities when testing for the efficacy of these cues. A priori power analysis revealed a sample size of 120 participants, with the expectation of a small effect given the novelty of the study and design (i.e., $d = .2$), should provide power of 0.80, with a significance level set at $\alpha = .05$.

Following completion of data collection and excluding the data from participants who self-reported not being a person of color, data from 121 participants remained ($M = 36.57$ years old, $SD = 10.94$). All participants were from the United States, with 54% identifying as a woman ($N = 65$), 46% as a man ($N = 56$), and all participants identifying to some degree as Black or Hispanic/Latino. Participants participated in exchange for monetary compensation at a rate of \$12.00 an hour. Study 1 was designed as a single factor between-subjects study with 3 levels (ISC condition: Control, Implicit, or Explicit). Participants were randomly assigned to one of the three conditions, and the study took no more than 20 minutes to complete.

Measures

Course Perception. To protect the integrity of the study, we first asked participants to give general ratings about the course. Some of the questions we asked included how enthusiastic they would be to take the course and if they believed the course would be engaging or not (see Appendix A). Some of these questions also served as a manipulation check to make sure participants could properly identify the goal of the course (Appendix B).

Sense of Belonging Scale. Following the overview questions about the course, participants then responded to five items where they self-reported their sense of belonging. Participants were asked to rate on a Likert scale ranging from 1 “strongly disagree” to 7 “strongly agree” if they felt like they would belong in the course, fit in, etc. (Appendix C). These items were the primary dependent variables for the study.

Performative Diversity/Diversity Dishonesty. Another key dependent variable was perceived performative diversity and diversity dishonesty. Here, performative diversity is defined as acts done for some sort of social gain (i.e., self-serving), and not altruistically or for the cause at hand. Wilton and company (2020) defined diversity dishonesty as the belief that an organization is *inflating* its actual level of diversity. Taken together, these items, overall, assessed if participants felt as though the person implementing the cue was being genuine or if it came off as disingenuous and performative. Study 1 adapted the items from their diversity dishonesty scale and included additional items further inquiring about the effort to implement diversity in the course. Overall, the items fell into one of two sub-groups.¹ Factor one contained

¹ 1A factor analysis was conducted on the items that participants rated in order to group items by communality (Table 1). As shown in Table 1, a two-factor model was an exceptional fit for the motivational factors participants were asked to respond to (see Appendix D).

items that were focused on genuine effort to promote diversity. The second factor focused on if participants felt that the effort was overstated.

Table 1

Factor Analysis- Performative/ Dishonesty and Genuine Effort Items (Study 1)

Item description	Factor_1	Factor_2	Communality	Uniqueness	Complexity
Genuine motivation to share diverse perspectives	0.860	0.030	0.74	0.26	1.00
Others would find effort to highlight diversity sincere	0.820	0.021	0.67	0.33	1.00
Genuinely invested in sharing diverse perspectives	0.776	-0.086	0.61	0.39	1.02
Genuine effort highlighting diverse researchers and theories	0.749	0.024	0.56	0.44	1.00
Overstating commitment to emphasize diverse perspectives	-0.028	0.998	1.00	0.00	1.00
Overstating commitment to highlighting diverse perspectives	0.064	0.764	0.59	0.41	1.01

Note. Factor analysis for the communality of the items that measured perceived genuine effort and performative/dishonesty.

Identity Rank. Next, participants were asked to rank different aspects of their identity from most to least important. They first did so by considering what is most important in how they view themselves, and then ranked the same list but considering what is important based on how others view them. The various aspects of identity they ranked we provided for them included: race, gender, sexuality, education, political affiliation, and socio-economic status. Looking at identity rank in an exploratory analysis would help shed light on what our cues

should focus on and potentially add to the conversation around the potency of cues depending on what they are targeting (Chaney, Sanchez, & Remedios, 2016; Pietri, Johnson, & Ozgumus, 2018). For example, a cue about race could still serve as a cue for someone not a part of a racial minority (e.g., a minority representation of a Black man serving as an indirect ISC for a White woman, or White man who is gay).

General Demographics and Group Identification. Lastly, we asked general questions about different aspects of identity such as political affiliation, race, and gender (for the full list, see Appendix E). Within these items, participants were asked two brief questions on how strongly they identified with their racial group and how much they identified with the culture associated with their ethnic group on a Likert scale ranging from 1 “none at all” to 5 “a great deal. Analyses examined whether group identification acts as a moderator between our ISCs and a sense of belonging.

Procedure

After providing consent, participants recruited on Prolific were randomly assigned to a condition of control, I-ISCs, or E-ISCs. Individuals who did not provide consent received a message that they did not qualify to participate in the study and were not able to continue. If they did provide consent, they were assigned to one of the three conditions.

Participants were then instructed to watch a short video of an overview of a fake course that they were told had been proposed to be taught the following academic year. The videos consisted of the a PowerPoint slideshow and participants could hear the professor going over a description of the course that was read from a script. To be clear, students could not see the professor, only the PowerPoint presentation accompanied by their voice. Within these videos there were I-ISCs in the implicit condition, E-ISCs in the explicit condition, but no ISCs in the

control condition (see Appendix F). An example of the difference between the I-ISC condition and E-ISC condition in this study is looking at the directness of the intent of professor (e.g., showcasing underrepresented psychologists), and acknowledging the intentional use of diverse psychologists and the ways in which their work directly benefited underrepresented groups. After watching the video, participants gave their feedback on the proposed course, followed by responding to questions about their sense of belonging. Then participants were asked to rank different aspects of their identity from most to least important, based on how they viewed themselves versus how others viewed them. Finally, they answered a series of demographic questions that include race, gender, sexual orientation, and political affiliation. Following completion of the survey, participants were fully debriefed on the intentions of the study and thanked for their participation.

Results

For some analyses, I performed an ANCOVA incorporating covariates into the model such as rated performative effort, group identification, and ranked- identity. This allowed for the examination of how these additional factors influenced the relationship between condition and belonging, adjusting for the potential confounding effects of individual differences in perceptions of performance and effort, as well as the strength of group identity. By including these covariates, I sought to gain a more nuanced understanding of the factors contributing to belonging, beyond the main effect of the condition alone.

Confirmatory Analyses

Sense of Belonging

Average sense of belonging ratings is presented in Table 2 by condition, with a visual representation shown in Figure 1. Given the data, a type-III ANOVA was run on the sense of

belonging scores to determine if they differed between conditions. Based on the model, the main effect of the condition was not a significant predictor, $F(2, 118) = 0.40, p = .67, \eta_p^2 = .007$.

Contrary to hypothesis, sense of belonging did not differ significantly between conditions.

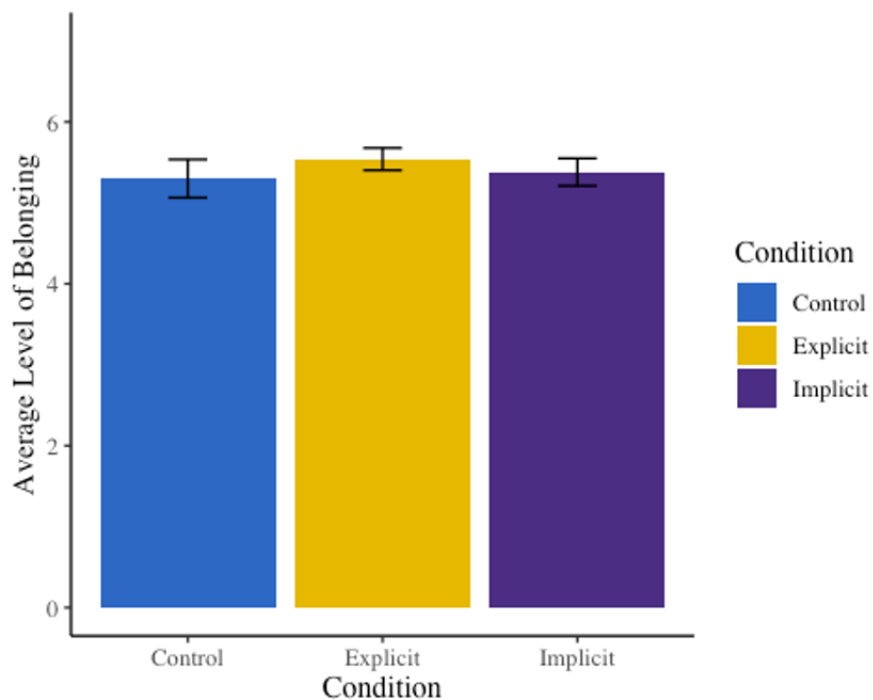
Specifically, the course with E-ISCs did not promote a higher sense of belonging or come across as more performative than that of the I-ISC condition or the control. 9i

Table 2

Average sense of belonging ratings (Study 1)

Condition	Sense of Belonging	Standard Error
Control	5.30	0.24
I-ISC	5.38	0.17
E-ISC	5.54	0.14

Note. Average, standard error of sense of belonging scores per condition.

Figure 1*Study 1 Sense of Belonging Levels*

Note. This figure shows the average sense of belonging reported by the participants in each condition. The error bars represent the standard error for each condition.

Performative Effort/Diversity Dishonesty

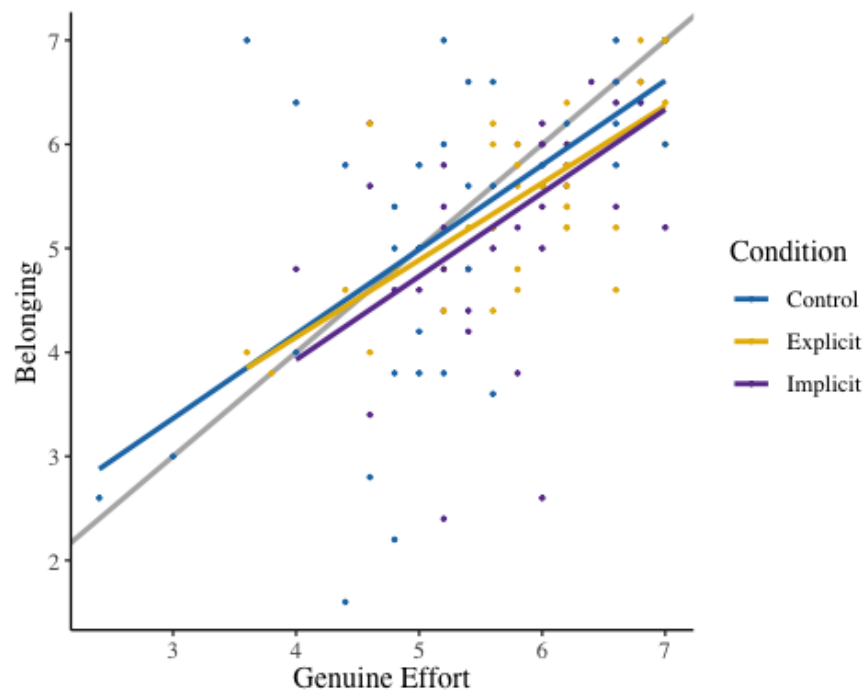
Although sense of belonging did not differ significantly by condition, I was also interested in evaluating if the diversity dishonesty (performative) ratings would serve as a significant covariate. As mentioned above, the items were grouped by indicating how genuine the effort was to promote diversity, and how much participants felt like the effort was being overstated (i.e., dishonest or performative). Given the data, a linear regression was run on the average sense of belonging scores to determine if they significantly differed between conditions when considering diversity dishonesty. Based on the type-III ANCOVA, the main effect of diversity dishonesty was not a significant predictor, $F(1, 115) = 2.35, p = .12, \eta_p^2 = .01$.

However, when the same model was run with genuine effort as a moderator, the main effect was

found to be significant $F(5, 115) = 14.72, p < .01, \eta_p^2 = .24$, with genuine effort as the significant predictor, $F(1, 115) = 36.55, p < .01, \eta_p^2 = .39$. Specifically, higher perceptions of genuine effort was associated with increased feelings of belongingness. These results suggest that efforts to be diverse coming across as genuine is a very important aspect of whether or not participants feel a stronger sense of belonging, despite condition not being significant (Figure 2). However, whether or not the ISCs appear performative did not have a strong influence on the sense of belonging scores.

Figure 2

Mapping Sense of Belonging by Genuine Effort



Note. This graph shows a sense of belonging as a function of perceived genuine effort for each group.

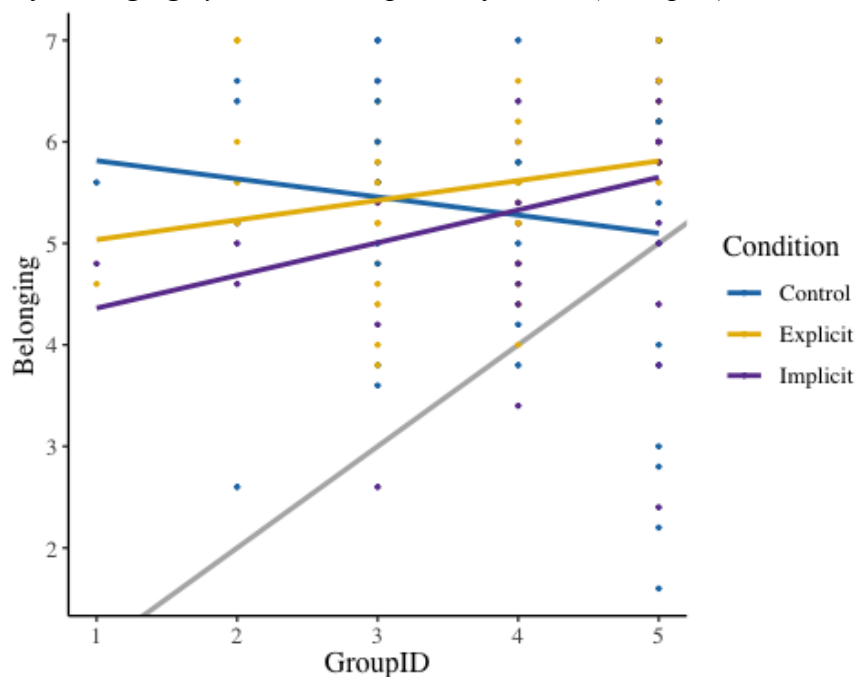
Exploratory Analyses

Group Identification

I also conducted an exploratory analysis on whether the way in which one identifies with their racial group and the culture associated with their racial group might impact their sense of belonging given the different cues. Given the data, a type-III ANCOVA was run on the sense of belonging scores and indicated a significant difference between conditions when including racial group identification as a covariate. Based on the model, the main effect of the condition was not a significant predictor, $F(2, 115) = 81.08, p = .14, \eta_p^2 = .007$. The main effect of group identification based on race (i.e., how much one identifies with their racial group) was not a significant predictor, $F(1, 115) = 1.98, p = .28, \eta_p^2 = .01$. Additionally, the interaction between cultural group identification and condition was not significant, $F(2, 115) = 2.37, p = .10, \eta_p^2 = .04$. However, the interaction between the I-ISC condition and racial group identification in the linear model had a significant effect ($M = 3.86, SD = 1.09$), $t(115) = 2.09, p = .04$ (Figure 3). That is, those in the I-ISC condition reported a higher sense of belonging the more they identified with their racial group compared to those who reported lower scores for racial group identification.

Figure 3

Mapping Sense of Belonging by Racial Group Identification (GroupID)



Note. This graph shows sense of belonging as a function of reported levels of identification with one's racial group for each condition.

We also ran the same test but considered cultural group identification instead of racial identification (i.e., how much participants identify with the culture typically associated with their racial group). Based on the type-III ANCOVA, the condition was not a significant predictor, $F(2, 115) = 0.56, p = .58, \eta_p^2 = .007$. The main effect of the cultural group identification was not a significant predictor, $F(1, 115) = 0.12, p = .73, \eta_p^2 = .01$. Additionally, the interaction between cultural group identification and condition was not significant, $F(2, 115) = 1.03, p = .36, \eta_p^2 = .02$.

Ranked Identity

A multiple linear regression analysis was conducted to examine the relationship between participants' sense of belonging and various dimensions of how they believed others ranked

aspects of their identity among six values, which included race, gender, sexuality, education, political affiliation, and socio-economic status. The overall model was not significant, $F(5,115) = 0.42, p = 0.83, \eta_p^2 = .02$, suggesting that considering how others might rank the importance of different aspects of a participants' identity did not significantly predict participants' sense of belonging. Additionally, the Spearman correlation matrix indicated that the dimensions had low to moderate correlations with one another, with values ranging from $r = -0.49$ to $r = 0.18$.

Finally, we conducted a hierarchical cluster analysis in order to group participants based on similarities in their rankings (see Table 3). The purpose of the clustering step was to identify distinct groups of participants who shared similar patterns across these variables, which could help us understand how these combined dimensions might relate to participants' sense of belonging. Based on the clustering, we identified two distinct clusters that emerged based on these six dimensions. After clustering, a linear regression analysis was conducted to examine the effect of cluster membership of the ranked dimensions of identity on participants' sense of belonging. The regression model included cluster as the predictor variable. The overall model was not significant $F(1,119) = 0.01, p = 0.92, \eta_p^2 < .01$, indicating that cluster membership did not significantly predict belonging.

Table 3

Average Other Rankings by Cluster (Study 1)

Cluster	Race	Gender	Sexuality	Education	Political Affiliation	SES
1	1.75	2.04	3.83	4.4	5.01	3.97
2	3.25	4.75	5.05	2.8	3.40	1.75

Note. This table shows the average of how the six aspects of identity were ranked by each cluster of participants when considering what others would consider is the most important aspect of their identity. Participants were clustered based on how similar their rankings were, and lower numbers represent the identity aspect being ranked as more important.

The same analyses were conducted to examine the relationship between participants' sense of belonging and the self-ranked dimensions of different aspects of their identity. The overall regression model was not significant, $F(5,115) = 0.59, p = 0.71, \eta_p^2 = .02$, suggesting that participants' self-ranked perceptions of the importance of various identity aspects did not significantly predict their sense of belonging. The Spearman correlation matrix revealed that the self-ranked identity dimensions had low to moderate correlations with one another, ranging from $r = -0.53$ to $r = 0.28$.

To further explore how participants' self-ranking patterns might influence their sense of belonging, another hierarchical cluster analysis was conducted. Once again, two clusters emerged from the analysis, suggesting two distinct groups based on their self-rankings (see Table 4). Subsequently, a linear regression analysis was conducted to examine whether cluster membership predicted participants' sense of belonging. The regression model, with cluster membership as the predictor, was not significant, $F(1,119) = 0.80, p = 0.37, \eta_p^2 = .01$, indicating that cluster membership based on self-ranked identity dimensions did not significantly predict participants' sense of belonging.

Table 4

Average Self Rankings by Cluster (Study 1)

Cluster	Race	Gender	Sexuality	Education	Political Affiliation	SES
1	2.39	2.39	4.11	2.80	5.30	4.00
2	2.44	1.72	3.72	5.05	4.85	3.23

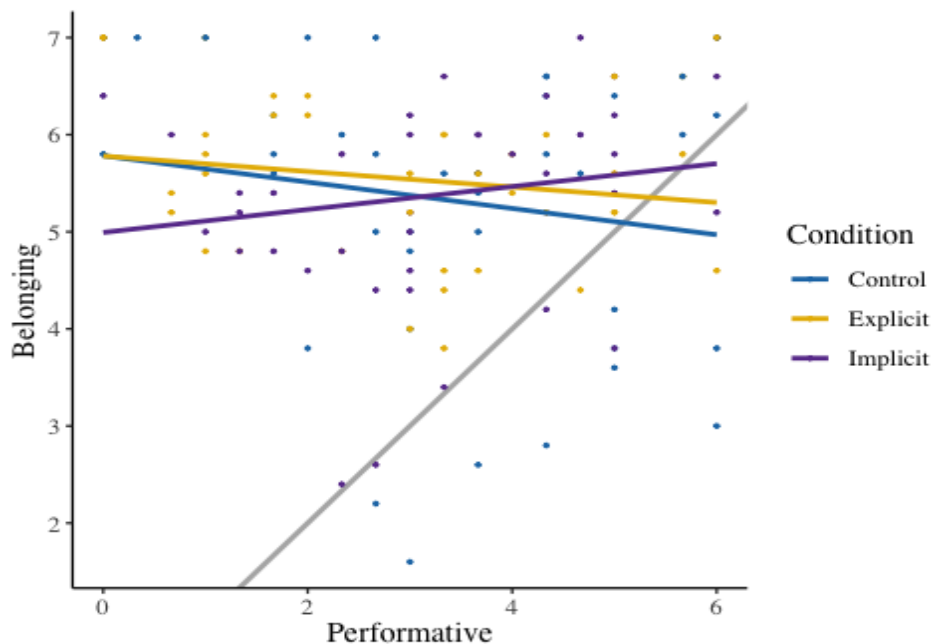
Note. This table shows the average of how the six aspects of identity were ranked by each cluster of participants when considering what they themselves would consider to be the most important aspect of their identity. Participants were clustered based on how similar their rankings were, and lower numbers represent the identity aspect being ranked as more important.

Discussion

Overall, the data indicated some interesting trends, but not significant differences. I hoped that a revised design in Study 2 would help clarify the results of Study 1. One interesting observation based on these analyses is that those in the I-ISC trended in a positive direction for sense of belonging the more performative they believed the cues were (see Figure 4). This was not a significant finding; however, it will be something to keep an eye on for Study 2. One explanation for this unexpected trend could be that the items asked were not clear enough, and it is important to clarify what I am asking participants to respond to.

Figure 4

Mapping Sense of Belonging by Performative Efforts



Note. This graph shows sense of belonging as a function of performative/dishonesty for each group.

Another interesting finding in Study 1 is the effect of group identification of participants' sense of belonging. As seen in Figure 1, the control group had a decline in sense of belonging the more one identified with their racial group. This was unsurprising as there were no safety cues

implemented, and these participants might be more tuned into the lack of diversity being implemented. This also seems to make sense from the standpoint of the other two conditions as those who identify strongly with their racial group could be more impacted by the race-targeted ISCs implemented in the study. Furthermore, the I-ISCs might have had more of an impact on those who identified more with their racial group by means of being more hypervigilant in their ability to identify them. This could potentially be further explained by the idea of stigma consciousness— where individuals believe they could be stereotyped by others (Pinel, 1999). This could result in individuals being more inclined to interpret subtle cues (Wang, Stroebe, & Dovidio, 2012).

The analysis involving genuine effort revealed a strong impact on sense of belonging. Specifically, participants who felt that the diversity efforts were genuine reported a stronger sense of belonging, regardless of whether the cues were implicit or explicit. This finding implies the importance of perceived sincerity in diversity efforts, which seems to be a key determinant of belonging, even if the intervention itself was not explicitly designed to address this factor. Another compelling aspect of this study was the examination of how participants' group identification (both racial and cultural) may interact with the different ISC conditions. While the main effects of racial and cultural group identification did not significantly influence belonging, the interaction between racial group identification and I-ISCs showed a significant trend. This suggests that individuals who feel more connected to their racial identity might be more attuned to subtle diversity cues (e.g., implicit signals of inclusion). This finding is consistent with the concept of stigma consciousness, where individuals with higher racial group identification may be particularly sensitive to cues that indicate whether they are being included or excluded (Pinel, 1999). Moreover, participants in the control condition who identified more strongly with their

racial group reported a lower sense of belonging. This suggests that when no diversity cues are present, those who strongly identify with their racial group may feel alienated or excluded, as they may be more attuned to the absence of diversity efforts. The effect is likely not significant in the explicit condition as the ISC could have been easier for all participants to recognize, and therefore, the baseline of belongingness was higher overall.

Limitations and Future Directions

One of the main limitations of this study is the lack of a clear manipulation check for the ISCs (implicit vs. explicit). Without ensuring that participants were actually noticing the intended diversity cues in the way they were designed, it is difficult to draw strong conclusions about the effectiveness of the cues in promoting belonging. This would have been helpful to help us understand how participants interpret cues to confirm that they were perceived as intended. Using a manipulation check such as self-report items asking participants how direct or subtle the ISC messaging appeared (e.g., “To what extent did this course explicitly highlight diversity?”), an open-ended recall question to assess what aspects of the messaging stood out, or a recognition task asking participants to identify which types of diversity-related language or imagery they remembered seeing.

Additionally, the lack of significant differences between the conditions may be due to the nature of the video format used in this study. The diversity cues presented in the video may not have been strong enough to elicit meaningful differences in how participants perceived their sense of belonging. In this study, despite the intention behind the E-ISCs being more explicit, they may not have been perceived as significantly different from the I-ISCs in terms of impact on belonging. While videos are a commonly used tool in online studies, they may not fully replicate the real-world settings where diversity cues are more dynamic and embedded in longer-term

interactions. Future research could explore more immersive, real-world interventions, or test variations in the medium (e.g., in-person, interactive activities).

In sum, while Study 1 provides initial insights into the effectiveness of diversity cues in promoting a sense of belonging, the lack of significant findings suggests the need for refinement in both the design of the study and the measures used. The importance of perceived genuine effort in diversity initiatives emerged as a key factor influencing belonging, which could be critical in understanding how to create inclusive environments. Future research should build on these findings by improving the implementation of diversity cues, utilizing more precise measures of identity, and incorporating manipulation checks to better capture participants' perceptions. By doing so, it may be possible to uncover more robust insights into how diversity interventions can effectively foster a sense of belonging among marginalized groups.

Study 2

In Study 2, I sought to change the manipulation to see if I could better test for differences between the conditions. Study 1 took a chance on using videos to implement the cues, as previous studies either measured the impact of cues overtime or implemented them via some sort of written or visual content (e.g., throughout the duration of a course, or on posters, or in profiles written about someone at a company; Chaney et. al., 2020; Howansky et. al., 2021).

The present study borrowed from the design from the Chaney et. al. (2020) study where participants were asked to look at personality profiles of individuals with whom they would hypothetically have an interaction and rate their sense of belonging. In that study, participants were given a personality profile packet about their partner which included or excluded information about their racial attitudes. The study by Chaney et. al. (2020) demonstrated that presenting ISCs in this manner (i.e., profiles) is effective in promoting a sense of belonging.

Study 2 follows this example by providing profiles for participants to view and measuring their sense of belonging based on their impression of profiles of professors (mentors) who are implementing ISCs. Specifically, in this study, participants were asked to evaluate professors who were candidates for a mentorship award— all of whom were White males. Two of the profiles were kept consistent and neutral (i.e., not implementing ISCs), while the third candidate implemented either E-ISCs, I-ISCs or no ISCs in the control condition (see Appendix H).

More generally, Study 2 adapted the manipulation of ISCs so that the potential for cues to register with our participants would be more likely based on how previous research has implemented ISCs. With this change, I anticipated more significant differences between the groups because the vignettes might make the information clearer generally. If this change to the design is effective, I hypothesize the following:

- a) The professor implementing the E-ISCs will foster a greater sense of belonging among the participants, followed by the professor implementing I-ISCs
 - a. The professor implementing E-ISCs will be chosen more often as the one more deserving of the mentorship award, because it is easier for participants to recognize the E-ISC.
- b) Overall, the more diversity dishonesty participants perceive, the less sense of belonging they will feel
 - a. The mentor profile with E-ISCs will come across as more performative than that of the I-ISC condition, because it might be seen as performative.
- c) Those who identify more strongly with their racial group will experience a stronger sense of belonging in the conditions emitting ISCs, because they will be able to more clearly identify the cues and their intention without it coming across as performative.

While some might consider this manipulation not salient enough to register a notable difference between conditions, this does more closely follow designs from other studies that have found success with this manipulation. Additionally, we closely followed and utilized examples of ISCs that were coded as either implicit or explicit from other studies.

Method

Participants and Design

Similar to Study 1, Study 2 did not vary the racial makeup of the professors (i.e., all Professors were White) in order to make sure the manipulation was truly working, and that professor race did not serve as an ISC. I also sought to control for the possibility that having a mentor of color could serve as an ISC in and of itself. Additionally, to ensure that the blurbs effectively conveyed the intended ISCs (or no cues when appropriate), we created a systematic rating process wherein six reviewers evaluated and classified the blurbs according to clearly defined criteria (i.e., definitions that we mentioned above describing implicit and explicit cues). The results from the ratings support that our blurbs exemplified the ISCs as intended. Lastly, the participant pool for Study 2 was the same as Study 1 and aimed to recruit at least 120 PoC participants (i.e., Black and Hispanic/Latino participants). After data collection and subsequent cleaning 118 participants remained, as some participants were dropped for not self-identifying as one of our target races in the survey ($M = 33.42$ years old, $SD = 10.28$). All participants were from the United States, with 56.78% identifying as a woman ($N = 67$), 43.22% as a man ($N = 51$), and all participants identifying to some degree as Black or Hispanic/Latino. Participants participated in exchange for monetary compensation at a rate of \$12.00 an hour. Study 2 was a between-subjects design with 3 levels (ISC condition: Control, Implicit, or Explicit). Participants were randomly assigned to one of the three conditions, and the study took no more than 20 minutes to complete.

Measures

The measures for Study 2 were the same measures from Study 1 and included: Sense of Belonging, Performative Diversity/Diversity Dishonesty, Identity Rank, and General Demographics and Group Identification. In addition to the previous measures, Study 2 also included the stigma consciousness questionnaire (Pinel, 1999). The intention behind including this measure is to see if it could help explain, within the conditions, why some cues may or may not have an effect on the participants. Specifically, if participants score higher in stigma consciousness, are they more likely to have a higher sense of belonging when exposed to the cues? Will those in the I-ISC condition experience a stronger effect of the cues if they are more stigma conscious? Or will those with more stigma consciousness come to find the cues more or less performative and disingenuous?

Procedure

For Study 2, the procedure was generally the same as in Study 1. The main difference was that the participants were directed to view one of three fictional websites we created for the study based on their assigned condition. Once on the site, the participants were asked to explore sections where they would read more information on the award (e.g., what the qualifications were to be considered, see Appendix G). They then looked at the mentor page where they read through their individual blurbs, fun facts, and student testimonials. Two of the profiles (i.e., Professor Smith and Professor Williams), were constructed to be neutral and not present any ISCs. These two profiles were seen on all versions of the site; however, Professor Jennings' profile blurb changed depending on condition. In the control condition, his blurb was neutral. In the implicit condition the blurb implemented I-ISCs and E-ISCs in the explicit condition (see Appendix H). Here, some examples of the ways the I-ISC condition differed from the E-ISC

condition include the directness (e.g., overtness) of support to DEI, supporting diverse ideas and students, and the hobbies noted for the professors.

After exploring the website and learning more about the mentors, the participants went back to the Qualtrics survey where they chose who they believed was most deserving of the award. Then they responded to items similar in Study 1 about their sense of belonging as if they were a student being mentored by Professor Jennings (i.e., our manipulated professor profile that implemented implicit, explicit, or no ISCs)². Participants also ranked different aspects of their identity from most, to least important, based on how they viewed themselves versus how others viewed them. Finally, they answered a series of demographic questions that included race, gender, sexual orientation, and political affiliation. Following completion of the survey, participants were fully debriefed on the intentions of the study and thanked for their participation.

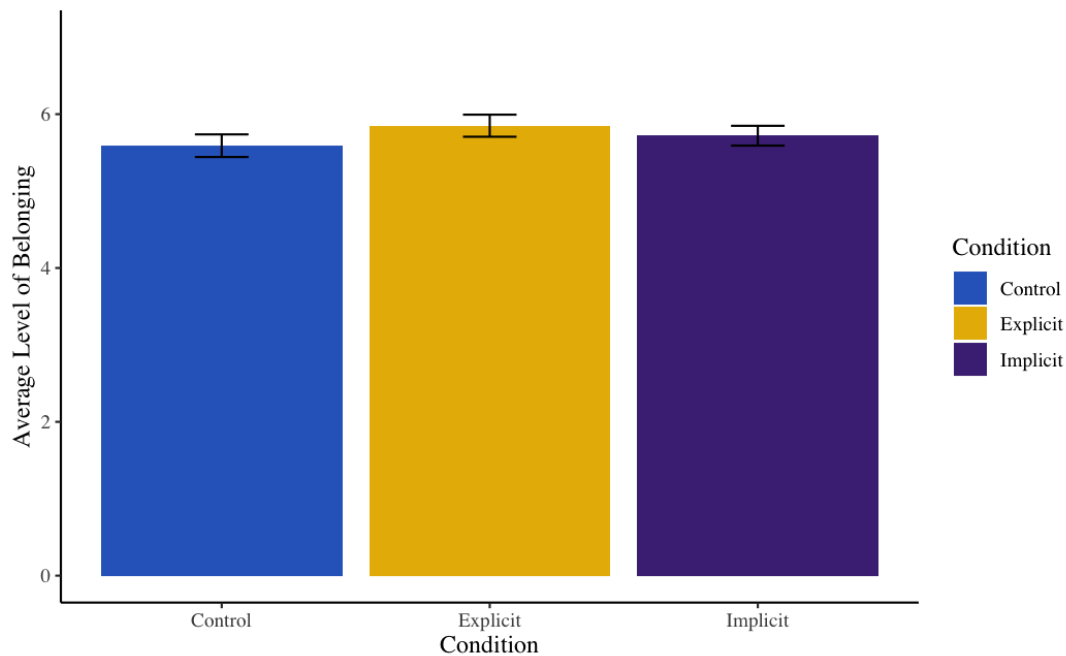
Results

Confirmatory Analyses

Sense of Belonging

Average sense of belonging ratings can be seen in Figure 5. A type-III ANOVA showed that the condition did not significantly contribute to the model, $F(2, 118) = 0.99, p = .37$. The effect size, measured by partial eta squared, was $\eta_p^2 = .02$. The results suggest that the conditions tested did not significantly influence feelings of belonging among participants.

² Participants were directed to go back and review the profile of Professor Jennings, as a refresher, prior to rating him along the different measures

Figure 5*Study 2 Sense of Belonging Levels*

Note. This figure shows the average sense of belonging reported by the participants in each condition. The error bars represent the standard error for each condition.

Performative Effort/Diversity Dishonesty

Next, we evaluated if the diversity dishonesty (performative) ratings would serve as a significant moderator. As mentioned in Study 1, the items were grouped by indicating how genuine the effort was to promote diversity, and how much participants felt like the effort was being overstated (i.e., dishonest or performative).

A type- III ANCOVA analysis was conducted to assess the interaction between condition and perceived performativity on feelings of belonging. The overall model was not significant, $F(5, 107) = 0.65, p = 0.66$. Additionally, the ANCOVA revealed that neither the condition $F(2, 107) = 0.31, p = 0.73, \eta_p^2 = .02$, nor perceived performativity $F(1, 107) = 0.01, p = 0.94, \eta_p^2 = .01$ had a significant impact on belonging. In conclusion, the results suggest that neither condition

did not significantly influence feelings of belonging among participants, even when considering ratings of performativity in the model.

A type-III ANCOVA was then performed to investigate the interaction between condition and genuine effort on feelings of belonging. The overall model was statistically significant, $F(5, 107) = 20.60, p < 0.01, \eta_p^2 = .35$. The ANCOVA results confirmed the significant contributions of both the condition $F(2, 107) = 12.96, p < 0.01, \eta_p^2 = .03$ and genuine effort $F(1, 107) = 6.32, p = 0.013, \eta_p^2 = .41$. The interaction effect between condition and genuine effort was also significant $F(2, 107) = 12.31, p < 0.01, \eta_p^2 = .19$. The results indicate that genuine effort significantly influences feelings of belonging. This result also replicates what we found in Study 1.

Group Identification

Similarly to Study 1, I also conducted an analysis on whether the way in which one identifies with their racial group and the culture associated with their racial group might predict their sense of belonging given the different cues. Given the data, a type-III ANCOVA evaluated the interaction between condition and participants' identification with their racial group on feelings of belonging. The overall model was not significant, but was approaching significance $F(5, 107) = 2.04, p = 0.079$. The model showed that the condition $F(2, 107) = 0.35, p = 0.708, \eta_p^2 = .02$, and racial group identification $F(1, 107) = 1.29, p = 0.258, \eta_p^2 = .06$, did not significantly contribute to the model, nor did the interaction between them $F(2, 107) = 0.40, p = 0.672, \eta_p^2 = .01$. In summary, the results show that identifying with one's racial group did not significantly predict feelings of belonging among participants, which fails to replicate what was found in Study 1.

A type-III ANCOVA was then conducted to explore the interaction between condition and the degree to which participants identify with the culture typically associated with their racial group on feelings of belonging. We found that the overall model was significant, $F(5, 107) = 2.52, p = 0.03, \eta_p^2 = .01$. However, although there is statistical significance, the effect size is small, therefore the predictors do not explain a large portion of the variance in the outcome variable. Furthermore, the ANOVA results indicated that condition $F(2, 107) = 0.74, p = 0.48, \eta_p^2 = .02$, cultural identification $F(1, 107) = 1.66, p = 0.20, \eta_p^2 = .08$, and the interaction between condition and GroupID2 $F(2, 107) = 0.66, p = 0.52, \eta_p^2 = .01$ did not significantly contribute to the model.

Exploratory Analyses

Ranked Identity Aspect

Like in Study 1, a type-III ANCOVA analysis was conducted to examine the relationship between participants' sense of belonging and various dimensions of how they believed others ranked aspects of their identity, including race, gender, sexuality, education, political affiliation, and socio-economic status. The overall regression model was not significant, $F(5,107) = 0.26, p = 0.93, \eta_p^2 = .01$. This suggests that how participants believed others ranked the importance of different aspects of their identity did not significantly predict their sense of belonging. Additionally, the Spearman correlation matrix indicated that the dimensions of others' rankings had low to moderate correlations with one another, with values ranging from $r = -0.47$ to $r = 0.14$ (see Table 5).

Table 5*Average Other Rankings by Cluster (Study 2)*

Cluster	Race	Gender	Sexuality	Education	Political Affiliation	SES
1	1.84	2.32	4.24	3.58	4.95	4.08
2	5.62	3.94	3.88	1.94	3.50	2.12

Note. This table shows the average of how the six aspects of identity were ranked by each cluster of participants when considering what others would consider to be the most important aspect of their identity. Participants were clustered based on how similar their rankings were, and lower numbers represent the identity aspect being ranked as more important.

A hierarchical cluster analysis was then conducted to group participants based on similarities in their rankings of the six identity dimensions. Two distinct clusters emerged. Cluster 1 had lower (i.e., more important) rankings for race ($M = 1.84$), gender ($M = 2.32$), and political affiliation ($M = 4.95$), while Cluster 2 had higher (i.e., less important) rankings for race ($M = 5.62$) and gender ($M = 3.94$), but lower (i.e., more important) rankings for political affiliation ($M = 3.50$) (see Table 6). A subsequent linear regression analysis, with cluster membership as the predictor variable, was not significant, $F(1,111) = 0.05$, $p = 0.82$, indicating that cluster membership based on others' rankings did not significantly predict participants' sense of belonging.

Table 6*Average Self Rankings by Cluster (Study 2)*

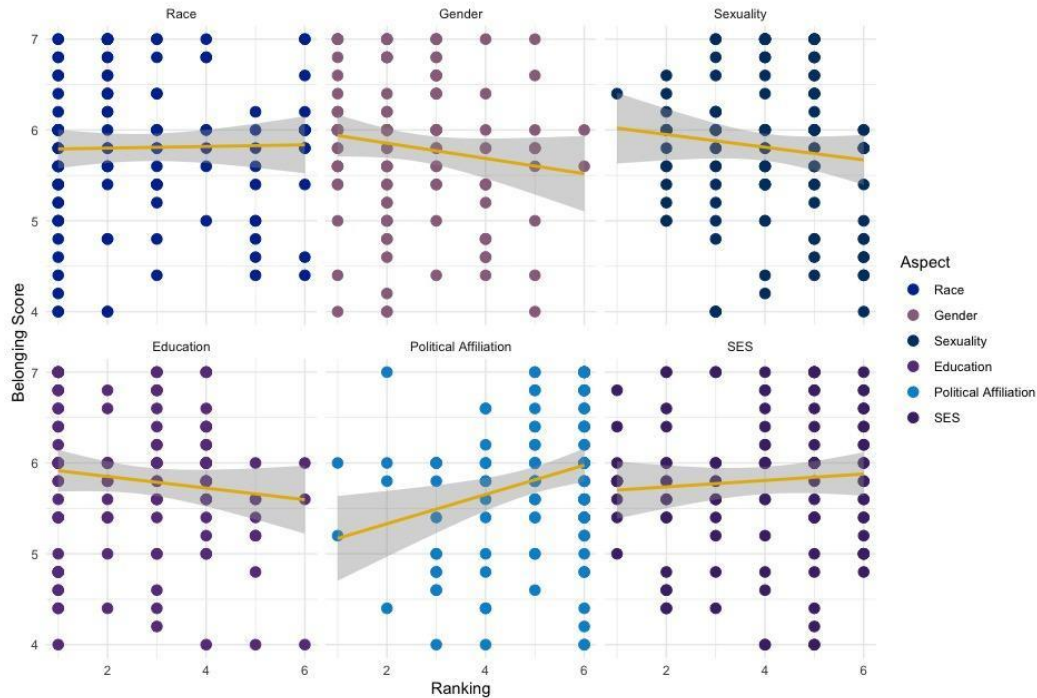
cluster	Race	Gender	Sexuality	Education	Political Affiliation	SES
1	5.43	3.00	3.78	2.13	3.35	3.30
2	2.08	2.46	4.11	2.83	5.37	4.16

Note. This table shows the average of how the six aspects of identity were ranked by each cluster of participants when considering what they themselves would consider to be the most important aspect of their identity. Participants were clustered based on how similar their rankings were, and lower numbers represent the identity aspect being ranked as more important.

The same analyses were conducted to examine the relationship between participants' sense of belonging and their self-ranked aspects of identity. The overall regression model was significant, $F(5,107) = 2.84, p = 0.02, \eta_p^2 = .19$, suggesting that participants' self-ranked perceptions of the importance of various aspects of their identity had a modest effect on their sense of belonging (see Figure 6). However, no individual predictors reached significance, with Education ($p = 0.07$) and Political Affiliation ($p = 0.06$) approaching significance. The Spearman correlation matrix for self-ranked identity dimensions revealed low to moderate correlations, with values ranging from $r = -0.5$ to $r = 0.31$.

Figure 6

Scatter Plots of Self Ranking vs. Sense of Belonging



Note. This figure shows the general relationship between how each aspect was ranked and how they compared to participants' sense of belonging score.

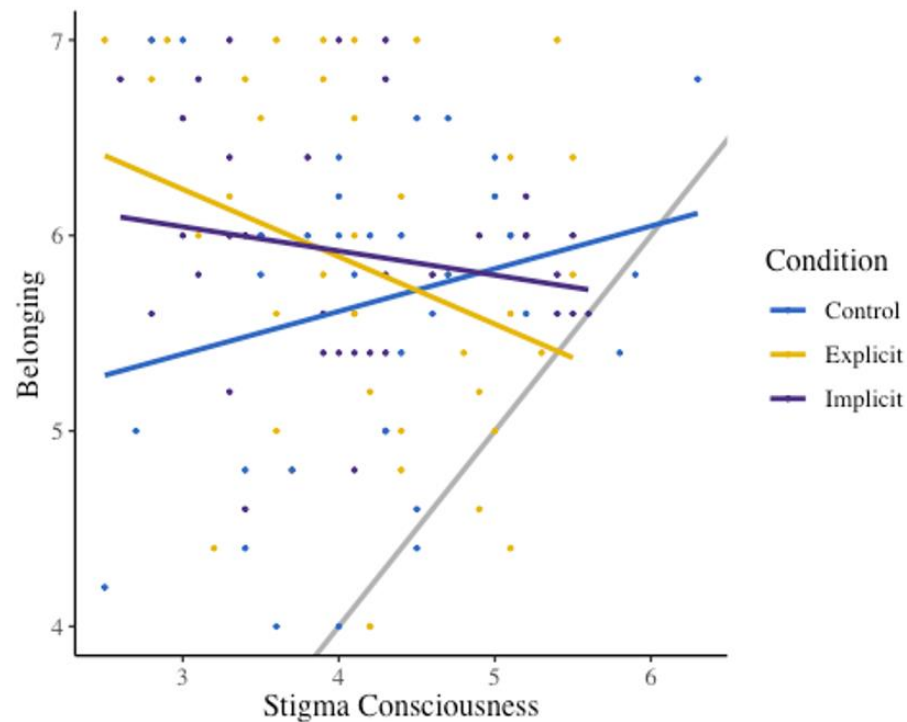
To explore further how participants' self-ranking patterns might predict their sense of belonging, a hierarchical cluster analysis was performed on the self-ranked dimensions. Two clusters were identified. Cluster 1 had lower (i.e., more important) rankings for Race ($M = 2.08$) and Gender ($M = 2.46$), while Cluster 2 had higher (i.e., less important) rankings for Race ($M = 5.43$) and Gender ($M = 3.00$), but lower (i.e., more important) rankings for Political Affiliation ($M = 5.37$). A linear regression analysis, with cluster membership as the predictor variable, was not significant, $F(1,111) = 2.66$, $p = 0.11$, $\eta_p^2 = .19$. This result indicates that cluster membership based on self-ranked identity dimensions did not significantly predict participants' sense of belonging.

Stigma Consciousness

Finally, a linear regression analysis was conducted to explore the interaction between condition and stigma consciousness on feelings of belonging. The model was found to be approaching significance, $F(5, 107) = 1.97, p = 0.09, \eta_p^2 = .19$. The type- III ANCOVA results indicated that condition had a significant effect on belonging $F(2, 107) = 3.98, p = 0.02, \eta_p^2 = .02$, while stigma consciousness did not reach significance $F(1, 107) = 2.12, p = 0.15, \eta_p^2 = .01$. The interaction between the two, however, was significant $F(2, 107) = 3.49, p = 0.034, \eta_p^2 = .06$, indicating that the relationship between condition and belonging is moderated by stigma consciousness. In conclusion, the results suggest that the condition significantly enhances feelings of belonging, particularly for individuals with varying levels of stigma consciousness, even though the effect size is small. Specifically, those in both ISC conditions reported lower sense of belonging, the higher their stigma consciousness levels were (see Figure 7).

Figure 7

Mapping Sense of Belonging by Stigma Consciousness



Note. This figure shows the relationship between participants' sense of belonging scores and their level of stigma consciousness.

Discussion

The goal of Study 2 was to explore the impact of ISCs on participants' sense of belonging in academic contexts, similar to Study 1, but by using a previously established design. By adapting the manipulation of ISCs to better align with prior research, we aimed to assess whether explicit cues (E-ISCs) and implicit cues (I-ISCs) would have a differential impact on feelings of belonging. While the findings were generally non-significant, several key insights emerged from the analysis, contributing to our understanding of how cues influence the social climate in educational settings.

Contrary to our hypothesis, the experimental conditions did not significantly affect participants' sense of belonging. This finding reflects the results of Study 1, where no significant differences were found between conditions, however, several explanations could account for this outcome. It is possible that the specific type or salience of the cues used in this study were insufficient to elicit strong feelings of belonging. The profiles we created for professors, even with explicit and implicit cues, may not have been perceived as sufficiently impactful to shift participants' sense of belonging. Furthermore, belonging may be influenced by a range of additional contextual factors—such as interpersonal interactions, the classroom environment, or personal experiences—rather than by brief exposure to diversity-related cues. This suggests that while ISCs may play a role in shaping belonging, their influence could be contingent on other contextual variables not captured in this study.

Another focus of this study was to assess whether participants viewed ISCs as performative or disingenuous and whether this perception predicted their sense of belonging. However, as with the sense of belonging measure, the results indicated that neither condition nor perceived performativity significantly predicted feelings of belonging. These findings indicate that, at least in the context of this study, the perceived genuineness of diversity efforts may not have been a strong enough factor to influence participants' emotional experiences of inclusion or belonging. On the contrary, the analysis of genuine effort (i.e., how genuine participants perceived the diversity efforts) did show a significant effect on belonging. This suggests that when diversity cues are seen as genuine, they may enhance feelings of belonging, even if the cues themselves are subtle or not highly explicit. This result replicates findings from Study 1, reinforcing the idea that the perception of authenticity in diversity efforts may be crucial in fostering a sense of belonging. Future studies could further explore how perceptions of

performativity evolve over time or under different conditions, such as through more sustained exposure to ISCs or in environments where diversity efforts are more visible.

In line with Study 1, we examined whether identification with one's racial group influenced the effect of ISCs on belonging. The results showed that racial group identification did not significantly interact with the experimental conditions to influence feelings of belonging. This finding diverges from what was found in Study 1, where group identification had a significant effect. One possible explanation for this inconsistency is that the brief exposure to mentor profiles was insufficient to activate or trigger strong identification with racial group membership. The relatively low variability in the data on racial group identification may have limited the power of this analysis. Additionally, the medium in which the participants were exposed to the ISCs differed from that in Study 1. While racial group identification did not significantly predict belonging in this study, cultural identification showed a small but significant interaction with condition. However, the small effect size suggests that cultural identification may not be a major driver of belonging in this context, or that other factors (e.g., prior experiences of inclusion or exclusion) are more important in shaping belonging.

Study 2 findings also suggest that how participants view their own identities and how they believe others view them may not be a strong predictor of their sense of belonging in a given context. However, this could also point to the complexity of how identity is constructed and understood by individuals. Other factors, such as situational or relational aspects of identity (e.g., in-group vs. out-group dynamics), may have a greater impact on belonging than one aspect of identity ranking higher than another.

A novel addition to this study was the inclusion of stigma consciousness as a moderator in the relationship between condition and belonging. The results indicated that stigma

consciousness moderated the effect of condition on belonging, though the effect size was small. Stigma consciousness appears to interact with the condition, subtracting from a sense of belonging for participants with higher stigma consciousness, particularly in conditions where ISCs were present. These findings suggest that individuals who are more attuned to experiences of stigma or discrimination may respond negatively to ISCs, potentially because these cues fail to appropriately validate their concerns about inclusion and belonging. Furthermore, when exposed to ISCs these cues may offer reassurance or a sense of recognition.

The role of stigma consciousness is a promising area for future research. Understanding how stigma consciousness interacts with different forms of ISCs could offer deeper insights into how marginalized groups experience diversity interventions. Future studies could expand this by investigating whether the type of stigma (e.g., racial, gender-based) influences responses to specific ISCs or whether this effect is more generalized across different forms of identity.

Limitations and Future Directions

While Study 2 provides valuable insights into the role of ISCs in fostering belonging, there are several limitations to consider. First, the brief exposure to mentor profiles may not have been sufficient to capture the full impact of diversity cues on participants' sense of belonging. Future research could explore how longer-term or more immersive interventions (e.g., through sustained exposure to mentors with diversity-related cues) affect belonging. Further, a key limitation of this study is the lack of a manipulation check to confirm that participants accurately perceived the diversity cues (explicit and implicit) in the mentor profiles. Without this check, it's difficult to determine whether the cues were effectively conveyed and noticed by participants, which could explain the lack of significant findings.

Another important consideration is that the contextual nature of belonging—shaped by individual, social, and environmental factors—may have influenced the results. Future studies should consider broader social and institutional factors that could enhance or undermine the impact of ISCs. For instance, exploring how belonging is shaped by interpersonal interactions within educational settings, or how institutional support for diversity is communicated, may provide further insights into how ISCs can be most effectively implemented.

In conclusion, Study 2 suggests that while ISCs may play a role in shaping belonging, their impact is likely influenced by factors such as authenticity, stigma consciousness, and contextual features that were not fully captured in this study. The results indicate that genuine effort of ISCs, as well as the moderating role of stigma consciousness, may be key factors in enhancing one's sense of belonging. Further exploration of these factors, along with a broader consideration of the contextual and interpersonal dynamics of belonging, will be crucial for understanding how diversity efforts can effectively foster inclusive environments in academic settings and whether or not there is a legitimate argument for differentiating implicit versus explicit ISCs.

Study 3

Building on the findings from Studies 1 and 2, a potential direction for Study 3 was to further refine the implementation of ISCs and better define the boundaries between I-ISCs and E-ISCs. Specifically, Study 3 could have aimed to address lingering uncertainties or incorporate new insights from the previous studies by refining the manipulation itself or adding new layers to the current design (e.g., manipulating the race of the mentor as done in Study 2). However, instead of focusing solely on refining the manipulation, Study 3 takes a step back to better understand the way we have been defining the framework itself. This shift in focus allows us to

assess whether our current definitions of implicit and explicit ISCs are perceived as intended by a larger audience. Additionally, we also include White participants in Study 3 as the goal of the study was to better understand the function of the cues along the implicit-explicit binary.

Including a dominant group (i.e., White participants) will give us insight into if the underlying mechanism of the cues differ along race, and regardless of the difference in interpretation (i.e., implicit or explicit), whether or not the participants still find a consistent distinction across the cues they learn about. In other words, Study 3 provided an opportunity to gather feedback on whether the framework, as currently described, accurately captures the essence of what different cues are presenting to participants.

Method

Participants and Design

For Study 3 we were interested in testing how well the given examples of ISCs mapped onto how we defined I-ISCs and E-ISCs. Study 3 aims to help us better understand how identity safety cues are mapping on to different dimensions (e.g., effort, conscious awareness of students, overt/subtle, implicit/explicit). We used a between- subjects design to examine how different participants from different racial backgrounds would view the different tactics (i.e., ISCs).

Using Prolific, I was able to filter for American participants. Since we were more concerned about the definitions of our groupings instead of the perceived sense belonging participants felt, we also included White participants in this sample, which is a deviation from Study 1 and Study 2. This would allow for more generalizability of how well our parameters define the distinction between I-ISCs and E-ISCs. Following completion of the data collection and cleaning, 116 participants remained ($M = 34.89$ years old, $SD = 11.89$)³. All participants

³ One participant was removed for identifying themselves as “Other,” and three more were removed for leaving that answer blank since we could not group them for analyses.

were from the United States, with 50% identifying as a woman (N = 60), 47.5% as a man (N = 57), 2.5% as non-binary (N = 3), and all participants identifying to some degree as Black (N = 29) or Hispanic/Latino (N = 28) or White (N = 59). Participants participated in exchange for monetary compensation at a rate of \$12.00 an hour. Study 3 took no more than 20 minutes to complete and was a single-group design as all participants were exposed to the same study stimuli.

Measures

The measures for Study 3 that were the same measures from Study 1 and/or Study 2 included: Stigma Consciousness, General Demographics, and Group Identification. In addition to the previous measures, Study 3 also included four new measures that were intended to capture how participants believed different tactics mapped onto various aspects that shape any given ISC.

- 1) Sense of belonging. We asked to what extent participants agreed that a tactic would make students feel more welcomed in the classroom and would indeed create a more welcoming space.
- 2) Implementation (overt vs. subtle). Participants were asked how likely it was that students would notice if a tactic was being implemented.
- 3) Influence (unconscious vs conscious). We asked to what extent participants believed that students would consciously understand the intention behind the tactic being implemented.
- 4) Effort (genuine vs disingenuous). We assessed to what extent participants agreed that the tactic showed genuine effort to create a welcoming environment or if it

was overstated⁴. To be clear, we did not measure effort in the sense of the energy (mentally or physically) that was required to carry out any given tactic.

These new measures were all rated on a Likert-type scale of 1-7 (see Appendix I for a detailed list of individual items).

Procedure

After consenting to the study, participants were told about how there are many tactics an instructor can implement to try to create a welcoming classroom. The study explained these tactics are often indicators of safety that are meant for a diverse group of individuals, while also mitigating threats stereotypes might create. Then they were provided with a description of how to view these tactics as either implicit—which is oftentimes subtle and likely to influence a student unconsciously (i.e., without the student being clearly aware of the intention of the tactic, but still being influenced by its presence) or explicit—implemented overtly (i.e., the instructor clearly and obviously drawing attention to the effort) and with students aware of the intent to influence how much they feel like they belong or are safe in a given space.

With this in mind, they viewed a few examples of tactics used in classrooms (see Appendix J). We had a total of 8 tactics, and we selected tactics based on our current definition of implicit-explicit ISCs, with each tactic type (implicit or explicit) having 4 examples for the participants to review. Following each example, they were asked questions about each tactic (i.e., the measures mentioned above) and then to rate them accordingly. We also emphasized that participants should not judge whether they thought these tactics would work or not, and instead, consider how a naive student would receive them.

⁴ This measure was similar in intent as the perceived performity/effort measure in Study 1 and Study 2 but used different items to more directly measure this aspect.

Results

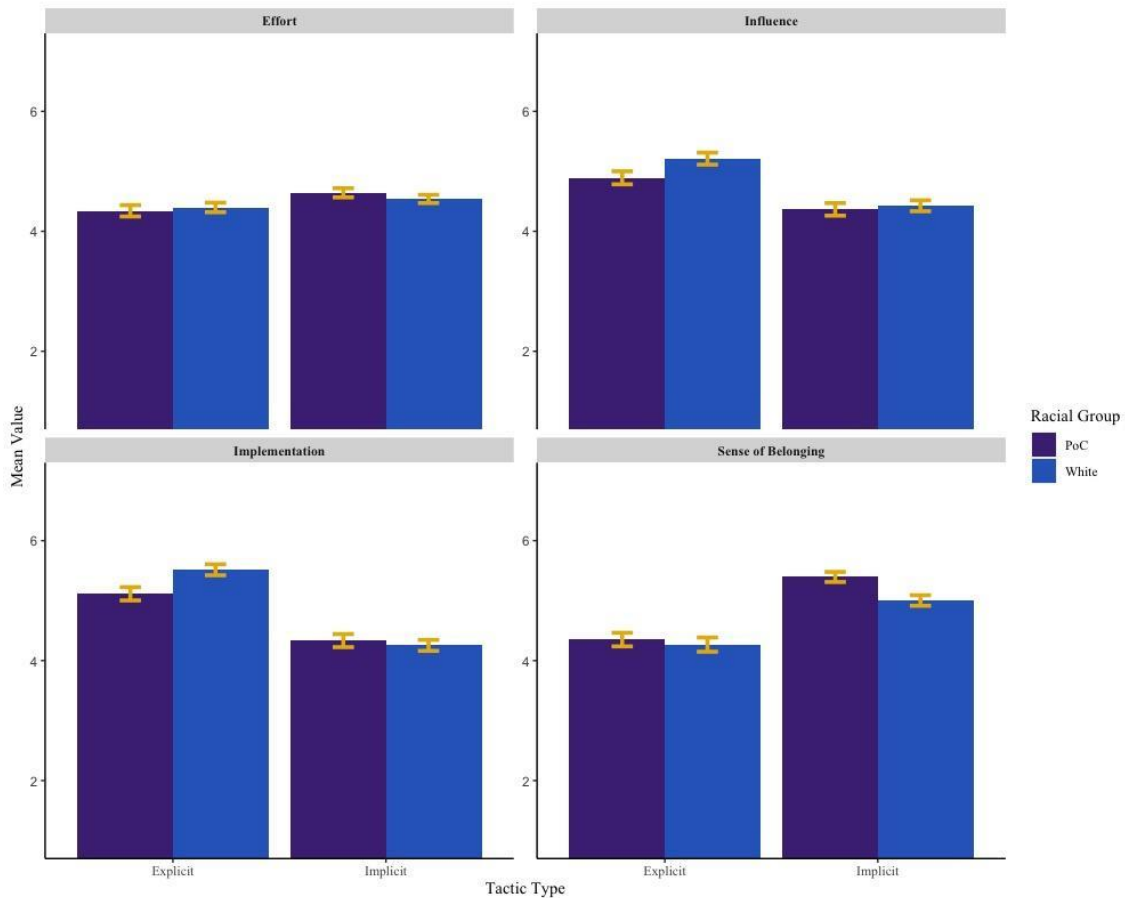
For each of the analyses across the four aspects considered in the proposed framework, a mixed-model analysis was conducted, treating tactic type (explicit vs. implicit) as a within-subjects factor and participant racial identity (Person of Color vs. White) as a between-subjects factor. Conducting a mixed-model ANOVA allowed for all data points to be considered for each tactic—considering each participant was measured repeatedly for each tactic type—and reduced the potential for error variance, allowing for a more powerful statistical test.

Implementation

The first analysis assessed the influence of race (White vs. PoC) and tactic type (implicit vs. explicit) on implementation. The model revealed a significant effect of tactic type on implementation ratings, $F(1, 924) = 29.46, p < .01, \eta^2 = 0.03$. Specifically, implicit tactics were associated with lower scores than explicit tactics, as shown in Figure 7. These lower scores meant that participants believed that the implicit tactics were less overt than explicit tactics. The effect of race was also significant, $F(1, 924) = 7.89, p = .01, \eta_p^2 = 0.01$, with White participants giving higher ratings than People of Color. The interaction between race and tactic type was also significant, $F(1, 924) = 5.66, p = .02, \eta_p^2 < 0.01$, indicating that the difference between implicit and explicit tactics was more pronounced for White participants than for PoC. The overall model was statistically significant, $F(3, 924) = 37.17, p < .01, \eta_p^2 = .12$, suggesting that race and tactic type significantly contributed to the variation in implementation ratings.

Figure 7

Average Ratings for All Aspects by Race



Note. This graph shows the average ratings for the 4 aspects that participants rated each ISC on (i.e., effort, influence, implementation, sense of belonging). The averages are shown by tactic type and racial group, PoC (Black and Hispanic) or White.

Sense of Belonging

Next, we evaluated the effect of race and tactic type on sense of belonging. A mixed-model ANOVA indicated a significant effect of tactic type, $F(1, 924) = 51.39, p < .01, \eta_p^2 = 0.05$, with implicit tactics leading to higher sense of belonging ratings compared to explicit tactics. However, neither race $F(1, 924) = 0.34, p = .56, \eta_p^2 < 0.01$, nor the interaction between

race and tactic type was significant, $F(1, 924) = 2.29, p = .13, \eta_p^2 < 0.01$, respectively, suggesting no substantial effect of race or interaction on sense of belonging. As with implementation, the overall model was significant, $F(3, 924) = 27.72, p < .01, \eta_p^2 = .083$, indicating that tactic type contributed significantly to sense of belonging, though race and the interaction were not significant.

Influence

For the influence measure, the model showed that tactic type significantly influenced ratings, $F(1, 924) = 13.33, p < .01, \eta_p^2 = 0.01$, with implicit tactics associated with lower influence scores than explicit tactics (i.e., implicit tactics were seen as operating on more of an unconscious level, while explicit tactics were seen as operating on more of a conscious level). The main effect of race was also significant, $F(1, 924) = 4.97, p = 0.03, \eta_p^2 = 0.01$, with White participants scoring higher than People of Color. However, the interaction between race and tactic type was not significant, $F(1, 924) = 1.65, p = .20, \eta_p^2 < 0.01$, suggesting that the effect of tactic type on influence did not differ across racial groups. Overall, the model was significant, $F(3, 924) = 15.85, p < .01, \eta_p^2 = .05$, with tactic type and race both significantly affecting influence ratings.

Effort

Finally, we investigated the effects of race and tactic type on effort ratings. The mixed-model ANOVA revealed that tactic type significantly influenced ratings, $F(1, 924) = 6.91, p < 0.01, \eta_p^2 = 0.01$, with implicit tactics leading to higher effort ratings compared to explicit tactics. However, race had no significant main effect, $F(1, 924) = 0.25, p = 0.62, \eta_p^2 < 0.01$, and the interaction between race and tactic type was also not significant, $F(1, 924) = 0.98, p = 0.32, \eta_p^2 < 0.01$, suggesting that effort was not influenced by racial group membership or the interaction

between race and tactic type. Again, the overall model was significant, $F(3, 924) = 2.861, p = 0.036, \eta_p^2 = .01$, indicating that tactic type had a significant impact on effort ratings, although race and the interaction were not significant.

Discussion

Study 3 aimed to refine the conceptual understanding of implicit-explicit ISCs by evaluating how well participants' perceptions aligned with the theoretical definitions of the proposed framework. While Studies 1 and 2 focused on testing this framework through an effort to directly implement ISCs, Study 3 took a step back to examine whether the definitions of implicit and explicit ISCs as currently framed were being interpreted as intended by a broader, more diverse audience. This study contributes to our understanding of how these cues are perceived and categorized, providing valuable insights into how implicit-explicit cues might be affecting students' experiences in classroom settings.

The results from the analysis of the overall models provide a clearer picture of how participants rated different tactics across various dimensions (i.e., sense of belonging, implementation, influence, and effort). In particular, the findings suggest that participants were able to distinguish between the two types of ISCs based on their levels of influence, implementation, and perceptions of effort. Participants consistently rated implicit and explicit cues differently, which is in line with the framework provided in the study. This supports the notion that the distinction between implicit-explicit ISCs is valid for participants from diverse racial and demographic backgrounds.

For implementation, the significant effect size suggests that participants clearly identified differences between tactics that were more likely to be noticed by students (e.g., explicit ISCs) versus those that operated at a more subtle, implicit level. The influence measure also yielded

significant findings, with participants indicating that explicit cues were more likely to be consciously perceived by students. This outcome is consistent with the premise that E-ISCs are meant to be overt and consciously recognized by students, thus influencing their awareness of the intention behind the tactic. In contrast, implicit ISCs, which operate at a nonconscious level, did not elicit as strong conscious awareness among participants, reinforcing the conceptual distinction between implicit and explicit cues. The effort dimension revealed that participants were able to differentiate between tactics that seemed more genuine versus those perceived as performative. E-ISCs, which often involve drawing attention to the effort being made, were less likely to be seen as genuinely intended to promote a welcoming environment.

Additionally, sense of belonging ratings demonstrated that implicit cues were more likely to create a feeling of inclusivity. This finding offers an important insight into how different types of ISCs might shape students' experiences in the classroom. As seen in Study 3, I-ISCs tend to be seen as operating in more subtle, subconscious ways, which may allow them to foster a sense of belonging without overtly drawing attention to the effort being made. This subtlety could help create an environment where students feel welcomed and safe without feeling singled out for their identity. For students who belong to marginalized groups, such as PoC, the perceived authenticity and ease of implicit cues might feel less performative or tokenizing, which could contribute to a deeper, more genuine sense of inclusion. This finding suggesting that implicit cues are more strongly associated with stronger feelings of a sense of belonging, underscore the importance of considering the nuances of how different types of cues are experienced. This insight may help students feel more authentically included, and aid educators and policymakers in refining their approaches to ISCs they implement. Taken together, it indicates that the

recognition of whether a tactic is noticeable or not plays a key role in determining how safe and welcomed a student feels in a classroom.

In addition to examining the impact of tactic type (implicit vs. explicit), we also explored how race might moderate participants' perceptions of these cues. Including race as an independent variable in this study also allowed us to examine whether I-ISCs and E-ISCs are perceived consistently across racial groups or if there are differences in how these cues are interpreted by those who are typically the targets of stereotype threat (e.g., PoC) versus those who are not (e.g., White participants). Interestingly, race did not significantly interact with tactic type in influencing participants' sense of belonging. This suggests that while the racial composition of the sample influenced how participants perceived the implementation of ISC, it did not substantially affect how these cues were associated with feelings of belonging. This may reflect a broader trend where both groups recognized the potential of I-ISCs to create a more welcoming environment, potentially due to the lower level of perceived "performative" effort required by ISCs. More generally, the slight variations observed—particularly regarding how participants from different racial backgrounds perceive the implementation and influence of ISCs—suggest that race is a relevant factor in understanding the broader dynamics of the classroom, but did not have as substantial an effect on belonging and perceived effort. Therefore, although race did not emerge as a uniformly significant factor across all outcomes in this study, its inclusion helped illuminate important insights into how racial background may influence the perception and effectiveness of ISCs in educational contexts. Importantly, a better understanding of how I-ISCs and E-ISCs are perceived across racial groups can also further help ensure that we are centering the voices and experiences of those with marginalized identities—specifically, those who are the usual targets of these cues. In the context of these studies, where the cues are

racially focused, it is essential that interventions are designed with the needs and perceptions of PoC in mind. By examining potential differences in how these cues are understood by both marginalized and non-marginalized groups, we can refine our approaches to better align with the experiences of those who face the most significant barriers to feeling safe and included in educational spaces. This helps to ensure that ISCs are truly effective in supporting those who are most in need of these protective measures.

Limitations and Future Directions

A limitation of Study 3 is that the sample was limited in its diversity, primarily comprising White, Hispanic/Latino, and Black participants. However, this was done to keep consistent with the participant pool in Study 1 and 2. We included White participants because we were interested in the overall defining aspects of the framework, more generally, and not targeting specific identities. We tested for the potential influence of racial difference in the ratings within all of the models. However, future studies could benefit from a more balanced sample to better capture the range of experiences across different racial and ethnic backgrounds.

Another limitation of Study 3 is the relatively small effect sizes observed across key outcomes. This could be due to the subtlety of the cues or the hypothetical nature of the study, which may not fully reflect real-world classroom experiences. Future research could address this by using more varied or dynamic ISC examples that more closely resemble the complexity of actual classroom environments. Additionally, exploring the long-term effects of these cues in authentic educational settings or incorporating more diverse populations may help clarify their true impact on students' sense of safety and belonging. The small effect sizes, however, could also be attributed to the relatively small sample. Smaller sample sizes can reduce statistical power, making it more difficult to detect meaningful effects, even when they are present. Future

studies could address this limitation by increasing the sample size, which would improve statistical power and enhance the ability to detect stronger, more reliable effects.

It is also important to consider the impact that a White participant reading the prompt in third person might have on our results. Specifically, this could lend a possible explanation as to why we did not see interactions with race. Since participants were asked to imagine how students might receive the tactics, they might have specifically imagined a PoC in both racial conditions, therefore, we might not have captured how White students specifically might react to the implementation of these tactics.

In conclusion, Study 3 provides critical insights into the way that implicit-explicit ISCs are perceived in educational settings. The findings suggest that participants are able to differentiate between these cues along multiple dimensions, including their level of visibility, intentionality, and perceived effort. This study paves the way for further refinement of the ISC framework, which could lead to more effective strategies for fostering inclusive and supportive environments in classrooms. The results also have implications for how educators might design and implement interventions to promote a sense of belonging for all students, especially those from marginalized groups.

General Discussion

The present collection of studies aimed to explore and refine the concept of ISCs in educational settings, specifically examining the distinction between I-ISCs and E-ISCs and their effects on students' sense of belonging and safety. Across three studies, we sought to clarify how different types of cues are perceived and how they influence students' experiences, both consciously and unconsciously. The results collectively provide valuable insights into the

functioning of the proposed framework, as well as ISCs more generally, and contribute to the growing body of research on identity safety in diverse classroom contexts.

The findings from the three studies demonstrate that I-ISCs and E-ISCs play distinct roles in shaping students' perceptions of belonging and safety, though the effects vary across different dimensions (e.g., implementation, influence, sense of belonging, and effort). Study 1 introduced the conceptual framework of ISCs, providing initial evidence that students respond to these cues in ways that can enhance their sense of inclusion and belonging, however, it did not differ along the implicit-explicit binary. Study 2 expanded on these findings by manipulating race and mentoring strategies, revealing ISC types (implicit- explicit) had a significant impact on students' feelings of identity safety. Study 3 further refined this framework by assessing participants' perceptions of how implicit and explicit cues map onto different dimensions (e.g., effort, influence, and implementation), offering more nuanced insights into the underlying processes that distinguish these cues.

Taken together, these studies highlight several key conclusions. First, implicit cues tend to be perceived as more subtle and unconscious, with less overt signaling of the instructor's intentions, while explicit cues are more noticeable and consciously recognized by students. Notably, implicit cues were generally associated with higher ratings of sense of belonging, suggesting that subtle, less overt tactics may be more effective in fostering a welcoming and inclusive environment. This finding aligns with existing literature suggesting that students often feel more comfortable when the attempt to create an inclusive space is not too overt or performative (e.g., Walton & Cohen, 2007). Second, while explicit cues were more likely to be recognized and associated with higher levels of influence, they were also perceived as less genuine in their effort to create a welcoming environment. This suggests that students may be

more sensitive to the authenticity of the tactics used by instructors, which is crucial for promoting a genuinely inclusive classroom atmosphere.

Study 3, in particular, offered important insights into how participants conceptualize I-ISCs and E-ISCs. While the overall pattern of results was similar across racial groups, there were some nuanced differences, particularly in the implementation ratings, with White participants showing a stronger distinction between implicit and explicit cues than participants of color. This finding underscores the importance of considering both the nature of the cue and the demographic background of students when evaluating the effectiveness of identity safety strategies in educational contexts.

Implications

The findings from these studies have several important implications for educators, researchers, and policymakers interested in promoting identity safety and inclusivity in classroom settings. First, the distinction between I-ISCs and E-ISCs offers a useful framework for designing interventions aimed at enhancing students' sense of belonging. Educators may want to consider using a combination of both types of cues, depending on the context and the needs of their students. For example, in classrooms with a diverse student body, implicit cues that are subtle and non-intrusive may be more effective in fostering a sense of safety and inclusion without overwhelming students with overt messages about diversity and come across as more genuine. On the other hand, explicit cues may be necessary in contexts where there is a need to signal strong institutional support for diversity and inclusion, especially for students who may be particularly vulnerable to stereotypes or discrimination.

The findings also highlight the importance of considering students' perceptions of the authenticity of identity safety efforts. If students perceive an instructor's actions as performative

or superficial, this may undermine the effectiveness of the tactic, regardless of whether it is implicit or explicit. This suggests that interventions aimed at fostering identity safety should focus not only on the content and visibility of the cues but also on ensuring that they are perceived as genuine and sincere. Educators might therefore benefit from focusing on fostering an authentic classroom culture that prioritizes inclusivity through consistent, meaningful actions rather than relying solely on one-time diversity initiatives or superficial gestures.

Finally, the role of racial and demographic factors in shaping how students perceive these cues highlights the importance of adopting an intersectional approach to identity safety. Future research and practice should consider the complex ways in which students' identities and experiences intersect with the types of identity safety cues that are most effective in creating a sense of belonging. This might involve tailoring interventions to different student groups or providing educators with the tools to recognize the diverse needs of their students.

Limitations and Future Directions

While the present studies provide valuable insights into the functioning of ISCs, there are several limitations that should be acknowledged. One key limitation is the relatively narrow demographic composition of the sample. Although we aimed to assess the generalizability of the framework, the sample may not fully capture the experiences of students from other racial or ethnic groups. Future research should strive for more balanced and representative samples to ensure that the findings are more widely applicable to different student populations.

Additionally, the experimental nature of the studies, particularly Study 3, relied on hypothetical classroom scenarios and self-report measures, which may not fully capture the complexities of real-world classroom dynamics. For example, students' responses to identity safety cues in an actual classroom environment might differ from those observed in the

controlled conditions of the present studies. Future research could benefit from using more ecologically valid methods, such as observational studies or longitudinal designs, to assess the long-term effects of ISCs on students' sense of belonging and academic outcomes. Furthermore, studies that incorporate more dynamic or varied ISC examples that reflect the complexity of actual classroom environments might yield more robust and generalizable findings.

There are several important directions for future research based on the findings and limitations of the present studies. First, researchers could explore the long-term effects of I-ISCs and E-ISCs in real-world classroom settings. Longitudinal studies could provide insights into how these cues affect students' sense of belonging, academic performance, and overall well-being over time. Additionally, future studies could examine how different types of cues interact with other factors, such as student motivation, or interpersonal relationships, to shape students' experiences.

Second, research could further investigate how racial and cultural differences influence the perception and effectiveness of ISCs. While Study 3 examined the role of race, it remains unclear how cues might be perceived differently across a broader range of racial and ethnic groups historically marginalized in educational contexts. Expanding the scope of research to include additional racial, ethnic, and cultural perspectives will be crucial for developing a more comprehensive understanding of how identity safety cues function across diverse student populations.

Furthermore, future research could also look into other theoretical intersections that embracing this framework of implicit-explicit ISCs could impact. For example, better understanding this potential distinction between I-ISCs and E-ISCs could be helpful in the ways in which we examine intergroup dynamics. Implementing ISCs more broadly could impact levels

of trust and cooperation between different social or cultural groups (Johnson & Pietri, 2024). If the consequences of implementing ISCs are negative (i.e., lowering trust between a non-targeted group and the group targeted by a cue), this could broaden the divide between different groups. However, this proposed framework could find a trusted work around by allowing us to understand if dominant group members react to I-ISCs differently than E-ISCs (e.g., differences in levels of perceived threat). If we understand this, cues can be implemented in a way that still fosters a sense of belonging for the targeted group without a potential rebound effect from other groups.

Lastly, it would be valuable to explore the role of other, more specific, targets of identity safety cues, such as those related to gender, sexuality, or socio-economic status. Understanding how cues related to these dimensions of identity intersect with racial and ethnic considerations could provide deeper insights into how inclusive practices can be tailored to meet the needs of all students.

In conclusion, this series of studies offers a contribution to our understanding of ISCs in educational settings. The findings provide strong evidence for the importance of distinguishing between I-ISCs and E-ISCs, as well as for the need to consider students' perceptions of authenticity and intent. These insights have practical implications for educators seeking to foster more inclusive and supportive classroom environments. By refining the conceptual framework of ISCs and examining the role of different cues in shaping students' experiences, these studies pave the way for more effective strategies to promote a sense of belonging and safety for all students.

References

- Allen, K. A. (2020). *The psychology of belonging*. Routledge.
- Allen, K. A., Kern, M. L., Rozek, C. S., McInerney, D. M., & Slavich, G. M. (2021). Belonging: A review of conceptual issues, an integrative framework, and directions for future research. *Australian journal of psychology, 73*(1), 87-102.
- Angel, D. M., Schatz, M., Zeiger, R. S., Sicherer, S. H., & Khan, D. A. (2021). Diversity, equity, and inclusion: what can a journal do?. *The Journal of Allergy and Clinical Immunology: In Practice, 9*(11), 3853-3856.
- Baumeister, R. F., & Leary, M. R. (2017). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Interpersonal development, 57-89*.
- Bersted, K. A., Lockhart, K. M., Yarboi, J., Wilkerson, M. K., Voigt, B. L., Leonard, S. R., & Silvestri, J. M. (2023). A path toward equity and inclusion: Establishing a DEI committee in a department of pediatrics. *Journal of Clinical Psychology in Medical Settings, 30*(2), 342-355.
- Blankschaen, K. M. (2016). Allied identities.
- Brehm, J. W. (1966). A theory of psychological reactance.
- Brown, K. T., & Ostrove, J. M. (2013). What does it mean to be an ally?: The perception of allies from the perspective of people of color. *Journal of Applied Social Psychology, 43*(11), 2211-2222.
- Burnett, G., & Bonnici, L. (2003). Beyond the FAQ: Explicit and implicit norms in Usenet newsgroups. *Library & information science research, 25*(3), 333-351.
- Chaney, K. E., Sanchez, D. T., & Remedios, J. D. (2016). Organizational identity safety cue transfers. *Personality and Social Psychology Bulletin, 42*(11), 1564-1576.

- Cheryan, S., Plaut, V. C., Davies, P. G., & Steele, C. M. (2009). Ambient belonging: how stereotypical cues impact gender participation in computer science. *Journal of personality and social psychology, 97*(6), 1045.
- Cipollina, R., & Sanchez, D. T. (2023). Racial identity safety cues and healthcare provider expectations. *Stigma and Health, 8*(2), 159.
- Collier-Spruel, L. A., & Ryan, A. M. (2024). Are all allyship attempts helpful? An investigation of effective and ineffective allyship. *Journal of Business and Psychology, 39*(1), 83-108.
- Crittles, C. (2020). *Pathways to Inclusive Excellence for Black Students in STEM* (Doctoral dissertation, Tufts University).
- De Souza, L., & Schmader, T. (2024). When people do allyship: A typology of allyship action. *Personality and Social Psychology Review, 10888683241232732*.
- Emerson, K. T., & Murphy, M. C. (2014). Identity threat at work: How social identity threat and situational cues contribute to racial and ethnic disparities in the workplace. *Cultural Diversity and Ethnic Minority Psychology, 20*(4), 508.
- Foy, C. M. (2021). Successful applications of diversity, equity, and inclusion programming in various professional settings: Strategies to increase DEI in libraries. *Journal of Library Administration, 61*(6), 676-685.
- Frost, D. M. (2011). Social stigma and its consequences for the socially stigmatized. *Social and Personality Psychology Compass, 5*(11), 824-839.
- Gonzales, L. D., Hall, K., Benton, A., Kanhai, D., & Núñez, A. M. (2021). Comfort over change: A case study of diversity and inclusivity efforts in US higher education. *Innovative Higher Education, 46*, 445-460.
- Goodwin, S. A., Williams, K. D., & Carter-Sowell, A. R. (2010). The psychological sting of

- stigma: The costs of attributing ostracism to racism. *Journal of Experimental Social Psychology*, 46(4), 612-618.
- Gorman, D. (2010). Maslow's hierarchy and social and emotional wellbeing. *Aboriginal and Islander Health Worker Journal*, 34(1), 27-29.
- Halvorsen, J. (2023). Interrogating white men's allyship: Implications of performativity for qualitative methodologies. *Qualitative Inquiry*, 29(8-9), 956-966.
- Hildebrand, L. K., Jusuf, C. C., & Monteith, M. J. (2020). Ally confrontations as identity-safety cues for marginalized individuals. *European Journal of Social Psychology*, 50(6), 1318-1333.
- Hofmann, W., Gschwendner, T., Nosek, B. A., & Schmitt, M. (2005). What moderates implicit—explicit consistency?. *European review of social psychology*, 16(1), 335-390.
- Howansky, K., Maimon, M., & Sanchez, D. (2022). Identity safety cues predict instructor impressions, belonging, and absences in the psychology classroom. *Teaching of Psychology*, 49(3), 212-217.
- Janke, S., Messerer, L. A., Merkle, B., & Rudert, S. C. (2024). Why do minority students feel they don't fit in? Migration background and parental education differentially predict social ostracism and belongingness. *Group Processes & Intergroup Relations*, 27(2), 278-299.
- Johnson, I. R., & Pietri, E. S. (2022). An ally you say? Endorsing White women as allies to encourage perceptions of allyship and organizational identity-safety among Black women. *Group Processes & Intergroup Relations*, 25(2), 453-473.
- Johnson, I. R., & Pietri, E. S. (2024). Signaling safety and fostering fairness: Exploring the psychological processes underlying (in) congruent cues among Black women. *Journal of*

Personality and Social Psychology.

- Kalina, P. (2020). Performative allyship. *Technium Soc. Sci. J.*, 11, 478.
- Kray, L. J., & Shirako, A. (2009). Stereotype Threat in Organizations: An Examination of its Scope, Triggers, and Possible. *Info*.
- Kruk, M., & Matsick, J. L. (2021). A taxonomy of identity safety cues based on gender and race: From a promising past to an intersectional and translational future. *Translational Issues in Psychological Science*, 7(4), 487.
- Kutlaca, M., & Radke, H. R. (2023). Towards an understanding of performative allyship: Definition, antecedents and consequences. *Social and Personality Psychology Compass*, 17(2), e12724.
- Laiduc, G. (2023). *Framing diversity to promote identity safety and interests in social justice in STEM* (Doctoral dissertation, UC Santa Cruz).
- Major, B., & O'brien, L. T. (2005). The social psychology of stigma. *Annu. Rev. Psychol.*, 56, 393-421.
- Maslow, A. H. (1943). Preface to motivation theory. *Psychosomatic medicine*, 5(1), 85-92.
- Martiny, S. E., & Nikitin, J. (2019). Social identity threat in interpersonal relationships: Activating negative stereotypes decreases social approach motivation. *Journal of Experimental Psychology: Applied*, 25(1), 117.
- McIntyre, R. B., Paulson, R. M., & Lord, C. G. (2003). Alleviating women's mathematics stereotype threat through salience of group achievements. *Journal of Experimental Social Psychology*, 39(1), 83-90.
- Miller, C. H. (2015). Persuasion and psychological reactance: The effects of explicit, high-controlling language. In *The exercise of power in communication: Devices, reception and*

- reaction* (pp. 269-286). Palgrave Macmillan UK.
- Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. *Psychological science, 18*(10), 879-885.
- Murphy, M. C., Kroeper, K. M., & Ozier, E. M. (2018). Prejudiced places: How contexts shape inequality and how policy can change them. *Policy insights from the Behavioral and Brain Sciences, 5*(1), 66-74.
- Page, S. E. (2007). Making the difference: Applying a logic of diversity. *Academy of Management Perspectives, 21*(4), 6-20.
- Petriglieri, J. L. (2011). Under threat: Responses to and the consequences of threats to individuals' identities. *Academy of Management Review, 36*(4), 641-662.
- Pietri, E. S., Johnson, I. R., & Ozgumus, E. (2018). One size may not fit all: Exploring how the intersection of race and gender and stigma consciousness predict effective identity-safe cues for Black women. *Journal of Experimental Social Psychology, 74*, 291-306.
- Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology, 76*(1), 114-128.
- Rutland, A., Cameron, L., Milne, A., & McGeorge, P. (2005). Social norms and self-presentation: Children's implicit and explicit intergroup attitudes. *Child development, 76*(2), 451-466.
- Salter, N. P., & Migliaccio, L. (2019). Allyship as a diversity and inclusion tool in the workplace. *Diversity within Diversity Management, 22*, 131-152.
- Savani, K., Morris, M. W., Fincher, K., Lu, J. G., & Kaufman, S. B. (2022). Experiential learning of cultural norms: The role of implicit and explicit aptitudes. *Journal of*

- Personality and Social Psychology*, 123(2), 272.
- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human resource management review*, 28(2), 176-189.
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American psychologist*, 52(6), 613.
- Wagner, H. S., Howland, M., & Mann, T. (2015). Effects of subtle and explicit health messages on food choice. *Health Psychology*, 34(1), 79.
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: race, social fit, and achievement. *Journal of personality and social psychology*, 92(1), 82.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, 331(6023), 1447-1451.
- Wang, K., Stroebe, K., & Dovidio, J. F. (2012). Stigma consciousness and prejudice ambiguity: Can it be adaptive to perceive the world as biased?. *Personality and Individual Differences*, 53(3), 241-245.
- Wilton, L. S., Bell, A. N., Vahradyan, M., & Kaiser, C. R. (2020). Show don't tell: Diversity dishonesty harms racial/ethnic minorities at work. *Personality and Social Psychology Bulletin*, 46(8), 1171-1185.

Appendix E.
Demographics Questionnaire

Now a few questions about you! Note: Please feel free to skip questions that you would prefer not to answer, questions that do require a response will be indicated as so.

- | | |
|---|---|
| <p>1. What is your gender?</p> <p>Male (1)</p> <p>Female (2)</p> <p>Non-binary (3)</p> <p>Other (4) _____</p> <p>Prefer not to say (5)</p> | <p>4. How much do you identify with the culture associated with your ethnic group?</p> <p>None at all (1)</p> <p>A little (2)</p> <p>A moderate amount (3)</p> <p>A lot (4)</p> <p>A great deal (5)</p> |
| <p>2. What is your sexual orientation?</p> <p>Heterosexual/Straight (1)</p> <p>Homosexual/Gay (2)</p> <p>Queer (3)</p> <p>Bisexual (4)</p> <p>Transgender (5)</p> <p>Pansexual (6)</p> <p>Asexual (7)</p> <p>Other (8) _____</p> <p>Prefer not to say</p> | <p>5. Do you identify as LGBTQ+?^[1]_[SEP]</p> <p>Yes (1)</p> <p>No (2)</p> <p>Prefer not to say (3)</p> |
| <p>3. How much do you identify with your racial group?</p> <p>None at all (1)</p> <p>A little (2)</p> <p>A moderate amount (3)</p> <p>A lot (4)</p> <p>A great deal (5)</p> | <p>6. What is your political affiliation?</p> <p>Democrat (1)</p> <p>Independent (2)</p> <p>Republican (3)</p> <p>Unsure (4)</p> <p>Prefer not to say (5)</p> |
| | <p>7. Choose one or more race/ethnicity that you consider yourself to be:</p> <p>American Indian or Alaska Native (1)</p> <p>Black or African American (2)</p> <p>East Asian (3)</p> <p>Hispanic (4)</p> <p>Latino (5)</p> <p>Native Hawaiian or Pacific Islander (6)</p> <p>Spanish (7)</p> <p>South Asian (8)</p> <p>White (9)</p> <p>Other (10) _____</p> <p>Prefer not to say</p> |

Appendix F. Study 1 Stimuli Example.

Below is an example of what participants saw in, both, the implicit and explicit condition for Study 1. What made the condition implicit or explicit was the way the professor spoke about the coach and the example of course content. In the explicit condition the voiceover explicitly acknowledged why Dr. Clark and Dr. Sanchez were included to because the field of psychology is historically very White, and the course wanted to highlight more diverse perspectives. Meanwhile, in the implicit condition the ISCs were through the visual stimuli, seeing a Black and Hispanic researchers (i.e., minority representation and environmental features).

IMPLICIT and EXPLICIT STIMULI:

Mamie Clark

- Studied racial preference and identity in Black children in integrated schools
- Doll Study: Found that majority of students liked White dolls more than the Black dolls
- Findings were used to help dismantle school segregation (Brown v. Board)



George I. Sanchez



- Pioneer of Chicano (Mexican-American) educational psychology
- Argued against the legitimacy of the IQ exam and its use to discredit the intelligence of Spanish speakers

Below is an example of what was seen by participants in the control condition, where we used White psychologists as the baseline for the course content.

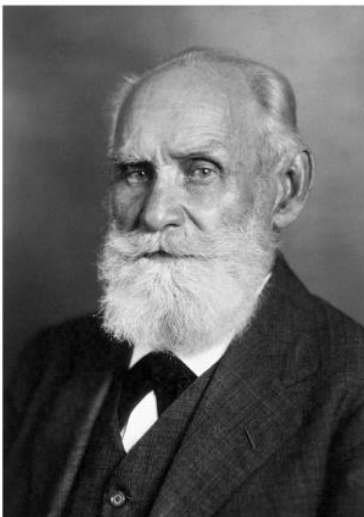
CONTROL STIMULI:

Christine Ladd- Franklin

- Psychologist, Mathematician, Logician
- Theory of Color Vision
 - Achromatic (black and white) vision developed first, followed by color vision
 - Within color vision, blue-yellow sensitivity develops before red-green color sensitivity



Ivan Pavlov



- Best known for his work on classical conditioning
- Classical conditioning continues is central to behavior therapy



Appendix G. Website- Homepage.

About

The Faculty Mentoring Award honors faculty members who have shown dedication to mentoring their students. This commitment is exemplified through their support of students advancing their academic and research journeys. Nominees are chosen for encompassing various forms of assistance, such as insightful guidance on conducting research.

Coaching

Nominees show dedication to nurturing talent to its fullest potential. They foster growth, resilience, and self-discovery in those they mentor.

Knowledge

Nominees embrace knowledge sharing, fostering an environment where wisdom is gained and shared.

Motivation

Nominees work to inspire others with enthusiasm to propel individuals to surpass their own expectations.

Faculty Nominees

The window for 2023-24 nominations has closed. Please view the selected nominees by clicking below.

Nominee Profiles

Selection Process

Selection Process

The selection process begins with an open nominations period, during which any faculty member may nominate an eligible colleague. The Selection Committee then evaluates all nominations and prepare a group of finalists under consideration, and ultimately recommends up to two winners to the Provost.

Eligibility Criteria

1. Senior, full-time faculty members holding an official academic appointment are eligible for nomination.^[L]
2. Nominees should have served as mentors over a sustained period, demonstrating significant success in their areas of mentorship.

Selection Criteria

Selected faculty will display a dedication to nurturing the intellectual, creative, and scholarly advancement of their mentees, enabling them to thrive both on campus and beyond.^[SEP] Evidence of long-term dedication to fostering mentoring relationships that contribute to the academic progression and personal growth of mentees.

Appendix H. Mentor Blurbs.

Professor Smith

As I apply for this mentoring award, I'm looking back on how I've helped students over the years. In psychology all of the work we do is centered around people and better understanding individuals. As a mentor, I've always loved guiding and supporting the next generation. Whether it's helping with projects or just being there when things get tough, mentoring has been a big part of my job. It has been an absolute pleasure to help grow the minds of these young researchers. It's really cool to think about how I can impact students' lives through the work that I feel so passionately about. Mentoring is important because it's not just about teaching facts but showing students how to actually put those tools to use. I truly care about helping students succeed, and I'm honored to be in the running for this award.

In my free time:

- I am really good at pottery and it is something I regularly do in my free time!

Student testimonials:

- Professor Smith has been such a great mentor!
- I am very thankful for the experience Professor Smith has given me

Professor Williams

In my field of psychology, my focus lies on not just conducting research, but also on mentoring others to engage in this work and grasp its nuances. Research is a great way to get students involved by allowing them to be hands on with the concepts that they are learning in the classroom. My mentees have been a wellspring of inspiration, and I firmly believe that our exchange of knowledge has been mutual. As a mentor, it has been such a great experience watching them engage with psychological concepts in this way. Guiding them allows me to nurture fresh ideas and it is so rewarding watching them bring their own ideas to life. This award will enable me to sustain my research endeavors and offer my mentees hands-on experience in proper research practices.

In my free time:

- I am a huge fan of pickleball and love playing with my friends on the weekend.

Student testimonials:

- Working with Professor Williams has been an awesome experience
- I appreciate the opportunity Professor Williams has given me

Control:

Professor Jennings #1

My research is in the area of psychopathology. With the work that I do, it is equally as important to me that I provide mentorship on how students can engage in this work and better understand how psychology research is done. I have found great inspiration from my mentees and truly believe that I have learned just as much from them as they have from me. Providing this mentorship gives me the opportunity to help foster ideas and perspectives. With this award, I will be able to continue to conduct this important research and continue to provide my mentees with invaluable experience in conducting rigorous research.

In my free time:

- I play in a co-ed softball league with my friends

Student testimonials:

- Professor Jennings has proven to be an invaluable mentor
- I am forever grateful for the chance to work and learn from Professor Jennings

Explicit:

Professor Jennings #2

I conduct research in psychopathology and emphasize ways we can conduct research that speaks to mental health outcomes that are equitable for Black, Indigenous, and other people of color. Oftentimes, research in this area is conducted on White participants with a particular cultural background, that often skews treatment and intervention implementation. With the work that I do, it is equally as important to me that I uplift the voices that I study in my research by providing mentorship on how they can engage in this work and further the efforts of equity. I have found great inspiration from my mentees and truly believe that I have learned just as much from them as they have from me. Providing this mentorship gives me the opportunity to intentionally foster diverse ideas and perspectives. With this award, I will be able to continue to conduct this important research and continue to provide my mentees with invaluable experience that they can take with them far after their work in my lab.

In my free time:

- I love giving back to my community and volunteering at local events helping our underserved and underrepresented communities

Student testimonials:

- It has been so nice being in an environment where I see other aspiring researchers who look like me, and that's all thanks to the environment that Professor Jennings has built
- Professor Jennings is a great mentor and has made it a point to make a space where people from different backgrounds can come together for a common goal!

Implicit:

Professor Jennings #3

I conduct research in psychopathology and emphasize how outcomes vary across a diverse set of individuals. Oftentimes, research in this domain lacks perspective, and it is important to conduct research that can provide more adaptable treatment and interventions. With the work that I do, I have the opportunity to work with a wide range of undergraduates, training them as research assistants, so they can learn more about how to conduct research on intergroup relations. I have found great inspiration from my mentees and truly believe that I have learned just as much from them as they have from me. Providing this mentorship gives me the opportunity to foster new ideas and perspectives. With this award, I will be able to continue to conduct this important research and continue to provide my mentees with invaluable experience that they can take with them far after their work in my lab.

In my free time:

- I'm an avid basketball fan and love playing pick-up whenever I get the chance!

Student testimonials:

- Professor Jennings has been such a great mentor, and I feel really like he values my perspective.
- Professor Jennings embraces always supports things that others might deem different

Appendix J.
Example Tactics.

Implicit Tactics

- Including a reading list in the syllabus that incorporates a racially diverse group of authors
- Playing music in a classroom and including a diverse mix of music genres
- Hanging posters in a classroom of a racially diverse group of influential people
- Using images of diverse scholars on a PowerPoint when discussing research that has been done on a given topic

Explicit Tactics

- Verbal acknowledgment that we reside on indigenous land at the beginning of a course
- Verbal acknowledgement that an area of study has historically not been racially inclusive
- Making a statement that a standardized test has often disproportionately disadvantage certain demographic groups
- Reviewing a diversity statement at the beginning of a course