

TAKING AIM AT WHAT IT MEANS TO BE ASIAN: DEVELOPMENT OF THE
ASIAN IDENTITY MEASURE (AIM)

by

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(Under the Direction of NEAL OUTLAND)

ABSTRACT

The term “Asian” has been used to describe a group of people with similar continental origins, physical characteristics, and people who share similar experiences (e.g., discrimination). As a precursor to identity-related experiences, accurate conceptualization of an identity group is important for understanding identity-related experiences, however, the degree to which Asian identity is perceived and should be treated as a pan-ethnic identity is not well understood. Currently, no measures of collective Asian identity exist. This study developed the AIM using Ashmore and colleagues’ (2004) framework of collective identity. Exploratory factor analysis yielded a 10-factor structure as best-fitting, however confirmatory factor analysis with an independent sample suggested a more parsimonious eight-factor model fit equally as well. Implications of these results for the framework are discussed, as well as limitations and future directions.

INDEX WORDS: COLLECTIVE IDENTITY, PAN-ASIAN, MEASUREMENT,
SCALE DEVELOPMENT

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CHAPTER 1

INTRODUCTION

Identity is an important precursor to understanding identity-related experiences and, “is one area in which diversity and minoritized experiences have increasingly been examined” (Moffitt et al., 2023, p.288). Widely understood as being complex and multidimensional (Ashforth et al., 2008; Ashmore et al., 2004; Cheek & Cheek, 2018; Phinney, 1991; 1992; Phinney & Ong, 2006; Roccas & Brewer, 2002; Sellers, Rowley, et al., 1997; Sellers, Smith, et al., 1998), racial and ethnic identity are of particularly high salience in the United States (US) because of the role that race has played throughout history. Understanding the different experiences of racial groups—which denote a socially constructed label for a group of people (e.g., Black, Asian, white, etc.) based on having similar physical characteristics such as skin color, hair texture, or facial features (Cokley, 2007; Helms, 2007)—has become increasingly relevant in workplace research with the rise in globalization and increasing organizational diversity in the past few decades. Not as well understood is racial and ethnic *identity*, which involves how individuals construct their own identities in response to being a part of a highly racialized society and internalize a sense of belonging, positive evaluation, and involvement with a collective group (Cokley, 2007).

One racial group that has had a complex history in the US in terms of how individuals have been racially grouped and elected to identify—and is the population of interest for this study—is that of Asian individuals.

The term “Asian” is a socially constructed label used to define a group of people with similar physical characteristics. As a racial category, this often manifests as an overarching group encompassing people who share ancestry from countries spanning the entire continent of Asia. This has also manifested as regional categories of racial groups such as South Asian, East Asian, Southeast Asian, etc. The term “Asian” has also been used to describe a shared, pan-Asian identity (sometimes referred to as Asian American¹) that denotes the collective values and/or experiences shared by individuals with ancestral roots originating from Asian countries. This implies that Asian individuals in the US experience similar internalizations of “ethnic cultural socialization” (Helms, 2007, p.236). Attitudes towards this pan-Asian conceptualization of identity have oscillated between support and criticism. On one hand, despite differences in language, religion, and history of immigration to the US, Asian ethnic groups have historically shared common experiences of stereotype generalizations, discrimination, violence, and exclusion (Lee & Ramakrishnan, 2020). In the 1960’s, these shared experiences culminated in the mobilization of a pan-ethnic Asian identity (i.e., “Asian American”) primarily based in providing a sense of collective empowerment and belonging in a white-dominant society (i.e., value in “banding together”; Espiritu, 1992; Lee, 2019; Zhou et al., 2016).

More recent support for a pan-Asian identity has included greater acknowledgement of the diverse social, political, economic, and cultural characteristics present within this group of individuals (Lee, 2019). However, some argue the pan-Asian

¹ In the context of this study, “Asian” refers to individuals of Asian ancestry living in the United States, regardless of whether they are citizens or not. Except for when using the same language of an external source, I purposefully avoid using the term ‘Asian Americans’ to avoid any possible conflation with nationality.

conceptualization still disproportionately resonates with middle-class, well-educated, American-born Asian individuals (Espiritu, 1992; Lee & Ramakrishnan, 2020) and it has been criticized for being too monolithic given the diversity in immigration histories, settlement patterns, experiences, and outcomes encountered across Asian ethnic groups (Espiritu, 1992; Zhou et al., 2016).

Recent research also indicates there is a higher centrality of East Asians compared to other regional Asian groupings when using the term “Asian” (Lee & Ramakrishnan, 2020), a notion supported by research related to workplace outcomes of Asian employees (e.g., Gündemir et al., 2019; Lee et al., 2015; Sy et al., 2010). However, findings indicate that many South Asians do still self-identify as Asian despite being externally assigned as such significantly less than East Asians (Lee & Ramakrishnan, 2020). Additionally, Merrell and colleagues (2024) found that perceptions of solidarity of multi-racial Asian-White people with Asian and white parent groups influence relevant intergroup attitudes and thus may be an important factor to consider for intergroup relations. This points to the importance of understanding people's identification with a pan-ethnic label such as “Asian” may be crucial for better understanding intergroup relations as well as individual experiences in the workplace. As a multidimensional construct, individuals may vary in their identification levels across different dimensions, and these differences may help explain variation in how individuals who share an identity may perceive and experience events differently. However, the degree to which Asian identity can be perceived and treated as a collective identity in workplace research is not well known. Collective identities are identities that an individual shares with a particular group of people (i.e., ingroup members) due to shared characteristics that set one group apart from others

(Ashforth et al., 2008; Ashmore et al., 2004). In the case of a collective Asian identity group, the primary characteristic that individuals share is Asian ancestry. Collective identities are conceptualized in terms of one's cognitive evaluations about an identity (i.e., perceptions of identity group), emotional significance of an identity group (i.e., attachment to the identity group), and one's behavioral involvement (i.e., choices that implicate the identity group) with an identity group (Ashmore et al., 2004).

The purpose of this study is to assess the degree to which Asian identity can be captured as a collective identity. In lieu of adapting already existing measures that are somewhat limited in scope (e.g., East Asian Ethnic Identity Scale (EAEIS), Barry, 2002) and breadth (e.g., Multigroup Ethnic Identity Measure (MEIM), Phinney, 1992), this study uses Ashmore and colleagues' (2004) framework of collective identity as a baseline for developing the Asian Identity Measure (AIM) with the purpose of capturing Asian collective identity as holistically as possible (i.e., capture multiple cognitive, affective, and behavioral dimensions). In doing so, this study makes two primary contributions.

First, to the researcher's knowledge, this is the first study to quantify Asian identity as a collective identity. The need for a measurement of Asian identity is particularly relevant given the exponential growth in the number of Asian employees in the US in the past few decades. Although there have been improvements in research studies clarifying how "Asian" is operationalized (e.g., Gündemir et al., 2019; Wong & McCullough, 2021), these operationalizations still vary in clarity and content across research studies (e.g., Gündemir et al., 2019; Lee et al., 2015; Sy et al., 2010; Wong & McCullough, 2021). As the Asian population continues to grow and increase in diversity, so too will the proportion and breadth of research on Asian experiences in the workplace.

Having a consistent measure that can be used to assess multiple dimensions of Asian identity would be useful for making comparisons across studies as well as evaluating potential temporal changes in the boundaries of Asian identity as social circumstances change over time (Espiritu, 1992).

Second, this study offers a first step for identifying the boundaries and limitations (in terms of dimensions and sub-dimensions) for conceptualizing Asian identity as a pan-ethnic identity. Ashmore and colleagues' (2004) framework provides a comprehensive list of 16 subelements (referred to as *sub-dimensions*) organized into seven elements (referred to as *dimensions*) of collective identity. An important precursor for understanding identity-related workplace experiences of Asian employees is understanding Asian identity itself (Alvesson et al., 2008). Using this framework as a baseline provides an opportunity to be extremely thorough in terms of the dimensions and sub-dimensions considered for identifying the boundary conditions of conceptualizing Asian identity as a collective identity. The ability to distinguish the dimensions and/or sub-dimensions of Asian identity can better inform future research on Asian individuals in the workplace by providing more information on how variation in various aspects of identification may contribute to perceptions of and reactions to identity-related experiences such as microaggressions, justice and mistreatment, racism-related stress, codeswitching behaviors, or perceptions of fit and attraction. Before delving into the literature and history on pan-Asian identity, I provide a brief clarification on terminology that will be used as well as the boundary conditions of this study.

Relevant Terms

Social vs Collective Identity

In many ways, *collective identity*—defined as an identity that is, “shared with a group or others who have (or are believed to have) some characteristic(s) in common,” (Ashmore et al., 2004; p.81)—is very similar to the construct of *social identity*, which is understood as an individuals’ self-concept that comes from self-defining into a social group as well as the emotional significance and value of that group (Tajfel, 1982). However, given that most identities acquire significance based on social relations with people, most identities are in fact social identities by nature (Simon, 1997, as cited in Ashmore et al., 2004). Thus, collective identity is viewed as a type of social identity that can be distinguished from other social identities, such as relational identities and personal identities (for further explanation, see Ashmore et al., 2004, p.82). In line with social identity theory’s (SIT, Tajfel, 1974; Tajfel et al., 1979; Tajfel, 1982) conceptualization of social identity, key aspects of collective identity include that they are self-claimed by an individual (as opposed to imposed on an individual). However, unlike SIT’s social identity conceptualization, claiming a collective identity does not rely on direct interchange with other individuals, such as making ingroup and outgroup comparisons (i.e., Ashmore et al., 2004). Additionally, the shared characteristics that make up a collective identity group can be ascribed (e.g., ethnicity) or achieved (e.g., political party; Ashmore et al., 2004). In this study, Asian identity is evaluated as a collective identity. However, references to social identity literature (e.g., complexity and multidimensional) are made given the overlap with relevant aspects of the theory’s conceptualization of social identity.

Asian vs Asian American vs Pan-Asian

It is important to mention that this scale development is specific to individuals living in the US. In developing scale items for the AIM, the term “Asian American” was purposefully avoided to prevent possible conflation with nationality or citizenship. For the sake of consistency, the term “Asian” (e.g., Asian population) is used throughout the present manuscript to refer to individuals of Asian ancestry living in the US, regardless of their citizenship or immigration status, unless explicitly noted otherwise. The term “Asian identity” is a label that refers to the degree of identification an individual has with this collective, pan-ethnic group.

The US as a geographical boundary was selected primarily because of the general salience of Asian identity that exists in the US. This is in part due to the history of Asian immigration to the US, which has played a large role in the growth and diversity of the Asian population as well as the development, support, and criticism of a pan-ethnic Asian identity (Espiritu, 1992; Zhou, 2016). This also contributes to a more practical necessity of adequate data collection by providing a baseline level of consistency in the potential experiences of Asian individuals and their relationship with their Asian identity.

Complexity and Multidimensionality of Identity

Identity is considered complex in the sense that identity can range from personal identity characteristics—those unique to a person and set them apart from other individuals—to collective identity characteristics—those shared with a particular group of people and distinguish the group from other groups (Ashforth et al., 2008; Cheek & Cheek, 2018). Collective identity is complex in that individuals can hold multiple group memberships, and these identities can interact to uniquely influence their experiences and

perceptions of the world (i.e., intersectionality, Crenshaw, 1989; Roccas & Brewer, 2002). The multidimensional nature of collective identity also contributes to a layer of complexity. That is, collective identities can be characterized by not only the awareness of being a member of a group, but also how an individual evaluates or perceives that group membership and the emotional attachment associated with group membership. (Ashforth et al., 2008; Sellers et al., 1997; Sellers et al., 1998). Some conceptualizations of identity also include the behavioral components associated with group membership, such as one's social relationships and the choices an individual makes that directly implicate one's group membership (Ashmore et al., 2004; Phinney, 1992).

Framework of Collective Identity

Ashmore and colleagues (2004) outline a framework for collective identity that delineates seven dimensions, or *elements*, of collective identity. These dimensions are made up of a varying number of sub-dimensions (i.e., *subelements*) and are primarily based on SIT (Tajfel, 1974; Tajfel et al., 1979; Tajfel, 1982) and IT (Stryker & Serpe, 1982; Stryker & Burke, 2000). As a framework, it incorporates not only the aspect of self-categorization but also the cognitive, affective, and behavioral components of collective identity. The dimensions and sub-dimensions are briefly described below and in Table 1.

Self-categorization. Self-categorization encompasses the extent to which an individual categorizes themselves into a particular identity group (*self-definition*), the degree to which an individual sees themselves as a typical member of that group (*prototypicality*), and the degree of certainty with which an individual places themselves in that identity group (*perceived certainty*). Self-categorization is the underlying mechanism

outlined in SIT in that when an identity is activated, this identity is either claimed or it is not (Ashmore et al., 2004; Tajfel, 1974). In SIT, the decision to claim or not claim an identity is based on the prototypical conception of the identity, and whether or not this prototypical version of the identity holds a positive value in society and would thus contribute positively to one's overall sense of self (Hogg et al., 1995; Tajfel, 1974).

Evaluation. Evaluation is a cognitive dimension that addresses the positive or negative perception an individual has of their own identity (*private regard*) as well as the positive or negative perceptions an individual thinks other people external to the group (e.g., general public) hold of their identity group (*public regard*). In both SIT and IT, social identities and identity roles are socially constructed categories and thus come with a certain level of value and prestige as designated by society (Hogg et al., 1995). In this way, how an individual views their own identity group (i.e., private regard) is largely dependent on how they think the identity group is valued in greater society (i.e., public regard). The valence with which an individual views their identity group is a determining factor in whether or not an identity is claimed (Tajfel et al., 1979).

Importance. Importance encompasses the personal value (or importance level) that an identity group holds for an individual's overall sense of self (*explicit importance*) and also considers where an identity ranks in terms of importance relative to other identities an individual might hold (*implicit importance*). This follows the view that identities are organized into a hierarchy such that identities that are more likely to contribute to an individual's actions (or more likely to be activated by contexts; Stets & Burke, 2000) are towards the top and thus are more self-defining than others lower in the

hierarchy (Hogg et al., 1995). In this sense, considering an identity's importance for an individual has direct implications for their behavioral tendencies.

Content and Meaning. The final cognitive dimension considered in the framework, content and meaning, will not be included in the scale development but is briefly described here. Broadly speaking, content and meaning taps into the individuals' beliefs and opinions about what it means to be a part of an identity group. More specifically, it includes the degree to which an individual self-ascribes to traits that are typically associated with the identity group (*self-attributed characteristics*), an individual's beliefs about how members of the identity group should act and interact in society (*ideology*), and the internally represented story (*narrative*) of both the individual's relationship with the identity group over time (i.e., individual identity narrative) as well as a narrative of the identity group's story over time (i.e., group story narrative). While certainly a relevant aspect of a collective identity, this range of content as it relates to Asian identity is extremely difficult to capture through a quantitative scale. For one, there is a wide variety of Asian stereotypes that exist in the US (e.g., model minority, perpetual foreigner; Murjani, 2014; Ng et al., 2007) that could be considered for "self-attributed characteristics." There is also a wide variety of beliefs (and realities) about Asian experiences in the US and opinions about how Asian individuals should act in society. Furthermore, the narrative sub-dimension would likely be more appropriately captured using qualitative methods that fall outside the scope of this study aim, which is to develop a quantitative scale of collective Asian identity. Ensuring that the full breadth of content in these areas are accounted for in a survey would require an extensive

literature review befitting of a separate study utilizing different methods. Thus, the content and meaning dimension is not included in the present scale development study.

Attachment. Attachment is the affective dimension of the framework and encompasses the degree to which an individual perceives commonalities in the ways they and other group members are treated and have shared outcomes (or fates) in society (*mutual fate*), the level of affiliative orientation or emotional involvement an individual feels towards a group (*affective commitment*), and the degree to which an individual's sense of self is interconnected (or merged) with the identity group (*interconnection of self and others*). Attachment is a primary aspect of SIT in that a social identity is understood as an individuals' self-concept that comes from self-defining into a categorical group as well as the emotional significance of that group (Tajfel, 1982). Similar to the level of importance that one's Asian identity might hold, the level of emotional attachment an individual has to their Asian identity can influence how an individual perceives negative identity-related experiences (e.g., discrimination) and the degree to which these experiences ultimately affect the individual.

Social Embeddedness. Social embeddedness is one of two behavioral components outlined in the framework and encompasses the degree to which an individual's ongoing social relationships directly implicate an identity group. Social embeddedness is paramount to IT's concept of commitment, or the degree to which an individual's relationship to particular others are dependent on an individual taking on a specific role (Stryker & Serpe, 1982). In other words, both the quantity of identity-related social ties and the strength of those ties are behavioral indicators of identification.

Behavioral Involvement. The other behavioral dimension in this framework, behavioral involvement, considers the degree to which an individual makes choices and decisions that directly implicate the identity group in question. Behavior involvement is a primary indicator of an identity according to IT and is directly related to social embeddedness (Stets & Burke, 2000). In this sense, individuals who have more connections with other Asian people are more likely to make choices that directly implicate their Asian identity.

History of Attitudes Towards Asian Identity as a Collective Identity

The current study focuses on Asian identity as a shared, collective identity and the aspects shared across individuals who identify as Asian. The Asian Identity Measure (AIM) developed in the present study will consider not only individuals' self-identification as being Asian, but a set of cognitive beliefs associated with identifying as Asian, the level of emotional significance and attachment their Asian identity holds, and the behavioral involvement associated with identifying as Asian. To understand this pan-ethnic approach to Asian identity, it is important to consider how it first developed.

Asian Identity in the US

The opportunity to form a pan-ethnic Asian identity in the US was in part borne out of the immigration restrictions prior to World War II (e.g., Chinese Exclusion Act of 1882, Immigration Act of 1917, Immigration Act of 1924). Before the 1940's, most Asian immigrants were foreign-born and thus maintained not only their ethnic group languages but also their home-nation rivalries (Espiritu, 1992). In the years following WWII, the proportion of second and third generation immigrants continued to grow, leading to a drastically different demographic make-up of the Asian immigrant

population in the US (Espiritu, 1992; Fong, 2008). Along with a shared birthplace of the US, newer generations also shared English as a common language and were much less tied to the national rivalries of the older generations (Espiritu, 1992). This led to a greater sense of intergroup similarity and recognition of the common experiences faced by these early Asian immigrant groups (primarily Chinese, Japanese, Filipino, Indian, and Korean; Espiritu, 1992; Zhou, 2016). In the 1960's, the term "Asian American" was first coined by university students as a means of unifying early Asian immigrant groups and protesting against the discrimination, oppression, and violence experienced by all of these groups (Zhou, 2016). In this sense, pan-Asian identity was more the product of political and social necessity for expanding the boundaries of ethnic affiliation in order to mobilize efforts rather than intergroup cultural bonds (Espiritu, 1992).

The movement towards a pan-Asian identity became more complex with the Immigration Act of 1965 and post-Vietnam War first-asylum refugee policies (Espiritu, 1992; Desbarats, 1985). The Immigration Act of 1965 radically reduced the restrictions on Asian immigration—particularly for professional and skilled workers. In the wake of the Vietnam War, hundreds of thousands of displaced people from Vietnam, Laos, and Cambodia came to the US seeking refuge (Desbarats, 1985; Fong, 2008). This subsequently led to not only a drastic increase in the Asian population, but a drastic change in the demography of this population in the coming decades in terms of national origin, the ratio of foreign-born to US-born, socioeconomic backgrounds, and settlement patterns (Desbarats, 1985; Fong, 2008; Wong, 1986; Zhou et al., 2016). As such, this heterogeneity in the Asian population has contributed to a wide range of experiences and outcomes encountered across Asian ethnic and regional groups (Espiritu, 1992; Zhou,

2016). For example, the percent of Asian American workers with advanced degrees is markedly lower for Southeast Asians compared to South and East Asians (McKinsey, 2022). Additionally, in a comparison of 16 Asian ethnic groups in terms of income, the same study by McKinsey (2022) found that a majority of ethnic groups (primarily Southeast and South Asian) fell below the median income for Asians overall, for both men and women. Indeed, the pan-Asian identity has been criticized for catering too strongly towards educated, American-born, middle-class Asians (Espiritu, 1992) and recent research indicates that East Asians are more central to the concept of “Asian” (Lee & Ramakrishnan, 2020; Gündemir et al., 2019; Lee et al., 2015; Sy et al., 2010).

This presents a discrepancy for South Asians in particular, as many still categorize themselves as Asian (Lee & Ramakrishnan, 2020). Furthermore, research indicates that perceptions of solidarity of multi-racial Asian-White people with Asian and white parent groups can influence intergroup attitudes, suggesting that better understanding individual identification with a pan-ethnic label such as “Asian” may be important not only for better understanding individual experiences but intergroup relations as well (Merrell et al., 2024). Having a limited understanding of the boundaries and limitations to where Asian identity can be perceived and treated as a shared, collective identity is a dilemma, particularly in workplace research, as Asians made up approximately 7% of the workforce in 2022 (US Bureau of Labor Statistics, 2023) and are the fastest growing racial/ethnic group in the US (Rico et al., 2023) with one of the highest proportions of employment at 62.7% (US Bureau of Labor Statistics, 2023). This study develops a quantitative measure of Asian identity (Asian Identity Measure, or AIM) as a means of assessing Asian identity as a collective identity.

Table 1

Elements and Subelements of Ashmore and Colleagues' (2004) Framework of Collective Identity

Element	Subelement	Definition
Self-categorization	Self-definition	The extent to which an individual categorizes themselves into a particular group (i.e., Asian).
	Prototypicality	The degree to which individuals see themselves as a prototypical member of the identity group (i.e., Asian).
	Perceived Certainty	The level of certainty an individual has in placing themselves into an identity group (i.e., Asian).
Evaluation	Private Regard	The positive or negative perception an individual has of their own (Asian) identity group membership.
	Public Regard	The extent to which individuals think others (e.g., general public) perceive their identity group positively or negatively.
Importance	Explicit Importance	The personal value (or importance level) of an identity group (i.e., Asian) for the individual's overall sense of self.
	Implicit Importance	The placement of a particular group membership in the person's hierarchically organized self-system; the individual is not necessarily consciously aware of the hierarchical organization.
Content & Meaning	Self-attributed Characteristics	The extent to which traits and dispositions that are associated with a social category are endorsed as self-descriptive by a member of that category.
	Ideology	The beliefs about a group's experience, history, and position in society and the expectations of members' attitudes and actions.
	Narrative: Individual Identity Story	The individual's internally represented story (narrative) of self as a member of a particular social category.
	Narrative: Group Identity Story	The individual's internally represented story (narrative) of a particular social category of which they are a member.

Attachment	Mutual Fate	The perceived commonalities in the ways an individual and other identity group members are treated and have shared outcomes or fates in society.
	Affective Commitment	The emotional involvement an individual has with their (Asian) identity group.
	Interconnection of Self and Others	The degree to which an individual's sense of self is interconnected—or merged—with the identity group (i.e., Asian).
Social Embeddedness	—	The degree to which a person's everyday ongoing social relationships involve the individual's identity group (i.e., Asian).
Behavioral Involvement	—	The degree to which a person engages in actions and makes choices that directly implicate the individual's identity group (i.e., Asian).

Note. Table was adapted from Ashmore et al. (2004)'s Table 1.

CHAPTER 2

METHODS AND RESULTS

Hinkin (1998) breaks scale development into six phases: Item generation, questionnaire administration (i.e., content validation), initial item reduction (i.e., exploratory factor analysis; EFA), confirmatory factor analysis (CFA), convergent and discriminant validity testing, and replication. This study focuses on the first four phases of developing the AIM. Figure 1 summarizes these phases and Table 1A of Appendix A shows a full list of items across each stage.

Phase 1: Item Generation and Pilot Testing

Items were developed using a deductive approach (Hinkin, 1995) based on Ashmore and colleagues' (2004) framework of collective identity as well as item adaptation from existing racial identity scales as appropriate (e.g., MIBI; Sellers et al., 1997). All dimensions and sub-dimensions were included in the initial pool of items, with the exception of the 'content and meaning' dimension (see above subsection on content and meaning). The initial item list of items ($k=90$ items) was drafted and then reviewed by a group of subject matter experts. Edits were made to ensure all items could use the same response scale (strongly disagree to strongly agree) and duplicate items were removed. The final item list for pilot testing contained 73 items with an average of 6.1 items ($SD=1.93$) per sub-dimension. Pilot testing participants provided feedback on the clarity of the items (e.g., degree of assumptions being made in the item, degree to which

the item was easy to understand) as well as the degree to which the item could be construed as offensive or threatening to participants.

Participants and Procedures

Items were reviewed by 20 academic and industry professionals with expertise in organizational behavior sciences working in a variety of occupations and who identified as Asian. Participants ranged from 23-44 years of age, with an average age of 30.8 ($SD=5.8$). Eighty (80) percent of the participants identified as women, 20% identified as men. A majority of the participants identified as US-born citizens (65%). Foreign-born visa holders made up about 20% and the remaining 15% identified as foreign-born (i.e., first generation) US citizens. In terms of specific Asian ethnic group identity (either alone or in combination), a large majority (60%) identified as Chinese, followed by Vietnamese (25%), Taiwanese (15%), Indian (5%), Japanese (5%), Korean (5%), Cantonese (5%). Demographics for all participants across phases can be seen in Table 2.

Participants were recruited using a snowball sampling method and contacted using an email listserv of a professional group that was known to have a high number of individuals who would meet the criteria for inclusion. Participants were first asked to take a short pre-screen survey to determine if they were over 18 years of age, whether they identified as Asian, and whether they had lived in the US for over a year. Eligible participants were then redirected to the pilot test survey in which they were randomly assigned to ten Asian identity items. The equal distribution of randomly assigned survey items is a form of planned missingness (i.e., random percentage design) and was utilized to help with survey fatigue (Zhang & Yu, 2022). Survey fatigue was important to consider here because for each item, participants responded to six questions using a 5-

point likert scale (strongly disagree to strongly agree), resulting in a total of 60 items. Additionally, depending on how participants responded, they were prompted to give additional explanation for their ratings.

For each Asian identity item, participants responded to the following: (1) I could easily understand the item. (e.g., I only had to read the item once and the meaning of the item was clear); (2) The scale provided was adequate (e.g., the scale provided me with an appropriate way to respond); (3) The item was written in such a way that I could have answered it more than one way (e.g., I could have said BOTH Strongly agree and Strongly disagree); (4) The item was written with at least one unverified assumption. (e.g., the statement, "Indicate why you think the programs need improvement" assumes that the programs need to be improved); (5) This item might be perceived as threatening, offensive, or harmful to a research participant; (6) The item is relevant to most people who identify as Asian.

Participants were also given an opportunity to “add additional comments or concerns regarding the above item” with an open response format. Upon completing the survey, participants were given the option to complete a follow-up interview regarding their responses to the survey items. The purpose of the follow-up interview was to get higher quality feedback and more in-depth explanation than what was written in the open response sections of the pilot test survey. As incentive for participation, all participants (regardless of whether they opted into the follow-up interview) were given the option to enter a raffle drawing for a \$50 e-gift card. Details of the interview procedure can be seen in Appendix B.

Pilot Testing Results

To assess the results of the pilot test survey, qualitative comments for each item were compiled and evaluated. Mean and standard deviation of scores of the items were also considered, along with the *n*-size at the item- and sub-dimension-level. Based on the responses a number of themes were identified as possible areas for item improvement. These themes and edits are below. A full list of items across each stage can be found in Table 1A of Appendix A.

Response Scale. Although previous research has found that 5-item likert scales are sufficient for capturing adequate reliability (Hinkin, 1998; Simms et al., 2019), the 5-point likert response scale was expanded to a 7-point likert response scale to increase the sensitivity for capturing the high level of nuance present in the concept of Asian identity and accommodate the bipolar nature of the response options (i.e., captures both agreement and disagreement; Boateng et al., 2018).

Addition of Contextual Phrases. Context was added to items to cue the participant to think of generalizations (e.g., including “general” or “overall” at the beginning of an item) about their Asian identity. Additionally, societal context was added to some items to cue participants to think of their experiences in the US. As an added measure, the following statement was added to the beginning of the survey:

The following pages contain statements referring to your feelings, perceptions, and/or behaviors that relate to your Asian identity*. You will be asked the extent to which you agree or disagree with each statement. These statements are specific to the context of living in the United States. Please refer to your experiences as an Asian person living in the United States when responding to all items.

*Note: These statements view Asian identity as a collective group identity (i.e., a pan-Asian identity).

Expansion of Items. The item, “My other identities (e.g., ethnicity, gender, occupation, sexuality, etc.) are more important to me than my Asian identity” was expanded into multiple items to help mitigate participant confusion regarding whether to consider their specific Asian ethnic group identity or the broader, pan-Asian identity when responding to items. Prototypicality items were also expanded to mitigate the potential for overgeneralizations to be offensive, hurtful, or unclear to participants (e.g., “I consider myself to be typical of most Asians,” became two different items: “My values would be considered typical of most Asians” and “My personality would be considered typical of most Asians”).

Removal of Items. Items were removed if they were (1) a duplicate of an already existing item after editing (e.g., “My Asian identity is a central part of my self-concept” → “My Asian identity is a central part of how I see myself” and the item “My Asian identity is important to how I see myself” was dropped), or (2) if there was a lack of generalizability that was irreconcilable with structural edits to item (e.g., “During elections, I think about the candidate’s record on racial and cultural issues that affect Asian people”). The final list of items for content validation contained 75 items with a mean of 6.3 items per sub-dimension ($SD=1.5$).

Phase 2a: Content Validation (Q-Sort)

For content validation, the present study utilized Anderson & Gerbing’s (1991) Q-sort task method which involves having participants match a list of items to a list of constructs based on the provided construct definitions. The constructs presented should be orbiting constructs, which helps assess the degree to which survey items are capturing a particular construct that is distinct from other, similar constructs (Colquitt et al., 2019).

The dimensions of collective identity (self-categorization, importance, evaluation, attachment, behavioral involvement, and social embeddedness) are definitionally distinct and thus were treated as orbiting constructs to each other (Colquitt et al., 2019). Namely, participants were presented with the name and definition of each dimension and asked to place items into the best-fitting concept. Each dimension definition represented a combined definition of their respective sub-dimensions (see Table 1). For example, self-categorization was defined as, “The degree to which an individual categorizes themselves into a particular group (i.e., Asian), the level of certainty they have in placing themselves into that group, and the degree to which they see themselves as a prototypical member of the group.”

Participants and Procedures

Participants ($n=20$) ranged from 18 to 34 years, with an average of 24.2 ($SD=3.8$). Thirty (30) percent of participants had completed a master’s degree, 25% had completed a bachelor’s degree, 5% had an associate degree and the remaining participants (40%) had completed some college. Over half (60%) of the participants identified as women², followed by 20% identifying as men¹, 5% identifying as non-binary, and 3% identifying as cisgender without specifying any other gender category. No participants identified as transgender. See Table 2 for all demographics.

For race and ethnicity, all groups are presented as the percent of individuals who identified as a particular category either alone or in combination with another category. In terms of race, 55% identified as East Asian, 30% identified as Southeast Asian, 20%

² For identifying gender, participants were given the options of woman, man, non-binary, cisgender, transgender, as well as the option to prefer to self-describe and prefer not to say and asked to “select all that apply.” The percentages of men and women shown here reflect participants who selected “woman” or “man,” either in combination with cisgender or alone.

identified as South Asian, and 5% identified as white or European descent. In terms of Asian ethnic group identity, 30% identified as Chinese, 20% as Indian, 15% as Korean, 15% as Vietnamese, 10% as Indonesian, 10% as Japanese, 10% as Taiwanese, 5% as Cantonese, 5% as Filipino, 5% as Hmong, 5% as Malaysian, 5% as Nepali, 5% as Pakistani, 5% as Singaporean, and 5% as Thai.

Most participants (65%) identified as US-born citizens with either neither or one parent being born in the US. The remaining 35% identified as either foreign-born US citizens ($n=1$) and visa holders ($n=6$) from China, Indonesia, Vietnam, or India. A large majority of participants (70%) had lived in the US for 10 or more years, 15% had lived in the US for 6-7 years, and 15% had lived in the US for 1-3 years. Over half of the participants identified Georgia as their state of residence, followed by 15% in Oregon, 10% in Wisconsin, and 5% (each) from California, Florida, North Carolina, and Washington.

Snowball sampling method was used to contact participants through pre-established university listservs identified by the researcher. Similar to the pilot testing survey, participants were first asked to take a short pre-screen survey to determine if they were over 18 years of age, whether they identified as Asian, whether they were a current undergraduate or graduate student, and whether they had lived in the US for over a year. Eligible participants were then redirected to the study survey where they received instructions for the content validation task and completed a round of practice that involved having participants correctly place four items into one of three available construct boxes (see Colquitt et al., 2019, Appendix A). Feedback was provided for each practice item. Once practice was completed, participants were randomly assigned 35

items (and one attention check item of, “This item should be placed in the behavioral involvement box.”) to match into six boxes labeled by the dimensions. Random percentage design of planned missingness was utilized once again to mitigate survey fatigue (Zhang & Yu, 2022).

Content Validation (Q-Sort) Results

Responses per item ranged from three to 13, with a mean number of responses per item of 9.1 ($SD=2.3$). To assess content validity, the proportion of substantive agreement (p_{sa}) and the substantive-validity coefficient (c_{sv}) were calculated, where the p_{sa} reflects the proportion of participants who correctly allocated the item to its intended construct and the c_{sv} reflects how much reflects how much participants assigned an item to its intended construct compared to other constructs (Colquitt et al., 2019). Colquitt et al.’s (2019) cutoff values from the “Stronger Average Correlation between Focal Scale and Orbiting Scales” were used as evaluation criteria (see Colquitt et al., 2019, Table 5).

In line with previous work (Clark et al., 2020; Matusik et al., 2023), all items ($n=27$) classifying as “Strong” and “Very Strong” were retained, unchanged. An additional 17 items were classified as moderate in both their p_{sa} ($p_{sa}=.60-.74$) and c_{sv} score ($c_{sv}=.21-.49$). These items were examined more closely to determine if minimal edits could be made to further improve the item. The mean number of responses per moderate item was 10.8 ($SD=1.1$). For each moderate item, the distribution of item placement into incorrect constructs was examined to assist with item-editing. Item breakdown and edits made for moderate items can be seen in Table C1 of Appendix C.

Forty-four (44) items were retained following content validation, with a mean number of items-per-dimension of 7.3 ($SD=3.6$). Importantly, all seven mutual fate items

scored as weak or lacking evidence of content validity, and only one and two items scored as moderate or higher for the private regard and interconnection sub-dimensions, respectively. To ensure an adequate number of items were included for each sub-dimension for the factor analysis phases, items for these three sub-dimensions were amended using the pilot test and content validation feedback and results. A second round of content validation was completed on this amended list of items ($k=79$) using feedback from subject matter experts (SMEs).

Phase 2b: Content Validation with Subject Matter Experts

Five SMEs were selected based on their expertise in scale development processes (i.e., all five SMEs had a PhD in I-O psychology or related field), diversity and identity, and/or their lived experiences as individuals who identify as Asian. One SME provided preliminary feedback on wording and redundancy of items. Additionally, the implicit importance sub-dimension was altered to better account for the fact that individuals may not necessarily be aware of their internal hierarchy of identities. This would potentially render direct measurement such as the present scale as an inadequate way for capturing this sub-dimension (see discussion section for further explanation). Alternatively, explicit importance was broken down into two sub-categories: *absolute* explicit importance (i.e., explicit importance as it is defined in the original framework) and *comparative* explicit importance (i.e., the relative personal value or importance level that an identity group holds for an individual in comparison to other identities an individual consciously holds). The final list of items for the SME content validation survey contained 84 items across 12 sub-dimensions (self-definition, prototypicality, perceived certainty, private regard, public regard, absolute explicit importance, comparative explicit importance, mutual fate,

affective commitment, interconnection, social embeddedness, and behavioral involvement) with a mean number of items per sub-dimension of 7.0 ($SD=1.3$).

In this survey, SMEs rated the following: The degree to which the scope and focus of each item adequately captured the intended sub-dimension, the degree to which each item was important for capturing the intended sub-dimension, the extent to which the sub-dimension was captured by the group of items as a whole, and the extent to which each sub-dimension captured a single, unique aspect of collective Asian identity. Participants were also asked to rate how the collection of items adequately captured Asian identity as a collective identity construct. Definitions of each sub-dimension were provided to the SMEs, and all ratings used a 5-point likert scale from strongly disagree (1) to strongly agree (5). In addition to providing quantitative ratings at the item- and sub-dimension-level, SMEs were also given the opportunity to provide open-ended feedback.

Content Validation (SME) Results

Item-level Analysis. Table D1 in Appendix D summarizes the SME's item-level evaluations for all items in terms of the degree to which the scope and focus of each item adequately captured the intended sub-dimension and the degree to which each item was important for capturing the intended sub-dimension. Given that the primary issues from the first content validation survey were with private regard, mutual fate, and interconnection, the results discussed here focus on these three sub-dimensions.

In terms of (a) the scope and focus of the item being relevant to their respective sub-dimension, the mean score rating for private regard was $M = 3.7$ ($SD = .3$), was $M = 4.1$ ($SD = .1$) for mutual fate, and was $M = 3.8$ ($SD = .5$) for interconnection. Each private regard, mutual fate, and interconnection item was assessed to evaluate whether they fell

below their respective sub-dimension means by at least one (respective) standard deviation. Items that were below by at least one full standard deviation included private regard items four ($M = 3.4$, $SD = 1.8$) and six ($M = 3.4$, $SD = 1.8$), mutual fate items one ($M = 4.0$, $SD = 1.0$) and two ($M = 4.0$, $SD = 1.2$), and interconnection item four ($M = 3.0$, $SD = 1.6$). In terms of (b) whether each item was important for capturing their respective sub-dimensions, the mean score rating for private regard was $M = 3.5$ ($SD = .3$), was $M = 4.0$ ($SD = .2$) for mutual fate, and was $M = 3.7$ ($SD = .6$) for interconnection. Items that were below their respective sub-dimension mean scores by at least one full standard deviation included private regard item four ($M = 3.0$, $SD = 1.8$), mutual fate items one ($M = 3.8$, $SD = .8$) and two ($M = 3.8$, $SD = 1.1$), and interconnection item four ($M = 3.0$, $SD = 1.8$). Table 3 summarizes these findings as well as key decisions made based on feedback.

The definition of mutual fate provided to the participants was, “the perceived commonalities in the ways an individual and other identity group members are treated and have shared outcomes or fates in society.” Given the relevance to the definition as well as the relatively higher mean scores (and lower standard deviations) for these items, no changes were made to mutual fate items. Additionally, one participant drew attention to the reverse-worded items in terms of whether they behave the same as positively worded items. Regarding private regard items, items four and six are the only negatively worded items and also the lowest scoring items in terms of having a relevant scope and focus and being important for capturing private regard. In the case of item six, this item was replaced with a different negative statement that was clearer in terms of how to code the response (i.e., “Overall, I have negative associations with being Asian”). To help

capture the potential nuance of “mixed feelings,” item four was retained as a way of accounting for the possibility of having both negative and positive feelings about an identity (i.e., counter to item five). The phrase “in general” was also added to the beginning to help generalize the item. For interconnection item four, no additional comments were left that were applicable to this item. Thus, interconnection item four was retained with no changes implemented.

Sub-dimension-level Analysis. Table 4 summarizes the SME’s evaluations for the degree to which each sub-dimension is adequately captured by the respective group of items and the degree to which each sub-dimension is a unique aspect of collective identity. Table 4 also summarizes key decisions that were made on sub-dimension items outside of private regard, mutual fate, and interconnection based on the overall comments made by the SMEs.

Finally, the extent to which the entire list of items adequately captured the construct of Asian identity as a collective identity was $M=4.5$ ($SD=.6$). The final list of items for the exploratory factor analysis (EFA) survey consisted of 89 items, with a mean of 7.4 ($SD=2.1$) items per sub-dimension (see Table A1 of Appendix A for full item list).

Phase 3: Exploratory Factor Analyses

Participants and Procedures

All participants were randomly assigned to complete 35 items as well as a demographics survey and one attention check item. A total of 525 participant responses were collected. Of these, 14 participants were eliminated for completing the survey in less than five minutes and failing the attention check item³ and one participant was

³ In surveys that are expected to take longer than five minutes, Prolific requires two failed attention checks in order for participants to be rejected. If surveys are expected to take five or less minutes, only one failed

removed for being a duplicate. This resulted in 509 participants who provided an average of 200.9 responses ($SD=4.3$) per item. Participants ranged from 18 to 66 years of age with a mean of 32.8 years ($SD=9.6$).

Regarding gender, 44.6% of participants identified as women and 50.5% identified as men⁴, and 1.6% identified as non-binary, either alone or in combination with another gender identity. A majority (65.4%, $n=333$) of participants had either completed a bachelor's degree ($n=257$) or some college ($n=76$) for their highest level of education, followed by completed a master's degree (13.4%), completed an associate degree (5.5%) and a high school diploma or equivalent (5.5%). Participants who had completed a doctorate degree, professional degree, completed some graduate school, or had completed trade/technical/vocational training degree, certificate or equivalent made up less than 4%, respectively. In terms of regions of residence⁵, participants were primarily from the Northeast (26.3%), closely followed by the West (23.7%), Midwest (21.1%), Southeast (21.1%), and lastly the Southwest (7.9%). The sample was fairly diverse in terms of industry, with 13.9% working in professional, scientific, and technical services, 12.2% working in health care and social assistance, 10.4% working in information, 8.45% in finance and insurance, 5.5% in arts, entertainment, and recreation, 5.5% in educational

attention check is required. This survey was expected to take approximately 12 minutes and contained only one attention check item (i.e., *What color is the sky? Select yellow below.*), thus, participants who failed the attention check item and took less than five minutes to respond were not included in the final data analysis.

⁴ For identifying gender, participants were given the options of woman, man, non-binary, cisgender, transgender, as well as the option to prefer to self-describe and prefer not to say and asked to "select all that apply." A majority of women (82.4%) did not specify anything other than woman, 17.2% specified cisgender woman, and less than one percent specified transgender woman. A majority of men (84.8%) did not specify anything other than man, 14.4% specified cisgender man, and less than one percent specified transgender, non-binary man and transgender man.

⁵ Northeast = CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT; Southeast = AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, WV; Southwest = AZ, NM, OK, TX; Midwest = IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West = AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY.

services, and less than five percent working in each of the following industries: government, manufacturing, administration and support services, accommodation and food services, other services except public administration, real estate, transportation and warehousing, wholesale trade, construction, management of companies and enterprises, utilities, and agriculture/forestry/fishing/hunting. The remaining participants ($n=97$ or 19.1%) either selected 'other' or did not select an industry. Participants had worked in the US for an average of 11 years ($SD=9.1$) and ranged from less than a year to 50 years of US work experience.

In terms of race and ethnicity⁶, 51.3% identified as East Asian, 32.4% as Southeast Asian, 19.5% as South Asian, 2.6% White or European descent, 1.6% Native Hawaiian or Pacific Islander, and less than one percent identified as either Hispanic or Latinx, Black or African descent, Asian American, and North Asian⁷. Approximately 8.1% ($n=41$) of participants identified as more than one race. Of these mixed race participants, 53.7% ($n = 22$) participants identified as Asian mixed with Native Hawaiian or Pacific Islander, Black or African descent, Hispanic or Latinx, or White or European descent, 43.9% ($n=18$) participants identified as mixed Asian race (e.g., South Asian and South East Asian), and one participant identified as mixed with two or more Asian races as well as a non-Asian race. In terms of specific Asian ethnicities, 29.9% of participants identified as Chinese, 16.9% as Filipino, 12.8% as Vietnamese, 12% as Indian, 11.2% as Korean, 9.8% as Cantonese, 6.9% as Japanese, 6.5% as Taiwanese, 4.7% as Pakistani, 2% as Cambodian, 1.6% as Bangladeshi, 1.6% as Thai, 1.2% as Hmong, 1.2% as

⁶ Total race and ethnicity percentages are presented as alone or in combination. Thus, percentages may exceed one hundred.

⁷ Asian American and North Asian were self-identified responses by participants.

Indonesian, and less than one percent as Laotian, Nepali, Okinawan, Tibetan, Armenian, Bhutanese, Hong Konger, Malaysian, Singaporean, Sri Lankan, and West Indian⁸, respectively.

In terms of immigration status, 73.5% of participants identified as US-born citizens, followed by foreign-born US citizens (23.4%). Approximately 2% identified as foreign-born residents or visa-holders, and 1.2% preferred not to say. A majority of participants (66.4%) identified as being born in the US and having either zero or one parent born in the US (i.e., second generation immigrant). A large majority of the participants who were not born in the US (i.e., first generation, $n=129$) identified as US citizens (92.3%) while the remaining identified their nationality as one of the following: Bangladesh, China, India, Japan, Pakistan, Philippines, and Thailand. See Table 2 for all demographics.

EFA Results

Preliminary Item Analysis. All analyses were run in R Version 4.3.0. Code for exploratory factor analyses can be seen in Supplemental Materials. Prior to any analyses, all necessary items were reverse scored. Prior to running the EFA, a number of measures were taken to identify items that could be removed. First, a unique variable analysis (UVA) was run to identify redundant items. Three items with a weighted topological overlap (WTO, Novick et al., 2009 as cited in wto R function of EGAnet package, Golino & Christensen, 2024) greater than .25 were removed. Next, a z-score assessment was performed to identify low-information items. Items with a normed (i.e., z-scored) standard deviation of less than two standard deviations below the total item average

⁸ West Indian and Hong Konger were self-identified responses by participants.

standard deviation were further assessed on the range and IQR of responses and their mean response score. Ultimately, three additional items were removed. Given that approximately 60% of the data was missing completely at random (MCAR) from the dataset, correlations were calculated using full information maximum likelihood estimation (FIML). Items were further assessed for pairwise correlations greater than .85, however none were found. Bartlett's test of sphericity on the reduced set of items ($k=83$) suggested a significant correlation in the data ($\chi^2(3403) = 117024.63, p < .001$) and Kaiser, Meyer, Olkin (KMO) measure of sampling adequacy indicated factor analysis was appropriate (KMO = .83; Hair et al., 1998).

Factor Extraction. To estimate the number of factors, a common factor analysis was run using principal axis estimation (Watkins, 2018). Multiple methods of factor extraction were assessed, and consensus was reached based on these results as well as considering relevant literature and the variables being measured (Preacher & MacCallum, 2003). Methods considered included the following: Optimal coordinates, parallel analysis, Kaiser criterion, scree plot, and exploratory graph analysis (EGA), and Very Simple Structure (VSS), and empirical Bayesian Information Criterion (BIC)⁹. Suggested factor extraction included 5-, 7-, 10-, 13- and 22-factor models. Taking into consideration theoretical knowledge of the 83 items, eight factor extraction models (6- through 13-factor models) were assessed using EFA.

EFA. Correlation matrix of the data indicated variable correlations ranging from low to high, suggesting an oblique method would be appropriate (Costello & Osborne, 2005; Lambert & Newman, 2023; Preacher & MacCallum, 2003; Sass & Schmidt, 2010).

⁹ R Packages used were Parameters, Psych, and EGAnet.

Given the complexity of the data structure, the CF-Facparsim rotation method was selected for its ability to appropriately account for factor complexity and estimate an approximate simple structure solution with less interfactor correlation bias (Sass & Schmidt, 2010). Comparisons between these eight models were made based on the factor loadings (item loading cutoff of .40; Stevens, 2002; item-per-factor threshold ≥ 3 , Costello & Osborne, 2005) as well as median and IQR of communality score. Communality indicates the proportion of variance for each item that is explained by the factors, with common magnitudes in the social sciences ranging from .40-.70 (Costello & Osborne, 2005). Factor models with higher median and lower IQRs of communality scores would indicate more items fall at a desired communality score level.

EFA model comparisons can be seen in Table 5. Statistical analysis of results suggested a nine-factor extraction was the best fitting. The nine-factor model accounted for 60.8% of the total variance in the 83 items and had the highest median communality score ($Communality_{Median}=.64$, $Communality_{IQR}=.27$) of all the factors, prior to additional factors failing to meet factor loading or minimum item-per-factor threshold criteria. For example, although the median communality for ten extracted factors was higher, the IQR was also higher ($Communality_{Median}=.68$, $Communality_{IQR}=.30$) and one of the factors contained only two items that loaded above .40. Median and IQR communality scores for items $\geq .40$ are also included in Table 5.

Further qualitative analysis of the item was completed for the eight- ($k=66$), nine- ($k=64$), and ten-factor ($k=59$) models to determine if the extracted factors for these models made theoretical sense. The themes determined for each factor as well as the individual items and their factor loadings can be seen in Tables F1 and F2 of Appendix E.

Further qualitative analysis of the nine-factor solution suggested one mixed theme that captured aspects of importance (e.g., “When considering all my identities, my Asian identity stands out as the most significant to my sense of self”) as well as a sense of interconnection (e.g., “If a story in the media portrayed Asians in a negative light, I would feel embarrassed”). In comparison, the eight- and 10-factor models yielded no mixed themes and thus were compared more closely.

Ultimately, the 10-factor model was selected for the following reasons: It yielded no mixed themes; it had a higher median communality score ($Communality_{Median}=.68$) compared to the eight-factor model ($Communality_{Median}=.60$); it accounted for greater than 60% of variance in the original items (Hair et al., 1998) and yielded a smaller number of items (62.4% variance accounted and $k = 59$) compared to the eight-factor model (58.8% variance accounted and $k = 66$); and all but one factor (mutual fate theme) had at least three items with item loadings $\geq .40$. To ensure the mutual fate theme had at least three items, the next highest non-cross loading item (mf_4 = .389) was identified and included. The final survey for the confirmatory factor analysis (CFA) contained 59 items across 10 factor themes: Interconnection, identity certainty, behavioral involvement, social embeddedness, mutual fate, private regard, public regard, prototypicality, absolute importance, and comparative importance. Table 6 shows the full list of item loadings and factor reliabilities, as well as factor reliabilities if each item was removed for the 10-factor model¹⁰.

¹⁰ Although affective commitment was not captured as a factor in the EFA, Table 6 also includes the highest loading affective commitment items on their respective factors. These items were not included in the CFA.

Phase 4: Confirmatory Factor Analyses

Participants and Procedures

Participants were asked to complete 59 items as well as a demographics survey and two attention check items¹¹. A total of 268 participant responses were collected. Of these, 16 participants were eliminated for failing to meet the inclusion criteria (i.e., did not identify as Asian person working in the US) and one participant was eliminated for failing both attention check items. Additionally, 79 participants were removed for having completed the EFA survey, resulting in 172 participants for the CFA. Participants ranged from 18 to 78 years of age with a mean of 35.2 years ($SD=10.1$). On average, participants lived in the US for 30.9 years ($SD=11.3$). Regarding gender, 47.1% of participants identified as women and 50.0% identified as men¹², 1.7% identified as non-binary, either alone or in combination with another gender identity, and .58% identified as transgender.

A majority (63.4%) of participants had either completed a Bachelor's degree ($n=97$) or some college ($n=12$) for their highest level of education, followed by completed a Master's or Professional degree (20.4%), completed an Associate degree or trade/technical/vocational training degree or equivalent (7.6%), a Doctorate degree (4.7%), and a high school diploma or equivalent (2.9%). Less than 2% had completed some graduate school. In terms of regions of residence, participants were primarily from the West (33.1%), followed by Northeast (27.9%), Southwest (14.5%), Southeast (13.4%), and Midwest (11.1%). The sample was fairly diverse in terms of industry, with

¹¹ Attention check items were: "What color is the sky? Select yellow below." and "This is a simple question. You don't need to be a wine connoisseur or avid beer drinker to answer. When asked for your favorite drink, you need to select carrot juice. Based on the text above, what is your favorite drink?"

¹² Men and Women percentages include people who did or did not specify cisgender. One participant specified only cisgender without specifying man or woman.

15.1% working in health care and social assistance, 13.4% working in professional, scientific, and technical services, 12.2% working in finance and insurance, 11.1% in information, 8.1% in educational services, 5.2% in government, and less than five percent working in each of the following industries: arts, entertainment, and recreation, manufacturing, transportation and warehousing, management of companies and enterprises, administration and support services, construction, wholesale trade, accommodation and food services, mining, quarrying, and oil and gas extraction, other services (except public administration), and real estate. Seven participants selected ‘other’ for their industry. Participants had worked in the US for an average of 13.8 years ($SD=9.5$) and ranged from one to 60 years of US work experience.

In terms of race and ethnicity¹³, 51.2% identified as East Asian, 30.2% as Southeast Asian, 18.6% as White or European descent, 14.5% as South Asian, 7.0% as Indigenous, American Indian, or Alaska Native, 4.1% as Black or African descent, 3.5% as Hispanic or Latinx, 2.9% as Middle Eastern or North African, and 1.7% as Native Hawaiian or Pacific Islander. and less than two percent identified as either Asian American, Caribbean Asian, Central Asian, or Mixed¹⁴. Forty-four (44) participants identified as more than one race. Of the mixed-race participants, 72.7% participants identified as being White or European descent, 27.3% identified as being Indigenous, American Indian, or Alaska Native, 13.6% identified as being Hispanic or Latinx, 11.4%

¹³ Total race and ethnicity percentages are presented as alone or in combination. Thus, total percentages may exceed one hundred.

¹⁴ Asian American ($n=3$), Caribbean Asian ($n=1$), and Central Asian ($n=1$) were self-identified responses by participants. Two participants self-described as mixed race but did not specify particular races and thus are excluded from mixed race analyses.

identified as being Black or African descent, 11.4% identified as being Middle Eastern or North African, and 6.8% identified as being Native Hawaiian or Pacific Islander.

In terms of specific Asian ethnicities, 31.4% of participants identified as Chinese, 15.7% as Filipino, 12.8% as Cantonese, 12.8% as Vietnamese, 12.2% as Japanese, 12.2% as Korean, 11.1% as Indian, 8.1% as Taiwanese, 4.1% as Bangladeshi, 4.1% Laotian, 3.5% as Indonesian, 2.9% Singaporean, 2.9 % as Thai, 2.3% Arab, 2.3% Malaysian, 2.3% as Pakistani, 1.7% as Jewish, 1.7% as Persian, 1.7% as Sri Lankan, 1.7% as Uzbek, and less than 1.5% as the following: Armenian, Bhutanese, Burmese, Hmong, Mongolian, Nepali, Okinawan, Palestinian, Tibetan, Turkish, Afghan, Azerbaijani, Bruneian, Cambodian, Georgians, Kurdish¹⁵. In terms of immigration status, 115 participants identified as US-born citizens, followed by 49 foreign-born US citizens, and six foreign-born residents or visa holders. Two people preferred not to say. See Table 2 for all demographics.

CFA Results

Code for confirmatory factor analyses can be seen in Supplemental Materials. CFA results showed that the 10-factor model fit was close to acceptable (Hu & Bentler, 1999): $\chi^2(1607)=2716.56, p<.001$, standardized root mean square residual (SRMR) = .074, root mean square error of approximation (RMSEA) = .063, comparative fit index (CFI) = .858. Items varied in terms of standardized factor loadings on their respective factors (see Table 7). Public regard (F7) was not significantly correlated with any factors except interconnection (F1; $p<.01$), mutual fate (F5; $p<.01$), private regard (F6; $p<.001$), and prototypicality (F8; $p<.05$). All other factor correlations were significant ($p<.01$; see

¹⁵ One participant specified “Asian/white” but did not specify their Asian ethnicity.

Table 8). The 10-factor model was compared to a one-factor model. Results indicated the 10-factor model was a better fit compared to the one-factor model, $\chi^2(1652)=6360.03$, $p<.001$, CFI=.398, RMSEA=.129, SRMR=.148, supporting the notion that collective identity is a multidimensional construct. The 10-factor model was also compared to a three-factor model such that each factor represented cognitive, affective, or behaviorally-based items. Results indicated this three-factor model ($\chi^2(1649)=5228.12$, $p<.001$, CFI=.542, RMSEA=.112, SRMR=.138) was worse fitting than the 10-factor model.

The correlations between interconnection (F1) and mutual fate (F5) as well as absolute importance (F9) and comparative importance (F10) were nearly perfect. Thus, the 10-factor model was also compared against an alternative eight-factor model. Results indicated the eight-factor model, $\chi^2(1624)=2737.17$, $p<.001$, CFI=.858, RMSEA=.063, SRMR=.075, had similarly acceptable fit as the 10-factor model and the difference in fit was not significant, $\Delta\chi^2(17)=20.62$, $p=.244$ (see Table 9 for eight-factor model factor correlations).

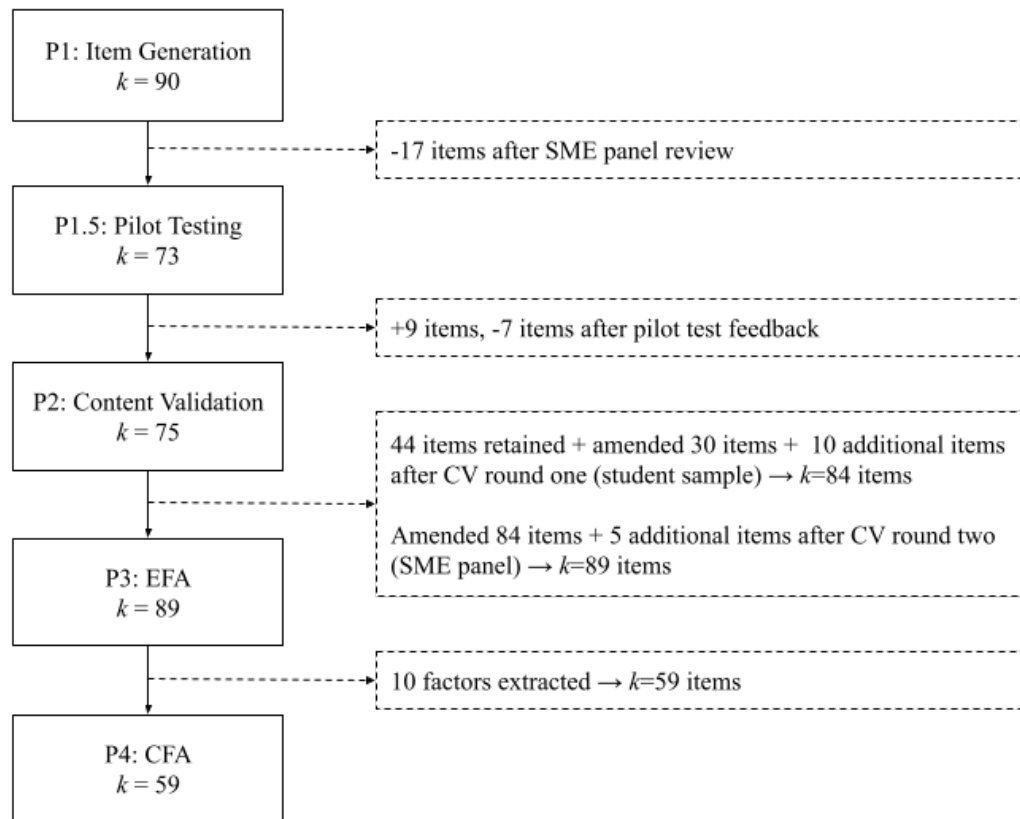


Figure 1. Summary of Item List From Item Generation (Phase 1) to CFA (Phase 4).

CV = Content validation. SME = Subject Matter Expert. P# = Phase number.

Table 2
Sample Demographics Across Phases

Demo- graphics	Phase 1: Pilot testing ($n=20$)	Phase 2a: CV – Q-sort ($n=20$)	Phase 3: EFA ($n=509$)	Phase 4: CFA ($n=172$)
General Description	Academic and industry professionals with expertise in organizational behavior sciences who identify as Asian.	Undergraduate and graduate students contacted through southeastern university email listservs.	Prolific sample of adult individuals who currently live in the US and identify as Asian.	Prolific sample of adult individuals who currently live and work in the US and identify as Asian.
Age	Range: 23-44 years $M (SD)$: 30.8 (5.8)	Range: 18-34 years $M (SD)$: 24.2 (3.8)	Range: 18-66 years $M (SD)$: 32.8 (9.6)	Range: 18-78 years $M (SD)$: 35.2 (10.1)
Gender	80% Women 20% Men	60% Women ^a 20% Men ^a 5% Non-binary 3% Cisgender	50.5% Men ^a 44.6% Women ^a 1.6% Non-binary ^a	50.0% Men ^a 47.1% Women ^a 1.7% Non-binary ^a .58% Transgender
Immigration Status	65% US-born citizens 15% Foreign-born US citizens 20% Foreign-born visa holders 60% Chinese ^a	65% US-born citizens 5% Foreign-born US citizens 30% Foreign-born visa holders 30% Chinese ^a	73.5% US-born citizens 23.4% Foreign-born US citizens 2% Foreign-born residents or visa holders 1.2% Preferred not to say 29.9% Chinese ^a	66.9% US-born citizens 28.5% Foreign-born US citizens 3.5% Foreign-born residents or visa holders 1.2% Preferred not to say 31.4% Chinese ^a

Specific Asian Ethnic Identity	25% Vietnamese ^a	20% Indian ^a	16.9% Filipino ^a	15.7% Filipino ^a
	15% Taiwanese ^a	15% Korean ^a	12.8% Vietnamese ^a	12.8% Cantonese ^a
	5% Indian ^a	15% Vietnamese ^a	12% Indian ^a	12.8% Vietnamese ^a
	5% Japanese ^a	10% Indonesian ^a	11.2% Korean ^a	12.2% Japanese ^a
	5% Korean ^a	10% Japanese ^a	9.8% Cantonese ^a	12.2% Korean ^a
	5% Cantonese ^a	10% Taiwanese ^a	6.9% Japanese ^a	11.1% Indian ^a
		5% Cantonese ^a	6.5% Taiwanese ^a	8.1% Taiwanese ^a
		5% Filipino ^a	4.7% Pakistani ^a	4.1% Bangladeshi ^a
		5% Hmong ^a	2% Cambodian ^a	4.1% Laotian ^a
		5% Malaysian ^a	1.6% Bangladeshi ^a	3.5% Indonesian ^a
		5% Nepali ^a	1.6% Thai ^a	2.9% Singaporean ^a
		5% Pakistani ^a	1.2% Hmong ^a	2.9 % Thai ^a
		5% Singaporean ^a	1.2% Indonesian ^a	2.3% Arab ^a
		5% Thai ^a	< 1% as following ^a ; Laotian, Nepali, Okinawan, Tibetan, Armenian, Bhutanese, Hong Konger, Malaysian, Singaporean, Sri Lankan, West Indian	2.3% Malaysian ^a
				2.3% Pakistani ^a
				<2% as the following ^a : Jewish, Persian, Sri Lankan, Uzbek, Armenian, Bhutanese, Burmese, Hmong, Mongolian, Nepali, Okinawan, Palestinian, Tibetan, Turkish, Afghan, Azerbaijani, Bruneian, Cambodian, Georgians, Kurdish
Racial Identity	—	55% East Asian ^a 30% Southeast Asian ^a	51.3% East Asian ^a 32.4% Southeast Asian ^a	51.2% East Asian ^a 30.2% Southeast Asian ^a

	20% South Asian ^a 5% White or European descent ^a	19.5% South Asian ^a 2.6% White or European descent ^a 1.6% Native Hawaiian or Pacific Islander ^a < 1% Hispanic or Latinx ^a < 1% Black or African descent ^a <1% Asian American ^a <1% North Asian ^a	18.6% White or European descent ^a 14.5% South Asian ^a 7.0% Indigenous, American Indian, or Alaska Native ^a 4.1% Black or African descent ^a 3.5% Hispanic or Latinx ^a 2.9% Middle Eastern or North African ^a 1.7% Native Hawaiian or Pacific Islander ^a <2% Asian American ^a <2% Caribbean Asian ^a <2% Central Asian ^a <2% Mixed (without specifying) ^a
Education	40% Completed some college 30% Master's degree 25% Bachelor's degree 5% Associate degree	50.5% Bachelor's degree 14.9% Completed some college 13.4% Master's degree 5.5% Associate degree 5.5% High school diploma or equivalent 3.5 % Doctorate degree 3.5 % Professional degree 2% Completed some graduate school	56.4% Bachelor's degree 20.4% Master's or Professional degree 7.6% Associate degree or Trade/technical/vocational training degree or equivalent 7.0% Some college 4.7% Doctorate degree

			2 % Trade/technical/vocational training or certificate	2.9% High school graduate, diploma or equivalent 1.2% Some graduate school (Master's, Professional, or Doctorate)
Years worked in US	—	—	<i>M (SD): 11 (9.1) years</i>	<i>M (SD): 13.8 (9.5) years</i>
Industry	—	—	13.9% Professional, scientific, and technical services 12.2% Health care and social assistance 10.4% Information 8.45% Finance and insurance 5.5% Arts, entertainment, and recreation 5.5% Educational services <5% in each of the following industries: Government; Manufacturing; Administration and support services; Accommodation and food services; Other services (except public administration); Real estate; Transportation and warehousing; Wholesale trade; Construction; Management of	15.1% Health care and social assistance 13.4% Professional, scientific, and technical services 12.2% Finance and insurance 11.1% Information 8.1% Educational services 5.2% Government <5% in each of the following industries: Arts, entertainment, and recreation; Manufacturing; Transportation and warehousing; management of companies and

		companies and enterprises; Utilities; Agriculture/forestry/fishing/hunting. 19.1% either selected ‘other’ or did not select an industry.	enterprises; Administration and support services; Construction; Wholesale trade; Accommodation and food services; Mining, quarrying, and oil and gas extraction; Other services (except public administration); Real estate; or Other.
Place of Residence	65% Southeastern states	26.3% Northeastern states	33.1% Western states
	25% Western states	23.7% Western states	27.9% Northeastern states
	10% Midwestern states	21.1% Midwestern states	14.5% Southwestern states
		21.1% Southeastern states	13.4% Southeastern states
		7.9% Southwestern states	11.1% Midwestern states

Note. CV = Content validation. EFA = Exploratory Factor Analysis.

^aIndicates percentages are presented as alone or in combination with another category (e.g., East Asian in combination with White or European descent), thus may exceed 100%. For gender category, it is specifically alone or in combination with “cisgender” or “transgender.” Industry was also collected in the EFA sample but was not included here for space sake. For states of residence: Northeast = CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT; Southeast = AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, WV; Southwest = AZ, NM, OK, TX; Midwest = IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West = AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY.

Table 3.

SME Content Validation Results: Item-level Analysis for Interconnection, Mutual Fate, and Private Regard Items

Item #	Sub-dimension	Item	Mean (SD)		Key decisions made
			(a) Scope & focus is relevant?	(b) Important for capturing?	
4	Interconnection	<i>My Asian identity is fully incorporated in my sense of who I am as a person.</i>	3.0 (1.6)	3.0 (1.9)	No changes
1	Mutual fate	<i>In the US, I am treated the same as most other Asian people.</i>	4.0 (1.0)	3.8 (.8)	No changes
2	Mutual fate	<i>I am affected by how others treat Asian people.</i>	4.0 (1.2)	3.8 (1.1)	No changes
4	Private regard	<i>I have negative feelings about being Asian.</i>	3.4 (1.8)	3.0 (1.9)	<i>In general added to the beginning of the item.</i>
6	Private regard	<i>I have mixed feelings about being Asian.</i>	3.4 (1.8)	–	<i>Replaced with: Overall, I have negative associations with being Asian.</i>

Note. For item (a), participants were asked to rate, “*The scope and focus of the item is relevant to the sub-dimension of [respective sub-dimension].*” For item (b), participants were asked to rate, “*This item is important for adequately capturing [respective sub-dimension].*” Participants responded on a scale from 1 (strongly disagree) to 5 (strongly agree). Overall sub-dimension mean scores for scope & focus (a) were as follows: Private regard item $M(SD) = 3.5(.3)$; Mutual fate item $M(SD) = 4.0(.2)$; Interconnection item $M(SD) = 3.7(.6)$. Overall sub-dimension mean scores for importance in capturing sub-dimension (b) were as follows: Private regard item $M(SD) = 3.7(.3)$; Mutual fate item $M(SD) = 4.1(.1)$; Interconnection item $M(SD) = 3.8(.5)$.

Table 4*SME Content Validation Results: Sub-dimension-level Analysis and Key Decisions Made*

Sub-dimension	Mean (SD)		Key decisions based on overall feedback
	Items capture sub-dimension?	Sub-dimension is unique?	
Self-categorization			Self-definition: Add item (<i>When relevant, I introduce myself to others as Asian.</i>)
Self-definition	4.20 (.45)	4.50 (.58)	Prototypicality: Reword item 6 (<i>I consider myself to be "stereotypically Asian."</i>)
Prototypicality	3.80 (.84)	4.50 (.58)	
Perceived certainty	4.0 (.71)	3.75 (1.26)	Prototypicality: Add quotations around "typical Asian person" in items 4 and 5.
Evaluation			Private regard: See Table 3.
Private regard	4.0 (1.22)	4.50 (.58)	Public regard: Reword items 5, 6, and 7 to say "people" instead of "other people" or "others." (e.g., <i>Other people generally respect Asians. → People generally respect Asians.</i>)
Public regard	4.20 (.84)	4.67 (.58)	
Importance			Public Regard: Replace "that Asians are undesirable" in item 7 with "of Asians as unfavorable."
Absolute explicit importance	4.20 (.84)	4.0 (.00)	
Comparative explicit importance	4.50 (.58)	3.75 (.50)	
Attachment			
Mutual fate	4.20 (.84)	4.50 (.58)	

Affective commitment	4.20 (.45)	4.50 (.58)	
Interconnection	4.0 (.71)	4.50 (.58)	
Embeddedness	4.20 (.84)	4.50 (.58)	
Behavioral involvement	4.0 (.00)	4.0 (.82)	• Add the following items: • <i>I seek out movies or TV shows that have Asian characters.</i> • <i>I attend community events that showcase Asian speakers and/or performers.</i> • <i>When possible, I volunteer at community and/or cultural events that support Asian people.</i> • <i>For personal reading, I seek out novels/books written by Asian authors.</i>

Table 5.
Comparison of EFA Extraction Models

Factor Extracted	% Variance Accounted	Communality		# of items per factor with loading > .40 (> .50)
		Median (IQR) All items	Median (IQR) Items $\geq$.40	
6-factor	53.8	.46 (.29)	.54 (.19)	11 (8): Interconnection, 7 (7): Private regard, 7 (6): Self-identification, 10 (7): Social embeddedness (activities), 7 (7): Public regard, 14 (11): Importance
7-factor	56.7	.58 (.28)	.67 (.17)	10 (7): Interconnection, 9 (7): Self-identification, 7 (7): Private regard, 8 (6): Social embeddedness, 13 (11): Importance, 7 (7): Public regard, 8 (5): Prototypicality
8-factor	58.8	.60 (.26)	.67 (.17)	9 (7): Interconnection, 9 (6): Self-identification, 7 (7): Private regard, 8 (6): Social embeddedness, 13 (9): Importance to sense of self, 7 (7): Public regard, 7 (5): Prototypicality, 6 (3): Behavioral involvement

9-factor	60.8	.64 (.27)	.70 (.14)	5 (5): Interconnection, 8 (6): Self-identification, 7 (6): Social embeddedness, 5 (5): Mixed, 7 (6): Private regard, 7 (7): Public regard, 6 (5): Prototypicality, 11 (5): Importance to sense of self, 6 (3): Behavioral involvement,
10-factor	62.4	.68 (.30)	.73 (.16)	4 (3): Interconnection, 9 (6): Self-identification, 5 (3): Behavioral involvement, 7 (6): Social embeddedness, 2* (2): Mutual fate, 7 (6): Private regard, 7 (6): Public regard, 5 (5): Prototypicality, 7 (3): General importance to self, 5 (3): Comparative importance to self
11-factor	65.1	.69 (.23)	.72 (.17)	3 (2): Self-identification, 4 (2): Mixed, 7 (5): Interconnection, 3 (2): Behavioral involvement (Leisure activities), 8 (6): Social embeddedness, 7 (7): Public regard, 7 (6): Private regard, 6 (5): Prototypicality, 3 (3): Community involvement, 4 (2): General importance to self, 5 (4): Comparative importance to self
12-factor	67.1	.69 (.21)	.75 (.17)	3 (3): Mixed, 3 (3): Self-identification, 5 (5): Interconnected affect, 4 (3): Behavioral involvement (Leisure activities),

				7 (6): Private regard, 4 (3): Mixed, 8 (6): Social embeddedness, 7 (7): Public regard, 5 (5): Prototypicality, 4 (2): Absolute importance, 6 (6): Mixed, 2 (1): Mixed
13-factor	68.8	.71 (.21)	.74 (.14)	2 (2): Mixed, 2 (2): Self-identification, 5 (4): Interconnected affect, 3 (3): Identification certainty, 3 (2): Behavioral involvement (Leisure activities), 7 (6): Private regard, 4 (3): Mixed, 6 (6): Social embeddedness, 6 (6): Public regard, 5 (5): Prototypicality, 7 (3): General importance to self, 3 (3): Community involvement, 4 (4): Reverse scored comparative importance

Note. “Mixed” indicates a factor grouping that did not make sense based on item content. Cross loading items are counted towards the highest loading item. *indicates the highest non-cross loading item (0.39) was identified and included to ensure all factors had at least three items.

Table 6.

Item-Factor Loadings for 10-Factor EFA Model (k=59)

[illegible]

I am uncertain about classifying myself as Asian.	0.58	-0.30	0.84
I feel certain I am an Asian person.	0.66		0.86
I have no doubt that I am an Asian person.	0.68		0.89
I question whether I should be considered Asian.	-0.30 0.50		0.83
<i>Behavioral Involvement (f3)</i>			<i>0.89</i>
I closely follow news stories that involve Asian people.	0.43		0.89
I seek out movies or TV shows that highlight Asian cultures.	1.01		0.85
When possible, I prefer to buy products from Asian brands.	0.40		0.88
I seek out movies or TV shows that have Asian characters.	0.66		0.85
For personal reading, I seek out novels/books written by Asian authors.	0.57		0.87
<i>Social embeddedness (f4)</i>			<i>0.94</i>
Most of my close friends are Asian.	0.67		0.93
I tend to spend my free time with Asian people.	0.62		0.93

Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	0.57		0.93
Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	0.66		0.93
Most of my everyday social connections are with Asian people.	0.70		0.93
My social life primarily involves Asian people.	0.77		0.93
I have few Asian social contacts.	0.44		0.96
<i>affcom_2</i> : In general, I feel connected to other Asian people.	0.27		
<i>affcom_5</i> : I tend to feel emotionally close with other Asian people.	0.28		
<i>affcom_7</i> : I feel a strong sense of belonging with other Asians.	0.29		
<i>Mutual Fate (f5)</i>			<i>0.71</i>
I am affected by how others treat Asian people. 0.48	0.51	-0.41	0.49
I am personally affected by policies related to Asian people.	0.39		0.40
My ability to succeed depends on the broader success of Asian people in the US.	1.02		0.92

-

<i>Private Regard (f6)</i>			<i>0.94</i>
In general, I like being Asian.	0.70		0.92
I feel good about being an Asian person.	0.75		0.92
Overall, I am happy to be an Asian person.	0.68		0.92
In general, I have positive feelings about being Asian.	0.63	-0.38	0.93
In general, I have negative feelings about being Asian.	0.75		0.95
Overall, I have negative associations with being Asian.	0.70		0.93
I feel a sense of pride in being Asian.	0.48	0.39	0.93
<i>affcom_3</i> : I feel at home with other Asian people, even if they are not in the same ethnic group.	0.30		
<i>Public Regard (f7)</i>			<i>0.95</i>
In general, Asian people are respected in US society.	0.74	-0.30	0.93
Asians are well-liked in US society.	0.74		0.93
Overall, Asian people are valued in US society.	0.82		0.95

Overall, Asians are viewed in a positive light.	-0.39	0.58	0.94
In general, people tend to view Asians favorably.		0.75	0.94
People generally respect Asians.		0.70	0.93
In general, people think of Asians as unfavorable.	-0.32	0.66	0.94
			0.90
<i>Prototypicality (f8)</i>			
My personality would be considered typical of most Asians.		0.67	0.90
I'm quite different from the prototypical Asian person.		0.78	0.89
I am quite similar to the typical Asian person.		0.63	0.86
I would not consider myself a typical Asian person.		0.66	0.86
I consider myself to be "stereotypically Asian."		0.66	0.88
<i>affcom_1</i> : I feel a strong attachment to other Asian people.		0.29	
			0.94
<i>Absolute Importance (f9)</i>			
To understand who I am as a person, it is important to know that I am Asian.		0.53	0.94

Being Asian is an important part of who I am.	0.50	0.32	0.93
Being Asian is significant to who I am as a person.	0.47	0.33	0.94
Being Asian is a core part of my sense of self.	0.65	0.30	0.95
My Asian identity is central to who I am.	0.46		0.93
If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	0.47		0.92
When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	0.46		0.93
<i>Comparative Importance (f10)</i>			<i>0.86</i>
My Asian identity is one of the most important identities I hold.	0.35	0.46	0.84
Among my different identities, my Asian identity is least significant in shaping me as a person.		1.06	0.83
Compared to my other identities, my Asian identity is less important to me.		0.66	0.81

My Asian identity ranks lower in importance compared to my other identities.			0.56	0.84
My Asian identity is fully incorporated in my sense of who I am as a person.	0.31	0.37	0.44	0.83

Note. Sample $n = 509$ (mean response-per-item = 200.9). All factor loadings $> .30$ are shown. For affective commitment items, the highest loading items are included on their respective factors in italics, but were not included in the CFA measure. With the exception of affective commitment items, items that did not load with any factor $> .30$ were removed for clarity. Factor loadings $> .40$ are bolded. Overall factor alphas are italicized.

Table 7.

Item Lambda Scores for 10-Factor CFA Model (k=59)

[illegible]

Behavioral Involvement ($\alpha=0.81$)

I closely follow news stories that involve Asian people.	0.52	behinv_2
I seek out movies or TV shows that highlight Asian cultures.	0.88	behinv_3
When possible, I prefer to buy products from Asian brands.	0.49	behinv_7
I seek out movies or TV shows that have Asian characters.	0.89	behinv_10
For personal reading, I seek out novels/books written by Asian authors.	0.65	behinv_13

Social Embeddedness ($\alpha=0.93$)

Most of my close friends are Asian.	0.88	embed_2
I tend to spend my free time with Asian people.	0.91	embed_3
Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	0.75	embed_5
Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	0.81	embed_6
Most of my everyday social connections are with Asian people.	0.86	embed_7
My social life primarily involves Asian people.	0.92	embed_8
I have few Asian social contacts.	0.59	embed_9r

Mutual Fate ($\alpha=0.64$)

I am affected by how others treat Asian people.	0.74	mf_2
My ability to succeed depends on the broader success of Asian people in the US.	0.48	mf_4

I am personally affected by policies related to Asian people.	0.73	mf_5
<i>Private Regard ($\alpha=0.92$)</i>		
I feel a sense of pride in being Asian.	0.71	affcom_6
In general, I like being Asian.	0.83	priv_1
I feel good about being an Asian person.	0.87	priv_2
Overall, I am happy to be an Asian person.	0.88	priv_3
Overall, Asians are viewed in a positive light.	0.74	priv_4r
In general, I have positive feelings about being Asian.	0.86	priv_5
Overall, I have negative associations with being Asian.	0.61	priv_6r
<i>Public Regard ($\alpha=0.95$)</i>		
In general, Asian people are respected in US society.	0.90	public_1
Asians are well-liked in US society.	0.91	public_2
Overall, Asian people are valued in US society.	0.84	public_3
Overall, Asians are viewed in a positive light.	0.88	public_4
In general, people tend to view Asians favorably.	0.85	public_5
People generally respect Asians.	0.89	public_6
In general, people think of Asians as unfavorable.	0.68	public_7r
<i>Prototypicality ($\alpha=0.86$)</i>		
My personality would be considered typical of most Asians.	0.76	proto_2

I'm quite different from the prototypical Asian person.	0.65	proto_3r
I am quite similar to the typical Asian person.	0.88	proto_4
I would not consider myself a typical Asian person.	0.73	proto_5r
I consider myself to be "stereotypically Asian."	0.70	proto_6
<i>Absolute Explicit Importance ($\alpha=0.92$)</i>		
To understand who I am as a person, it is important to know that I am Asian.	0.73	abexp_2
Being Asian is an important part of who I am.	0.87	abexp_3
Being Asian is significant to who I am as a person.	0.86	abexp_4
Being Asian is a core part of my sense of self.	0.85	abexp_5
My Asian identity is central to who I am.	0.76	abexp_6
If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	0.78	comexp_2
When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	0.75	comexp_6
<i>Comparative Explicit Importance ($\alpha=0.85$)</i>		
My Asian identity is one of the most important identities I hold.	0.87	comexp_3
Among my different identities, my Asian identity is least significant in shaping me as a person.	0.49	comexp_4r

Compared to my other identities, my Asian identity is less important to me.

0.79 comexp_5r

My Asian identity ranks lower in importance compared to my other identities.

0.67 comexp_7r

My Asian identity is fully incorporated in my sense of who I am as a person.

0.73 inter_4

Note. Sample $n = 172$.

Table 8.*Factor Correlations of 10-Factor CFA Model (k=59)*

	f1 ($\alpha=.79$)	f2 ($\alpha=.89$)	f3 ($\alpha=.81$)	f4 ($\alpha=.93$)	f5 ($\alpha=.64$)	f6 ($\alpha=.92$)	f7 ($\alpha=.95$)	f8 ($\alpha=.86$)	f9 ($\alpha=.92$)	f10 ($\alpha=.85$)
f1	1.00									
f2	.411***	1.00								
f3	.422***	.225**	1.00							
f4	.310***	.344***	.497***	1.00						
f5	.995***	.318***	.427***	.269**	1.00					
f6	.318***	.732***	.347***	.294***	.267**	1.00				
f7	-.218**	.032	-.005	.009	-.240**	.316***	1.00			
f8	.294***	.416***	.426***	.754***	.329***	.410***	.174*	1.00		
f9	.551***	.596***	.515***	.452***	.494***	.691***	.036	.465***	1.00	
f10	.485***	.649***	.455***	.435***	.428***	.759***	.054	.480***	.981***	1.00

Note. F1 = Interconnection, F2 = Identity certainty, F3 = Behavioral Involvement, F4 = Social embeddedness, F5 = Mutual fate, F6 = Private regard, F7 = Public regard, F8 = Prototypicality, F9 = Absolute importance, F10 = Comparative importance. Cronbach's alpha coefficients for each factor are in parentheses. *** $p < .001$ ** $p < .01$ * $p < .05$.

Table 9.*Factor Correlations of Alternative 8-Factor CFA Model (k=59)*

	f2 ($\alpha=.89$)	f3 ($\alpha=.81$)	f4 ($\alpha=.93$)	f5 ($\alpha=.84$)	f6 ($\alpha=.92$)	f7 ($\alpha=.95$)	f8 ($\alpha=.86$)	f9 ($\alpha=.94$)
f2	1.00							
f3	.224*	1.00						
f4	.344***	.497***	1.00					
f5	.378***	.424***	.295**	1.00				
f6	.731***	.347***	.294***	.300**	1.00			
f7	.032	-.005	.009	-.226*	.316***	1.00		
f8	.416***	.425***	.754***	.306**	.410***	.175*	1.00	
f9	.615***	.497***	.449***	.511***	.716***	.042	.472***	1.00

Note. F2 = Identity certainty, F3 = Behavioral Involvement, F4 = Social embeddedness, F5 = Collapsed interconnection/mutual fate, F6 = Private regard, F7 = Public regard, F8 = Prototypicality, F9 = Collapsed absolute and comparative importance. Cronbach's alpha coefficients for each factor are in parentheses.

*** $p < .001$ ** $p < .01$ * $p < .05$.

CHAPTER 3

DISCUSSION

The present study developed a measure of collective Asian identity using Ashmore and colleagues (2004) framework of collective identity. EFA results suggested a 10-factor model with the following factors: Interconnection, identity certainty, behavioral involvement, social embeddedness, mutual fate, private regard, public regard, prototypicality, absolute importance, and comparative importance. However, alternative model comparisons with an independent CFA sample suggested that a more parsimonious eight-factor model may be more appropriate, in which mutual fate and interconnection as well as absolute and comparative importance are collapsed. Taken together, this simultaneously suggests partial support for as well as challenges to Ashmore and colleagues' (2004) framework of collective identity.

In terms of evidence to support this framework of collective identity, private and public regard consistently loaded as distinct factors across all EFA extraction models. Furthermore, the significant positive correlations between public regard and prototypicality and private regard indicate that when an individuals' public perception of their identity group is more positive, they are more likely to share those positive perceptions of the group and are more likely to see themselves as a prototypical member of the group. This aligns with Tajfel and Turner's (1972) assumption that individuals strive to maintain positive self-esteem and thus are more likely to self-claim a social identity when it positively contributes to one's sense of self. The significant negative

correlation between public regard and the collapsed interconnection/mutual fate factor suggests that when individuals' public perception of their group is lower, they are likely to perceive their individual and group outcomes (e.g., upward mobility) and treatment (e.g., discrimination) as more interdependent, and vice versa (i.e., higher public perception relates to less interdependence between individual and group outcomes and treatment). One possible explanation for this is the overarching notion that, "bad is stronger than good" (Baumeister et al., 2001, p.323) – that is, negative events tend to be more salient and/or have greater and longer lasting effects than positive events. Given that individuals seek to maintain a positive self-concept (Tajfel & Turner, 1972), low public regard for a collective identity could be perceived as threatening and thus, as a means of self-protection, individuals may seek to distance this negative information from their unique sense of self and instead attribute outcomes and treatment—particularly negative experiences¹⁸—to their identity group membership (i.e., higher interconnection/mutual fate).

Additionally, while absolute (explicit) importance was consistently captured across EFA extraction models, the degree to which comparative importance loaded as a separate factor varied across EFA extraction models. The 10-factor EFA model showed a high number of cross loading items between these two factors and they also showed very high correlation ($r=.98$) in the 10-factor CFA model. Comparison with an alternative eight-factor CFA confirmed that collapsing the absolute and comparative importance factors to be one factor related to importance yielded a more parsimonious model of

¹⁸ The interconnection factor in the 10-factor model primarily includes negatively oriented items (e.g., *When Asian people are threatened, I feel personally threatened.*), thus I emphasize negative experiences in this discussion. Future studies might evaluate differences between positive and negative attribution of experiences and outcomes to identity group membership.

relatively equal fit. This suggests that seeing one's Asian identity as important to their overall sense of self versus in comparison to their other identities may not be a strong enough distinction for individuals to consciously identify. This supports Ashmore and colleagues' (2004) theorizing that individuals are likely not aware of their internal hierarchy of identities and thus are limited in their ability to report on relative importance of those identities in a direct measure such as a self-report survey.

Additionally, the subelements of self-definition and perceived certainty consistently collapsed to become one factor (ultimately renamed *identity certainty*). This makes sense; by pairing an item about self-identification (e.g., I identify as Asian) with a likert-type response scale, participants likely automatically consider a degree of certainty when responding to the item. Including self-identification (as understood by Ashmore et al., 2004) in a measure of collective identity may only be relevant when considering multiple group-specific variables in a diverse sample, in which case establishing group membership may be important. However, in cases such as the present study, group membership functions more as a criterion for inclusion than a dimension of collective identity. In this way, the degree to which Ashmore and colleagues' (2004) self-definition and perceived certainty are considered distinct aspects of collective identity may depend on the nature of the research questions.

Findings from the present study also challenge particular aspects of Ashmore and colleagues' (2004) framework – specifically the affective commitment, interconnection, and mutual fate subelements. Not only was affective commitment not captured by any of the EFA extraction models, but none of the affective commitment items—apart from one item that loaded onto private regard—had loadings greater than .40 (see Table 6). These

results counter the narrative that feeling a sense of belonging or emotional attachment is a key aspect of collective identity (Ashmore et al., 2004) and suggests that individuals' connection to their collective Asian identity may be more of a cognitive and behavioral connection than an emotional one. This supports previous research that points to pan-Asian ethnicity as being, "the product of material, political, and social processes rather than cultural bonds," (Espiritu, 1992, p.164) – in the context of this study, all data was collected during a US presidential election year in which Asian identity may have been particularly salient. Former vice president Kamala Harris began the 2024 election season campaigning as former president Joe Biden's running mate, using her platform to target Asian American voters across the states (e.g., 2024 Presidential Town Hall Event in Philadelphia, PA, Zhou, 2024). When Harris accepted her bid as the 2024 Democratic presidential nominee in August—two months before the CFA data was collected and three months after the first pilot test data was collected—she continued to target Asian American voters (e.g., publishing columns in Asian journals; World Journal, Asian Journal, Yonhap News Agency, The Juggernaut, and Việt Báo Daily News; Roy, 2024). Given that the formation of pan-ethnic groups is largely thought to be circumstantial (Espiritu, 1992)—a pattern that is evident in the history of Asian American engagement in political activities (Nakanishi, 1986; Omatsu, 2016)—it is possible that collective Asian identity presenting as more cognitive and behavioral may be a reflection of the circumstances of when the present data was collected. However, additional research is needed to assess whether this preliminary pattern of collective identity being more cognitive and behavioral, less affective, holds stable across time periods of different social (e.g., increases in anti-Asian sentiment) or political (e.g., heightened representation

in public spheres) circumstances and whether this pattern extends to other collective identity groups or is specific to collective Asian identity.

Mutual fate and interconnection were highly correlated in the 10-factor CFA model ($r=.99$) and showed evidence of cross-loading across multiple EFA extraction models. Ashmore and colleagues (2004) describe mutual fate and interconnection as similar but distinct constructs. The former involves the acknowledgment that group member outcomes are generally similar, despite individual differences, and thus group membership at least partially influences how individuals are treated and their ability to move up (or down) in the world (Ashmore et al., 2004). The latter is defined as the degree to which individuals merge experiences of the group with their individual experiences (Ashmore et al., 2004). Whereas mutual fate captures, “I experience X because [group] experiences X” (self $\rightarrow$ group), interconnection captures, “When [group] experiences X, I experience X/Y/Z” (group $\rightarrow$ self). Although the 10-factor model was selected in the EFA, the eight-factor CFA model comparison suggested that collapsing mutual fate and interconnection into one factor yielded a more parsimonious model of relatively equal fit. On one hand, it is possible that the subtle distinction between these two may not be adequately captured in the present items. On the other hand, the results may suggest a broader issue with the framework and challenge the notion that these two subelements—both of which have to do with intertwining feelings, experiences, and/or outcomes between the self and the group—are conceptually distinct from each other. Indeed, identity theorists have debated how interdependence (i.e., interconnection) and common fate (i.e., mutual fate) relate to social identity—while social identity theorists Tajfel and Turner argue they are distinct aspects, others have argued that common fate

and interdependence are the same construct or that common fate is an outcome of interdependence (see Turner & Bourhis', 1996 "Reply to Rabbie et al." for a summary of debate). Although the present study's results suggest mutual fate and interconnection are not conceptually distinct enough to be considered separate factors, future studies should explore the causal direction between the two and how they both relate to collective identity, either as separate or combined aspects.

Limitations and Future Directions

Apart from what has been outlined in the discussion above, the present study had a number of limitations that provide a fertile ground for additional future directions for research to continue to build on these preliminary findings. These limitations have been grouped into three major areas—sample composition, nature of survey design, limited scope—and are discussed further below.

Sample Composition

First and foremost, the sample composition for all four stages were predominantly East and Southeast Asian and most were somewhat small. The smaller subgroup sample size restricted the ability for testing measurement equivalence across groups¹⁹, thus, the degree to which these results are generalizable to all Asian individuals—particularly Central and West Asian as well as non-US citizens—is somewhat questionable. In the first two stages, the use of a snowball sampling method for recruiting participants, although practical, may have contributed to the highly East and Southeast Asian demographic

¹⁹ An attempt for assessing measurement equivalence was made with numerous demographic variables including regional subgroups (East, South, and Southeast Asian), birthplace (US-born, non-US born), and gender (women, men). Of the groups that had minimally adequate sample sizes for assessing model fit (East Asian $n = 66$, US-born $n = 115$, women $n = 81$, and men $n = 86$), none of the subset group models showed adequate fit statistics.

composition for these phases. This is consistent with a study by Lu et al. (2021) wherein East Asians tended to have higher ethnic homophily compared to South Asians. In other words, even with a baseline group of participants that is equal across Asian regional subgroups, East Asians are more likely to share with other East Asian people, which would continue to snowball into a sample that is proportionally higher in East Asian individuals. Future studies assessing identity or identity-related experiences of Asian employees should account for this by using more targeted sampling techniques and, when necessary, impose quotas in order to ensure a more representative sample composition.

Nature of Survey Design

An additional major limitation in this measure is its self-report nature. Self-report measures are limited to capturing phenomena that individuals are consciously aware of. Given this limitation, implicit importance as understood by Ashmore and colleagues (2004) was ultimately excluded, and instead a “comparative explicit importance” was assessed. Future research may consider accounting for implicit importance using a more qualitative approach, such as asking individuals to respond to an open-ended question (e.g., “How would you describe yourself?”), using an instrument such as the Twenty Statements Test (Kuhn & Partland, 1954), or having participants do an implicit association or sorting task (e.g., Stirratt et al., 2008).

Similarly, the content and meaning subelements were not included because of their necessarily qualitative nature. Self-ascribed characteristics and ideology requires an understanding of descriptive stereotypes (i.e., currently assumed behaviors and traits) of Asians as well as prescriptive stereotypes (i.e., expected behaviors and traits) of Asians that fell outside the scope of this study. Future research should build off previous work in

these areas (e.g., Berdahl & Min, 2012; Bu & Borgida, 2021) to develop a more comprehensive understanding of these aspects of collective Asian identity, as they may be particularly useful for understanding the workplace experiences of Asian employees (e.g., perceptions of mistreatment, microaggressions, perceptions of shared experiences with other Asian employees). Stirratt and colleagues (2008)' hierarchical class analysis (HICLAS) method may offer a useful avenue for not only considering the traits and characteristics associated with Asian identity, but also for considering Asian identity as it intersects with other identities (e.g., gender) to influence identification.

Limited Scope

Finally, this study was limited to the first four of Hinkin's (1998) scale development phases; item generation, questionnaire administration (i.e., content validation), initial item reduction (i.e., exploratory factor analysis; EFA), and confirmatory factor analysis (CFA). Although the EFA suggested a 10-factor model as best-fitting, an alternative CFA model comparison suggested an eight-factor model was more parsimonious and thus better fitting. Given this, future studies should first and foremost consider testing additional alternative models with various configurations of the all of the quantitative framework elements—including affective commitment—to determine the best possible model for conceptualizing the multidimensionality of collective identity (see Leach et al, 2008 as an example).

Additional studies can build off these preliminary results by conducting convergent and discriminant validity testing with related constructs such as specific Asian ethnic group identity or aspects of personal identity such as self-esteem or personal identity orientation. As an example, Roberts and colleagues' (1999) revised version of the

Multigroup Ethnic Identity Measure may be a promising measure for convergent validity that assesses many of the elements present in the AIM (e.g., evaluation, importance, social embeddedness, and behavioral involvement). Additionally, given that this study was limited to Asian individuals living in the US, future studies could look to replicate and extend these findings in other western countries with moderate to large Asian populations, such as Canada, the United Kingdom, or Australia. Future studies could also look to replicate this measure with other communities often treated or conceptualized as pan-ethnic groups, such as Black/African American, Middle Eastern/North African (MENA), or Hispanic and Latino/a populations and assess the degree to which the pattern of collective identity found here holds stable with other collective identity groups.

An additional observation from the EFA that could be considered for future research studies is the trend related to behavioral involvement items. Across the EFA factor extraction model (Table 5), the items that made up the “behavioral involvement” theme consistently varied such that in some extraction models, the factor theme was more related to leisure activities (e.g., “I seek out movies or TV shows that have Asian characters”), whereas other extraction models yielded a behavioral involvement theme more centered around community support (e.g., “When possible, I volunteer at community and/or cultural events that support Asian people”). Although further exploring this observed trend fell outside the scope of the present study, future research may consider investigating this distinction in types of behavioral involvement as they relate to Asian identity, particularly in relation to the predominantly collectivist tendencies of Asian ethnic group cultures given the general collectivist-orientation that predominates many Asian ethnic group cultures (Guess, 2004; Hofstede, 2001).

Conclusion

In the present study, a measure of collective Asian identity was developed. Preliminary results (i.e., EFA) yielded 10 factors of collective Asian identity: Interconnection, identity certainty, behavioral involvement, social embeddedness, mutual fate, private regard, public regard, prototypicality, absolute importance, and comparative importance. However, subsequent CFA model comparison tests indicated that a more parsimonious eight-factor model in which interconnection and mutual fate as well as absolute and comparative importance were collapsed to create two factors fit equally as well. Overall, the present results suggested that collective Asian identity may be more cognitive and behavioral as opposed to emotional, however additional replication and extension studies are needed to explore other alternative models of collective identity, assess convergent and discriminant validity, establish measurement equivalence across groups, and evaluate the degree to which the dimensionality of collective identity observed in the present study extends to other populations.

Further research can build off the limitations presented here and explore how collective identity measures may be used to better understand workplace experiences. For example, a multi-dimensional measure such as the AIM could be used to develop profiles that help explain variation in reactions to and perceptions of identity-related experiences such as microaggressions, justice and mistreatment, racism-related stress, engagement in identity management behaviors (e.g., codeswitching), or perceptions of fit and attraction. Ultimately, this study made incremental steps towards evaluating the degree to which Ashmore and colleagues' (2004) framework of collective identity is measurable and the extent to which Asian identity can be considered a collective identity.

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APPENDIX A
ITEM LIST THROUGHOUT PHASES

Table A1.
Full Item List Entering Each Phase

Pilot Testing ($k = 73$)	Content Validation (Q-sort; $k = 75$)	Content Validation (SME; $k = 84$)	EFA ($k = 89 \rightarrow 83^{\dagger}$)	CFA ($k = 59$)
<i>Self-definition ($k = 3$)</i>	<i>Self-definition ($k = 3$)</i>	<i>Self-definition ($k = 6$)</i>	<i>Self-definition ($k = 7$)</i>	<i>Identity Certainty ($k = 9$)</i>
I identify as Asian.	I identify as Asian.	I identify as Asian.	I identify as Asian.	I identify as Asian.
I would categorize myself as Asian.	I would categorize myself as Asian.	I would categorize myself as Asian.	I would categorize myself as Asian.	I would categorize myself as Asian.
I think of myself as Asian.	I think of myself as Asian.	I think of myself as Asian.	I think of myself as Asian.	I think of myself as Asian.
		I consider myself a part of the collective Asian community.	I consider myself a part of the collective Asian community.	I would not consider myself Asian.
		I would not consider myself Asian.	I would not consider myself Asian.	I rarely think of myself as Asian.
		I rarely think of myself as Asian.	I rarely think of myself as Asian.	I am uncertain about classifying myself as Asian.

			When relevant, I introduce myself to others as Asian.	I feel certain I am an Asian person.
				I have no doubt that I am an Asian person.
				I question whether I should be considered Asian.
<i>Prototypicality (k = 4)</i>	<i>Prototypicality (k = 8)</i>	<i>Prototypicality (k = 6)</i>	<i>Prototypicality (k = 6)</i>	<i>Prototypicality (k = 5)</i>
I consider myself to be typical of most Asians.	My interests/hobbies would be considered typical of most Asians.	My values are typical of most Asians.	My values are typical of most Asians.	My personality would be considered typical of most Asians.
I'm quite different from the prototypical Asian person.	My personality would be considered typical of most Asians.	My personality would be considered typical of most Asians.	My personality would be considered typical of most Asians.	I'm quite different from the prototypical Asian person.
I share characteristics with most other Asian people.	My values would be considered typical of most Asians.	I'm quite different from the prototypical Asian person.	I'm quite different from the prototypical Asian person.	I am quite similar to the "typical Asian person."
I am similar to most other Asians.	I'm quite different from the prototypical Asian person.	I am quite similar to the "typical Asian person."	I am quite similar to the "typical Asian person."	I would not consider myself a "typical Asian person."
	I share values with most other Asian people.	I would not consider myself a "typical Asian person."	I would not consider myself a "typical Asian person."	I consider myself to be "stereotypically Asian."
	I share personality characteristics with most other Asian people.	I consider myself to be "stereotypically Asian." **	I consider myself to be "stereotypically Asian."	

I share hobbies/interests
with most other Asian
people.

I am similar to most
other Asians.

<i>Perceived Certainty (k = 5)</i>	<i>Perceived Certainty (k = 5)</i>	<i>Perceived Certainty (k = 8)</i>	<i>Perceived Certainty (k = 8)</i>
The fact that I am a member of the Asian population is very clear to me.	My Asian identity is very clear to me.	It is clear to me that I am Asian.	It is clear to me that I am Asian. [†]
I often have trouble classifying myself as Asian.	I often have trouble classifying myself as Asian.	I am uncertain about classifying myself as Asian.	I am uncertain about classifying myself as Asian.
I am certain I am a part of the Asian community.	I feel certain I belong to the Asian community.	I feel certain I am an Asian person.	I feel certain I am an Asian person.
I know that I am a member of the Asian population.	I know that I am a member of the Asian population.	I know for sure that I am Asian.	I know for sure that I am Asian. [†]
I am confused about whether I would classify myself as Asian.	I am confused about whether I would classify myself as Asian.	I sometimes doubt whether I should be classified as Asian.	I sometimes doubt whether I should be classified as Asian. [†]
		I am certain I identify as Asian.	I am certain I identify as Asian. [†]
		I have no doubt that I am an Asian person.**	I have no doubt that I am an Asian person.

		I question whether I should be considered Asian. **	I question whether I should be considered Asian.	
<i>Private Regard (k = 7)</i>	<i>Private Regard (k = 5)</i>	<i>Private Regard (k = 6)</i>	<i>Private Regard (k = 6)</i>	<i>Private Regard (k = 7)</i>
In general, I'm glad to identify as Asian.	In general, I'm glad that I am Asian.	In general, I like being Asian.	In general, I like being Asian.	In general, I like being Asian.
I am happy that I am Asian.	I am proud to be Asian.	I feel good about being an Asian person.	I feel good about being an Asian person.	I feel good about being an Asian person.
I am proud to be Asian.	In general, I am happy to identify as Asian.	Overall, I am happy to be an Asian person.	Overall, I am happy to be an Asian person.	Overall, I am happy to be an Asian person.
If it were possible, I would not choose to be Asian.	Sometimes I wish I were not Asian.	I have negative feelings about being Asian.	In general, I have negative feelings about being Asian.	In general, I have negative feelings about being Asian.
I am grateful that I was born Asian.	In general, I have positive feelings about being Asian.	In general, I have positive feelings about being Asian.	In general, I have positive feelings about being Asian.	In general, I have positive feelings about being Asian.
I wish I were not Asian.		I have mixed feelings about being Asian.**	Overall, I have negative associations with being Asian.	Overall, I have negative associations with being Asian.
I have positive feelings about being Asian.				I feel a sense of pride in being Asian.
<i>Public Regard (k = 7)</i>	<i>Public Regard (k = 6)</i>	<i>Public Regard (k = 7)</i>	<i>Public Regard (k = 7)</i>	<i>Public Regard (k = 7)</i>
In general, Asian people are respected in society.	In general, Asian people are respected in US society.	In general, Asian people are respected in US society.	In general, Asian people are respected in US society.	In general, Asian people are respected in US society.
Asian people are well- liked by society.	Asians are well-liked in US society.	Asians are well-liked in US society.	Asians are well-liked in US society.	Asians are well-liked in US society.

Asian people are valued in society.	Overall, Asian people are valued in US society.	Overall, Asian people are valued in US society.	Overall, Asian people are valued in US society.	Overall, Asian people are valued in US society.
Overall, Asians are viewed in a positive light.	Overall, Asians are viewed in a positive light.	Overall, Asians are viewed in a positive light.	Overall, Asians are viewed in a positive light.	Overall, Asians are viewed in a positive light.
Other people see Asians positively.	In general, other people see Asians positively.	In general, other people tend to view Asians favorably.	In general, people tend to view Asians favorably.	In general, people tend to view Asians favorably.
Asian people are respected by the broader society.	Asian people as a whole are generally respected by the broader US society.	Other people generally respect Asians.	People generally respect Asians.	People generally respect Asians.
In general, society views Asian people as worthy.		In general, others think that Asians are undesirable. **	In general, people think of Asians as unfavorable.	In general, people think of Asians as unfavorable.
<i>Explicit Importance (k = 10)</i>	<i>Explicit Importance (k = 8)</i>	<i>Absolute Importance (k = 6)</i>	<i>Absolute Importance (k = 6)</i>	<i>Absolute Importance (k = 7)</i>
In general, being Asian is an important part of my self-image.	In general, being Asian is an important part of my self-image.	In general, being Asian is an important part of my self-image.	In general, being Asian is an important part of my self-image.	To understand who I am as a person, it is important to know that I am Asian.
My Asian identity is a central part of my self-concept.	My Asian identity is a central part of how I see myself.	To understand who I am as a person, it is important to know that I am Asian.	To understand who I am as a person, it is important to know that I am Asian.	Being Asian is an important part of who I am.
To understand who I am as a person, it is	To understand who I am as a person, it is	Being Asian is an important part of who I am.	Being Asian is an important part of who I am.	Being Asian is significant to who I am as a person.

important to know that I am Asian.

important to know that I am Asian.

Being Asian is an important part of who I am.

Being Asian is an important part of who I am.

Being Asian is significant to who I am as a person.

Being Asian is significant to who I am as a person.

Being Asian is a core part of my sense of self.

Being Asian is a very important aspect of my life.

Being Asian is a very important aspect of my life.

Being Asian is a core part of my sense of self.

Being Asian is a core part of my sense of self.

My Asian identity is central to who I am.

My Asian identity is a significant part of who I am.

My Asian identity is a significant part of who I am.

My Asian identity is central to who I am.

My Asian identity is central to who I am.

If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.

I would not be me if I were not Asian.

My Asian identity is a key part of my overall sense of self.

When considering all my identities, my Asian identity stands out as the most significant to my sense of self.

My Asian identity is important to how I see myself.

I would not be me if I were not Asian.

Being Asian is an important reflection of how I see myself.

My Asian identity is a key part of my overall sense of self.

<i>Implicit Importance (k = 4)</i>	<i>Implicit Importance (k = 8)</i>	<i>Comparative Importance (k = 7)</i>	<i>Comparative Importance (k = 7)</i>	<i>Comparative Importance (k = 5)</i>
Of all my identities, my Asian identity is one of the most important to me.	Of all my identities, my Asian identity is one of the most important to me.	Of all my identities, my Asian identity is one of the most important to me.	Of all my identities, my Asian identity is one of the most important to me.	My Asian identity is one of the most important identities I hold.
My other identities (e.g., ethnicity, gender, occupation, sexuality, etc.) are more important to me than my Asian identity.	My gender identity is more important to me than my Asian identity.	If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	Among my different identities, my Asian identity is least significant in shaping me as a person.
If I had to rank the importance of my various identities (e.g., race, ethnicity, gender, occupation, sexuality, etc.), I would put my Asian identity near the top.	My professional/occupational identity is more important to me than my Asian identity.	My Asian identity is one of the most important identities I hold.	My Asian identity is one of the most important identities I hold.	Compared to my other identities, my Asian identity is less important to me.
My Asian identity is one of the most important identities I hold.	My sexual orientation is more important to me than my Asian identity.	Among my different identities, my Asian identity is least	Among my different identities, my Asian identity is least	My Asian identity ranks lower in importance compared to my other identities.

		significant in shaping me as a person. **	significant in shaping me as a person.	
	My religious identity is more important to me than my Asian identity.	Compared to my other identities, my Asian identity is less important to me. **	Compared to my other identities, my Asian identity is less important to me.	My Asian identity is fully incorporated in my sense of who I am as a person.
	My ethnic group identity is more important to me than my Asian identity.	When considering all my identities, my Asian identity stands out as the most significant to my sense of self. **	When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	
	If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	My Asian identity ranks lower in importance compared to my other identities. **	My Asian identity ranks lower in importance compared to my other identities.	
	My Asian identity is one of the most important identities I hold.			
<i>Mutual Fate (k = 6)</i>	<i>Mutual Fate (k = 7)</i>	<i>Mutual Fate (k = 6)</i>	<i>Mutual Fate (k = 6)</i>	<i>Mutual Fate (k = 3)</i>
I think a lot about how my life will be affected because of being Asian.	I think about how my life will be affected because of being Asian.	In the US, I am treated the same as most Asian people.	In the US, I am treated the same as most Asian people.	I am affected by how others treat Asian people.

My destiny is tied to the destiny of other Asian people.	I think about how my life is affected because I am Asian.	I am affected by how others treat Asian people.	I am affected by how others treat Asian people.	My ability to succeed depends on the broader success of Asian people in the US.
What happens to Asian people affects what happens in my life.	My future will be similar to most other Asian peoples' futures..	I am impacted by events that affect Asian people in the US.	I am impacted by events that affect Asian people in the US.	I am personally affected by policies related to Asian people.
When things get better for Asian people, then things will get better for me.	What generally happens to Asian people in this country affects what happens in my life.	My ability to succeed depends on the broader success of Asian people in the US.	My ability to succeed depends on the broader success of Asian people in the US.	
How I experience the world is directly related to being Asian.	If things get better for Asian people in this country, then things will get better for me.	I am personally affected by policies related to Asian people.	I am personally affected by policies related to Asian people.	
My fate and my future are bound up with that of other Asian people.	How I experience the world is directly related to being Asian.	My personal struggles are connected to the struggles that other Asian people in the US face.	My personal struggles are connected to the struggles that other Asian people in the US face.	
	My fate and my future are connected to other Asian peoples' fate and futures.			

<i>Affective Commitment</i> (<i>k</i> = 6)	<i>Affective Commitment</i> (<i>k</i> = 6)	<i>Affective Commitment</i> (<i>k</i> = 7)	<i>Affective Commitment</i> (<i>k</i> = 7)
I have a strong sense of belonging to other Asian people.	I feel a sense of belonging to most other Asian people.	I feel a strong attachment to other Asian people.	I feel a strong attachment to other Asian people.

I feel a strong attachment to other Asian people.	I feel a strong attachment to most other Asian people.	In general, I feel connected to other Asian people.	In general, I feel connected to other Asian people.	
I feel connected to other Asian peoples in general.	In general, I feel connected to most other Asian people.	I feel at home with other Asian people, even if they are not in the same ethnic group.	I feel at home with other Asian people, even if they are not in the same ethnic group.	
I feel at home with other Asian people, even if they are not in the same ethnic group.	I feel at home with other Asian people, even if they are not in the same ethnic group.	I feel a strong bond with other Asian people.	I feel a strong bond with other Asian people. [†]	
I feel a strong bond with other Asian peoples.	I feel a strong bond with other Asian people.	I tend to feel emotionally close with other Asian people.	I tend to feel emotionally close with other Asian people.	
I feel emotionally close to other Asian people.	I tend to feel emotionally close with other Asian people.	I feel a sense of pride in being Asian.	I feel a sense of pride in being Asian.	
		I feel a strong sense of belonging with other Asians.**	I feel a strong sense of belonging with other Asians.	
<i>Interconnection (k = 6)</i>	<i>Interconnection (k = 6)</i>	<i>Interconnection (k = 6)</i>	<i>Interconnection (k = 6)</i>	<i>Interconnection (k = 4)</i>
If someone said something bad about Asian people, I would feel as if they had said it about me.	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.

When people compliment Asian people, it feels like they are complimenting me personally.	If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	When Asian people are threatened, I feel personally threatened.
When Asian people are threatened, I feel personally threatened.	When Asian people are threatened, I feel personally threatened.	When Asian people are threatened, I feel personally threatened.	When Asian people are threatened, I feel personally threatened.	If a story in the media portrayed Asians in a negative light, I would feel embarrassed.
I have incorporated my Asian identity into my unique personality.	I have incorporated my Asian identity into my personality.	My Asian identity is fully incorporated in my sense of who I am as a person.	My Asian identity is fully incorporated in my sense of who I am as a person.	I am impacted by events that affect Asian people in the US.
I feel like I have blended my Asian identity with my unique personal qualities.	Overall, I feel like I have blended my Asian identity with my unique personal qualities (e.g., personality).	It would be impossible to differentiate between "me" and "Asian."	It would be impossible to differentiate between "me" and "Asian."	
When I talk about Asian people, I usually say 'we' rather than 'they'.	When I think about Asian people, I usually think of a collective group that includes myself.	If a story in the media portrayed Asians in a negative light, I would feel embarrassed.**	If a story in the media portrayed Asians in a negative light, I would feel embarrassed.	
<i>Social Embeddedness</i> ($k = 7$)	<i>Social Embeddedness</i> ($k = 6$)	<i>Social Embeddedness</i> ($k = 10$)	<i>Social Embeddedness</i> ($k = 10$)	<i>Social Embeddedness</i> ($k = 7$)
Most of my social relationships are with people who are Asian.	Most people I socialize with are also Asian.	Most people I socialize with are Asian.	Most people I socialize with are Asian. [†]	Most of my close friends are Asian.

During an average week, I interact with Asian people often.	Most of my close friendships are with Asian people.	Most of my close friends are Asian.	Most of my close friends are Asian.	I tend to spend my free time with Asian people.
Most of my close friendships are with Asian people.	I often spend time with other Asian people.	I tend to spend my free time with Asian people.	I tend to spend my free time with Asian people.	Most of my activities (e.g., work, leisure, volunteer) involve Asian people.
I often choose to hang out with other Asian people.	I tend to spend my free time with Asian people.	It's important to me to have social relationships with Asian people.	It's important to me to have social relationships with Asian people.	Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.
I tend to spend my free time with other Asian people.	I tend to prefer romantic partners who are Asian.	Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	Most of my everyday social connections are with Asian people.
I tend to prefer romantic partners who are Asian.	It's important to me to have social relationships with Asian people.	Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	My social life primarily involves Asian people.
It's important to me to have social relationships with Asian people.		Most of my everyday social connections are with Asian people.**	Most of my everyday social connections are with Asian people.	I have few Asian social contacts.
		My social life primarily involves Asian people.**	My social life primarily involves Asian people.	
		I have few Asian social contacts. **	I have few Asian social contacts.	

		I have very few social ties with Asians. **	I have very few social ties with Asians.		
<i>Behavioral Involvement</i> (<i>k</i> = 8)	<i>Behavioral Involvement</i> (<i>k</i> = 7)	<i>Behavioral Involvement</i> (<i>k</i> = 9)	<i>Behavioral Involvement</i> (<i>k</i> = 13)	<i>Behavioral Involvement</i> (<i>k</i> = 5)	
I listen to and/or seek out music from Asian artists.	I tend to listen to and/or seek out music from Asian artists.	I listen to music by Asian artists.	I listen to music by Asian artists.	I closely follow news stories that involve Asian people.	
During elections, I think about the candidate's record on racial and cultural issues that affect Asian people.	I pay attention to news stories that affect Asian people.	I closely follow news stories that involve Asian people.	I closely follow news stories that involve Asian people.	I seek out movies or TV shows that highlight Asian cultures.	
I pay attention to articles and news stories that deal with race and cultural issues specific to Asian people.	I seek out movies or TV shows that highlight Asian cultures.	I seek out movies or TV shows that highlight Asian cultures.	I seek out movies or TV shows that highlight Asian cultures.	When possible, I prefer to buy products from Asian brands.	
I seek out movies or TV shows with Asian lead character(s).	I try to seek out Asian people as friends.	I attend community events that highlight Asian cultures.	I attend community events that highlight Asian cultures.	I seek out movies or TV shows that have Asian characters.	
I try to seek out Asian people as friends.	When considering a new job, I typically look into the company's Asian representation.	I prefer to cook Asian food when eating at home.	I prefer to cook Asian food when eating at home.	For personal reading, I seek out novels/books written by Asian authors.	
When considering a new job, I typically look into the company's Asian representation.	I participate in clubs and/or community events that celebrate Asian culture.	When available, I shop at Asian grocery markets.	When available, I shop at Asian grocery markets.		

I participate in clubs and/or community events that celebrate Asian culture.	I prefer to cook Asian food when eating at home.	When possible, I prefer to buy products from Asian brands.	When possible, I prefer to buy products from Asian brands.
I prefer to cook Asian food when eating at home.		I wear clothing associated with Asian cultures.**	I wear clothing associated with Asian cultures.
		I display Asian cultural objects in my home.**	I display Asian cultural objects in my home.
			I seek out movies or TV shows that have Asian characters.
			I attend community events that showcase Asian speakers and/or performers.
			When possible, I volunteer at community and/or cultural events that support Asian people.
			For personal reading, I seek out novels/books written by Asian authors.

Note. ** indicates items added via preliminary review of one SME. † indicates items removed prior to running EFA ($k=83$; due to item redundancy or falling < 2 standard deviations below mean total item standard deviations).

APPENDIX B

PILOT TESTING INTERVIEW PROCEDURE

For pilot test participants who agreed to a follow-up interview, individuals were asked to schedule an available 20-minute window of time using the platform Calendly. At the start of each interview, participants were given a refresher on the purpose for the overall project, their role in the pilot test study, and were asked to give consent for recording the audio of the interview. The researcher then went through each Asian identity item the participant had been randomly assigned, with a particular focus on the items that were flagged (e.g., items where a participant strongly agreed that “this item might be perceived as threatening, offensive, or harmful to a research participant”). Because all participants were randomly assigned to different items, interviews were somewhat unstructured. In the case of most flagged items, the researcher asked the participant for clarification on a rating or elaboration on qualitative comment that was left. When possible, the researcher also asked if the participant had suggestions for improvement. Cameras were off for the entirety of the interview. Once the interview was complete, participants were given the opportunity to ask any questions to the researcher and thanked for their time in the survey as well as the interview.

APPENDIX C

CONTENT VALIDATION Q-SORT ITEM BREAKDOWN: MODERATE ITEM

EDITS

Table C1*Summary of Edits Made to Moderate-Scoring Items in Q-Sort Content Validation Phase*

Subdimension	Strong/Very Strong items (psa > .75 and csv > .50)	Moderate items (psa=.60-.74 and csv=.21-.49)	Edits Made to Moderate Items
Self-categorization			
Self-definition: Degree to which an individual categorizes themselves into a particular group (i.e., Asian).	1. I identify as Asian. 2. I would categorize myself as Asian. 3. I think of myself as Asian.		
Prototypicality: Degree to which an individual sees themselves as a prototypical member of the group.	7. I'm quite different from the prototypical Asian person. 11. I am similar to most other Asians.	6. My personality would be considered typical of most Asians. (n=11); 64% selfcat, 18% behinv, 9% eval, 9% import	6. No changes
Perceived certainty: Level of certainty an individual has in placing themselves into that group.	12. My Asian identity is very clear to me. 13. I often have trouble classifying myself as Asian.		

	14. I feel certain I belong to the Asian community.		
	15. I know that I am a member of the Asian population.		
	16. I am confused about whether I would classify myself as Asian.		
Evaluation			
Private regard: The positive or negative perception an individual has of their own (Asian) identity.	21. In general, I have positive feelings about being Asian.	18. In general, I am happy to identify as Asian. (n=9); 67% eval, 33% selfcat	18. In general, I am happy to identify as Asian. → I feel good about being Asian.
Public regard: How an individual thinks others (e.g., general public) perceive their identity group.	23. Asians are well-liked in US society.	22. In general, Asian people are respected in US society. (n=9); 67% eval, 22% embed, 11% attach	22. No change
	25. Overall, Asians are viewed in a positive light.	24. Overall, Asian people are valued in US society. (n=12); 67% eval, 17% attach, 8% embed, 8% import	24. No change
	26. In general, other people see Asians positively.		
	27. Asian people as a whole are generally respected by the broader US society.		
Importance			
Explicit importance: The personal value of an identity group (i.e., Asian) for both the		28. In general, being Asian is an important part of my self-image. (n=11); 73% import, 27% selfcat	32. Being Asian is a very important aspect of my life.

individual's overall
sense of self.

→ Being Asian is
a core part of my
sense of self.

30. To understand who I am
as a person, it is important
to know that I am Asian.
(n=11); 64% import, 27%
selfcat, 9% eval

31. Being Asian is an
important part of who I am.
(n=10); 70% import, 10%
attach, 10% embed, 10%
selfcat

32. Being Asian is a very
important aspect of my life.
(n=9); 67% import, 11%
embed, 11% eval, 11%
selfcat

Implicit importance:
Where an identity
ranks in comparison to
other identities that the
individual holds.

36. Of all my
identities, my Asian
identity is one of the
most important to me.

37. My gender identity is
more important to me than
my Asian identity. (n=12);
67% import, 25% selfcat,
8% eval

Items 37, 38, 39,
40, 41 were
removed. New
items were used
(see Appendix A).

40. My religious
identity is more
important to me than
my Asian identity.

38. My
professional/occupational
identity is more
important to me than my
Asian identity. (n=11); 64%
import, 9% selfcat, 9%
attach, 9% behinv, 9% eval

41. My ethnic group
identity is more
important to me than
my Asian identity.

39. My sexual orientation is
more important to me than
my Asian identity. (n=8);
75% import, 12.5% behinv,
12.5% selfcat

42. If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.

43. My Asian identity is one of the most important identities I hold.

Attachment

Mutual fate:

The perceived commonalities in the ways an individual and other identity group members are treated in society.

Affective commitment: The emotional involvement an individual has with their (Asian) identity group.

52. I feel a strong attachment to most other Asian people.

53. In general, I feel connected to most other Asian people.

54. I feel at home with other Asian people, even if they are not in the same ethnic group.

56. I tend to feel emotionally close with other Asian people.

55. I feel a strong bond with other Asian people. (n=12); 67% attach, 25% embed, 8% selfcat

55. No change

Interconnection: The degree to which an individual's sense of self is interconnected with the group.

57. If someone spoke negatively about Asian people, I would feel as if they were speaking about me. (n=10); 70% attach,

57. No change

10% behinv, 10% eval, 10% selfcat

59. When Asian people are threatened, I feel personally threatened. (n=10); 70% attach, 10% behinv, 10% eval, 10% selfcat

Social embeddedness

Social embeddedness: The degree to which an individual's everyday ongoing social relationships involve the individual's identity group (i.e., Asian).

63. Most people I socialize with are also Asian.

64. Most of my close friends are also friendships are with Asian people. (n=11); 73% embed, 9% attach, 9% behinv, 9% selfcat

64. Most of my close friends are also friendships are with Asian people. → Most of my close friends are Asian.

66. I tend to spend my free time with Asian people. (n=10); 70% embed, 20% attach, 10% behinv

66. No change

68. It's important to me to have social relationships with Asian people. 69% embed, 23% import, 8% attach

68. No change

Behavioral Involvement

Behavioral involvement: The degree to which a person engages in actions and makes choices that directly implicate the individual's identity group (i.e., Asian).

69. I listen to and/or seek out music from Asian artists.

71. I seek out movies or TV shows that highlight Asian culture. (n=11); 64% behinv, 18% eval, 9% embed, 9% import

71. No change

75. I prefer to cook Asian food when eating at home. 75. No change
(n=10); 70% behinv, 20% selfcat, 10% attach

APPENDIX D

SME CONTENT VALIDATION: SUMMARY OF ITEM-LEVEL EVALUATIONS

Table D1.*SME Content Validation: Summary of Item-Level Evaluations*

Item	Mean (SD) - Relevant scope & focus?	Mean (SD) - Important for capturing?
Self-definition		
I identify as Asian.	4.4 (1.3)	4.4 (1.3)
I would categorize myself as Asian.	4.4 (1.3)	4.4 (1.3)
I think of myself as Asian.	4.2 (1.3)	4.2 (1.3)
I consider myself a part of the collective Asian community.	3.6 (1.1)	2.8 (0.8)
I would not consider myself Asian.	4.4 (0.6)	3.6 (1.1)
I rarely think of myself as Asian.	3.8 (1.1)	3.6 (1.1)
Prototypicality		
My values are typical of most Asians.	3.0 (1.2)	2.8 (0.8)
My personality would be considered typical of most Asians.	3.2 (1.3)	2.8 (0.8)
I'm quite different from the prototypical Asian person.	4.2 (0.8)	3.8 (0.8)
I am quite similar to the typical Asian person.	3.8 (1.3)	3.4 (1.14)
I would not consider myself a typical Asian person.	4.4 (0.9)	3.8 (0.8)
I am pretty "stereotypically Asian."	3.0 (1.2)	3.3 (1.5)
Perceived certainty		
It is clear to me that I am Asian.	3.4 (1.3)	3.4 (1.5)
I am uncertain about classifying myself as Asian.	4.6 (0.6)	4.0 (1.2)
I feel certain I am an Asian person.	4.0 (1.4)	3.6 (1.5)
I know for sure that I am Asian.	4.2 (1.3)	3.2 (1.1)
I sometimes doubt whether I should be classified as Asian.	4.6 (0.6)	4.0 (0.7)
I am certain I identify as Asian.	3.8 (1.6)	3.4 (1.5)
I have no doubt that I am an Asian person.	3.8 (1.9)	3.5 (1.7)
I question whether I should be considered Asian.	4.3 (0.5)	4.3 (0.5)

Private regard		
In general, I like being Asian.	3.8 (1.6)	3.6 (1.5)
I feel good about being an Asian person.	3.8 (1.6)	3.8 (1.6)
Overall, I am happy to be an Asian person.	4.0 (1.4)	3.6 (1.3)
I have negative feelings about being Asian.	3.4 (1.8)	3.0 (1.9)
In general, I have positive feelings about being Asian.	4.0 (1.4)	3.8 (1.3)
I have mixed feelings about being Asian.	3.4 (1.8)	3.4 (1.8)
Public regard		
In general, Asian people are respected in US society.	4.2 (0.8)	3.6 (1.5)
Asians are well-liked in US society.	4.0 (1.0)	3.4 (1.5)
Overall, Asian people are valued in US society.	4.2 (0.8)	3.6 (1.5)
Overall, Asians are viewed in a positive light.	4.6 (0.9)	4.4 (0.9)
In general, other people tend to view Asians favorably.	4.6 (0.9)	4.2 (0.8)
Other people generally respect Asians.	4.4 (0.9)	4.0 (1.2)
In general, others think that Asians are undesirable.	3.8 (1.5)	3.5 (1.3)
Absolute importance		
In general, being Asian is an important part of my self-image.	4.4 (1.3)	4.3 (1.5)
To understand who I am as a person, it is important to know that I am Asian.	3.8 (1.6)	3.5 (1.7)
Being Asian is an important part of who I am.	4.2 (1.3)	4.3 (1.5)
Being Asian is significant to who I am as a person.	3.6 (1.7)	3.3 (1.7)
Being Asian is a core part of my sense of self.	3.4 (1.82)	4.0 (2.0)
My Asian identity is central to who I am.	3.8 (1.9)	3.8 (1.9)
Comparative importance		
Of all my identities, my Asian identity is one of the most important to me.	4.0 (2.0)	4.0 (2.0)
If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	4.0 (2.0)	3.8 (1.9)
My Asian identity is one of the most important identities I hold.	4.0 (2.0)	3.5 (1.7)
Among my different identities, my Asian identity is least significant in shaping me as a person.	4.8 (0.5)	4.5 (1.0)
Compared to my other identities, my Asian identity is less important to me.	5.0 (0.0)	4.5 (1.0)

When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	3.8 (1.9)	3.8 (1.9)
My Asian identity ranks lower in importance compared to my other identities.	4.8 (0.5)	4.5 (1.0)
Mutual fate		
In the US, I am treated the same as most other Asian people.	4.0 (1.0)	3.8 (0.8)
I am affected by how others treat Asian people.	4.0 (1.2)	3.8 (1.1)
I am impacted by events that affect Asian people in the US.	4.2 (0.5)	4.2 (0.5)
My ability to succeed depends on the broader success of Asian people in the US.	4.2 (0.8)	4.0 (1.0)
I am personally affected by policies related to Asian people.	4.2 (0.8)	4.2 (0.8)
My personal struggles are connected to the struggles that other Asian people in the US face.	4.2 (0.8)	4.2 (0.8)
Affective commitment		
I feel a strong attachment to other Asian people in the US.	4.0 (1.2)	4.0 (1.2)
In general, I feel connected to other Asian people in the US.	4.0 (1.2)	3.6 (1.1)
I feel at home with other Asian people, even if they are not in the same ethnic group.	3.6 (1.1)	3.6 (1.1)
I feel a strong bond with other Asian people.	4.0 (1.2)	3.8 (1.1)
I tend to feel emotionally close with other Asian people.	3.8 (1.1)	4.0 (1.2)
I feel a sense of pride in being Asian.	2.8 (1.8)	2.8 (1.8)
I feel a strong sense of belonging with other Asians.	4.0 (1.4)	4.0 (1.4)
Interconnection		
If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	4.4 (0.9)	4.4 (0.9)
If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	4.2 (1.3)	4.2 (1.3)
When Asian people are threatened, I feel personally threatened.	4.2 (0.8)	4.0 (0.7)
My Asian identity is fully incorporated in my sense of who I am as a person.	3.0 (1.6)	3.0 (1.8)

It would be impossible to differentiate between "me" and "Asian."	3.5 (1.9)	3.3 (2.1)
If a story in the media portrayed Asians in a negative light, I would feel embarrassed.	3.8 (1.3)	3.5 (1.3)
Social embeddedness		
Most people I socialize with are also Asian.	4.2 (1.3)	4 (1.2)
Most of my close friends are also Asian.	4.2 (1.3)	4 (1.2)
I tend to spend my free time with Asian people.	4.2 (1.3)	4 (1.2)
It's important to me to have social relationships with Asian people.	3.6 (1.5)	3.2 (1.3)
Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	4.2 (1.3)	3.6 (1.5)
Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	4.2 (1.3)	3.8 (1.3)
Most of my everyday social connections are with Asian people.	3.8 (1.6)	3.8 (1.6)
My social life primarily involves Asian people.	3.8 (1.6)	3.8 (1.3)
I have few Asian social contacts.	4.0 (1.2)	3.6 (1.3)
I have very few social ties with Asians.	4.3 (0.6)	4.0 (1.2)
Behavioral involvement		
I listen to music by Asian artists.	3.8 (1.6)	3.2 (1.5)
I closely follow news stories that involve Asian people.	3.4 (1.8)	3.0 (1.6)
I seek out movies or TV shows that highlight Asian cultures.	3.8 (1.6)	3.2 (1.49)
I attend community events that highlight Asian cultures.	3.4 (1.8)	3.2 (1.8)
I prefer to cook Asian food when eating at home.	3.6 (1.5)	3.4 (1.5)
When available, I shop at Asian grocery markets.	3.4 (1.5)	3.0 (1.4)
When possible, I prefer to buy products from Asian brands.	3.4 (1.5)	3.0 (1.6)
I wear clothing associated with Asian cultures.	3.8 (1.9)	3.3 (1.7)
I display Asian cultural objects in my home.	3.5 (1.7)	3.3 (1.7)

APPENDIX E

ITEM LOADINGS FOR EIGHT- AND NINE-FACTOR EFA MODELS

Table F1.*Item-Factor Loadings for Eight-Factor EFA Model (k=66 items)*

Factor Names Items		Item Factor Loadings							
		F1	F2	F3	F4	F5	F6	F7	F8
Interconnec- tion	I am affected by how others treat Asian people.	0.75							
	I am impacted by events that affect Asian people in the US.	0.66							
	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	0.70							
	If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	0.56				0.33			
	When Asian people are threatened, I feel personally threatened.	0.84							
	If a story in the media portrayed Asians in a negative light, I would feel embarrassed.	0.61							
	I am personally affected by policies related to Asian people.	0.54							
	My personal struggles are connected to the struggles that other Asian people in the US face.	0.49							
	I seek out movies or TV shows that have Asian characters.	0.42							
I identify as Asian.		0.72							

Self-identification	I would categorize myself as Asian.	0.65	
	I think of myself as Asian.	0.77	
	I would not consider myself Asian.	0.42	0.31
	I rarely think of myself as Asian.	0.48	
	I am uncertain about classifying myself as Asian.	0.67	
	I feel certain I am an Asian person.	0.73	
	I have no doubt that I am an Asian person.	0.76	
	I question whether I should be considered Asian.	0.47	
Private Regard	In general, I like being Asian.	0.69	
	I feel good about being an Asian person.	0.86	
	Overall, I am happy to be an Asian person.	0.76	
	In general, I have positive feelings about being Asian.	0.68	
	In general, I have negative feelings about being Asian.	0.85	
	Overall, I have negative associations with being Asian.	0.66	
	I feel a sense of pride in being Asian.	0.51	0.34
Social Embeddedness	Most of my close friends are Asian.	0.68	
	I tend to spend my free time with Asian people.	0.70	
	Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	0.63	
	Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	0.75	
	Most of my everyday social connections are with Asian people.	0.75	
	My social life primarily involves Asian people.	0.84	

	I have few Asian social contacts.	0.42
	I have very few social ties with Asians.	0.43
	In general, being Asian is an important part of my self-image.	0.46
	To understand who I am as a person, it is important to know that I am Asian.	0.54
	Being Asian is an important part of who I am.	0.63
	Being Asian is significant to who I am as a person.	0.52
	Being Asian is a core part of my sense of self.	0.68
	My Asian identity is central to who I am.	0.47
	Of all my identities, my Asian identity is one of the most important to me.	0.50
Importance	If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	0.51
	My Asian identity is one of the most important identities I hold.	0.59
	Among my different identities, my Asian identity is least significant in shaping me as a person.	0.51
	Compared to my other identities, my Asian identity is less important to me.	0.42
	When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	0.49
	My Asian identity is fully incorporated in my sense of who I am as a person.	0.59
	In general, Asian people are respected in US society.	0.83
Public Regard	Asians are well-liked in US society.	0.84

	Overall, Asian people are valued in US society.	0.83
	Overall, Asians are viewed in a positive light.	0.68
	In general, people tend to view Asians favorably.	0.83
	People generally respect Asians.	0.78
	In general, people think of Asians as unfavorable.	0.71
Proto- typicality	My values are typical of most Asians.	0.44
	My personality would be considered typical of most Asians.	0.75
	I'm quite different from the prototypical Asian person.	0.86
	I am quite similar to the typical Asian person.	0.64
	I would not consider myself a typical Asian person.	0.74
	I consider myself to be "stereotypically Asian."	0.64
	In the US, I am treated the same as most Asian people.	0.41
Behavioral Involvement	I attend community events that highlight Asian cultures.	0.73
	I prefer to cook Asian food when eating at home.	0.44
	I wear clothing associated with Asian cultures.	0.40
	I attend community events that showcase Asian speakers and/or performers.	1.06
	When possible, I volunteer at community and/or cultural events that support Asian people.	0.67
	For personal reading, I seek out novels/books written by Asian authors.	0.41

Note. All factor loadings > .30 are shown. Items that did not load with any factor > .30 were removed for clarity. Factor loadings > .40 are bolded.

Table F2.
Item-Factor Loadings for Nine-Factor EFA Model (k=64 items)

Factor Names	Items	Item Factor Loadings								
		F1	F2	F3	F4	F5	F6	F7	F8	F9
Interconnec- tion	I am affected by how others treat Asian people.	1.06								
	I am impacted by events that affect Asian people in the US.	0.69								
	If someone spoke negatively about Asian people, I would feel as if they were speaking about me.	0.57			0.37					
	When Asian people are threatened, I feel personally threatened.	0.67			0.39					
	I am personally affected by policies related to Asian people.	0.63								
Self- identification	I identify as Asian.		0.77							
	I would categorize myself as Asian.		0.62							
	I think of myself as Asian.		0.75							
	I would not consider myself Asian.		0.44			0.30				
	I rarely think of myself as Asian.		0.44							
	I am uncertain about classifying myself as Asian.		0.59							
	I feel certain I am an Asian person.		0.70							
	I have no doubt that I am an Asian person.		0.70							
	I question whether I should be considered Asian.		0.44							
Social Embedded	Most of my close friends are Asian.			0.66						
	I tend to spend my free time with Asian people.			0.69						

-ness	Most of my activities (e.g., work, leisure, volunteer) involve Asian people.	0.61	
	Most of the people I communicate (e.g., face-to-face, text, call, video call) with on a daily basis are Asian.	0.74	
	Most of my everyday social connections are with Asian people.	0.72	
	My social life primarily involves Asian people.	0.81	
	I have few Asian social contacts.	0.42	
	I have very few social ties with Asians.	0.42	
Mixed	If I had to rank how important my various identities (e.g., ethnicity, gender, occupation, religion, sexuality, etc.) are to me, I would put my Asian identity near the top.	0.58	
	When considering all my identities, my Asian identity stands out as the most significant to my sense of self.	0.60	
	To understand who I am as a person, it is important to know that I am Asian.	0.51	0.33
	If someone spoke highly of Asian people, I would feel as if they were complimenting me personally.	0.60	
	If a story in the media portrayed Asians in a negative light, I would feel embarrassed.	0.35 0.54	
Private Regard	In general, I like being Asian.	0.66	
	I feel good about being an Asian person.	0.83	
	Overall, I am happy to be an Asian person.	0.72	
	In general, I have positive feelings about being Asian.	-0.32 0.67	
	In general, I have negative feelings about being Asian.	0.83	
	Overall, I have negative associations with being Asian.	0.64	

	I feel a sense of pride in being Asian.	0.49	0.33
Public Regard	In general, Asian people are respected in US society.	0.81	
	Asians are well-liked in US society.	0.81	
	Overall, Asian people are valued in US society.	0.82	
	Overall, Asians are viewed in a positive light.	0.70	
	In general, people tend to view Asians favorably.	0.80	
	People generally respect Asians.	0.70	
	In general, people think of Asians as unfavorable.	0.68	
Proto- typicality	My values are typical of most Asians.	0.44	
	My personality would be considered typical of most Asians.	0.74	
	I'm quite different from the prototypical Asian person.	0.84	
	I am quite similar to the typical Asian person.	0.63	
	I would not consider myself a typical Asian person.	0.71	
	I consider myself to be "stereotypically Asian."	0.60	
Importance	Of all my identities, my Asian identity is one of the most important to me.	0.49	
	My Asian identity is one of the most important identities I hold.	0.63	
	Among my different identities, my Asian identity is least significant in shaping me as a person.	0.77	
	Compared to my other identities, my Asian identity is less important to me.	0.46	
	Compared to my other identities, my Asian identity is less important to me.	0.49	

	In general, being Asian is an important part of my self-image.	0.30	0.41
	Being Asian is an important part of who I am.		0.59
	Being Asian is significant to who I am as a person.	0.34	0.44
	Being Asian is a core part of my sense of self.	0.40	0.55
	My Asian identity is central to who I am.		0.43
	My Asian identity is fully incorporated in my sense of who I am as a person.		0.62

	I attend community events that highlight Asian cultures.		0.72
	I prefer to cook Asian food when eating at home.		0.42
	I wear clothing associated with Asian cultures.		0.41
Behavioral Involvement	I attend community events that showcase Asian speakers and/or performers.		1.04
	When possible, I volunteer at community and/or cultural events that support Asian people.		0.63
	For personal reading, I seek out novels/books written by Asian authors.		0.40

Note. All factor loadings > .30 are shown. Items that did not load with any factor > .30 were removed for clarity. Factor loadings > .40 are bolded.