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What Do We Mean by “Ethnicity” and “Race”? A Consensual Qualitative Research Investigation of Colloquial Understandings

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Abstract: Lack of clarity and questionable congruence between researcher and participant understandings of ethnicity and race challenge the validity and impact of research utilizing these concepts. We aimed to both elucidate the multiple meanings that research participants in the United States might bring to questions about ethnicity and race and examine their relation to formal conceptualizations of these variables. We used consensual qualitative research-modified analyses to conduct thematic content analysis of 151 responses to open-ended survey questions about meanings of ethnicity and race. Participants included a racially diverse sample of 53 males, 87 females, and 11 unidentified gender with a mean age of 28.71 years. Results indicated that the most frequent colloquial meanings of ethnicity included origin, culture, ancestry, related or similar to race, social similarity, religion, and identity. The most frequent colloquial meanings of race included physical characteristics, ethnicity, origin, social grouping, ancestry, and imposed categorization. Results also illustrated how participants approached defining ethnicity and race. Results support the acknowledged and critiqued colloquial confounding of ethnicity and race and indicate a lack of agreed upon meaning between lay representations/meanings and formal meanings used by social scientists. This incongruence threatens valid operationalizations for research and challenges our ability to use these concepts in interventions to promote social justice and psychological health.

Keywords: race; racialization; ethnicity; social representations; cultural representations; consensual qualitative research; validity; research methods

1. Introduction

Both ethnicity and race are social constructions.¹ This means that the meanings of both concepts are developed within a given society’s cultural context (Mukhopadhyay et al. 2014). As social constructions,

¹ The complexity of the meaning of “social construction” generally, the historical development of meanings of ethnicity and race, and their functions or purpose in relation to creating hierarchies of power, privilege, and oppression specifically are beyond the scope of this article. Numerous authors (e.g., Cornell and Hartmann 2004; Fredrickson 2015; Guthrie 2004; Hattam 2004; Saperstein and Penner 2013) have considered some aspects of the historical development of meanings of race (and racism) and ethnicity, with somewhat varied emphases on function, meaning, differentiation, or effects on individuals, groups, or societies. Furthermore, the meanings of ethnicity and race as social constructions are created and maintained at multiple ecological levels. Thus, individuals have personal meanings of race and ethnicity as abstract concepts and as applied personalized identities (e.g., ethnic identity; Phinney and Ong 2007). Groups that are categorized within these concepts develop group meanings reflected in social identities (see overview of sociological and psychological approaches to social identities in (Thoits and Virshup 1997)). These categories become institutionalized, not only in social discourse, but also in formal institutions that impose demands of a priori determined self-categorization (e.g., the U.S. census categories) that have and use a priori meanings and associations to justify (implicitly or explicitly) institutional practices (e.g., immigration

their meanings and the boundaries of categories within each of these categories are socially developed and change in relation to social discourse across historical time and context. One could, therefore, argue that there is no real meaning to these concepts or categories, and that social scientists should therefore resist using them. However, most social scientists agree that these concepts are relevant to lived experience in ways that have significant psychological, interpersonal, and material impact ([American Anthropological Association 1998](#); [American Sociological Association 2003](#); [American Psychological Association 2019](#)), that research into the experiences and effects related to these variables is important, and that such research is a foundation for effectively challenging oppression and inequity. The question therefore becomes not *whether* we engage with these concepts but *how* can we do so in a way that guides us to more robust and valid research?

Although the social and natural sciences have clearly defined and differentiated ethnicity and race (e.g., [American Anthropological Association 1998](#); [American Psychological Association 2019](#); [Markus 2008](#); [Omi and Winant 1994](#); [Smedley and Smedley 2005](#); [Wang and Sue 2005](#)), numerous scholars have noted that there continues to be widespread misunderstanding and confounding about the meanings of these concepts amongst the general public, as well as in how they are operationalized in social science research (e.g., [American Sociological Association 2003](#); [Eisenhower et al. 2014](#); [Markus 2008](#); [McGoldrick et al. 2005](#); [Smedley and Smedley 2005](#); [Tate and Audette 2001](#); [Winant 2000](#)). This confusion and confounding create a disconnection between psychologists and other social science researchers seeking to understand and address racial disparities and the public with whom they are researching, educating, or intervening. Without a shared understanding of meaning between researchers and research participants, variables cannot be accurately assessed, calling into question the validity of research into experiences related to race and racism, such as mental health disparities ([Eisenhower et al. 2014](#); [Helms et al. 2005](#); [Markus 2008](#); [Omi and Winant 1994](#); [Smedley and Smedley 2005](#); [Tate and Audette 2001](#); [Winant 2000](#)). A more thorough awareness of the social representations and colloquial understandings of ethnicity and race will not only contribute to increasing validity in research but also facilitate the creation of more effective educational and psychological interventions to address social inequities and racism.

Ethnicity is a multifaceted, dynamic concept that develops and strengthens relationships through the formation of communities coming together around *cultural similarity* ([American Anthropological Association 1998](#); [Markus 2008](#); [McGoldrick et al. 2005](#); [Omi and Winant 1994](#); [Smedley and Smedley 2005](#)). Culture is understood to be learned and interpersonally or socially transmitted and subject to change over time and context ([Markus 2008](#); [National Institute of Health NIH](#); [Smedley and Smedley 2005](#)), with ethnic culture referencing a specific type of culture related to geographical and historical connection. Although discrimination between groups based on ethnicity is not uncommon, ethnic identity, affiliation, or categorization is primarily defined and chosen by the group and/or individuals within the group and frequently provides a positive sense of belonging and inclusion ([McGoldrick et al. 2005](#); [Phinney and Ong 2007](#); [Smedley and Smedley 2005](#)). Ethnicity affects behavior through the learned experience of cultural values, social norms, aesthetics, and so forth, that affect individuals' and groups' self-view, thinking, emotions, and behavior and through the sense of belonging and identity developed through group affiliation (e.g., [Markus 2008](#); [McGoldrick et al. 2005](#); [Omi and Winant 1994](#); [Phinney and Ong 2007](#); [Smedley and Smedley 2005](#)). For example, differences between collectivistic (e.g., Japanese) and individualistic (e.g., United States) culture have been extensively researched (e.g., [Markus and Kitayama 1991](#)). These cultural affiliations are not inherently related to race or racialization. However, social representations of ethnicity often confound race and ethnicity for various reasons, including obscuring the power basis of race ([Omi and Winant 1994](#); [Smedley and Smedley 2005](#)).

laws and redlining in housing). Different disciplines focus on different levels of analysis, development, and effect. In this paper, we are most interested in how individuals understand these concepts, rather than with group, society, or historical developments, although we recognize that these cannot, of course, be wholly distinct.

In contrast, race is a social representation created for the purpose of devising social groupings related to physical appearance in order to create and maintain a power hierarchy between groups and enforce systems of privilege, most specifically between White people and people of color (Markus 2008; Smedley and Smedley 2005; Tate and Audette 2001). “Race” sometimes refers to the broad concept but can also refer to the specific categories within the construct, while “racialization” refers to the process of being socialized into the sociosystemic hierarchy and worldview. The effects of race and racialization are imposed, regardless of an individual’s self-view or chosen identity (Markus 2008; Suyemoto 2002). Although historical groupings on the basis of physical appearance may have been simple categories, race evolved after the development of Linnaeus’s taxonomy as hierarchically based, creating a mythical biologicalized basis (de Gobineau 1853) for distinctions in treatment, despite the lack of scientific support for this view (Smedley and Smedley 2005; Tate and Audette 2001; Tucker 2004).

Given that the meaning of racialization has been driven by its function in relation to power and privilege, the boundaries of racialized groups and the basis of race itself have varied, lacked precision, and have frequently reflected erroneous understandings of race and racialization. Race has been erroneously conceptualized as biological, genetically based, and inherited; deterministic of cultural affiliation and/or personal abilities and behaviors; and as a scientifically valid justification for interpersonal and institutional discrimination (Markus 2008; Omi and Winant 1994; Smedley and Smedley 2005; Tate and Audette 2001; Tucker 2004; Winant 2000). Although race is related to social meanings based on physical appearance and physical appearance is largely genetic and biologically determined, this does not mean that race or racial categories, themselves, are actually biologically determined (Marks 1996; Smedley and Smedley 2005; Wang and Sue 2005). Furthermore, the biologicalization of race has itself been a primary way that race has been used to maintain oppression of racialized minorities (American Anthropological Association 1998; Smedley and Smedley 2005).

Race affects behavior primarily through the necessity and effects of negotiating racism (e.g., Harrell et al. 2003; Markus 2008; Omi and Winant 1994; Smedley and Smedley 2005; Winant 2000). Psychological disparities related to race and racism (usually separated from cultural affiliation, acculturation, or culture shock) include general psychological distress, and specific psychiatric symptoms of depression, anxiety, trauma symptoms, and suicidal ideation for Black Americans, Asian Americans, Latinx, and Native Americans (Alamilla et al. 2010; Harrell et al. 2003; Hudson et al. 2016; Hwang and Goto 2008; Lee and Ahn 2011, 2012; Liu and Suyemoto 2016; Pieterse et al. 2010; Pieterse et al. 2012; Sanchez et al. 2018; Tucker et al. 2016; Walker et al. 2017; Whitbeck et al. 2002). Racism, regardless of ethnic cultural experience, also affects social and environmental disparities in multiple areas such as health, education, housing, and income.

Research has explicitly examined the differentiation or intersection of race and ethnicity and supports the conceptual distinction and need to differentiate these concepts in research, in order to make accurate attributions and interpretations. For example, Cokley (2005) found weak relations between components of ethnicity and racial identity variables including internalized racialism in a sample of 201 African American college students. His findings supported a differentiation of racial identity and ethnic identity. Studies have also supported that first generation immigrants have stronger ethnic affiliation and/or less racialized identification (Deaux et al. 2007; Hall and Carter 2006; Wiley et al. 2008) and are therefore less affected by the negative effects of racialization such as stereotype threat (Deaux et al. 2007; Wiley et al. 2008). These type of findings further emphasize the need to consider both ethnicity and racialized experience and variability.

The definitions of ethnicity and race described above reflect the emerging consensus in the literature within social science that explicitly focuses on defining or conceptualizing ethnicity and race. However, an examination of the research that is conducted within social science fields, including (perhaps even especially) within psychology and other health related fields, suggests that the increased clarity and differentiation of ethnicity and race offered by scholars within social science who specialize in these issues is not being consistently applied in research operationalizations. Indeed, there are numerous critiques of the actual operationalizations of ethnicity and race and associated calls for

greater application of known issues in order to promote conceptual clarity and differentiation, ensure construct and external validity, and enable generalization without overaggregation (e.g., [Eisenhower et al. 2014](#); [Ford and Kelly 2005](#); [Helms et al. 2005](#); [Phinney 1996](#); [Smedley and Smedley 2005](#); [Wang and Sue 2005](#)).

In spite of these analyses and the growing body of research pointing to the need to better operationalize race and ethnicity, most health disparities and psychological research continues to measure race and ethnicity primarily or solely by utilizing the revised Directive Number 15 from the U.S. Office of Management and Budget (OMB). Accordingly, researchers minimally use the five race categories of American Indian/Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Black or African American, White, and ethnic categories of Hispanic/Latino and non-Hispanic/Latino. While using these categories as simple descriptors of a sample may (to some) be less objectionable, these categories are often used as primary variables of interest, from which major interpretations are made without further investigation. Optimally, researchers would operationalize the specific components or meanings of race (e.g., racial identity and stereotype threat) or ethnicity (e.g., ethnic affiliation/cultural orientation, ethnic identity, and acculturation/enculturation) ([Helms et al. 2005](#); [Jones 2001](#); [Tsai et al. 2002](#)) that are hypothesized to have significant effects. Minimally, however, a clear differentiation of race and ethnicity within operationalization and associated consideration of why specific categorical options are used in relation to the research question would enable researchers to better understand what specific components warrant further study.

Therefore, one step towards addressing these calls and critiques is better understanding the meanings that research participants are bringing to these concepts, so that we may shape operationalizations of the constructs that increase validity by taking into account these initial colloquial understandings. By “colloquial”, we mean the meanings that the general public might have (lay conceptions), in contrast to formal scientific definitions; that is, when discussing research validity, we use “colloquial” to refer to the meanings that an average research *participant* might have for words or concepts that are not specifically explained in measures and operationalization.

Understanding colloquial meanings of ethnicity and race may also be important in its own right, as research suggests that how individuals interpret and conceptualize ethnicity and race is meaningful in relation to individual psychology and human interaction. The ways in which individuals perceive and understand the concepts of ethnicity and race affects how they develop racial and ethnic identities, both of which are related to interpersonal interactions and mental health ([Helms et al. 2005](#); [Markus 2008](#); [McGoldrick et al. 2005](#); [National Institute of Health NIH](#); [Phinney and Ong 2007](#)). Furthermore, understandings of ethnicity and race as applied to self and others affect the ways in which individuals interact. For example, [Tawa and Kim \(2011\)](#) found that a biologicalized view of race related to greater discomfort with people racially different than oneself, particularly among individuals with higher levels of intergroup anxiety. Such beliefs decrease the likelihood of racial integration and diversity by predicting an overall lack of inclination to interact with members of different racial groups, consequentially determining a racial uniformity within a group of friends ([Tawa and Kim 2011](#)); this may impede the creation of a common ingroup identity that could contribute to more positive interracial attitudes ([Gaertner and Dovidio 2005](#)).

In sum, although the meanings, functions, and effects of ethnicity and race have been conceptually defined and differentiated by social scientists as described above, researchers in social science such as psychology and health services may not be operationalizing these variables with attention to (a) the identified and differentiated conceptual meanings or (b) the possibility of colloquial errors in understandings related to ways in which the meanings of race and ethnicity may be shaped in order to maintain inequity, the privilege and benefit of some and the oppression of others. In research, such lack of attention may contribute to a Type I or Type II error, from missing data (if participants skip questions due to lack of clarity in meaning), lack of reliability, or lack of construct validity (e.g., [Eisenhower et al. 2014](#); [Ford and Kelly 2005](#); [Helms et al. 2005](#)). The lack of the application of clear and distinct definitions of ethnicity and race within the field of psychology has resulted in uncertainty

about the significance, validity, and contributions to scientific study of the research utilizing these concepts (Eisenhower et al. 2014; Ford and Kelly 2005; Helms et al. 2005; National Institute of Health NIH; Phinney 1996; Smedley and Smedley 2005).

Acknowledging the uncertainty surrounding these concepts and understanding current colloquial understandings is needed to move forward and address the difficulties discussed above (Ford and Kelly 2005; Omi and Winant 1994; Markus 2008; National Institute of Health NIH). Empirically establishing the nature of colloquial understandings is the first step towards developing more valid operationalizations that are legible to research participants; effectively working with the meanings that students bring to diversity classrooms; or understanding the meanings that the lay public generally brings to information related to race, ethnicity, and disparities. Thus, the main objective of this study is to explore the colloquial understandings and definitions of ethnicity and race. We also examine the congruence between colloquial understandings and the formal definitions within social science fields that have been presented above.

2. Results

Consensual qualitative research-modified (CQR-M) analyses indicated that responses not only addressed the intended question: “how do you define ethnicity and race?” but also demonstrated variability in the process through which participants approached answering the question and, in some cases, spontaneously commented on the functions or effects of ethnicity and race. Therefore, results are presented for three domains: (1) colloquial meanings of ethnicity and race, (2) process approach to generating meanings of ethnicity and race, and (3) spontaneously offered functions of ethnicity and race. A qualitative content analysis with an inductive approach aims to describe the themes present and (consistent with CQR-M) their frequency across participants, rather than seeking to develop independent and exclusive categories for responses; responses could therefore be double or multiple coded even within a domain.

2.1. Colloquial Meanings of Ethnicity and Race

The colloquial meaning domain captured the themes addressing the primary research question “what is the respondent’s personal (colloquial) understanding of ethnicity or race?” (see Tables 1 and 2). All participant responses received at least one meaning code. Two participants answered the race question by providing a definition that they explicitly noted was someone else’s definition (e.g., “scientists say ... ”); these responses were coded as such and separated from the primary analysis presented here, as our focus was on personal colloquial meanings.

Table 1. Colloquial meanings of ethnicity.

Ethnicity Definition Themes	Data Examples
Origin and Background (n = 68; 45.03%): Responses define ethnicity as (a) geographical location or place (n = 34; 22.52%); (b) nationality or national origin (n = 14; 13.25%), or (c) background unspecified, referencing background or origin but not specifying culture, ancestry, geographical location, nationality or heritage (n = 20; 9.27%).	“Ethnicity is one’s geographic heritage, i.e., what region of the world you are from and related cultural traditions” “Nationality or religious affiliation.” “Ethnicity is one’s own origin.”
Culture (n = 59; 39.07%): Responses define ethnicity as culture, cultural influences, and/or norms. Responses explicitly include use of the word “culture,” and relate ethnicity to traditions, behaviors, language, values, and/or cultural presentation.	“Ethnicity is a sub-group of humans sharing the same or similar culture.” “Ethnicity encompasses all of the cultural elements of a person’s life. It would not be something like where you lived physically, but the location you live in does influence you with its culture. History, festivals, holidays, language, etc.”

Table 1. Cont.

Ethnicity Definition Themes	Data Examples
Ancestry (n = 44; 29.14%): Responses define ethnicity as shared historical knowledge or experiences shared through an ancestral component, referring to familial connections, heritage, descent, lineage, and family history, regardless of the type of ancestry specified (i.e., cultural, genetic, national, or racial).	<p>“This is more of a heritage thing - your family background or where your family lineage originated.”</p> <p>“To me, ethnicity means a group of people that tends to identify with each other based on common ancestors and cultural origins.”</p>
Related to Race (n = 35; 23.18%): Responses define ethnicity as related to race, defined as (a) generally similar to race but still distinct (n = 11; 7.29%), describing an overlap in meaning while also identifying or referencing perceived distinctive elements (b) similar but broader than or more than race (n = 9; 5.96%), including other issues or experiences; (c) the same as race (n = 8; 5.30%); or (d) a subdistinction of race (n = 7; 4.64%), where race is the broader category and ethnicity is seen as a cultural classification within race, but finer distinctions and specific indications separate ethnicity as a subdistinction of race, rather than a concept similar to race.	<p>“Ethnicity is similar to race. A person’s ethnicity is dependent on their country of origin or the country their family is originally from.”</p> <p>“When I think of ethnicity, I not only think of someone’s racial background, but their religious background and their ancestry.”</p> <p>“The same as ‘race.’ just in a ‘nicer’ way.”</p> <p>“At first I said that race [referring to previous question] means ‘group’ I belong to. Ethnicity is when you subdivide [sic] this group into many cells.”</p>
Social Grouping and Social Similarity (n = 32; 21.19%): Responses define ethnicity as a shared experience relating to a social group, social commonalities, social categorization, and social connections.	<p>“Ethnicity is a common trait people are bound to. It’s something that makes people find a common ground and a sense of belonging to a certain ethnicity.”</p>
Religion, Spirituality (n = 22; 14.57%): Responses define ethnicity as specifically related to religious or spiritual beliefs.	<p>“My cultural or religious background.”</p> <p>“A religion.”</p>
Identity/Differentiation (n = 20; 13.25%): Responses define ethnicity as a way of identification, and/or a uniqueness, that separates and distinguishes the individual from other individuals, but not including group identification or social connection.	<p>“I also feel like this is just one part of who I am. It makes me unique.”</p> <p>“To me, ethnicity is an essential part of a person’s sense of self. It encompasses an infinite string of ancestry, along with its culture, its values, and its traditions.”</p>
Biologically Inherited, Genetic (n = 8; 5.30%): Responses define ethnicity as inherent and related to unchanging genetic characteristics that are biologically passed down.	<p>“Genetic heritage that is acquired from your family’s lineage and that cannot be changed or altered.”</p>
Nonvisible, Personality Traits (n = 7; 4.63%): Responses define ethnicity as character, personality, or behavioral traits that were not specified as related to culture, race, physical appearance, or genetics.	<p>“Ethnicity is the origin in the world in which your features and personality traits derive from.”</p>
Phenotype (n = 5; 3.31%): Responses define ethnicity as related to phenotype; physical characteristics and features that are externally observable about an individual.	<p>“It is the color of my skin.”</p>
Upbringing (n = 2; 1.33%): Responses define ethnicity as related to personal socialization, describing, “how I was raised.” Discusses how the individual’s formative years resulted in the transmission of culture and influence.	<p>“The culture(s) in which a person was raised/brought up or the culture(s) that a person identifies himself/herself with.”</p>
No Definitional Content (n = 6; 3.97%): Responses did not define or describe ethnicity. Respondents did not perceive the question, “what does ethnicity mean to you” as requesting a definition of ethnicity. Instead, they seemed to perceive this question as “how meaningful is ethnicity to you?” or “what is the importance of ethnicity to you?”	<p>“It doesn’t have special meanings for me.”</p>

Data examples presented here include the entire response, which could be coded under multiple code definitions. For example, the response “nationality or religious affiliation” was coded as both nationality and as religion/spirituality. 59.60% (n = 90) of participants’ responses were complex responses, which received more than one content code, while only 37.75% (n = 57) of participants’ responses were simple responses, which received only one content code. 2.65% (n = 4) of participants skipped the question. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.

Table 2. Colloquial meanings of race.

Race Definition Themes: Participant's Own Meaning	Data Examples
Physical Characteristics (n = 61; 40.40%): Responses define race as the meaning of race is attributed to physical appearance and characteristics of individuals, such as skin color, hair, physical features, etc.	"A race is a sub-group of humans identifiable by physical characteristics, mainly skin color."
Culture and Ethnicity (n = 37; 24.50%): Responses define race as (a) having a cultural, sociocultural, religious, language, customs, values, or behavioral component, not including responses discussing place or region where culture may be inferred, it must be explicitly stated (n = 18; 11.92%) or (b) race is explicitly attributed to ethnicity or ethnic background (n = 19; 12.58%).	"Race means a society of people identified by their ancestors, culture etc." "To me race means your ethnicity."
Origin and Background (n = 31; 20.53%): Responses define race as (a) related specifically to a place, nationality, or geographic region as a separate concept from culture (n = 18; 11.92%), or as relating to an unspecified background or origin, as a concept of describing, "where I am from." (n = 13; 8.61%)	"To me race means different nationalities and culture." "It's a definition of someone's or their family's origin."
Social Group or Shared Experiences (n = 23; 15.23%): Responses define race as a shared or common experience, whether positive or negative, among a social group or community.	"Race means a society of people identified by their ancestors, culture, etc."
Ancestry, Heritage, History (n = 21; 13.91%): Responses define race as involving a connection across ancestral, familial heritage, or lineage, relating to general or specific (racial or cultural) ancestry.	"Where a person's family originally comes from."
Imposed Categorization (n = 18; 11.92%): Responses defined race as (a) a way of actively imposing labels and categories on groups and individuals. (n = 15; 9.93%), or (b) as creating an ascribed categorization by scientists or the scientific discipline (n = 3; 1.99%).	"Race is a label that society puts on you so you often go with what society thinks of you." "I guess I've been brain washed into believe Darwin's theory of race and there being 3 types of races: mongoloid, negroid, and caucasoid."
Genetic, Biological (n = 13; 8.61%): Responses defined race as being biologically or genetically inherited. This does not pertain to discussing race in relation to physical characteristics, unless it explicitly states this is genetic or biological.	"The genetic makeup of an individual that defines his or her physical attributes."
Hierarchy, Power, and Privilege (n = 12; 7.95%): Responses defined race as being attributed and maintained by the creation of a hierarchy of power and privilege. Responses discussing stereotypes and the categorization of people as being more valuable than another group are within this theme.	"Race is an artificial category used to divide up power and resources."
Social Construct (n = 10; 6.62%): Responses defined race as a manufactured concept that is entirely created and maintained by society. This does not refer to ascribed categorization or race being an imposed label.	"Race is a socially constructed notion of groupings of people. There have been various 'scientific' studies around race, such as the eugenics movement, to 'prove' that white folks are better/smarter/etc. There is no scientific basis of race: it is complete socially constructed."
Personal Identity (n = 9; 5.96%): Responses defined race as a concept with which individuals personally identify. This does not relate to group identity or an imposed label by society.	"Identity."
Superficial (n = 5; 3.31%): Responses defined race as being superficial and based on minor and/or unimportant characteristics.	"Superficial (quite literally, only skin deep) subsets of the species Homo sapiens."
No Definitional Content (n = 15; 9.93%): Responses either did not directly answer the question, "what does race mean to you?" nor specifically address personal significance (n = 11; 7.28%), or defined by race by answering either, "how important or significant is race to you?" or "what do you think of the concept of race?" (n = 4; 2.65%)	"Not special meanings." "I dislike the concept and believe it shouldn't be part of our vocabulary in the US or elsewhere."

Data examples presented here include the entire response, which could be coded under multiple code definitions. 86.75% (n = 131) of participants' responses were complex responses, which received more than one content code, while only 11.26% (n = 17) of participants' responses were simple responses, which received only one content code. 11 of the 17 participant responses that received only one content code were coded as "no definitional content." 1.99% (n = 3) of participants skipped the question. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.

Themes characterizing lay conceptions of ethnicity included ethnicity as the following (presented in order of frequency, see Table 1): (a) origin and background, (b) culture, (c) ancestry, (d) related to race, (e) social grouping and social similarity, (f) religion or spirituality, (g) identity/differentiation, (h) biologically inherited, genetic, (i) nonvisible, personality traits, (j) phenotype, and (k) upbringing. Themes characterizing lay conceptions of race included race as the following (presented in order of frequency, see Table 2): (a) physical characteristics, (b) culture and ethnicity, (c) origin and background, (d) social group or shared experiences, (e) ancestry, heritage, and history, (f) imposed categorization, (g) genetic or biological, (h) hierarchy, power, and privilege, (i) social construct, (j) personal identity, and (k) superficial.

Overall, in comparing ethnicity responses to race responses, ethnicity meanings were more straightforward and clearer while the race meanings reflected more uncertainty and complexity in meaning, requiring more extensive discussion during analysis to come to consensus during coding. More ethnicity responses were simple responses (receiving one meaning code: 37.09%) as compared to race responses (11.26%). It was more frequent for participants to *not* provide a meaning of race than to not provide a meaning of ethnicity, either through providing an answer without definitional content or through skipping the question altogether (n = 10 for ethnicity, n = 18 for race; see Tables 1 and 2).

2.2. Process of Approaching Meaning Making of Ethnicity and Race

Process themes captured how participants approached the task of describing their personal meanings for ethnicity and race (see Tables 3 and 4). All participant responses were coded with at least one process code. Ethnicity process codes (presented in order of frequency, see Table 3) included (a) straightforward definition, (b) multifaceted definition, (c) comparative or negatively defined, (d) personalized process, (e) providing examples of ethnic groups, (f) circumlocution, (g) expressed confusion, (h) expressed personal importance, and (i) expressed discomfort. Race process codes (presented in order of frequency, see Table 3) included (a) straightforward definition, (b) focus on function or effect, (c) objecting to or challenging the meaning or utility of race, (d) presenting an unclear meaning, (e) circumlocution or expressed confusion, (f) comparative response, (g) providing a listing of races, (h) presenting a personalized response, (i) describing changes in meaning across context, and (j) expressed discomfort.

Process codes further reflected the ways that participants experienced describing their meaning(s) of ethnicity as simpler and more comfortable than describing their meaning(s) of race. Discussion of the effect, objections to the meaning or utility, circumlocution or confusion, and discomfort were much more frequent processes when defining race than when defining ethnicity.

Table 3. Participants' process approaches to generating meanings of ethnicity.

Ethnicity Process Themes	Data Example
Straightforward Definition (n = 70; 46.36%): Respondents approached defining ethnicity by providing a straightforward definition of the meaning of ethnicity.	"It refers to culture."
Multifaceted Definition (n = 28; 18.54%): Respondents approached defining ethnicity through the process of listing or defining multiple aspects of ethnicity.	"Ethnicity is a combination of geography, culture, language, and religion."
Comparative or Negatively Defined (n = 20; 13.25%): Respondents approached defining ethnicity by actively comparing it with something else, or by defining what it is not, by using language and relationship words such as, "as opposed to," "more than," "less than," or "similar to."	"Ethnicity, more so than race, is used to explain common ancestry rather than physical traits." "Ethnicity to me, is a broader grouping of people that is not based on race but more so on common cultural beliefs and traits. My ethnicity is a huge part of who I am!"
Personalized Process (n = 17; 11.26%): Respondents approached defining ethnicity through the process of referencing themselves or personal subjective experiences.	"I also feel like this is just one part of who I am. It makes me unique."

Table 3. Cont.

Ethnicity Process Themes	Data Example
Providing Examples of Ethnic Groups (n = 15; 9.93%): Respondents approached defining ethnicity by listing examples of ethnic groups. This included responses that listed examples that respondents defined as ethnicity, but that may not actually be ethnic groups as defined by social science.	<p>“Background—in my case I’m a bit of a mutt—Welsh, Polish, Lithuanian, Irish, 3rd generation so basically now American.”</p> <p>“The difference of individual social groups. Ex. Asian, Hawaiian, African-American, Caucasian, Native-American, etc.”</p>
Circumlocution (n = 9; 5.96%): Respondents approached defining ethnicity by expanding on an original definition in ways that introduced confusion of meaning due to uncertainty about the concept, rather than providing clarity about the meaning.	<p>“Ethnicity seems to be what one’s heritage is. It gets complicated because so much of this seems to be popularly defined by color and also gets wrapped up in nationality. For example, the term ‘black’. What does that really mean? Is it accurate in any way? Is it helpful? If you’re a black woman born in London, then you’re both black and English. Racially, you’d be considered black. Your nationality would be English. Your ethnic heritage would be a different answer. I suppose ethnicity means, Where is your family from? Where was their family from?”</p>
Expressed Confusion (n = 7; 4.64%): Respondents approached defining ethnicity by explicitly discussing feelings of confusion or difficulty in defining ethnicity due to their perception of the complexity of ethnicity.	<p>“I don’t really use the word, honestly. I would typically use it to mean the same thing as race, but probably wouldn’t use it because I know I don’t understand the nuances of it.”</p>
Expressed Personal Importance (n = 6; 3.97%): Respondents approached defining ethnicity by answering the question, “how important is ethnicity to you?” rather than defining ethnicity directly.	<p>“Sorta important.”</p> <p>“It means nothing to me.”</p>
Expressed Discomfort (n = 2; 1.32%): Respondents approached defining ethnicity by expressing feelings of discomfort about ethnicity or feelings of discomfort experienced during the process of defining the concept.	<p>“I think this is part race as well. We are all from different countries as well. I think as in race, there has been some issues of hate, Arabs come to mind, after 9/11. It is still going in. I think it is terrible.”</p>
Data examples presented here include the entire response, which could be coded under multiple code definitions. 15.89% (n = 24) of participants’ responses were complex responses, which received more than one process code, while 80.79% (n = 122) of participants’ responses were simple responses, which received only one process code. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.	

Table 4. Participants’ process approaches to generating meanings of race.

Race Process Themes	Data Examples
Straightforward Definition (n = 75; 49.67%): Respondents approached defining race by providing a straightforward definition of the meaning of race.	<p>“The color of your skin.”</p>
Focus on Function or Effect (n = 19; 12.58%): Respondents approached defining race by describing its function or effect within society.	<p>“It is something that is used to separate people. Over the years it has been a source of hate; differences are scary. I think the hate is caused by fear.”</p>
Objecting to or Challenging the Meaning or Utility (n = 23; 15.23%): Respondents approached defining race by objecting to or challenging the meaning or utility of race within a societal context. Active or explicit disagreement is required for this theme.	<p>“Race means nothing to me. I don’t agree with its use as a system of measuring a person’s identity based on skin color or language or origin.”</p>
Unclear Meaning or Definition (n = 24; 15.89%): Respondents approached defining race in such a way that there was not a clear idea of their meaning of race, for example, stating race is a “way of categorizing people” without the basis for that categorization.	<p>“A way of categorizing people so one doesn’t have to think of them as individuals.”</p>

Table 4. Cont.

Race Process Themes	Data Examples
Circumlocution or Expressed Confusion (n = 17; 11.26%): Respondents approached defining race by expanding on the response in ways that introduced confusion about their definition of race and decreased clarity about its meaning.	“‘Race’ is a term that seems to describe something that does not concretely or specifically exist. Sometimes it’s used interchangeably with ethnicity. Sometimes it’s used to describe a person or people, but often the determination comes down to skin color or facial features. Is that science? Is that useful? Does it take into consideration the mixed heritage that all of us have? Its a term that doesnt mean anything to me because it’s ambiguously defined, and so I dont use it.”
Comparative Response (n = 15; 9.93%): Respondents approached defining race by actively comparing it to a different concept or negatively defining race by what it is not.	“Race to me is basically a matter of skin color, and that’s all. Anything else would fall under ‘ethnicity’.”
Providing a Listing of Races (n = 13; 8.61%): Respondents approached defining race by listing different races. This included responses that listed examples that the respondents defined as race, but may not actually be racialized groups as defined as defined by social science.	“Race is the society in which you belong. Ex. Black, White, Asian, Russian etc.”
Personalized Response (n = 15; 9.93%): Respondents approached defining race through referencing personal experiences, explicitly stating, “I,” “me,” or “my.”	“I am Hispanic Italian American. To me, it is a combination of cultures in my life and how a person would identify me taken at face value.”
Describing Changes in Meaning Across Context (n = 10; 6.62%): Respondents approached defining race as a concept that changes over time within society, contextually, or by individual perspective.	“Race is a social construct, not a biological fact. The definitions of particular ‘races’ change over time as social understandings change.”
Expressed Discomfort (n = 11; 7.28%): Respondents approached defining race by discussing personal discomfort or a negative emotion or mood state when discussing race. Disagreement with race as a concept is not included within this theme unless explicit discomfort is discussed.	“Race is an association by color and geographic region, usually the two go hand in hand, but not always. Ultimately it is a term that makes little sense for any useful catagorical purpose. Ultimately the word leaves me feeling uncomfortable since it has little real definition.”
Data examples presented here include the entire response, which could be coded under multiple process codes. 25.17% (n = 38) of participants’ responses were complex responses, which received more than one process code, while 72.85% (n = 110) of participants’ responses were simple responses, which received only one process code. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.	

2.3. Function of Ethnicity or Race

Although the survey question asked only about meaning, some respondents spontaneously included comments on the functions or effects of ethnicity and race (see Table 5). In accordance with an inductive analysis approach, rather than see this part of responses as irrelevant, we believed they offered additional information about the social representations of ethnicity and race. Not all responses included information about function, and therefore only the subset of responses where participants offered this information spontaneously (n = 33; 21.85%) were coded for function. Ethnicity function themes (presented in order of frequency, see Table 5) included ethnicity as: (a) providing a sense of self, (b) less loaded than race, (c) maintaining power hierarchies, (d) explaining family, culture, ancestry, and heritage, (e) a source of pride or celebration, and (f) providing a worldview. Race function themes (presented in order of frequency, see Table 5) included race as: (a) creating hierarchy, separation, negative judgment, discrimination, (b) causing or creating conflict, hate, dehumanization, (c) useless, meaningless, or personally insignificant, and (d) a source of positive pride, identity,

community, or connection. For ethnicity, function themes were more clearly stated and more easily differentiated from meaning than function themes presented in relation to race. However, participants spontaneously discussed function more frequently when addressing race, than when addressing ethnicity. For ethnicity, 11.9% (n = 18) of participants spontaneously described at least one, while 21.8% (n = 33) of participants spontaneously described at least one function of race.

Table 5. Spontaneously offered functions of ethnicity and race.

Ethnicity Function Themes	Data Example
Providing a Sense of Self (n = 9; 5.96%): Respondents described ethnicity as serving to define and understand “who I am,” with oneself or within the world.	“Ethnicity is one’s own origin, and helps me identify with my own identity. It is a reflection of one’s character to some extent.”
Less Loaded than Race (n = 5; 3.31%): Respondents described ethnicity as serving to be more politically correct or less problematic than race, functioning as a way to talk about race without causing a reaction from individuals.	“Ancestry and ethnicity seem to be the politically-correct terms that have replaced ‘race’ although I think ethnicity allows for finer distinctions as between Spaniard and Italians for example. Ethnicity entails culture and customs—display—the ethnicity of others seems approachable even welcoming.”
Maintaining Power Hierarchies (n = 4; 2.65%): Respondents described ethnicity as a social construct serving to maintain a hierarchy of power within society.	“Ethnicity is the national subtext that people are classified under, which makes them easier to govern by the more powerful among national residents.” “I guess it means the truer form of race, the way gender is more identifying than sex. on reflection race must be the color of your skin, and ethnicity is a P.C. word invented in the last 30 years to make easier, less demeaning judgments of entire groups.”
Explaining Family, Culture, Ancestry, and Heritage (n = 2; 1.33%): Respondents described ethnicity as serving to explain aspects of culture, heritage, and ancestry within a familial setting. It does not refer to ethnicity functioning within the individual, or as a worldview.	“Ethnicity explains to me the culture and traditions of my ancestors and family.”
A Source of Pride or Celebration (n = 2; 1.33%): Respondents described ethnicity as serving to allow for cultural pride and/or celebration.	“Well because of my mix, it means a lot and I’m very proud of it!”
Providing a Worldview (n = 1; 0.66%): Respondents described ethnicity as serving to explain the ways in which people see and understand the world in which they live in.	“Ethnicity is culturally and nationally based. Cultural in the sense of shared meanings, artistic, linguistic, and historic. Nationality in how those meanings are tied to a certain country or land area. It is something of a shorthand used to describe traits of a people. The other identifying traits are ideology and religion. There are counter example within this parameter, but again it is more of a shorthand of how people are bounded together. It also provides a worldview for the individual, one that they either accept or reject, in whole or in part. Their stance toward this view helps define in part the persons sense of self.”
Race Function Themes	Data Examples
Creating Hierarchy, Separation, Negative Judgment, Discrimination (n = 21; 13.91%): Respondents described race as serving to create a hierarchy of benefits and privilege, causing negative judgments related to stereotypes and division of groups.	“A socially created, hierarchical structure constructed for the purpose of distributing benefits, power, and privilege unequally.”
Causing or Creating Conflict, Hate, Dehumanizing (n = 10; 6.62%): Respondents described race as serving to create conflict, active marginalization, interpersonal animosity, or alienation within society.	“It is something that is used to separate people. Over the years it has been a source of hate; differences are scary. I think the hate is caused by fear.”
Useless or Meaningless or Personally Insignificant (n = 6; 3.97%): Respondents described race as functionally useless, essentially stating, “race means nothing to me.”	“Nothing. “race” is a concept. it does not exist. It’s created to label and alienate.”
A Source of Positive Pride, Identity, Community, or Connection (n = 5; 3.31%): Respondents described race as serving to create a positive sense of self or social connection. This theme explicitly refers to positive identity or connections.	“In my opinion, race is a form of identity that allows groups of people to relate and bond with each other. It means having something to represent and take pride in.”

2.4. Examination of Congruence of Participant Meanings in Relation to Social Science Conceptualizations

In order to examine the relationship between colloquial understandings and the operationalized definitions within the social science literature, we (the 3 authors) created congruence categories (see Tables 6 and 7). As a group, we discussed the dominant and central elements of ethnicity and race that were identified in the literature and the common misconceptions and/or incongruent aspects of each concept presented in the literature. As supported by the literature review presented above, congruence in either category required (a) differentiation between race and ethnicity, given that the literature explicitly discusses the problematic confounding of these variables (e.g., Omi and Winant 1994; Smedley and Smedley 2005) and (b) a lack of biological attribution.

Table 6. Examination of congruence between colloquial meanings and social science definitions of ethnicity.

Congruency Category	Data Examples
<p>Congruent Meanings of Ethnicity (n = 42; 27.8%): Responses were considered to be congruent with formal social science meanings of ethnicity if they understood ethnicity as related to culture and not biologically or racially determined.</p> <ul style="list-style-type: none"> • Must be coded as: culture. • Must <i>not</i> be coded as biologically inherited, genetic, phenotype, or in relation to race. • Could be (but not required to be) coded as: as ancestry, identity, nonvisible characteristics, origin and background, social grouping, upbringing, or religion/spirituality. 	<p>“Ethnicity means one’s culture, religion, traditional upbringing.” “To me, ethnicity is an essential part of a person’s sense of self. It encompasses an infinite string of ancestry, along with its culture, its values, and its traditions.”</p>
<p>Possibly Congruent Meanings of Ethnicity (n = 49; 32.5%): Responses for ethnicity were considered to be possibly congruent with formal social science meanings of ethnicity if they included aspects that could be related to culture, but their meaning did not relate culture to ethnicity explicitly.</p> <ul style="list-style-type: none"> • Not coded as: culture. • Coded as at least one of: ancestry, identity, nonvisible characteristics, origin and background, social grouping, upbringing, and/or religion/ spirituality. • Must <i>not</i> be coded as: biologically inherited, genetic, phenotype, relation to race. 	<p>“Ethnicity is your heritage.” “The common history of a group of people.” “Ethnicity is known by person’s ancestral roots.” “Ethnicity is a common trait people are bound to. It’s something that makes people find a common ground and a sense of belonging to a certain ethnicity.”</p>
<p>Incongruent Meanings of Ethnicity (n = 49; 32.5%): Responses were considered to be incongruent with formal social science meanings of ethnicity if they described ethnicity as biologically inherited, phenotype, or in relation to race.</p> <ul style="list-style-type: none"> • Coded as: biologically inherited, genetic, phenotype, relation to race. • Could be coded as: any other code in addition. 	<p>“Race/Nationality.” “The combined genetic blend of my ancestors.” “A representation of a race.”</p>

Responses that did not define ethnicity (n = 11; 7.3%) were not used in this analysis. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.

Table 7. Examination of congruence between colloquial meanings and social science definitions of race.

Congruency Category	Data Examples
<p>Congruent Meanings of Race (n = 6; 4.0%): Colloquial meaning responses for race were considered to be congruent with formal social science meanings of race if they described race as related to power or limitations and related to perceived physical characteristics, while not being related to culture, ethnicity, or nationality and not genetic/biological.</p> <ul style="list-style-type: none"> • Must be: (a) coded in the meaning domain as related to physical characteristics, and (b) coded in the function domain as having the purpose of separation or power hierarchy or causes/creates conflict, hate, and dehumanization. • Must not be coded as: culture, ethnicity, national identity/nationality, and/or genetics. 	<p>“Race is something that is used to categorize people for social purposes. It is a social limitation of humans, who are content to be categorized by the amount of melanin deposits in their skin. Scientists have proven again and again that race is nothing more than gene flow and a response to climates that result in the features that distinguish the ‘races.’ Culturally, especially in heterogeneous cultures such as the US, race attempts to assign ‘packages’ that contain information on how to act, dress, date, what interests one is allowed to have and not have, and the conceptions that one must have about the world.”</p>
<p>Partially Congruent Meanings of Race (n = 54; 35.8%): Colloquial meaning responses for race were considered to be partially congruent with formal science meanings of race if they included singular primary aspects of race via discussing either power or physical characteristics, but their meaning did not combine these aspects for the formal definition of race.</p> <ul style="list-style-type: none"> • Must be either (a) coded in the meaning domain as related to physical characteristics, or (b) coded in the function domain as having the purpose of a power hierarchy or causes or creates conflict, hate, and dehumanization. • Must not be coded as culture, ethnicity, national identity/nationality, or genetics. • Could be coded as ancestry, heritage, imposed categorization, geography, place, and/or national origin (not identity). 	<p>“Race, to me, means simply the color of one’s skin.” “Race is an artificial category used to divide up power and resources.” “Race is a made up social construction which divides the human species and is often abused by certain groups to oppress others.”</p>
<p>Possibly Congruent Meanings of Race (n = 28; 18.5%): Colloquial meaning responses for race were considered to be possibly congruent with formal science meanings of race if they included secondary aspects of race but did not explicitly discuss power or physical characteristics in relation to race.</p> <ul style="list-style-type: none"> • Not (a) coded in the meaning domain as related to physical characteristics, or (b) coded in the function domain as having the purpose of a power hierarchy or causes or creates conflict, hate, and dehumanization, • Coded as at least one of: ancestry, heritage, imposed categorization, personal identity, social construct, social grouping, geography, place, and/or national origin. • Must not be coded as: culture, ethnicity, national identity/nationality, and/or genetics. 	<p>“The group to which I belong based on ancestry.” “Race mean a group of people distinguished by different sets of characteristics.”</p>
<p>Incongruent Meanings of Race (n = 47; 31.1%): Colloquial meaning responses for race were considered to be incongruent with formal science meanings of race if they described race as biological, as cultural, or as national identity.</p> <ul style="list-style-type: none"> • Coded as: culture, ethnicity, national identity/nationality, and/or genetics. • Could be coded as: any other code in addition. 	<p>“To me race means your ethnicity.” “A type of people united by genetics, traditions and/or beliefs.”</p>

Participant responses that were left blank or had been coded as “someone else’s meaning” or “no definitional content,” (n = 19; 12.6%), were not utilized for this analysis. Responses were edited only to address typos (e.g., missing apostrophes or misspelling), capitalize initial word, and insert ending punctuation where needed.

Responses to, “what does ethnicity mean to you?” were categorized as “congruent”, “possibly congruent”, or “incongruent” with the following meanings:

1. Congruent meanings of ethnicity: responses were considered to be congruent with formal social science meanings of ethnicity if they understood ethnicity as related to culture and not biologically or racially determined. Although biological perceptions may be included in ethnocultural

understandings that is not the same as understanding culture or ethnicity *as* biological or essential in biological ways,

2. Possibly congruent meanings of ethnicity: responses for ethnicity were considered to be possibly congruent with formal social science meanings of ethnicity if they included aspects that could be related to culture, but their meaning did not relate culture to ethnicity explicitly.
3. Incongruent meanings of ethnicity: responses were considered to be incongruent with formal social science meanings of ethnicity if they described ethnicity as biologically inherited, phenotypical, or in relation to race.

Responses to, “what does race mean to you?” were categorized as “congruent,” “partially congruent,” “possibly congruent,” or “incongruent” with the following meanings.

1. Congruent meanings of race: colloquial meaning responses for race were considered to be congruent with formal social science meanings of race if they described race as related to power or limitations/oppression and related to perceived physical characteristics, while not being related to culture, ethnicity, or nationality and not genetic/biological. Although physical appearance has biological aspects and physical appearance is related to race, that does not mean that race itself is biological, genetic, or essential in biological ways, as discussed in the Introduction section above.
2. Partially congruent meanings of race: colloquial meaning responses for race were considered to be partially congruent with formal science meanings of race if they included singular primary aspects of race via discussing either power or physical characteristics but their meaning did not combine these aspects for the formal definition of race.
3. Possibly congruent meanings of race: colloquial meaning responses for race were considered to be possibly congruent with formal science meanings of race if they included secondary aspects of race but did not exclusively discuss power or physical characteristics in relation to race.
4. Incongruent meanings of race: colloquial meaning responses for race were considered to be incongruent with formal science meanings of race if they described race as biological, as cultural, or as national identity.

Using these meanings, we considered how responses reflecting the thematic coding presented above related to these categories, to capture the central elements and consider common misconceptions. Each congruence category was operationalized in relation to thematic coding in the data (see Tables 6 and 7 for cross coding criteria). For ethnicity, any response that had been thematically coded as based on race or biological was categorized as “incongruent with social science conceptualizations” of ethnicity regardless of other codes that may have been applied to the response. Congruence for ethnicity required that the response be explicitly coded as culture. Possibly congruent responses were those that were not incongruent (did not confound ethnicity with race or attribute ethnicity to biology) but also had not been coded as culture. Full descriptions of criteria, associated coding bases, number of participants in each category, and associated data examples for ethnicity congruence categories are presented in Table 6.

For race, any response that had been thematically coded as biological or as culture, ethnicity, or nationality was categorized as “incongruent with social science conceptualizations” regardless of other codes that may have been applied to the response. Congruence for race was more complex than for ethnicity, because the formal definition of race within social science literature relates to aspects of meaning that we had originally coded within the function domain (e.g., power and privilege, purpose of creating hierarchy). Therefore, we used both the meaning and the function domains within the race analysis to create categorizations. Congruence thus required recognition of the relation of race to physical appearance and simultaneous acknowledgment of the power and privilege basis of racialization. The need for the additional category “partially congruent” became evident when examining the responses that were initially categorized within “congruent” and “possibly congruent.” The categorization of “congruence” was quite narrow, reflecting the most stringent formal definitions

(that have some controversy) and setting a very high bar: only six participants (4.0%) described personal colloquial meanings of race that were categorized as congruent with formal social science meanings. Given that the meaning of race, particularly within psychology, is still debated, we sought to create a category that could capture partial congruence, defined as including either but not both of the primary foundational parts of race. Thus, a meaning that defined race as skin color, or a meaning that defined race as a social construction to create power differentials would be categorized as partially congruent. Some researchers might consider either of these responses as congruent with social science meanings, while researchers would disagree.

Full descriptions of criteria, associated coding bases, number of participants in each category, and associated data examples for ethnicity and race congruence categories are presented in Tables 6 and 7. Within ethnicity, participants' responses were distributed relatively evenly across categorizations, with approximately one third of participants categorized as congruent, possibly congruent, and incongruent. Within race, only 4% of participants offered responses that were fully congruent with formal definitions (related to power and related to perceived physical characteristics while not related to culture, ethnicity, nationality, and not explicitly genetic or biological). Approximately one third of participants offered responses that were incongruent.

3. Discussion

Results support that colloquial understandings (lay conceptions) of ethnicity and race include a wide range of possible meanings that may or may not agree with formal conceptual definitions describing ethnicity as a concept focused on (ethno)cultural similarities related to ancestral and geographical descent and race as a concept related to physical characteristics and social distinction and hierarchy (Markus 2008; McGoldrick et al. 2005; Omi and Winant 1994; Smedley and Smedley 2005; Suyemoto 2002). Results also support the widely acknowledged confounding of race and ethnicity in colloquial meaning. Participants' colloquial meanings of ethnicity were frequently (23.18%) dependent on or related to race, and themes such as origin and background, culture, ancestry, social grouping, religion, identity, biological inheritance, and physical characteristics appeared within both ethnicity and race data.

Furthermore, results indicated that participants' meanings of race were more confused than meanings of ethnicity and that participants experienced greater difficulty or discomfort in describing their meanings of race, perhaps reflecting the power basis and histories of injustice upon which race is based (Smedley and Smedley 2005). Past literature has examined how discussing race explicitly may encourage individuals to recognize their colorblind racial attitudes and the often hidden systems of privilege. Although necessary to addressing systemic racism, these recognitions may be uncomfortable, challenging the myth of meritocracy in the United States, eliciting uncomfortable feelings including fear, anxiety, and anger and evoking denial related to stances of egalitarianism based upon aversive racism, cultural biases, and stereotypes (Gaertner and Dovidio 2005; Omi and Winant 1994; Pinderhughes 1989; Smedley and Smedley 2005; Sue 2015). Prior research suggests that White people and People of Color have different awareness, understandings, and comfort level in considering processes of racialization and that race or ethnicity may have different salience related to racial, ethnocultural, or intersectional positionalities (e.g., immigration status or generation; American Psychological Association 2019; Suyemoto and Donovan 2015). Future research focused on understanding lay conceptions of race and ethnicity could explore possible differences in understandings and the processes of coming to understand that might be related to research participants' own racial, ethnic, or intersectional identities.

While differentiated definitions of ethnicity and race have been established by social scientists, results from this study suggest that the public frequently confounds these concepts within widely accepted social representations. Even when not confounding, participants did not have single, shared understandings of the meanings. Although this confounding and multiple meanings may reflect the lived experience of interactive and intersectional racial and ethnic identities (Umaña-Taylor et al. 2014), it may simultaneously prohibit the investigation of these variables as social or relational predictors or

correlates. In relation to social science research, confounding and ambiguity in the operationalization of ethnicity and race affect the validity and consistency of results and interpretations. Without clear distinctions between ethnicity and race as concepts, an uncertainty exists both among participants in relation to how they understand, perceive, and report information (Ford and Kelly 2005; Helms et al. 2005; Smedley and Smedley 2005) and between participants and researchers. Because ambiguity exists concerning the concepts of ethnicity and race within research, the validity and utility of these concepts for the research, the researcher, the participants and how results are generalized for society are also threatened (Ford and Kelly 2005; Helms et al. 2005; Omi and Winant 1994).

When ethnicity and race are regularly confounded, the differential benefits or risks associated with each cannot be clearly considered for individuals, social groups, or society. In addition, the complexities of each concept are minimized and/or ignored, increasing reductionism in the field (Helms et al. 2005; Markus 2008; Omi and Winant 1994; Phinney 1996; Smedley and Smedley 2005; Suyemoto 2002). In contrast, by differentiating race and ethnicity, we may evaluate the separate, additive, and interactive or intersectional effects. Thus, results of this study suggest that researchers interested in race and ethnicity as social or grouping variables need to clearly operationalize and differentiate these variables. Researchers also need to clearly communicate their intended operationalizations to research participants (see for example appendix in Wadsworth et al. 2016). This is necessary because our results indicate that there is not an agreed upon colloquial meaning, so that different research participants may be referencing different meanings in responding to race and ethnicity variable operationalizations that are not clearly and fully described.

Even at the level of considering individual identity, differentiating race and ethnicity in research may capture more nuanced and valid data, as well as enable a fuller understanding of individuals whose identities may not be centered within the dominant confounded constructions. An individual person's internal identity may indeed integrate multiple variables and prioritize the experience of such intersectionality, as in ethno-racial identity or heterosexual masculinity, which encompasses how the internal and individual experience of gender and sexual orientation are intersectional. However, this does not mean that we should not differentiate these variables conceptually or operationally in research. Examining *both* aspects of intersectional experience, in addition to their interaction encompasses intersectionality more fully (Crenshaw 1989). Thus, we may consider gender and sexual orientation as well as sexualized gender. Or, in the current case, we may consider racial identity, ethnic identity, and ethno-racial identity (or racialized ethnic identity). But we can only consider all of these aspects if we clearly conceptualize and operationalize the differentiated concepts and then consider their intersectionality. Doing so may be particularly important when considering how our research methodology may or may not enable the investigation or reflection of the experiences of those individuals whose identity experiences do not fit well within the dominant confounded constructions: examples would include transracial Asian adoptees whose racial and ethnic identities may be experienced as differentially referenced (e.g., Kim et al. 2010; Suyemoto 2002) or Caribbean immigrants who may struggle with identifying as "Black" (e.g., Waters 1994; Suyemoto and Donovan 2015). Differentiating race and ethnicity, even at the level of identity, may be particularly important in order to avoid reifying oppression of these groups that are marginalized within already marginalized racial or ethnic groups.

Future research and applications of research would be improved if researchers were to clearly differentiate these variables in their research plans and measures, define such measures for participants to the extent necessary to ensure that participants understand what is being asked about, and specifically report how ethnicity and race were operationalized. Differentiating between ethnicity and race creates a space for shared understanding among participants, allowing participants to self-identify racially *and* ethnically, an issue identified in previous research (Eisenhower et al. 2014). This may increase responses, enable clearer reporting of results, and thereby increase the validity of research (Eisenhower et al. 2014). By making a concise distinction between race and ethnicity, the oppressive nature of reporting results via misdirected racial categorization is advanced and possibly eliminated (Helms et

al. 2005). Such a distinction benefits research through its connection to the colloquial understanding among participants and the substance of the research as a whole.

The differentiation of race and ethnicity is important for validity. But it is not enough to simply differentiate race and ethnicity in clear operationalization instructions. As social science researchers, we must continually interrogate our research practices in relation to these variables, lest we replicate the problematic aspects that maintain oppression in our continuing research. Meanings of race and ethnicity change over time, and so we should consider what our operationalization means at a given moment in time and a particular context. For example, MENA (Middle Eastern North African) is a currently racialized group if one is focusing on experiences of discrimination or imposed identity negotiation (among other things). However, MENA has not been “approved” as a category for the census, even though the need to consider such a category was explicitly identified in 2014. That does not, however, mean that researchers interested in race and racialization should not operationalize MENA as a racialized group. Furthermore, building on the results of this research, we might, as researchers, choose to more fully engage ethnicity and examine how existing categorical structures might be contributing to confounding race and ethnicity. For example, we might inquire about ethnicity for *all* participants and not just Hispanic or nonHispanic. We could also avoid the practice of listing separate ethnocultural groups as races or subtypes of races and instead inquire about ethnicity within race. These approaches would not be incompatible with federal government mandates. OMB requires that federally funded research meet minimum standards with minimum group categorizations (five racial groups of American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Pacific Islander or White, and one yes/no category for Hispanic or Latino). However, researchers may make choices about whether and how they choose to expand those categories.

Although these suggestions would be improvements upon many current practices, it is not enough to review and expand categories. If we are serious about engaging race and ethnicity as social constructions, we must also grapple with issues beyond defining and refining categories. We must consider the ways in which the categorizations that we use in research and in governmental forms themselves contribute to the social construction of these variables, and often do so in ways that contribute to oppression rather than to resisting oppression. We must consider how we can use and report on these variables in ways that challenge simplistic reification of categorical essentialism that contributes to maintaining oppression.

Beyond research implications, more fully understanding lay conceptions of race and ethnicity can also contribute to developing more effective multicultural and antiracist education in schools and community settings. Students in diversity classes and participants in community education are not arriving to these educational initiatives as “blank slates”. They hear and understand the information provided through previously established understandings of race and ethnicity reflecting social representations of these variables, with all of the historical complexity and psychological resistance that accompany those social representations or that have (or have not) been fostered by them. The variability among respondents in this study that is evident in their meanings of race and ethnicity suggest that conversations about these issues could often be impeded by not actually referencing the same concepts. Our findings suggest that education and workshops related to race and ethnicity might do well to begin with exploring participants’ already established meanings, and work to find a common understanding for dialogue. Similar to the call for researchers to develop a more critical approach and actions, educators also need to more seriously grapple with the meanings of social construction and our possible collusion with reifying rather than resisting oppressive ramifications of these concepts and categories. We cannot apply a “cookbook” categorical approach in our antiracist work. Differentiating race and ethnicity explicitly in our conversations can be one step to help us consider issues such as heterogeneity within groups and explore the interaction of systemic (race) and localized (ethnicity) paradigms as both/and rather than either/or (Cornell and Hartmann 2004). This differentiation can help us as consider more fully the functional consequences of ethnocultural

and racial hierarchies and the ways they intersect and/or are triangulated to maintain White supremacy and European American cultural hegemony.

4. Materials and Methods

We utilized consensual qualitative research-modified analyses (CQR-M; [Spangler et al. 2012](#)), surveying participants online with standardized open-ended questions about their personal definitions and conducting a qualitative content analysis, developing categories of definitions. We then examined the frequency of participant responses in relation to congruence with definitions and differentiation in the field.

CQR-M incorporates characteristics of post-positivistic and constructivist research paradigms ([Ponterotto 2005](#); [Spangler et al. 2012](#)). Post positivist philosophy is reflected in the assumption that a general shared understanding of a phenomenon exists (i.e., that there is a shared social representation rather than only individual representations or interpretations) and in the goal to describe the most frequent understandings by using counts, suggesting implications for generalizability. Simultaneously, CQR-M reflects constructivism as it emphasizes an inductive analysis process where meanings and results emerge from the data and participants' understandings. The main objective of a thematic content analysis in CQR-M is that the experiences of the participants' voices are captured in the results, without an a priori operationalization, theory, or hypothesis to disprove. CQR-M uses standardized open-ended questions, leading to more direct content responses requiring less interpretive coding than extended depth interviewing and enabling larger data samples and greater confidence in generalization ([Spangler et al. 2012](#)). The CQR-M method attempts to minimize groupthink, individual expectations, and bias potential ([Hill et al. 1997](#); [Spangler et al. 2012](#)).

4.1. Participants and Procedures

Participants included 53 males, 87 females, and 11 unidentified gender who ranged in age from 18 to 64 ($M = 28.71$). Participants were recruited through advertising on campus, in the local [city redacted] community and nationally via Listserv and internet postings. Recruitment materials described the study as focused on "how people understand social groupings," so as not to bias the sample towards or against particular interest in racial or ethnic issues. Participants were compensated with \$5 or class extra credit and were entered in a drawing to win a \$300 gift card. There were no inclusion or exclusion criteria other than age (adult status over 18). In sum, we aimed to obtain a sample of participants similar to that used for many general research studies in psychology that recruit through universities and public calls for participation.

Self-identified ethnicity was reported in open-ended responses, from which we created pan-ethnic groupings for general descriptive purposes. Participants self-identified ethnically as ethnicities categorized as: European American (41.72%; $n = 63$), Jewish (13.25%; $n = 20$), Asian American (10.60%; $n = 16$), Hispanic/ Latino/a, (9.27%; $n = 14$); African American (5.96%; $n = 9$), multi-ethnic (12.58%; $n = 19$), and unspecified (8.61%; $n = 13$). Participants self-identified racially as White (62.25%; $n = 94$), Asian (11.26%; $n = 17$), Black (8.61%; $n = 13$), Latino/a (7.28%; $n = 11$), Native American (0.66%; $n = 1$), multiracial (6.62%; $n = 10$), and unidentified (3.31%; $n = 5$).² Participants included 103 U.S. born

² Note that our participant description is an example of using race and ethnicity categories as descriptive variables, rather than using simple and confounded categories as primary variables of analysis. We deliberately used the language "self-identified" to be clear that participants are referencing available categories (either categories that we presented to them, or categories that they self-identified that we then aggregated within pan-ethnic categories). Our approach to operationalizing race and ethnic descriptors of our sample for this study enabled all participants to self-identify ethnicity, not only as Hispanic or nonHispanic as in Census or U.S. Office of Management and Budget categorizations, but in relation to their own self-perception of ethnic identity/affiliation. We used an open-ended question "for the purpose of this study, what ethnic group or groups apply to you? (e.g., Italian, Irish, Jewish, Japanese, Vietnamese, Haitian, Kenyan, Puerto Rican, Dominican, Lakota)". We then aggregated responses in pan-ethnic categories. We operationalized race with the following question: "Although you may not identify with these groups/labels, for the purpose of this study please choose the following racial group(s) which apply to you (choose more than one if it applies)" followed by categorical choices. We chose this approach to race as we were

(68.2%), 37 immigrants (24.50%), and 11 participants who chose not to provide information about origin (7.30%). The majority (88.10%; $n = 133$) of participants had some college experience, 7 participants identified as having completed high school as their highest education level (4.6%), and 11 participants did not provide a response about educational status (7.3%).

4.2. Measures

Data were collected through an online survey. Participants first read a description of the study and indicated their informed consent online. The recruitment materials and consent form informed participants that the study focused on “how people understand social groupings”. The survey began with the prompt “the following open-ended questions ask how you understand social groupings. There are no right or wrong answers, just try to answer each question as honestly as possible”. Participants were then asked a series of six questions, three related to ethnicity and three related to race; each question was asked after the answer to the previous question was provided: “what does ethnicity [or race] mean to you?”, “how do you identify ethnically [or racially]?”, and “how has your ethnicity [or race] affected your life?” This paper reports results from the 151 responses for the questions “what does ethnicity mean to you?” and “what does race mean to you?” Questions were framed and asked with this wording in order to avoid language that might affect participants’ responses, for example, by priming participants to think about race and ethnicity together and/or differentiated or by alerting participants to the fact that they would be asked about both race and ethnicity separately. We inquired about participants’ meanings rather than asking them to provide a definition as we were interested in their personal and colloquial meanings, rather than formal learned or rote definitions. In order to address possible order effects, the order of the questions was randomized among participants: 81 participants received the group of race questions first and 70 participants received the group of ethnicity questions first. This study was conducted in compliance with the Institutional Review Board of the University of Massachusetts Boston.

4.3. Analysis

Answers to the ethnicity and race questions were analyzed separately using CQR-M ([Spangler et al. 2012](#)) and the coding program NVivo. The coding teams for both analyses (ethnicity and race) included a range of novice and experienced coders and coders with experience with the prior question as well as those without; this facilitated the strengths of the CQR-M method where different viewpoints, knowledge-levels, and experiences contribute to minimize bias and expectations when reviewing and analyzing the data ([Hill et al. 1997](#)). Each coder had some theoretical background of the concepts of ethnicity and race, their relation, and their differentiation. In addition, coders had engaged in reflexive exploration of their own meanings of ethnicity and race and considered the influences of personal experiences on analysis of the results, through journaling and discussions ([Hill et al. 1997](#)) in an effort to bracket assumptions and expectations and minimize possible bias.

Each analysis included five primary coders (professor, three graduate students, one undergraduate) and two auditors (one graduate student, one undergraduate). A total of nine individuals participated across the two analyses: Two individuals (the professor and one of the clinical psychology graduate students, who are the first and third authors) participated as primary coders for both the ethnicity and race analyses; two clinical psychology graduate students participated in only one analysis as a primary coder (race or ethnicity); and two clinical psychology graduate students and the two undergraduate students participated in one analysis as a coder and in the other as an auditor. Graduate student

interested in general descriptive categories and self-positioning in relation to established categories rather than finer personal or experienced meanings or nuances. Within race category choices, we included Latino/a as a racial category, as supported by research suggesting that Latina/o peoples experience racialization for themselves and as imposed ([Eisenhower et al. 2014](#); [Hattam 2004](#)). This approach to operationalization enabled participants to self-define as, for example, some participants did, both ethnically and racially Latinx or as racially Black and ethnically African American (or Black or Haitian).

auditors completed the audit prior to participating in primary coding for the other variable, whereas undergraduate auditors completed the audit after participating in primary coding for the other variable.

The responses to “what does race mean to you?” were coded first, followed by the ethnicity responses. Initially, the CQR-M analysis aimed at simply addressing the primary research question: “what are the colloquial meanings (lay conceptions) of ethnicity and race?” However, early in the coding process, coders discussed the difficulty capturing the meaning differences between responses that, for example, provided a single simple definition of race, versus those that included multiple (and sometimes contradictory) definitions of race, or those that included emotional commentary, or other aspects. We observed content and characteristics within the responses that did not reflect simple definitional themes. Following an inductive approach, the coding team agreed on a coding schema that reflected the nuances evident within the data: primary domains of definition, process, and function were therefore developed. When coding the ethnicity data, the team reviewed the data and discussed whether these same domains (definition, process, and function) emerged before agreeing to continue with the domains.

Coders conducted the analyses separately for the ethnicity and race data using the same iterative consensual procedure. Coders first engaged in open coding through individually reviewing 30–50 responses. Coders then came together to present their coding and discuss the codes. In the group, coders read each response and each coders’ open codes. Through discussions, coders arrived at consensus for a preliminary codebook that included code names, perceptions of meanings in the data, and rationale for domains, codes, or themes. A second group of 20–40 responses was then coded by each coder using the preliminary codebook; in this process individual coders added new codes, noted questions, and suggested refinements or changes to existing codes and code definitions. A second round of consensual discussion examined coding of each of these responses from each coder, adding codes and clarifying existing codes. The data within each of the codes was then reviewed in the group to check validity and develop clarity on conceptual meanings and differentiation of each code inductively.

Formal coding of all responses used the resulting inductively and consensually derived codebook. Each coder individually coded each response for meaning, process, and (where relevant) function. Coding for each response was reviewed and responses lacking full consensus were discussed by the group, sometimes resulting in changes to the coding or to the codes and categories. At times, the coder who was the outlier in the coding group changed their code to agree with the majority of the research team; at other times, the outlier convinced the team with their rationale and all other coders changed their codes to agree with the outlier; at still other times, the codes themselves were revised, refined, or differentiated as indicated through the process of analysis. When codes were revised or differentiated, the coding team individually recoded and then met again for consensus. The consensual process led to careful and fine analysis and differentiation of concepts as indicated within the data itself. This final process of reviewing, providing rationale, and revising coding continued until all responses and codes reached consensus by all coders.

Once consensus had been reached for every code for every response, auditors reviewed the code meanings, coded each response, and reviewed the team’s coding in comparison with their own. Discrepancies were discussed with the coding team, which primarily led to clarification of code meanings and distinctions.

Following the coding of ethnicity responses, the race coding was revisited to check for clarity and ensure that similar language used in the coding within the two analyses were used with similar meaning in order to avoid confusion. Following this check, both analyses were reviewed in order to integratively analyze the ways in which participants differentiated, confounded, and/or defined the concepts of ethnicity and race or approached the task of defining.

4.4. Methodological Strengths and Limitations

In relation to methodological strengths and limitations of this study: The open-ended questions enabled an inductive analysis yielding a description of the range of colloquial understandings of ethnicity and race. The CQR-M methodology allowed for a large sample size while benefiting from an inductive approach. Using CQR-M by different coding teams with overlap in coders served to minimize potential biases, check for consistency through the data analysis with common coders, and simultaneously protect against the imposition of meaning from prior analysis through including unique coders. Although this study had a large sample size for qualitative analysis, the participants were generally highly educated and primarily identified as racially White and ethnically European American. This type of sample is not uncommon for studies with general samples recruited through universities, local university neighborhoods, and internet Listservs. However, generalization is limited by these sample characteristics and future research is needed to understand how more diverse (e.g., in race, ethnicity, or education) or specialized samples (e.g., clinical samples) might understand race and ethnicity in order to determine whether recommendations from this study for improving validation of operationalization would generalize to those populations.

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