New Perspective: How Consumer Genetics Can Foster Ethnic Understanding

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Abstract

We live in a time rife with ethnic tensions, yet many of us unknowingly share our genetic heritage with those perceived to be "the other." If we knew more about our genetic heritage, would we be more accepting of others? In research involving direct-to-consumer genetics (DTCG), that is what we found. When people took a genetic test, they not only gained a better understanding of what they already knew about their family history but, more importantly, about their unknown genetic heritage, leading to a desire to share and learn more. This paper explores if DTCG can foster ethnic understanding.

Introduction

Identity, loosely defined as how individuals and groups define their selfhood and collective character, is unifying and divisive. It brings people together around shared beliefs and behaviors and pits others against each other based on differences, such as ethnicity. To that end, identity can be one of the most powerful forces for peace, but it can also be a destructive force of evil, as we have often experienced in wars and politics. But what if people realized they were more similar than different to those they consider to be "the other?" If they learned they shared a genetic identity, could it lead to a greater acceptance of people presumed to be different from them?

A 2018 ethnography of direct-to-consumer genetics (DTCG) found that when people took a consumer ancestry genetic test, they had an increased desire to share and learn more (Artz 2018). Likewise, we ask, can using DTCG tests contribute to ethnic understanding?

What is Identity?

Identity in the social sciences is a term that became popular in the 1960s with the work of Erik Erikson's theory of psychological development. But despite its recent introduction into academic literature, identity has been a topic of interest in the west since the ancient Greeks (Brubacker and Cooper 2000). However, despite its history,

identity in the social sciences is a highly debated concept with many dissenting views and definitions. A broad definition of the term based on Erikson's conception involves how a person views themselves in relation to others around them (Erikson 1950).

While Erikson's work has proven to be a helpful starting place and the basis for the way many anthropologists view identity, the discipline of anthropology has demonstrated that constructing and understanding identity is also far more nuanced. Many have called attention to the fact that identity is often fluid and multidimensional, incorporating gender, class, politics, religion, nationality, ethnicity, and culture (Alcoff and Mendieta 2003). To this end, many have used the concept of hybridity coming out of post-colonial discourse to discuss the mixture of identities that are recognized today.

Can Genetics Affect Perceived Identity & Social Coherence?

A recent extension to identity discourse is being made possible by genetics. Given the rise of low-cost genetic testing, we can now understand the effects of movements such as colonialism and its predecessors at an individual genetic level. No longer are we reliant on the victors' malleable histories to call attention to global patterns of conquest. Instead, we can see how the ethnic makeup of individuals is, in fact, a mixture that frequently extends beyond modern borders or the concept of nationalities that families pass down as part of their oral heritage. As such, we asked, can DTCG testing reshape notions of identity and how it relates to social coherence in a world full of divisive nationalistic politics and wars? Previous discourse has indicated genetic testing could.

Stressing concern, a 1996 study by Paul Rabinow described how social identity based on biological conditions could alter people's identity and mediate their social relationships (Rabinow, 1996). Similarly, in a 2002 study, Paul Brodwin cautioned that "What is at stake in genetically-based claims of identity or rightful belonging is not just good or bad science. What is at stake is also personal esteem and self-worth, group cohesion, access to resources, and the redressing of historical injustice" (Brodwin 2002, 324).

More positively, a 2016 study by Turrini and Prainsack found that "genetic or genomic data can serve as a starting point to tell a story about ourselves, claim a place in the ongoing evolution of bio-medicine, or contribute to medical research" (Turrini and Prainsack 2016, 6). Furthermore, a 2018 ethnography of DTCG testing found that the desire to understand oneself was a major motivating factor for taking a DTCG test, and consumers were often encouraged to learn more about their unknown past and share their new results with others (Artz 2018).

A 2018 Ethnography of DTCG

The 2018 study set out to understand the differences between genealogy and health consumers. Semi-structured interviews and observations were conducted with 19 participants, segmented into two groups of consumers. The first group of 10 included individuals who had previously used genealogical genomics services such as AncestryDNA or 23andMe. The second group of nine included individuals who had used a health analysis service. Many of these users also did use genealogical services, but they were unique in that they also used a health service.

Participants shared their experiences, beliefs, values, perceptions, motivations, and concerns regarding the DTCG tests in all cases. The health group also participated in a contextual inquiry session to make product improvements to a health platform.

The study found that participants' motivation for taking a DTCG test often was related to understanding oneself and/or their kin. The study also found that participants often spoke of wanting to learn more about themselves as a function of learning more about others.

Conclusion

This study found that consumers self-reported positive feelings and views towards individuals of other ethnicities after learning that they were, in fact, more ethnically diverse than they previously believed themselves to be.

Based on this, we are encouraged that DTCG tests may foster ethnic understanding; however, we caution that it may also entrench harmful racial concepts. Likewise, we propose additional qualitative and quantitative research to understand better how consumers respond to their results in context at the time of the reveal and see if their behaviors change over time.

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