Spreading the Wealth: The Influence of First-Generation College Students and

Networked Counterstorytelling on Social Capital Theory and Practice

by

Kristi Johns

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Approved April 2020 by the
Graduate Supervisory Committee:

Melanie Bertrand, Chair
Lindsey Dippold
Brooke Foucault Welles

ARIZONA STATE UNIVERSITY

May 2020

ABSTRACT

There is tremendous value in bringing fresh voices and perspectives to theory and practice, as it is through these novel lenses that research advances in rich and more equitable ways. However, the importance of first-generation college students being involved in this process has been vastly underestimated and undervalued by researchers and practitioners alike. Extrapolating from interdisciplinary research on counterstorytelling and networked counterpublics, the aim of this study was to explore how the proposed theoretical model of networked counterstorytelling—as presented through a grassroots digital storytelling campaign—could create space for first-generation student voice and leadership to help inform current theoretical understandings of social capital and community cultural wealth. Using a multimethodological approach—combining large-scale network analytics with qualitative netnographic analysis (Kozinets, 2015)—this study (1) produced novel methods for measuring and analyzing social capital within social media communities, which can serve as template in academia research and educational practice and (2) demonstrated how grassroots digital storytelling campaigns, facilitated by the affordances of social media platforms such as Instagram, can function as a means for inviting the leadership, voice, and perspectives of first-generation college students into the design of higher education research and practice.

DEDICATION

This dissertation is dedicated to all those who have shaped my social capital and
made this degree possible.

- To ASU for embracing innovation that made this degree possible.

- To the Kellogg School of Management and Ford Engineering Department at
  Northwestern University for providing a home away from home.

- To my MoDAL family (Addie, Mike, Eva, Jolie) for sharing their community.

- To Nicole Stephens, and the CDI lab, for supporting my research.

- To Rebecca Carey for seeing beyond a label.

- To my LSC cohort, Lisa, Teddi, Jonathan, and Alison.

- To Ellen, Jaklyn and Ken for making a space for peace. thought and reprieve during
  a global pandemic.

- To "familia" who helped carry me so I could carry on with this work. (The Hunt
  family, The Aikele family, the Beard family, the Nelson family).

- To the caregivers of my children (Elizabeth, Moné, Ms. Diana, Afsar and Amini
  family, Ms. Natalie, Ms. Samantha, Ms. Kim, Ms. Ashah).

- To all the ties, strong and weak, on which I depend.

- And to Scott, Myla, and Zeke. You are my everything.

TABEL OF CONTENTS

iii

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

RESEARCH CONTEXT AND PURPOSE OF THE STUDY

Higher education in the United States is cited as the "great equalizer," providing access and opportunities to students regardless of their identity, background, and life experiences (boyd & Marwick, 2011; Mather & Jarosz, 2014, p. 399). Given that a four-year degree is currently the most effective means for economic mobility (the ability to improve one's financial livelihood), access to college is crucial (Bowen, Kurzweil, & Tobin, 2005; Hamedani & Markus, 2019; Hurst, 2008, 2010; Mather & Jarosz, 2014)). However, access alone is not enough. The path through higher education is not equitably trod, with first-generation college students (FGCS) graduating at approximately half the rate of their peers (Jehangir, 2010; National Center for Education Statistics, 2018). This gap in college completion rates carries serious ramifications. It depletes the economy of vital talent, reduces workforce diversity of experience and perspective, and exacerbates the economic disparities, racial inequities, and cultural divides in the U.S. population (Engle & Tinto, 2008; Hamedani & Markus, 2019; Hurst, 2010). In the realm of academia, this gap gatekeeps marginalized voices and perspectives from shaping academic research, education policy and post-secondary practice.

Knowing college success rates highly favor continuing-generation students and students from economically advantaged backgrounds, higher education stakeholders have sought to understand why this occurs and how it can be addressed. A growing body of research points to social capital (e.g. the resources available within a network of relationships) as a vital resource for student success (Freeland Fisher, 2018; Lin, 2015; Lin, 1999). However, as universities and policymakers continue to invest resources toward

1

research and support programs designed to foster FGCS social capital, the gaps in retention and graduation continue (Mather & Jarosz, 2014; Perna & Jones, 2013).

My dissertation seeks to address this issue by exploring how networked technologies facilitate the development of FGCS social capital by creating space for student voice and leadership. Specifically, I studied how a grassroots storytelling campaign lead by FGCS provided means to build social capital networks through social networking sites (e.g. Instagram) and shape a community counternarrative about the FGCS experience.

Design Error in Higher Education

A key issue facing FGCS involves the limited platforms by which they are able to share their personal experiences without being defined and presented by an outside, "authoritative" source. The process of understanding—and then effectively supporting—the unique needs of FGCS requires more than administrator, faculty, and policy-maker input and decision-making. Brown & Wyatt (2010), leading voices in design thinking research, explains three reasons for why interventions repeatedly fail. First, these initiatives are not built with the users' needs in mind. Second, designers of the interventions do not engage users for feedback and prototype development. Finally, those leading the initiative dismiss the culture and needs of all the stakeholders involved, especially those with the least power. Brown stresses how users, whenever possible, ought to be leading and running the design process itself, not simply testing the product for feedback (Brown & Wyatt, 2010). In the case of FGCS, when designing and evaluating retention initiatives and student support programs, the first key factor missing is student voice and leadership.

The second factor of design error is the lens by which FGCS interventions and programs are created and assessed. The standards used to determine, and measure, student

2

success is shaped by a biased narrative. This narrative, voiced through the norms and values embedded in college culture, structures, and practices, holds its foundation in the norms and values of White, male, upper-class ideologies (Hamedani & Markus, 2019). Establishing a default metric for student success based on hegemonic dynamics of race, class, gender, dis/ability, etc., creates an educational system that is perpetually informed and shaped by dominant group ideologies, which, in turn, deficitizes anyone who does not align with these ideological "norms." It can be inferred then that theoretical frameworks, academic research, and educational practice developed within hegemonic institutions inherently embody deficit ideologies around difference. This includes theory, research and practice guiding the work supporting FGCS's success.

Holding a narrow, deficit-informed framework for FGCS success enforces a deficit view of FGCS social capital. This limits the positive impact of programs and services seeking to support social capital development and can, in fact, create more harm than good (Freeland Fisher, 2018; Schwartz, Lowe, & Rhodes, 2012). While relationships connecting FGCS to resources within networks commonly known to hold traditional forms of academic, social, and professional power (e.g. bridging ties) are vital for economic mobility, these relationship ties are not always successful in supporting FGCS. For example, research by Schwartz et al. (2012) discovered when students experienced negative or curtailed interactions with a mentor, their academic performance and feelings of self-worth were significantly diminished. A connection to someone with resources is not, on its own, enough; there must also be a sense of trust and safety within this connection.

Furthermore, only valuing the social capital held by those in power diminishes the wealth of resources already available to FGCS within their personal identities, families, and

communities. Counterpublics marginalized by hegemonic structures, such as FGCS, find alternative ways to foster and build their social capital. FGCS have a wealth of capital available within their personal networks, known as community cultural wealth, which is dismissed by most colleges and universities (Yosso, 2005). These networks provide validation, renewal, and support for FGCS navigating an educational environment not designed for their success (Renninger, 2015). Today, more than ever before, FGCS are seeking out and mobilizing these networks through social media (boyd & Ellison, 2010; Kim & Kim, 2017). Social networking sites function to foster and build relationships and communities, especially for marginalized student groups, and are a primary place for FGCS to safely tell their stories and experiences (boyd & Marwick, 2011; Marwick, Fontaine, & boyd, 2017; Renninger, 2015). However, extant literature has done very little exploration into how these digital networks foster social capital, how storytelling relates to the formation of these networks, the value counterpublics find in these processes and spaces.

To better understand how these networks functions, I look to scholarship on counterstorytelling, defined as "a method of telling the stories of those people whose experiences are not often told" (Solórzano & Yosso, 2002, p. 32). Founded in the roots of critical race theory, counterstorytelling is "a tool for exposing, analyzing, and challenging the majoritarian stories of racial privilege" and functions to "shatter complacency, challenge the dominant discourse on race, and further the struggle for racial reform" (p. 32). Drawing upon this definition, I propose the concept of networked counterstorytelling, the use of counterstorytelling— housed primarily within digital social networking platforms—to co-construct a multimodal community narrative, build social capital, and transfer capital for individual and community wealth accrual. This theoretical framework provides a lens for

FGCS initiatives, and the research that shapes them, which leverages FGCS leadership and voice and honors the community cultural wealth already inherent in their identities and personal networks.

The New "Traditional" College Student

The notion of a traditional college student—a recent high school graduate from a white, upper- to middle-class background—is no longer the norm (Jesnek, 2012). College students today represent a broad range of economic backgrounds, races and ethnicities, geographical regions, languages, and abilities (Lamoreaux, 2016; Tate, Caperton, et al., 2015). Students of Color are a growing presence in higher education as are students from working class backgrounds (Tate, Fouad, et al., 2015). The average student age is rising as more students are postponing college directly out of high school, and a growing number of students are returning to college after time in the workforce, altering both their needs and range of experiences (Jesnek, 2012). In addition, many of these students are the first in their families to attend and graduate from college (Jesnek, 2012; Lamoreaux, 2016; Tate, Caperton, et al., 2015; Tate, Fouad, et al., 2015).

Consensus on what defines a first-generation student varies. Universities and colleges, as well as public and private research institutions, use different metrics to qualify this status (Renn & Reason, 2013). For this research, FGCS are defined as college students from economically marginalized backgrounds whose parents have not received a bachelor's degree (Jehangir, 2010). Connecting generation status and economic situation in this definition is important since "family income impacts not only graduation from high school, a precondition to college access, but also impacts [student] enrollment, persistence, and completion of collegiate degrees" (Jehangir, 2010, p. 15).

The Intersectionality of the First-Generation College Student Experience

Understanding the experiences of FGCS requires an intersectional lens. Crenshaw coined the term "intersectionality" in the late 1980s to describe the complicated "dynamics of difference" and "solidarities of sameness" that come with multiple axis thinking (Cho, Crenshaw, & Mccall, 2013, p. 787; Crenshaw, 1989a). Intersectionality functions to consider how axes of power (e.g. race, gender, class) define a person's experiences and identity within the world around them (Cho et al., 2013). In addition to being the first in their families to graduate from college, as well as coming from economically marginalized backgrounds, factors of race, gender, age, dis/ability, language, religion and ethnicity influence FGCS post-secondary experience. Using a lens that does not provide space for all these identities and how they intersect limits the understanding of the experiences of FGCS and diminishes the substance and value of their stories.

As a majority of FGCS are students of Color, race and racism must be centered in the FGCS experience (Choy, 2001; Hurtado, 2005, 2015). Class and class discrimination are also salient aspects of the experiences of FGCS in navigating higher education as social class background powerfully shapes student success outcomes (Bowen et al., 2005; Hurst, 2008, 2010; Mather & Jarosz, 2014; Wilbur, 2016). Since the majority of FGCS are women (66%), many of whom have dependents (38%) and are single parents (30%), gender identity and gender roles are another important factor to consider (Engle & Tinto, 2008; Wilsey, 2013). Most FGCS are a non-traditional age for higher education (25 years and older), and compared to their continuing generation peers, a significant percentage of FGCS are multilingual, speaking English as an additional language (18%) (Choy, 2001; Hurtado, 2005, 2015). As well, a large percentage of students with disabilities or who registered with

programs under the American Disabilities Act are FGCS (Engle & Tinto, 2008). Compared to white, upper-class ableist norms embedded in higher education's structures and culture, all of these factors play a fundamental role in the nuanced identities of FGCS and, as such, dramatically impact their higher education experience and access to economic mobility.

When discussing economic mobility, it is important to delineate this concept from that of social mobility and upward mobility. These phrases are frequently used interchangeably, yet they carry significant difference in their meaning and impact. Upward mobility reinforces hegemonic structures in society, positioning marginalized groups as lower than those within the mainstream. Social mobility, on the other hand, implies a required change in sociality— not only in class and economic status, but in the cultures, norms and relationships therein—a painful conflict for FGCS who are continually straddling the boundaries of home and college life. Describing student success as mobility out of one social strata into a new one supports the idea of assimilation and encourages muting or forsaking previous identities, cultures, and relationships. While it is true that social mobility is a common function of academic attainment, superficially labeling it as "student success" does not acknowledge the conflicting nature this definition places on mobility. With this in mind, the term economic mobility will be used to describe student success through college persistence and graduation, thus opposing the hierarchical framing of upward mobility and the deficitized definition of success embedded in social mobility.

Persistence, Retention, and Graduation Rates

Though a rapidly growing population in higher education, the current trajectory of FGCS differs significantly from their college peers. Only 14% of FGCS complete their bachelor's degree in four years (compared to 68% of continuing-generation students)

7

(Bjorklund-Young, 2016; Kena et al., 2015). Retention efforts are also a concern, as FGCS have a 26% higher likelihood of dropping out after their freshman year of college compared to only 7% of their continuing-generation peers (Engle & Tinto, 2008). Persistence is also a concern for incoming FGCS freshmen. Research by Castleman and Page (2015), discovered that 22% of economically marginalized students who were "college intending" (planning to attend college the fall after graduating high school) "melted" during the summer (Castleman & Page, 2015). Students who attend two-year colleges fare even worse. At community colleges, which enroll a disproportionate number of FGCS (85%) compared to their four-year counterparts (25%), only one out of three students transfer to a four-year institution (National Center for Education Statistics, 2018; Shapiro et al., 2015). Fewer than 15% of all community college students will graduate with a four-year bachelor's degree within six years (Shapiro et al., 2015). As summarized in the U.S. National Report Card (2013), the gap in student success within higher education "has not changed over the past decades" (National Report Card, 2013, p. 143).

The Landscape of Higher Education

Conversations regarding the gap in college completion for first-generation college students frequently cite higher education as being a broken system. With closer inspection, however, it is clear that the issues plaguing our colleges and universities are not due to a broken system, but one that is working entirely as it was designed.

Designed Oppression Within Higher Education

The assertion that higher education provides an equitable experience for all students ignores the embedded privilege and bias within its institutions, systems, and culture (Mather & Jarosz, 2014). Hamedani and Markus (2019) explain how U.S. higher education "reflects

and promotes assumptions about what it means to be 'smart,' 'educated,' and 'successful'….

[These] assumptions are not neutral, but are instead powerfully shaped by white, middle- to

upper-class beliefs, norms, and values" (Hamedani & Markus, 2019, p. 3). Since the norms

and values of an organization shape its culture and structures, campus norms which

favorably bias white, economically advantaged students will also actively undermine the

economic mobility of FGCS (Allan, Garriott, & Tracey, 2016; Fryberg, Covarrubias, &

Burack, 2013; Quaye & Harper, 2015). Deeply embedded in campus culture, these biases

extend into campus structures, programs and curriculum, permeating the entire fabric of our

education system (Yosso, Smith, Ceja, & Solórzano, 2009). Often coded as cultural

differences, these power imbalances are frequently masked as "shared" norms and values at

the college, as well as "neutral" forms of evaluation and practice (Matsuda, 1993; Yosso,

2005).

U.S. Social Constructs and Hierarchies

Positioning the experiences of FGCS within larger social constructs of the U.S helps

frame how this gap in college retention and graduation occurs and why it continues to

perpetuate. The hegemonic norms and structures embodied in the U.S. higher education are

symptoms of the oppressive, discriminatory foundations of our country (Adams, Dobles,

Gómez, Kurtiş, & Molina., 2015; Adler & Aycan, 2018; Delgado & Stefancic, 2012; Markus,

2008). Throughout history, social constructs (e.g. race, class, gender, dis/ability) have been

used to categorize and label groups of people in order "to 'navigate' the world around us"

and shape our identities within this world (Omi & Winant, 2015, p. 105). Identity is reflected

in our ability to differentiate ourselves from others and then assign meaning to these

differences (Urrieta, 2007). Since identity is relational—reflecting "a person's continuously

9

changing perceptions of themselves as an individual and part of a collective—social constructs of race, gender, and class directly influence a person's identity as they navigate hegemonic ideologies embedded in our society's structures (Coronella, 2016, p. 5).

Existing within a society automatically enforces classifications based on difference, shaping societal and self-perceptions of identity. To be clear, social identities are social constructs, and these constructs function "to differentiate groups" and, far too often, serve to establish "the superiority or dominance of one group or another" (Yosso, 2006, p. 5). Social constructs are not representative of fixed traits, but are instead products of societal ideologies and interactions, which then shape future social thought and relationships (Graham, Nosek, & Haidt, 2012; Prentice & Carranza, 2002). This, in turn, creates biased societal definitions of what it means to be successful and affects how persons from different identities can or cannot achieve this success (Eberhardt, Goff, Purdie, & Davies, 2004).

Hamedani and Markus (2019) explain, "Difference is cast as the result of negative and innate shared behavioral characteristics or tendencies rather than as a matter of differential access to resources, power, and/or status" (p.7). Discriminatory practices (e.g. racism, sexism, classism, ableism) are products of ideological hierarchies shaped by social constructs and serve to perpetuate stereotypes and establish grounds for determining what is right and wrong and who is good and bad (Hamedani & Markus, 2019; Wong, 2015; Wong & Green, 2016). Over time, reinforced discriminatory practices become norms and values held by society which shape its culture, institutions, and structures, seamlessly embedding institutionalized "isms" throughout society as a whole (Markus, 2008; Markus & Moya, 2010).

10

Hegemonic Violence in Higher Education

Oppression and discrimination in higher education are not issues of the past. Already in 2019, we have seen discriminatory university recruiting practices, the perpetuation of sexist tropes in academia, and the indictment of social elites for using wealth and privilege to cheat the admissions process. Racism remains a pervasive issue in higher education with "hate crimes and discrimination continu[ing] to manifest within university settings" (Gin, Martínez-Alemán, Rowan-Kenyon, & Hottell, 2017, p. 160). Economic and class discrimination are also a continued source of concern. In 2013, 77% of college students from the top economic quartile graduated as compared to just 9% of their peers in the bottom quartile (Cahalan & Perna, 2015). In addition to racial and classed biases, higher education continues to perpetuate sexist, ableist, ethnocentric, and heteronormative norms and values. These norms and values pervade the structures, culture and practices within education and become difficult to recognize except by those who do not align with these socially constructed standards (Matsuda, 1993). Yosso (2005) explains, discrimination and racism are "often well disguised in the rhetoric of shared 'normative' values and 'neutral' social scientific principles and practices" (p. 74).

Resistance Through Counterpublics

Due to these inequities, the realm of higher education is ripe for the formation of counterpublics. Counterpublics, proposed and defined by Fraser (1990) as a critique to Habermas's (1989) original ideation of the public sphere, are "the unique sites and methods that members of [marginalized] groups use to produce nondominant forms of knowledge" (Fraser, 1990, cited in Jackson & Foucault-Welles, 2015, p. 2). Universities are sites of potential counterpublics because they "have long been special places, places of both

11

innovation and resistance" (M'Gonigle & Starke, 2006, p. 10). The embedded hierarchies in

higher education reinforce marginalization on lines of race, class, gender, and countless other

"isms" seen in society, necessitating the formation of counterpublics for individual and

group survival.

Counterpublic communities are built around a shared set of beliefs, experiences, and

values, and they function to provide space for validation, renewal, and support. For FGCS,

counterpublics function as a reprieve from the racialized, sexist, and classed structures on

campus (Asen & Brouwer, 2001). Counterpublics recognize the value of community cultural

wealth and build spaces to accrue resources, develop a shared dialogue, and celebrate

community members. Resource exchanges are frequently accomplished through the medium

of storytelling, which legitimizes and communicates the "lived realities" of those on the

margins and pushes "the mainstream public sphere to acknowledge and respond to these

realities" (Jackson & Foucault Welles, 2016, p. 398). Counterpublics provide refuge as well as

foster resistance and power through counter narration and the formation of new social and

cultural structures (Jackson & Foucault Welles, 2015; Renninger, 2015).

Networked Counterpublics

With the advent of Web 2.0 technology, counterpublics are taking new life. In 2015,

Jackson and Foucault-Welles formally proposed networked counterpublics as a theoretical

model useful for understanding marginalized communities connected through digital

technologies. Renninger (2015) followed suit with a similar definition in that same year.

Much like the counterpublics before them, these online communities' function to address

inequities and sustain those on its margins. Indeed, "networked spaces offer citizens most

invisible in mainstream politics radical new potentials for identity negotiation, visibility, and

influence" (Jackson & Foucault Welles, 2016, p. 399). Examples of #BlackOnCampus and #MarchForOurLives movements demonstrate the power social media has in generating digital forms of these counterpublics for marginalized student groups, and how these networked communities, in turn, influence institutions and society.

Students marginalized by higher education have a long history of resisting and subverting oppressive institutions, finding ways to foster and build capital within their networks. Today, FGCS are seeking out these networks, as well as mobilizing the resources therein, through social media (boyd & Ellison, 2010; Kim & Kim, 2017). These social networking sites function to foster and build relationships and communities, especially for marginalized student groups and are a primary place for FGCS to safely tell their stories and experiences (boyd & Marwick, 2011; Marwick et al., 2017; Renninger, 2015).

An Equitable Design for Higher Education

Designers seek to identify errors in products or services to improve their function, a concept which also applies for those designing interventions to support FGCS in higher education. Srinivasa (2018) stated the following regarding design methods and ideology, "There is no such thing as human error [in product or service design]. If an error is done by users, then it's a faulty design" (Srinivasa, 2018, p. 2). As such, when FGCS interventions are ineffective it is incumbent to study errors in the intervention design, not in the students using them. In the process of designing solutions to the systemic barriers facing first-generation college students in higher education, it is vital to bring FGCS to the center the of the design process. As explained by the Creative Reaction Lab (2018), an organization working at the heart of the concept of equitable design:

> We have noticed some people that use design thinking are often separate from the communities they are trying to understand: they go into the community to observe

13

and then leave to create a solution. On the other hand, Equity-Centered Community Design focuses on dismantling systemic oppression and creating solutions to achieve equity for all. To do this, the process incorporates history and healing, where history is unpacked to unveil power structures and open a space for relearning. Empathy and humility are used to involve the community in co-creation during every step of the process. Overall, we believe ECCD fills in some of the gaps we have found in design-thinking and thus, we developed the process to focus on the community and equity (https://www.creativereactionlab.com/our-approach).

Far too often the lens for understanding and supporting marginalized groups is informed, constructed, and lead by those holding traditional forms of power. In the context of FGCS, university faculty and policy makers are the ones at the center holding power of the design process. More often than not they serve as the spokespeople describing the experiences of the FGCS attending their campuses (Sadler, 2018; Simons, 2018) and serve as the leaders designing and implementing programs and strategies on the behalf of FGCS needs (Sadler, 2018). However, given the growing gap of college success between FGCS and their continuing generation counterparts, it is clear this top-down approach is not working.

A primary problem rests in the fact that the majority of FGCS interventions are not directly informed or led by FGCS feedback creating a gap of understanding between those designing these services and those using them (Chamberlain, 2018; Johnson, 2018; Sadler, 2018). At best, these programs fall short in fully addressing FGCS needs; at worst, they embody a deficit narrative which lays fault and responsibility on FGCS for the barriers impeding their academic, professional, and economic mobility. Beyond this, it perpetuates the cycle of who enters traditional spaces of influence and power.

Universities seeking to improve support for FGCS need to re-center individuals and groups on the margins in the design of these services. By engaging those directly experiencing marginalization, and ceding power so they can lead the design of programs, colleges can help affect actual change for their experience on the margins. To do this, FGCS

need ownership of their stories. This research aims to answer similar inquiry lines stated by

Solórzano & Yosso (2002) with respect to FGCS:

> Often, educational marginalization is justified through research that decenters and even dismisses communities of color—through majoritarian storytelling. We continually ask, "Whose stories are privileged in educational contexts and whose stories are distorted and silenced?" U.S. history reveals that White upper-class and middle-class stories are privileged, whereas the stories of people of color are distorted and silenced. We further ask, "What are the experiences and responses of those whose stories are often distorted and silenced?" In documenting the voices of people of color, our work tells their stories. (p. 36)

Problem of Practice

Universities and FGCS ultimately have the same goal: student success. Social capital

is a key resource in achieving this goal. However, interventions targeting student persistence

are not narrowing the graduation gap between FGCS and their peers. Central to this

problem is the salient ideology held by higher education institutions that support resources

are designed *for* FGCS, not *with* FGCS. This deficit approach marginalizes student voice,

devalues their culture and identities, and dismisses FGCS authority over their own

experiences.

To effectively redesign higher education and foster FGCS social capital, universities

and colleges must value FGCS voices and perspectives, respectfully engage in students'

platforms of choice as guests, and learn to rely on FGCS expertise to shape theories and

practice implemented on their behalf. It is not enough to simply address the symptoms of

faulty design; higher education must get to the root of the problem. This means ceding space

to the leadership of FGCS, as well as their knowledge and expertise, to reshape theory,

policy and practice. Guided by this understanding, I studied how the proposed concept of

networked counterstorytelling served to not only create novel social capital networks FGCS,

but to inform and shape social capital theory and practice itself. To accomplish this, I

15

collaborated with a team of undergraduate and graduate FGCS students to implement a grassroots digital storytelling campaign designed to amplify the voices and experiences of FGCS. I studied this multi-phase intervention using an exploratory mixed methods research design, guided by the following research questions:

1. How were the structural components of social capital presented within the networked counterstorytelling (NCS) campaign?

2. What aspects of social capital emerged within the NCS multi-modal narrative?

3. How was community cultural wealth discussed in the NCS multi-modal narrative?

4. How did FGCS perceive the value of networked counterstorytelling?

Chapter 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORKS

"We fear those who speak about us, who do not speak to us and with us. We know what it is like to be silenced. We know that the forces that silence us, because they never want us to speak, differ from the forces that say speak, tell me your story." hooks (p. 206)

Chapter 2 begins with a literature review of the theoretical voices shaping higher education research and practice. discussing the experiences of FGCS in higher education. First, context for how and why FGCS' voice is dismissed will be described along with the ways this dismissal impacts student success and well-being. This will be followed with an overview of FGCS needs while attending college, narrowing in on the importance of sense of belonging and its impact on student success. Next, a deeper discussion of the value of social capital will be provided, evaluating key elements that comprise these social networks, and outlining the structural FGCS' needs for structural, relational and cognitive connections as they navigate college and university life. Following this literature review, I will further explore the proposed theoretical model of *networked counterstorytelling* through the merger of its foundational frameworks: counterstorytelling and networked counterpublics. Counterstorytelling will be analyzed within the context of social media use by FGCS, exploring its multimodal nature in narrative construction; the affordances of networked counterpublics will be described in the context of FGCS marginalization and their use of social media. From these merged frameworks, I will define the parameters of networked counterstorytelling; describe its function in correlating counterstorytelling, networked counterpublics and social capital; and discuss how this theoretical model fills important gaps in current literature.

Unheralded Stories of First-Generation College Students

There is desperate need for more student voice addressing the issues within higher education. However, the discussions influencing university policy and programs are conducted by those considered to hold power in higher education, namely, administrators, faculty & researchers and policymakers (Chamberlain, 2018; Sadler, 2018; Simons, 2018). If student voice as a whole is being pushed from a central role, the voices of FGCS, who are on the margins of the student population, are heard and valued even less than their peers. Kramarae (2005), whose scholarship informs the theory of muted groups, describes how any individual or group "distinguish[ing] themselves from the dominant one in terms of race, age, gender, sexual orientation, and economic status can potentially be silenced or muted" (p. 54). Since higher education as a whole has been shaped by, and therefore embodies, White, male, middle- to upper-class culture and values, this silencing effect directly affects the intersectional identities of FGCS.

Consequences of Muting Student Voice

The muting of FGCS' voice produces several consequences. First, it curtails spaces for FGCS to share their stories. For FGCS wishing to elevate stories of their experiences, few spaces may be available to freely share without being defined or potentially penalized by someone in authority (Marwick et al., 2017; Renninger, 2015). This prevention of student expression does not imply FGCS have no stories to share; on the contrary, it "suggests that people attached or assigned to subordinate groups may have a lot to say, but they tend to have relatively little power to say it" (Kramarae, 2005, p. 54).

A second consequence of muting student voice is negating FGCS ownership of their personal stories. When FGCS' experiences are shared in mainstream discourse, the

18

"dominant groups" determine how their experiences are communicated" (Boylorn, 2013, p. 7). Appropriation of FGCS' stories by faculty, administrators, researchers, and other students, as well as the curation of FGCS' first-hand stories tailored to the dominant narrative on campus, dismisses FGCS ownership of their experiences and how they wish them to be shared. As Kramarae (2005) explains, their experiences are "interpreted for them by others; and they are encouraged to see themselves as represented in the dominant discourse" (p. 55). Their voice is either silenced or lost due to its diminished value.

The devaluation of FGCS' perspectives and insights is a third consequence of the muting process. Student voice is not seen as a source of authority "by those in the dominant positions" and "their knowledge is not considered sufficient for public decision-making or policy making processes" (Kramarae, 2005, p. 55). FGCS are "all too often positioned in education research, policy, and popular discourse as uninformed, at risk, or apathetic (Lesko, 2012)" (Stornaiuolo & Thomas, 2017, p. 338). This devaluation of FGCS voice and authority leads to the reinforcement of majoritarian discourse about their experiences and needs. Also referred to monovocals, master narratives, and standard stories, majoritarian stories are generated from those holding power, perpetuating a "legacy of privilege" by claiming a neutral, objective stance and presenting a single narrative to represent a complicated and nuanced experience (Solórzano & Yosso, 2002).

Majoritarian stories distort and silence the experiences of those on the margins, building narratives off the assumptions of white, upper- and middle-class norms and values as the standard for society (Hamedani & Markus, 2019; Solórzano & Yosso, 2002). These biased narratives inform the lenses of many social science and education frameworks used to address inequities, establishing a deficit framing of marginalized groups—people of color,

women, working class communities—and creating interventions that approach them as lacking compared to the standard "norms" (Lesko, 2012; Solórzano & Yosso, 2002). This is frequently the case for FGCS retention strategies in higher education.

Student Needs in Higher Education

Paradoxically, though FGCS are a muted group, they also feature prominently in universities' retention efforts. While higher education may not be designed for FGCS, as a substantial portion of their student body, colleges and universities are very much dependent on them for their survival. In the world of higher education, accreditation is king, and the primary metrics associated with accreditation are student retention and graduation rates (Mati, 2018). Furthermore, attrition rates significantly impact the bottom line of higher education institutions (Ladson-Billings, 2006). As such, efforts to boost these numbers continue to be a top priority for post-secondary institutions. As FGCS encompass a growing percentage of the student body, yet their graduation rates remain low, institutions are devoting substantial resources into retention services supporting their college success. Below I explain three of the primary targets for FGCS support services, as related to real or perceived needs in the areas of finances, academics, and sense of belonging. I focus the bulk of my attention on the sense of belonging due to the nature of my dissertation.

Financial Needs

First-generation students, as defined by Jehangir (2010), come from economically marginalized backgrounds, making financial support vital for their college success. Concerns with the cost of tuition, books, housing, and transportation are heavy financial and emotional burdens, especially since the vast majority of FGCS are financially independent (74%) and do not have family to help supplement the price of tuition and day-to-day costs

of living (Engle & Tinto, 2008, p. 5). Furthermore, many FGCS bear caregiving responsibilities for children and other family members, which require work and family responsibilities beyond what their continuing-generation peers carry while attending school. This increases FGCS' overall expenses (e.g. childcare costs), decreases time available for studying and coursework, and limits their ability to fully participate in the college experience (Engle & Tinto, 2008, p. 3). Finally, limited financial resources not only impacts FGCS' earning potential, it affects their ability to fully engage in the formal and informal structures of university life—the cost of social interactions (Renn & Reason, 2013; St. Clair-Christman, 2011) While their peers are able to spend money on social gatherings and extracurriculars, many FGCS either cannot, or choose not, to join in on these activities due to financial constraints. To address this issue, some colleges and universities have created programs to provide financial assistance to FGCS.

Academic Needs

Improved academic support is another real need for first-generation students. Limited access to academic resources and professional networks can significantly impact FGCS' academic opportunities before, during, and after college as they transition into careers (Bettinger & Boatman, 2013; Engle & Tinto, 2008). Even when resources are available, many FGCS do not take full advantage of them. For example, Engle and Tinto (2008) found FGCS are not as likely to engage in academic and social experiences connected to college success such as "studying in groups, interacting with faculty and other students, participating in extracurricular activities, and using support services" (p.4).

Needs Related to Sense of Belonging

Beyond the direct burden of financial and academic barriers, FGCS face what can be described as the social undercurrents of higher education (Mehta, Newbold, & O'Rourke, 2011; Sanacore & Palumbo, 2015). Not only do FGCS need increased access to supportive and transporting relationships, they also need the confidence and safety to utilize those relationships. An overarching need touching the lives of many of FGCS is the need for social acceptance, support, and safety (Jehangir, Williams, & Jeske, 2012; Swanbrow Becker, Schelbe, Romano, & Spinelli, 2017).

Many FGCS feel left out and have trouble finding their place once they start attending college (Housel & Harvey, 2009; Johnson, Richeson, Finkel, & Simpson, 2011; Ostrove & Long, 2007). These feelings become strikingly apparent at four-year institutions where the campus culture is based on white, male, and middle-class norms (Jehangir, 2010, p. 33). The discomfort created when students of color and those from low-income or working-class backgrounds enter institutions structured around white, high-income norms and values can be profound. These disparities leave many FGCS feeling excluded at their respective campuses and can lead them to question whether they fit or belong in college (Covarrubias & Fryberg, 2015; Ostrove & Long, 2007; Walton & Cohen, 2007).

For many FGCS, being able to fully engage in college life is complicated. As mentioned previously, the cost of social interactions is heavy. While many of their peers are spending money on social gatherings and extracurriculars, FGCS either cannot or choose not to join due to the cost of these interactions. This could be due to a lack of funds or work and family obligations that interfere. Described as the "hidden curriculum", this understanding of how and when to navigate college resources—such as selecting a major,

finding an internship, meeting with campus advisors, and building their resume—is

inherently provided to students whose parents have already gone through the college

experience, leaving FGCS to navigate these waters alone (Housel & Harvey, 2009; Ostrove

& Long, 2007; Reay, Crozier, & Clayton, 2009).

For FGCS, a function of psychosocial safety includes "the belief that people who have

backgrounds like theirs deserve to attend college and can thrive there" (Stephens, 2014, p.

944). Background-specific obstacles can undermine FGCS' academic performance and limit

their opportunity to succeed (Stephens, Townsend, Markus, & Phillips, 2012; Stephens,

Fryberg, et al., 2012). This could include differences in culture and communication such as

speaking English as a second language, studying as an international student, or simply using

vernacular outside the norms of higher education, often referred to as code switching (Elkins

& Hanke, 2018). Diminishment due to differences can be felt in the long-term as well as in a

student's day-to-day actions. They come up in conversations as intended or unintended

microaggressions to the point that many FGCS feel they are bridging two cultures, not

feeling a sense of belonging in either one (Oldfield, 2007, 2012; Rendón, 1992). In such

circumstances, FGCS receive the message that "their cultural capital, language, and resilience

are not of use" at that particular institution (Jehangir, 2010, p. 33). The effects of this

compromised psychological safety and diminished cultural value of FGCS include stereotype

threat, social identity threat, and imposter phenomenon (Gray et al., 2018; Yosso et al.,

2009). FGCS often struggle with a sense of belonging on their respective college campuses

(Covarrubias & Fryberg, 2015; Ostrove & Long, 2007). This lack of belonging or isolation

can lead to feelings of depression and loneliness for FGCS and can affect their

empowerment and self-efficacy, significantly impacting student retention and success (Collings, 2014; Engle & Tinto, 2008; Mehta et al., 2011).

The Importance of Social Networks

One way to enhance FGCS' sense of belonging is by fostering social ties and connections. This can be accomplished through countless avenues: admissions processes, hiring practices, curriculum design, and mentorship to name just few. Student diversity is vital, and admissions processes, including investments in early interventions, should be a top priority. Furthermore, diversity of student demographics must also be reflected in the administration, faculty, and staff. Young people benefit from role models who look like them and have similar experiences. This sense of homophily can help shape a positive identity and inspire a crucial sense of belonging in students, schools, and communities (Gopalan & Brady, 2020). Implementing hiring practices that prioritize this, as well as dedicating resources to improve the pipeline for potential hires, should be undertaken. Students also need to see themselves in the curriculum they are being taught.

Mentorship is another important avenue for building the personal and professional networks of FGCS. First-generation college students benefit significantly when they are connected with student mentors who can draw on personal experiences to understand the social and emotional challenges facing their mentee (Plaskett, Bali, Nakkula, & Harris, 2018). Referred to as near-peer mentors, these relationships help provide support and guidance on logistical, academic, and social needs. Furthermore, in their research, Plaskett et al, (2018) discovered the most successful mentoring relationships extended beyond practical support and formed a strong relationship of trust, empathy, and respect. After graduation, social connections continue to impact careers. When it comes to economic mobility, these personal

connections significantly advantage white, upper-class continuing generation students, so it is vital to build social networks which FGCS can use to glean the necessary resources to support their academic and professional endeavors.

Online communities through social networking sites (SNS) have become a primary method for building and sustaining social capital for college students. The relationship between students and social media has been shown to directly influence their academic and social public spheres (Gray, Vitak, Easton, & Ellison, 2013; Junco, 2012a, 2012b). Social network platforms provide students a space to "maintain the social connections that shape campus culture" (Alemán & Wartman, 2009, p. 159) with researchers claiming social media to be the "social glue" of university campuses" (Madge, Meek, Wellens, & Hooley, 2009, p. 152). Students now turn to online social media networks to connect and develop relationships as an alternative or a complement to their physical environments (Ellison, Steinfield, & Lampe, 2007). The ability of social media to build interpersonal relationships, make new friends, and enable social communities to support each other is its core value for college students (Jin, 2015; Kim & Kim, 2017; Nabi, Prestin, & So, 2013).

Implicit Bias Shaping Theory and Practice

Before discussing the role and importance of social capital, it is necessary to evaluate the role implicit bias has played in shaping education theory and practice. As mentioned in the introduction, design error should be a top consideration when designing and assessing interventions for FGCS, and part of this design error rests on the theories and frameworks used to shape these interventions. The following section presents an example of how the design error of implicit bias shaped educational theory, research, and practice affecting

FGCS, the unintended consequences of error, and current efforts to repair these consequences.

The Tinto Effect: Deficit Ideologies Shaping Theory and Practice

Tinto's 1993 model of student departure has deeply influenced research surrounding student retention (Perna & Jones, 2016; Rendón, 1992; Tinto, 1993). For decades Tinto's theory has been used as the gold standard in the design and development of student interventions and retention strategies, to the point that this framework is now ubiquitous across educational and social science research and practice, a concept I like to refer to as the "Tinto effect" (Perna & Jones, 2016; Rendón, 1992; Tinto, 1993). While much value can be, and has been, derived from this foundational framework, it also holds serious gaps regarding its impact on marginalized student groups; a flaw which Tinto himself later acknowledged (Tinto, 2012).

The primary issue with the theory of student departure is the deficit narrative and approach its frameworks reinforce. When white, upper-class norms prevail as the standard in higher education, efforts to fully integrate students into university social and academic life frame life experiences outside campus norms as a deficit instead of an asset. Campus programs designed off these deficit frameworks focus their efforts on cultural integration (Tinto, 1993). Assimilation and integration severely impact a sense of belonging. The opposite of belonging is fitting-in, which requires assessing and then acclimating oneself to one's environment. However, this is the goal of most retention programs in which a successful student is an assimilated student (Solórzano & Yosso, 2002, p. 31).

This frames FGCS as lacking, ultimately holding them responsible for overcoming barriers to economic mobility and minimizing institutional accountability for forging these

barriers (Hamedani & Markus, 2019). Terms such as minority, at-risk, disadvantaged, disabled, etc., are tell-tale rhetoric of the deficit ideology seen in student programs and services. This "cultural deficit storytelling," used by social scientists and educators alike, threads a tight story about FGCS—students of color, economically-marginalized students, female students, and students who are differently-abled—perpetuating a harmful narrative around student difference throughout academia and practice (Solorzano, 1998; Valencia & Solórzano, 1997).

Instead of addressing implicit bias and the harm it creates, practices functioned to ignore it via colorblind approaches. A primary ideology derived from "cultural deficit storytelling" is a colorblind approach or race-neutral approach to education research and practice (Solórzano & Yosso, 2002, p. 31). Initially implemented to address issues of race, colorblind approaches have, over time, seeped into the deficit narratives surrounding a litany of socially constructed differences (e.g. class, gender, able-bodiedness, etc.). Reasons for color-blind strategies could be due to discomfort with and insecurity in broaching deeply sensitive conversations around privilege, bias, and discrimination. This can lead to color-blind practices which are directly led by implicit biases surrounding difference. For example, when race, class, gender, and able-bodiedness are seen through a deficit lens, administrators, professors, and students may seek to downplay the differences on the premise of protecting individuals or groups by not highlighting their "deficiencies". More discriminatory efforts of colorblind strategies aim to intentionally protect the privilege and power of those at the center (e.g. "reverse racism", dismissal of patriarchy, bootstraps mentality, strict meritocracy).

Regardless of intent, colorblind ideologies significantly harm marginalized groups by dismissing and invalidating their racialized, classed, and other discriminatory experiences in an effort to view all students "equally" and not advantage one group over another. Colorblind approaches diminish the role identity plays in shaping FGCS' university experience, dismiss implicit bias and hegemonic structures in education, and devalue the wealth of resources inherent in FGCS' backgrounds, culture, and networks.

While colorblind approaches undermine or minimize student difference, difference-conscious approaches embrace, value, and highlight student difference in campus communication, curriculum, and program development. Interventions based on difference-conscious ideology aim to contextualize student experiences within the social and cultural norms of campus. For example, research by Stephens et al. (2014) determined when incoming FGCS heard a panel of upperclassmen describe how their identities as FGCS influenced their experiences at college, these incoming freshmen experienced a greater sense of belonging on their campus, an increased willingness to seek campus resources, and improved academic performance. However, because U.S. colleges and universities seldom acknowledge how difference in race, class, gender, and able-bodiedness can affect students' educational experiences, "many first-generation students lack insight about why they are struggling and do not understand how to overcome these barriers" (Stephens, Hamedani, & Destin, 2014, p. 944). Efforts by higher education stakeholders to dismantle colorblind intervention must be intentional in acknowledging institutionalized power imbalances and the deficit views they perpetuate on their campuses, especially when it comes to social capital.

Social Capital

Who we know fuels the direction of our lives. From our identity and worldviews, to the ethics and values we hold and the types of education and careers we pursue, the people and institutions with whom we are formally and informally connected guide us every step along our path. This is the heart of social capital: the powerful undercurrent structuring our views of the world and ourselves, guiding the direction of each of our personal and professional paths. And for FGCS, the power of social capital can mean the difference between success and failure.

The Voices Shaping Social Capital Theory

The foundations of social capital theory as we know it today were established in the 1980's by French researcher Pierre Bourdieu. Bourdieu (1986) studied ways in which dominant classes of society leveraged social connections and relationships to maintain their dominant positions in society (e.g. cultural capital, social capital, and economic capital). Bordieuan theories of capital have served as the foundation of subsequent social and cultural capital frameworks to this day and which are used by numerous scholars to frame societal inequities. For example, Coleman (1988) took Bourdieu's framework and broadened its perspective to extend the value of relationships not only for the social elites but for communities who have been marginalized and denied social and economic power. Scholarship from Putnam (1995, 2000) introduced a transformational lens to Bourdieu's framework by suggesting the value of utilizing social capital to bridge gaps between social class, opportunity, and privilege (e.g. bonding, bridging, and linking capital).

By the close of the 20th century, there were over 23 unique definitions in published research (Adler & Kwon, 2002) leading social capital scholars Lappé and Du Bois (1997) to

describe the concept as a "wonderfully elastic term" (p. 119). Today a proliferation of social

capital derivatives saturate academic research, literature, and practice and can be categorized as:

individual vs network frameworks; individual, group, and/or class analyses; measurement

techniques; etc. This research embraces a networked concept of social capital, grounded in Lin

(1999, 2001) and Nahapiet and Ghoshal's (1998) frameworks, and defined as "the sum of the

actual and potential resources embedded within, available through, and derived from the

network of relationship possessed by an individual or social unit" (p.243).

Key Facets of Social Capital

Structural Components of Networks.

Social capital can be understood in terms of the networked resources it affords;

(hence, I draw upon an understanding of the structural frameworks of social capital

(Granovetter, 1992; Lin, 1999, 2001; Nahapiet & Ghoshal, 1998). Frequently utilized in

organizational behavior studies, this framework has been used to understand knowledge

sharing within formal organizations and work groups settings (Chiu, Hsu, & Wang, 2006;

Robert, Dennis, & Ahuja, 2008; Van Den Hooff & Huysman, 2009) and to investigate the

connection between resource exchange and production innovation for employees (Chen,

2008; Reagans & Zuckerman, 2001; Tsai & Ghoshal, 1998). In a more recent study, Warren

(2015) shifted away from a more traditional business application to study how Nahapiet and

Ghoshal's (1998) social capital framework could apply in online civic engagement. This

aspect of social capital can be assessed and measured using Lin's (2001) model of social

capital, a framework which unbundles structural social capital into three key components: (1)

the resource(s) embedded within a network, (2) the ability to access these resources, and (3)

the ability to mobilize a network's resource(s). Lin's framework was used to frame the methods and analysis of structural social capital in this dissertation.

Network Ties.

Access to network resources is based on structural connections. Structural access to capital is forged through the development and maintenance of network ties and configurations by an individual or social unit (Coleman, 1988; Nahapiet & Ghoshal, 1998; Putnam, 2000). Tsai and Ghoshal (1998) describe structural capital as social interaction ties (or network ties) which function as channels for information and resource flow and provide access to resources and community assets. The strength of network relationships, commonly referred to as strong and weak ties, plays a significant role in how social capital is mobilized.

There are social capital ties that function to help students "get by" vs. "get ahead" (De Souza Briggs, 1998). A student's network of strong ties is typically closely connected; each party, or node, holds similar connections and resources. The downside to this tight-knit community is that "redundant ties offer redundant resources" (Burt, 2000). Many people reach out for multiple introductions with increasingly looser ties to connect to new opportunities (Granovetter, 1973, 1983, 1992; Smith, 2005; Zhao, 2013). However, when unbundled this weak tie networking differs along lines of class. Adults with low-incomes leverage weak ties for lateral job mobility, while middle- and upper-class adults utilize weak ties more for upward job mobility (Smith, 2005; Zhao, 2013). There is a significant education-weak tie interaction where benefits from weak ties increase according to higher levels of education (Granovetter, 1973, 1983, 1992; Smith, 2005; Zhao, 2013) .

However, while the majority of people secure jobs through their weak ties, Gee (2017) discovered that one effective strong tie can prove more valuable all else being equal.

31

Through analyzing Facebook relationship strength, Gee determined that stronger ties, while fewer and less diverse than weak ties, may be more willing to help. Fisher (2018) elaborates on this concept by explaining, "Our strongest positive ties tend to look out for us (and we for them) and can offer the greatest access to professional opportunities. Our weaker positive ties, however, tend to be more plentiful, and as such can diversify our access to opportunities beyond what our far fewer strong ties can offer. Our weaker ties may also provide a low-risk space to vent or grapple with our struggles" (p, 41).

Homophily

Improving social capital cannot be addressed by an increase in strong and weak contacts alone. While the amount of connections is important, the quality of these relationships determine their social capital potential, or relational capital. Relational capital is frequently measured by trust. "Valuable relationships...are grounded in trust, not just logistics" (Freeland Fisher, 2018, p. 41). Fukuyama (1995) defines trust as "the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms on the part of a member of that community" (p.26). Homophily, or "the inclination of individuals to connect to other like themselves" is one of the most important factors found to generate trust in social networks (Fisher, 2018, p.41-42). People like to interact with others who are similar to themselves; as such, the "average person's networks are highly homogenous along axes of gender, education, religion, age, occupation, and race and ethnicity" (p. 42). As Fisher (2018) explains, "Similarity breeds connection and trust" (p. 42).

However, within this concept lies a powerful truth: the categories by which we self-sort are, at least to a degree, malleable (Smith, Mcpherson, & Smith-Lovin, 2014). Changes

in which factors influence homophily explain connection between common dimensions, but also demonstrate how these ties can bridge "across other dimensions where two people may be different" (Fisher, 2018, p.42). This takes place because "different dimensions of similarity can inspire trust" (p. 43). When a FGCS meets someone new, in person or online, they will be most likely to trust that person if they can see or experience similarities to their own identity (p. 43). These social interactions have a strong effect on trust, increasing vulnerability in relationships, and allowing for greater collective problem solving and collaboration (Kim, 2007; Warren et al., 2015; Xu, 2010). Viewing social capital through a mutually beneficial lens supports this.

Cognitive Resonance.

Cognitive resonance within social capital describes the shared language and vision within a network relationship or community that builds connection and belonging (Warren et al., 2015). Nahapiet and Ghoshal (1998) state, "Beyond the existence of shared language and codes" the sharing of stories provides "powerful means in communities for creating, exchanging, and preserving rich sets of meanings" (p.254). Digital network ties like those found on social network sites allow interactive information exchange and co-creation of content contribution (Chiu et al., 2006; Warren et al., 2015). Given that narratives and stories are a primary medium for developing a shared language and vision, I will use the term "narratives" or "stories" interchangeably when describing the cognitive level of social capital. For example, Warren and colleagues (2015) applied Nahapiet & Ghoshal's (1998) framework of social capital levels in the context of online civic engagement. They demonstrated how shared language and norms of social capital correlated with the production of online civic content in the form of stories, pictures and narratives (Warren et al., 2015).

The Import of Yosso's Community Cultural Wealth for Social Capital Theory

It was not until Yosso's (2005) publication that the lens of Critical Race Theory was introduced to Bourdieu's foundational frameworks of capital. Focusing on the broader concept of cultural wealth—a framework embodying social, cultural, and economic capital—Yosso critiqued the deficit framing of Bourdieuian cultural wealth, countering that communities marginalized by mainstream society hold a wealth of social and cultural capital within their personal networks. This critical perspective introduced an important shift in social and educational science research, turning "the research lens away from a deficit view of Communities of Color as places full of cultural poverty disadvantages, and instead focus[ing] on and learn[ing] from the array of cultural knowledge, skills, abilities and contacts possessed by socially marginalized groups that often go unrecognized and unacknowledged" (Yosso, 2005, p. 69). In Yosso's framework, multiple forms of capital—*aspirational, navigational, linguistic, familial,* and *resistant*—are combined with social capital and cultural capital to comprise what she terms "community cultural wealth" (Yosso, 2005).

Networked Counterstorytelling

In this dissertation, I studied how the proposed theoretical framework of networked counterstorytelling influenced FGCS' structural social capital and co-constructed a multimodal narrative regarding the FGCS experience. Below I discuss the concepts of counterstorytelling and networked counterpublics, the building blocks of the proposed concept of networked counterstorytelling.

Counterstorytelling

Any discussion of FGCS must recognize the vital importance of centering student voice. Stories are a source of identity and power. They give the listener and the teller the opportunity to process and make sense of the world around them and their lived experience in it. However, for the majority of FGCS, their stories are being told for them. Informed by Critical Race Theory, counterstorytelling involves sharing the stories of people "whose experiences are not often told (e.g. those on the margins of society)" (Solórzano & Yosso, 2002, p. 32). Boylorn (2013) describes the need to "represent nondominant or marginalized groups whose voices and experiences are often overlooked or silenced" (p. 7). She explains that muted groups are suppressed when the dominant group determines how (or if) the experiences of nondominant groups are communicated (Boylorn, 2013, p. 7). This is not due to a lack of voice. Kramarae (2005) argues, "...people attached or assigned to subordinate groups may have a lot to say, but they tend to have relatively little power to say it" (p. 55).

While the core of counterstorytelling centers the narratives of individuals and communities of color, Solórzano and Yosso (2002) also point out the crucial need "to focus on the intersections of oppression because storytelling is racialized, gendered, and classed and these stories affect racialized, gendered, and classed communities" (p.31). Counterstorytelling functions to resist majoritarian influences by building community, challenging perceived wisdom at the center, opening new windows into the realities of those on the margins, and teaching others with a mind toward constructing a new world (Solórzano & Yosso, 2002). It is liberating, resistant, and focused on re-centering communities on the margins.

One of the functions of counterstorytelling is to call out and resist "isms." Williams (2004), a white university faculty member, described how student protests toward campus administration for approving a Ku Klux Klan march were largely ignored based on free speech protection. However, when Black students began sharing personal stories of their families being terrorized by Klan violence, "they provided a powerful 'counterstory' to the dominant narrative of free speech as an unquestioned good" and found means to make their voice resonate with "the contemporary culture at the university" (Williams, 2004, p. 167).

Telling personal narratives also serves to validate one's experiences (Rendón, 1994). Storytelling provides a process for meaning-making, knowledge-sharing, and social identity development (Jehangir, 2010; Mair, 1988; Peavy, 1998). Reflecting on one's personal experiences produces a framework for "understanding the past events of one's life and forming future actions" (Polkinghorne, 1988, p. 35). By sharing their personal narratives, FGCS can create spaces "to make sense of their multiple selves, consciousnesses, and identities through self-authorship" (Jehangir, 2010). Self-authorship gives students "the internal capacity to define one's beliefs, identity, and social relations" (Baxter Magolda, 2008, p. 269).

Counterstorytelling helps students understand and create context for their lived experiences in academia. Research by Jehangir (2010) evaluated how counterstorytelling within multicultural learning communities created spaces for FGCS and their peers to have meaningful dialogue which helped address FGCS feelings of isolation and marginalization. When FGCS share their personal narratives it "reinforces and authenticates their purpose and presence in higher education both for themselves and those around them" (Jehangir, 2010, p.541). Through counterstories, FGCS can work to "bridge the gap between home and

school worlds" and see how their personal identities are reflected in their experiences at college, identities which build on the multiple axes: race, class, gender, able-bodiedness, etc. (Jehangir, 2010, p.542).

One of the processes for unmuting counterstories is utilizing social media platforms (West & Turner, 2010). Storytelling is now, more than ever before, a community effort. Networked technologies are transforming our process for hearing, telling, and sharing stories as social media has introduced new processes, platforms, and mediums for communication and literacy. The function of these communities is governed by users themselves, as "people figure out together how to use different media and often agree on the appropriate social uses of technology by asking advice and sharing stories with each other" (Gershon, 2010, p. 6). This process can help develop a vital sense of belonging as counterstorytelling fosters empathy and connection, and can "strengthen traditions of social, political, and cultural survival and resistance (Solórzano & Yosso, 2002, p.32).

The multimodality of social media communication embraces multiple forms and levels of narrative. Today, digital storytelling is geography- and platform-agnostic. It can be synchronous and asynchronous, co-constructed (real-time and asynchronously) or singularly voiced. Digital storytelling utilizes traditional text and new-age text (e.g. emojis) in formats that are unlimited (e.g. blogging) and limited (e.g. Twitter 240-character count). Self-expression on social media is capable of seamlessly transitioning from text presentations to visual (e.g. pictures, videos) and audio presentations (e.g. podcast, voice to text, music) and then back again.

Due to its multimodal nature and narrative structure, digital storytelling is deeply engaging for users, a concept which social justice movements, as well as the world of

business and marketing, have targeted. Furthermore, new forms of expression (e.g. emojis, gifs, memes) are frequently appropriated and re-appropriated by companies, social organizations, and marginalized groups as means for promoting identity-specific communication and connection. Two important affordances of digital storytelling are its (1) archived, yet open-canon structure, directly supporting the creation of living narratives, and (2) interactive nature, allowing co-creation of content and ideas, and fosters connection between old and new actors (boyd, 2010). Regardless of the platforms and modes of literacy, counterstorytelling is a powerful force for fostering empathy and connection, developing a vital sense of belonging, and "strengthen[ing] traditions of social, political, and cultural survival and resistance" (Solórzano & Yosso, 2002, p.32).

Networked Counterpublics

Building on the concepts of networked counterpublics discussed in the introduction, this section provides an overview of their structural affordances along with leading literature surrounding its theoretical framework, its connection to higher education and FGCS, and its role in shaping the theoretical model of networked counterstorytelling.

Networked counterpublics are rooted in boyd's theoretical model of networked publics, established in 2011 and modified and restructured over the past decade as technologies and society developed and changed. Networked publics are publics which have been restructured by social network sites and are "simultaneously a space and a collection of people" (boyd & Marwick, 2011, p. 4). In other words, networked publics are both the community *and* the "location" which houses the community. According to boyd (2011), the leading voice in networked publics, the affordances of networked technology such as social network sites (SNS) "shape publics and how people negotiate them" (p. 7).

38

Networked technologies introduce "new affordances for amplifying, recording, and spreading information and social acts" (boyd, 2011, p.7). These structural affordances are: *persistence*, the ability to capture moments and archive them; *replicability*, allowing for easy reproduction of information and increasing the potential circulation of content; *scalability*, enabling broad distribution by enhancing access to real-time events or reproductions of the moment; and *searchability*, the ability to effectively search and access information and networks (boyd, 2011). These affordances are valuable in informing the model of theoretical counterstorytelling. Through the utilization of SNS affordances, networked publics are capable of building community, sharing resources, and influencing societal actions. "Because of social media's connectedness...and the 'technological architecture' of platforms... members of groups whose worldviews are not traditionally reflected in the mainstream may have more power to rewrite dominant narratives than ever before" (Jackson & Foucault Welles, 2015, p. 4).

Using Fraser's (1990) framework of counterpublics and embracing boyd's (2011) affordances of networked publics, Jackson & Foucault-Welles (2015) proposed networked counterpublics as a theoretical counterpart to boyd's networked publics, an important theoretical contribution to communications research. Describing the value of digital networks' affordances for counterpublics, Jackson & Foucault-Welles (2015) explain: Networked online platforms play an important role in this process of routinising political and rights-based engagement, as they may offer alternative spaces for public deliberation. This is especially relevant for environments where traditional power structures fail to include individual voices in decision-making processes or lose the trust of citizens due to corruption, abuse of power or neglect of certain communities and social groups. (p.4)

This opens up the possibility for counterpublics to leverage the architecture of the social web to advance their causes. Networked technologies open spaces for silenced or muted voices (Shirky, 2008) and are often the first "mediated space where marginalized voices articulate in mass" by providing "an alternative structure for citizen voices and minority viewpoints" (Benkler, Roberts, Faris, Solow-Niederman, & Etling, 2013, p. 8). Poell (2014) describes the affordances within SNS technological architecture—autonomy, porousness, and community-specific self-representation—as key avenues by which networks form and information is broadcast and spread. For example, research by Jackson and Foucault-Welles (2015) demonstrated how Facebook played "an important role in strengthening the distribution networks of alternative online media and exposing even citizens not actively seeking alternative political narratives to counterpublic content" (p.4).

As a relatively new theory, scholarship has much to explore within the model of networked counterpublics. Most of the literature to this point has focused on the function of these communities in political activism, though their impact and effect extend far beyond just the political sphere. Researchers from a spectrum of fields—education, business, social sciences, etc.—can find meaningful applications for this framework in understanding the connections between counterpublics and networked technology. It is important to note that scholarship evaluating the processes and mechanisms by which networked counterpublics are formed has yet to be established. Furthermore, the scope of published research on networked counterpublics to this point has been observational and assessed retroactively, with little to no literature exploring interventions designed to develop these online communities. In summary, there are great opportunities for research related to networked counterpublics in lifting up the voices of communities who are all too often unheard.

A Theoretical Model Linking Counterstorytelling and Networked Counterpublics

It is apparent there is a meaningful relationship between counterstorytelling, networked counterpublics, and social capital. However, available literature has yet to unbundle this connection. Following the injunction to develop unifying theories that bridge specific platforms and features in social media research, I propose the theoretical model of *networked counterstorytelling* (NCS) as a digital process for *counterstorytelling* and a functional complement to that of *networked counterpublics*. If the theory of networked counterpublics frames the affective function of online communities, the framework of networked counterstorytelling provides a model for their formation. As described in the first chapter, I define networked counterstorytelling as: the use of counterstorytelling—primarily through online social networking platforms—to construct community narrative discourse and build social networks for structural, relational, and cognitive support.

Extant literature on networked counterstorytelling is difficult to find, though the concept is salient throughout publications on networked counterpublics and digital activism. Research by Neumayer & Stald (2014) used the phrase "crowd-sourced counternarrative" to describe the role of mobile phones in connecting street protests in Germany and the Netherlands (p. 127). Stornaiuolo and Thomas (2017) used the concept of "restorying," which frames youth digital activism and counternarrative work as "a central mechanism for disrupting normative and deficitizing frameworks" (p. 351). Other related examples include research by Papachirassi and de Fatima (2012), covering stories shared through social networking sites during the Arab Spring, and a study by Leung and Lee (2014) evaluating the effect of social networking sites on narratives, describing them as "often the first mediated space where marginalized voices are articulated en masse" (p.347).

When describing the connection between networked counterstorytelling to social capital, it is crucial to recognize Yosso's (2005) contribution of community cultural wealth. In Yosso's framework, community cultural wealth expands far beyond *social* capital to include additional forms of capital: aspirational, navigational, linguistic, familial, and resistant capitals. Bearing in mind the recent role networked digital technologies have played in college students' social capital, the value of information and communication technologies transforms digital networks from simply a mode of information transferal to a primary source of capital. Social networking sites have dramatically increased the affordances of storytelling's impact, transforming it from simply a mode of information transferal to a primary source of capital. As described by Duncan-Andrade (2007), the digital engagement and digital activism of young people and youth of color "across several loci" have been used by student communities to build "critical hope" and generate a "bank of counter-narratives" to counteract dominant deficitizing discourses in education research (p. 27).

The theoretical model of networked counterstorytelling holds implications for education, communication, sociology, politics, social activism, marketing, and a spectrum of other fields of study. Furthermore, the multimodality of networked counterstorytelling provides a rich and complicated arena for data collection and analysis. In the context of this research, I utilized the model of networked counterstorytelling to study a grassroots social media campaign led by and for FGCS: referred to here on as the networked counterstorytelling (NCS) campaign. This dissertation explored the NCS campaign to study the relationship between social capital, networked counterpublics, and counterstorytelling with the goal to identify the processes by which these frameworks interact and inform current understandings of social capital theory.

42

Chapter 3

METHODS

This study investigated a grassroots social media campaign highlighting the experiences of first-generation college students navigating higher education. Extrapolating the theories of counterstorytelling and networked counterpublics, I proposed the theoretical model of networked counterstorytelling to examine how a facilitated digital storytelling campaign—referred to here as the NCS campaign—generated social capital and made space for the development of a co-constructed multimodal community narrative. Data collected from the NCS campaign intervention was analyzed to (1) identify the influence of the NCS campaign on FGCS social capital networks and (2) understand FGCS's perceptions of social capital, community cultural wealth and the value of networked counterstorytelling. Using a multimethodological approach—combining large-scale network analytics with qualitative netnographic analysis (Kozinets, 2015)—I addressed the following research questions:

1. How were the structural components of social capital presented within the networked counterstorytelling (NCS) campaign?

2. What aspects of social capital emerged within the NCS multi-modal narrative?

3. How was community cultural wealth discussed in the NCS multi-modal narrative?

4. How did FGCS perceive the value of networked counterstorytelling?

Epistemology

As discussed in the literature review, the cultural and institutional structures of higher education are far from neutral (Hamedani & Markus, 2019). For this reason, research efforts seeking to address institutionalized power imbalances are best framed through a critical epistemology. This critical lens recognizes multiple worldviews and asserts that knowledge

44

must extend beyond simply the dominant perspective (Foley, 2013). In higher education, this means expanding perspectives beyond that of administration and faculty, and highlighting lenses outside those shaped by white, male, upper-class norms and values (Hamedani & Markus, 2019).

Shedding light on the power imbalances felt by FGCS due to institutional, structural, and cultural hierarchies in higher education requires a nuanced lens. Matters of race, gender, ethnicity, language, and class generate multiple axes by which power dynamics can impact how FGCS experience their post-secondary education. With the goal to "build perspectives that [are] inclusive of a wider range of people and standpoints" (Stage & Manning, 2003, p. 233), a critical epistemology that incorporates an intersectional perspective is best designed to gather a more complete picture of students' lived experiences (Grzanka, Santos, & Moradi, 2017). Furthermore, while a critical epistemology functions to validate lived oppressions, it also highlights and celebrates the oft-dismissed qualities, skills, and mindsets accrued by marginalized individuals and communities. For example, using a critical lens Yosso (2005) expanded the framework of social capital to the concept of community cultural wealth. Through this epistemic shift, marginalized groups—which are frequently viewed through traditional epistemic lenses as having a deficit of capital—are shown to have a wealth of resources unrecognized by more mainstream perspectives.

In its role as a liberatory epistemology, critical research requires branching away from positivist methodologies which universalize knowledge and claim objectivity and instead seeks knowledge from "those who have been epistemologically marginalized, silenced, and disempowered" (Solórzano & Yosso, 2002, p. 36). Skeptics of this shift express uncertainty with the subjective nature this epistemic lens creates with scholars frequently embodying an

activist stance in their research (Denzin & Lincoln, 2005; Hanrahan, 2000). This removal of objectivity could potentially lead researchers to "see" in the data the conclusions they wish to find. However, given the urgent need to counter systemic oppression, an activist stance is a necessary component of the research, and is thus embraced as a strength, not a weakness (Foley, 2013). Solórzano and Yosso (2002) explain, "we must look to experiences with and responses to racism, sexism, classism, [*ableism*] and heterosexism in and out of schools as valid, appropriate, and necessary forms of data" (p. 37). To address issues of trustworthiness, rigorous methodological processes are put in place to mitigate researcher bias. These include data source triangulation, method triangulation, and member checking as means for establishing reliability and validity.

Research Design and Methodology: Designing for Emergence

There is an urgent need to make space for nuanced methods of research in academia. Technological advances, social movements, and a rapidly changing economy are all pressing factors forcing researchers, as well as colleges and universities as a whole, to either adapt or get left behind. In spite of this growing urgency, the majority of studies conducted within the field of higher education follow traditional, positivist lines of inquiry (Hutchinson & Lovell, 2004; Wells, Kolek, Williams, & Saunders, 2015). A review of past publications in top-tier higher education journals indicate the vast majority of accepted studies were quantitative (primarily correlational or longitudinal) with a small percentage being purely qualitative (Wells et al., 2015). This shift toward a quantitative monopoly in higher education research is concerning.

While more traditional forms of research will always be necessary, if these publications are not complemented with publications utilizing more human-centered

46

methodologies, the pervasive gap between research and practice will continue to widen to the detriment of all stakeholders. The notion that research occurs in the ivory tower, while practice take place in the trenches, must change. Part of this change requires breaking down the silos between the tower and the trenches, by blending the skillsets and perspectives of researchers and practitioners. This is possible by embracing methodologies capable of embodying the academic rigor of traditional research while simultaneously integrating the human and contextual elements of practice.

Mixed Methods Research

Due to technological advances drastically changing economic and educational landscapes, institutions—such as universities and colleges—are becoming more dependent on flexible and dynamic research methods able to provide practical, context-specific strategies to facilitate organizational adaptation. In order for these monolithic institutions to develop the nimbleness necessary to adapt with these rapid changes, more innovative methods of research—bridging the gap between academia and practice—must be utilized. Mixed methods design, along with research approaches leveraging iterative design processes, provides this needed methodology (The Design-Based Research Collective, 2003).

Action Research

Action research, along with similar iterative research approaches, provides this type of methodology. Critics of action research express concerns with its less rigid, "messy" nature of data collection and analysis. Others cite the subjective nature of the research and its potential for bias. While these concerns certainly highlight the complications of conducting action research, they do not negate its value. The problems that affect social institutions and organizations, such as those in higher education, are complicated,

contextual, nuanced and messy. As such, traditional research methods are not always designed to effectively address these issues. While action research should not necessarily be implemented in lieu of more traditional forms of research, it needs to be provided equal footing and value.

For the purposes of this study, action research provided a suited approach to address issues facing higher education. It embraced research processes which align with a critical epistemic lens to better frame the nuanced experiences of FGCS in college. And its methods were well-suited for iterative research designs. Grassroots interventions are fluid processes that require adaptive research strategies in order to effectively study their impact. The iterative, flexible nature of action research made it possible to develop pivoting methods and instruments able to accommodate the unknowns of organic social dynamics.

Furthermore, action research was able to embrace a concurrent mixed methods approach for data collection and analysis, the design for this dissertation study. Since mixed methods approaches pivot, in part, away from more traditional methods of research which generally compartmentalize qualitative and quantitative methods, it was necessary to expand the breadth and types of data collected to ensure validity and reliability (Creswell, 2014; Creswell & Plano Clark, 2011). While mixed methods processes made collection and analysis more complicated and time intensive, action research studies stress the importance of collecting "multiple measures on the variables of interest in a given study" which "allows – and in fact, encourages – the researcher to triangulate the collected data for greater research credibility" (Sage, 2017, p.241).

Social Media Research

In addition to aligning with a critical paradigm and the needs of the changing landscape of higher education, mixed methods designs are gaining traction in social media research as well (Best, Manktelow, & Taylor, 2014; Hamm et al., 2013; Jones, Sinclair, Holt, & Barnard, 2013; Snelson, 2016; Williams, Terras, & Warwick, 2013). As a relatively new field of study, social media research focuses on the development of social network site technologies, the upsurge of their use, and the impact this has on individuals and society (Duggan, Ellison, Lampe, Lenhart, & Madden, 2014; S. Greenwood, A. Perrin, & Duggan, 2016). A study released by Snelson (2016) predicted that social networking activity—which had 1.96 billion users in 2015—would increase to 2.44 billion users by 2018. Three years later and the actual numbers for 2018 were 3.196 billion users (Kemp, 2018). This rapid growth, along with the constant evolving of digital platforms and networks, proves difficult for traditional research designs to keep up. Scholars across a broad array of fields are discovering that, in order to stay abreast with the fast-moving, unpredictable field of Web 2.0 technology, they need research designs that mirror the nature of the field they are studying (boyd, 2010; Ellison & boyd, 2013; S. Greenwood et al., 2016; Snelson, 2016).

Adaptive research designs were also valuable for addressing the rapid changes of social media platforms and the policies which regulate them. Companies of social networking sites create frequent iterations of their platforms to update technology or change application features. With very little notice, new features can be introduced, or established features can completely disappear from the platform. For example, in 2017 YouTube discontinued the ability to annotate videos. While overall a minor feature, this change potentially impacted any academic research connected with YouTube annotations. Along with social media's rapid expansion and evolution come policies governing its use. Privacy policy changes, such as

49

changes to the age requirement for personal social media accounts, which may seem

insignificant, can dramatically impact a research study built around previous platform

restraints on age (boyd, 2010; boyd & Marwick, 2011; Ellison & boyd, 2013). With respect to

this research study, privacy policies enacted at the start of 2019 significantly limited research

access to data for social networking platforms such as Facebook and Instagram. This

required a substantial shift of methods for data collection and analysis.

Netnographic Research

Research studying the connections between digital technologies and social

psychology (e.g. culture, identity development, community building) is a growing area of

interest for scholars studying the impact of social network sites (SNS) on society.

Scholarship addressing this connection requires frameworks and methodologies which

merge technical processes of large data analysis with the rich depth and thickness found in

ethnographic studies. In their article, Ellison and boyd, leading voices in the field of

networked technologies, explains, "Because of how people's position within the [social

network sites] shapes their experiences of it, activity-centric analyses require

contextualization and translation, not unlike what social scientists studying differing cultural

practices have had to do for decades" (p. 165). A netnographic methodology provided an

effective way to seek this contextual, human element of digital relationships and

communities:

> There are very few, if any, specific, procedural guidelines to take a researcher through the
> steps necessary to conduct and present an ethnography using social media data,
> attending to the scrupulous preservation of a humanist perspective on online interaction.
> (Kozinets, 2015, p. 5)

Recognizing the need for an ethnographic methodology tailored for online community engagement and culture, Kozinets conceptualized netnographic research practices in the mid-1990's as means for applying a humanist lens to understand the cultural meaning of online communities. In its earliest stages, netnographic studies were sparse in published scholarship, However, since 2008, the use of netnographic methods have rapidly increased, becoming widespread across various disciplines. This is especially true for the field of market research, where netnographies have been utilized to study consumer culture, consumer behavior, and user-driven market analysis. Today netnographic research has established itself as a reliable qualitative methodology recognized among marketing researchers (Heinonen & Medberg, 2018).

For some, the methodologies used within the fields of business and marketing are seen as incompatible within a critical epistemological lens, as many ideologies of capitalism inherently run counter to movements for social justice. However, business, education, and social movements do not, and cannot, function in siloed spheres; each influences, impacts, and merges with the other. This is readily apparent with the power and role that networked technologies have played in collapsing these traditionally siloed spheres (boyd, 2010; Ellison & boyd, 2013; Kozinets, 2015). Since my dissertation approached higher education's muting of FGCS voice and leadership from a design perspective, a perspective aligned with and drawn from research conducted in business, engineering, and marketing design is suited. Human-centered and user-driven design for product and service development can be adapted fairly seamlessly to student-centered, student-driven designs of support service as means for greater social justice.

In its methods, netnographic research adopts approaches of more traditional ethnographies and adapts these concepts to align with the changing role of technology on individuals, communities, and cultures. To align with a critical epistemology, this research employed a humanist netnography which focused on "research questions with deep social import" and utilized "social media data to attempt to answer these questions and influence social change" (Kozinets, 2015, p.272). As opposed to more positivist netnographic approaches, a humanist netnography "places the researcher firmly in the position of an advocate, and can even push her into activism" (p.270). A detailed description of netnographic data collection and analysis conducted for this study will be described in the methods section of this chapter.

Operationalizing Social Capital

As discussed in the literature review, the concept of social capital is used across a broad range of research fields making it difficult to establish uniform definitions and forms of measurement. As such, it is incumbent upon each research study to clarify *how* social capital will be defined and establish which *methods* best align with the set definition. Since online social capital is a developing concept, there is yet to be a "gold standard" for methods of collection and analysis established in published scholarship. As with other aspects of research adapted to online settings, researchers, out of necessity, must frequently develop new methodological metrics in order to conduct their research. As such, there were clear limitations when collecting and analyzing social capital data for this study. Recognizing these limits helped refine the methods involved and ensured the research did not conflate the findings beyond a scope it could feasibly assess.

This research study defined social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998, p.243). In order to measure the virtual social networks of FGCS in the context of this study, I operationalized social capital and evaluated it according to Lin's (2001) three structural components: (1) the resource(s) within a network, (2) access to network resource(s), and (3) mobilization of network resource(s).

As discussed in Chapter 2, recent research interventions have demonstrated that listening to the personal experiences of FGCS peers improved the emotional wellbeing and academic success of students who were the first in their families to attend college (Dittmann & Stephens, 2017; Stephens et al., 2014; Stephens, Townsend, Hamedani, Destin, & Manzo, 2015; Townsend, Stephens, Smallets, & Hamedani, 2019). In this role, personal stories functioned as a source of storytelling capital for FGCS to utilize. In the context of the NCS social media campaign, FGCS' stories were transcribed into digital formats (e.g. podcast, Instagram post, Instastories), which were then mobilized by social media users. With digital storytelling acting as the r*esource*, the other two components of Lin's social capital—*access* and *mobilization*—were evaluated using various network interactions on social media.

The following example demonstrates this concept. Recent FGCS alumni sharing their experiences navigating college could be considered a *storytelling resource*. By turning alumni stories into a podcast, this storytelling resource transforms into a *digital storytelling resource*. Posting the podcast on iTunes, and a housing website, creates a digital form of *access* to the resource, which could be measured through means such as podcast downloads or unique visits to the podcast website. In turn, sharing a link to the podcast on a social media

platform (e.g. Instagram, Facebook, Twitter, etc.) provides additional forms of *access* to the storytelling resource. These networking platforms also provide means for resource *mobilization*, which will be described shortly. Furthermore, since FGCS are the sources of these stories, they, along with the stories they share, also function as an indirect storytelling resource. This means that access and mobilization of storytelling resources could be measured determined not only through the stories themselves, but through the ability to create connections with individuals and communities who hold these stories.

Three factors must be considered when measuring social capital mobilization: time, means of mobilization, and the consequence of mobilization. Time is a crucial factor, since an individual can mobilize a relationship at any point in the relationship's lifetime. As such, a longitudinal evaluation of these relationships would be the only way to fully measure mobilization. This would require research encompassing the lifetime of access to the relationship. Since the vast majority of research studies cannot span this scope of time, a direct analysis of how, when, and to what degree social capital was mobilized throughout a relationship is not feasible. Furthermore, the means by which social capital can be mobilized are broad and difficult to compartmentalize. These means of mobilization could include a phone call, a text message, meeting for coffee, an email (to a primary or secondary party), a direct message on Instagram, an exchange of information on LinkedIn, a handwritten letter, and so on. Finally, analysis of the act of social capital mobilization varies. Should researchers focus on the *action* of mobilization itself (e.g. requesting to meet with a job recruiter on campus) or the *result* of the mobilization (e.g. receiving a job offer from the recruiter post-meeting)? Furthermore, does the result require a full exchange of the resource for it to be considered (e.g. accepting or declining the job offer)? Each of these questions impact how

mobilization can and should be measured. For the purposes of this research, mobilization was measured through the *action* of engaging with a digital storytelling resource.

Network Analysis for Structural Social Capital

In addition to the rich, qualitative data provided within netnographies, complementary quantitative measures of social capital were collected and analyzed. Table 1 provides key metrics for quantitative measurements of social capital within Instagram, the primary social media platform utilized by the NCS campaign. These metrics for social capital within social media were modified from a 2010 MIT Sloan Management Review on social media marketing analysis (Hoffman & Foder, 2010).

Table 1

Measures for Structural Social Capital via Social Networking Sites

Social Media	Resource	Access	Mobilization
Instagram	# of posts # of instastories # of followers # of direct messages # of comments # of replies	# of accounts reached # of followers # of shares | saves # of hashtags # of mentions # of follows # of comments # of responses	# of post engagements # of post likes # of comment likes # of shares | saves # of comments and replies # of mentions # of follows # of website visits # of profile visits

The metrics used to evaluate online marketing campaigns (e.g. brand awareness, engagement, and word-of-mouth) closely aligned with Lin's structural components of social capital (e.g. resource, access, and mobilization), which allowed methods of data collection and analysis to crossover fairly seamlessly. Moderate adaptations, primarily for updates due to technological advances, were needed. Data from these measures were triangulated with

netnographic social network data for reliability and validity, as well as to provide a rich and nuanced understanding of the research results.

Overview of the Study

As discussed in the literature review, difference-education interventions—which leverage FGCS voice to discuss how their identities influence their experiences navigating college—have shown to increase FGCS' sense of belonging and willingness to seek campus resources (self-efficacy), key metrics of social capital (Stephens et al., 2014; Stephens, Hamedani, & Townsend, 2019; Stephens et al., 2015). Furthermore, these interventions have proven to be effective in both face-to-face and digital formats (e.g. email, audio recordings, video recordings) (Stephens et al., 2019; Townsend et al., 2019). This study sought to explore the influence of a difference-education intervention when it was mobilized via interactive networked technologies. Specifically, I wanted to understand how social media could leverage the difference-education intervention to build FGCS social capital and create a co-constructed multimodal narrative of the FGCS experience.

This dissertation explored three aspects of the NCS campaign. First, for Research Question 1, I examined how the virtual networks of the NCS Instagram account presented Lin's three structural components of social capital. Second, for Research Questions 2 and 3, I evaluated the multimodal narrative created through the NCS campaign to understand FGCS's perspectives on social capital and community cultural wealth, respectively. Finally, for Research Question 4, I examined FGCS perceptions of the value of networked counterstorytelling and the associated NCS campaign.

Intervention

The intervention for this study leveraged digital technologies to create and support a grassroots counterstorytelling campaign by and for FGCS. In May 2019, a cohort of FGCS from Midwestern University volunteered in leading the NCS campaign. Over the 2019 summer, I collaborated with the two student leads from this group (described as the NCS student team members) to prepare content and goals for the NCS campaign launch. The NCS student team members selected Instagram and podcasting as the primary platforms for story sharing for the campaign and took ownership in finding, curating and publishing NCS social media content.

The NCS campaign intervention launched at the start of the Fall 2019 semester (August 1, 2019), and I followed and tracked its progression until the close of the semester (December 30, 2019). From its onset, the campaign was designed to be led and curated by students themselves, with facilitation from me when requested or agreed upon by the students leading the project. The processes and results of this NCS campaign during the Fall 2019 intervention time period provided both the context and content for studying the proposed framework of networked counterstorytelling along with the four research questions guiding this dissertation.

Setting

Given this study's focus on the social media storytelling content and digital networks formed through the NCS campaign intervention, the Instagram platform utilized for the campaign served as the primary setting for this research. In this sense, the research invention also served as the research site. However, the NCS campaign partnered and collaborated with students, faculty and staff from a number of universities and colleges across the United

States. One institution in particular, Midwestern University, played a substantial role is supporting and facilitating the campaign; therefore, detail for this specific campus and its involvement with the study will be provided for greater research context. It is also important to note that the NCS campaign, and its affiliated Instagram account and podcast, did not hold formal affiliations with any higher education institutions.

Midwestern University

Midwestern University served as the primary site for recruiting student volunteers for the NCS campaign and several in-person NCS team meetings were held at the campus' student services building. Midwestern University is a mid-size, private religious institution located in the Midwest region of the United States. The university is located in a large metropolitan city and is in close proximity to several other four-year institutions. Midwestern University functions as a top feeder school for community college transfer students throughout the region. The university serves approximately 11,500 undergraduate students, thirty-nine percent of which are students of color. Within this specific population, approximately half of the students considered are US minority population. According to the university, a quarter of the student population are considered first-generation college students.

The university has multiple programs specifically designed to support FGCS attending the campus. The federal assistance program TRIO and its subsidiary Achieving College Excellence (ACE), are grant-supported programs on campus design "to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to postbaccalaureate programs" (Office of Postsecondary Education, 2019). In addition to

these national programs, Midwest University has a campus-specific mentorship program called BRIGHT. This program is established for students who identify as first-generation or a person of color and is housed within the campus department for student diversity and inclusion. It serves 70-80 incoming freshman by connecting them with upperclassmen student mentors who are also a part of BRIGHT, creating cohorts of ~5-6 freshman grouped with one student mentor. The BRIGHT mentorship program has been in place for 30 years and has a deep alumni network. However, consistent records of student alumni have only been kept since 2008.

Instagram

Instagram is a photo and video-sharing social networking service which allows users to share content through the combined multimodality of video, image and text communication. It has proved to attract a broad user audience, in part, due to the specific affordances of the platform (Lee & Borah, 2020; Lee, Lee, Moon, & Sung, 2015). The use of Instagram is especially prevalent amongst teens and young adults, which makes it an especially pertinent space for higher education research (Sheldon, Rauschnabel, Antony, & Car, 2017). For this analysis, I collected data from the NCS Instagram account—an account created and run by the two NCS student team members and myself.

Participants

Formal Participants

NCS Student Team Members. NCS student team members self-selected to be a part of this research study. Student volunteers were recruited at a leadership training meeting for BRIGHT student mentors at the close of the Spring 2019 semester. All 12 mentors in attendance were invited to collaborate on the counterstorytelling campaign with the ability to

opt-out at any point during the study intervention. From this initial meeting, 5 of the 12 mentors expressed interest in supporting the campaign and had availability to do so. One month prior to the start of the intervention (July 2019), two of the five BRIGHT mentor volunteers requested to participate as student interns for the NCS campaign during the Fall 2019 semester; one of these students arranged to receive academic internship credit from Midwestern University for their participation. These two BRIGHT student mentors lead the NCS campaign from July 2019 through the entirety of the intervention, dedicating at least 10 hours a week to working on the campaign. While both students were aware and updated on the research aspects of the NCS campaign, their involvement with the campaign was in the role of NCS team members. The only data I collected from NCS team collaborations came from my research journals, of which all identifying data of NCS members was omitted. Any firsthand accounts from the NCS student interns or BRIGHT student collaborators were provided through signed consent to participate in focus group interviews.

NCS Podcast Interviewees. Interviewees for the podcast episodes were recently graduated BRIGHT alum from Midwestern University. Over the 2019 summer six BRIGHT alumni were interviewed. Of the six interviews, only one was published in episodes for the NCS podcast during the intervention time frame. Three of the six interviewees provided written and signed consent to include their podcast interviews in this dissertation study, the remaining interviewees provided verbal consent in the recorded interview. Only interviewees who gave signed consent had their interviews used directly for research analysis. For the remaining three interviews, I incorporated observations from my research journal regarding the interview in the analysis but did not include any direct content from the interview itself.

Informal Participants

NCS Instagram Storytellers. Participation in the NCS Instagram storytelling campaign was an entirely opt-in approach. Students who wished to participant self-selected involvement through snowball sampling started by the NCS interns. NCS interns reached out to friends, peers, and faculty at Midwestern University and other campuses across the country, to see if they, or anyone they knew, wanted to share their story with the NCS Instagram campaign. These participants then invited others within their social circles to share their stories with the NCS campaign as well. Stories were contributed in various formats including in-person conversation, text messages, email, video conferencing, shared Google docs, social media content, and blogs.

NCS Instagram Users. As the NCS Instagram account was public, anyone who had access to Instagram (e.g. public or private) could choose to engage with the NCS campaign. Participants self-selected involvement through snowball sampling started by the NCS interns. For example, as NCS student volunteers engaged with peers and faculty to produce content for the campaign, at their discretion they would promote the NCS Instagram account encouraging other students and faculty to participate with the NCS Instagram. User participation with the NCS Instagram account included: following the account, liking or commenting on account posts and Instastories, sending or responding to direct messages (DMs), saving or sharing account content, tagging the account through mentions, utilizing account specific hashtags, etc.

Action Research Timeline

The timeline for this research study was broken into three phases: pre-intervention, intervention, and final analysis. Pre-intervention took place over the Spring and Summer

2019 semesters. The NCS campaign intervention period ran throughout the Fall 2019 semester, August 1, 2019 until December 31, 2019. While data collection and analysis occurred throughout phases 1 and 2 using a constant comparative method, phase 3, involving a final analysis of each qualitative and quantitative strand, was conducted once the intervention phase completed. An overview of the three phases of the NCS research intervention can be seen in Figure 1 below.

Figure 1

NCS Intervention Timeline

PHASE 1
Pre-Intervention
Spring & Summer 2019

Recruitment of the NCS campaign team
- Midwestern University - BRIGHT program
- Two (2) student interns leading NCS team

Development of NCS campaign platforms
- Held podcast interviews with recently graduated BRIGHT alum
- Established NCS Instagram account and podcast hosting sites

PHASE 2
Intervention
Fall 2019

Launch and progression of the NCS campaign
- Weekly NCS team meetings
- Creation of NCS campaign content (posts, Instastories, podcasts, etc.)

PHASE 3
Final Analysis
Winter 2020

Analysis of the NCS campaign data
- Social network analysis of NCS Instagram account
- Netnographic analysis of full NCS campaign
- Triangulation & member checking

Phase I: Pre-intervention (Spring & Summer 2019)

The summer prior to the 2019-2020 school year, I facilitated weekly meetings with the NCS student team members to discuss campaign goals, mission statement, core values, and brainstorm ideas on content development, marketing and resource support. These meetings were held either remotely via Zoom video conferencing or in person at

Midwestern's campus where the NCS student interns attended. I also conducted interviews with 6 recently graduated FGCS, purposively selected from BRIGHT alumni network, about their experience as a FGCS at Midwestern University for the NCS podcast. These interviews were recorded and coded using a "grounded theory"-informed process. These codes and the recorded interviews functioned as digital content for the NCS podcast and Instagram account.

Phase 2: Intervention (Fall 2019)

Each week of the Fall 2019 semester, meetings were held with the NCS campaign's two student interns, either remotely via Zoom video conferencing or in person at Midwestern's campus, to prepare content and plan strategies for the counterstorytelling campaign. From this structured portion of the intervention (NCS team weekly meetings), the NCS campaign was launched and grown. Throughout the intervention time period the NCS campaign was advertised by NCS team member by word of mouth, via department emails and newsletters, and through campus orientations and meetings.

Throughout the Fall 2019 semester, NCS interns selected and designed online platforms (Instagram, Squarespace, Simplecast), developed content (e.g. posts, Instastories, podcasts), and brainstormed campaign marketing, branding and research strategies to house and amplify the stories of FGCS. NCS interns collaborated with each other, me, and any other participants they wished to include (peers on their campus, peers from other campuses, faculty, administrators, FGCS alumni, etc.) throughout the semester to design and implement strategies for collecting and sharing FGCS first-hand stories. Access to the NCS Instagram account and content (e.g. posts, stories, comment responses, direct message (DM) responses, etc.) was jointly shared between the two NCS student team members and me. To

ensure the privacy and safety of the student community, university names were removed (in both text and graphics) in the NCS Instagram posts and stories, and every storytelling participant could select the degree to which their personal identity was disclosed or kept anonymous. Secondary engagement (follower comments, replies, DM's, retweets, likes, shares, etc.) was not limited or controlled. However, while freedom of engagement with the platform was a top priority, any attempts of cyberbullying (e.g. disparaging remarks, threats, slurs, etc.) were immediately blocked or addressed at my discretion and with the advice of the NCS student team members.

Phase 3: Final Analysis (Winter 2020)

At the close of phase 2, I triangulated constant comparative findings from data collection and analysis during the intervention. This final analysis combined findings from the NCS Instagram network analysis with codes and memos from the grounded theory analysis of the NCS multimodal narrative to contextualize findings according to each of the four research questions.

Methods

In this study, I examined the influence of networked counterstorytelling on (1) forming social capital within the NCS Instagram network and (2) shaping a co-created multimodal narrative around the FGCS experience, specifically related to social capital and community cultural wealth. Finally, I explored students' perceptions of networked counterstorytelling and the NCS campaign. An exploratory multistrand mixed-methods design was used to address these research goals.

Data Collection for NCS Instagram Network Analysis

      Student interns selected Instagram for the NCS social media campaign, as such data

collection was tailored to the affordances of the Instagram platform. Measures for structural

social capital were based off Lin's (2001) framework of social capital network components:

(1) the *resource*(s) themselves, (2) *access* to resource(s), and (3) *mobilization* of resource(s). A list

of platform terms and definitions, along with the aligned social capital component(s) it

measures, is provided in Table 2 below.

Table 2

Glossary of Pertinent Instagram Metrics: Terms, Definitions, and Correlated Social Capital Type(s).

Term	Definition	Social capital type
Posts	Number of [image + caption] publications directly posted by a specific account	Resource
Instastories	Number of stories added to a specific account's story feed – (24-hour lifespan)	Resource
Followers	Number of unique accounts following a specific account	Resource
Hashtags*	Number of unique hashtags used within a post	Access
Reach	Number of unique accounts the post reached	Access
Impressions	Total number of times the post was viewed	Access
Follows	Number of new followers received from the post	Resource, access, mobilization
Engagement	Number of user actions taken directly related to the post.	Mobilization
Total likes	Number of likes a post receives	Mobilization

External likes*	Number of likes a post receives not from account followers	Mobilization, access
Comments	Total number of comments made on the post	Mobilization, access
Replies	Number of responses to posts comments	Mobilization, access, resource
Comment likes	Number of users who like comments within the post	Mobilization, resource
Mentions	Number of times your account's handle was mentioned by other users	Access, mobilization
Profile visits	Total number of profile views related to the post	Access, mobilization
Saved	Number of unique accounts that saved the post to their personal saved folder.	Access, mobilization
Shares	Number of times the post was shared by a viewer to another account	Mobilization, access
Website visits	Number of times visitors clicked the link to your website from your profile page.	Access, mobilization
Reactions	Total number of emoji responses to an account's Instastories	Resource, access, mobilization

Table 2 terms and definitions were based on Instagram Insights metrics of analysis, with the exception of three metrics: Instastories, hashtags, and external likes. Instastories data was collected from the Archive feature located in the NCS Instagram account. Data for hashtags and "external likes" were collected manually after each post publication. Using the metrics from Table 1, the NCS Instagram account was analyzed to identity and categorize *resource* metrics, evaluate means of *access* to NCS resources, and assess methods of *mobilization* of the NCS Instagram account network.

NCS network resources

Given Lin's (2001) definition of social capital being "the real and potential resources held within one's network," it was important to select metrics that would measure both the real (*direct*) resources (e.g. the stories themselves) and the potential (*indirect*) resources (e.g. the people holding these stories) within the NCS Instagram network. Direct storytelling resources were identified as forms of narrative content produced by the NCS Instagram account and presented in the form of NCS Instagram posts and Instastories. Indirect resources were based on the concept of potential storytelling sources and presented themselves in two forms: (1) followers of the NCS Instagram account and (2) 1:1 communication between the NCS account and other unique user accounts on Instagram.

Empirical data for the direct storytelling resources came from a content analysis of the 41 posts and 88 Instastories shared by the NCS Instagram account during the course of the research intervention (Aug 1 – Dec 31, 2019). Data for the first indirect storytelling resource (NCS account followers) was manually scraped at three time-intervals throughout the intervention using public profile information available through the Instagram app. I pulled demographic and engagement data regarding account followers from the NCS account's Instagram Insights, a data analytics feature made available to all Instagram "business" or "creator" accounts with 100+ followers. Instagram Insights' algorithms produce superficial, generalized data analyses for account followers; however, this feature's affordances provide access to more data than what is available through external access of the platform. Data for the second indirect storytelling resource, 1:1 communication between the NCS account and other unique user accounts, was pulled directly from the NCS Instagram account's direct messages and post comments. Any data content that could be connected

67

back to users' personal accounts was omitted or redacted in the findings, unless expressly permitted by the user.

Access to NCS network resources

Resource access was determined by positioning the NCS Instagram account as a *network* of storytelling resources to which any other Instagram account or user could potentially gain access. In this context each NCS Instagram account post functioned as a separate direct storytelling resource. A key value for resource access is the bankability of the resource, or the ability to return to the resource at a later time. Given the impermanence of Instastories, which are only accessible for 24 hours after posting, only NCS posts were used for direct storytelling resources measuring access. However, both types of indirect storytelling resources (account followers and 1:1 user communication) were used to measure growth of access to indirect resources. All access data was collected from Instagram Insights during phase 3 of the research study, except for the metrics of "hashtags" and "outside likes", in which case the data was scraped manually after each post's publication (see Table 1).

NCS network mobilization.

Data measuring mobilization of NCS network resources was collected during the final phase of the research using Instagram Insights. Mobilization was based on user engagement with the NCS account in general as well as user engagement with each individual NCS post. Metrics of engagement with the NCS account included: profile visits, website clicks, and account follows. Metrics of engagement for NCS posts included: comments and replies, post likes and comment likes, and post saves and shares.

68

Data collection for the NCS multimodal narrative

To evaluate the co-constructed community narrative formed from the NCS campaign, a netnographic approach for data selection was utilized. Since netnographies are exploratory by nature, data collection and analysis were a concurrent process which took place until saturation was reached. Below I provide a description of the three forms of data that comprised the netnographic data used in this collection: archival, elicited, and produced.

Three forms of netnographic data

There are three forms of data gathered in netnographies: the collected (archival data), the co-created (elicited data), and the produced (produced data). Archival data comprised any and all online social experience-related data that researchers "find", "collect" or 'gather' from social media communities and does not bear the imprint of the researcher as creator or director. Elicited data, on the other hand, is co-created through the researcher's own social interactions with technologies and participants. Produced data is created solely by the researcher. Since netnographic researchers "are not dealing merely with words, but with images, drawings, photography, sound files, edited audiovisual presentations, website creations and other digital artifacts," data collection processes should be informed by multimodal research analyses (Kozinets, 2015, p.164). Below I will provide a description of the data collection instruments with which I personally designed for this research study.

Archival data. Archival data was collected from any sources with which I had no personal engagement as a research. This data included anything curated or published by users and organizations outside the NCS campaign: social media content (e.g. posts and Instastories), student and campus blogs, and university websites.

Elicited data. Elicited data was collected from any content that data that bore my fingerprint as a researcher or participant. This data included all content produced through the NCS campaign including: 2 NCS podcasts and the affiliated platforms housing them (Simplecast.com, Google Podcast, Spotify, and Apple Podcast); 41 NCS Instagram posts, 88 NCS Instastories, and 38 NCS Instagram account 1:1 interactions; archived data from NCS team meetings (Google docs containing meeting notes, archived stories for NCS Instagram posts, and campaign plans and feedback; Slack, email and text communication between myself and the NCS team). No elicited data was presented in findings unless expressly permitted by all parties connected with the information.

Produced data. Produced data included all data generated solely by me as a researcher participant. This data was collected from the following research instruments: raw interviews for the NCS podcast (narrative interviews and focus group interviews) and my researcher journal.

Narrative interviews. Narrative interviews were conducted with 6 recently graduated BRIGHT alumni over the 2019 summer, three of which provided signed approval to publish their interviews for the NCS podcast. These interviews were conducted remotely, via phone or video conferencing, according to the preferences of the interviewees. All interviews were audio recorded and took approximately an hour to conduct. (See Appendix A.) Participants who wished to have their interview included in the dissertation research provided signed documentation (see Appendix).

Focus group interviews. Two focus groups were conducted during the Fall 2019 semester with current undergraduate FGCS in the BRIGHT program at Midwestern University. These interviews were conducted in person. The first focus group discussion was

conducted with a group of twelve students during a BRIGHT mentorship training meeting on campus. As an invited guest, I was provided 30 minutes during the meeting to facilitate the discussion. Due to it being a campus-affiliated meeting the meeting was not audio recorded; instead I wrote down students' thoughts and feedback and shared it back with them for accuracy. The second focus group discussion was structured as a podcast group interview with three students in the BRIGHT program. This interview was audio recorded and lasted approximately 90 minutes. In both focus groups, interview questions discussed students' experiences as a FGCS in higher education, their feelings of belongingness on campus, and their perceptions of the NCS campaign. Participants who wished to have their interview included in my dissertation research provided signed documentation.

      Researcher journal. Throughout the campaign, I recorded observations from each meeting and engagement related to the NCS campaign in my personal research journal. This included: weekly NCS team meetings; conversations I held with students, staff, administrators and community members while facilitating the NCS campaign; meetings with BRIGHT student, staff and administration; and email and text communication related to the NCS campaign. I also kept a thorough record detailing the progression of the NCS during the pre-intervention, intervention, and final analysis phases of the research. Finally, I kept a running record of the thoughts, ideas, and observations which arose throughout the netnographic data collection and analysis for this study.

Table 3

Data collection overview

Data Source or Instrument	Description	Justification	Research Question(s)

Network analysis & data scraping	Analysis of NCS Instagram content as well as network access and engagement using Table 1 metrics designed for this study	Identity, measure, and evaluate the types of structural social capital produced from the NCS Instagram account network	1
Netnographic content	Online content comprising the multimodal narrative formed by the NCS campaign	Gain insights from FGCS stories connected with the NCS campaign, especially in relation to social capital, community cultural wealth, and student perceptions of the NCS campaign	1, 2, 3, 4
Interviews	Narrative interviews with BRIGHT alumni	Describe personal experiences within higher education and how they connect to their identity; produce relevant anecdotal content	2, 3, 4
Focus groups	Semi-structured focus group interviews with current BRIGHT students	Describe personal stories and feedback on stories, share experiences working with mentees, provide feedback on the NCS campaign; produce relevant anecdotal content	2, 3, 4
Researcher Journal	Recorded observations of BRIGHT student collaborations, monthly group gatherings, and online engagement	Provides in-depth context of the intervention process and design as well as my role as a researcher; create ideas and content for social media campaign	2, 3, 4

Data Analysis

A series of quantitative and qualitative data sources were analyzed from the pre-intervention, intervention, and final analysis phases of the study.

Analysis of the NCS Instagram account network

Analysis of the NCS Instagram network was conducted to assess social capital measures of reach, access and mobilization. Social media marketing analytics (e.g. user awareness, engagement, and connection) were modified to structure the data categories for analysis of social capital components (resource, access and mobilization).

NCS network resources

Direct Storytelling Resources. Using analysis strategies from recent publications on Instagram-based communication and branding (Filimonov, Russmann, & Svensson, 2016; Lalancette, Raynauld, & Payne, 2019; Muñoz & Towner, 2017), a coding scheme—designed to embrace dynamics of visual and text media within social media—was developed following an inductive approach seeking to identify core themes within the NCS Instagram content related to the FGCS experience. Initial coding was tested on a small sample of posts and Instastories produced from the NCS campaign during the intervention. Rubrics for coding were modified throughout analysis in order to adequately describe and analyze the complex nature of the NCS multimodal narrative. Account posts and stories were categorized according to the narrative content they provided using themes derived from this coding process.

Indirect Storytelling Resources. Network measurements were scraped manually at three time-markers over the course of the intervention period (September 30, October 30, and December 30, 2019). Network size (n) was determined by the number of NCS account

followers at each data collection time-marker. Node weights were based on the network size

of each follower of the NCS account at the given dates of data collection. Edge weight was

determined from the weighted sum of measurable relationship factors: time (persistence with

the campaign account), directionality (reciprocated account follow by the NCS account), and

permeability (private vs public account). Centrality of unique network modes was

demonstrated through edge links to the NCS account central node. Links between network

nodes, aside from the central node, remain undetermined as this data was inaccessible due to

Instagram privacy protect policies.

Network measures were visualized using Gephi. The following equation was used to

modify node weight in order to scale it for graphic representation. For each time-marked

data set, the maximum and minimum node weights were calculated in conjunction Gephi

node minimum size (x) to determine maximum size (A):

$$A = 0.1 \left(\frac{\max\limits_{i \in n} f(i)}{\min\limits_{i \in n} f(i)} \right) x$$

Node colors indicate 1G follower account types: bright green = personal account,

dark green = professional account, black = organization account. All node edges link directly

to the origin node as data describing links between nodes was inaccessible. Edges

highlighted in orange indicate the follower account is private; black edges indicate a public

account.

Access to NCS network resources

The NCS Instagram account provided a variety of metrics to evaluate access to NCS

storytelling resources. Metrics were drawn from Hoffman & Foder's (2010) matrix of user

engagement (Table 2) and were then modified for the specific context of network access of

the NCS Instagram campaign (see Table 6). These measures included: (a) the reach of *direct storytelling resources* to unique user accounts*,* (b) types of access facilitation (e.g. hashtags, mentions), and (b) means for accruing new *indirect storyteller resources* (i.e. follows, outside likes, post comments).

As discussed in Table 2, data for network analysis was pulled from Instagram Insights except in the case of external likes and hashtags, in which case the data was scraped manually after each post publication. Data was evaluated to determine the *reach of access* for direct storytelling resources and the *growth of access* to indirect storytelling resources. In this context, *reach of access* is defined as the number of unique accounts reached by an individual direct storytelling resource. *Growth of access*, on the other hand, is defined as the number of connections to indirect storytelling resources. Given that impermanence of Instastories, only the NCS posts were included as a direct storytelling resource for the following access analyses. Both measures of account followers of 1:1 user communication were used to measure the NCS account's growth of access to indirect storytelling resources.

Post reach (the number of unique user accounts reached by the post) was the primary metric used to measure user access to the NCS direct storytelling resources. In connection to post reach, I measured types of access facilitation (hashtags and mentions) used by each individual post to identify potential trends. Finally, manifestations of indirect storytelling resources (follower, external likes, post comments and replies) were collected to see if trends existed between post reach and the accrual of potential indirect storytelling resources.

NCS network mobilization

The NCS Instagram account provided a variety of metrics to evaluate access to NCS storytelling resources. Metrics were drawn from Hoffman & Foder's (2010) matrix of user engagement (Table 2) and were then modified for the specific context of network access of the NCS Instagram campaign (seeTable 6). Metrics of mobilization were grouped along two lines: passive or active mobilization and post or account resources.

Forms of engagement were considered passive if the engagement only required one action on the part of the user. Examples of passive engagement metrics included: post likes, comment likes and profile visits. On the other hand, engagement was considered active if multiple actions were required on the part of the user in order to complete the action. These actions include fell in this category because this form of engagement only required one tap from the user in order to complete the action. The remaining metrics (follows, external likes, comments and replies, saves, shares and website visits) fell into this category. There were two exceptions for passive and active classification: comment likes and post saves. Technically, in order to like a post comment, a user must tap into the post to fully access the comments, which requires extra action on the part of the user. Post saves, on the other hand, only require one tap by the user to complete the action. However, this metric was still considered active as since the act of saving a post resource infers the user's intention to return to the post at a later time, a process that would require multiple actions to carry out.

Analysis of the NCS Multimodal Narrative

To understand the co-constructed community narrative of the FGCS experience formed from the NCS campaign, netnographic methods of data collection were utilized. First, all narrative sources were screened for relevance to the research study and check for

potential story duplications. Using a constant comparative method, codes and themes were gathered from the remaining narratives which included NCS digital content, interviews, focus groups, and my research journals. Trustworthiness and reliability of data collection, analysis, and findings were established through member checking throughout the study and data triangulation in the final analysis.

Netnographic screening of narrative sources

Netnographic data analysis includes a fluid integration of content analysis, interviews (online and in person), semiotic visual analysis, social network analysis and the use of big data analytic tools and techniques (Kozinets 2015). This research employed a humanist netnography, which guides analysis methods to address larger social issues at hand that "conveys to its readers a personalized and sensitizing connection with the human experience" (Kozinets, 2015, p.265). Throughout the analysis process, researchers must ask themselves: Is your netnography empathic, enlightening, and empowering? Does it sensitize readers to the concerns and lifeways of particular human beings? (p.266). This critical humanist lens framed the qualitative analysis of FGCS interactions and engagements on the intervention's social media platform(s).

The netnographic data collection process involved three phases. A description of this three-phase collection process for the NCS multimodal narrative data in this study is discussed in the data analysis section of this chapter. as seen in Figure 2 below.

Figure 2

Phases of Netnographic Screening
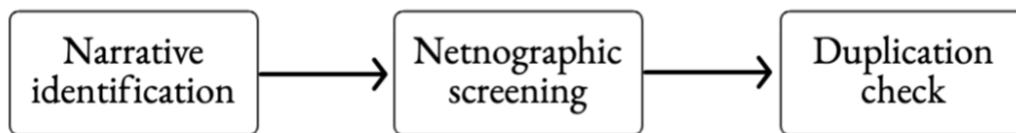
As outline in Figure 2, the first phase of data collection involved identifying the narrative sources connected to the NCS campaign. In this initial compilation, a wide net was used for collecting narrative sources. Any content with a clear connection to the NCS campaign was considered for analysis including: all published social media and online content generated by the NCS campaign (e.g. Instagram posts, Instastories, account interactions; NCS campaign website; sites housing the NCS podcast and episodes, etc.); unpublished interviews for the NCS campaign with participant signed permission for research use; related content and accounts, within and without Instagram; digital and hardcopy researcher journals and memos; and related university artifacts.

The initial compilation of narrative sources was screened using a modified version of Kozinet's (2015) matrix for netnographic data selection. Narrative sources were evaluated to determine pertinence to the study using the following metrics: relevance, activity, interactivity, sustainability, heterogeneity/homogeneity, richness, and experientiality. I included two additional metrics, credibility and proximity, were included in this. Prioritized metrics were weighted. (see **Error! Reference source not found.**) Relevant to the research questions and with the greatest proximity to the NCS campaign. the most relevant content and central content. Both primary and secondary social media content were included in analysis so long as its digital content received a score of on Kozinet's metric (see **Error! Reference source not found.**).

Table 4

Data Collection and Screening of the NCS Multimodal Narrative

Narrative source types	Example of content	Initial count	Screening count	Redundancy count
NCS Instagram posts	Image, caption, comments, replies, etc.	41	32	32
NCS Instastories	Image, text, mentions, tags, stickers, shares, etc.	88	64	39
NCS Instagram account interactions	Direct messages, Instastory reactions and comments, mentions, etc.	38	13	8
Published NCS podcasts	Audio recorded episodes	2	2	1
Unpublished interviews for NCS podcast	Raw audio files	9	6	2
Unpublished interviews for NCS Instagram	Raw transcripts	14	12	2
Related digital content (outside NCS Instagram)	Recommended lists, accounts followed by NCS account, followed hashtags in feed, etc.	--	20	20
NCS Instagram account interactions	Direct messages, Instastory reactions and comments, mentions, etc. Twitter, Facebook, Slack, blogs, websites, email, Google docs, texts, memes, gifs, etc.	38	13	8
Researcher journal	Physical and digital journals (includes written text, audio/video recordings, drawing and sketches, etc.)	12	2	2

Total	204	151	106

Analyzing Content from the Netnographic Screening

The NCS multimodal narrative was first analyzed using a grounded theory approach. This first involved initial coding of the multimodal narrative text and visual content using in vivo code labels. This was followed by a focused coding process to synthesize initial codes into more conceptual content. At this point the analysis diverged from a strictly grounded theory approach depending on the Research Questions at hand. For Research Questions 2, 3, and 4, focus codes were analyzed using a theoretical coding process. However, for Research Questions 2 and 3, instead of using a ground theory approach to develop the theoretical codes, I used a priori theoretical coding themes based on key concepts from social capital and community cultural wealth, respectively. This process allowed for the expansion and critique of these theories, respectively. Substantial narrative themes which did not fit cleanly with the set frameworks were evaluated using grounded theory approach to conceptualize models for their interactions.

Figure 3

Quasi-grounded theory analysis of netnographic screening results
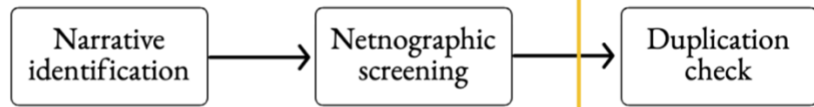
	Narrative identification	Netnographic screening	Duplication check
NCS podcast	11	8	3
NCS posts	55	44	34
NCS interactions	38	13	8
NCS Instastories	88	64	39
External sources (blogs, websites, etc.)	--	20	20
Research journal	12	2	2
	204	151	106

Quasi-grounded theory analysis

Research Question 2 — Structural Social Capital (Lin, 2001)

Research Question 3 — Community Cultural Wealth (Yosso, 2005)

Research Question 4 — Networked Counterstorytelling

Themes which arose from the coding process were in turn be used to inform subsequent coding until *theoretical saturation* is achieved. This is accomplished through *constant comparison* of findings in the data to elicit the properties and dimensions of each category code (Charmaz, 2006; Creswell & Plano Clark, 2011). Constant comparison of interview data continued until the processes yielded the *interchangeability of indicators*, meaning no new properties or themes were emerging from continued coding and comparison. The NCS multimodal narrative was first analyzed using a grounded theory coding and thematic grouping process. Afterwards, findings from the grounded theory themes were evaluated

through the theoretical lenses of social capital, community cultural wealth, and networked counterstorytelling to produce findings for research questions two, three and four, respectively.

Final Analysis

Final analysis followed a concurrent mixed method design selected for this research. For the final analysis, I triangulated analytical findings from the NCS Instagram network analysis with codes and memos from the grounded theory analysis of the NCS multimodal narrative to contextualize findings according to each of the four research questions. Storytelling content was analyzed to determine its connections to social capital, community cultural wealth, and networked counterstorytelling using a process which combined both inductive and deductive research approaches: grounded theory coding followed by a priori theoretical coding of grounded theory groupings. In doing this, I was able to embrace an exploratory study of FGCS voice and perspective—providing space for the emergence of novel findings—and then utilize these findings to analyze current frameworks of social capital. theory.

By evaluating discovered narrative themes along the three theoretical axes of Yosso's community cultural wealth, Lin's framework of social capital, and networked counterstorytelling, findings functioned to help fortify and expand these theories. Substantial narrative themes which did not fit cleanly with the set frameworks were evaluated using grounded theory theoretical coding to conceptualize models for their interactions.

Research Question 1

For research question 1, which explored the structural components of social capital within the NCS Instagram account network, I combined network analyses of each of the

three components analyzed (resources, access, and mobilization) to produce an expanded picture of the NCS campaign social capital. Using this expan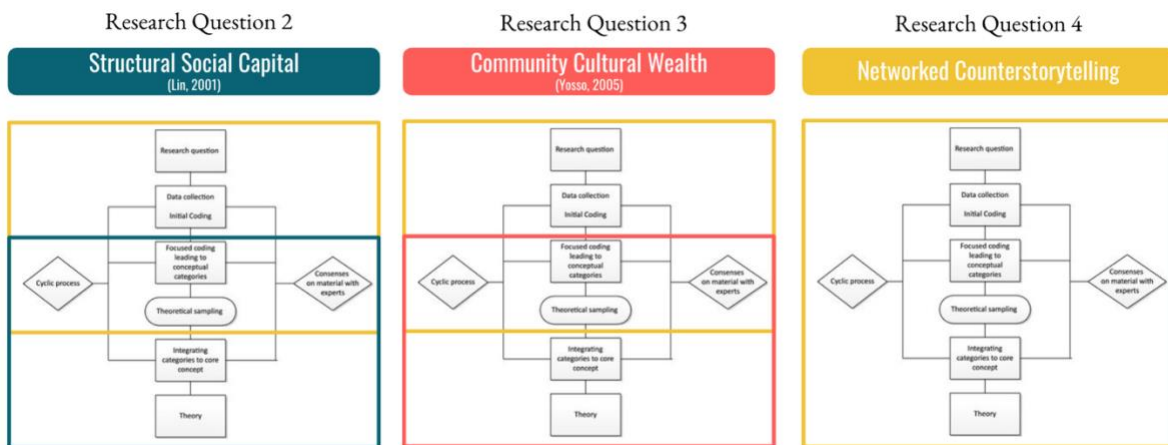ded framing, findings were evaluated to identify interrelated components between each of the social capital structures produced from the NCS campaign. Related components were provided aligned labels for uniformed terminology.

Research Question 2

For research question 2, I grouped codes and memos from the grounded theory analysis of the NCS multimodal narrative according to their connection to elements of social capital. This grouping was structured by aligning grounded theory codes and memos with "a priori" themes derived from the social capital frameworks discussed in the Chapter 2 literature review. This included themes such as homophily, belongingness, and Lin's (2001) structural components of social capital. (Lin, 2001)

Research Question 3

Research questions 3 used a similar final analysis as research question 2. However, for this question, results from the grounded theory analysis of the NCS multimodal narrative were evaluated for their connection to "a priori" themes of the six forms of capital in Yosso's community cultural wealth. Codes or memos that did not align with any of the six forms of capital were reevaluated and grouped to form grounded theory thematic codes. Once all codes and memos were categorized—either with Yosso's six forms of capital or a new thematic code—each group's content was contextualized by evaluating the specific narrative quotes which comprised codes and memos in the group.

Research Question 4

For research question 4, I evaluated findings from the netnographic analysis of the multimodal narrative for their connection to FGCS perceptions of networked counterstorytelling and the NCS campaign. I also pulled all direct interview data from FGCS interviews and focus groups that related to the guided discussion about students' perceptions of networked counterstorytelling and the NCS campaign. Findings from the netnographic analysis were triangulated with FGCS interview and focus group data and contextualized by evaluating the direct quotes associated with these triangulated findings.

Chapter 4

FINDINGS

This study followed a grassroots networked counterstorytelling (NCS) campaign which used the digital platforms of Instagram and podcasting to highlight the stories of first-generation college students' as they navigated higher education. The data sources gathered to address this study's research questions included: network information scraped from the NCS campaign's Instagram account; rich, qualitative data provided from FGCS first-hand stories shared with and through the NCS campaign's podcast and Instagram account; personal interviews, focus groups, and written and visual digital artifacts collected throughout the research intervention; and my researcher journals. The aim of this study was to explore how the proposed theoretical model of networked counterstorytelling—as presented through the NCS digital storytelling campaign—could invite FGCS student voice to help inform current theoretical understandings of social capital and community cultural wealth. Findings addressed the following four research questions guiding this study:

1. How were the structural components of social capital presented within the networked counterstorytelling (NCS) campaign?

2. What aspects of social capital emerged within the NCS multimodal narrative?

3. How was community cultural wealth discussed in the NCS multimodal narrative?

4. How did FGCS perceive the value of networked counterstorytelling?

NCS Campaign Overview

The NCS campaign intervention period ran from August 1, 2019 until December 31, 2019. At the start of the intervention, the NCS campaign team consisted of two undergraduate student volunteer interns and me. By the close of the semester, the NCS

campaign team had grown from a team of three into a team of six: three undergraduate student interns, two graduate student volunteers, and me. In the course of the intervention time period, the NCS campaign developed and launched: a Squarespace website with 27 subscribers; a certified podcast housed on simplecast.com with two published episodes available on Spotify, Google Podcast, and Apple Podcast—along with 5 additional recorded interviews in cue to be edited and published—and an Instagram account with 113 followers, 41 published account posts, 88 Instastories, and 38 unique direct messages with other platform accounts. The campaign was also able to build personal connections with prominent Instagram accounts supporting first-generation college students, including Michelle Obama's organizations Better Make Room and Reach Higher, as well as administrative connections to digital and on-campus student services organization, diversity and cultural affairs programs at colleges and universities across the United States.

With this context, I will address the influence of networked counterstorytelling on the structural components of social capital, the key focus of Research Question 1. In the following section I will discuss how the NCS campaign used its Instagram account platform to create a community network to house and build the structural components of social capital.

Research Question 1 Findings

This first section examines findings for Research Question 1: How were the structural components of social capital presented within the networked counterstorytelling (NCS) campaign's digital network? I addressed this question by analyzing the structural social capital formation (resource, access, and mobilization) within the NCS Instagram campaign. Given the exploratory nature of this research; the rapidly changing role of social

media in social networks; and the fact that research methodologies designed to study these social media communities are yet in their infancy; in many ways, the metrics developed to assess social capital in this study functioned as both the methods and the findings. As such, the following discussion for research question 1 presents two levels of findings for each of three structural components of social capital: First, I will reintroduce the novel metrics designed to measure the structural social capital component being discussed. Then, I will present findings for those metrics in the context of the NCS Instagram account network.

Structural Components of NCS Social Capital.

The NCS Instagram campaign presented novel means for assessing Lin's (2001) three structural components of social capital. Using metrics from Table 2, presented in Chapter 3, the NCS Instagram campaign was analyzed to identity and evaluate the account's: network *resources* metrics, means of *access* to these network resources, and methods of *mobilization* for network resources.

Resources within the NCS Instagram network

As discussed in Chapter 3, social capital was operationalized by designating "stories" or "storytelling" as the resource(s) of interest within the NCS Instagram network. Given Lin's (2001) definition of social capital as "the real and potential resources held within one's network," storytelling was measured as both the real (*direct*) resources (e.g. the stories themselves) and the potential (*indirect*) resources (e.g. the people holding these stories), of which the NCS Instagram account produced both.

Direct storytelling resources. Direct resources within the NCS campaign network were generated through published narratives shared by the NCS Instagram account. These narratives, presented in the form of Instagram posts and Instastories, were published by the

NCS Instagram account throughout the course of the intervention period. In total, the NCS Instagram account published 41 posts and 88 Instastories.

Instagram posts. Analysis of the 41 NCS Instagram posts presented three primary uses for these storytelling resources: (1) to share first-hand stories from FGCS, (2) to make and invite commentary on the FGCS experience, and (3) to discuss the guiding values the NCS campaign. While the NCS Instagram content is available as a public domain, to respect users' privacy all personal data was redacted from the images, unless expressly approved by the user.

First, the NCS campaign used posts as a narrative resource for sharing the personal stories of FGCS, with over half of the NCS Instagram posts (n=21) being dedicated to this purpose. The majority of these posts (n=16) used a first-hand storytelling format: a profile photo image of a student accompanied by a post caption quoting the student's description of their experiences as a FGCS. While a few of these first-hand FGCS stories were presented anonymously (e.g. using a photo of the student's hands or backpack, removing all personal information from the caption), over 80% (n=13) of the student interviewed for the NCS Instagram account, intentionally chose to identify themselves in the post (e.g. providing a headshot photograph, including their first name and preferred pronouns, allowing their personal Instagram handle to be tagged, etc.) (Figure 4). The remaining posts (n=5) used images and captions to connect followers to other resources—TED talks, NCS podcast episodes, links to articles—that housed stories describing the experiences of students who were the first in their families to attend college.

Figure 4

NCS Instagram post on September 30, 2019
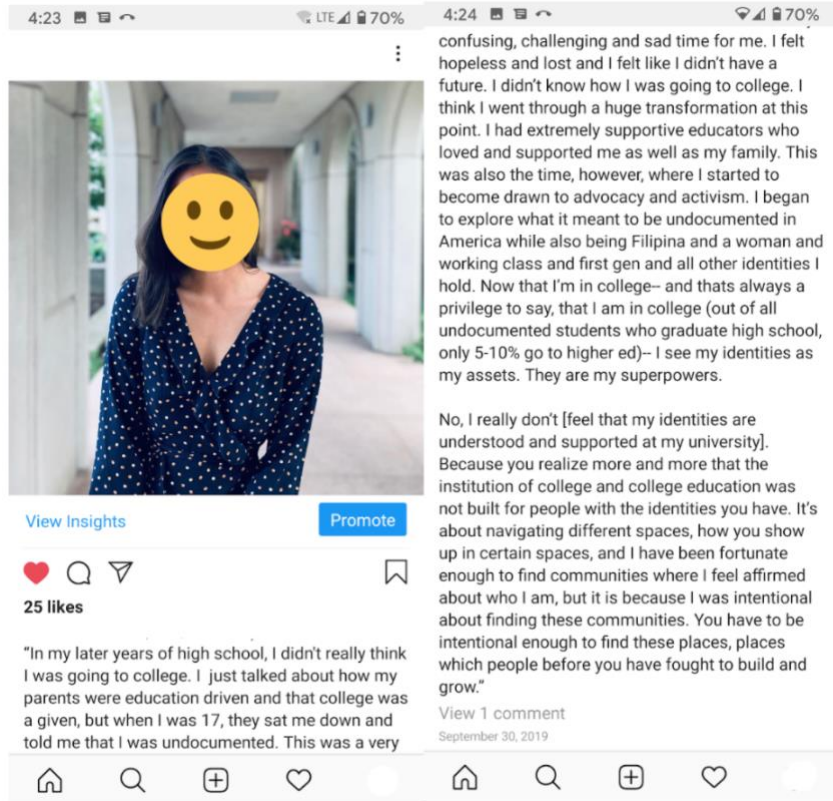
Second, the NCS campaign used Instagram posts to discuss the values of the NCS campaign. These values revolved around student equity and included topics such as FGCS intersectionality, counterstorytelling and student voice, and the importance of community cultural wealth and asset-based ideologies (Figure 5). The category of NCS campaign values comprised a third of the total NCS Instagram posts (n=14) and contained the widest variety of content examples.

Figure 5

NCS Instagram post on November 19, 2019
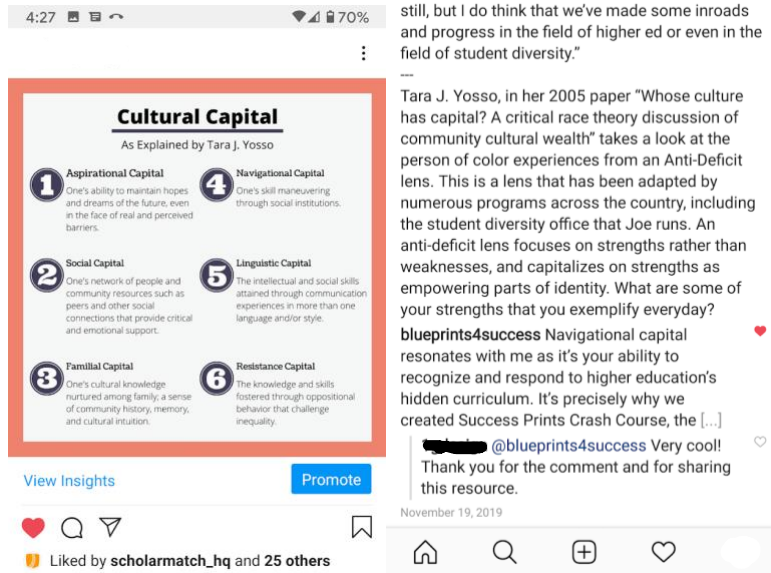
Finally, the NCS campaign used Instagram account posts to make and invite commentary on the FGCS experience. Seven of the 41 total NCS Instagram posts functioned in this commentary role, presenting a critical lens on the higher education experience, especially in regard to institutionalized forms of oppression experienced by FGCS on college and university campuses. These posts used image and caption combinations to discuss topics such as discriminatory admission practices, racism and classism in higher education, and the ineffectiveness of campus programs in meeting student needs. These posts were presented either in the form of political cartoon images with accompanying captions (Figure 6) or as a quotation image with a caption encouraging community discussion on the quotation topic (Figure 7).

Figure 6

NCS Instagram post on October 25, 2019
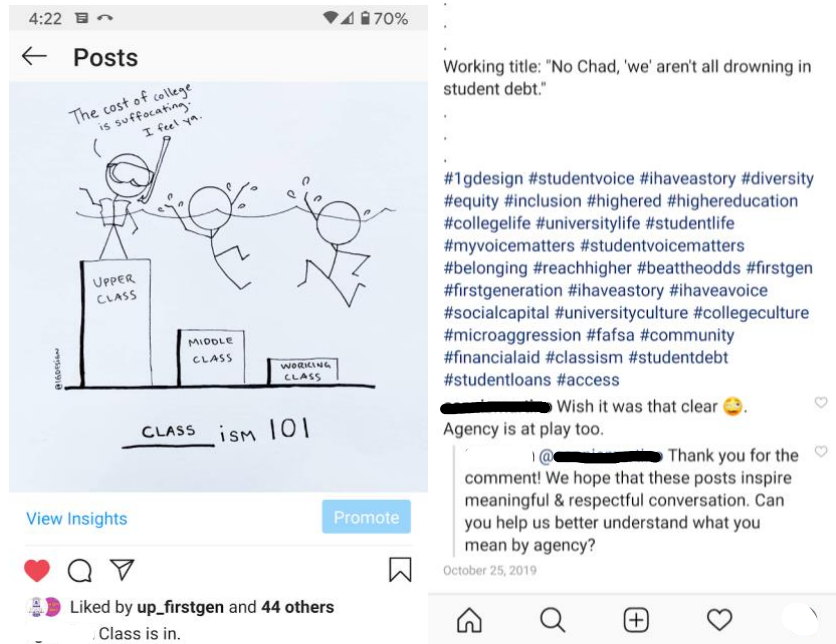
Figure 7

NCS Instagram post on November 7, 2019
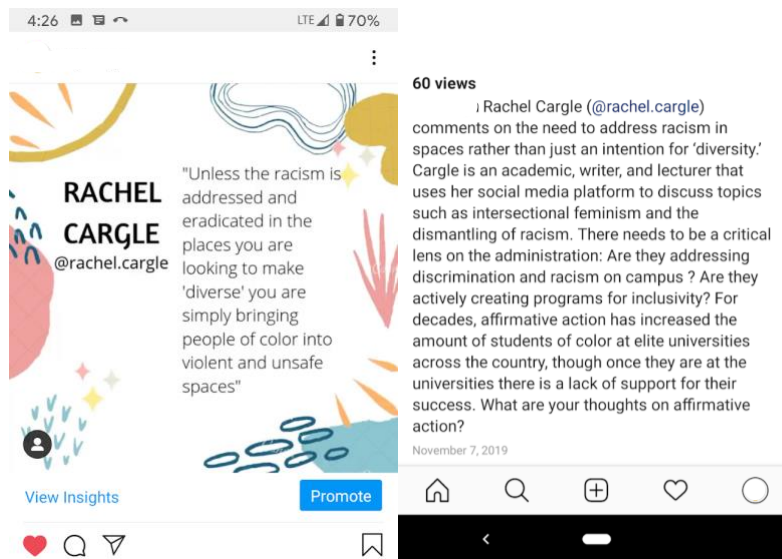
Of the NCS Instagram post resources, I collaborated with NCS student team

members on 19 of the NCS posts. (e.g. 13 of which involved helping design graphics and

produce photo images, the other 6 involved drafting caption content). All content was member checked by the NCS student team members to be sure it aligned with their vision and purpose for the campaign.

Instastories. An added layer to studying Instastories within the multimodal narrative involved the affordances of Instastories which allow users to share posts (i.e. narrative content) from other accounts while also providing them ability to present their own commentary on the content being shared. This presented a rich, yet complicated, resource for data collection and analysis. Analysis of the 88 NCS Instastories showed the NCS campaign using this direct storytelling resource for the same three primary purposes as Instagram posts: (1) to share first-hand stories of FGCS, (2) to make and invite commentary on the FGCS experience, and (3) to discuss the guiding values of the NCS campaign. Again, personal data (e.g. name, Instagram user handle, university affiliation(s) images) within the following examples were redacted, unless the participant expressly provided permission.

One way the NCS campaign used Instastories as a narrative resource was in sharing the personal stories of FGCS. Three quarters of the Instastories (n=65) were dedicated to this purpose. Half of these stories(n=32) highlighted posts of FGCS interviews for the NCS Instagram account. The other half (n=33) shared stories and posts from other Instagram accounts which spotlighted the experiences of FGCS. See (Figure 8)

Figure 8

NCS Instastories, posted on October 25, November 7, and November 11, 2019
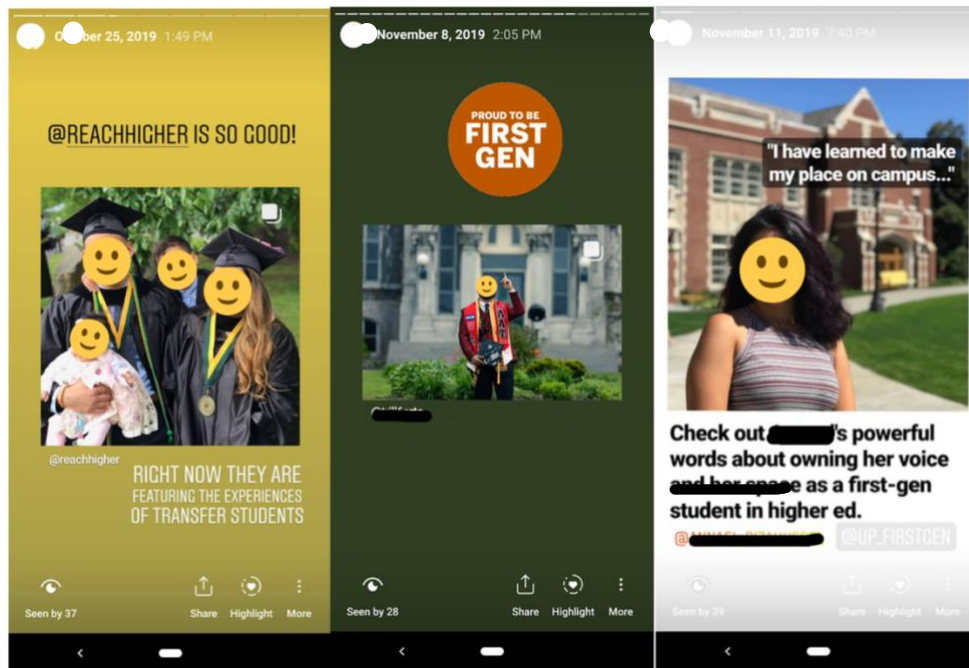
Like the NCS Instagram posts, the NCS campaign also used Instastories to make and invite commentary on the FGCS experience (Figure 9). Twelve of the 88 total NCS Instastories fit this description of social commentary on higher education and institutionalized systems of oppression.

Figure 9

NCS Instastories, posted on October 23 and November 8, 2019
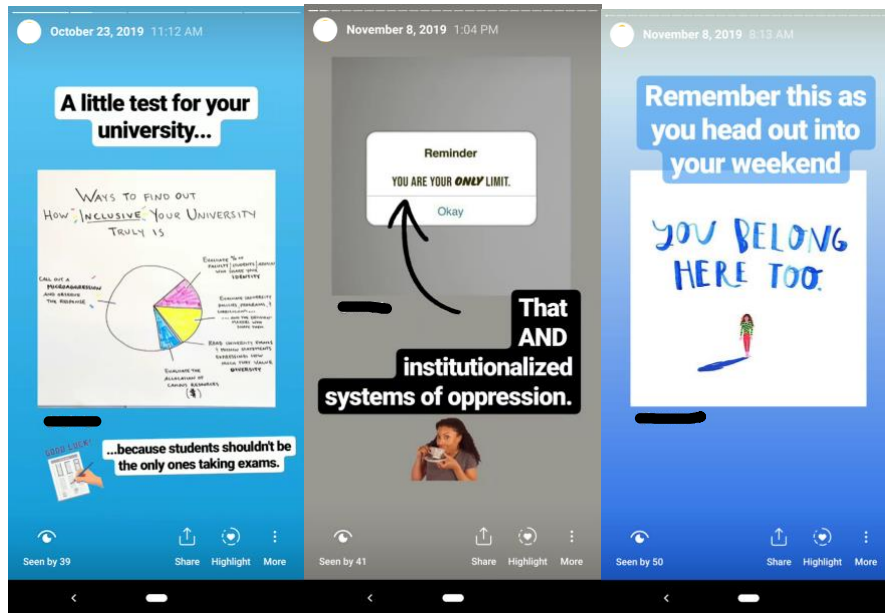
Several of these Instastories functioned as a critique of university and college campuses. This included topics of campus culture, diversity and inclusion efforts. The remaining Instastories in this category presented commentary as a form of aspirational support for FGCS. These stories shared content designed to encourage and uplift FGCS to fostering a sense of belonging. (Figure 9).

Finally, just as the NCS Instagram posts, the NCS campaign used Instastories to share the values of the campaign. However, these comprised a far smaller percentage of the total NCS Instastories than this category did for NCS posts (5.7% as compared to 34.1% of NCS posts). Furthermore, while both the NCS posts and Instastories presented content designed to discuss the values of the NCS campaign (e.g. intersectionality, student voice and ownership, diversity and inclusion, etc.), only the NCS Instastories provided content that encouraged followers to act on these values through local community activism (Figure 10).

94

Figure 10

NCS Instastories, posted on September 19, October 7, and November 7, 2019
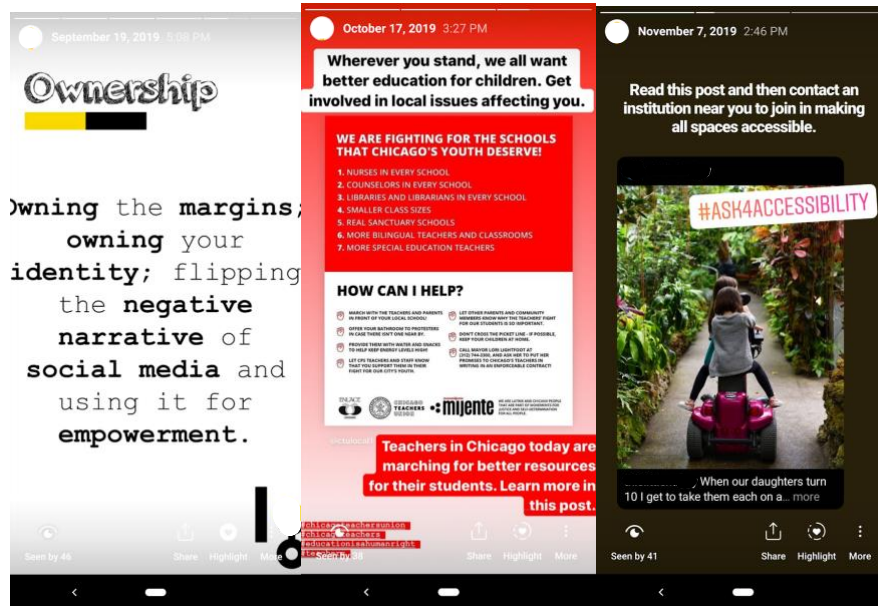
Combined, the NCS posts and Instastories produced a total of 129 direct storytelling resources within the NCS Instagram network.

Indirect storytelling resources. In addition to producing direct storytelling resources through NCS Instagram posts and Instastories, the NCS campaign also generated indirect storytelling resources. These indirect storytelling resources presented in two forms: (1) followers of the NCS Instagram account and (2) 1:1 communication between the NCS account and other unique user accounts. Both forms functioned as indirect storytelling resources as each represented a network connection that could potentially be mobilized for additional narrative resources.

Account followers. Growth of indirect storytelling resources via NCS followers showed a steady increase over the intervention time period. Over the course of the NCS campaign intervention period, followers of the NCS Instagram account grew consistently. At

the start of the campaign, August 1, 2019, there was one follower of the NCS account. By the end of the first month (August 30, 2019) the account had 33 followers. At the three-month mark (October 30, 2019) there were 88 followers and by the close of the intervention period (December 30, 2019) the account had a total of 113 followers. These numbers present a positive linear trend in follower growth for the early months of the NCS campaign which, and in turn, indicate an upward trend in indirect storytelling resources.

Growth of indirect resources and of NCS account followers was assessed using (a) an ego-centric network analysis in Gephi, and through the collection of follower demographic and engagement data from Instagram Insights. Using the NCS Instagram account as the origin node, follower data was scraped from data publicly available on the Instagram platform three times over the course of the campaign.

Figure 11

Growth of NCS Instagram followers over time

Time marker A	Time marker B	Time marker C
9/30/2019	10/30/2019	12/30/2019
n=33	n=88	n=113
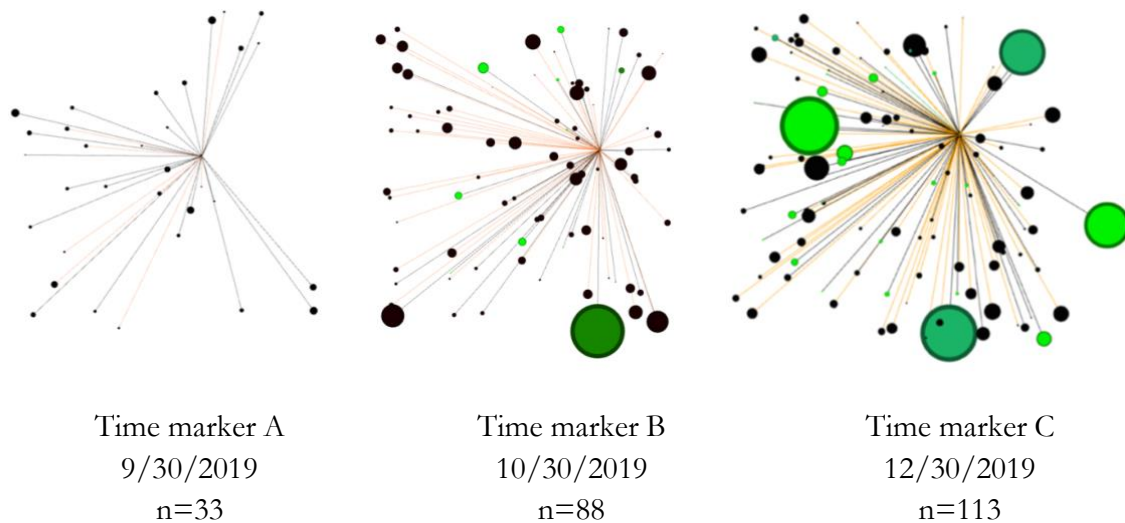
As seen in Figure 11, network size grew steadily across the three time-markers with node weights shifting from n=33 at the end of September (top left), to n=88 at the end of October (top right), to n=113 at the close of the month in December 2019 (bottom middle). Account types, indicated by node color show 75.2% of followers as personal accounts and 22.1% as professional or organization accounts (18.6% organization, 3.5% professional), with 2.7% having an unknown account type. Private and public accounts, as indicated by edge color (orange=private; black=public), were split fairly evenly (52.2%=private, 46.9%=public, 0.9%=unknown).

In addition to findings provided from manual scraping of NCS Instagram follower data, data from the NCS account's Instagram Insights presented relevant, though somewhat superficial, data surrounding NCS follower demographics. This data was used to provide a breakdown of followers' gender and ages (Figure 12) as well as determine general trends for the times and days NCS followers used the Instagram app (Figure 13).

Figure 12

NCS campaign follower age and gender demographics
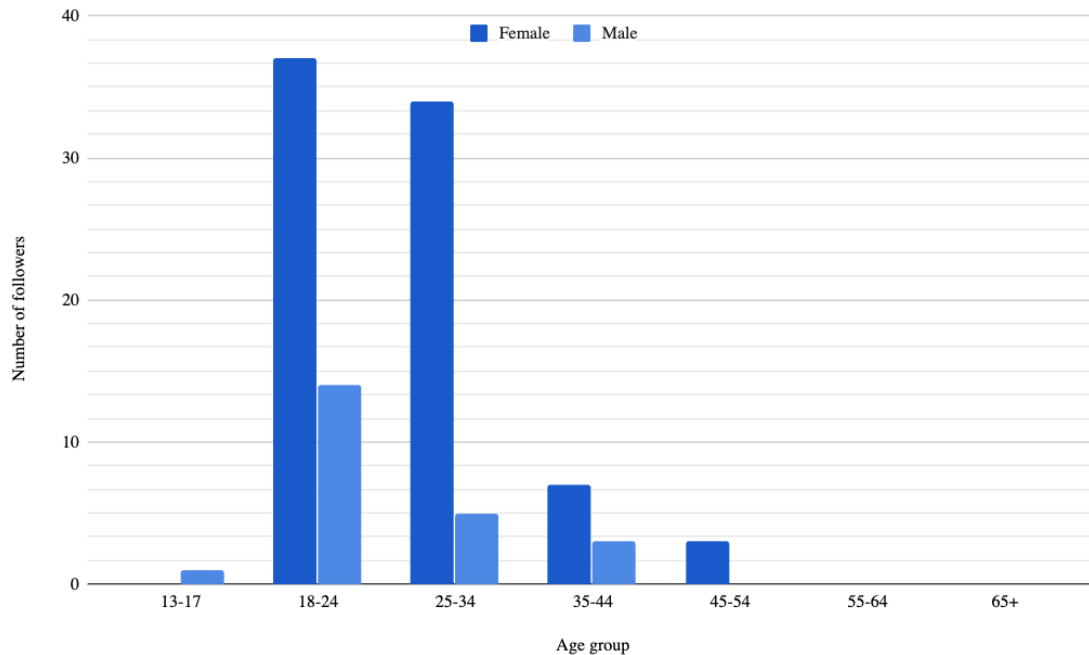
As evident in Figure 12, the majority of followers fell between the ages of 18-24 (49.5%) and 25-34 (38.1%), with the remaining age groups (13-17=1.0%, 35-44=8.6%, 45-54=2.9%) comprising the remaining 12.5% of followers. The majority of total followers identify as female (77.1% female compared to 22.9% male); however, it is important to note that Instagram Insights does not provide for more gender nuance beyond the male-female binary. Little can be analyzed beyond this preliminary data as Instagram and its parent company, Facebook, does not provide details behind their data collection and analyses algorithms. Engagement data for the NCS account followers was also collected using the Instagram Insights. Figure 13 below provides patterns of Instagram platform use for followers according to time and day.

Figure 13

Patterns of Instagram use for NCS campaign followers.
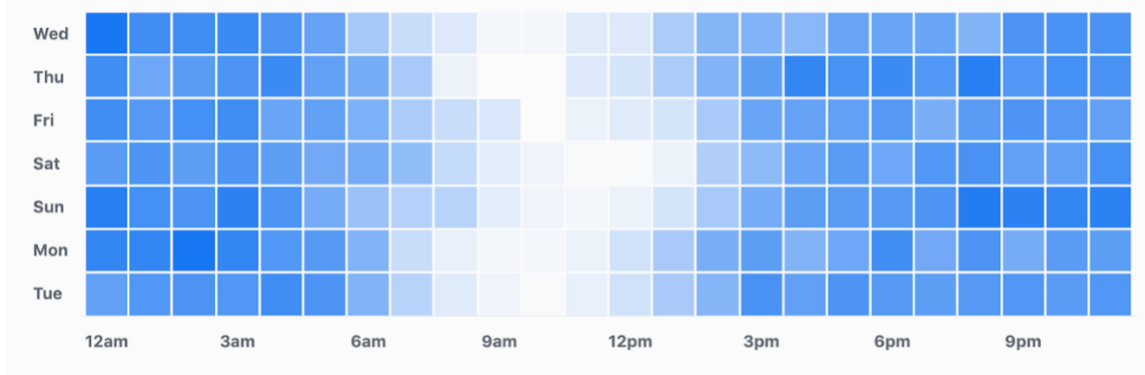
In Figure 13, the color gradient indicates the number of NCS followers using Instagram at each day and time period, with darker shading representing a higher number of follower engagement. Findings indicate the key times NCS followers were on Instagram fell between 9pm and 4am. The least likely time to engage with NCS followers was between the hours of 8am to noon. These trends were relatively uniform for each day of the week. These findings allow for generalized insights based on the demographics of those interested in the NCS campaign—the content topics that might resonate with followers based on their age and gender, and prime days and times for posting NCS account content based on the probability of follower presence on Instagram—all valuable information in shaping the potential storytelling content held by this indirect network resource.

Unique 1:1 user communication. The NCS campaign utilized 1:1 communication with other Instagram users to produce indirect storytelling resources. This metric differs from the previous measure of NCS followers, as these exchanges were not limited to only users following the NCS account. These indirect storytelling resources included current followers, users that eventually became followers, as well as users with no affiliation with the NCS Instagram account. Contact measures included account mentions (by the NCS

account), user comments on NCS posts, and direct messages (including those produced through Instastory emoji reactions) throughout the NCS campaign intervention period. Table 5 below provides a summation of each contact type along with sub-counts differentiating if the initial contact was made by the NCS account (internal initiation) or another user account (external initiation).

Table 5

Indirect NCS resources via 1:1 Instagram communication metrics

Contact types	Internal initiation	External initiation	Total
Mentions	16	0	16
Post Comments	10	22	32
Direct Messages (DM)	11	2	13
Instastory reactions	6	3	9
Total	41	29	70

The majority of 1:1 account communication made during the course of the intervention was initiated by the NCS account (58.6% as compared to 41.4%). Of the 70 total contacts, made by or to the NCS account, 22.8.1% were initiated though an account mention (n=16), 18.6% were started via direct messages (n=13), 45.7% came through post comments (n=32), and 12.9% began with an emoji reaction to an Instagram story (n=9). Less than half (n=31) of the all combined contacts were initiated between the NCS account and a current follower of the NCS account. The remaining 55.7% of communication took place with accounts outside the NCS account network.

To be considered a viable indirect resource, both parties (the NCS account and the contacted user) were required to participate in the exchange. A quarter of total contacts (n=17) produced a continued exchange between the NCS account and the external accounts

beyond the initial communication contact. Eight of these seventeen continued DM conversations were with accounts outside the NCS follower network. During the course of the intervention, the NCS account gained 5 new followers from the 70 total contacts (4 from DM, 1 from a story reaction).

Access to NCS network resources

The NCS Instagram account provided a variety of metrics to evaluate access to NCS storytelling resources. These measures were drawn from Hoffman & Foder's (2010) matrix of user engagement (Table 2) discussed in Chapter 3, and were then modified for the specific context of network access of the NCS Instagram campaign (Table 6). Next to each metric term in Table 6 is a list of the social capital component(s) it measures (column 2), its affiliated storytelling resource type (column 3), and a cumulative count of each metric collected over the course of the intervention time period, Aug 1 – Dec 31, 2019.

Table 6

Network Access of the NCS Instagram Campaign

Term	Social capital component	Resource	Total
Reach	Access	Direct	5599
Hashtags	*Access (facilitation)*	*Direct*	195
Mentions	*Access, mobilization (facilitation)*	*Direct*	33
Follows	Resource, access, mobilization	Indirect	20
Total likes	Mobilization	Indirect	617
External likes*	*Access*, mobilization	Indirect	127
Comments	Mobilization, access	Indirect	32

| Replies | Mobilization, access, resource | Indirect | 5 |

Note. Italicized metrics (hashtags and mentions) are a source of access facilitation and not a direct measure of access itself.

As indicated in the Chapter 3 analysis, since Instastories are only accessible for 24 hours after posting, and a key value for resource access is its bankability (the ability to return to the resource at a later time), only the NCS posts were included as a direct storytelling resource for the following access analyses. Post reach (the number of unique user accounts reached by the post) was the primary metric used to measure user access to the NCS direct storytelling resources. In connection to post reach, I measured types of access facilitation (hashtags and mentions) used by each individual post to identify potential trends. Finally, manifestations of indirect storytelling resources (follower, external likes, post comments and replies) were collected to see if trends existed between post reach and the accrual of potential indirect storytelling resources.

Access to direct storytelling resources (NCS posts) varied significantly. Figure 14 below demonstrates NCS post reach over the course of the NCS campaign.

Figure 14

Accounts reached over NCS campaign timeframe
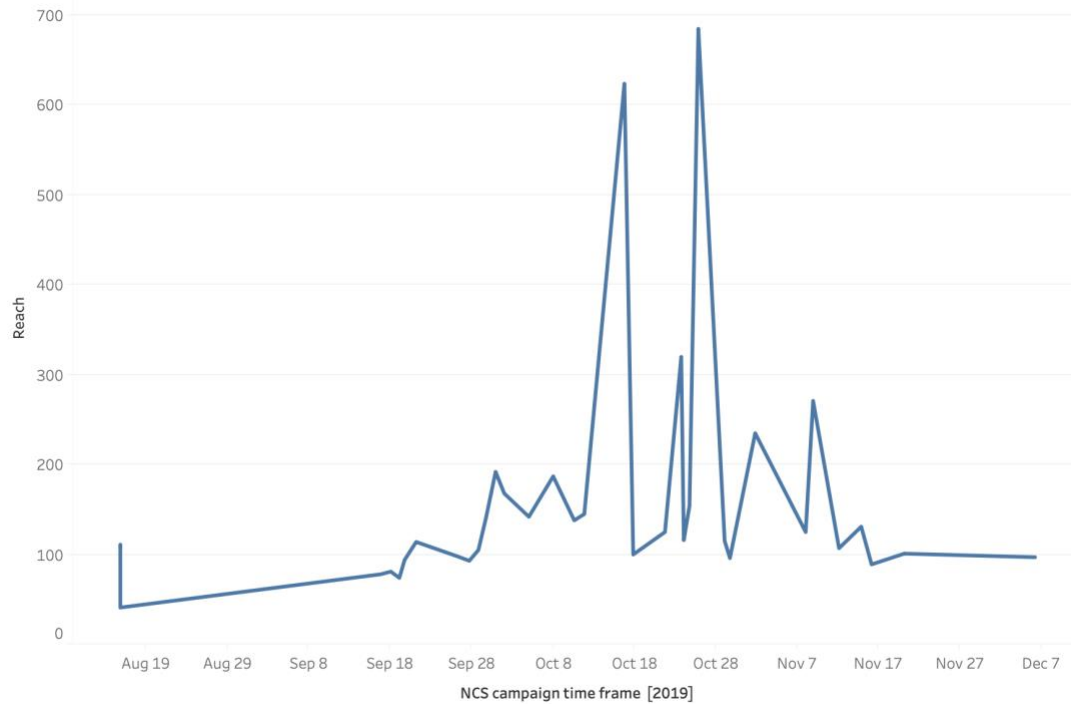
As can be seen in Figure 14, access for direct storytelling resources via NCS Instagram posts varied significantly for each post, though there was a slight trend toward increased reach over the entire span of the intervention. Findings also showed a positive trend between post reach, types of access facilitation (e.g. hashtags, mentions), and means for accruing potential indirect storytelling resources (e.g. followers, comments and responses, and external likes) (see Figure 15).

Figure 15

Trends in NCS post access, indirect resource accrual, and reach facilitation

NCS Instagram Posts			Reach	Resource Accrual	Facilitation

Mentions
0   5   10

Cartoon 3	October	25
Photo + narrative 10	October	16
Cartoon 1	October	23
Photo + narrative 14	November	8
Cartoon 5	November	1
Photo + narrative 4	September	30
Photo + narrative 7	October	7
Photo + narrative 5	October	1
Cartoon 2	October	24
Photo + narrative 9	October	11
Photo + narrative 6	October	4
Photo + narrative 3 (anon)	September	29
Photo + narrative 8	October	10
Photo + narrative 16	November	14
Quote/infographic 5	November	7
Photo + narrative 11	October	21
Photo + narrative 12	October	23
Photo + narrative 13	October	28
Podcast 3	September	20
Photo + narrative 15	November	11
Photo + narrative 2 (anon)	September	28
Quote + narrative 2	November	19
Quote/infographic 4	October	17
Quote/infographic 3	September	25
Quote + narrative 3	December	5
Cartoon 4	October	29
Podcast 2	September	19
Photo + narrative 1 (anon)	September	27
Quote + narrative 1	November	15
Podcast 1	September	17
Quote/infographic 1	September	16
Quote/infographic 2	September	18
Graphic 9	August	15
Graphic 8	August	15
Graphic 7	August	15
Graphic 2	August	15
Graphic 1	August	15
Graphic 4	August	15
Graphic 6	August	15
Graphic 5	August	15
Graphic 3	August	15

Reach axis: 0   200   400   600
Resource Accrual axis: 0   10   20   30
Facilitation axis: 0   10   20   30
Hashtags

Legend:
- External Likes
- Responses
- Comments
- Follows
- Hashtags
- Mentions

As seen in Figure 15, there was a positive trend between NCS posts reach and the means for accruing new indirect storytelling resources. The correlation between post reach and types of reach facilitation was also positive, but slight.

Mobilization of NCS network resources

Having measured access to NCS Instagram network resources, the final social capital component analyzed was mobilization of the NCS network. The NCS Instagram account produced a variety of metrics for evaluating mobilization provided below in Table 7 These metrics were categorized on two lines: passive or active mobilization and post or account resources.

Forms of engagement were considered passive if the engagement only required one action on the part of the user. Examples of passive engagement metrics included: post likes, comment likes and profile visits. On the other hand, engagement was considered active if multiple actions were required on the part of the user in order to complete the action. These actions include fell in this category because this form of engagement only required one tap from the user in order to complete the action. The remaining metrics (follows, external likes, comments and replies, saves, shares and website visits) fell into this category. There were two exceptions for passive and active classification: comment likes and post saves. Technically, in order to like a post comment, a user must tap into the post to fully access the comments, which requires extra action on the part of the user. Post saves, on the other hand, only require one tap by the user to complete the action. However, this metric was still considered active as since the act of saving a post resource infers the user's intention to return to the post at a later time, a process that would require multiple actions to carry out.

Next to each term is a list of the social capital component(s) it measures (column 2), whether the mobilization was considered active or passive (column 3), the type of resource it was mobilizing (column 4), and a cumulative count of each metric collected over the course of the intervention time period.

Table 7

Network mobilization of the NCS Instagram Campaign

Term	Social capital component	Activity Level	Resource	Total
Engagement	Mobilization	-		682
Follows	Resource, access, mobilization	Active	Account	20
External likes	Access, mobilization	Active	Post	127
Comments	Mobilization, access	Active	Post	32
Replies	Mobilization, access, resource	Active	Post	5
Saves	Access, mobilization	Active	Post	395
Shares	Mobilization, access	Active	Post	30
Website visits	Access, mobilization	Active	Account	63
Post likes	Mobilization	Passive	Post	617
Profile visits	Access, mobilization	Passive	Account	395
Comment likes	Mobilization, resource	Passive	Post	33

Given that indirect storytelling resources represent *potential* resources within the NCS network, measuring indirect resource mobilization proved difficult. As such, findings for resource mobilization centered on how users engaged with direct storytelling resources. Mobilization was analyzed on three fronts: (a) trends in engagement over time (b) trends between engagement and types of active and passive mobilization, and (c) observations of internal and external engagement with *direct storytelling resources.*

106

Mobilization of the NCS network over time. Direct resource mobilization was

measure through user engagement with NCS posts. Mobilization of the NCS network

aligned with measures of direct resource access over time. Figure 16 below demonstrate

NCS post reach and engagement over the course of the NCS campaign.

Figure 16

Correlation between NCS direct resource mobilization and reach over time
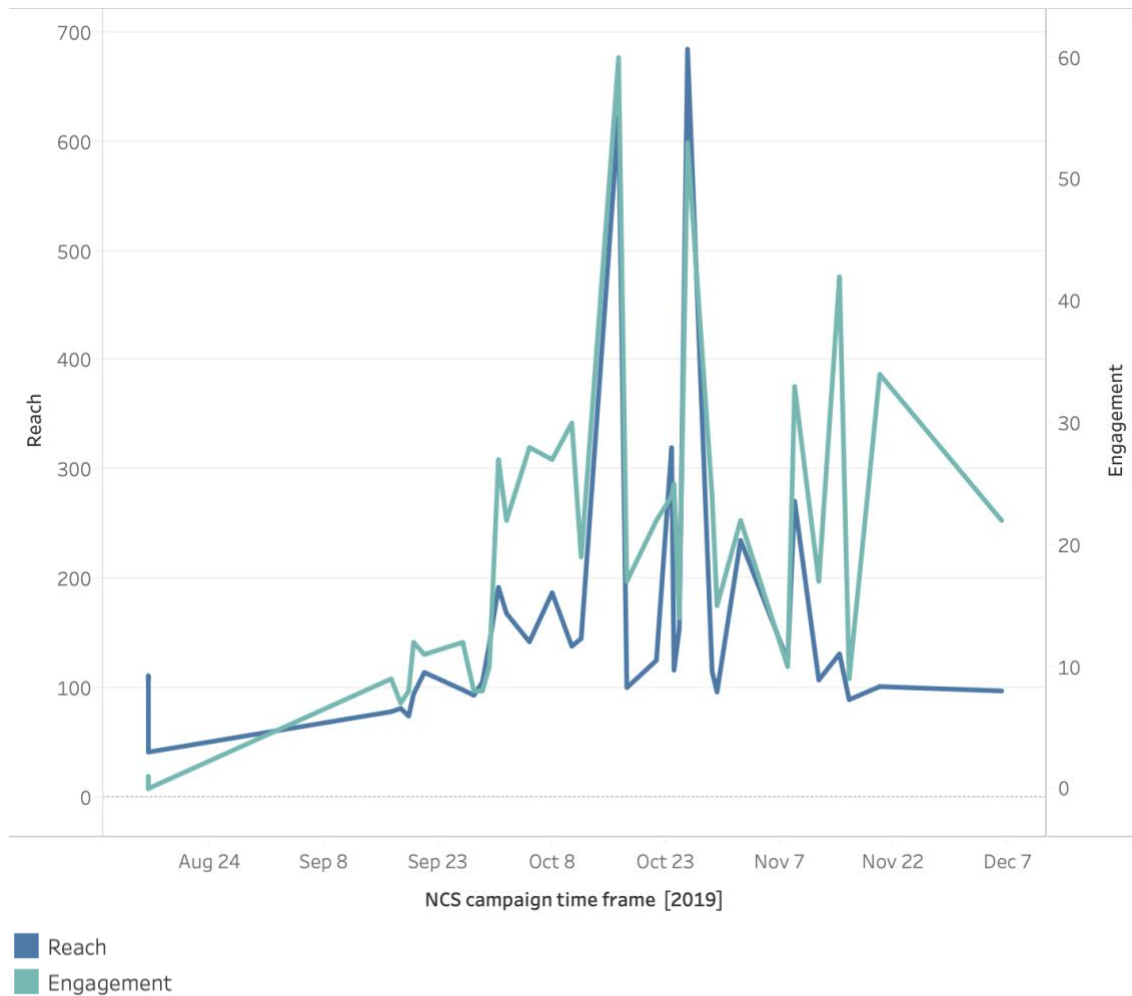
Note. The x-axis depiction of chronology was measured on hourly increments instead of daily increments. This provided the ability to delineate reach measurements between posts that were published on the same day.

As seen in Figure 16, there was close correlation between NCS post access and mobilization over time. Engagement for direct storytelling resources via NCS Instagram posts, much like reach, varied significantly according to the post, with a slight trend of increased engagement over time. Aside from the posts at the start of the campaign, post engagement consistently surpassed post reach with two exceptions: two posts in October (Oct. 16 and Oct. 25) had greater access than mobilization.

Active and passive forms of mobilization. Findings showed a positive trend between engagement and active forms of post mobilization. However, these was no clear trend between direct resource engagement and active forms of account mobilization (Figure 17).

Figure 17

User Engagement and Active Forms of Post and Account Mobilization

Figure 18

User Engagement and Passive Forms of Post and Account Mobilization
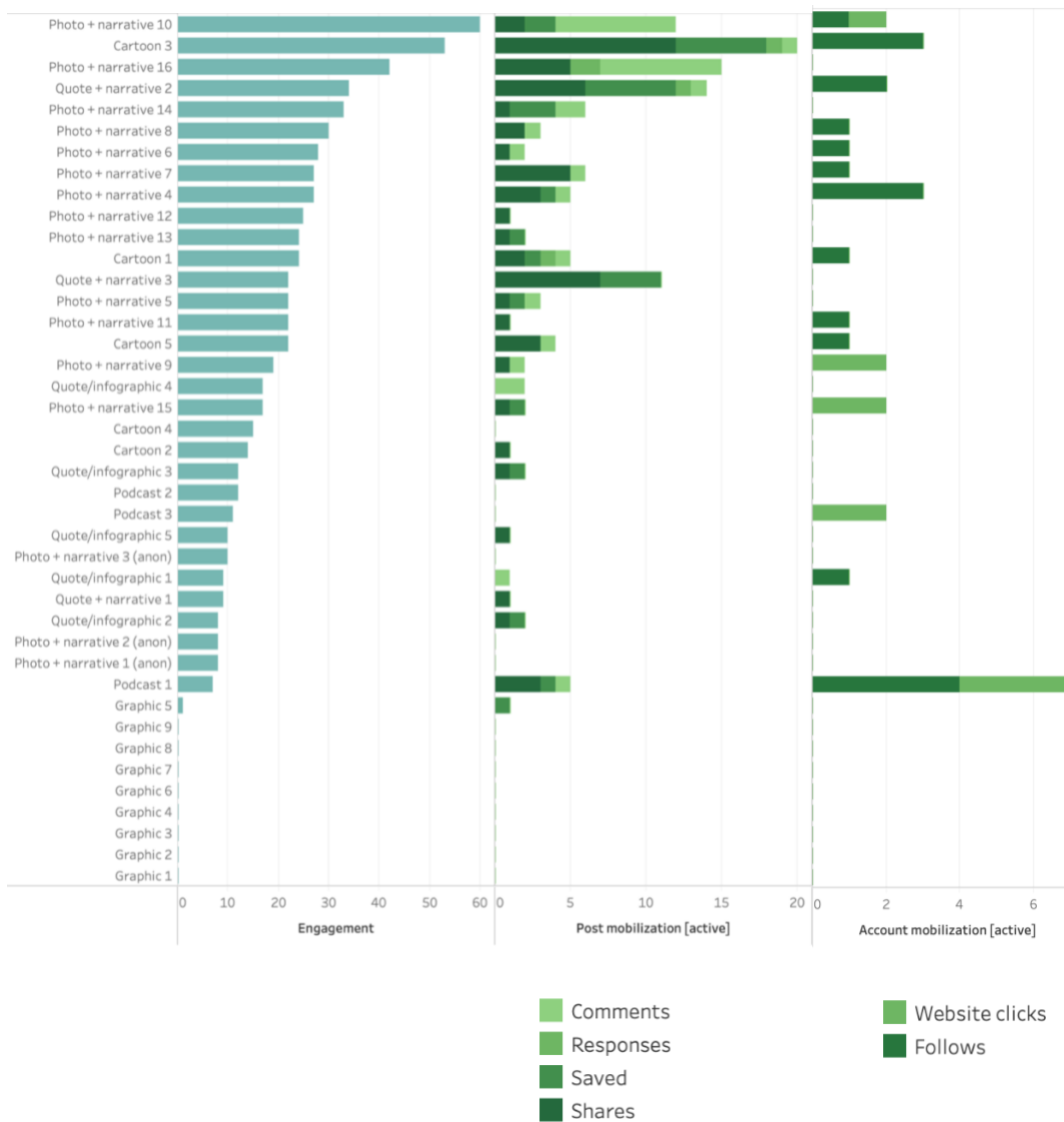
As seen in Figure 17, there was a positive trend between NCS posts engagement and forms of active post mobilization. However, there were no obvious trends between engagement and active forms of account mobilization.

Findings also demonstrated a positive correlation between engagement and passive forms of post and account mobilization (Figure 18).

Figure 18

User Engagement and Passive Forms of Post and Account Mobilization
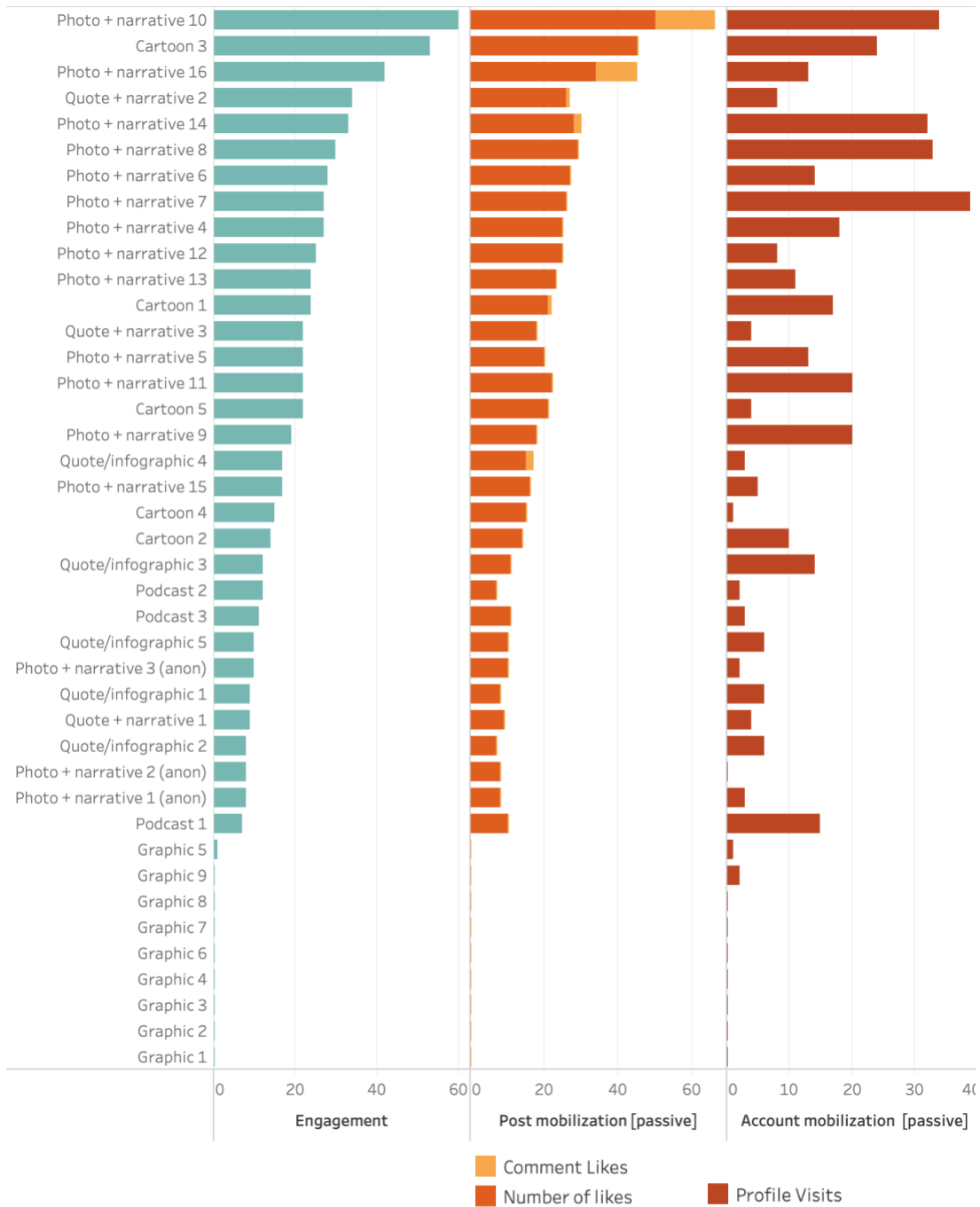
As seen in Figure 18, there was a positive trend between NCS posts engagement and forms of passive post mobilization. There was also a positive trend between engagement and passive forms of account mobilization, though this was not as strong.

Summary of Research Question 1 Findings.

This research question considered the role networked counterstorytelling played in shaping Lin's (2001) three structural components of social capital within the NCS Instagram network. This discussion began with an overview of the direct and indirect resources identified within the NCS Instagram network, based off the operationalization of social capital through storytelling. The discussion continued with findings and examples for evaluating access to the NCS network resources. Finally, the discussion presented means to assess passive and active forms of mobilization within the NCS network. Findings from this exploratory study produced means for identifying and measuring each component of social capital: *resources* within the network, *access* to network resources, and *mobilization* of network resources.

Netnographic Results of NCS Campaign

From the netnographic screening, a total of 98 narratives were selected for qualitative analysis. The composite analysis of these narratives will be referenced as the NCS multimodal narrative throughout the discussions for Research Question 2, 3 and 4. A breakdown of the narrative sources and demographics are provided in Table 8 and Table 9, respectively.

Table 8

Narrative Source, Proximity, and Count

Narrative source	Proximity to NCS campaign	Total narratives
NCS podcast (published and unpublished interviews)	Primary	3
NCS Instagram feed (published posts and unpublished post interviews)	Primary	34

NCS Instagram interactions	Primary	8	
NCS Instastories	Secondary	39	
Public blogs, websites, researcher journal	Secondary	22	
Total		106	

Table 8 categorized the narrative sources according to their proximity to the NCs campaign (primary and secondary) and provided a total narrative count for each narrative source. Primary sources included: Instagram posts, stories and direct messages; published podcast episodes; recorded interviews for podcast and/or Instagram posts not yet published with signed participant permission for use in research. Secondary sources included: publicly available posts or publications from other sources shared directly with the NCS campaign

Table 9 grouped each narrative according to two specific demographics: each storyteller's relation to higher education and their respective gender. Of the 98 stories, these two variables were clearly indicated for 62 of the stories. The final column of Table 9 provides a total count of unique stories for each storyteller group.

Table 9

Demographics of Narrative Sources

Relation to higher education	Gender Identity				Total unique stories
	Male		Female		
	Total	Percentage	Total	Percentage	
Current students	15	34.1	29	65.9	44
Faculty and/or administration	3	50.0	3	50.0	6
Recent alumni	2	20.0	8	80.0	10
Stopped-out students	1	50.0	1	50.0	2
Total	21	30.2	41	69.8	62

Narrative source demographics regarding gender were determined by pronoun preference within each student narrative; pronouns were clearly indicated in each of the narrative sources. I did not want to speculate on data regarding storytellers' race, ethnicity, or economic situation, since this was not clearly stated in all of the narrative data. Instead, I allowed findings from the qualitative analysis of NCS multimodal narrative, which was both rich and thick, to speak to these aspects of FGCS identity.

The NCS multimodal narrative was first analyzed using a grounded theory approach. This first involved initial coding of the multimodal narrative text and visual content using in vivo code labels. This was followed by a focused coding process to synthesize initial codes into more conceptual content. At this point the analysis diverged from a strictly grounded theory approach depending on the Research Questions at hand. For Research Questions 2, 3 and 4, focus codes were analyzed using a theoretical coding process. However, for Research Questions 2 and 3, instead of using a ground theory approach to develop the theoretical codes, I used a priori theoretical coding themes based on key concepts from social capital and community cultural wealth, respectively. This process allowed for the expansion and critique of these theories, respectively. Substantial narrative themes which did not fit cleanly with the set frameworks were evaluated using grounded theory approach to conceptualize models for their interactions.

Research Question 2 Findings

Research Question 2 explored the NCS multimodal narrative for greater depth and breadth of understanding regarding FGCS social capital. Finding from this analysis were aligned with Lin's three structural components of social capital. The following discussion

113

presents the qualitative findings regarding the social capital of FGCS in the context of Lin's (2001) three structural components of social capital.

FGCS Discussion of Social Capital

Throughout the NCS narrative, Lin's (2001) components of social capital arose in students' discussion of their higher education journey. These components aligned with the study's operationalized framing of social capital, namely: storytelling as network resources, access to storytelling resources, and the ability to mobilize their network for storytelling resources. In this discussion, I first present how FGCS described the value of counterstorytelling resources. I conclude the discussion by providing an overview of factors influencing FGCS access and mobilization of social capital.

The value of counterstorytelling resources

Similar to findings from Research Question 1, storytelling resources were described by FGCS in both their direct and indirect forms: the stories themselves (direct resource) and relationships with people holding these stories (indirect resource). Storytelling firsthand stories shared from other FGCS served as the direct storytelling resources, while references to mentors and mentorship functioned as indirect storytelling resources. Both resources, direct and indirect, were highly valued by FGCS.

FGCS counterstories. Students valued hearing stories firsthand from other FGCS. In a story shared with the NCS Instagram account through a student blog, a current FGCS relayed the value of listening to a student panel of other FGCS mentors. This student stated, "[It] was really impactful because some of the mentors that were there told their stories…" explaining "there's just something more about hearing it from them." In stating how there was "something more" in hearing FGCS stories firsthand, this student identifies the

importance and value of counterstorytelling. Solórzano and Yosso (2002) defined counterstorytelling as "telling the stories of those people whose experiences are not often told" (p. 32). In this process, counterstorytelling stresses the need for personal, firsthand narratives as a key source for these stories (p. 32).

Hearing other FGCS share their personal stories also helped students reposition themselves as storytellers themselves, giving them opportunity to claim ownership in the larger FGCS narrative. In a university blog shared with the NCS Instagram, a current undergraduate student described how this happened for him when he heard the stories of his graduating peers at an end-of-the-year banquet held for FGCS at their campus. He explained:

> All the seniors get a chance to tell their stories…and tell other [FGCS] students what they've gone through and how they've gone through it…and I thought, 'Maybe one day I'll be able to do that too.'

This student could see himself in the place of his soon-to-be graduating peers and as such saw how he could, in turn, use his own voice and experiences to contribute to the FGCS legacy. This ability to connect the stories of other people to themselves was not isolated to relationships between FGCS and their near-peer mentors; storytelling bridged connection across other siloes, such as those between students and faculty. In a story shared with the NCS Instagram account through a student blog, a current FGCS undergraduate described how her professor, who was also the first in her family to attend college, used her personal stories to support and encourage the FGCS students in her classes. This student explained:

> Whenever we're in class, she'll tell us anecdotes of how she did things in her professional career. And I'm like, 'Wow, that's me!' … That dynamic was there, and it was really cool to experience. Just because I'm starting from zero essentially, doesn't mean that I can't be a professor.

115

First, it is important to note in this quote, how this student describes herself as "starting from zero," thus demonstrating the pervasive influence deficit ideologies had in shaping perceptions of her FGCS identity and her "lack" of personal capital. However, seeing a professor who embraced her own identity as a FGCS and shared stories of her experiences in open, empowering ways, helped this student to connect her identity with that of her professor's. This was evident in the student's exclamation about her professor, "Wow, that's me!" This professor's counterstorytelling fostered a sense of connection and belonging that bridged an often-hierarchical positioning between faculty and student, building a sense of unity through their identity alignment. This, in turn, reinforced the student's belief, which she shared later in the interview, that "you can be what you see." Together, the two previous examples demonstrate the powerful connection between counterstorytelling mentorship.

FGCS Mentorship. Along with the value of hearing other FGCS first-hand stories, students stressed the importance of building mentor relationships with the people who held these stories and experiences as an anchor of support. In the multimodal narrative, students turned to mentors for guidance, feedback, and belonging.

Mentors and the stories they held were a valuable resource for FGCS to gather vital information and guidance to successfully navigate college. In an interview for the NCS podcast, a recent FGCS alum described how her mentors helped her throughout the specifically barriers she experiences as a FGCS at her university. She explained:

> I think that there are certain factors that I didn't really take into consideration, you know? And I really needed guidance from mentors who may have experienced the same things in their past and have shared their wisdom on to current first-generation students.

116

For her, the personal experiences of mentors were a source of "guidance" and "wisdom" she could glean for personal support. As such, the stories they shared contained valuable information to help support other FGCS. Mentorship also served as an opportunity for FGCS self-reflection and growth. In an interview for the NCS podcast, a current FGCS graduate student explained:

> It really just takes somebody there to actually listen to you; that's kind of where you grow as a person. And that's something that's hard to do by yourself, because it's easy to close yourself off to the world. But once you have somebody that you feel you can confide in, even if it's someone that you just talk to like once a month or something. They can still be considered a mentor if they help you grow.

Students also stressed the importance of having mentors who could personally relate to their identity and experiences. In a focus group interview for the NCS podcast, an undergraduate FGCS student explained "It would be very nice to see how somebody else navigates the world. Somebody who can navigate those kinds of stereotypes and come out on the other side." This sentiment was shared by another student whose story was provided to the NCS campaign through a student blog. She stated, "Having the representation, and being able to hear from those who have had similar experiences as I have, was pivotal in how I changed my perception of a quality that is fundamental to who I am."

Factors Influencing Network Access and Mobilization

Given the degree to which students valued the stories of those with similar lived experiences as themselves, FGCS highly valued being connected to social networks with individuals and communities who held these counterstories. In the multimodal narratives, several factors arose which influenced students' ability to access and mobilize networks for support, which will be discussed below.

Spaces for Network Access

University programs. Students described their experiences with campus programs specifically designed to foster connection between students of minoritized identities. For some students, university programs and cohorts designed specifically for the needs of FGCS were a core source of community and belonging. In a story shared with the NCS Instagram account through a student blog, a current FGCS said:

> After the first [FGCS cohort] event I attended, I knew that I belonged with them. I felt the sense of belonging that I had not found in the first few weeks I was at [campus]. The [FGCS mentors] were so friendly, and the things they said were so similar to what I wished I could share with people.

While her campus at large did not create a space for connection and belonging, the university's program designed for FGCS was able to meet this student's need. Another student described how the FGCS student group provided by the university was a primary source of guidance and support. In their story—shared by a university blog through the NCS Instagram account—this student explained, "I could not imagine how hard my experience and how lost I would have been if I did not have the [FGCS] community…"

However, this sense of belonging and connection was not experienced by all students with their campus's student support programs. First, many students discussed the difficulty of finding these programs in the first place. The majority of students felt support programs for FGCS were not well advertised by the university, and many expressed frustrations with how inaccessible they were to FGCS due to time and scheduling conflicts. Other students explained how they felt their college only gave "lip service" to supporting FGCS, but ultimately "swept under the rug" any issues that really affected them. Even when FGCS programs were accessible, not all students derived the same benefit from them. In an interview for the NCS Instagram account, a current undergraduate FGCS shared how their

experience with campus FGCS program differed from their other FGCS peers. She

explained:

> As great as it is to go to the [FGCS & student diversity] room and to have my cohorts—to have my people with me, it's unfortunate because I don't think people experience the same things I do. Just because we're all so different, and we all go through different things. We're all majoring in something different. I never really go home feeling, like, validated. But I just wake up and go on with my life as usual.

In this quote, this student describes how having a shared identity with students in her

campus support program, was not enough to foster a sense of belonging. For her, identity

alone was not enough to validate and support her needs. In addition to ineffective campus

programs, students expressed difficulty bridging spaces of support on campus. In a focus

group interview for the NCS podcast, a group of undergraduate students described how

their campus programs did not address the intersectionality of their identities. They

explained:

> Student A. We interviewed [our advisor] about his experience in higher ed, in general. He mentioned about intersectionality and how sometimes [our] identities are separated. Like, if you identify as part of the LGBTQ+ community, then you're in this area at certain colleges. A certain ethnicity? Then you're in this area...Just consider the time commitment of being a [FGCS]. How you have to separate yourself to have separate time to commit to build[ing] community with those other identities.

> Student B. Yeah, like at one o'clock [I] can be a person of color, and at two o'clock I'm going to go be queer.

> Student C. And it's not just the time, but the type of environment that it creates. How do I address all these different needs my identities hold? If you're wanting to go to an organization for the LGBTQ+ community, and it's all white and you are a student of color, then that aspect of your identity could also feel not safe in that environment…

This pull created a strain on the student's time as well as their ability to bring their

full selves to spaces the entered. The pull across multiculturalism or the spectrum of

experiences within one identity. Students discussed multiculturalism and how this shaped

119

their higher education experience. In an interview for the NCS Instagram account, a current student described the difficulty in accessing supportive FGCS networks on campus based on her multicultural identity. She explained:

> I think with [student diversity and FGCS programs] there's still a little bit of, kind of, the issue of people who are, maybe a little, [pause] I don't know…people who are multiracial and identify more so with their white identity. I think there's kind of not a lot of inclusion regarding that.

It is apparent, through her pauses and hesitations throughout the interview, the discomfort this student felt in discussing her racial identity and the nuances it holds for her and her ability to interact with other student groups on campus. Not having a clear distinction within her own identity made it difficult for this student to find "inclusion" or a sense of belonging with highly siloed student affinity groups on campus. She continued:

> It's kind of interesting that like I'm a person of color, and I was adopted into a white family, because I just have never really experienced a lot of Mexican culture. Because I am half Mexican, and it's kind of difficult for me to feel like I belong in a community of people of color as well. Because sometimes I feel like, "Oh, I'm not Mexican enough" or "Oh, I'm not cultured enough." So, I think the rise of [student groups] addressing things like being multiracial is important and will help.

This feeling of not being "enough" of a certain identity was shared by many students in the NCS narrative. Students who needed access to networks of support but were unable to find them, often sought these connections and resources outside the tradition campus spaces.

Non-traditional spaces. While campuses sought to provide spaces for FGCS students to connect, many students expressed the need for spaces and communities outside the jurisdiction of their university. In an interview for the NCS podcast, a recent FGCS alum described how a study abroad provided this space for her. She explained:

> I think that being able to get placed outside of [my campus] community was kind of exposing me more so to understand my place at [my campus]. Like, I had to leave

120

[campus] a little bit to experience people's stories and their storytelling for me to be able to have the strength and the foundation to say, "Hey, you know, this is my story."

Technology played a significant role in connecting students to spaces and communities outside their campus. For many, social media was a lifeline to maintain connections with networks back home with family and friends. In an interview for the NCS Instagram account, a temporarily stopped-out student described how she turned to technology to sustain her while she was at college. She explained:

> Being away from my friends and family was so hard. This massive change resulted in daily panic attacks. The smallest thing would send me reeling. But social media reminded me how close we are to one another. I could instantly see or hear my family and my friends and feel okay.

These digital external spaces also functioned as a third space for FGCS community connection—spaces in which FGCS held ownership. Digital platforms such as podcasting and social media served as valuable sources to build these third spaces owned and lead by students themselves. This was evidenced in a story shared during a focus group interview for the NCS podcast:

> We kind of talked about our experiences being student of color at a predominantly white institution. Because as much as there was space to talk about it [on campus], it was organized space to talk about it. Like, during office hours you can go talk about it, but that's about it. So, [we] were like, "We want to have more conversations about this and want to share our conversations. Share things we've learned. Share experiences about what it's like to be [us]." So, we went and made a podcast and told the world about it.

Students utilized these digital spaces to validate their own experiences, to create space for the voices of "groups that typically are silenced," and to forge connection for understanding and belonging. As one student remarked about the NCS campaign, "I think that's why [this campaign] is so cool. With social media campaigns we get to give space for people to be more understanding [of] other identities and also to feel understood."

121

Security in Network Mobilization. FGCS's ability to mobilize their network depended on feelings of belonging and safety. As discussed in the literature review, a sense of belonging is crucial for student success. In the NCS narrative, a sense of belonging was often tied to aspects of FGCS's identity, both of which influenced their confidence and initiative in mobilizing and building their network. For example, students described how their identities influenced their experience entering a college environment so different than their own, explaining how difficult it was to "feel at home in your own skin." Students felt they were constantly filtering aspects of themselves in order to effectively function on campus. In an interview for the NCS podcast, a student described having "traditional and cultural values that are near and dear to me" but not "being able to relate to the larger population of the [college] community." Students' feelings of belonging or disconnect depended on the degree to which they felt a connection to community.

Homophily and Belonging. Students sought belonging through homophily. To foster belonging FGCS sought homophily through communities who shared identities or experiences. This behavior was best described in a story shared with the NCS Instagram account through a university blog. A FGCS alum explained, "[As FGCS] we were naturally drawn to each other based on some of our experiences, at first without knowing it." In the multimodal narrative, homophily—or the tendency to affiliate with those who share similarities to one's self—was pursued across a fluid intersection of identities and experiences for FGCS.

Homophily and Intersectionality. Intersectionality influenced resonance and belonging for FGCS. Students found a sense of relief in finding peers and mentors who related to their identity. Though this ability to connect and build resonance varied according

122

to context. Intersectionality influenced FGCS homophily with their college community. For some students, racial identity was a primary source of resonance and belonging. For example, in a focus group interview for the NCS podcast, a student attending a predominantly white campus described how negative interactions with white people and communities in the past influenced her current social groupings. She explained:

> I do gravitate more towards [people of color] as a result of things like that. And I feel that's just kind of like, my thing now. I guess I'll feel more comfortable if I'm surrounded by other [people of color] as opposed to, immersed in like a fully like, Caucasian environment.

For this student racial identity was a driving element in the individuals and communities to which she was drawn. She attributed this draw towards people of color as "a result of things like that," referring to past experiences of racialized aggressions and microaggressions toward her and her family. However, racial identity was not always the most prominent factor for FGCS community homophily. Another student, who attended the same university as the student in the previous example, described how her sense of belonging came from being part of a community with shared political views. In her interview for the NCS Instagram account, she explained:

> I don't mean to speak on behalf of all people of color, but me personally I have found more of a home on campus at [this university] than I ever did in Plano, Texas. So maybe my background being in a very red, conservative state had to do a lot with that, but personally I feel that I belong here, and I never had to question that.

Yet still other students found resonance through their economic circumstances. In an interview for the NCS Instagram account, a current FGCS shared how his financial situation was a leading factor in finding community. He explained:

As a mixed racial student who is of low-income status, I feel that I relate better with people who are in that same scenario. A lot of the friends I've made come from low income or working-class families so we all have the same mindset that doing well in college is a must.

For many students, their economic circumstances and their family responsibilities were inextricably linked. Another student explained this in his interview for the NCS Instagram account. He said:

> Something that's unique to especially low-income students and students of color who are first-generation is they have a larger role in their families. They have a bigger responsibility towards contributing to their families that I feel people [who] are not first-generation, or people that are more well off, don't necessarily understand—at least not inherently.

Homophily and Resonance. The key to securing a homophilic connection was establishing a shared sense of resonance between both parties. Students found resonance through the FGCS experience. Many described feeling a sense of relief in finding peers and mentors who related to their personal experiences. In a story shared with the NCS Instagram account through a university blog, a current FGCS described the value she found in feeling understood as a FGCS. When she met a group of FGCS peer, she explained, "It's like 'Ok, I have people here who kind of understand what I'm going through.' And if I didn't have that, I don't know how confident I would be in myself being here either." This sentiment was supported through another story from a student blog. This student explained:

> [FGCS are] my people. FGEN means more than just my community because the people in the community are not just people who have similar interests, we have similar goals, challenges; and of course, one thing that we all have in common is we are navigating college life together.

In feeling a shared experience with her FGCS peers, this student found belonging in her "people" who understood the "goals" and "challenges" of being a FGCS. Without this community for support, FGCS felt misunderstood and overwhelmed. As a current FGCS

124

described in the NCS narrative through a student blog, "When other people don't understand your struggles, it can lead to a feeling of isolation within a group of peers that can be discouraging." This experience created a disconnect for FGCS with their non-FGCS peers. In a story shared with the NCS Instagram account through a university blog, a student explained that while she has friends outside of the FGCS community, her friendships with other first-generation students were different because of the background they share and the support they provide one another. "Even though I had made other friends and talked to other people, it's not the same, and it just felt really encouraging…having all these people now who support me and encourage me and check up on me is just always a good feeling."

The elasticity of homophily. As evidenced from the examples of FGCS group homophily, while shared identity and experiences were important in determining belonging, the types of identities and experiences that were most valued in building resonance varied for each student. Furthermore, while FGCS stressed the importance of having a supportive community that helped them feel at home with themselves, students also valued the ability to "meet new people" and network into new spaces and communities different than their own. For many FGCS higher education provided this opportunity. College created a place to "branch out" into new spaces, broaden perspectives and experiences and forge novel connections for personal and professional growth that would ultimately "open up doors in life" for themselves and their families. In an interview for the NCS Instagram account, a current FGCS described summarized this purpose of college as his opportunity "to be vulnerable and grow in spaces where I normally wouldn't find myself" explaining how he was "grateful for it because I believe it will lead me to be a better person, a better student, and a better professional down the line."

125

Given the value students saw in creating heterophilic connections and networks, many FGCS actively sought ways to build resonance across differences. To do this, students leveraged the elasticity of homophily, an adaptive ability which allows individuals to utilize intersectionality and shared personal experiences to build connections with people, even when more prominent aspects of their identities did not align. For example, in an interview with the NCS campaign, a current FGCS described how his campus environment facilitated his ability to build connections according to varying aspects of his identity. He explained, "Being at a school as diverse as [my campus], I find that I can belong to some sort of demographic, whether that be because of race, income status, etc."

Students used homophilic elasticity to address feelings of isolation. For example, in an NCS podcast interview, a recent FGCS alum explained:

> I feel like it's very easy to feel isolated. But if you look for it anywhere you are, you can find community. Like it's just a bunch of like-minded people and you don't all necessarily have to be like Mexican American or African American, or even all Caucasian. You can be all different races, but all you need to do is have the same mindset.

In this quote, this student describes how connecting with people who had a shared mindset allowed him to foster meaningful relationships across racial differences. Another example of the elasticity of homophily was evidenced in a quote from a FGCS professor shared with the NCS Instagram account through a university blog. She explained:

> I have a real connection with people who are working through this on their own that I might not even have with my own children, who are going to have a huge advantage…whether it's [FGCS] or any other situation, I feel like it gives me greater empathy and compassion for any challenge people are dealing with.

This professor demonstrated the power of homophilic elasticity in her ability to find resonance with the experiences of other FGCS and build a "real connection" with them in ways she was not able to do with her own children.

126

Threats to safety. FGCS needed safety to forge new connections to utilize resources, such as mentorship, within their network. Feelings of safety were crucial for students' confidence in finding and then, turning to, mentors for support. This safety related to FGCS ability to be vulnerable in their relationships, new and old, and to find belonging in new spaces and cultures—especially when trying to bridge hegemonic structures within their university. In the NCS narrative, FGCS's struggles with belonging and connection came when safety was compromised or felt threatened. These threats to safety could occur due to lack of representation, identity threat, imposter phenomenon, as well as the dismissal and exploitation of FGCS labor.

Lack of representation. Students described how their identities influenced their experience entering a college culture so different than their own, explaining how difficult it was "feel at home in your own skin." They felt they were constantly filtering aspects of themselves in order to effectively function on campus. In an interview with a recent FGCS alum for the NCS podcast, a student shared how responsibilities to family created a different experience compared to other students. She explained, "You know how the saying goes, 'The higher up you go, the less you see of yourself.' So, being more explicit, for example: me, being a low-income woman of color in the sciences—which is a mouthful—the higher up I go, the less of me I see." In her comment, this student describes how the intersectional elements of her identity, such as race, gender and class, compounded the lack of representation she experienced as she progressed along her professional and academic career.

Many FGCS described their desire for mentorship and leadership from professionals who shared their identity. In a focus group interview for the NCS podcast, a current student

expressed her frustration at having a predominantly white faculty demographic at the college. She explained:

> I think a big thing for me is having faculty and professors that are people of color. Because that's such a big deal…We're going here to have future careers and I think having people who are constantly telling and teaching us about what we're going to do, but not having similar identities as us makes us feel very excluded.

Beyond desiring identity representation in their professors and administrators, students explained the dissonance of having specific courses being taught by faculty whose identities were not aligned with the subject matter. In the same focus group interview, this student explained, "There are some courses that just can't be taught by white faculty." With nods of affirmation from her peers also being interviewed, she continued,

This lack of representation was felt not only through faculty and staff demographics, but in the demographics of the student body for the campus as a whole as well as within specific departments and programs. Many students explained that even when they had a strong community at their college, there were still situations and environments where they felt isolated. Example of this included being the only person of color, or the only woman, in their program or class. In an interview with a recent FGCS alum for the NCS podcast, a student shared his experience with this. He explained:

> There are definitely instances where you find yourself being the only student of color in the classroom and things like that. And it does definitely feel very isolated when you kind of realize that or you start hearing some of these statistics about students of color in upper education or higher education, excuse me. But as a student at [this university], it can be very isolating.

For this student, the lack of representation of other students of color on his campus and in his classrooms felt "very isolating" and affected his sense of belong. Furthermore, these feelings of isolation began to reinforce a deficit framing of student success as

evidenced by this student's reflection of "the statistics about students of color" in graduating college.

   Identity threat. Identity threat was a common source of anxiety for FGCS, often in tandem with a lack of representation in the faculty or student body. Threats to FGCS identities were often manifest through racialized and classed microaggressions and biased norms, the prevalence of which created violent spaces which compromised students' safety and belonging. FGCS described examples of identity threat on varying fronts and discussed how this impacted them. For example, in an interview for the NCS podcast, a FGCS alum explained the harm she experienced through racial microaggressions. She explained:

> It is very hard for first generation students, students of color, to be able to be a part of those communities. So, in situations like that I didn't feel heard. Especially whenever there were professors who would say very micro-aggressive comments, and no one would bat an eye. I think that those are moments where I would say, you know, "Hey, that's not fair." Why isn't anyone turning around and saying anything? And why should I be the one to advocate for myself? Like, why can't there be other people who also say, "Hey, that's not okay."

   In stating how she "didn't feel heard" and "no one would bat an eye" when racist comments were made toward her, this student describes a form of experiential gaslighting, where witness of an abuse decline to acknowledge the abuse taking place. By calling out the fact that no one else was "saying anything" in her defense, thus forcing her to "advocate for [her]self," she sheds light on the vital need for those who are not experiencing the microaggressions to be active participants in stopping them.

   Students also felt their identity threatened when it came to their economic and financial living conditions. This was evidenced in a story shared with NCS Instagram campaign via a FGCS blog post:

> As much as I tried to just go with the flow and not draw attention to myself, there's no easy or low-key way to admit to your friends that you can't go somewhere or do

129

something with them because you simply can't afford it. I've got student loan bills to pay, gas to buy and doctor's appointments to go to. It never gets easier or less awkward explaining this to people.

Summary of Research Question 2 Findings

Question 2 explored the NCS multimodal narrative to better understand how students described social capital, as operationalized through storytelling resources. The discussion began with students' descriptions of direct and indirect storytelling resources they valued in their networks, which was followed with a discussion of the effectiveness of different spaces in higher education on facilitating access to storytelling resources. The discussion concluded with an overview of key threats to FGCS safety in mobilizing and growing their network.

Research Question 3 Findings

This section discusses findings for Research Questions 3: How was community cultural wealth discussed within the NCS multimodal narrative? This analysis presents a depth and breadth of capital described by FGCS which fortifies, as well as expands, Yosso's original framework of community cultural wealth. The types of capital discussed throughout the multimodal narrative were described in nuanced, and often contradictory, ways by students. These differences in perspective were often attributed by the student to the intersectionality of their personal identities. In the following discussion, I begin by describing students' perspectives on the forms of capital outlined in Yosso's framework of community cultural wealth. After this review of findings, I conclude the discussion by outlining three additional forms of capital which emerged in the grounded-theory exploration of the NCS student narratives.

How FGCS described community cultural wealth

Grounded theory coding of the NCS student narratives produced themes closely aligned with the six forms of capital in community cultural wealth. One of those forms (social capital) was described in depth in Research Question 2. The other forms—familial, linguistic, aspirational, navigational and resistant—are evaluated in this section. Following the overview of these findings, three additional forms of capital –economic, positional, and perspective—that emerged from the data will be outlined and explored for their potential contribution to the original community cultural wealth framework.

Throughout the Research Question 3 discussion, it is important to note the nuanced perspectives and experiences shared by FGCS regarding their personal community cultural wealth. Across the board, perspectives on capital—within and beyond Yosso's framework—were described in contradictory ways by FGCS, presenting a potentially dualistic nature to capital when contextualized in the setting of hegemonic organizations and societies. This concept of capital duality was best summarized by one of the FGCS comments shared with the NCS narrative during the research intervention. They stated, "For me, being a (first-generation college student) is both a challenge and a blessing."

Familial capital

Family related codes shaped a larger percentage of the themes within the NCS multimodal narrative. These familial themes embraced Yosso's broader concept of family which included immediate family members (parents and siblings), grandparents, cousins, aunts and uncles, as well as neighbors, close friends and mentors—such as teachers and coaches—who were all described in a similar familial light. As one student explained in an interview for the NCS podcast, family consists of the "very close people in your life who are

131

looking out for your best interest." Given the degree to which family emerged in the thematic analysis, both in depth and breadth of data, familial capital was unbundled into three subcategories, all of which connected to aspects of Yosso's original definition. These subcategories were *network capital*, *generational capital*, and *cultural capital*.

Network capital. Network capital refers to the relationship dependencies exchanged between an actor (e.g. FGCS students) and their network (e.g. family). Yosso (2005) defined this aspect of familial capital as "the importance of maintaining a healthy connection to our community and its resources" (p.79). Students described two forms of family dynamics within network capital. The first dynamic described family relationships as a close, interconnected network with each member holding responsibilities to, and deriving support from, their family community. In the second dynamic, individuals within a family network function in more autonomous and independent ways of one another. Each dynamic presented differing benefits and barriers to students within these networks. The first dynamic, defined here as interdependent capital, was far more common in FGCS family networks, while the second dynamic, defined as independent capital, was assigned by FGCS to their non-FGCS peers.

Interdependent capital. The majority of FGCS described their familial relationships as an interdependent network of interactions, where family provided crucial resources and support to the student and the student returned that support to their family. The interdependent nature of FGCS network capital was evident when students described their family's investment in getting them to and through college. In these relationships, family sacrificed to create opportunities for their student, something which the student honored and highly valued and, in turn, strove to return the favor. In a story shared with the NCS

132

Instagram account through a student blog, a current FGCS described this interdependent relationship between herself and her family. She explained:

> FGEN is my pride. Seeing my parents smiling with tears when they sent me off for college, I know that they are so proud of me for taking the leap to do something they did not get to do. At that moment, I also know that I am so proud of them because, with their time and effort to pay for my education, they earn every bit of my achievement.

This student recognized the role her parents played in helping reach and accomplish these educational achievements. With that recognition, she coupled her successes to her parents, creating a shared ownership of the achievements. This mutualistic exchange of support between student and family expanded the student's educational experiences into a collective achievement.

Along with pride and honor, some students felt a weight of responsibility in their role as a first-generation college student with the concept of familial "pressure" deeply interwoven throughout the NCS narrative. One student, who shared their story in an interview for the NCS Instagram account, described this pressure as a sense of indebtedness to their family due to the sacrifices made on their behalf. They explained:

> Being a first-generation student has definitely put an enormous pressure onto me. The idea of failing my parents after all they have done and sacrificed for me is absolutely dreadful. When I hear their stories, the way they grew up, the struggles they endured, and the journey in finding a better life—my parents are Mexican immigrants who grew up in poverty—I couldn't imagine taking all of that for granted by not doing well. They've stated in the past that the only thing they want is for me to not end up like them, poor and unhappy with their jobs, full of regrets. I don't think I could live with myself knowing that their efforts have been in vain.

In this statement the student outlined the sacrifices their parents made for them to live in the United States and earn a college degree. This investment in the student's future placed a heavy weight of accountability on them as well as producing a sense of honor in making their parents' sacrifices efficacious.

133

Independent capital. The concept of independent capital was most apparent when FGCS discussed how the interdependent network of their network capital at times introduced conflict to their family relationships. During these situations, students cited the value of independence held by many of their non-FGCS peers. For example, several FGCS discussed how their non-FGCS peers had fewer restraints on their choice of colleges, while university selection for FGCS was restricted to campuses close to home in order to support family, even if these colleges were not their personal preference. A student interviewed for the NCS podcast explain her decision to attended a local college near family by stating, "It was a lot of going back and forth with my parents as to where I was going to go, because I applied throughout the entire country, but they somehow persuaded me to stay in-state." This student discussed the pressure for campus proximity as a source of conflict in her relationship with family, describing the decision as "a huge fight with my parents" in order to determine where she would be "attending college for the next four years."

Several students expressed a sense of confinement in their freedom to select a major or career path of their own choice. This confinement came from feeling an obligation to pursue a degree and career that was both "prestigious" and lucrative in order to lift their family and themselves financially. One first-gen alum, now a university faculty member, explained in a university blog shared with the NCS account, "Parents may worry about affording tuition or may pressure their children into choosing a certain major for their investment to seem worthwhile." In this last comment, parents of FGCS were positioned as investors in their child's academic career, implying a sense of ownership and an expected return on their investment. A family's investment in their student's education often created spoken, or unspoken, expectations for the student to return the favor by investing back into

134

the family. In an interview for the NCS podcast, a recent FGCS alum shared how this affected her. She explained:

> Some people would tell me that, you know, you always look like you're on edge. You're always running around. And I think it was because, you know, as a first-generation student, and as my biggest identity of being, you know, a child of immigrants and undocumented immigrants, I felt like I had to do things for my parents. And they never told me anything. They did not bat an eye and they did not say, "[Name redacted], I want you to be a doctor." Never, never. My parents are, and will always be, very supportive of my decisions. But for some reason, I don't know where I got it from, I thought that I had to meet a quota to make up for the fact that my parents, you know, immigrated to this country [for me].

In stating how she was "always running around," this student describes a profound sense of motivation to work hard and perform well at college; a motivation fueled by her parents' sacrifices (e.g. immigrating to provide opportunities for her) and encouragement (e.g. respecting and supporting her professional decisions) on her behalf. However, the interdependent relationship of her family community led her to believe she need to "meet a quota" supporting her parents, without her parents ever expressing any expectations of reciprocity. This interdependent pull was felt by many FGCS in different ways according to their personal family dynamics. However, regardless of context the barriers to interdependency were a limited sense of independence and a diminishing feeling of ownership in their personal and professional decision-making. A current FGCS explained this in their interview for the NCS Instagram account. They stated:

> When you have a path laid out for you—graduate high school, go to college, get a degree, start a job—it's hard to take the risk and steer yourself off of that path.

In their comment, this student described the difficulty in choosing an academic, or career, path outside the one established by family, or the "path laid out" for them. To assert independence in decision-making around their life choices was considered a "risk" implying

a potential loss if that path was not approved or successful in the eyes of the student and their family.

Generational capital. Another subcomponent of familial capital described in the FGCS multimodal narrative was the concept of generational capital: one's dedication to, and benefits received from, *family* (Yosso, 2005). Students who derived value from their generational capital found empowerment to how their identity related to a greater family community. Yosso describes this as "'the sense of group consciousness and collective identity' that serves as a resource 'aimed at the advancement of an entire group'" (p.81). The ways in which generational capital was held and valued depended largely on the broader social and cultural histories, constructs and dynamics that shaped each student's collective identity and as well as that of the educational institutions they attended. In relation to the experiences of FGCS and non-FGCS, generation capital was presented as having two sides: *ancestral capital* and *pedigree capital,* respectively.

Ancestral capital. FGCS frequently sought an inheritance of strength from the stories and experiences of those who came before them, described by Yosso (2005) as family "long passed on" (p.79). Ancestral capital was demonstrated as FGCS's used the stories of those before them as strength and motivation and, in turn, founding value in dedicating their journey and achievements to others, including generations before and those to follow. This ancestral inheritance provided students a sense of ancestral pride, cultural beliefs (e.g. perseverance, honor, respect), and deeply held values passed from one generation to the next (Yosso, 2005).

Students described how their higher education journey was not for their personal edification alone, it was in service to a larger family community. When discussing their

reasons for going to college, they emphasized the importance of doing so for those who came before (ancestry), those who would come after (posterity) and anyone else "like them" who did not have the opportunity (communities with a shared identity or experience). This ability to earn a college degree on behalf of others was something FGCS honored and highly valued. In a focus group interview for the NCS podcast, a freshman college student elaborated on the power of ancestral capital in providing motivation and finding community:

> One thing that we talked to each other a lot about is ancestral history. Because in my culture my mom, my grandmother, she has like a mini shrine in her house…it's when you pray to the ancestors. And she does that three times a day. And [my mentor] was talking about how her grandmother and her mother, how they always like going to church [to] pray for their ancestors. And how everything she does is motivated by thinking about those that came before her.

This sense of purpose and pride in playing a transformational role for their family and community was frequently shared in the FGCS narratives. They described bringing their parents' joy by getting into college and viewed themselves as role models, setting the example for siblings, cousins, and neighbors, or any person who may align with their identity. Many considered their college attendance as means to "pave the way" for family and community members and viewed this responsibility with honor. In a story shared with the NCS account, a student shared both the weight and motivation of this responsibility:

> I've learned that as a FGCS, it is my job to begin the process of breaking cyclical and systematic oppression. I have earned my place where others who haven't had the same opportunities as me couldn't, and this puts enormous but motivating pressure on me. I do feel like I have to prove myself here, but that pushes me to do better.

In this quote, this student describes how their ability to earn a college degree on behalf of others was a "motivating pressure." Their academic pursuit reached far beyond personal professional goals and served the function of "breaking cyclical and systematic oppression." This weight of responsibility was both a heavy responsibility and a motivating

137

force for action. In an interview for the NCS Instagram account, a current FGCS, whose parents immigrated to the United States to provide her new educational opportunities, stated, "Don't ever take for granted the life you have, because it was built from the blood, sweat, and tears of the ones who love you. You have to work hard, or nothing is going to pay off." In this comment, the student describes the importance of honoring the sacrifices of their parents by attaching her parents' sacrifices to her own responsibility to succeed in college to make the sacrifice and investment "pay off."

The primary barriers to FGCS's form of generational capital came from entering academic and professional environments/spaces that did not value the ancestral capital held by these students. In a story shared from a university blog with the NCS campaign, a faculty member, who herself identified as a first-generation college student, expressed her efforts to help students "understand what it means to be [a FGCS] and the advantages it brings, especially if students may have seen their [FGCS] identities presented as a deficit." In this comment, this professor validates the FGCS forms of capital, such as ancestral capital, while describing the institutionalize oppression experienced when this capital is devalued by the university, its staff and students. This devaluation of FGCS identity and, in turn, their ancestral capital occurred when campus policies and culture only held one from of generational capital (pedigree) as valuable, deficitizing all others in comparison.

Pedigree capital. In the realm of higher education, pedigree capital is overwhelmingly defined by the norms and values of white, upper-middle class men (Hamedani & Markus, 2019). Pedigree capital values those with family backgrounds associated with mainstream, institutionalized positions of power and influence. Pedigree capital benefits those who inherit symbolic capital valued by those at the center. In the context of universities, example

of pedigree capital include: a student or faculty member's connection to certain academic organizations (e.g. university affiliations, field of study, research foundations, legacy children, sororities and fraternities), honors (e.g. degrees held, title earned, field of study, sororities and fraternities, research grants and awards) and professional positions (e.g. professional field, C-suite leadership positions, affiliations with large profile companies, connections with those in political offices). Understanding the degree to which academia and the workforce values pedigree capital, a current FGCS during an NCS Instagram interview expressed pursuing their degree was so important. They stated plainly, "College is a huge deal because college is your social status, college is everything."

Colleges with policies and cultural norms preferencing pedigree capital, created an inherent devaluation of those holding ancestral generational capital. Examples of this devaluation included questioning the expertise of those with FGCS background and automatically assuming someone with pedigree capital holds more authority. FGCS described how peers and faculty holding pedigree capital would often be given precedent over others. In a story shared with the NCS campaign from a student blog, a third-year student described the harm of being in an academic environment that did not value her ancestral capital. She explained:

> I felt that stating my background as [a first-generation college student] would run the risk of having my academic capabilities underestimated. Receiving unnecessary pity or having my status seen as a deficit in spite of my achievements was one of my biggest fears. Due to this, I refrained from stating that neither of my parents attended college. Sometimes, I would even say that my parents went to college to avoid any presumptions that could potentially be made about me.

In this quote, the student describes the deficit perspective the university enforced surrounding her identity and the fact that her parents did not attend college. This inherent favoring of pedigree capital created a dangerous environment for this student, to the point

139

that she felt it necessary to conceal her identity to prevent bias and bigotry from others to affect her academic and professional experience.

Cultural capital. The third subcategory of familial capital that emerged from the NCS narrative was cultural capital. Yosso defined this aspect of familial capital as the "cultural knowledges nurtured among familia (kin) that carry a sense of community history, memory and cultural intuition" and stated that "our kin also model lessons of caring, coping and providing (educación), which inform our emotional, moral, educational and occupational consciousness" (p. 76). While closely tied to generational capital, there are key differences between cultural and generation capital that merit their distinct categories. Generational capital considers how a person's identity and perspectives are connected with their family community, while cultural capital reflects how the norms, values and beliefs of the family community shape a person's behavior.

In the multimodal narrative, FGCS cited how the norms, values and beliefs gleaned from their family cultures were key in shaping their "ways of being" while at college. These ways of being often differed substantially from their non-FGCS peers and the college campus culture at large, a culture shaped by white, male, upper-class norms and values. By presenting their culture capital in contrast to that of their peers and campus, FGCS narratives produced commentary on the dualist nature of cultural capital, that of mainstream capital and countercultural capital.

Mainstream capital. FGCS expressed frustration with the overall ease in which their white, upper-class peers were able to navigate the predominant campus cultures that aligned so closely with white, upper-class norms and values. Mainstream capital was best elicited in FGCS descriptions of first entering higher education spaces. Many students described the

shock and isolation of entering into a "completely different world" at their university. In a story shared with the NCS Instagram account through a student blog, a soon-to-be graduating FGCS described the stark transition of being immersed in the mainstream culture of his college campus. He explains, "The beginning of my first year at [🏫] was a cultural shock. The environment was completely different from home, and I was unsure of how to fit in, so I solely focused on my academics instead." In this quote, the student reflected on how the difference in campus culture as compared to his home affective his feelings of belonging on campus—describing the transition as "a culture shock" and how it affected his ability "to fit in." He also described the emotional toll of "guilt" and "shame" he felt from leaving his home and how this combined with his struggle to find "a place" at college.

Several FGCS described how the cultural shock was far from benign in its impact on their identity and wellbeing. One student described it as "an extreme slap in the face with a hand that's 20 feet large." A primary source of frustration was the lack of awareness, by peers as well as by faculty and administration, for the emotional and cognitive exertion required by FGCS for simply "existing" at the campus. In an interview with a recent FGCS alum for the NCS podcast, the student described trying to explain to his white classmate the constant experience of correcting microaggressions directed toward him by other classmates and professors. He explained:

> I remember an instance…here at [my university] with my cohort. So, I go by [a nickname]. And [my friend was] saying, "Why do you go by [a nickname]?" And I'm like, "Oh, it's because people never pronounce my name right." And [my friend was] like, "How?...everyone knows how to say [your name]." And I'm like, "You'd be surprised." He's like, "We don't believe you."

141

This student's classmate was incredulous of his experiences, both presenting his own

privilege while simultaneously dismissing the lived reality of his friend and peer. He

continued:

> Then lo and behold, the first week of classes we're all sitting in the row, and they're
> doing attendance. They're calling up people and the person goes, "Jose?" and looks
> straight at me and goes, "Oh, that must be you." I said, "No, try the other name."
> And he goes, "[mispronounced name]?" I said, "Close. It's [pronounces name
> correctly]." And he says, "Okay." And then there was another person who we call
> Neto. His name is Jose Ernesto, and we call him Neto—everyone knew him as
> Neto. So, the professor said, "Jose?" And [my friend] was like, "Who's Jose?" But
> then the professor was like, "It must be you, right?" Because he's a student of color.

When recounting the story, this student described the obliviousness of those who

exist in homogenous cultures matching their own by stating, "It was funny afterwards, [my

friend was] like in shock and disbelief. Like, 'Oh, I can't believe that happened!' And I'm

like, 'Yeah, that happens more than you think.'" In this quote, this student reflects on the

cultural obliviousness of his white peers, as demonstrated in his classmate comments, to the

lived realities of students with cultural norms and values different than those shaping the

mainstream culture of faculty, staff and students on campus.

Countercultural capital. Students described how the cultural values, developed from

the examples and teachings of loved ones. Common family values in the narrative were:

strength, resilience, hard work, gratitude, honesty and frugality, to name a few. In an

interview for the NCS account, a current FGCS described the qualities their parents

exhibited that they wished to emulate. She explains, "Because my parents could not go to

college, they have a harder life, and to be able to get me to go to college required a lot of

strength and perseverance." The example of family in shaping FGCS values was reiterated

across the multimodal narrative. In a student interview for the NCS account and an

interview. They stated, "Coming from an immigrant family, I was raised to appreciate all the

142

opportunities my younger sisters and I had growing up." Another FGCS alum explained in an NCS podcast interview, "I grew up in a family that typically didn't believe in like handouts and things like that." The cultural values, taught through example and embedded in familial norms and behaviors, influenced how students approached their college education. As one student stated in their interview for the NCS account, "I want to do well in college mostly for the sake of my family, to make my parents proud." This appreciation of higher education and the desire to succeed demonstrated the student's effort to honor and support family by achieving something their family valued: a college degree.

FGCS believed their cultural capital lead them to approach college differently than their peers. FGCS described approaching the academic and social element of college differently than non-FGCS. While their continuing-generation peers were perceived as attending college to "check a box" and to assert social independence from family, FGCS approached college as a somber responsibility to self and family, emphasizing the importance of sacrificing what they perceived to be less-significant activities in order to reach a more important, long-term goal. For FGCS, the top priorities while attending college included: personal and professional development, academic success, and a clear career path that would lift both themselves and their family. In a story shared for the NCS podcast, a student stated the need to keep "tunnel vision" toward their goals, stating, "I can't afford to make choices that waste my time." Another student stated a similar aloofness to certain social aspects of college that did not align with their goals or cultural values. They explained, "I still don't get the appeal of Greek life. Or going out to parties and drinking" and followed this with the injunction, "That's just not how I was raised." In these quotes, student reflect how the

familial values and norms they held dictated their behavior in the social and academic

decision they made.

Linguistic capital

Yosso defines "Linguistic capital also refers to the ability to communicate via visual

art, music or poetry. Just as students…must often develop and draw on various language

registers, or styles, to communicate with different audiences." While linguistic capital was

reference occasionally by FGCS in the NCS campaign, it is the larger, meta-analysis of the

campaign that more clearly demonstrates the two forms of linguistic capital, redefined here

as communication capital: polyglot capital and linguistic default capital.

Polyglottal capital. Polyglottal capital is derived from the skills and abilities gleaned

from learning multiple languages, dialects or manners of speaking. Yosso defines this as "the

intellectual and social skills attained through communication experiences in more than one

language and/or style." This form of capital aligns with Yosso's original definition of

linguistic capital. While linguistic capital was reference occasionally by FGCS in the NCS

campaign, it was manifest primarily in students' conversations and behaviors throughout the

NCS campaign.

Several students used their polyglottal capital to help ease the often-jarring social

transition into college. In a story shared with the NCS account through a student blog, one

student described this experience for her. She stated:

> Being of a different race than the majority here at this school is very difficult…when
> I went to that first [FGCS meeting], I finally saw people of different colors, people
> who looked like me and who talked Spanish just like I did, and it was really
> comforting to see that there were people like that here.

In this situation, finding a community of people who could relate to her personal

identity, racially and linguistically, was a vital source of support and relief. Students also

144

found a sense of community and belonging from polyglottal capital beyond specific languages and dialects. In an interview for the NCS Instagram account, a student who attend a predominantly white high school explained the sense of belong that came when he first entered his culturally and linguistically diverse college campus. He explained:

> Walking around campus, you will more than likely always hear tons of different languages being spoken. Ranging anywhere from Spanish, French, Mandarin, Korean, you name it! Being half Moroccan, it's nice to be able to learn Arabic with fluent Arabic speakers and professors. It was quite frankly the first time for me getting to interact with 'my people' so to say.

In his comment, this student describes how language and his to engage with people who spoke other languages, especially languages affiliated with his identity, a means for finding community.

Finally, the NCS campaign itself was a meta demonstration of students' ability to leverage various forms and modalities of communication in order to reach different audiences. Yosso explains, "Linguistic capital also refers to the ability to communicate via visual art, music or poetry… [Students] must often develop and draw on various language registers, or styles, to communicate with different audiences." The students running the NCS campaign utilized a spectrum of communication platforms (social media, video conferencing, text messaging, email, collaborative digital documents, face-to-face meetings) and forms (e.g. written, visual, audio, in-person) to interact and communication with an oft-siloed array of stakeholders (i.e. students, community members, faculty, staff, alumni, administration).

Hegemonic linguistic capital. Default linguistic capital is held by those whose primary language is the established norm and standard in society. This form of linguistic capital fortifies a streamlined ease of communication, requiring accommodation by others to

adapt to mainstream communication preferences and styles. Those with default linguistic capital are not required to invest the same cognitive exertion into novel language development and multilingual transitioning; however, this ease due to preferential communication also perpetuates a void in skillsets, such as cross-cultural communication and connection, as those holding polyglottal capital.

The counterpart of polyglottal capital was best seen in students' reflections on the absence of representation of their linguistic capital in traditional spaces of power and influence. In a story shared with the NCS Instagram campaign through a university blog, a current FGCS explained how linguistic default capital drove her desire to pursue a degree. She explained:

> I am studying because I want to see more diversity in the health field and more bilingual access for patients that are non-native English speakers. So, when you ask me "Why are you first?" it is because of encouragement, support, resources and because I feel I have something to contribute that is worth having a college education.

By stating her goal to bring "more diversity" and "bilingual access for patients" into the medical field, this FGCS highlights the glaring vacancy of polyglottal capital in these professional and academic spaces. These linguistic vacancies were often missed or ignored by those in positions of power who hold default linguistic capital.

Furthermore, just as the NCS campaign presented a meta-analysis of polyglottal capital, it also demonstrated the linguistic default capital. For example, as a researcher whose primary language is the default language, I was able to use English as the universal means for communicating and building this campaign. Often times code-switching when speaking to me during interviews and focus groups. Repeatedly considered ways to build out the podcast in the preferred languages of the student's interview and their families/communities.

146

The very fact that campaign was conducted, built and presented in English (the students were interviewed in English and provided their stories in English)—primarily using what several students referred to as their "white" accent—is an example of these two sides of linguistic capital.

Aspirational capital

Yosso (2005) described aspirational capital as "the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers" (p. 78). In the multimodal narrative, aspiration capital was oriented around the purpose and direction of FGCS achievements. For FGCS aspiration capital was focused entirely on transcending, while non-FGCS were described as having aspirational capital tailored toward expanding.

Transcending capital. When describing how and why they were able to maintain "hopes and dreams for the future," students expressed the transcending nature of their goals (Yosso, 2005, p.78). This transcending purpose of students' aspirations were described using phrases such "lifting," "rising above" and "moving up". This upward trajectory created a singular focus on college to support these aspirations. This was expressed well by a FGCS interview for the NCS Instagram campaign. He explained, "College wasn't presented to me as a choice, it was presented to me more like you need to do this if you want to move up, because you need to work twice as hard to match up to the person next to you." In their comment, this student described a singular focus by dedicating every resource and "work[ing] twice as hard" toward achieving college success. This reference to working "twice as hard" also alludes to the structural inequities and cultural biases faced by FGCS.

Students' aspirational capital was closely connected to their generational and interdependent familial capital. In an excerpt from an interview for the NCS Instagram

147

account, a current FGCS described how their identity as the child of parents who immigrated to the United States placed heavy emphasis on the importance of higher education. She said:

> College has been everything. There is no living without college, at least in the immigrant view that I run with, like everything that my parents ever did for me was for college, and it is still for college. Like if you don't go to college, you're not going to go anywhere is kind of what I grew up with.

By stating "there is no living without college," this student demonstrates how higher education is valued as an utmost priority for herself and her family. In stating "if you don't go to college, you're not going to go anywhere," she uses the aspiration for economic mobility as a driving force to attain a college degree. She also describes how her aspirations were not only for her, but for her parents who sacrificed for her to attend college.

In an interview for the NCS Instagram account, a current FGCS described the role family played in motivating her. She explains, "Knowing that I have an opportunity, one of which was not available to my parents, to better my life serves as a driving force to my success." This role of family was reinforced in another FGCS interview for the NCS Instagram account, when they described their parent's decision to immigrate to the United State, "I came to understand, Oh, [my parents] came here for [me] to go to school. So, college is a huge deal…college is everything."

Family connections to FGCS aspirational capital could also be seen in their larger ambitions to not only lift themselves and their family, but to transform an entire community trajectory going forward. In this excerpt from an interview for the NCS Instagram account, this student describes how their identity as the child of parents who immigrated to the United States placed heavy emphasis on the importance of higher education. She said:

148

This goal of theirs was formulated from the missed opportunities that both of them experienced as a result of not attending college. My mother and father both understood that college attendance was not only a phase of life, but a pathway to becoming a well-rounded and educated individual who could contribute to society in a positive way, to make a better life for themselves, and ultimately break the family system that has been present for all generations prior.

This student describes how the "goal" to attend college was guided by her parents' aspirations for her as well as themselves due to the "missed opportunities" they experienced. In her quote, the importance that college held for her family extended beyond herself and her parents and became an aspiration to "ultimately break the family system that has been present for all generations prior." The hope of transcending was summarized in another undergraduate FGCS story shared with the NCS Instagram account through a student blog. He stated, "The goal of being a first-generation student is to be the last one in your family."

Expanding capital. In contrast to transcending aspirational capital, FGCS described how their non-FGCS peers were able to use the time, energy, and resources FGCS dedicated to transcending to expand the opportunities already available to them. Many students in the multimodal narrative described how the weight of responsibility, and the fear of letting family down, made it difficult to pursue goals or interests outside the singular focus of transcending current circumstances. One student explained, "Everything I do is for this bigger higher institution." In a conversation recorded in my research journal, a student described the opportunities provided to peers with more privileged background. "Can you imagine what I could do if I had the financial safety net they have?" He continued, "They can afford to take risks, explore new spaces, because the consequences are softened for them. All my decisions must be focused on helping me and my family move up. Even if I wanted to, I can't branch out like them, because the stakes are so much higher for me if I

fail." At the close of the conversation he stated, "So, basically I have to hedge my bets toward the things that are most likely to support me and my family."

Students described how the weight of institutionalized barriers on their aspiration capital and personal well-being. During a podcast interview for the NCS campaign, a recent FGCS alum explained, "I think a lot of first-generation students will feel that sentiment of having a lot of burden on their shoulders… And you feel like you can't let anyone down." She then described the affect these aspirations had when she working to rise up through an education system designed against her success. She stated:

> I was taking out a lot of loans, and I was financially independent because my parents couldn't help me out. Another aspect of that would be classes get harder, and I really wanted to graduate with honors. I wanted to be that Latina who was really coming on top of everything. And because of that, I would say, my second semester senior year I was so burned out. I just wanted to…I wanted to please everyone. And it wasn't necessarily for the wrong reasons. I wanted the programs to advance. I wanted there to be kind of a legacy that was left behind. And I think at the end of it, I just burned myself out.

This side to aspirational capital was often seen in student's reflection on the difficulty of needing to resist. In this comment, this student describes their struggle to break beyond the structural and financial "tunnel vision" of their aspirations. This difficulty in breaking into new paths was also described on a more psychological level by a FGCS whose story was shared with the NCS Instagram account. In sharing advice for new first-generation students, he said, "Be open! In my opinion, it's the hardest thing to do for a first-generation college student because of the path we were set to follow."

Navigational capital

Yosso (2005) described navigational capital as the "skills of maneuvering through social institutions" especially when those institutions were "not created with Communities of Color in mind" (p.80). In the multimodal narrative, navigational capital was often discussed

150

by FGCS through a design lens. Students used terms such as being "tailored" to describe their non-FGCS peer's preparation for college. Furthermore, concepts such as "institutional design", "structural barriers", "embedded benefits" were used to describe the differing navigational experiences of FGCS and non-FGCS at college.

Blueprint capital. The complement to navigational capital was often seen in student's reflection on the difficulty of needing to resist. When discussing the navigation capital of their peers, student stories would often describe resources their non-FGCS peers held which were not available to them as FGCS. These resources were described as "the unwritten rules of college" which served as a procedural blueprint available to students whose parents and community network understood the working of higher education through personal experience. In an interview for the NCS campaign, a student described this sentiment succinctly by stating, "It is not easy to choose to go to college when nobody in your family knows how any of it works." In his comment, this student describes the difficulty in pursuing an academic experience foreign to everyone within their personal family network. The benefits of knowing "the lay of the land," was also discussed in an interview with a recent FGCS alum for the NCS podcast. He explained:

> As a [FGCS] you face a particular set of challenges that are not really appreciated by people that have been tailored to go to university, people that have been raised with "You're going to go to college" and then "You're going to go to this and do that".

In using the phrase "tailored to go to university," this student alludes to the *design* of higher education's structural, cultural and procedural processes and how non-FGCS have been shaped to fit this design. Several processes students described difficulty navigating included signing up for class, declaring a major, registering for financial aid (e.g. FAFSA, scholarships, grants), securing internships or fellowships, and determining graduation

151

requirements. Furthermore, the time investment required to learn and subsequently carry out these processes presented a substantial investment. This was best described in a story shared with the NCS campaign through a student blog. This student explains:

> Although I was able to get into college successfully, the whole process was new territory for my parents. Since I was the eldest child of my family, I was the trailblazer for most of the college application journey. The number of nights staring at a computer screen just trying to decipher what to put into the FAFSA alone were countless.

In this quote, student describes how their experience as a "trailblazer" included the added investment required to learn unfamiliar systems, processes, and environments. However, while this navigation capital initially appeared to be a benefit held by non-FGCS, other aspects of navigational capital emerged from the FGCS narratives which described navigational skill uniquely by many FGCS.

Maneuvering capital. Students capital came out as the ability to skillfully maneuver around and through professional and academic spaces not designed to support FGCS – a concept of navigation capital aligned with Yosso's original definition. This maneuvering capital provided FGCS the ability to adeptly navigate institutional and cultural barriers which could potentially impede their university success. Just as their non-FGCS peers received their blueprint capital from family connection, FGCS also described the role family and community played in supplying their maneuvering capital. A student who was interviewed for the NCS account described how her father taught her to utilize every available resource to develop the skills necessary for college:

> This is why every tutoring session, exam, or science fair was made an absolute priority. He understood that each of these aspects, no matter how small, would contribute to my ability to get in and attend college.

In her comment, this student describes how her father identified key, cost-effective ways to prepare his daughter with the skills necessary to secure a college degree. Given the financial cost of college prep resources, this ability to identify and utilize accessible resources (e.g. free tutoring, science fairs) created an effective way to maneuver around the preparatory barriers which may have prevented her from attending college.

Students also described the self-efficacy they developed in order to navigate barriers to their higher educational goals. In a story shared with the NCS Instagram account through a student blog, a student explained how they built a network of support to guide them through the structures of higher education. They explain:

> Because I am [FGCS], it is my identity that has taught me to learn so many things from not only my parents but so many others in my community that will continue to grow.

In this comment, the student describes reaching out to their personal network, parents and beyond, to develop and grow. Of note, this student directly ties their identity as the reason for why they developed the skill of learn new things from other around them. This efficacious leveraging of one's network to access navigational capital was reinforced in a story shared with the NCS campaign through a student blog. A current FGCS student described her how her ability to persistently seek resources was the key reason why she was able to attend college. She stated:

> Resources are everywhere, one just has to be persistent about finding them…I am not here because I am the smartest or have the money. I am here because I found scholarships, family motivation, and support.

Another student expressed a similar aspect of networking initiative to her navigational capital. In an interview for the NCS Instagram account, this current FGCS described the value in finding a network of support to help navigate higher education. She

commented, "(Don't) hesitate to reach out. Get rid of the notion that you have to do things on your own…You'll be surprised at how willing people are to help and support."

Students also described their ability to navigating cultural biases and the value of mentors in this role. One student described his social maneuvering capital as his ability to keep "calm, cool, and collected" when dealing with difficulties, obstacles or oppression—a demeanor learned from personal experience and the examples of friends and family. In an interview for the NCS Instagram account, a student who attend high school and college campuses which were predominantly white explained:

> Although the majority of my class are white, being around mostly white people is something that I'm not unfamiliar with.

In her comment, she explains how her previous experiences navigating the predominantly white space of high school facilitated the transition into the predominantly white institution of college. This learned ability to navigate white spaces was attributed to personal experience and the guidance of mentors. In a focus group interview for the NCS podcast, a student expressed her relief in having a college mentor who also identified as a racial minority. She explained, "I feel I'm very lucky in the way that my RA [mentor] is a woman of color and she could direct me." In her comment, this student describes the value of FGCS mentors with shared identities and experiences with the students. It is important to note in this situation, while the student and the mentor were both women of color, they were not of the same race or ethnicity. Their ability to build a close relationship of trust stemmed from a shared experience and not necessarily aligned identities.

Resistant capital

The multimodal narrative did not produce two dualistic elements under the category of resistant capital. Instead, FGCS described their personal resistant capital and then

154

discussed the what their non-FGCS peers both lacked and gained from not having this form

of capital. With this understanding, findings presented a counterpart to FGCS resistant

capital, instead of two subcategories. In this section, I will discuss how students described

resistant capital in the multimodal narrative and then conclude the section by outlining the

counterpart to resistant capital: streamlined capital.

Yosso (2005) defined resistant capital as the "knowledges and skills fostered through

oppositional behavior that challenges inequality" (p. 81). Resistant and streamlined,

directional capital. Students described the qualities of resistance which they developed and

inherited from their families. In a story—shared with the NCS Instagram account through a

university affinity group account—a current FGCS student reflected on how their family

instilled the qualities she needed to resist the oppressive experiences in higher education. She

explained:

> Being an FGEN is not a deficit, it actually is strength and persistence. Because my
> parents could not go to college, they have a harder life, and to be able to get me to
> go to college required a lot of strength and perseverance.

This capacity to identify and leverage the assets held within their identities is essential

for student resistance, especially considering the degree to which first-generation college

students' identities have been framed as a source of deficiency within the institutions of

higher education. As one student shared during a NCS podcast interview, "I love just

proving people wrong."

Students demonstrated their resistant capital when they described their desires to

create institutional change. Yosso described this as "transformative resistant capital" and

discussed how students use the "cultural knowledge of the structures of racism" as

"motivation to transform such oppressive structures" (81). In a focus group interview for

155

the NCS podcast, a student described how the cultural knowledge of institutional oppression motivated her. She explained, "We like really analyzed it in terms of like, what structural things [are creating these] barriers, but also like from an empowerment perspective." Later in the focus group interview, another a current FGCS described their desire to create systemic change. He stated:

> If someone else has started the revolution, yeah, go follow them. Fight for what you believe in. But if no one else has, don't be afraid to be the one to go kick down someone's door and start a fire.

In this quote, the student references one of the university mantras of "setting the world on fire" to reposition his university education as the very force he would use to change the campus itself. by embracing the concept of trailblazing and forging new paths for others. This need for additional exertion was described as both a weight and source of personal strength. In an interview with a recent FGCS alum for the NCS podcast

Streamlined capital. The counterpart to resistant capital, streamlined capital, was often seen in student's reflection on the difficulty of needing to resist. Students expressed the need to work twice as hard as their non-FGCS peers, who were often described as having their path through college eased for them. In the multimodal narrative, resistant capital and streamline capital were closely associated with student identity—the most prevalent of which were race, gender and class.

When considering the following student comments, as well as those from other discussions in this chapter, it is important to consider the underlying role that oppressive institutionalized barriers play in depleting student's personal sources of capital and, in turn, generating college burnout. In their discussion, FGCS often assigned streamlined capital to their white peers. This was evidenced in a focus group interview for the NCS podcast. In the

conversation a second-year undergraduate student described how racial identity affected the degree of friction students experience in higher education. He stated:

> Being a student of color, it's like you're in a race and your white counterparts have like a 50-mile head start before you. And you have to keep doing the race while also work on catching up in that race. And if [the university is] not providing the resources for you help you catch up, in a way like they're just like feeding into the system.

In support of this student's comment describing how race influenced streamlined capital, another student in the interview described how economic class factor into the equation. She described needing to "work twice as hard" to the earn the funding necessary to pay for her college education and concluded by stating, "But there are students here who don't have to worry about those things, who don't have to get second jobs, or even first jobs." Similar to aspirational capital, FGCS expressed the toll of constantly pushing against the oppressive structures and cultures on campus. This frictional cost was expressed well in an NCS podcast interview with a recent FGCS alum. She explained:

> My identities, for lack of a better term, I would say they kind of racked up towards senior year. And to me, I felt and it's very similar, I hope that someone out there is listening to this, to say, as a first-generation student, you feel like you have to put the world on your shoulders….And I think that all of that motivation, and all that energy, and I was like, Oh, my God, like I'm going to be a part of such a great thing, such a large movement that, you know, that Latinas or Latinx people are trying to do in the sciences. But at the same time, because of that, I didn't take care of my mental health.

The exertion required by FGCS to resist took its toll on students' physical and psychological wellbeing as they entered academic institutions rife with oppressive barriers. Students frequently described the "burnout" they experienced in their efforts to trailblaze for themselves and their family. This was illustrated in a student interview for the NCS account. In the interview the student was asked what advice they would give their younger selves before going to college. In her response she said:

157

I think that my high school, about-to-go-to-college self was more bold. More out there, more passionate, more energetic to create many changes. I think I was much more unapologetic coming into college about who I was and the identities I hold. Ready to kick down doors. I think I am about the same now, but a little less. I'm more tired.

In this quote, this student expresses her desire and ambition to create change, and how that desire remained even when her energy and resources are drawn thin. She continued:

By tired, I mean doing so much, trying to put so much on my plate. Burnout is very real. Take the school of ed for example, I was like, "This is who I am; this is what I believe in." I would be that person to disagree and sometimes call people out…, [but] because I'm so bogged down—there's so much work now—it's hard to remember the vison and remember the end goal. Like, why am I doing this?

In these examples, it is clear that resistance to hegemonic structures within higher education came at a cost to FGCS. These examples also demonstrated the fluidity and ease with which non-FGCS exist in these same education settings, often times unbeknownst to the frictional oppression affecting their FGCS peers.

Additional Forms of Capital

Students described other forms of capital within their community cultural wealth not directly reference by Yosso. These references to capital were clustered into three groups: economic capital, positional capital and perspective capital.

Economic capital

In the fields of finance and economics, the term economic capital is used to describe the resources used to ensure solvency or the capital necessary to survive any risks that may be taken. In the NCS multimodal narrative FGCS students described economic capital in two forms emerged, the more-readily apparent form being financial capital. The other form of capital which emerged was innovation capital.

Financial capital. Finances were a reoccurring theme discussed by FGCS across the

multimodal narrative, though it almost entirely focused on FGCS needs for more financial

capital. Students repeatedly described the struggles they experienced from not having the

financial means to support themselves, their family, and their education. In an interview for

the NCS podcast, a recently graduate FGCS alum explained:

> I did get a scholarship through [my college], but it wasn't sufficient. So [my parents]
> told me that they would help me out. But the first year we started to notice that, as
> someone of low socioeconomic status, this was actually a huge toll on my family…it
> was very nerve racking. I think that my identity of being of low socio-economic
> status was very prominent my first year.

For many first-generation students, parents' financial concerns added stress to the

college experience. In an interview for the NCS Instagram account, a second-year

undergraduate described the strain of having limited finances. He explained:

> Being raised by a single mother my whole life, it is strictly staying in college. My
> mom will sit down and talk to me about how much I spend on food and
> stuff…Finances are changing, and things are changing, and I have to make sure I can
> pay still. I find myself with two and a half, almost three jobs to make sure I can
> continue to stay, have some money for myself, and help my mom out with payments.
> I haven't suffered through the worst. I can say, though, I wish circumstances could
> be more comfortable.

Finances affected which college a student attended. When asked how they selected

their undergraduate university, an undergraduate student interview in a NCS podcast said,

"It was mostly because I could afford it…the entire time I was there I lived at home just to

offset costs." Finances also impacted students' engagement with the campus culture and

social experience. In a story shared with the NCS Instagram account through a student blog,

a second year FGCS described the stark contrast between growing in a small working-class

community, only to enter the comparative opulence of college life. She remarked, "[My

family] always did without the 'finer things' — no extravagant traveling, only secondhand or

clearance section clothing. I never even owned a Hydroflask (gasp)…because let's be honest, who pays $40 for a water bottle? Not my family."

It was, in fact, the heavy focus on economic capital that lead Yosso to develop the framework of community cultural wealth. However, to ignore the substantial role finances play in the student experience is to ignore not only the accountability of holding financial capital but to also dismiss the economic capital held by FGCS. This form as capital was identified as innovation capital.

Innovation capital. Innovation capital encompasses the creativity, insight, scrappiness, and self-efficacy to make ends meet. This form of capital leans into the definition of economic capital as the means "necessary to survive any risks taken" (Yosso, 76). In essence, it is the ability to find ways of making a square peg fit in a round hole. In a story shared with the NCS Instagram account through a student blog, a second-year FGCS described how limited resource taught him take risks and learn new skills. He stated:

> Because I could not ask my parents how to submit financial letters for college, I learned to reach out to other people, which help[ed] to boost my confidence. Because I could not learn from my parents' experience, I learned to take risks going into the unknown. Because I am [FGCS], it is my identity that has taught me to learn so many things from not only my parents but so many others in my community that will continue to grow.

FGCS demonstrated innovation capital through their novel approaches to accomplish tasks typically addressed through finances. Examples included creating strategic travel routes (e.g. create use of public transit, informal ridesharing, slug line commuting), aligning course schedules with caregiving responsibilities, staggering semester loads with friends in order to save on the cost of books and materials, and trading off work and schooling with siblings and parents in order to afford the costs of college. Through innovation capital, FGCS developed the skill to utilize available resources to overcome

160

barriers. In an interview for the NCS podcast, a recently FGCS alum described his

satisfaction in outperforming his peers in college who had substantially more financial

resources than him. He described how his ability to take whatever he was provided and

ultimately reach success was the reason he made it into his current doctoral program. He

stated:

> It doesn't matter what your background is or how many resources you've had put
> towards education; the book is there, and the writing is on the books. As long as you
> open them and study, like yeah, you're fine. That was one of my favorite things to do
> is try to just like outdo people that were complaining, the people that had the
> resources but never really used them.

Positional capital

Positionality within the institution dramatically influenced how FGCS as well as

faculty navigated themselves and used their personal capital. Students described the

hierarchical structures within their college and the effect those structures had on campus

culture, safety, and engagement. This positional hierarchy, referred here as apex capital,

provides those at the top, or center, of an organization the resources and network to directly

influence campus policy, culture, and programs. This could include campus admissions and

hiring, course curriculum and instruction policies, disciplinary counsels, student support

services.

Apex capital. In a focus group interview for the NCS podcast, students described

the frustration in dealing with faculty holding apex positional capital:

Interviewer: Of the micro aggressions and structural issues you deal with, how much
of it do you attribute to intentional bigotry as opposed to complete
obliviousness due to privilege? Or, on a more practical level: do you feel
if faculty were better informed it would lead to meaningful change?

Student A: I think certain faculty—honestly the younger faculty—would be open.
But there's a lot of older faculty who are already on tenure, and they
don't give a damn about what comes out their mouths. As much as you

tell them to, they're not going to budge. Because they've been here for fifty years and they're going to be here for another like thirty, until they croak out.

Student B: And they are the *experts*. They know everything.

Student A: Yeah, experts. They know it all. They've *been* there.

Student C: How could *we* possibly have any information to teach them?

This conversation presents an example of how faculty holding apex capital (tenure) were able to use their positionality to impede progress.

Edge capital. While many stories related to positional capital focused on those holding apex positional capital, the complementary form of this capital, edge capital, was manifest throughout the NCS campaign. Edge capital leverages the fluidity of one's fringed position within a group or organization to broker bridging connections and dismiss restrictions of institutional power imbalances. Those holding edge capital utilize their marginalized position to circumnavigate systemic barriers. Edge capital allows people to more easily subvert rigid structures (ex.) and broker connections across silos.

The NCS campaign in and of itself was a manifestation of edge capital. Since it had no direct affiliation with a university, college campus, or institutionalized organization, the campaign could function autonomously, without restrictions placed on it by a department of university. Students felt comfortable speaking freely, making statements not as easily made by those holding positional capital. The NCS campaign's edge capital also allowed it to embrace voices from multiple perspectives and places since it was not restricted to a single institution or program purpose. Being affiliated with a university removes anonymity, which was a common concern from student and faculty being interviewed. As such several interviewees requested anonymity in sharing their stories. However, many student

interviewees felt empowered in their ability to speak openly about their identity and stories. Fears of jeopardizing status with an institution.

Perspective capital

Perspective capital is closely connected with positional capital. However, while perspective capital is derived from ones' *vantage point* due to their placement within an organization, positional capital is derived from the *power* assigned to someone based on their placement within an organization.

Focal capital. Focal capital is defined by the vantage point provided to those who are considered "insiders." These individuals hold centralized positions and perspectives and, as such, their focal perspective capital is closely linked with apex positional capital. This interplay between apex capital and focal capital permits those in positions of power to reinforce centralized viewpoints and perspectives as the gold standard, placing anything different or contrary as less-than. This cyclical power-perspective reinforcement dynamic serves to (1) diminish the authority and credibility of outside perspectives and (2) withhold positions of power from those who hold marginalized experiences, as a hope to prevent change to the established power dynamic.

It is focal capital—asserted through the claimed authority of those with apex positional capital—which intentionally, as well as inadvertently, shapes those holding different experiences and viewpoints than the center, such as FGCS, as being deficient. Deficit-based narratives about FGCS are ubiquitous in higher education, a topic that arose frequently in the NCS narrative. Students described this deficit language as being led and perpetuated largely by faculty and administration. The deficit narrative of FGCS was so pervasive it was, at time, expressed in FGCS's language about themselves. For example, in

163

several NCS interviews, interviewees described FGCS as "students with disadvantages" or "people who weren't designed to go to college." In a story shared with the NCS Instagram account through a student blog, a current FGCS explained how being surrounded by these deficit perspectives shaped how he viewed his own identity, stating, "I believed so wholeheartedly that being a first-generation college student was a negative quality."

Peripheral capital. Peripheral capital embraces the notion that the vantage point from those on the margins provides a unique and valuable perspective with which to understand society. In many ways, peripheral capital embraces frameworks from feminist standpoint theory which assert that (1) knowledge is socially situated, (2) marginalized groups are specifically situated in ways which allow for a more objective awareness of society, and (3) organizations and communities which need to address power relations should begin with the lives of the marginalized (Bowell, 2011). With regards to FGCS, peripheral capital is derived from the perspective and vantage point held from being pushed to the edge of an organization; it frames the position of being "the outsider within" as an asset allowing people on the edges to see what those at the center cannot.

In the NCS multimodal narrative FGCS asserted their peripheral capital when they counter deficit narratives about their identity. This was evidenced in a story shared with the NCS Instagram account through a student blog by a current FGCS; she stated, "Being [a FGCS] is not a deficit, it actually is strength and persistence." In an interview for the NCS campaign, an second year undergraduate student stated how the assets she holds as a FGCS allow her "to offer a different perspective on the college process and be a voice for those who come from the same background" to which she concluded, "[It] makes this part of who I am just that much more valuable."

This ability to flip deficit-based perspective to asset-based was a key focus for faculty members who shared their stories with the NCS campaign. As expressed from a professor in the NCS Instagram account, professors and administrators who were FGCS themselves, felt a responsibility to help students and colleges "understand what it means to be [FGCS] and the advantages it brings, especially if students may have seen their [FGCS] identities presented as a deficit." Another FGCS professor expressed that one of the most valuable aspects of being a first-generation college student are the different perspectives and ways of understanding they bring to higher education. They explained:

> First-gens come to the conversation and to the community with new and refreshing perspectives. They learn from others too, and others also learn from them. See yourself as coming with a different perspective, different gifts, different talents that will be relevant and useful to the university.

In their comment, this professor describes the value that FGCS peripheral capital holds not only for students themselves, but for universities and colleges. The "new and refreshing perspectives" hold provide "relevant and useful" insights that could help effectively redesign structures, policies and cultures of higher education. For FGCS students and faculty alike, the key to inviting FGCS perspectives into positions of influence was to honor the authority of those holding these perspectives and cede power to allow space for their leadership. The importance of universities being guided by the voices FGCS was described well in a final comment shared in the professor's interview from earlier. They stated, "How do we grow in wisdom? By the questions that we ask." And for this professor, FGCS were asking all the right questions.

Summary of Research Question 3 Findings.

Research question 3 considered the types of capital discussed by FGCS within the NCS multimodal narrative. The discussion began with student descriptions of capital which

aligned with Yosso's framework of community cultural wealth (CCW). Within this discussion, Yosso's construct of familial capital was unbundled into three subconstructs (network capital, generational capital, and cultural capital) and each subconstruct, along with other forms of CCW capital (navigational, aspirational, resistant, and linguistic) were. Each of these capital constructs were described by students in nuanced, sometime contradictory, ways. The discussion around FGCS narrative around capital continued as three additional forms of capital outside those defined in CCW were identified, namely economic capital, positional capital, and perspective capital. Students also described these three additional forms of capital in nuanced, often contradictory, ways. Indeed, each form of capital presented unique benefits as well as barriers depending on how one was positioned, or perceived to be positioned, within an organization or community. Thus, findings from the research question present opportunities to expand Yosso's (2005) already powerful framework of community cultural wealth and allow possibility for a more nuanced understanding of an individual's or organization's community cultural wealth along the axis of intersectionality.

Research Question 4 Findings

This final section presents findings for Research Question 4: How did students perceive the value of networked counterstorytelling? To examine Research Question 4, at the conclusion of each interview for the NCS campaign, students were asked what value, if any, they saw in a social media storytelling campaign lead by FGCS. Findings from these interview questions, in conjunction with findings from the multimodal narrative analysis, will be review in this discussion. First, I will discuss the benefits FGCS perceived with networked counterstorytelling. Then, I will describe the barriers and drawback student saw in

166

networked counterstorytelling. Finally, I will review FGCS perspectives specifically regarding

the NCS campaign intervention launched for this research study. Students expressed the

importance of both networks and stories in supporting the FGCS needs and discussed the

power and potential of combining these two elements within digital spaces.

The Benefits of Networked Counterstorytelling

Student discussed the benefits networked counterstorytelling presented for

themselves, their peers, and higher education campuses at large. This included the ability of

NCS to (1) create space for student voice and counterstorytelling, (2) foster connection

between diverse groups of people, and (3) build new networks and communities.

A Space to House and Transfer Stories

As discussed in Research Question 2, FGCS treated storytelling as a vital network

resource and found resonance and encouragement embedded in the stories shared by FGCS.

In an interview for the NCS campaign, a current FGCS described how stories served as a

resource for personal reflection and community connection. They explained:

> I really think [stories are] a valuable asset just to relate to one another in regard to
> our own experiences. And also encouraging those who are maybe coming into
> college, or are still kind of exploring their identities, to maybe just be more in touch
> with themselves and try to have an open mind and grow as people. I think things like
> this definitely have had an influence on me, so I think it could really help others too.

By describing stories as an "asset," this student frames storytelling as a form of

capital. As such stories could be used "to related to one another," thus building community

connections through shared experiences. Stories were also described by this student as a

resource for self-reflection and growth as people could use them to "explor[e] their

identities," "be more in touch with themselves" and "grow as people." For many students,

this self-reflection led them to consider the value in their own stories. As such, stories served as critical resource for spreading beneficial information for FGCS growth and success.

Students expressed how stories provided practical information regarding the first-generation students' experiences. This information included learning "requirements of being admitted to a specific college or university," finding and securing financial support, and understanding "the social aspects that play into college life." They also explained how stories provided information that allowed listeners to learn about new identities, perspectives and experiences. When asked about the value of NCS during an interview, a current FGCS explained:

> I think it can definitely be helpful and can have a lot of positive impact on both [the campus] and the students whose stories are being shared. Because it gives...everyone who's interested a chance to learn more about someone.

Students described how stories from other FGCS helped increased FGCS awareness through information they held. As such, networked counterstorytelling used stories as vessels for holding and relaying information. In its ability to hold and transfer capital, stories functioned as a vessel for capital as well as a form of capital itself. In essence, stories served as a cognitive form of capital used to transfer and accrue network resources, such as those within community cultural wealth, within a network counterstorytelling movement.

A Means to Foster Homophily.

These stories, and the information and network they provided, were a key source of validation for FGCS experiences in college. In an interview for the NCS Instagram account, a third-year college student spoke to the value of hearing first-hand stories about the structural and institutional barriers FGCS faced. She explained how this validation of the FGCS experience "relieved so much stress from me, because then I had something other

than myself to blame [these difficulties] on." Another student described how validating

stories helped relieve her feelings of isolation, stating "It's nice knowing I am not alone in

my struggles."

Storytelling played a crucial role in fostering homophily between individuals and

communities. In an interview with a recent FGCS alum for the NCS podcast, a student

stated:

> I think that the art of storytelling—to be able to say, you know, "This happened to
> me. You may be experiencing something different, but here are my two cents." I
> think that those are very valuable experiences.

In her quote, this student describes storytelling as an artform and a "valuable

experience." By framing story sharing as a "valuable experience," storytelling shifted beyond

simply knowledge transferal to a lived experience. The experiential aspect provides a sense of

ownership in the storytelling process both the listener and the storyteller—creating a novel

third space for connection. In a focus group interview with current FGCS engaged with the

NCS campaign, a student shared her thoughts on these storytelling experiences when she

said, "I think that's why it's so cool. With social media campaigns we get to give space for

people to be more understanding [of] other identities and also to feel understood." One key

element in her quote is the idea that social media functions as not only a source for

information-sharing, but a "space for people." The other element inferred from her quote

was social media's ability to foster homophily through storytelling; to create opportunities

individuals and groups to "be more understanding" and "to feel understood." These

empathetic third spaces provided opportunities to generate new layers of homophily

allowing the ability to build connection across difference, as explained by a current FGCS

interviewed for the NCS Instagram account:

I think sharing these unique stories with prospective college students or even just people who are of the same demographic would not only educate but inspire. Inspire in the sense that everyone would feel their story could contribute to a much bigger picture and in turn help them feel their place within the mixed demographics of their school. It most definitely matters.

A Process for Building Novel Networks and Communities

NCS was seen as a networking resource to connect to new communities, perspectives and spaces. The ability to step outside one's current situation and circumstances, to see and hear new stories and ways of being, was critical in bolstering FGCS strength and courage. In an interview for the NCS podcast, as recent FGCS alum shared how this affected her. She explained, "I used to be…afraid, because I wasn't able to, you know, share my favorite kind of songs or share the culture that I have at [my university.]" She continued, "I had to leave [my university] a little bit—to experience people's stories and their storytelling—for me to be able to have the strength and the foundation to say, 'Hey, this is my story.'" Students described the value of stories in building a community within new spaces. In a narrative shared with the NCS campaign through a student blog, a third-year undergraduate FGCS discussed how sharing stories with other FGCS she had never met allowed them to create a new community of support. She explained, "We hear stories from each other, which are both touching and inspiring. We share each other's struggles by holding each other's hand and walk through the challenges together."

Digital stories allowed FGCS to connect—irrespective of geography, time, or institutionalized boundaries—and form networks within and across social media platforms, thus transforming traditional counterstorytelling to networked counterstorytelling, where NCS functioned as not only a resource but a space for gathering. Students valued the ability

to enter into new spaces. However, this ability was often limited due to siloes of inaccessibility, geography and ideology. For this reason, FGCS discuss the potential of NCS to make inaccessible networks accessible. This sentiment was shared by a recent FGCS alum for the NCS podcast. She explained:

> I would say that everything is very valuable, as long as it is accessible, right. And that's something that we always run into, right is, you could always have resources that are available, which could be the solution to a lot of people's stress and anxiety, [but it's only useful] as long as it's accessible.

Time constraints, financial limitations, caregiving responsibilities, geographic limitations, and caregiving constraints were several factors preventing FGCS from connecting with these spaces and the resources they held. This was a key benefit FGCS saw in the NCS campaign; it utilized social media to create a third space that acted as middle ground for FGCS to connect with spaces and communities previously inaccessible. As shared by a student in an interview for the NCS Instagram account, "Social media is such a great platform, because social media is accessible."

Students valued the ability to create connections across identities (e.g. race, gender, class) and cited NCS as a means for accomplishing this. In addition to its ability to bridge structural barriers, NCS was viewed as a way to potentially bridge demographic differences. In an interview for the NCS Instagram campaign, a current FGCS explained their perception of networked counterstorytelling for FGCS by stating, "I think such a campaign would be very valuable because social media gives one the ability to reach people across many demographics."

Furthermore, FGCS saw NCS as a tool to break down ideological siloes and harmful power imbalances. For example, many students who were interview stressed the importance of closing gaps between students and campus faculty; gaps they considered to reinforce

171

power differentials favoring the voices of professors and administrators over the voices of students. When asked if a digital storytelling campaign for and by FGCS would be valuable, a current student responded in their interview, "Yes, because, of course, groups that typically are silenced should be heard." For this student, NCS provided novel ways to navigate these muting forces and spaces, describing its potential to re-center student voice and provide FGCS the ability to reclaim ownership of their narrative.

The Barriers of Networked Counterstorytelling

While FGCS expressed an overwhelming consensus and approval for networked counterstorytelling, students were also quick to point out the negative impact social media had the potential to create. These concerns included social media's ability to exacerbate feelings of isolation, the pressure it created to fractionalize self, and its tendency to reinforce echo chambers.

Students expressed concerns with social media increasing FGCS feelings of loneliness and anxiety. Phrases such as "I'm missing out" or "experiencing FOMO (fear of missing out)" were used by students to describe feelings of disconnect and loss they felt when viewing certain content on social media. In an interview for the NCS podcast, a recent FGCS alum described the dangers he saw in depending too heavily on a social media community. He explained:

> It's very easy to feel isolated if your community is solely internet based or social media based. It's easy to feel like you're not good enough in those instances. If you see that your community are going on retreats, or they're doing so-and-so, or they're buying this-and-that. Meanwhile, you're just in class and you're like, "Oh, [expletive] so-and-so is at the beach right now."

Students also discussed the negative impact social media can have on self-esteem. From the podcast interview above, this same student described the shame many FGCS feel

172

when following peers on social media. He explained how students riddle themselves with thoughts such as "I'm not good enough" or "so-and-so's my age and they already have this" when they see what other people are posting on their social media accounts, explaining, "It's so easy to make comparisons over the internet." With this context another recent FGCS alum explained:

> So, I do think that social media could be very good. But it's also the theoretical versus the actual, right? There's been a lot of studies done [showing] social media causing a lot of anxiety for people. And that's why we need to use things for good. You know that…Spider Man reference about having power and having responsibility? It is just the same thing for social media.

Students discussed how social media platforms incentivize social dynamics which pressure for the fractionalization of self, explaining how on social media it is "difficult to be your authentic self." For students, authenticity was lost when content was curated to only show certain aspects of a life, while omitting important experiences and details that give full context to a person or situation. In a podcast interview, a recent FGCS alum shared that content curated this way was harmful because seeing was "unmotivating, because you don't see the person's day-to-day struggle." Students preferred social media content that was "unfiltered" and presented the more complicated aspects of life not always considered to "Instagram worthy."

Selective curation not only impacted students' perceptions of self, it made it difficult to create safe spaces where students' stories could challenge the status quo while also encouraging community to engage in conversations and topics that were uncomfortable, but necessary for growth and change. This is what lead students to describe their concerns with the ability of social media to reinforce echo chambers of deeply entrenched social and institutional siloes. Several students questioned the effectiveness of NCS in cutting across

173

social differences and institutional siloes. In an interview for the NCS Instagram account, a second year FGCS described this concern. She explained:

> It's good to have something out there to allow people to be heard, but there needs to be more implementation of how this message will get across. Because if people can avoid something they don't want to hear, they will avoid it.

In her comment, this student explains how story-sharing alone, regardless of its accessibility, would not be sufficient in generating changes to mindsets or institutional structures and cultures. Understanding the tendency for people to "avoid something they don't want to here," she continued:

> Here's an example. On social media, like on Instagram, if I don't like an account personally, if I don't like what someone's posting, I either unfollow or block them. I can't say that there aren't people who won't do the same [with the NCS campaign], because that's just what we do. But if we're in person face-to-face, and we have organizations that are very loud and vocal about what we believe, you can't avoid that…you have to notice that. So, I think that implementing stories on social media, that could be great, but I think more so we should focus on doing that in person. That's actually what is going to make the change.

Students also discussed how social media campaigns leveraging NCS were "not the complete solution." While FGCS believed NCS could create a community and space to help students get through college, across the board students expressed a desire to create lasting change; change that would benefit other FGCS and in turn improve higher education as a whole. These comments became a powerful demonstration of FGCS leveraging their capital (e.g. interdependent capital, aspirational, resistant).

Perceptions of the NCS Campaign

Social media is powerful, accessible, and novel. For these reasons it is able, for the most part, to function outside the control of monolithic structures such as colleges and universities. Don't know how to keep up, and as such are not able to stop movements before they make an impact. Even now, as I write up this dissertation, example of students

174

crashing homework app in China. Students know how to use novel technology to create a mass movement. capable of subverting traditional power dynamics. Referencing #hashtag campaigns which lead to structural and policy changes.

FGCS believed the NCS campaign could grow and provide power for student voice to impact higher education. While not considered a panacea, students believed the NCS campaign held potential to influence campuses toward change. In an interview for the NCS Instagram campaign, a third year FGCS was asked his opinion on the value of the NCS campaign. While stating that in its infancy the campaign had little power to influence large institution, this student also expressed optimism in its ability to create larger change in time. He explained:

> I feel if enough stories are shared, and if enough peoples' stories are heard, and if they reach the right people, then I think a lot of great things can come. [Universities will] learn how to make the experience easier and better for students. Or if not easier, at least make things seem not as imbalanced as they are now. If these stories do make an impact on the institution as a whole, it could definitely spread across the country and spark some sort of call-to-action in order to change how we go about certain systems and navigate college for people who aren't designed to go to college.

Students discussed the importance in expanding the reach of the NCS campaign in order for it to promoting change. As such, students described the need to play a part in spreading its influence, both in person and digitally. In an interview for the NCS podcast, a recently graduated FGCS shared her excitement for the power of digital storytelling by FGCS and cited the need to spread its influence. She explained:

> What this podcast is offering, you know, the art of storytelling through podcasting, is very valuable. And it's good. And it's powerful. And now, in all of its benevolence, the [issue] is just: we all have to do our part to spread the word….It's just a question of what avenues and routes? Where is it going to be available? Who's going to be able to say, "Hey, have you heard this awesome podcast?" You know, things like that, that really…what's the word for it? Give that big punch; that huge impact that we're all looking for.

I conclude this discussion with an anecdote of the power of networked counterstorytelling in supporting FGCS. This conversation came from a focus group interview with a current FGCS and the two student interns leading the NCS campaign. In the interview, the NCS student interns expressed some of the difficulties in running the campaign, questioning whether it was having any influence. A FGCS joining the focus group interview quickly responded to their concerns. The exchange is provided below:

Student A: It's really nice to see the stories you guys put out. At least I know that I enjoy it. I'm not saying I refresh [the feed] every day or anything, but I enjoy seeing other people with similar lived experiences to either myself or people that I know. I know that seeing, for example, [name redacted]'s story, I was like, "Oh shit, I know other people like that." I actually forwarded it to one of my friends, because I was like, "Hey, just so you know, you're not the only one."

NCS Intern 1: Really? You shared it with someone else?

Student A: Yeah, he also goes to [this university]. I have a couple of friends like [name redacted] who are freaking out because they're Dreamers, and there's been a lot going on with that recently…I think the direct exposure [the NCS campaign] has set up is very beneficial for the community at large. Not only does it assist others who have similar lived experiences to see they can relate to people, that they are not the only one there. But it also, to an extent, serves to educate people who don't have those lived experiences, to see how those experiences are very influential upon your life and your outlook. [Your platform] does all those things.

NCS intern 2: Oh man, that just made my day. Thank you.

NCS intern 1: It's working! I'm so excited!

Summary of Research Question 4 Findings.

This discussion overviewed students' perceptions of networked counterstorytelling and the NCS campaign. Students expressed the importance of both networks and stories in supporting the FGCS needs and discussed the power and potential of combining these two elements within digital spaces. In their interviews, students discussed both barriers and benefits to networked counterstorytelling. Barriers included concerns with reinforcing echo

chambers, worries over the influence of social media on anxiety and isolation, and shortcoming in digital spaces effectively impacting physical spaces. Benefits included the ability for networked counterstorytelling to create spaces for student voice, allow accessible connections to new networks, and foster homophily across differences. Student also believed that the NCS campaign used for this study could influence higher education for the better. To do this, they stressed the importance of students themselves spreading and leading this initiative.

Chapter 5

DISCUSSION

"FGCS's are the leaders of century-long game of catch up, but if we stay motivated, while acknowledging each other's struggles and providing systems of support, the gap will quickly close."
-Student story from the NCS campaign

The aim of this study was to explore how the proposed theoretical model of networked counterstorytelling—as presented through the NCS digital storytelling campaign—could invite FGCS student voice to help inform current theoretical understandings of social capital and community cultural wealth. Within the context of the study intervention, FGCS were able to leverage the affordances of networked counterstorytelling within the NCS campaign to develop community and create novel spaces for FGCS voice and stories. It was through the iterative counterstorytelling of FGCS in the digital space of the NCS Instagram account that students generated a social media community network, equipped with storytelling resources, and produced a co-constructed multimodal counternarrative of the FGCS experience. In the process, this study addressed the following research questions:

1. How were the structural components of social capital presented within the networked counterstorytelling (NCS) campaign?

2. What aspects of social capital emerged within the NCS multimodal narrative?

3. How was community cultural wealth discussed in the NCS multimodal narrative?

4. How did FGCS perceive the value of networked counterstorytelling?

Contributions to Research and Practice

I combine the discussion sections of research and practice with intention. Research and practice are far too siloed from each other, to the detriment of both. In discussing the contributions this study presents for both these arenas, I want it to be clear that these contributions are one in the same. The contributions from this study that support academic research and the same as those that support educational practice, and vis versa. These contributions include the development of novel methods for social capital analysis within social media settings and demonstrations of networked counterstorytelling in advancing the marginalized voices into educational research and practice.

This study explored the connection between networked counterstorytelling and the structural components of social capital. As part of this exploration, this study produced novel methods for measuring and analyzing social capital within social media communities. While the specific metrics from this method of analysis were tailored to Instagram, the larger conceptual framework which shaped the methods of this study could find application across various social media platforms sites. With this in mind, I intentionally designed methods for this study which utilized accessible metrics for data collection and analysis, both in cost and required skillsets. All measures of social capital for this study were collected using platform features at no cost (e.g. Instagram Insights, Instastories archive, timeline grid posts), and analysis of this data did not require SASS or software purchases or training. In my efforts to design accessible methods for social capital analysis, I hope this study and its methodology can serve as template for others seeking to further our understandings of social capital within social networking site communities, both in academia research and educational practice. Furthermore, with the generalizability of these methods, this study seeks to

contribute to a core injunction to bring more uniformity to social media research
methodologies.

This study also demonstrated how grassroots digital storytelling campaigns,
facilitated by the affordances of social media platforms such as Instagram, can be one of
many ways to invite the voices of FGCS into the design of higher education research and
practice. In doing so, the NCS campaign intervention functioned to help inform current
theoretical understandings of social capital and community cultural wealth.

Contributions to Theory

This action research study seeks to contribute to our knowledge of community
cultural wealth and social capital theory through the proposed theoretical framework of
network counterstorytelling. Findings from this study demonstrate how the both the
framework and process of networked counterstorytelling can serve as means to develop and
shape theory. There is tremendous value in bringing fresh voices and perspectives to theory.
It is through these novel lenses that research advances. It was Yosso who, no doubt through
her firsthand understanding of the first-generation college student experience, produced the
theoretical contribution of community cultural wealth and finally introduced the lens of
Critical Race Theory into social capital research—a contribution which has had, and will
continue to have, immeasurable influence for improving research in these fields. Is it any
wonder then that this vital perspective, one which has reshaped social and cultural theory,
came from a first-generation college student researcher?

Understanding now the value of FGCS perspective and voice, this study seeks to
contribute to theory in three specific ways (Figure 19). First, the student voices which led
this study present a critique to dominant theoretical frameworks of social capital. Second,

180

FGCSs voices within the NCS multimodal narrative produced insights that both validate and expand Yosso's theoretical framework of community cultural wealth. Finally, I offer the proposed theoretical framework of networked counterstorytelling presented in this study as a new contribution to theory.

Figure 19

Three theoretical contributions from NCS campaign

A Counter to Deficit Ideologies of Social Capital

In spite of Yosso's (2005) transformational model of community cultural wealth—a framework which has significantly shifted the framing of academic research around cultural capital—the majority of scholarship specific to social capital maintains a Bordieuan lens. Social capital continues to be viewed as a unidirectional exchange between parties, where those with power and resources, through benevolence or self-aggrandizement, act as benefactors toward those on the margins. This is especially true when discussing bridging and linking concepts of network ties. For example, Lin (2001), whose models for social capital use Bourdieu as foundation, described the benefits of a connection within social capital networks asymmetrical, creating an indebtedness for the recipient of a social capital

resource "exchange." To justify why a benefactor would engage in an imbalanced relationship between themselves and a "deficient" party, Lin (1999) explains:

> A critical issue in social exchange where social capital is transacted is that the transaction may be asymmetric: a favor is given [which cannot be reciprocated] …What is expected is that the [receiver] and the [giver] both acknowledge the asymmetric transactions which create the former's social debt to the latter, who accrued social credit. Social debt must be publicly acknowledged in public for the [receiver] to maintain his/her relationship with the [giver]. Public recognition in the network spreads the reputation of the [giver]. The greater the debt…the greater the reputation gained by the [giver]. (p.40)

Not only does this conceptualization of social capital perpetuate harmful and inaccurate deficit narratives of marginalized communities, this Bordieuan-informed framework reinforces white savior mentalities. Research and practice shaped by such frameworks will continue to exacerbate social, economic, and educational inequalities, not repair them. Just as Yosso (2005) challenged the Bordieuan interpretation of cultural capital, I challenge Bordieuan interpretations of social capital which pervade academic discourse and research. This includes the foundations that shaped Lin's framework of social capital which was utilized in this very research study. In doing so, I propose a theoretical reframing toward mutualistic social capital.

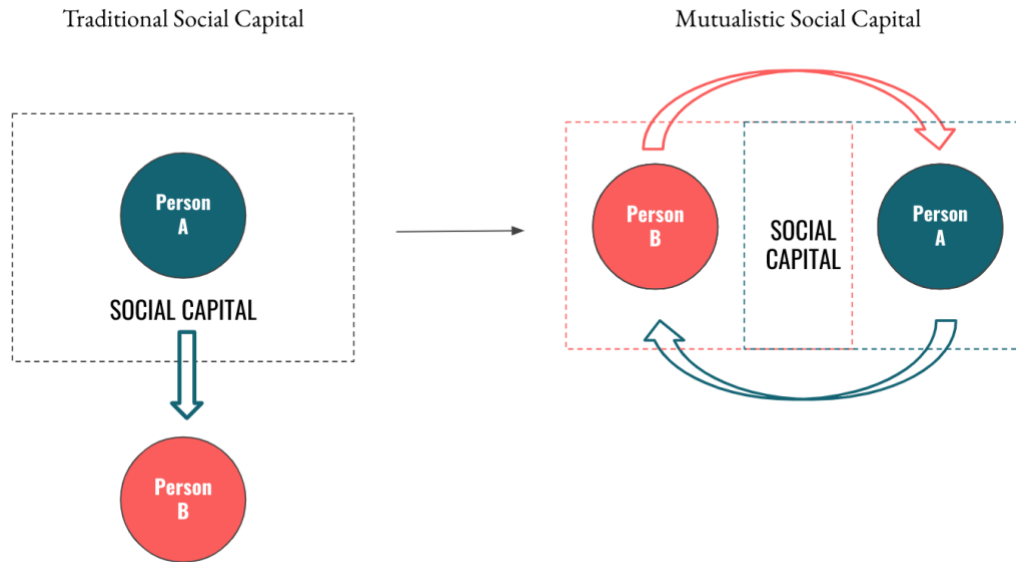### *Mutualistic Social Capital*

When discussing the needs of marginalized communities such as FGCS, Bordieuan social capital frames those at the center as accruing and holding social capital and those on the margins as lacking these connections. To be sure, there are clearly resources vital to economic mobility only available within the social capital networks of those in power. Scholarship has shown how communities privileged by race, class, and gender function to hoard financial, social, and professional capital within their closed networks, depriving those outside these networks access to these vital resources (Bettinger & Boatman, 2013; Engle &

Tinto, 2008). By countering this deficit framing of social capital, I do not intend to diminish the vital need to break down structural and cultural barriers to capital held by those in traditional positions of power. What I do propose is shifting away from a unidirectional, hierarchical perspective of social capital—especially in the concept of bridging and linking ties—which imply a sense of debt and obligation for those receiving the resources to those sharing them. This inequitable framing of social capital reinforces hegemonic ideologies, perpetuates the production of oppression in organization and society, and fortifies deficit perspectives of difference ubiquitous in society.

In higher education, FGCS may be at a so-called "deficit" with respect to certain financial, academic, and professional resources, but post-secondary institutions are also at a deficit. Universities and colleges are falling short in meeting the needs of their FGCS, an issue substantially impacting retention and graduation rates and, in turn, their bottom line (Ladson-Billings, 2006). If these shortcomings are due to a design error of deficit-informed support services for FGCS, then recognizing the wealth of resources held by FGCS, which can guide an effective redesign of these programs, is crucial for universities and colleges. This means the resources necessary for higher education's success are embedded in the networks of FGCS, leaving higher education institutions at a deficit and in vital need of assistance from the students relegated to the margins of their campuses. Flipping the hierarchal framework of social capital on its head allows researchers and practitioners to "see" multiple forms of social capital, shifting away from a unidirectional debtor-benefactor lens to a more collaborative, mutualistic relationship between the center and the margins (see Figure 20).

Figure 20

Mutualistic social capital

183

Traditional Social Capital | Mutualistic Social Capital

A mutualistic social capital framework is designed to (1) highlight the wealth of resources fostered by individuals and groups at both the center and the margins of an organization or community, (2) provide insights into processes which can broker across barriers between the margins and the center, and (3) facilitate the centering of those on the margins and in their community networks.

Expanding the Framework of Community Cultural Wealth.

A mutualistic framing of social capital merged with bell hook's framework of margins to center allows individuals and communities to better see, and in turn utilize, a more nuanced form of community cultural wealth.
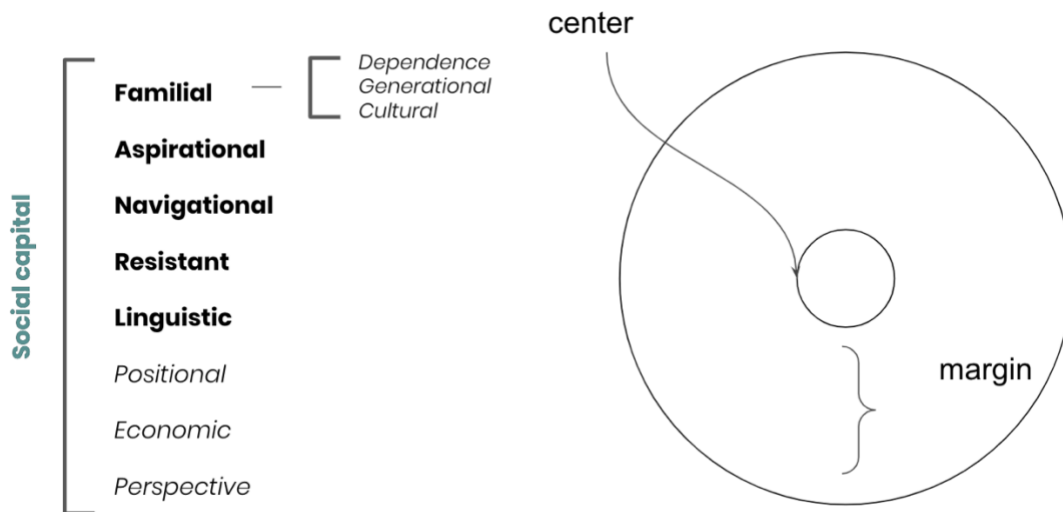
Intersectional Community Cultural Wealth

Findings from the NCS multimodal narrative, indicate that FGCS hold a nuanced perception of their personal community cultural wealth. They also presented additional forms of capital not yet defined in Yosso's original framework. These perspectives on capital—within and beyond Yosso's framework—were described by students in
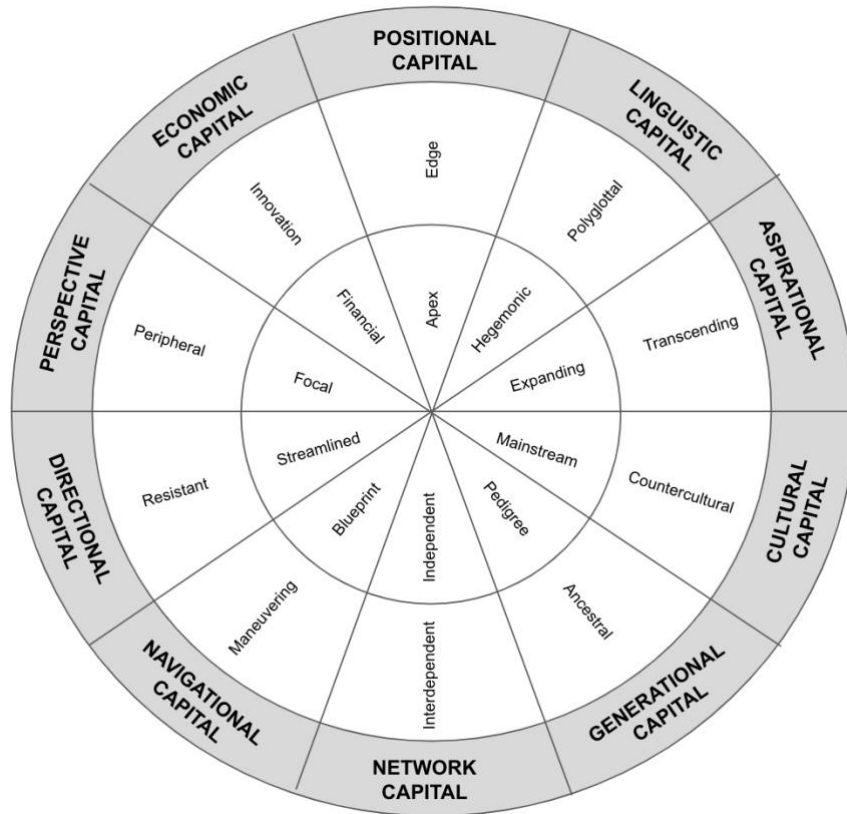
contradictory ways, presenting a potentially dualistic nature to capital. This dualistic nature to capital is best understood when contextualized in the setting of hegemonic organizations and societies: presented here as intersectional community cultural wealth.

Intersectional community cultural wealth expands Yosso's framework and presents a dynamic framework for understanding social capital and intersectionality within hegemonic environments. The concept of capital duality aligns well with Crenshaw's critical framework of intersectionality, and its application to hegemonic systems of oppression can best be framed using bell hooks concept of margins to center (Figure 21) (Carbado, Crenshaw, Mays, & Tomlinson, 2013; Crenshaw, 1989a; Crenshaw, 1989b, 1991).

Figure 21

Intersectional Community Cultural Wealth

Figure wheel labels:

Outer ring (capital types): POSITIONAL CAPITAL, ECONOMIC CAPITAL, LINGUISTIC CAPITAL, PERSPECTIVE CAPITAL, ASPIRATIONAL CAPITAL, DIRECTIONAL CAPITAL, CULTURAL CAPITAL, NAVIGATIONAL CAPITAL, GENERATIONAL CAPITAL, NETWORK CAPITAL

Middle ring: Edge, Innovation, Polyglottal, Peripheral, Transcending, Resistant, Countercultural, Maneuvering, Ancestral, Interdependent, Pedigree, Independent

Inner ring: Apex, Financial, Hegemonic, Focal, Expanding, Streamlined, Mainstream, Blueprint, Pedigree

In Figure 21, the dualistic nature of capital is presented along different forms of capital within community cultural wealth (revised via findings from Research Question 3.) This framework can be used to understand how one's personal community cultural wealth is shaped, and how power and privilege are constructed and manifest in within organizations and societies. This framing permits FGCS to lean into an asset-based understanding of their personal wealth of capital while not dismissing their lived experiences of pain and oppression. As such, intersectional community cultural wealth presents framework affordances that can address the nuances of social identity. In so doing, this hopes to embrace the following injunction from Moraga (1983):

> The danger lies in ranking the oppressions. The danger lies in failing to acknowledge the specificity of the oppression. The danger lies in attempting to deal with oppression purely from a theoretical base. Without an emotional, heartfelt grappling with the source of our own oppression, without naming the enemy within ourselves

186

and outside of us, no authentic, non-hierarchical connection among oppressed groups can take place. (p. 29)

By introducing an intersectional lens to community cultural wealth, individuals and organizations can better tailor their understandings of capital and power according to the varying identities and dynamics influencing privilege and oppression both within themselves and their institution. Thus, allowing greater theoretical flexibly for research to engage in the "emotional, heartfelt grappling" affecting all of us.

Networked Counterstorytelling

Having introduced the proposed concepts of mutualistic social capital and intersectional community cultural wealth, I present the following discussion to demonstrate the connection between these theories and networked counterstorytelling—a discussion informed by the voices of FGCS within the NCS multimodal narrative. In this section, I will lead with a discussion on how social capital shapes one's community cultural wealth.

The types and forms of capital that comprise an individual's community cultural wealth are fluid, continually shaped by the social networks with which they engage. In this sense, it can be said that one's social capital shapes their personal community cultural wealth. This means that each person holds different forms and versions of community cultural wealth (Figure 21) with vary degrees of privilege depending on (a) their personal identity and experiences and (b) the hegemonic norms of their environment.

At first, this nuanced understanding of community cultural wealth may seem contradictory to Yosso's original intention in presenting the theoretical framework of community cultural wealth. The presentation of her framework was designed to counter the pervading concept that only those with traditional positions of power and privilege held cultural capital. Yosso (2005) explained, "Therefore, while Bourdieu's work sought to

provide a structural critique of social and cultural reproduction, his theory of cultural capital

has been used to assert that some communities are culturally wealthy while others are

culturally poor" (Yosso, 2005, p.76). As such, Yosso presented community cultural wealth as

a counter to this deficit framing of communities pushed to the margins of society, especially

communities of color.

This iteration of intersectional community cultural wealth in no way seeks to

undermine the original theoretical contribution; it aims to build on its revolutionary

foundations. In the NCS multimodal narrative of this study, FGCS presented a far more

nuanced description of their community cultural wealth, which each student holding a

unique combination of capital compared to their peers (Figure 22). And just like the

multimodal narrative, when these unique combinations of capital are collected together it

produces a fluid array of accessible capital (see Figure 27).

Figure 22

*Social Capital Influences on Intersectional Community Cultural Wealth.*
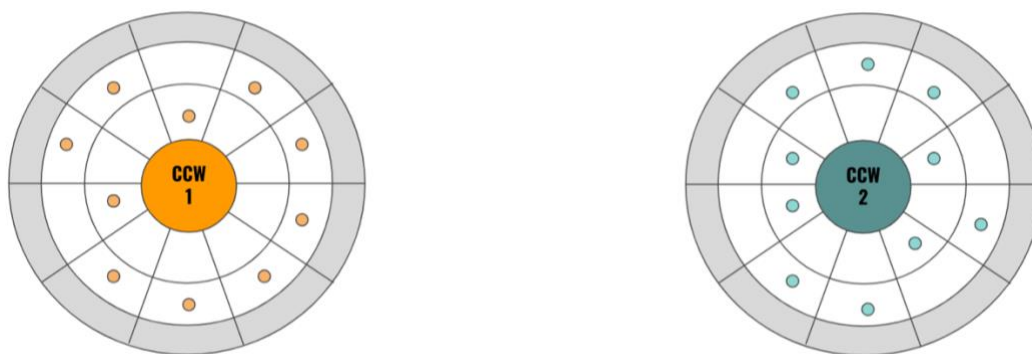
From the analysis of student narratives, I would argue that capital comprising one's

community cultural wealth can be transferred, accrued, and mobilized amongst networked

counterpublics. In order to transfer capital between parties, this information is housed in the

form of stories—a concept frequently cited by Yosso (2005) throughout her framework of

community cultural wealth. The affordances of social networking sites present the means for producing stories, the space to share and store them, and the networks to spread and amplify the capital within them. In this lies the basis of networked counterstorytelling: outlines in the following models (Figure 23, Figure 24, Figure 25, Figure 26, Figure 27). Two forms of networks resources are to facilitate networked counterstorytelling: storytelling resources and spatial resources.

Figure 23

Generating Storytelling Resources and Cognitive Homophily within NCS
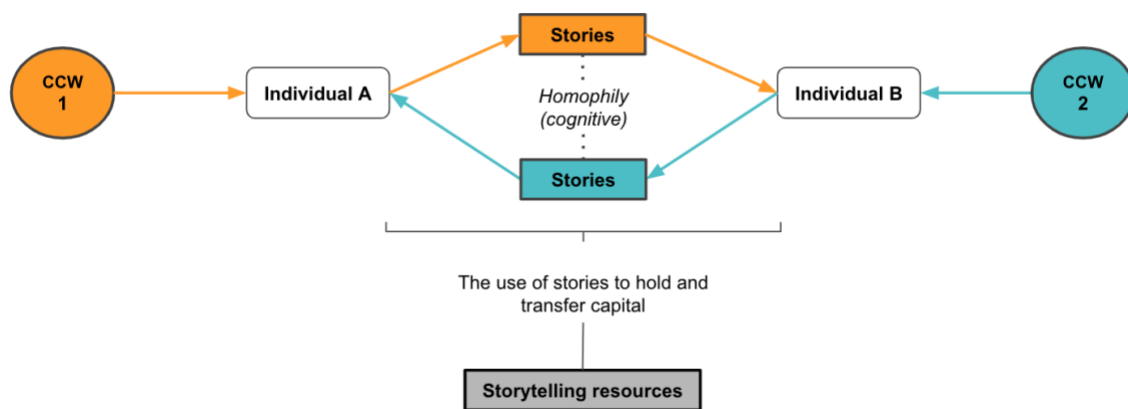

Storytelling resources:

Storytelling resources: a community's ability to share capital housed within community cultural wealth by embedding this information into personal stories and narratives. Storytelling transference functions to challenge majoritarian narratives, share knowledge, validate and build community, develop personal identity, and foster a sense of belonging. This is accomplished in the hearing, telling and sharing of personal stories.

Figure 24

*Storytelling Resources Fostering Relational Homophily*
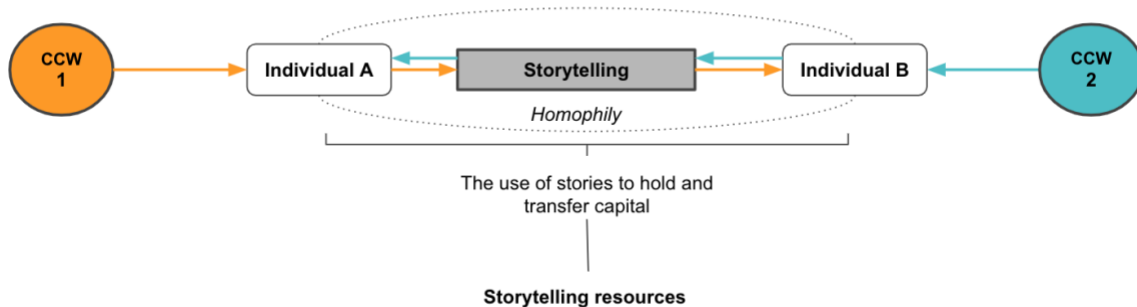
Spatial Resources

Spatial Resources: a community's ability to leverage the affordances of physical spaces and digital technologies to elevate the voices and stories of marginalized groups, create space for community development, and promote and mobilize activism and resistance.
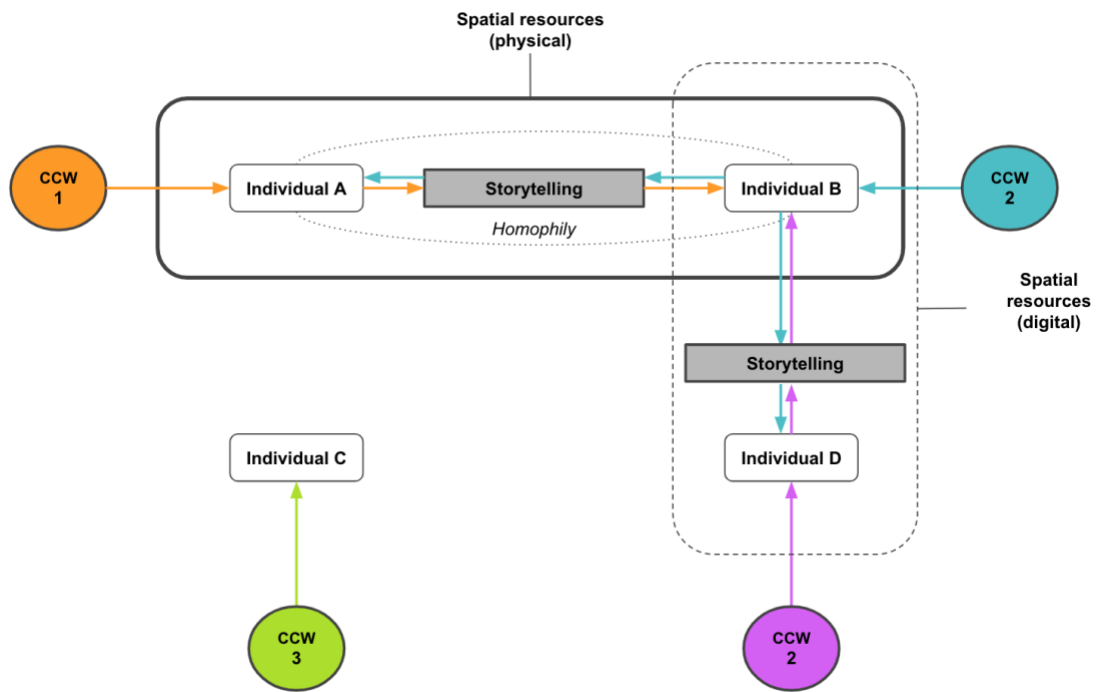
Figure 25

Physical Spatial Resources within NCS
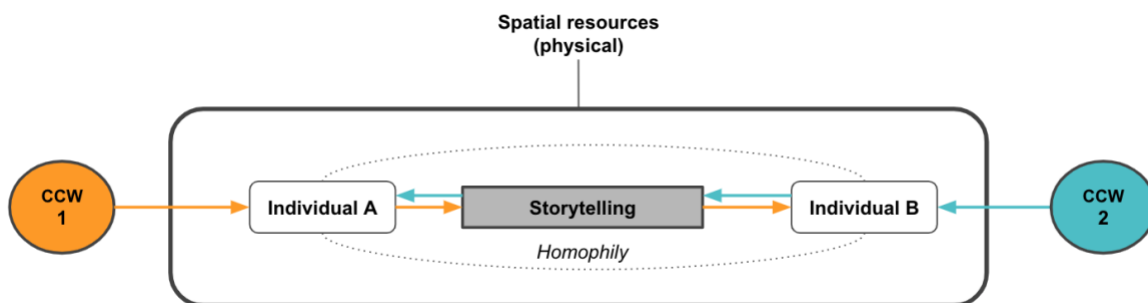
Bearing in mind the recent role networked digital technologies have played in college students' social capital, the value of information and communication technologies transforms digital networks from simply a mode of information transferal to a primary resource of social capital. Online communities through social networking sites (SNS) have become a primary method for building and sustaining social capital for college students (Figure 26).
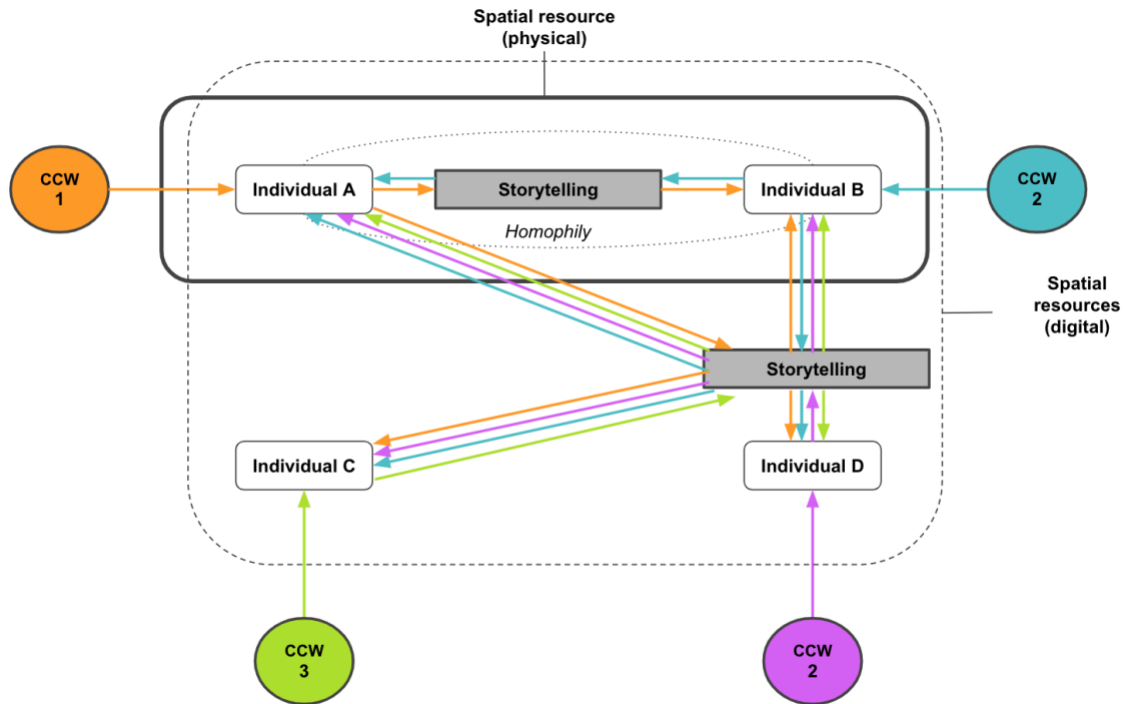
Figure 26

Digital Spatial Capital Bridging New Connections Via Storytelling

Figure 27

Digital Spatial Capital Fostering Capital Transfer and Accrual Within NCS

Social networking sites have dramatically increased the affordances of storytelling's impact, transforming it from simply a mode of information transferal to a primary source of capital. As described by Duncan-Andrade (2007), the digital engagement and digital activism of young people and youth of color "across several loci" have been used by student communities to build "critical hope" and generate a "bank of counter-narratives" to counteract dominant deficitizing discourses in education research (Duncan-Andrade, 2007, p. 27).

A word of caution for researchers, leaders and policymakers approaching social capital from this new lens. This framework is not to be used as another method for exploiting resources of marginalized groups to the sole benefit of those holding social and institutional power. As Yosso (2005) declared about the theoretic framework of community cultural wealth, "These forms of capital draw on the knowledges Students of Color bring with them from their homes and communities into the classroom. They are not

192

conceptualized for the purpose of finding new ways to co-opt or exploit the strengths of Communities of Color" (Yosso, 2005, p.82). Following Yosso's injunction, symbiotic social capital requires "a commitment to conduct research, teach and develop [educational institutions] that serve a larger purpose of struggling toward social and racial justice" (p.82).

Future Research

The theoretical model of networked counterstorytelling—along with the frameworks of mutualistic social capital and intersectional community cultural wealth—holds implications for education, communication, sociology, politics, social activism, marketing, and a spectrum of other fields of study. Furthermore, the multimodality of networked counterstorytelling provides a rich and complicated arena for data collection and analysis. Researchers from a spectrum of fields—education, business, social sciences, etc.—can find meaningful applications for these frameworks in understanding the connections between social capital, counterpublics, counterstorytelling, and networked technology. It is important to note that scholarship evaluating the processes and mechanisms by which networked counterpublics are formed has yet to be established. Furthermore, the scope of published research on networked counterpublics to this point has been observational and assessed retroactively, with no little to no literature exploring interventions designed to develop these online communities. In summary, there are great opportunities for research related to networked counterpublics in lifting up the voices of communities who are all too often unheard.

Concluding Remarks

The power of student voice has been vastly underestimated and undervalued. Of all the findings discovered from this research intervention, the vital importance of generating

spaces for the expression, retention, and connection of student stories and social capital networks stands out the most. Furthermore, identifying means to safely and effectively connect student-governed spaces with the spaces holding social and institutional power would facilitate the diffusion of lasting change that would better higher education both for students and the universities they attend.

I recognize in seeking to develop functional collaborations with student voice leading the initiatives, potential risk exists for those on the margins. While it is imperative for FGCS to become a "necessary, vital part" of the whole, to do so exposes them to a certain level of risk to step outside of the margins, and participants who choose to engage are opening themselves up in vulnerable and authentic ways (hooks, 1989, p. 206). However, this vulnerability also creates opportunities: opportunities for renewal and support, growth and change, and a deepened perspective in developing a new reality. This new reality should not and cannot signify an attempt to change those on the margins to become mainstream. Instead, marginality should be clung to because it offers the possibility of "radical perspective from which to see and create, to imagine alternatives, new worlds" (p. 207). Through networked counterstorytelling, I hope that those students who may be considered on the margins come to view their unique perspectives as a source of collective strength rather than viewing the margin "as a sign marking despair" (p. 206) This collective strength stems from recognizing their worth as they share their perspectives—knowing the inherent value they and their stories hold. As stated by Moraga (1983), "One voice is not enough, nor two, although this is where dialogue begins." (p. 34).

REFERENCES

Adams, G., Dobles, I., Gómez, L. H., Kurtiş, T., & Molina., L. E. (2015). Decolonizing Psychological Science: Introduction to the Special Thematic Section. *Journal of Social and Political Psychology, 3*(1), 213-238.

Adler, N. J., & Aycan, Z. (2018). Cross-cultural interaction: what we know and what we need to know. *Annual Review of Organizational Psychology and Organizational Behavior, 5*, 307-333.

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*(1), 17-40.

Alemán, A. M. M. n., & Wartman, K. L. (2009). Online social networking on campus : Understanding what matters in student culture. *(1st ed.). New York, NY: Routledge.*

Allan, B., Garriott, P., Keene, C., & Tracey, T. J. G. (2016). Outcomes of social class and classism in first- and continuing-generation college students. *Journal of Counseling Psychology, 63*(4), 487-496.

Asen, R., & Brouwer, D. C. (2001). Counterpublics and the state. *Albany: SUNY Press.*

Baxter Magolda, M. (2008). Three elements of self-authorship. *Journal of College Student Development, 49*(4), 269-284.

Benkler, Y., Roberts, H., Faris, R., Solow-Niederman, A., & Etling, B. (2013). Social mobilization and the networked public sphere: Mapping the SOPA-PIPA debate. *Cambridge, MA: Berkman Center Research Publication.*

Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children and Youth Services Review, 41*, 27-36.

Bettinger, E., & Boatman, A. (2013). Student supports: developmental education and other academic programs. *The Future of Children, 23*(1), 93-115.

Bjorklund-Young, A. (2016). Family income and the college completion gap. *Johns Hopkins: Institute for Education Policy.*, 1-6.

Bourdieu, P. (1986). The forms of capital. *In J. Richardson (Ed.) Handbook of Theory and Research for the Sociology of Education*, 241-258.

Bowen, W., Kurzweil, M., & Tobin, E. (2005). From bastions of privilege to engines of opportunity. *Chronicle of Higher Education, 51*(25), B18.

boyd, d. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. *Networked Self: Identity, Community, and Culture on Social Network Sites*, 39-58.

boyd, d., & Ellison, N. (2010). Social network sites: Definition, history, and scholarship. *IEEE Engineering Management Review, 38*(3), 16-31.

boyd, d., & Marwick, A. E. (2011). Social privacy in networked publics: Teens' attitudes, practices, and strategies. *A Decade in Internet Time: Symposium on the Dynamics of the Internet and Society.*

Boylorn, R. M. (2013). Sweetwater black women and narratives of resistance. *New York, NY:.*

Brown, T., & Wyatt, J. (2010). Design thinking for social innovation. *Stanford Social Innovation Review, 8*, 31-35.

Burt, R. (2000). The network structure of social capital. *Research In Organizational Behavior, 22*(345-423).

Cahalan, M., & Perna, L. W. (2015). Indicators of higher education equity in the United States: 45-year trend report.

Carbado, D., Crenshaw, K., Mays, V., & Tomlinson, B. (2013). Intersectionality. *Du Bois Review: Social Science Research on Race, 10*(2), 303-312.

Castleman, B., & Page, L. C. (2015). Summer nudging: Can personalized text messages and peer mentor outreach increase college going among low-income high school graduates? *Journal of Economic Behavior & Organization, 115*(C), 144-160.

Chamberlain, S. (2018). Co-designing with students: The good, The bad, and the not-so ugly. *Edsurge Independent.,* Retrieved from https://edsurgeindependent.com/co-designing-with-students-534ef835f43c.

Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. *Thousand Oaks, CA: SAGE, 2006.*

Chen, M., Chang, Y., & Hung, S. (2008). Social capital and creativity in R&D project teams. *R&D Management, 38*(1), 21-34.

Chiu, C., Hsu, M., & Wang, E. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems, 42*(3), 1872-1888.

Cho, S., Crenshaw, K., & Mccall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Journal of Women in Culture and Society, 38*(4), 785-810.

Choy, S. (2001). Students whose parents did not go to college: Postsecondary access, persistence,
and attainment. *Washington, DC: National Center for Education Statistics. .*

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95-120.

Collings, S., & Watkins. (2014). The impact of peer mentoring on levels of student wellbeing, integration and retention: A controlled comparative evaluation of residential students in UK higher education. *Higher Education, 68*(6), 927-942.

Coronella, T. (2016). Validation theory into practice: Asset-based acacemic writing with first-generation Latina engineering college students. *ASU Digital Repository*, 1-202.

Covarrubias, R., & Fryberg, S. A. (2015). Movin' on up (to college): First-generation college students' experiences with family achievement guilt. *Cultural Diversity and Ethnic Minority Psychology, 21*(3), 420-429.

Creative Reaction Lab. (2018). A new model for community engagement, problem solving, and creating inclusive and equitable outcomes. Retrieved from: https://www.creativereactionlab.com/our-approach.

Crenshaw, K. (1989a). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist policies. . *The University of Chicago Legal Forum*, 139-167.

Crenshaw, K. (1989b). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist policies. . *University of Chicago Legal Forum, 1989*, 139-168.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity, and violence against women of color. *Stanford Law Review, 43*(6), 1241-1300.

Creswell, J. W. (2014). Research design : Qualitative, quantitative, and mixed methods approaches. *(4th ed.). Thousand Oaks: SAGE Publications.*

Creswell, J. W., & Plano Clark, V. L. (2011). Designing and conducting mixed methods research. *(2nd ed.). Thousand Oaks, CA: Sage.*

De Souza Briggs, X. (1998). Brown kids in white suburbs: Housing mobility and the many faces of social capital. *Housing Policy Debate, 9*(1), 177-221.

Delgado, R., & Stefancic, J. (2012). Critical race theory: An introduction. *New York: New York University Press.*

Denzin, N., & Lincoln, Y. (2005). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (eds.). *The Sage Handbook of Qualitative Research 3rd Edition, Thousand Oaks, CA: Sage Publishing*, 1-32.

Dittmann, A. G., & Stephens, N. M. (2017). Interventions aimed at closing the social class achievement gap in education: changing individuals, structures, and construals. *Current Opinion in Psychology, 18*, 111-116.

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2014). Social media update 2014. *(Pew Research Center Report),* Retrieved from http://www.pewinternet.org/2015/01/09/social-media-update-2014/.

Duncan-Andrade, J. (2007). Urban youth and the counter-narration of inequality. *Transforming Anthropology, 15*(1), 26-37.

Eberhardt, J. L., Goff, P. A., Purdie, V. J., & Davies, P. G. (2004). Seeing black: Race, crime, and visual processing. *Journal of personality and social psychology, 87*(6), 876-893.

Elkins, B., & Hanke, E. (2018). Code-switching to navigate social class in higher education and student affairs. *New Directions for Student Services, 162*, 35-47.

Ellison, N. B., & boyd, d. (2013). Sociality through social network sites. In Dutton, W. H. (Ed.). *The Oxford Handbook of Internet Studies, Oxford: Oxford University Press*, 151-172.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication, 12*, 4.

Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first-generation students. *The Pell Institute for the Study of Opportunity in Higher Education*, 1-38.

Filimonov, K., Russmann, U., & Svensson, J. (2016). Picturing the party: Instagram and party campaigning in the 2014 Swedish elections. *Social Media + Society, 2*(3), 1-11.

Foley, J. A. (2013). The struggle for critical teacher education: How accreditation practices privilege efficiency over criticality and compliance over negotiation. *Critical education, 4*(3), Retrieved from: http://ojs.librry.ubc.ca/index.php/criticaled/article/view/182433.

Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy. *Social Text, 25*(26), 56-80. doi:10.2307/466240

Freeland Fisher, J. (2018). Who you know. *Jossey-Bass Publication.*

Fryberg, S. A., Covarrubias, R., & Burack, J. A. (2013). Cultural models of education and academic performance for Native American and European American students. *School Psychology International, 34*(4), 439-452.

Fukuyama. (1995). Trust: The social virtues and the creation of prosperity. *New York: Free Press.*

Gee, L., Jones, J., & Burke, M. (2017). Social networks and labor markets: How strong ties relate to job finding on Facebook's social network. *Journal of Labor Economics, 35*(2), 485-518.

Gershon, I. (2010). The breakup 2.0: Disconnecting over new media. *Ithaca: Cornell University Press.*

Gin, K., Martínez-Alemán, A., Rowan-Kenyon, H., & Hottell, D. (2017). Racialized aggressions and social media on campus. *Journal of College Student Development, 58*, 159-174.

Gopalan, M., & Brady, S. (2020). College students' sense of belonging: A national perspective. *Educational Researcher, 49*(2), 134-137.

Graham, J., Nosek, B. A., & Haidt, J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PloS one, 7*(12), e50092.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*(6), 1360-1380.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory, 1*, 201-233.

Granovetter, M. (1992). Economic institutions as social constructions: A framework for analysis. *Acta Sociologica, 35*(1), 3-11.

Gray, B., Johnson, T., Kish-Gephart, J., Tilton, J., Lawrence, T., Amis, J., & Mcgahan, A. (2018). Identity work by first-generation college students to counteract class-based microaggressions. *Organization Studies, 39*(9), 1227-1250.

Gray, R., Vitak, J., Easton, E. W., & Ellison, N. B. (2013). Examining social adjustment to college in the age of social media: Factors influencing successful transitions and persistence. *Computers & Education, 67*(15), 193.

Grzanka, P., Santos, C., & Moradi, B. (2017). Intersectionality research in counseling psychology. *Journal of Counseling Psychology, 64*(5), 453-457.

Habermas, J. (1989). The structural transformation of the public sphere: An inquiry into a category of bourgeois society. *Polity Press, Cambridge*, 161.

Hamedani, M., & Markus, H. R. (2019). Understanding culture clashes and catalyzing change: A culture cycle approach. *Frontiers in psychology, 10*(700).

Hamm, M. P., Chisholm, A., Shulhan, J., Milne, A., Scott, S. D., Klassen, T. P., & Hartling, L. (2013). Social media use by health care professionals and trainees: A scoping review. *Academic Medicine : Journal of the Association of American Medical Colleges, 88*, 1376-1383.

Hanrahan, N. W. (2000). Difference in time: A critical theory of culture. *Westport, Conn.: Praeger.*

Heinonen, K., & Medberg, G. (2018). Netnography as a tool for understanding customers: Implications for service research and practice. *The Journal of Services Marketing, 32*(2), 657-679.

Hoffman, D. L., & Foder, M. (2010). Can you measure the ROI of your social media marketing? *MIT Sloan Management Review, 52*(1), 41-49.

hooks, b. (1989). Choosing the margin as a space of radical openness. *Yearning: Race, gender, and cultural politics, Boston, MA: South End Press.*, 203-209.

Housel, T. H., & Harvey, V. L. (2009). The invisibility factor: Administrators and faculty reach out to first-generation college students. *Brown Walker Press.*

Hurst, A. (2008). Tearing down the gates: Confronting the class divide in American education. *Review of Higher Education, 31*(2), 246-247.

Hurst, A. (2010). Schoolcraft vs. becoming somebody: Competing visions of higher education among working-class college students. *Qualitative Studies, 1*(2), 75-90.

Hurtado, S. (2005). The next generation of diversity and intergroup relations research. *Journal of Social Issues, 61*(3), 595-610.

Hurtado, S. (2015). Thinking about race: The salience of racial identity at two- and four-year colleges and the climate for diversity. *The Journal of Higher Education, 86*(1), 127-155.

Hutchinson, S., & Lovell, R. (2004). A review of methodological characteristics of research published in key journals in higher education: Implications for graduate research training. *Research in Higher Education, 45*(4), 383-403.

Jackson, S., & Foucault Welles, B. (2015). Hijacking #myNYPD: Social media dissent and networked counterpublics. *Journal of Communication, 65*(6), 932-952.

Jackson, S. J., & Foucault Welles, B. (2016). #Ferguson is everywhere: Initiators in emerging counterpublic networks. *Information Communication and Society, 19*(3), 397-418.

Jehangir, R. (2010). Stories as knowledge: Bringing the lived experience of first-generation college students into the academy. *Urban Education, 45*(4), 533-553.

Jehangir, R., Williams, R., & Jeske, J. (2012). The influence of multicultural learning communities on the intrapersonal development of first-generation college students. *Journal of College Student Development, 53*(2), 267-284.

Jesnek, L. (2012). Empowering the non-traditional college student and bridging the digital divide. *Contemporary Issues in Education Research (CIER), 5*(1), 1.

Jin. (2015). The role of Facebook users' self-systems in generating social relationships and social capital effects. *New Media & Society, 17*(4), 501-519.

Johnson, S. (2018). What student leaders think about the future of education. *Edsurge Independent.,* Retrieved from: https://www.edsurge.com/news/2019-01-04-what-student-leaders-think-about-the-future-of-education.

Johnson, S., Richeson, J., Finkel, E., & Simpson, J. (2011). Middle class and marginal? Socioeconomic status, stigma, and self-regulation at an elite university. *Journal of personality and social psychology, 100*(5), 838-852.

Jones, E., Sinclair, J. M. A., Holt, R. I. G., & Barnard, K. D. (2013). Social networking and understanding alcohol-associated risk for people with Type 1 diabetes: Friend or foe? *Diabetes Technology & Therapeutics, 15*, 308-314.

Junco, R. (2012a). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education, 58*(1), 162-171.

Junco, R. (2012b). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior, 28*(1), 187-198.

Kemp, S. (2018). Global digital report (2018). *We Are Social,* Retrieved from: https://wearesocial.com/blog/2018/01/global-digital-report-2018.

Kena, G., Musu-Gillette, L., Robinson, J., Smith, W., Nelson, V., Robles-Villalba, V., . . . Zhang, J. (2015). The condition of education in 2015.

Kim, B., & Kim, Y. (2017). College students' social media use and communication network heterogeneity: Implications for social capital and subjective well-being. *Computers in Human Behavior, 73*, 620-628.

Kim, S. (2007). Media Use, Social Capital, and Civic Participation in South Korea. *Journalism & Mass Communication Quarterly, 85*(3), 477-494.

Kozinets, R. V. (2015). Netnography: Redefined. *(2nd ed.). London ; Los Angeles: SAGE Publications.*

Kramarae, C. (2005). Muted group theory and communication: Asking dangerous questions. *Women and Language, 28*(2), 55-61, 72.

Kramarae, C. (2009). Muted group theory. *Encyclopedia of communication theory, 1,* 668-669.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher, 35*(7), 3-12.

Lalancette, M., Raynauld, V., & Payne, G. (2019). The power of political image: Justin Trudeau, Instagram, and celebrity politics. *American Behavioral Scientist, 63*(7), 888-924.

Lamoreaux, A. (2016). A different road to college: A guide for transitioning non-traditional students. *College of Education & Human Development.*

Lappé, F., & Du Bois, P. (1997). Building social capital without looking backward. *National Civic Review, 86*(2), 119-128.

Lee, D., & Borah, P. (2020). Self-presentation on Instagram and friendship development among young adults: A moderated mediation model of media richness, perceived functionality, and openness. *Computers in Human Behavior, 103*, 57-66.

Lee, E., Lee, J.-A., Moon, J. H., & Sung, Y. (2015). Pictures speak louder than words: Motivations for using Instagram. *Cyberpsychology, Behavior and Social Networking, 18*(9), 552-556.

Lesko, N. (2012). Act your age!: A cultural construction of adolescence. *Critical social thought, New York: Routledge.*

Leung, D., & Lee, F. (2014). Cultivating an active online counterpublic: Examining usage and
political impact of Internet alternative media. *International Journal of Press/Politics, 19*(3), 340-359.

Lin, J. H. (2015). The role of attachment style in facebook use and social capital: Evidence from university students and a national sample. *Cyberpsychology, Behavior, and Social Networking, 18*(3), 173-180.

Lin, N. (1999). Building and network theory of social capital. *Connections, 22*(1), 28-51.

Lin, N. (2001). Social capital : A theory of social structure and action. *Cambridge, UK: Cambridge University Press.*

M'Gonigle, M., & Starke, J. (2006). Planet U: Sustaining the world, reinventing the university.

Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. *Learning, Media and Technology: Learning and Social Software - Researching the Realities, 34*(2), 141-155.

Mair, M. (1988). Psychology as Storytelling. *International Journal of Personal Construct Psychology, 1*(2), 125-137.

Markus, H. (2008). Pride, prejudice, and ambivalence: toward a unified theory of race and ethnicity. *American Psychology, 63*, 651-670.

Markus, H., & Moya, P. (2010). Doing race : 21 essays for the 21st century. *(1st ed.). New York: W.W. Norton.*

Marwick, A., Fontaine, C., & boyd, d. (2017). "Nobody sees it, Nobody gets mad": Social media, privacy, and personal responsibility among low-SES youth. *Social Media Society, 3*(2).

Mather, M., & Jarosz, B. (2014). The demography of inequality in the United States *Population Bulletin, 69*(2), 2-15.

Mati, Y. (2018). Input resources indicators in use for accreditation purpose of higher education institutions. *Performance Measurement and Metrics, 19*(3), 176-185.

Matsuda, M. (1993). Words that wound: Critical race theory, assaultive speech, and the First Amendment (New perspectives on law, culture, and society). *Boulder, Colo.: Westview Press.*

Mehta, S. S., Newbold, J. J., & O'Rourke, M. A. (2011). Why do first-generation students fail? . *College Student Journal, 45*(1), 27-34.

Moraga, C. (1983). La güera. In this bridge called my back: Writings by radical women of color. *Woman of Color Press*, 27-34.

Muñoz, C. K., & Towner, T. L. (2017). The image is the message: Instagram marketing and the 2016 presidential primary season. *Journal of Political Marketing, 16*, 3-4.

Nabi, R. L., Prestin, A., & So, J. (2013). Facebook friends with (health) benefits? Exploring social network site use and perceptions of social support, stress, and well-being. *Cyberpsychology, Behavior, and Social Networking, 16*(10), 721-727.

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *The Academy of Management Review, 23*(2), 242-266.

National Center for Education Statistics. (2018). First-generation students: College access, persistence, and postbacherlor's outcomes. *U.S. Department of Education, 421*, 1-31.

Neumayer, C., & Stald, G. (2014). The mobile phone in street protest: Texting, tweeting, tracking, and tracing. *Mobile Media & Communication, 2*(2), 117-133.

Office of Postsecondary Education. (2019). Federal TRIO programs - Home page. *U.S. Department of Education,* Retrieved from: https://www2.ed.gov/about/offices/list/ope/trio/index.html.

Oldfield, K. (2007). Humble and hopeful: Welcoming first-generation poor and working-class students to college. *About Campus, 11*(6), 2-12.

Oldfield, K. (2012). Still humble and hopeful: Two more recommendations on welcoming first-generation poor and working-class students to college. *About Campus, 17*(5), 2-13.

Omi, M., & Winant, H. (2015). Racial formation in the United States. *New York: Routledge.*

Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *Review of Higher Education, 30*(4), 363-389.

Papacharissi, Z., & De Fatima Oliveira, M. (2012). Affective news and networked publics: The rhythms of news storytelling on #Egypt. *Journal of Communication, 62*(2), 266-282.

Peavy, R. V. (1998). Socio dynamic counseling. A constructivist perspective for the practice of counselling in the twenty-first century. *Victoria, British Columbia, Canada: Trafford.*

Perna, L., & Jones, A. (2013). Improving college success for students from underrepresented groups. *The State of College Access and Completion*, 1-240.

Perna, L., & Jones, A. (2016). Throwing down the gauntlet: Ten ways to ensure that higher education research continues to matter. *Review of Higher Education, 39*, 319-338.

Plaskett, S., Bali, D., Nakkula, M. J., & Harris, J. (2018). Peer mentoring to support firstgeneration low-income college students. *99*(47-51).

Poell, T. (2014). Social media and the transformation of activist communication: Exploring the
social media ecology of the 2010 Toronto G20 protests. *Information, Communication & Society, 17*(6), 716-731.

Polkinghorne, D. (1988). Narrative knowing and the human sciences. *(SUNY series in philosophy of the social sciences). Albany: State University of New York Press.*

Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of women quarterly, 26*(4), 269-281.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy, 6*(1), 65-78.

Putnam, R. D. (2000). Bowling alone: The collapse and revival of American community. *Simon and Schuster, New York, NY.*

Quaye, J., & Harper, S. R. (2015). Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations (2nd ed.). *New York, NY: Routledge.*

Reagans, & Zuckerman. (2001). Networks, diversity, and productivity: The social capital of corporate R&D teams. *Organization Science, 12*(4), 502-517.

Reay, D., Crozier, G., & Clayton, J. (2009). "Strangers in paradise"?: Working-class students in elite universities. *Sociology, 43*(6), 1103-1121.

Rendón, L. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education, 19*, 33-51.

Rendón, L. I. (1992). From the barrio to the academy: Revelations of a Mexican American "scholarship girl."First-Generation Students: Confronting the Cultural Issues. *New Directions for Community Colleges, 80*, 55-64.

Renn, K. A., & Reason, R. D. (2013). College students in the United States: Characteristics, experiences, and outcomes. *San Francisco, CA: Jossey-Bass Publication.*

Renninger, B. (2015). "Where I can be myself … where I can speak my mind" : Networked counterpublics in a polymedia environment. *New Media & Society, 17*(9), 1513-1529.

Robert, L. P., Dennis, A. R., & Ahuja, M. K. (2008). Social capital and knowledge integration in digitally enabled teams. *Information Systems Research, 19*(3), 314-334.

S. Greenwood, A. Perrin, & Duggan, M. (2016). Social media update 2016. *Pew Research Center (2016),* Retrieved from http://www.pewinternet.org/2016/11/11/social-media-update-2016/.

Sadler, A. (2018). Academic innovation lacks student voice. And that has to change. *Edsurge: Digital Learning in Higher Ed,* Retrieved from https://www.edsurge.com/news/2018-04-05-academic-innovation-lacks-student-voice-and-that-has-to-change.

Sanacore, J., & Palumbo, A. (2015). Let's help first-generation students succeed. *The Chronicle of Higher Education, 61*(36), A22.

Schwartz, S., Lowe, S., & Rhodes, J. (2012). Mentoring relationships and adolescent self-esteem. *The Prevention Researcher, 19*(2), 17-20.

Shapiro, D., Dundar, A., Wakhungu, P. K., Yuan, X., Nathan, A., & Hwang, Y. (2015). Completing college: A national view of student attainment rates – Fall 2009 cohort. *National Student Clearinghouse Research Center, 10.*

Sheldon, P., Rauschnabel, P., Antony, M., & Car, S. (2017). A cross-cultural comparison of Croatian and American social network sites: Exploring cultural differences in motives for Instagram use. *Computers in Human Behavior, 75*, 643-651.

Shirky, C. (2008). Here comes everybody : The power of organisation without organisations. *London]: Allen Lane.*

Simons, M. (2018). The power of student voice. *Edsurge Independent.,* Retrieved from https://edsurgeindependent.com/the-power-of-student-voice-2387b99b3864.

Smith, J., Mcpherson, M., & Smith-Lovin, L. (2014). Social distance in the United States: Sex, race, religion, age, and education homophily among confidants, 1985 to 2004. *American Sociological Review, 79*(3), 432-456.

Smith, S. S. (2005). "Don't put my name on it": social capital activation and job-finding assistance among the black urban poor. *American Journal of Sociology, 111*(1), 993-1027.

Snelson, C. (2016). Qualitative and mixed methods social media research: A review of the literature. *International Journal of Qualitative Methods, 15*(1).

Solorzano, D. G. (1998). Critical race theory, race and gender microaggressions, and the experience of Chicana and Chicano scholars. *International journal of qualitative studies in education, 11*(1), 121-136.

Solórzano, D. G., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for education research. *Qualitative Inquiry, 8*(1), 23-44.

Srinivasa, S. (2018). Human error or design error? . *UX Collective: Medium, R*etrieved from https://uxdesign.cc/designing-for-errors-6d3aac033b83.

St. Clair-Christman, J. (2011). Family support and institutional support for low-income, first generation college students. . *(Ph.D) University of Delaware, Ann Arbor, R*etrieved from http://search.proquest.com.erl.lib.byu.edu/docview/903252326?accountid=4488

Stage, F. K., & Manning, K. (2003). Research in the College Context: Approaches and Methods. *New York: Brunner-Routledge.*

Stephens, Townsend, Markus, & Phillips. (2012). A cultural mismatch: Independent cultural norms produce greater increases in cortisol and more negative emotions among first-generation college students. *Journal of Experimental Social Psychology, 48*(6), 1389-1393.

Stephens, N., Fryberg, S., Markus, H., Johnson, C., Covarrubias, R., & Simpson, J. (2012). Unseen Disadvantage: How American Universities' Focus on Independence Undermines the Academic Performance of First-Generation College Students. *Journal of personality and social psychology, 102*(6), 1178-1197.

Stephens, N., Hamedani, M., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science, 25*(4), 943-953.

Stephens, N., Hamedani, M., & Townsend, S. (2019). Difference matters: Teaching students a contextual theory of difference can help them succeed. *Perspectives on Psychological Science, 14*(2), 156-174.

Stephens, N., Hamedani, M., & Destin, M. (2014). Closing the Social-Class Achievement Gap: A Difference-Education Intervention Improves First-Generation Students' Academic Performance and All Students' College Transition. *Psychological Science, 25*(4), 943-953.

Stephens, N. M., Townsend, S. S. M., Hamedani, M. G., Destin, M., & Manzo, V. (2015). A difference-education intervention equips first-generation college students to thrive in the face of stressful college situations. *Psychological Science, 26*, 1556-1566.

Stornaiuolo, A., & Thomas, E. (2017). Disrupting educational inequalities through youth digital activism. *Review of Research in Education, 41*(1), 337-357.

Swanbrow Becker, M., Schelbe, L., Romano, K., & Spinelli, C. (2017). Promoting first-generation college students' mental well-being: Student perceptions of an academic enrichment program. *Journal of College Student Development, 58*(8), 1166-1183.

Tate, K., Caperton, W., Kaiser, D., Pruitt, N., White, H., & Hall, E. (2015). An exploration of first-generation college students' career development beliefs and experiences. *Journal of Career Development, 42*(4), 294-310.

Tate, K., Fouad, N., Marks, L., Young, G., Guzman, E., & Williams, E. (2015). Underrepresented first-generation, low-income college students' pursuit of a graduate education: Investigating the influence of self-efficacy, coping efficacy, and family influence. *Journal of Career Assessment, 23*(3), 427-441.

The Design-Based Research Collective, T. D.-B. R. C. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher, 32*(1), 5-8.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition. *The University of Chicago Press.*

Tinto, V. (2012). Completing college: Rethinking institutional action. *University of Chicago Press.*

Townsend, S. S. M., Stephens, N. M., Smallets, S., & Hamedani, M. G. (2019). Empowerment through difference: An online difference-education intervention closes the social class achievement gap. *Personality and Social Psychology Bulletin, 45*, 1068-1083.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *The Academy of Management Journal, 41*(4), 464-476.

Urrieta, L. (2007). Identity production in figured worlds: How some Mexican Americans become Chicana/o activist educators. *The Urban Review, 39*(2), 117-144.

Valencia, R. R., & Solórzano, D. G. (1997). Contemporary deficit thinking. *The evolution of deficit thinking: Educational thought and practice*, 160-210.

Van Den Hooff, B., & Huysman, M. (2009). Managing knowledge sharing: Emergent and engineering approaches. *Information & Management, 46*(1), 1-8.

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of personality and social psychology, 92*(1), 82-96.

Warren, A., Sulaiman, A., & Jaafar, N. (2015). Understanding civic engagement behaviour on Facebook from a social capital theory perspective. *Behaviour & Information Technology, 34*(2), 163-175.

Wells, R., Kolek, E., Williams, E., & Saunders, D. (2015). "How we know what we know": A systematic comparison of research methods employed in higher education journals, 1996-2000 v. 2006-2010. *Journal of Higher Education, 86*(2), 171-198.

West, R., & Turner, L. H. (2010). Introducing communication theory: Analysis and application (4th ed.). *New York: McGraw-Hill.*

Wilbur, T., & Roscigno, V. (2016). First-generation disadvantage and college enrollment/completion. *Socius, 2*(0).

Williams, B. T. (2004). The truth in the tale: Race and "counterstorytelling" in the classroom. *Journal of Adolescent & Adult Literacy, 48*(2), 164-169.

Williams, S. A., Terras, M. M., & Warwick, C. (2013). What do people study when they study Twitter? Classifying Twitter related academic papers. *Journal of Documentation, 69*, 384-410.

Wilsey, S. (2013). Comparisons of Adult and Traditional College-Age Student Mothers: Reasons for College Enrollment and Views of How Enrollment Affects Children. *Journal of College Student Development, 54*(2), 209-214.

Wong, A. (2015). The renaissance of student activism. *The Atlantic, Retrieved from* https://www.theatlantic.com/education/archive/2015/05/the-renaissance-of-student-activism/393749/.

Wong, A., & Green, A. (2016). Campus politics: A cheat sheet. *The Atlantic, Retrieved from* https://www.theatlantic.com/education/archive/2016/04/campus-protest-roundup/417570/.

Xu, Q., Perkins, D., & Chow, D. (2010). Sense of community, neighboring, and social capital as predictors of local political participation in China. *American Journal of Community Psychology, 45*(3-4), 259-271.

Yosso, T., Smith, W., Ceja, M., & Solórzano, D. (2009). Critical race theory, Racial microaggressions, and campus racial climate for Latina/o undergraduates. *Harvard Educational Review, 79*(4), 659-690, 781, 785-786.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education, 8*, 68-91.

Yosso, T. J. (2006). Critical race counterstories along the Chicana/Chicano educational pipeline. *New York: Taylor & Francis Group.*

Zhao, W. (2013). Social networks, job search and income disparity in a transitional economy: an institutional embeddedness argument. *Res. of Sociology Work, 24*(2013), 103-132.

APPENDIX A

NCS INTERVIEW GUIDE

Round 1 Structured Questions

What were your perceptions of college growing up?

How did you determine your career/academic goals and interests?

How valuable did/do you view college in achieving your personal/career goals [then and now]?

How did you choose the college/university you attended?

How did your identity as a FGCS influence your experiences in college?

Tell me about a time in your college experience when:
    Someone helped you academically, professionally, or personally.
    You helped someone academically, professionally, or personally.
    You reached out for support and it was not helpful.
    You felt engaged and/or "at home" as a student at [your university].
    You felt disengaged and/or unsupported at [your university].

Reflecting on your time at [university], what do you wish current and prospective FGCS understood about their college experience?

Reflecting on your time at [university], what do you wish non-FGCS, faculty, and administration understood about the FGCS college experience?

Now that you are graduated, what do you wish you had known prior to entering the workforce?

What supports do you wish you had now in your career?

APPENDIX B

NCS FOCUS GROUP INTERVIEW GUIDE

Guiding Questions:

Do you feel your experiences as FGCS are understood and supported at [university]? Why or why not?

Tell me about a time in your college experience when:
    You felt engaged and/or "at home" as a student at [your university].
    You felt disengaged and/or unsupported at [your university].
    Someone helped you academically, professionally, or personally.
    You helped someone academically, professionally, or personally.
    You reached out for support and it was not helpful.

What role does social media play in your experience at [university]?

Tell me about a time when:
    Social media supported your experience at [university]
    Social media negatively impacted your experience at [university]

Do you think a social media campaign sharing the stories of FGCS at [university] would be valuable? Why or why not?

If yes, who do you think it would be valuable for?

APPENDIX C

MODIFIED NETNOGRAPHIC CONTENT ANALYSIS MATRIX

Netnographic narrative example	Measures	Score	Weighted Score
1G Instagram post			
Primary, first-hand story			
	Relevance*	10	20
	Activity	3	3
	Interactivity	1	1
	Sustainability	3	3
	Heterogeneity | Homogeneity	8	8
	Richness*	8	16
	Experientiality	5	5
	*Credibility**	9	18
	*Proximity**	10	20
"The fact that my parents didn't go to college played into a lot of my stress. I felt like I couldn't call on them to help me navigate things, cuz they didn't know. I couldn't call them to say, 'Hey, this isn't working' or 'I don't know what to do. I don't know what courses to take. I don't know who to talk to.' I just wanted to turn to someone, anyone, and say, 'Please help me, I don't know how to navigate this huge system.' When my son is in that situation, I'm gonna help him, even though I kinda, you know, it didn't work out for me. So yeah, it's not my parents' fault, you know. It's just that I had friends in similar situations who could call their parents back home and say, 'What should I do?' And I didn't have that. My parents would just go, 'I don't know. Figure it out.'"	Total	57	94
		0.63	0.72

(Kozinets, 2015)

214