

Defining and Measuring Social Capital for Young People

A PRACTICAL REVIEW OF THE LITERATURE ON RESOURCE-FULL
RELATIONSHIPS



Peter C. Scales, Ph.D., Ashley Boat, Ph.D., & Kent Pekel, Ed.D.

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EXECUTIVE SUMMARY

This report establishes a theoretically-informed framework for the measurement and improvement of social capital among youth and young adults (YYAs) of color and from low-income backgrounds. It supports a larger project known as Social Capital Assessment and Learning for Equity (SCALE), which focuses on developing and refining useful measures of social capital for programs designed to enhance postsecondary and employment opportunities for YYAs of color and from low-income backgrounds.

With support from the Bill & Melinda Gates Foundation's Equitable Futures initiative, Search Institute developed this report by undertaking an extensive search of the literature on social capital, as reflected in both scientific, peer-reviewed journals and resources for practitioners and policymakers. The literature review was not intended to be encyclopedic, but comprehensive and rigorous with an emphasis on practical measurement of social capital in programs serving YYAs. The review has led to several conclusions.

Relationships and Resources Are Key to Defining Social Capital

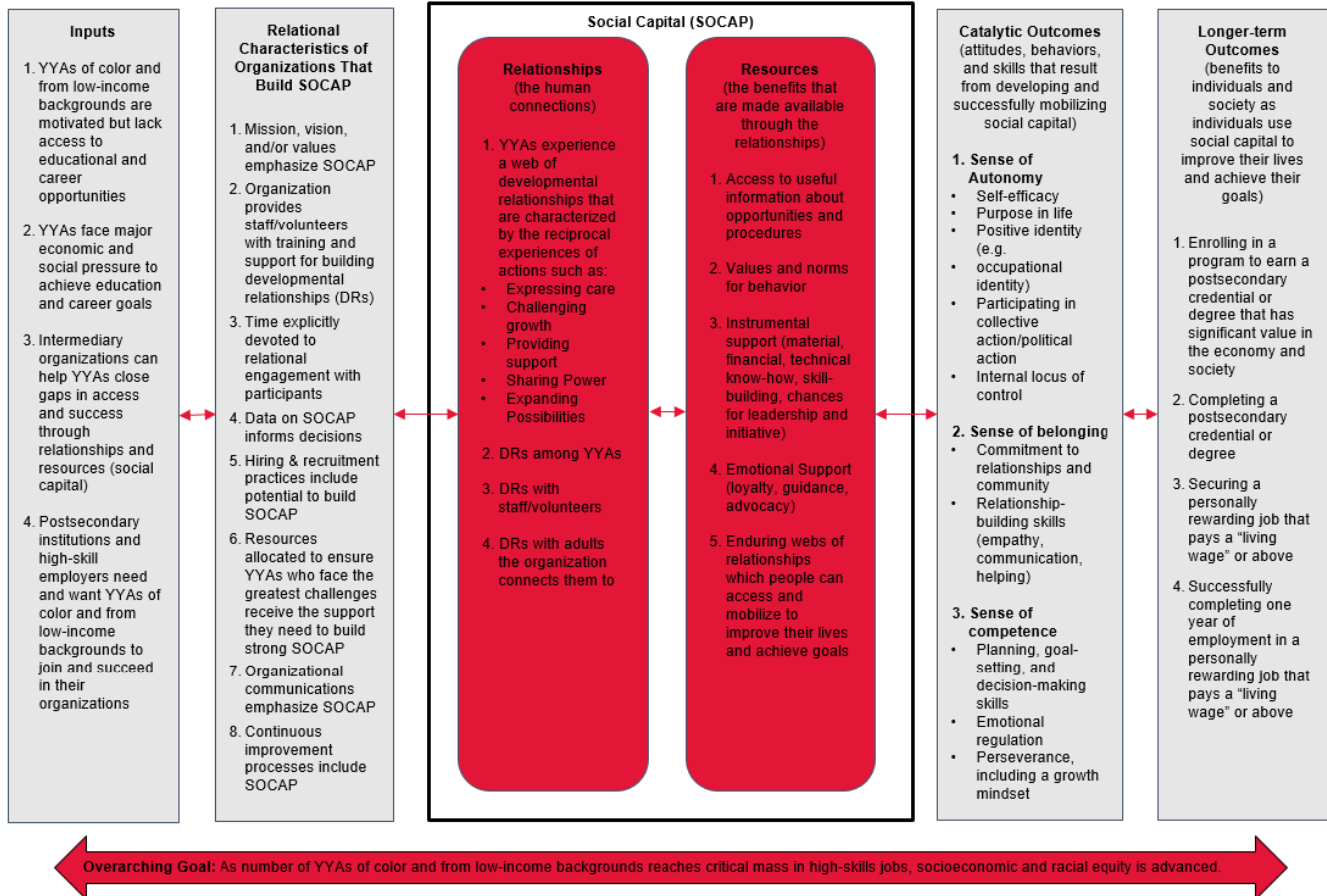
- There is little consensus on what social capital is and how it should best be measured.
- The two most common elements of social capital are relationships and resources.
- It is through relationships that individuals or a collective group of people are able to access resources.
- **For the purposes of this report, social capital can be defined as the resources that arise from a web of relationships which people can access and mobilize to help them improve their lives and achieve their goals, which inevitably shift over time.**

Based on this definition, and our literature review, we created a measurement and improvement logic model for the SCALE project, with bi-directional associations among the key components.

- The model shows how organizations can create the conditions in which YYAs experience plentiful, resource-rich developmental relationships, which contribute to their autonomy, belonging, and competence, and ultimately, to educational and occupational success, and the advancement of broader socioeconomic and racial/ethnic equity.
- Although social capital is critical to enhancing the well-being for all YYAs, it may be particularly valuable for YYAs of color and from low-income communities.
- There is a need to address weaknesses in conceptualization and measurement of social capital as it pertains to historically marginalized YYAs.
- There are three main kinds of social capital: bonding (connections between people who are similar), bridging (connections between people who are dissimilar), and linking (connections across power differences).
- Most studies fail to explicitly note that bonding capital, by itself, cannot serve to bring greater equity of opportunity to those who experience current racism, sexism, and discrimination and in many cases also centuries of systemic exclusion and social injustice.
- The proposed logic model incorporates all three forms of social capital, particularly bridging and linking capital.



Social Capital Assessment & Learning for Equity (SCALE) Measurement and Improvement Logic Model



Social Capital is Associated with Positive Youth Outcomes

- Whether defined as relationships or resources, social capital matters because it generally, although not always, has been linked to positive outcomes for children, youth, and young adults.
- Experiencing social capital does not always bring about individual or collective good, as when, for example, social capital provided to some YYAs systematically excludes others (e.g., informal advice and connection networks among affluent whites that are generally not accessible to low-income persons of color).
- But more consistently, social capital is associated with a variety of positive health, education, and employment outcomes.

Relationships are Critical, Especially When They are "Developmental"

- The literature primarily emphasizes social capital from relationships in the family and neighborhood, and gives considerably less attention to social capital from relationships with peers and adults in organizations that serve YYAs, schools, congregations, mentoring programs, and other settings.
- The quality of relationships--how developmentally strong they are--is also understudied.

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- Whether the context is family, school, or programs for YYAs, the research has consistently shown that the social capital of developmental relationships that feature the five elements shown in Table 2 are linked to the kinds of social capital resources and near-term/proximal outcomes depicted in Figure 1.
- Such “developmental relationships” are an especially key source of social capital for YYAs of color and low-income youth.
- But key types of social capital are not distributed equally across demographic groups.
- Research consistently shows that YYAs are much less likely to experience adults and peers providing support for them, and especially sharing power with them and expanding their possibilities in life, than they are to experience expressions of care and being challenged to grow or meet high expectations. These three relationship elements of providing support, sharing power, and expanding possibilities are important in providing the “linking” and social “leverage” capital that help YYAs of color and youth from low-income communities achieve successful trajectories despite historical marginalization and current systemic obstacles.
- Programming guided by social capital needs two elements to be successful: (1) YYAs are in an organizational environment where they have regular opportunities to interact with adults who serve as institutional agents or brokers, and (2) YYAs learn skills and behavior that enable them to enhance their relationships with others.

Social Capital Measurement Currently Has Little Consensus

- A review of the social capital literature revealed many ways to measure social capital – suggesting that there is no agreed-upon best method or any single instrument that captures all aspects of social capital.
- The most common broad categories of measures in the social capital literature are family social capital, community social capital, and to a lesser extent peer social capital.
- Social capital has most often been measured using survey instruments (e.g., name generators, position generators) and to a lesser extent, electronic data collection tools such as smartphones, Bluetooth sensors, and online social media sites (e.g., LinkedIn, Twitter) have been used. However, these tools may only measure a limited number of social capital dimensions.
- Most measures do not capture both relationships and/or resources.
- Of the survey measures that do exist most have not been tested for reliability or validity.

A Modular Approach Grounded in Measuring Relationships and Resources Advances the Field

- At a minimum, social capital should involve both the measurement of developmental relationships and resources provided by these relationships.
- Because social capital is a multidimensional construct, it is likely that a single instrument may not be able to capture all aspects of social capital. Programs may need to use multiple measures to fully understand how social capital is being promoted within their program.
- A “core and more” approach may be most useful, in which all programs in a given coalition, network, collaboration, or initiative measure a common core of social capital constructs, and then add supplemental measures that align more specifically with the individual program or organization’s mission and goals.
- The degree to which social networks include people with valuable knowledge, connections, and positions is of significant practical importance but is difficult to measure accurately and efficiently.

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- The size of social networks can be measured (often at significant expense), but it is not clear how practically useful that measure is. Functional forms of social capital such as quality or level of trust within relationships may be more predictive of positive outcomes than structural forms of social capital such as the size of someone's network. Thus, it is important to include dimensions of relationships quality and not just the structure of the relationships.

Future Directions

- This report lays the groundwork for developing useful tools and measures of social capital for practitioners, by using qualitative and quantitative data to further understand how YYAs are experiencing social capital, and how relationships and the resources they acquire from those relationships contribute to their education and employment opportunities.
- That information will be compiled, analyzed, and used to refine measures and develop items that are well-aligned with this literature review and program participants' experiences as they relate to social capital.



Defining and Measuring Social Capital for Young People

A PRACTICAL REVIEW OF THE LITERATURE ON RESOURCE-FULL RELATIONSHIPS

Peter C. Scales, Ph.D., Ashley Boat, Ph.D., and Kent Pekel, Ed.D.

Search Institute

An initial comment is in order as preamble, given this unprecedented moment in history.

The global COVID-19 pandemic has with blinding speed torn large holes in the social and economic fabric that holds societies together. We are discussing social capital here, and how to ensure, especially for youth and young adults (YYAs) of color and from low-income backgrounds, that they have greater and more equitable opportunities for educational and occupational success. But the social and economic structures of almost all countries around the world are not, at this moment, able to withstand far-reaching consequences the steps that must be taken to contain, mitigate, and hopefully soon, treat this disease. Unfathomable amounts of wealth worldwide have vanished overnight, billions of people cannot work, or have to work less, or work from home (which the vast majority of those in the bottom 75% of income in the United States cannot do--Gamio, 2020); schools, colleges, and places of worship have shut down and/or gone entirely to online operations; the in-person interactions that are the heart of human relationships have been drastically curtailed as “social distancing,” “self-isolation,” and “quarantine” become some of the most common words we hear and see. At this writing, economists are predicting, at best, zero growth in the American economy until 2021, and at worst, a sharp contraction. How programs serving YYAs operate, as for all other families, businesses, organizations, schools, and other institutions, is changing drastically and evolving daily in response to the pandemic.

In this context, ensuring access to developmental relationships and equitable social capital is both more important than ever, and more challenging to achieve than ever, as is how to measure whether young people are experiencing those essential contributions to their positive development. What program practices can still occur, what experiences of young people with others can still happen, what educational and occupational opportunities are even still available, even if only curtailed for months, and how all of this can best be measured, all are affected by the course of the pandemic and the world’s responses to mitigate its effects. This a course of events unparalleled in modern history, and, at this point, impossible fully to predict with confidence.

Our work generating recommendations for social capital measurement and developing social capital measures over the next months plays out against this backdrop of extreme uncertainty, calling for patience, tolerance of ambiguity, creativity, flexibility, and openness to new ways of partnering and conducting practical, applied work among teams of researchers and practitioners. Our collective challenge in this project over the next months is to apply those skills as best we can to produce recommendations and measures that are theoretically and scientifically defensible, and vitally useful in work with YYAs, but that are also realistic within the uncharted landscape we now inhabit.



“Despite the difficulty of having a single, succinct, and easy to measure notion of social capital, it is such an important concept that we cannot avoid it.”

- Economist Matthew O. Jackson (p. 140)¹

Background

All youth and young adults (YYAs) need and benefit from positive relationships. Relationships are critical not only for broad positive development, but also because they promote educationally- and occupationally-relevant social capital by connecting YYAs to valuable resources and opportunities. Unfortunately, not all youth and young adults, particularly YYAs of color from low-income communities, are able to access these important relationships (Erickson, McDonald, & Elder, 2009; Putnam, 2015). This is problematic as key developmental relationships are critical to attaining higher education and full-time employment opportunities (DuBois & Silverthorn, 2005; Kim & Schneider, 2005; McDonald, Erickson, Johnson, & Elder, 2007).

Fortunately, there are several promising programs that have been designed to increase postsecondary and employment opportunities of YYAs of color through the power of relationships. These programs connect YYAs with peers, mentors, coaches, potential employers, and many others to increase their network of support and access to social capital. As these programs expand, they need well-validated and practitioner-friendly tools to accurately assess their ability to promote and strengthen social capital among the populations they serve.

Despite the excitement about the potential of social capital to increase postsecondary and employment opportunities for YYAs, there remains a lack of clarity around its definition (Bankston & Zhou, 2002). Due to this lack of conceptual consensus, there is a gap between theoretical understandings of social capital and the ways social capital has been empirically measured.

The aim of this report is to establish a theoretically-informed framework for the measurement of social capital among YYAs of color and from low-income backgrounds participating in programming designed to enhance postsecondary and employment opportunities. This report does so by discussing four major themes: 1) how social capital has been conceptualized to date; 2) proposing a model of social capital to inform its measurement and improvement; 3) reviewing how researchers and practitioners working in this field have measured social capital; and 4) identifying best practices for the measurement of social capital among YYAs of color and from low-income backgrounds.

With support from the Bill & Melinda Gates Foundation’s Equitable Futures initiative, Search Institute undertook an extensive search of the literature on social capital, as reflected in both scientific, peer-reviewed journals and resources for practitioners and policymakers. Our particular interest was how social capital has been defined and measured for YYAs of color and from low-income backgrounds. Although wide-ranging, this literature review was not exhaustive. The literature review was not intended to be encyclopedic, but comprehensive and rigorous with an emphasis on practical measurement of social capital in programs serving YYAs.

After reviewing dozens of sources that describe and measure social capital among both adolescents and young adults, we have drawn several clear conclusions about how social capital is defined, why it matters, the role of relationships in building and measuring social capital, how organizations serving YYAs provide it, and how social capital has been measured among YYAs. This review of the literature

¹ Jackson, Matthew. *The Human Network: How Your Social Position Determines Your Power, Beliefs, and Behaviors*. New York: Pantheon Books, 2019.



supports a larger project known as Social Capital Assessment and Learning for Equity (SCALE), which focuses on developing and refining useful measures of social capital for programs serving YYAs of color and from low-income backgrounds.

Relationships and Resources Are Key to Defining Social Capital

To establish a strong framework for the measurement of social capital, it is important to have a clear understanding of the concept. Social capital is a multidimensional construct that scholars have defined and operationalized in many ways. For example, the Bill & Melinda Gates Foundation has defined social capital as “people’s access to, and ability to mobilize, human connections that help them further their potential and their goals” (Strategic Review, 2020). After reviewing many such definitions of social capital, two common elements emerged: relationships and resources (Bourdieu, 1986; Coleman, 1988; Freeland-Fisher, 2019; Lin, 1999; Putnam, 2000; Small, 2009). It is through relationships that individuals or a collective group of people are able to access resources for pursuing goals. Thus, **for the purposes of this report, we have slightly revised the Gates Foundation definition as follows: Social capital is the resources that arise from a web of relationships which people can access and mobilize to help them improve their lives and achieve their goals, which inevitably shift over time.**

Perhaps the most striking conclusion from this literature review is that there is so little consensus on what social capital is and how it should best be measured. Jackson (2019) characterizes the literature in this way: The literature on social capital is “sprawling and inconsistent in its multitude of alternative definitions and uses of the term” (line 202). Vynke and colleagues (2013) agree, saying that there is a “lack of clarity on how to measure the concept and in the variety of constructs that are used to refer to neighbourhood social capital (e.g., social support, social resources, social cohesion, informal social control” (p. 4 of 18)). Part of the challenge in defining (and measuring) social capital is that it comes from a multitude of influences and experiences. Grootaert et al. (2004), writing for the World Bank project on measuring social capital, remarked that “the literature has demonstrated that the creation of social capital is a complex process heavily influenced by social, political, and cultural factors as well as by the dominant types of economic activity” (p. 17).

Definitions of Social Capital

Definitions of social capital run a gamut from simple to complex. Glanville et al. (2008) for example, described social capital as “the social relationships that people invest in, whether consciously or unconsciously, to enhance their ability to achieve desired goals” (p. 107). Ahn (2011) said social capital “refers to the idea that one derives benefits—i.e., advice, information, or social support—through their network of relationships” (p. 1439). Similarly, Kim and Schneider (2005) described social capital as “realized through the social ties that connect individuals to resources” (p. 1197). Crosnoe (2004) also defined it simply as resources that flow through relationship ties, including information, norms, and support. Rothon et al. (2012) used Coleman’s conceptualization of social capital to define it as “resources which create benefits for individuals through their participation in groups.” (p. 698). The Christensen Institute describes social capital similarly, but adds the important reality that youths’ goals change over time: “young people’s access to and ability to mobilize human connections that might help them further their potential and their goals, as those goals emerge and inevitably shift over time” (Freeland-Fisher, 2019).

Some researchers have described social capital not in terms of individual relationships or benefits but rather as a feature of neighborhoods or communities, building off of the notions of neighborhood social cohesion and control advanced by Sampson and colleagues (1999). For example, De Clerq et al. (2012), suggested that social capital is not an individual resource, but is rather a “collective characteristic of places arising from people’s shared experiences. It can be defined as the quantity and



quality of social relationships such as formal and informal social connections as well as norms of reciprocity and trust that exist in a place or community” (p.203). Al-Fadhli and Kerson (2010) built off Putnam’s (2000) similar definition, that social capital is “features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives” (p. 380). Flanagan et al. (2014) also invoked collective action as the outcome of social capital, defining social capital as “that web of networks, norms, and trusting relationships that enable people to address community issues through collective action” (p. 296). Dill and Ozer (2019) do not limit the role of social capital to people “working together” for “shared objectives,” but rather include individual benefits as well. They describe network-based social capital, which “emphasizes how community members access and leverage resources within neighborhood institutions and organizations for individual or collective action” (p. 2 of paper).

Muller and Ellison (2001), utilizing Coleman’s framework, described social capital as “social relationships and institutional involvements [that] provide individuals with various kinds of resources which can facilitate action and be mobilized toward instrumental ends” (p. 157). The resources those relationships can provide include: values and norms for behavior; useful information about opportunities and procedures; and encouragement for long-term social investment and exchanges within a context of norms of reciprocity, trust, and mutual obligation (p. 158). Morgan and Haglund (2009) followed Morrow (1999) in specifically invoking the tenets of self-determination theory in their definition of social capital. They identified three primary features that social capital provides: a sense of belonging (identity and safety with local environments); autonomy and control (perceptions of power to influence community or institutional decisions); and social networking (participation in school and community life).

Jackson (2019) listed seven kinds of social capital that include both individual and community classifications. These features are phrased from the perspective of the person, persons, and institution that *provides* the capital, rather than the one(s) who experience the social capital: information (the ability to acquire/spread valuable information); brokerage (serving as an intermediary between others who want to interact); coordination and leadership (being connected to others who don’t interact with each other, and having the ability to coordinate others’ behaviors); bridging capital (being an exclusive connector between disparate groups); favor capital (ability to exchange favors due to position in a network and repeated reciprocation); reputation (people believing in the person’s or organization’s reliability and high quality); and community (ability to sustain cooperation behavior).

Finally, McPherson et al. (2014) reviewed 55 social capital studies and unified many of these definitions in concluding that there is now “relative consensus that social capital includes those elements of social networks that can bring about positive social, economic, and health development,” and that it “can occur at the micro (individual, family/household) or macro (local, national, and international) level” (p. 2 of paper).

Relationships and Resources as the Dual Pillars of Social Capital

What can we make of all these definitions? First, scholars agree that social capital is not a unitary, single construct but is multi-dimensional (Grootaert et al., 2004). Second, it also is abundantly clear that relationships are at the heart of the concept of social capital, and it is those relationships that deliver resources that help either individuals or neighborhoods/communities, or both, develop positively.

Yet, there is a wide variety of interpretations about which relationships matter, what aspects of relationships matter most, and even whether relationships themselves are the social capital, or whether the benefits that relationships provide are the most conceptually and policy-relevant definition of social capital.



For example, is the relationship between a mentor and their mentee inherently an asset for the educational and occupational success of the mentee, that is, social capital for them, or is social capital only apparent in the education-and occupation-relevant information, expectations, and connections the mentor makes possible for the mentee? The literature contains plentiful examples of each approach. Religious involvement and extracurricular activity participation, for example, have been treated as both indicators of social capital, and as inputs which help to create social capital. Muller and Ellison (2001), for example, framed family and community social capital as variables that explained the association between religious involvement and academic outcomes, and did not consider religious involvement itself to be an indicator of social capital. McPherson et al. (2014) and Morgan and Haglund (2009), on the other hand, classified religious involvement as an indicator of community social capital. Ferguson (2006) reviewed 22 social capital studies and concluded that a little over half the studies defined social capital as the “relationships or interactions” between children and families or individuals and communities. The other studies defined social capital as the benefits or assets those relationships provide. Ferguson observed that “this conceptual duality of social capital complicates comparisons of findings among studies, as researchers are utilizing a common term to signify and measure two separate concepts” (p. 8).

The theoretical debate over whether social capital is the relationships or the resources is interesting, but from a practical standpoint, not as relevant as the conclusion that both the relationships and specific resources that can emanate from high-quality relationships are important for YYAs educational and occupational identity and success (as well as other outcomes—see below), and that, therefore, both should be measured. There are two important limitations of the literature: 1) it primarily emphasizes social capital from relationships in the family, and secondarily, the neighborhood, and gives considerably less attention to social capital from relationships with peers and adults in organizations serving YYAs, schools, congregations, mentoring programs, and other settings; and 2) the quality of relationships--how developmentally strong they are--is also under-studied.

Rather than focusing on whether or not relationships should be measured as a form of social capital, scholars and practitioners should consider how best to understand and measure the *quality of relationships* within individuals' web of relationships. It is clear that the quality of relationships - how developmentally strong they are - is understudied. It is imperative to better understand how these high-quality relationships may contribute to YYA's social capital, as research indicates that these relationships are critical to promoting positive life trajectories among YYAs of color from low-income communities (Dubois et al., 2011; Ghosh & Reio, 2013; Kim & Schneider, 2005; Stanton-Salazar, 2011).

For example, high-quality relationships, which Search Institute defines as *developmental relationships*, (discussed in more detail below) may provide benefits that are discernable in the relative short-term (tangible resources that can also be measured, such as advice, information, or financial help). **Yet the relationships themselves, beyond their more immediate resources, also are a longer-term source of possible benefits that can accrue in the future, an investment in potential resources being realized later.** For example, a “near-peer” alumnus of an apprenticeship program may most immediately provide a new program participant with valuable information about how the program works, what the expectations are, and insights about the program's general culture. But it may be only later, after the new participant has shown promise worthy of the near-peer staking their reputation on, that the near-peer alumnus provides another more valuable and politically-sensitive resource, an introduction to a potential employer. In other words, the social network a youth has is not just an asset that can help them attain a short-term goal, but is an outcome itself that potentially can be tapped into throughout life, depending on how strong, enduring, reciprocal, and therefore developmental the relationships in that network are.



Proposed SCALE Measurement and Improvement Logic Model

Based on our review and a definition of social capital as consisting of both developmental relationships and resources accrued through those relationships, **the following measurement and improvement logic model for the SCALE project was conceptualized to illustrate the process through which a program focused specifically on improving postsecondary and employment outcomes among YYAs may enhance the social capital of its program participants.**

The model shows how a web of developmental relationships—such as YYAs with parents, extended family, other YYAs (peers and near-peers), teachers, and coaches/mentors/program leaders (inclusive of both formal and informal relationships)—can, through its structure, size, density, diversity, and strength of quality, provide key resources for and with YYAs. These key resources include values and norms for behavior conducive to educational and occupational success (e.g., responsibility, integrity, respecting expectations regarding timeliness, and working hard, and general rules (which may sometimes be able to be negotiated) for how one relates to those in authority), information about opportunities and how to connect with those opportunities, a variety of kinds of instrumental and emotional support, and a sense that these relationships are stable, trusting, and reciprocal

In turn, those resources help contribute to outcomes that are more proximal to and catalytic for the desired longer-term outcomes, including a sense of autonomy, belonging, and competence. The power of YYAs simply feeling a sense of belonging should not be under-estimated, despite how “soft” an outcome it might appear to be. For example, Yeager and Walton (2011) noted that experiments that simply helped low-income and first-generation college students feel like they belonged in college had a positive effect on students’ sense of academic confidence and level of effort.

This model’s emphasis on developmental relationships has an important implication for helping to reduce inequities in life opportunities that youth often experience—beyond the expectation by some that individual effort and tenacity are, on their own, adequate for dealing with structural inequities. The reality is that many young people in disadvantaged circumstances already have a great deal of resilience. However, as a study of high school “non-graduates” found, students who were not in school “were trying, but they were trying, in most cases, alone” (Zaff et al., 2014, p. 14). These researchers concluded that “young people needed connections with adults and peers who cared about them, people who provided support and guidance, and access to relevant educational programs and social services. That is, a pathway to re-engagement depends on a young person’s individual strengths and perseverance meeting with social connection and institutional support” (p. 13).

Together, this meeting of relationally-driven resources with young people’s existing individual strengths helps YYAs stretch, expand, and become more powerful and savvy in the ways of the world, and how to navigate the majority world norms and processes that have, for YYAs of color and from low-income communities, systemically excluded people like them.

The model includes bi-directional associations among the key components. that have been supported by research. Stanton-Salazar and colleagues (Stanton-Salazar, 1997; Stanton-Salazar and Dornbush, 1995), for example, found that social capital was an *outcome* of grades: Grades predicted the number of school-based weak ties Mexican-American youth had, their number of non-kin weak ties, and the proportion of non-Mexican origin members in the adolescent’s social network.

The model connects organizational inputs such as the commitment of the organization and its partners to doing what is necessary to close educational and occupational equity gaps for YYAs of color and from low-income backgrounds, with organizational characteristics that build social capital such as collecting data on social capital to inform decisions, resources allocated for staff and volunteer



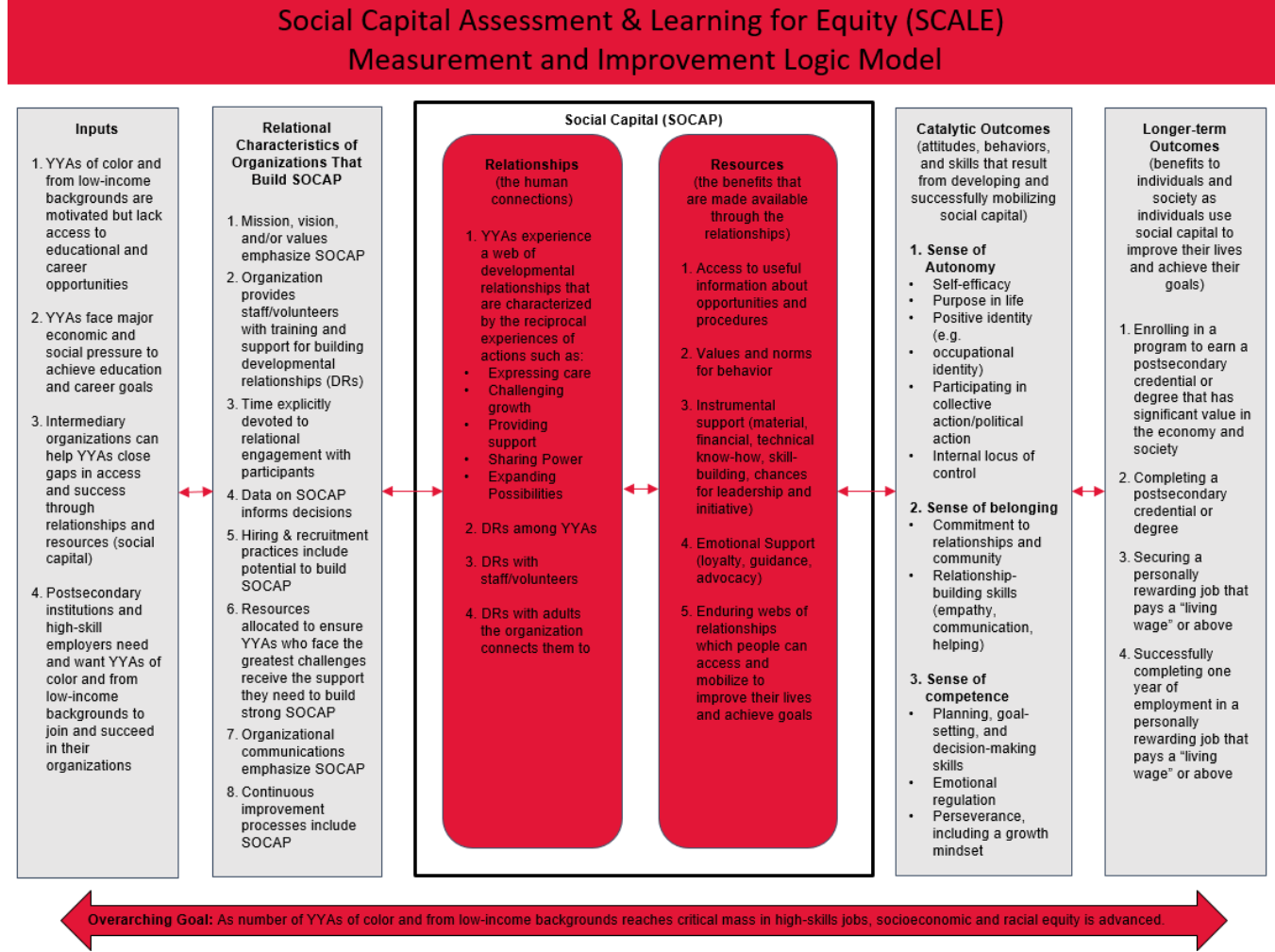
professional development on developmental relationship-building, alignment of partner organizations' vision, goals, and structures such as hiring practices with the intent of building social capital, and so on.

In turn, the organizational inputs and characteristics that create the conditions for building social capital should produce observable efforts by staff and volunteers, and other YYAs in the organization, to build key elements of developmental relationships with the YYAs in the organization's programs. Subsequently, this should lead to YYAs in the organization's programs reporting that they do in fact experience such developmental relationships, both within and beyond the organization.

As a result of experiencing those developmental relationships, there are relationally-based outcomes upon or within the near-term of YYA's exit from the organization or program. These include autonomy, sense of belonging, and competence. It is these relationally-driven outcomes which in turn facilitate the achievement of important educational and occupational outcomes later (1-3 years after existing the organization or program). These outcomes are more proximal to ultimate outcomes than are developmental relationships and resources. We call them *catalytic* outcomes, because, much like a catalyst in a chemical reaction, when a YYA experiences the outcomes of autonomy, belonging, and competence, their chance is strengthened and speeded up for achieving the ultimate outcomes of enrolling in and completing post-secondary education, and securing a living wage job and staying in it for at least one-year post-program.



Figure 1. Search Institute’s SCALE Measurement and Improvement Logic Model



Organizational Inputs and Characteristics that Build Social Capital

The indicators of the first components of the model--organizational inputs and characteristics of organizations that build social capital--have grown out of Search Institute’s current and previous research-practice partnerships over the last decade with a variety of schools, organizations, and coalitions serving YYAs. These components of the model suggest that programs serving YYAs can succeed and build social capital among the youth they serve by intentionally and effectively incorporating specific inputs and investments to support relationship-building processes in their program. Programs may accomplish this through a number of means including allocating resources for relational skills and other relevant staff development and training for both staff and program participants, and materials used throughout the program, and ensuring that the organization reflects a relational mindset and commitment to inclusion and equity in its program goals, vision, values, and structure. For the organization or program to be an effective context for nurturing occupationally- and educationally-relevant developmental relationships, those relationship-building processes need to be explicit and intentional, and exhibited in practices such as data-based planning, staff recognition and celebration, communications, hiring practices, and other human resources and organization policies.

Finally, the organization, for all its rhetorical commitments, must allocate the necessary *time* for truly developmental relationships to be seeded and nurtured, between its staff and volunteers and the YYAs in the program, and among the young people themselves. Few organizations would fail to endorse the



ideal of building strong relationships. But the challenge of structurally ensuring the time for that to happen in genuine and impactful ways is just as common as is the support to do it, which is why there is so often, as the youth-serving organizations we work with themselves admit, a gap between these relational intentions and what actually happens, despite best efforts (Pekel, 2019).

Social Capital: Building Webs of Developmental Relationships and Resources

As defined above, the social capital component of the model is conceptualized as both a resulting web of developmental relationships, and education- and occupation-relevant resources which are accessible through these relationships. It is through staff/volunteers, and other YYAs engaging in specific developmental relationship-building practices (such as expressing care, challenging growth, providing support, etc.) that YYAs are able to enhance or strengthen their web of relationships and access varying forms of relevant resources.

As we suggested earlier, the literature often reflects an attempt to distinguish relationships from resources, and label one as social capital and the other not. We distinguish them in our logic model but define both as social capital, because in real life, relationships and resources are not particularly separable, but neither are they exactly the same thing. They are each the sides of the same coin. The distinction is subtle, but important. The “relationships” column in the model is about **what a YYA’s peers, near-peers, and other adults do, their actions**, to create, strengthen, and maintain a developmentally-influential relationship with that YYA. The “resources” column is about the **benefits the YYA feels** they have “in” or because of that relationship. It is entirely possible, for example, that a given adult in a program is offering new information or leads on opportunities to a YYA, but that YYA might not understand the information or use the leads to expand their opportunities, so in that sense, it is not much of a resource.

The logic model assumes that programs may enhance both relationships and resources, that is, social capital, at both the individual and community levels.

Individual Social Capital

Individual social capital tends to focus on individuals and the relationships between individuals within a social network (Lin, 1999). A high level of individual social capital is equivalent to having a large number of quality relationships with individuals who have access to valuable and diverse resources (Van der Gaag & Snijders, 2005). The resources provided by relationships can come in many tangible and intangible forms such as connections through networks (e.g., job referral from a friend of a friend) and forms of social support including emotional (e.g., support from a close family member or friend during a difficult life transition), instrumental (e.g., review resume or job application, provide financial help) or informational support (e.g., job opening). Jackson (2019b), for example, argues that the key way that social capital reduces inequities is by providing people access to information—about colleges, jobs, housing, etc.—that their existing connections don’t have.

Community Social Capital

Social capital can also be accessed at a group or community level. Community level social capital may focus on a specific social group such as an organization and how this group is able to access social capital either from relationships of members *within* the organization or through relationships with individuals or other social groups *outside* of the organization (Payne, Moore, Griffis, & Autry, 2011). At the community level, social capital is typically conceptualized as a way to acquire both individual and collective resources (Bhandari & Yasunobu, 2009). Resources at this level may include similar resources at the individual level (i.e., connections and social support) as well as resources typically acquired at the community level such as social cohesion and inclusion (e.g., group membership and belonging), collective action, and empowerment (e.g., political action).



There are a variety of ways that programs may strengthen both individual and community-level social capital. At the individual level, a program may create opportunities for individuals to broaden their network by providing opportunities for new relationships to form and for existing relationships to flourish and become closer. By enhancing program participant's web of developmental relationships, it is likely that program participants will also have access to more resources such as connections to others (e.g., connections to potential employers) and forms of social support (e.g., emotional, instrumental, and informational) all of which may contribute to obtaining a postsecondary education and/or an employment opportunity. At the community level, program participants may feel a sense of group belonging and/or inclusion by being a part of a cohort of individuals who all belong to the same program or organization. Due to membership of the program and/or organization, individuals may build relationships with other social groups (e.g., a college or employer) associated with the program as well as past participants of the program (i.e., alumni). Thus, program participants may have access to resources commonly associated with individual-level social capital (e.g., connections, social support), but also community-level social capital such as greater group inclusion and solidarity, collective action, and empowerment.

Catalytic Outcomes by Exit from the Organization or Program

In order to attain ultimate outcomes, the model names several outcomes to which the developmental relationships and resources contribute, and which act as catalysts that more proximally and directly affect whether youth reach the ultimate outcomes. These catalytic outcomes draw from the self-determination theory of human motivation, which describes three fundamental needs that influence human behavior, the need for autonomy, belonging, and competence (Ryan & Deci, 2000). Developmental relationships, characterized by support, trust, empowerment, etc., help provide the emotional and instrumental resources that contribute to youth developing key near-term outcomes:

- A sense of autonomy (self-efficacy, sense of purpose, a more well-developed sense of what they want to do with their lives, including a sharper occupational identity, internal locus of control, and the capacity to engage in collective or group action for both personal and community betterment);
- A sense of belonging (reflected in a commitment to relationships with others and to contributing to broader groups and community, as well as critical relationship-building skills such as empathy, communication, and helping dispositions and skills, all of which attract others to provide help and supports); and
- A sense of competence (including skills such as planning, goal-setting, and decision-making skills, the capacity to emotionally regulate themselves, and the dispositions and skills to persevere in the face of adversity and challenge, including a growth mindset).

Following the language used by Dill and Ozer (2019), the resources YYAs accrue through developmental relationships can broadly be described as social support (generally but not exclusively, help with day to day issues) and social leverage resources (emphasis more on help getting ahead or with social mobility). YYAs need to experience both kinds of relationally-based resources to move toward the catalytic outcomes of autonomy, belonging, and competence.

As noted above, emotional support is reflected in feeling reciprocal trust with others in their networks, and having positive values such as responsibility and honesty reinforced through those relationships. Instrumental support may include being helped to solve problems, being provided financial help, and being given information and communications that help with educational and occupational goals.



The bi-directionality of the model shows how experiencing both kinds of support promotes the catalytic outcomes, but those catalytic outcomes also promote greater likelihood of YYAs accruing even more resources, because all of the autonomy, belonging, and competence indicators themselves facilitate cultivating new relationships and nurturing and strengthening existing ones, which collectively enhances the odds of YYAs achieving educational and occupational goals. For example, communication skills, empathy and listening skills, being able to work in teams and solve conflicts peacefully, and emotional self-regulation skills present a YYA as mature, other-oriented, and unselfish, all characteristics valued by employers and co-workers, which are key to rising socioeconomic prospects.

In the same way, emotional and instrumental resources help YYAs develop the catalytic outcomes of planning and decision-making skills, and a sense of self-efficacy and purpose in life, all of which are important contributors to feeling confident to achieve educationally and occupationally, have a sense of direction and ultimate goals, and creating and maintaining an overall roadmap for pursuing those goals. The information and communication YYAs' network members provide that orients them to norms and procedures for how to act in new settings and with new people who can help them advance is also an important resource for social leverage. Overall, through their program experiences, YYAs should feel empowered to both achieve individual goals and contribute as members of the wider community, which may also entail participation in collective or political action to better the community and/or the groups of which they are a part.

An important part of identity for the SCALE project, included as a near-term, catalytic outcome that is critical for social leverage or mobility, is "occupational identity," defined as "young people's vision of their future selves in the workplace, what they like to do, what they believe they are skilled at, and where they feel they belong" (Bill & Melinda Gates Foundation, 2020b, p. 4). Although interviews conducted with youth for the Gates Foundation found the term itself was not very effective, "occupational identity" encompasses all the developmental processes of exploring interests, developing skills, and building a picture of oneself that lead to youth generating dreams for the future and making plans for pursuing them, including adapting and adjusting as life realities, both helps and hindrances, become more obvious.

In a previous stream of research, Search Institute has used the shorthand term "sparks" to refer to this intersection of interests and skills that expresses to the world what the internal essence of a youth is, the spark being metaphorically the fire that lights their motivational fuse, including helping them persevere through challenge and setback (Benson & Scales, 2009). Critically for the SCALE project, and the emphasis on developmental relationships as core components of social capital, having sparks, by themselves, are not enough to help youth thrive, that is, become the best they can be, not just do okay. To be thriving, youth need both sparks and people who support them in developing and using their sparks in ways that benefit the youth and the world around them.

Search studies have shown that youth who can identify their sparks and who have a strong web of relationships supporting and nurturing those aspects of identity are much more likely than youth who don't to have a high level of a sense of purpose and hope for the future, engagement and hard work at school, positive ethnic identity, a belief it is important to help others and work to correct social inequities, and a belief it is important for them to be involved in community issues (Scales, Benson, & Roehlkepartain, 2011; Scales, Roehlkepartain, & Benson, 2010). Thus, one of the most important contributions developmental relationships and resources make is to help youth identify and nurture those sparks that give shape to youths' possibilities for a life path that is productive, relationally rewarding, and meaningful, including entry to "good" jobs and careers (see more on "good" jobs below).



Longer-Term Outcomes

The final component of the model is outcomes to be achieved some time after exiting the organization or program (we envision these within a 1-3-year time frame). Outcomes are the ultimate goals of the program or organization.

The ultimate outcomes listed in Figure 1 are about individual youth, and the role of developmental relationships and resources in strengthening their educational and occupational trajectories. Based on this model, it is hypothesized that the culmination of a stronger web of developmental relationships with access to various resources and leading to the proximal, catalytic outcomes is likely to contribute to YYA's longer-term ability and opportunity to secure and thrive in a postsecondary education and/or employment opportunity. The logic model posits that the social capital indicated by developmental relationships and those broad categories of resources helps all youth, but especially youth of color and from low-income households, attain the near-term outcomes of autonomy, belonging, and competence, which more proximally lead to the ultimate outcome of enhancing education and employment opportunities.

Advancing Socioeconomic and Racial Equity

The entire social capital logic model is depicted as resting upon the foundation of the broader societal context in which individuals strive to thrive. Thus, Figure 1 suggests that all of the components of the model, working together (organizational inputs and characteristics of a commitment to building social capital, the experienced social capital of developmental relationships and resources, the catalytic and longer-term ultimate outcomes) both are rooted in current levels of, and have the potential to contribute to advancing higher levels of socioeconomic and racial equity, as programs help remove barriers to key relationships and resources needed to succeed in higher education and/or an employment environment.

Placing socioeconomic and racial/ethnic equity in this foundational role is intended to acknowledge that the success of any program for the advancement of YYAs of color and from low-income backgrounds is influenced by where norms, institutions, communities, states, and the nation currently are in the ongoing struggle for equality and equity under the law, and in unwritten social interaction. It recognizes that, although there has been notable progress in the nearly 70 years since *Brown v Board of Education* attempted to stop racial segregation of schools, racism and discrimination remain powerful facts of life for YYAs of color, who are as a result then disproportionately represented among the poor and economically struggling. Programs for YYAs that do have the explicit commitment to building their social capital--the relationships and resources they need not just to survive but to thrive--will be contributing to the advancement of higher levels of socioeconomic and racial/ethnic equity.

This is particularly so if the resources youth realize, including social support (especially instrumental support) and social leverage (which may include collective action, and empowerment and political action), are explicitly intended to not only provide "access" to opportunities denied to historically marginalized communities, but also to help transform those institutions, systems, norms, and policies such that the success of YYAs of color and from low-income communities becomes a central priority.

For example, African American and Latinx youth focus group participants have described some of the skills needed for "striving in order to thrive" to include perseverance, the ability to engage in struggle, patience, overcoming obstacles, and not being held back by others or oneself (Goodwin-Simon Strategic Research, 2019). These kinds of skills might be included among core catalytic outcomes measured. The ultimate outcome of thriving, as defined by those African American and Latinx youth



participants may be, in terms of measurement time required, beyond the capacity of the SCALE project to assess, as it includes longer-term markers (i.e., beyond 1 year) such as financial stability, home ownership, being able to give back, being in careers they love and find fulfilling, and that allow them to live their vision of a good life.

But in the shorter-term, they described features of a **good job** that are aspects of the employment outcome that are more immediately measurable: A good job is one you enjoy; that has good benefits; where there are friendly coworkers; that enables you to make enough money; where you are respected; and that has opportunities for growth (Goodwin-Simon Strategic Research, 2019). These comments from youth are well-aligned with more objective indicators of a “high-quality” job established for a Brookings-Child Trends analysis of job pathways for young adults: Wages 400% or more of the federal poverty line; fringe benefits that include paid sick leave or vacation, a retirement plan, and medical insurance; an optimal number of weekly work hours between 31-50 hours; and high job satisfaction, defined as liking their job very much (Ross et al., 2018).

Social Capital as an Outcome

Depending on how social capital is theorized, there is also evidence that social capital can be an outcome, and not only something that contributes to outcomes such as making progress toward a postsecondary credential or degree. It is instructive to dwell for a moment on this latter role, social capital as an *outcome* of something that is more often thought of as an outcome itself, such as grades or obtaining a certificate or skill credential. The social capital literature is vast, but for both conceptual and methodological reasons (see Grootaert et al., 2004, for example), social capital is rarely examined as an outcome. More often, it is conceptualized as an input or a variable that predicts or leads to an outcome.

However, the broader literature on positive youth development, beyond the literature explicitly naming “social capital,” frequently demonstrates the recursive, bi-directional cause and effect connection among variables that are, for convenience’s sake, assigned to predictor and outcome roles. Repeatedly, studies show there is a virtuous cycle in which positive relationships help bring about individual strengths and contextual benefits and resources, which subsequently further increase the youth’s odds of experiencing more positive relationships, resulting in enhanced individual and contextual assets, and on and on (Benson, Scales, Hamilton, & Sesma, 2006; J. V. Lerner, et al., 2013).

Individual and social assets, which are forms of social capital whether called that or not, also tend to be correlated with each other. For example, youth who experience strong relational support from parents and other adults are also likely to experience other forms of social capital such as positive adult role models, monitoring in the home, school, and neighborhood settings, and constructive engagement in activities such as extracurricular programs. Similarly, youth with higher levels of social competencies are also more likely to have other internal assets such as a positive identity and a commitment to learning (Benson et al., 2006; Benson, Scales, & Syvertsen, 2011).

From a practical standpoint, what these intercorrelations and the bi-directional association of social capital and outcomes mean is that programs, policies, and other interventions that can positively affect *any* of the variables in the SCALE logic model are likely to also affect *other* variables in the model, and to thereby strengthen the likelihood of the virtuous cycle of positive inputs fostering positive outcomes which foster still more positive inputs, in the same way that students who are engaged at school attract more teacher investment in them, which enhances engagement and achievement, which attracts still more positive teacher response (Wang, Degol, & Henry, 2019). Positive impact anywhere in the chain thus has an increased chance of activating positive developmental cascades. What this means is that



strengthening one relationship so that it is truly developmental not only increases the chance of youth attracting more of the key resources in the logic model; it also increases the chances of *other* relationships becoming stronger, activating their own likelihood of providing further resources, all of which multiplies the chance of youth attaining desired outcomes.

Social Capital is Associated with Positive Youth Outcomes

Whether defined as relationships or resources, social capital matters because it generally has been linked to positive outcomes for children, youth, and young adults. Although social capital is critical to enhancing the well-being for all young people, it may be particularly valuable for young people of color and from low-income communities. Many intersecting factors have led to disparities and the underrepresentation of youth and young adults of color in postsecondary education and employment pathways (Hossain & Bloom, 2015; Reid & More, 2008; Snyder & Dillow, 2012). These factors include things such as implicit bias and structural racism and few high-quality education opportunities (Burchinal et al., 2011; Levy, Heissel, Richeson, & Adam, 2016). For example, young people of color are more likely to suffer from harsh school discipline policies (Toldson, McGee, & Lemmons, 2013; Lewin, 2012), experience more race-based stressors such as stereotype threat and perceived discrimination (Levy et al., 2016), and experience greater employer discrimination (Pager, 2007; Pager & Shepherd, 2008). These barriers are likely to contribute to disparities in postsecondary outcomes and may place young people on poor life trajectories – contributing to income inequality and poor health outcomes later in life (Diette, Goldsmith, Hamilton, & Darity, 2018; Gamoran, 2015; Ho & Wei, 2011).

Social capital, however, may play a critical role in promoting education and employment attainment for young people of color. Social capital and positive relationships have been shown to be associated with a range of positive postsecondary outcomes including greater education attainment (e.g., college retention, higher GPA), full-time employment, and promotional opportunities (Dubois et al., 2011; Ghosh & Reio, 2013; Kim & Schneider, 2005; Stanton-Salazar, 2011). Experiencing social capital, however, does not always bring about individual or collective good (Rothon et al., 2012). Gang membership, for example, is a complex case in point. Individual members in a gang may gain solidarity, trust, protection, and a sense of inclusion (positive outcomes) from gang membership. The gang might also bring positives to the wider community, as when gangs help in fostering racial/ethnic pride, or help to feed the homeless. But the way the gang survives, given a systemic lack of mainstream living wage jobs in its community, typically also involves committing serious criminal behaviors including drug trafficking, armed robbery, extortion, and violence (negative outcomes for both individuals and the community). More consistently, however, social capital (regardless of how it has been conceptualized) is associated with a variety of positive health, education, employment, psychological, and social-emotional outcomes.

Positive Outcomes of Social Capital

Health and Well-being

Vynke et al. (2013) looked at eight studies examining social capital and adolescent health and found that half of the studies linked greater social capital in the form of indicators such as neighborhood social cohesion and social control, and parents' sense of community, to adolescents' better health and well-being. Sometimes, but not in all studies, social capital was the mechanism through which socioeconomic status was related to health, and sometimes it strengthened that association, such that social capital had greater benefit for youth from more low-income backgrounds.

De Clerq et al. (2012) conducted an interesting study in more than 600 communities with more than 10,000 adolescents in Belgium, examining individual and community social capitals' effect on adolescents' perceptions of their health and well-being. Community social capital (e.g., the level at which people can be trusted) predicted health better than individual social capital (e.g., youth



involvement in clubs or community organizations), although each was positive. Typically-observed differences in adolescents' perceived health and well-being by socioeconomic status, in which youth from lower-income backgrounds self-report worse health, "substantially narrow" (p. 202) in communities with an average level of community social capital. However, there were diminishing returns of social capital such that perceived health and well-being did not increase as much in communities once they had average levels, but increased community social capital in communities that were low in it predicted a considerable increase in perceived health and well-being. Furthermore, a meta-analysis of 37 studies examining social network interventions in relation to health behaviors and outcomes among young adults found that these types of interventions tended to yield positive health benefits in several domains including sexual health, substance use (e.g., smoking, alcohol), and general well-being (Hunter et al., 2019). Finally, Ferguson's (2006) review of 22 studies concluded that "of all the predictive factors associated with youth wellbeing, social capital—second only to poverty—has the highest influence on children's development and attainment of future outcomes" (p. 9).

Education

Dika and Singh (2002) used the National Educational Longitudinal Study of 1988 and its follow-up data collections to examine social capital and a variety of educational outcomes. Various indicators of family and community social capital (e.g., parent expectations, parent monitoring, how much parents know the parents of adolescents' friends, etc.) were linked to standardized test scores, GPA, effort expended on homework, truancy, and educational aspirations. Similarly, Crosnoe (2004) found that high school students who were close with their parents did 21% better in achievement if they also attended a school where they perceived strong student-teacher bonding. Students who were not close with their parents also benefited from strong student-teacher ties, but at a much weaker level: Their achievement was only 2% better. This relation was weaker for African Americans and stronger for Asians. Crosnoe interpreted the results as showing that close ties with parents, especially in a relationally strong school, may facilitate the transmission of instrumental resources such as parents' educational aspirations. Although this is good for the youth who have strong relationships with both parents and teachers, it shows how schools can act, not for resilience or compensation, but for "social reproduction," and can "actually widen various aspects of social inequality" (p. 277).

Al-Fadhli and Kerson (2010) found that family and religious social capital were the strongest predictors of college aspirations among African American adolescents, for both males and females, and that cultural social capital (e.g., the frequency of engaging in cultural events like concerts, sports, movies, and community forums) was linked to better future outlook and planning for males. The researchers commented that family and religious social capital were so closely associated in this African American sample, that they were "inseparable" (p. 386). Glanville et al. (2008) also concluded that religious attendance (a combination of worship and youth groups) promotes intergenerational closure (parents knowing their child's friends, and the parents of those friends), friendship networks with higher educational resources and norms, and extracurricular participation. Those indicators of social capital accounted for a "small part" of the influence of religious involvement on outcomes such as GPA, dropout, and school attachment.

Postsecondary Education

Kim and Schneider (2005) studied how parent support affects adolescents' transition to postsecondary education. They found that alignment of parents' and student's educational goals increases the odds of students attending postsecondary education the year after high school graduation. There were different effects of differing kinds of parent social capital, depending on parents' educational level. For example, active parent participation in high school guidance programs for postsecondary education was more beneficial to students whose parents had less than a college education (supporting Stanton-Salazar's (2011) theoretical framing and empirical findings, that social capital has a greater influence for lower-



income families). However, another social capital indicator, the frequency of college visits families made, had a greater effect on postsecondary attendance only for students whose parents had more than a high school diploma.

Among young adults, several studies have shown that forms of social capital including strong relationships with institutional agents such as professors, school staff, and counselors are essential to postsecondary success. Lund et al. (2019), for example, found that college students who had at least one informal or formal mentor had significantly stronger sense of purpose for their lives than students who did not have mentors. Importantly, however, the *number* of mentors was not associated with purpose, but the *quality* of the mentoring relationship was, with students who had a high-quality mentoring relationship (authentic, engaged, empowering) having the strongest sense of purpose.

Dowd et al. (2013) conducted a qualitative study of 10 students starting at a community college who transitioned to a 4-year institution and found that institutional agents were key in helping students navigate the transition to college and in helping them "achieve their full academic potential" (p. 21). A couple of studies found that the relationships that students of color had with college instructors (e.g., frequency of interactions) were associated with student learning including higher GPAs (Lundberg & Schreiner, 2004; Tovar, 2015). Similarly, Bordes-Edgar et al., (2011) conducted a 4.5-year follow-up study examining Latino/a students' academic persistence and found that support from faculty and college staff was related to retention and degree completion. These studies illustrate that social capital resulting from positive relationships formed within a postsecondary environment can lead to positive postsecondary outcomes among youth and young adults.

Employment

Social networks are valuable for providing resources such as job referrals, information about job openings, and access to hiring managers to help young people secure employment (Brown, Setren, & Topa, 2016). For example, a study conducted among 136 homeless youth and young adults (aged 13-24) found that receiving emotional resources from street-peers increased the likelihood of youth to engage in employment services (Barman-Adhikari & Rice, 2014). Another study found that informal mentoring relationships during adolescence were positively related to the likelihood of securing full-time employment in young adulthood (McDonald et al., 2007). McDonald (2015) more recently analyzed data from the National Longitudinal Survey of Youth and found young and older adults (ages 29-43) who obtained their job through their social network had higher wages relative to adults who used formal job searching techniques. Strong relationships with individuals in one's social network are also valuable, as one study found that strong social ties helped young adults find their first job and these contacts were especially useful during times of unemployment (Kramarz & Skans, 2014).

Social Capital and Historically Marginalized Youth and Young Adults

Overall, various forms of individual, family, community, and cultural capital have been shown to have positive effects on a range of outcomes for adolescents and young adults, particularly on educational engagement, performance, and achievement, and employment, wages, and benefits. These positive effects are not observed in all studies, but they are in most, across a diversity of ways in which the social capital indicators are measured. Yet, despite research highlighting the importance of social capital, YYAs of color and youth from low-income communities tend to be less likely to report having key developmental relationships in their lives (Erickson et al., 2009; Putnam, 2015).

For example, one study found that Latinx students received little guidance from college staff and faculty regarding choice of degree and planning for career and postgraduate options (Rios-Aguilar & Deil-Amen, 2012). Similarly, another study found that high school English-language learners were less likely to report school personnel as a part of their social support system (Stanton-Salazar & Dornbusch,



1995). Students of color and first-generation college students also tend to have fewer and less varied relationships with individuals relevant to their college and professional development (Nichols & Islas, 2016; Rios-Aguilar & Deil-Amen, 2012). Fitzpatrick and colleagues (2013) found that, as early as kindergarten, children perceived by their teachers as disadvantaged were 32% less likely to report positive relationships with their teachers several years later when they were in the 4th grade. Pianta and colleagues (2012) argued that the underlying problem of unequal achievement among low-income students is not fundamentally a problem of student intelligence, family values about education, or even, for the most part, curriculum. Rather, it lies in those students' needs "to feel competent, positively related to others, and autonomous" (p. 372), the very outcomes our logic model describes as the catalytic outcomes likely from developmental relationships and the emotional and instrumental resources they bring. Fortunately, programming that promotes relationship-building for YYAs of color and from low-income backgrounds has the potential to increase social capital by facilitating positive relationships that contribute to greater future education and employment opportunities.

These considerations of the importance of social capital for historically marginalized youth lead to the need to address weaknesses in conceptualization and measurement of social capital as it pertains to historically marginalized youth. Certainly, one of the most common critiques of previous conceptions of social capital, notably how it was framed by Coleman (1988) and scholars who followed that framing, is that it was a "top-down" idea that ignored both the agency that youth themselves have in shaping their own social capital, and the role of relationships and resources *outside the family* in forming trajectories of educational and occupational achievement, especially for youth from historically marginalized communities. These weaknesses in the literature and measurement are especially pertinent to address for the SCALE project, because young adults are the primary participants in SCALE partners' programs, and because young adults typically have both more agency than adolescents, and less dependence on parents and family for the resources needed to get ahead (Scales, Benson, Oesterle, Hill, Hawkins, & Pashak, 2015). These weaknesses are so prevalent in the literature because, although the thinking of Bourdieu (1986), and Putnam (2000) offered ideas about social capital that departed from some of Coleman's (among other ways, by recognizing the importance of *community* social capital), it is Coleman's conceptualizations, and the measurement resulting from those ideas, that have dominated social capital research in the last few decades.

Bonding, Bridging, and Linking Social Capital

As a result, only a minority of social capital researchers have explicitly acknowledged the agentic role that YYAs themselves have, that they are not simply re-actors, but actors who influence their own paths, and relatively few explicitly address the need for systemic changes to help them achieve more equitable educational and economic opportunities. More researchers than that include types of social capital beyond the "bonding" social capital of the kind Coleman made central to his framework (e.g., strengthening group affiliation by passing on norms, expectations, and opportunities within groups already brought together by shared cultures of race, ethnicity, education, and social class; see Table 1 for types of social capital). But most still do not explicitly note that bonding capital, by itself, cannot serve to bring greater equity of opportunity to those who experience not only current racism, sexism, and discrimination, but, as in the case particularly of African American and Native American YYAs, centuries of systemic exclusion and social injustice. The limits of "bonding" social capital are even more clear for young people whose social locations are within the intersection of multiple historically marginalized and bias-experiencing groups (e.g., simultaneously being poor, female, and a youth or young adult of color; gender nonconforming, and a youth or young adult of color; etc.).

Several researchers have described how bonding social capital, by strengthening ties among people who already are alike in important demographic ways, and who may already have strong ties (including family members, neighbors, close friends, and co-workers), can be a force for exclusion and limiting



access to success systems, rather than broadening and diversifying that access (see Grootaert et al., 2004). Flanagan et al. (2014), for example, defined bonding social capital as solidarity felt in tightly knit, homogeneous networks of people familiar with each other, in contrast with bridging social capital that refers to weaker ties among more heterogeneous persons and groups. Dika and Singh (2002) observed that the emphasis on bonding social capital, as well as “Problems in the conceptualization and measurement of social capital have resulted in a body of research that, except for a few studies, does not acknowledge differential access to social networks and social resources” (p. 46).

In short, social capital is not equitably distributed. This stark fact underscores the importance of the foundational, aspirational outcome in the logic model, advancing racial/ethnic and socioeconomic equity. Developmental relationships and key resources can help individual youth from historically marginalized communities better leverage their talents and interests to attain educational and occupational success. But generations of systemic racial/ethnic discrimination and injustice have created structural barriers to opportunity that cannot be overcome on a wide scale unless those relationships and resources also are contributing to broader changes in laws, policies, funding, and social norms that have created and perpetuated that inequity. There is, therefore, an intersection between individual and community social capital that is highly dependent for effectiveness on the broader context. Aldrich (2010) notes, for example, that in bouncing back from disasters, “communities with more trust, civic engagement, and stronger networks” recover more quickly than more “fragmented, isolated ones” (p. 4). But crucially, he underscores that social capital really only thrives for broader community change when residents feel effective as citizens and trust not just their neighbors but their representatives. Where suspicions and distrust of political and institutional leaders such as policymakers, banks, and police are high, then, social capital is harder to leverage.

To increase equity of opportunity that explicitly acknowledges this differential access to networks and resources, even the notion of “bridging” social capital, or connections across differing groups, does not suffice, since as Grootaert et al. (2004) note, “bridging” is often conceived of as being done among relative peers in terms of their social status, that is, horizontal connecting. Ultimately, social capital that helps historically marginalized youth succeed within a context of systemic exclusion, racism, sexism, and discrimination has to also include “linking” social capital, which World Bank researchers (Grootaert et al., 2004) saw as more “vertical” connection--resources being realized through relationships between unequals in power and domination, particularly with people in positions of authority.

Table 1. Types of Social Capital

Type	Definition
Bonding	Connections between people or groups are similar
Bridging	Connections between people or groups who are dissimilar
Linking	Connections between people or groups across power and status differences

Expanding on these notions, Dill and Ozer (2019) offer a useful update on the several kinds of social capital. They discuss how social support is capital that helps individuals get by or deal with daily issues, whereas social “leverage” is capital that helps people get ahead and access information and connections that advance their social mobility. Finally, and unusually in the literature, they explicitly describe “critical social capital,” which involves “fostering [people’s] political consciousness and positive racial identity to analyze, respond to, and address issues such as racism, police violence, and neighborhood violence in their schools and communities” (p. 3).

Lastly, most studies do not specifically look for assets in contexts of apparent disadvantage, but Ferguson (2006) notes that “numerous studies” (p. 9) find social capital in such “marginal areas or



ghettos,” as reflected by intra- and extra-familial social support networks and “elaborate systems of inter-familial bartering,” although these are often inadequate to overcome the deleterious effects of poverty, in part because social capital in lower-income communities tends to be “loose and fragmented.” Rabinowitz et al. (2020) is another example of the minority of studies acknowledging that youth living in neighborhoods of high poverty, crime, and disorganization may in fact also experience social capital in those settings. Using “pluralistic neighborhood theory,” they suggest that “disadvantaged and disordered communities may also possess assets and strengths that support youths’ positive development.” (p. 495). Such assets may include residents feeling a responsibility to protect YYAs from the high level of perceived risk on the streets, and common financial hardships promoting a reaching out among families facing financial hardship, to help each other.

Similarly, the presence of individual and social developmental assets, including strong relationships with family, peers, and other adults, has been documented internationally among youth who are victims of natural disasters or even living in refugee camps due to wars and armed conflict (Scales, Roehlkepartain, Wallace, Inselman, Stephenson, & Rodriguez, 2015). In the same way, a study of gang and non-gang urban youth and young adults found that of various kinds of individual and social capital studied (e.g., racial/ethnic identity, role models, positive family and peer relations, etc.), gang members had more of them than non-gang members did in 25% of the cases (Taylor et al., 2003). Finally, Goodwin-Simon Strategic Research group (2019), in focus groups with African American and Latinx youth across the country, found that youth may have skills that could be useful in a career, but they don’t necessarily recognize them as career-worthy skills, such as “finesse” or “hustle.”

These findings suggest that conceptualizations and measurement of social capital, especially when applied to YYAs from historically marginalized communities and/or living in contexts of “obvious” disorganization, must be more sensitive than is common to measuring the presence of less traditional and harder to document types of social capital. Those more hidden kinds of social capital relationships and resources might be overlooked in an effort to document and understand the environment of risk that those young people inhabit.

The logic model we have proposed is hospitable to all three major forms of social capital—bonding, bridging, and especially linking (or social support, social leverage, and critical social capital), and to identifying both indicators common in the literature as well as social capital indicators that are less well-represented but perhaps critically important in low-income communities. It is our hypothesis that opportunities for historically marginalized youth, those who do not have systemic economic, educational, occupational, and civic advantages, will be realized to the extent that *all* those forms of social capital can be strengthened.

Relationships are Critical, Especially When They are “Developmental”

Developmental Relationships Defined

To this point, we have described how important relationships are for YYAs to progress toward educational and occupational goals, but we have not yet fully defined *developmental* relationships. Beginning in 2013, Search Institute conducted a multi-year program of extensive literature reviews, focus groups, and studies on the role of relationships in positive development. The literature reviews cut across a wide variety of niches, from attachment research to peer programs, mentoring to student-teacher relationships and school climate, resilience, and social capital research. Eighteen focus groups with youth, parents, and youth workers provided more dynamic relationships insights that suggested the mechanisms for *how* strong relationships promote positive development. Our subsequent studies included national as well as local samples of youth, parents, and youth workers, with some samples specifically selected to examine relationships among families in highly stressful circumstances (detailed in Pekel et al., 2018).



Drawing on all those varied sources, we created and refined a new framework of developmental relationships. Drawing most specifically on self-determination theory (Ryan & Deci, 2000), we define developmental relationships as close connections through which YYAs discover who they are (their identity), cultivate abilities to shape their own lives (agency), and engage with and contribute to the world around them (connections and contributions to community).

Developmental relationships as so framed include but go beyond caring and provision of emotional support. Building most closely on the work of Li and Julian (2012), the institute’s developmental relationships framework names five interconnected elements, and specific actions within each, that define a developmental relationship (see Table 2 below).

Table 2. The Developmental Relationships Framework

Elements	Actions	Definitions
Express Care Show me that I matter to you.	Be dependable	Be someone I can trust.
	Listen	Really pay attention when we are together.
	Believe in me	Make me feel known and valued.
	Be warm	Show me you enjoy being with me.
Challenge Growth Push me to keep getting better.	Encourage	Praise me for my efforts and achievements.
	Expect my best	Expect me to live up to my potential.
	Stretch	Push me to go further.
	Hold me accountable	Insist I take responsibility for my actions.
Provide Support Help me complete tasks and achieve goals.	Reflect on failures	Help me learn from mistakes and setbacks.
	Navigate	Guide me through hard situations and systems.
	Empower	Build my confidence to take charge of my life.
	Advocate	Stand up for me when I need it.
Share Power Treat me with respect and give me a say.	Set boundaries	Put in place limits that keep me on track.
	Respect me	Take me seriously and treat me fairly.
	Include me	Involve me in decisions that affect me.
	Collaborate	Work with me to solve problems and reach goals.
Expand Possibilities Connect me with people and places that broaden my world.	Let me lead	Create opportunities for me to take action and lead.
	Inspire	Inspire me to see possibilities for my future.
	Broaden horizons	Expose me to new ideas, experiences, and places.
	Connect	Introduce me to people who can help me grow.

NOTE: Relationships are, by definition, bidirectional, with each person giving and receiving. So each person in a strong relationship both engages in and experiences each of these actions. However, for the purpose of clarity, this framework is expressed from the perspective of one young person.

In this framework, *expressing care* in a relationship requires actions that show YYAs that they matter. *Challenging growth* involves actions that push young people to keep improving. When adults and peers provide emotional and practical (instrumental) resources to help youth and young adults complete tasks and achieve goals, they are *providing support*. When adults and peers treat YYAs with respect and give them a say in the settings they are in (family, school, program, work, neighborhood, etc.), they are



sharing power. And finally, to *expand possibilities*, adults and peers connect YYAs with people, places, and ideas that broaden their worlds.

Developmental Relationships Embody and Promote Resource Access

Although rhetorically distinguishable for the sake of clearly identifying key features of developmentally-influential relationships, these five relational features are best understood as conceptually connected and overlapping to varying degrees with each other. Thus, for example, we have found in qualitative work (focus groups and interviews) that it is the overall relationship that youth experience, with these features of the relationship namable and describable, but not perceived as separate from each other (Scales et al., 2019). In another study, we found that students described developmental relationships with their teachers most often as experiencing expression of care plus one or more of the other elements (Sethi & Scales, 2020). In other words, those middle and high school students were essentially concluding whether or not teachers cared for and about them, but the relationship needed to involve much more than just expressions of care for them to draw that conclusion and feel that teachers “had their back.” Similarly, in another study, young adults of color and from low-income backgrounds described “caring” in terms of consistency and commitment, stability, providing multiple kinds of support, and generally trusting that those caring individuals will “do right by them” (Center for Promise, 2015, p. 20).

Our logic model (Figure 1, above) suggests that the elements of developmental relationship that YYAs experience with (in a program setting) other youth and young adults, program staff and volunteers, and through them, other adults beyond the program, potentially may contribute to YYAs in a program experiencing the resources listed as catalytic outcomes by their exit from the program. Each of the five elements may have a part in influencing all of the resources listed, but each also may have a stronger relevance for some of the social capital resources. For example, how much YYAs experience feeling cared for and about in a program likely contributes a good deal to their sense of belonging, and their experience of being challenged to grow in areas of personal interest, and provided support to do so, may be especially important in their developing the resource of an internal compass or locus of control. In the same way, expanding YYAs possibilities may contribute more to their having more relational resources for social leverage than feeling cared for or about would.

Even in early studies long before the developmental relationships framework was created, we had found that strong relationships promoted thriving and reduced risk behaviors among youth by strengthening the kinds of resources we named as social capital in our logic model in Figure 1. For example, Scales, Benson, and Mannes (2006) followed a sample of middle school students through high school, finding that time spent in youth programs, religious community, and volunteering when students were in sixth to eighth grades (experiencing strong adult and peer relationships) was significantly related to their experience of support, empowerment, and boundary-setting assets (resources) from nonfamily adults when they were in the seventh to ninth grades. In turn, those developmental resources experienced in the seventh to ninth grades were significantly related to levels of risk behaviors and thriving when students were in the 10th to 12th grades, even after controlling for earlier levels of risk and thriving.

The developmental relationships framework has built on research such as that, but has also sharpened understanding of the way strong relationships raise the odds of YYAs having the social-emotional and instrumental resources they need for success, and provided more comprehensive measurement of those processes. In our research, we have found that students with higher levels of developmental relationships with teachers feel more connected to school, are more motivated to work hard, and have better GPAs, than students whose relationships with teachers do not capture all those elements of developmental relationships (Scales et al., 2019; Scales et al., 2020; Sethi & Scales, 2020). And when



students' experience of developmental relationships increases over the school year, they do better on those educational outcomes than students whose relationships with teachers stay about the same or get worse (Scales et al., 2019).

Developmental Relationships and Family and Youth Adversity

These associations are just as strong, and sometimes stronger, for students from lower-income backgrounds (eligible for free and reduced price meals) as for students from more affluent backgrounds. Critically, however, we have also found that students from lower-income backgrounds, especially those who also *feel financially strained*, are less likely to experience high-quality developmental relationships, and more likely to say those relationships with teachers get worse as the school year goes on. One contributor to this pattern is suggested by a recent study of a racially, ethnically, and socioeconomically diverse sample of 4-9 year olds (Heberle & Carter, 2020). Socioeconomically disadvantaged children who *felt* more financially and materially disadvantaged had more parent-reported attention problems and greater anxious-depressive symptoms, all of which certainly could inhibit their likelihood of attracting developmental relationships from teachers and other nonfamily adults as they move through school.

In other studies, we have found that families experiencing high stress, but who also have strong developmental relationships with their children, have youth who are many times more likely than youth in stressed families, but who do not have those developmental relationships, to manage their emotions well, take personal responsibility for their actions, be good at making and keeping plans, and have a sense of purpose in life (Syvertsen, Roehlkepartain, & Wu, 2016). These are all social capital resources that help promote a trajectory for educational and occupational success, despite adversity. Similarly, if youth in out-of-school time programs had stronger developmental relationships with their program leaders, they were twice as likely post-program, as youth without those good relationships with leaders, to stretch themselves to reach goals, be able to set goals, have a sense of social responsibility, and be effective team members (Syvertsen, Wu, & Sullivan, 2018).

An additional institute study with youth and young adults in the Opportunity Reboot program, that has a strong mentoring feature as part of its core resources, also found that participants, contrasted with comparison samples not in the program, had stronger positive identities, social-emotional competencies, and ability to navigate educational and occupational systems. Not surprisingly then, they also tended to have better employment rates, and were successful at increasing their wages, although the percentage attaining a living wage was still small, about 1 in 7 (Syvertsen, Roskopf, Wu, Sethi, & Chamberlain, 2020).

Adding strength to these findings are the results of a Brookings-Child Trends analysis of what predicts high-quality jobs among disadvantaged 29 year olds (e.g., low-income, from less-educated family backgrounds). They were significantly more likely to have high-quality jobs at age 29 if they participated in a *relationship-based* Career and Technical Education program as teenagers. According to the authors, "Participating in a cooperative education, internship, apprenticeship, or mentorship program in high school is related to higher subsequent job quality. The relationships built between participants and adults set these programs apart from other career-related high school activities, like job shadowing, career majors, and tech prep, which we find are not related to job quality" (Ross et al., 2018, p. 4). Even though the researchers were not able to measure the quality of the relationships, they noted that the positive effects of even those more superficially-measured relationship-based career education and training programs were striking, lasting for at least 10 years, even after controlling for cognitive test scores and later work experience.



So, whether the context is family, school, or youth program, the research has consistently shown that the social capital of developmental relationships, especially when featuring the five elements shown in Table 2, are linked to the kinds of social capital resources depicted in Figure 1, our SCALE logic model, resources that increase all YYA's odds of educational and occupational success, but may be even more critical for the success of historically marginalized youth.

The Relevance of Developmental Relationships for Historically Marginalized Youth

The framework and measures of developmental relationships have a special relevance for the SCALE project. They describe more comprehensive targets for and assessments of “positive” or “supportive” relationships than is typical in the relationships literature or most interventions that aim to improve YYA-adult (or YYAs with peers) relationships. The evidence also suggests their value in promoting positive outcomes for all young people, and particularly for those from lower-income backgrounds. The elements of developmental relationships explicitly name actions adults and YYAs' peers must take, from providing opportunities to connecting young people with others who can bring new resources to them, that together represent the kind of “linking” social capital or social “leverage” capital that research has shown is so necessary to deal effectively with the realities of inequitable access to power and social networks that raise the odds of educational, occupational, and economic success.

Our research also has shown that, across contexts, Express Care (especially from parents, siblings, and friends) and Challenge Growth (especially from parents, teachers, and youth program leaders) are the most common elements of developmental relationships young people report, although even they are typically at just “okay” and not “excellent” levels. But, our research also consistently shows that young people are much less likely to experience Provide Support, and especially Share Power and Expand Possibilities. These three relationship elements arguably are even more important in providing the “linking” and social “leverage” capital that may be particularly valuable in helping youth of color and youth from low-income communities achieve successful trajectories despite historical marginalization and current systemic obstacles. In fact, another of our studies found that adding in Provide Support, Share Power, and Expand Possibilities resulted in more significant impact on students' motivation, sense of belonging at school, and GPA, compared to the impact when they experienced only Express Care and Challenge Growth (Scales et al., 2020). Provide Support, Share Power, and Expand Possibilities may have similar value-add for the young adults who make up the majority of SCALE partner program participants.

Two of our findings from studies of families and student-teacher relationships add an even more sobering underscore to these research results. Parents who feel financially strained are less likely than parents who feel less strained to say they provide high levels of developmental relationships for their children (Pekel et al., 2015). And as mentioned earlier, students eligible for free and reduced price meals and who also feel financially strained are less likely to report high levels of developmental relationships either at the beginning or end of the school year (Scales et al., 2019). Moreover, *even though developmental relationships with teachers tend to decline for all groups of students, they decline over the school year significantly more for those lower-income students.*

The conclusions are clear: Developmental relationships contribute to young people having resources that are key to successful outcomes. But average levels of developmental relationships are just so-so, the aspects of relationships that might be most important for historically marginalized YYAs are even less common, especially for low-income young people, and all the elements of developmental relationships decline over time more for those from low-income backgrounds, in the absence of special efforts to strengthen relationships. For all these reasons, developmental relationships and the resources they can help produce are the key social capital elements of our logic model and measurement suggestions (see below for details on measurement).



Organizations Serving YYAs may Enhance Social Capital

Organizations serving YYAs are uniquely positioned to help enhance the social capital of young persons of color and from low-income communities. As YYAs participate in social groups outside of their family and peers, they have access to influential relationships with individuals of relatively high-status who may be positioned to provide forms of social and instrumental support. Stanton-Salazar (2011) has termed these individuals as “institutional agents.” Another way program staff may leverage their relationships with young persons of color is through brokering – providing learning opportunities and connections to individuals and institutions that help assist them in meeting their goals (Ching, Santo, Hoardley, & Pepler, 2016). Parents often act as brokers by seeking out educational opportunities for their children through activities such as contacting professionals and connecting with other parents (Barron, Martin, Takeuchi, & Fithian, 2009). Brokers, however, can also be key individuals within organizations such as teachers and youth-serving program staff (Ching et al., 2016). Studies have shown that institutional agents and brokers are critical to supporting successful transitions to campus life for first-year college students from diverse and low-income backgrounds (Dowd, Pak, & Bensimon, 2013; Museus & Neville, 2012).

These institutions also have the opportunity to empower youth. Institutional agents may do so by mobilizing or directly providing resources and support to youth that enable them to subsequently navigate or exert control over the social environment (Stanton-Salazar, 2011). For example, Dill and Ozer (2019) conducted a qualitative interview study of 25 African American and Latinx 12-20 year olds in East Oakland, shedding more light than most studies on *how* social capital gets built in a youth organization setting serving lower-income youth of color. Thematic analysis showed that the organization mobilized *social support* (i.e., to help youth get by) in several key ways: serve as nonfamilial role models; provide culturally relevant relationships with youth of color; provide loving accountability (i.e., caring but demanding); and support youths’ goal attainment. The organizational relationships also activated *social leverage* (i.e., to help youth get ahead) by: providing access to academic and educational resources; providing access to employment opportunities; enhancing youths’ self-esteem; and enhancing youths’ future orientation. The researchers noted, too, that some youth have only weak ties to the youth organization, dropping in to do just one activity like basketball, which might not be enough to help overcome stronger ties reflected in their “street” relationships. Another study by Eyster and Nightingale (2017), writing for the Urban Institute, reported a variety of research showing the positive effects of programming such as apprenticeships and other work readiness efforts can have on youth’s employment opportunities. For example:

- On the Job Training programs have been found to have positive effects on the wages of low-skilled workers.
- Participating in a registered apprenticeship is linked to average wage gains of \$7000 in the 6th year after enrollment, compared with control groups, and the benefits are greater than the costs.
- Employers tend to receive a positive return on their investment in apprenticeships within 1-2 years.
- Participants in Career Pathways programs earn about 18% more, and are more likely to find higher wage jobs with better benefits than are control youth not participating in those Career Pathways programs.

Stanton-Salazar’s (2011) work provides a guiding framework for the development of programming that hopes to enhance social capital of YYAs. He suggests that programming guided by social capital needs two elements to be successful including: (1) youth are in an organizational environment where they have regular opportunities to interact with adults who serve as institutional agents or brokers; and (2) youth learn skills and behavior that enable them to enhance their relationships with others (Stanton-Salazar, 2011).



Although studies of programming and interventions that target social capital are scarce, a couple of promising studies do exist. For example, Scales and colleagues (2005) examined how a school-business partnership affected the academic motivation of low-income, urban Hispanic and African American high school students. They found that students with higher levels of exposure to school-business partnerships reported higher levels of individual and social developmental assets (e.g., adult role models, feeling valued, self-efficacy) and positive developmental outcomes, including better grades, better school attendance, and more academic motivation. Focus groups with students, parents, teachers, and business partners showed that the most impactful partnership experiences emphasized the building of relationships between students and caring adults. These relationships engaged, affirmed, and activated students' inner resources for school success.

Importantly, students who received only help that provided a resource (e.g., scholarships, stipends, and assistance completing college applications and paperwork) did not attain the same degree of academic success as students who also received a form of help that occurred side by side with an adult (e.g., a mentor brainstorming with a student about the pros and cons of various college choices). The movement along the continuum from providing "for" the student to student engagement in academic work was facilitated by adults who scaffolded students' activities and experiences toward increasingly greater self-sufficiency, self-motivation, and self-regulated learning. Likewise, Schwartz and colleagues (2018) implemented a program for first-generation college students designed to improve their ability to cultivate social capital on campus and found program participants showed more positive attitudes towards seeking support and improved relationship quality with instructors, which translated into higher grade point averages (Schwartz et al., 2018).

A study of the Student Conservation Corps (Syvertsen, Sullivan, & Wu, 2016) found that participation in the environmental leadership and stewardship activities of SCA produced significant growth in corps members' goal setting, self-efficacy, purpose, teamwork, perspective taking, and social responsibility, among other PYD outcomes. Importantly, higher quality of programming made a significant difference in pre-post changes. High quality included opportunities for decision making, learning how to solve problems, and learning how to cooperate with others, as well as high levels of developmental relationships characterized by feelings of mutual respect with program leaders, leaders showing interest in youth as individuals, helping them feel they mattered, setting high expectations for them, and helping them explore new ideas and possibilities for themselves. Youth who said they had such a high-quality program experience were two to three times more likely than youth with lower-quality experiences to have high post-program levels of stretching, being able to set goals, feeling efficacious, and being able to communicate well with others, among other outcomes (Syvertsen, Sullivan, & Wu, 2016).

The Teen Voice national study of 15-year-olds also found that young people who had chances to express their opinions and be taken seriously were much more likely than those low on such indicators of "voice" to want to master what they study at school, have a high GPA, have a sense of purpose and hope for the future, a positive ethnic identity, believe that it's important to be involved in community issues, and actually volunteer (Scales, Roehlkepartain, & Benson, 2010).

These studies suggest that programming focused on enhancing the social capital of YYAs through strengthening their developmental relationships can be successful. However, as Pekel (2019) noted, organizations serving YYAs typically have a strong rhetorical advocacy of those relationships, but are far less likely to provide concrete guidance and training to their staff and volunteers about how to build developmental relationships with and among the youth and young adults they serve. In short, most people working with YYAs know that relationships matter, but few know how to get beyond mattering to engaging in the practices that actually strengthen those relationships. Among the practices Search Institute uses with organizations, for example, are a variety of activities to help staff and volunteers get in touch again with the role developmentally-strong relationships played in their *own* development,



assess in what ways their organization is or is not intentional about building developmental relationships, and create written commitments that describe with whom and in what ways staff and volunteers will target building developmental relationships with and among YYAs in their organization's programs (Pekel, 2019).

In the absence of such intentional efforts, the data show that the majority of young people do not experience relationships that are developmentally powerful, and that provide various types of support, opportunities to be empowered, and to expand their sense of possibilities for their lives, all being critical positive development nutrients that go beyond basic expressions of care and urging young people to work hard. For example, the Teen Voice national study of 15 year olds found that only 9% reported having strong relationships that supported their development of personal interests and provided opportunities for young people to have a voice (Scales, Roehlkepartain, & Benson, 2010). Even in the large 8-year 4-H Study of Positive Youth Development, within an organization dedicated to providing such experiences, only 25% of 5th-12th grade youth experienced high levels of relationally-driven positive youth development (R. M. Lerner et al., 2013). In a study of more than 700 middle school students, 60% had low levels of developmental relationships with teachers, and another 24% only had high levels of teachers challenging them to grow, but not of all the other elements of strong developmental relationships (Shramko, Syvertsen, & Scales, 2019). And in a worldwide study of more than 32,000 youth and young adults ages 9-31 in 30 countries, only a bare majority (52%) reported high levels of developmental relationships with nonfamily adults in the school setting, and a whopping 75% had less than adequate levels of those nonfamily developmental relationships in community settings (Scales & Roehlkepartain, 2017).

Social Capital Measurement Currently Has Little Consensus

Given the potential of social capital to enhance the postsecondary and employment opportunities for YYAs of color and from low-income backgrounds, it is imperative that programs and organizations find useful ways to assess if they are making strides in strengthening the social capital of their program participants. Our review of the social capital literature revealed many ways to measure social capital – suggesting that there is no agreed-upon best method or any single instrument that captures all aspects of social capital. As illustrated in the proposed measurement and improvement model of social capital in Figure 1, social capital is a multidimensional construct that at a minimum should involve both the measurement of relationships and resources provided by these relationships.

The most common broad categories of measures in the social capital literature among YYAs are family social capital and community social capital; with a limited number of studies focused on peer social capital. This is an important limitation to note, as the literature primarily emphasizes social capital from relationships in the family, and secondarily, the neighborhood, and gives considerably less attention to social capital from relationships with peers and adults in organizations and programs serving YYAs, schools, congregations, mentoring programs, work, and other settings.

Below is a summary from selected studies of some of the most common indicators of family social capital, community social capital, and peer social capital. This summary includes only studies that have explicitly named their focus as “social capital.” It includes several studies that are reviews of another 85 studies. Collectively then, this summary reflects conclusions from more than 100 social capital studies. However, it does not include studies in the vast literature on relationships which are not designated as about “social capital.” As noted above, we already have conducted extensive literature searches, focus groups, and studies to construct and refine the developmental relationships framework. The measures we will propose in later reports for assessing developmental relationships therefore already reflect that comprehensive scientific foundation.



Family Social Capital

Ferguson (2006) reviewed 22 social capital studies and provided a useful overview of the general patterns. In general, “numerous studies” (p. 4) have followed how Coleman operationalized family social capital: eight of the 22 studies looked at effects of family social capital on child outcomes and operationalized family social capital using the following indicators: family structure, quality of parent-child relations, adult interest in the child, parents’ monitoring of the child, and extended family support and exchange. Many other scholars have identified similar indicators of family social capital (see Al-Fadhli & Kerson, 2010; Booth & Shaw, 2020; Dika & Singh, 2002; Rothon et al., 2012) including McPherson et al. (2014), who reviewed an additional 55 relevant social capital studies, 33 of which were conducted in North America. The authors reported similar patterns of family social capital measures (parental involvement in school-related activities, parental monitoring, and quality of parent-child relationships) as Ferguson (2006) and many others. Rothon and colleagues (2012) took a different approach to measuring social capital by assessing parent’s social networks. The authors measured parent’s social networks by measuring a number of indicators such as parental involvement in the school environment, PTA membership, frequency of attending school events, and number of donations made to the school. A couple of studies also included a measure of intergenerational closure (a structural dimension), which assessed whether parents knew or had talked to their child’s friends and parents of those friends (Dika & Singh, 2002; Glanville et al., 2008; Haynie & South, 2005; Kim & Schneider, 2005; Muller & Ellison, 2001). Finally, a couple of studies did consider other aspects of social capital such as shared activities, shared goals and family cohesion Crosnoe, 2004; Kim & Schneider, 2005; Morgan & Haglund, 2009).

Table 3. Family Social Capital Indicators

Relationships	<p>Family structure and size</p> <ul style="list-style-type: none"> • Two parent household • Number of extended family who live in the home <p>Intergenerational closure</p> <ul style="list-style-type: none"> • Know or talk to youth’s friends • Know or talk to parents of youth’s friends <p>Quality of parent-child relationship</p> <ul style="list-style-type: none"> • Number of times parent verbally encourages child • Parent-child communication • Frequency with which parent talks about things that matter to youth • How many times in the last 7 days, youth ate evening meal with family? • Talk with child about youth problems <p>Adult interest in child</p> <ul style="list-style-type: none"> • Parents’ academic aspirations and expectations • Parents’ levels of empathy for the child’s needs <p>Parent monitoring of child</p> <ul style="list-style-type: none"> • Knowing with whom the child is and what they are doing when not at home • Have a pretty good idea of youth interests, activities, and whereabouts • How often parents know where youth is going in the evening • Whether parent has set a curfew on weeknights
Resources	<p>Parent support</p> <ul style="list-style-type: none"> • Number of times parent helps child with homework • Helping child with and checking child’s homework <p>Extended family support</p> <ul style="list-style-type: none"> • Number of interactions child has with extended family • Number of times child visits extended family outside the home



	<p>Parent involvement in school-related activities</p> <ul style="list-style-type: none"> • PTA membership • Frequency of involvement in school activities • Attendance at school events and meetings • Number of donations made to school <p>Youth empowerment</p> <ul style="list-style-type: none"> • How true it is that parent likes youth to make their own decisions <p>Shared family activities</p> <ul style="list-style-type: none"> • Amount and types of activities youth does with their families <p>Shared family goals and cohesion</p> <ul style="list-style-type: none"> • Parent participation in school programs about postsecondary financial aid and number of college visits with their children • Parent and child agreement on education goals
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Community Social Capital

Thirteen of the 22 studies that Ferguson (2006) reviewed examined how community social capital affects youth outcomes. The most common instrument of community social capital was the Social Capital Index, which included the following indicators: participation in local community, sense of personal agency or personal or collective efficacy, feelings of trust and safety, informal neighborhood connections, connections with family and friends, tolerance of diversity, feelings of being valued by society, and feelings of team or connection at work. All of those 13 studies, in addition to some of the above indicators, also used one or more of Coleman and Hoffer’s (1987) four components of community social capital: social support networks, civic engagement in local institutions, trust and safety, and/or degree of religiosity. Many of these same indicators were found in other studies of community social capital including social support network, civic engagement, trust, and neighborhood and school quality (McPherson et al., 2014; Morgan & Haglund, 2009; Romer et al., 2009; Rothon et al., 2012; Vynke et al., 2013). Finally, several studies examined additional forms of community social capital such as neighborhood cohesion and neighborhood social control (Booth & Shaw, 2020; De Clerg et al., 2012; Vynke et al., 2013).

Table 4. Community Social Capital Indicators

	<p>Community network size</p> <ul style="list-style-type: none"> • Number of close friends • Number of visits with these friends per week • Number of informal neighborhood connections • Number of connections with friends and family <p>Trust</p> <ul style="list-style-type: none"> • Degree to which most people in the neighborhood can be trusted • Belief that people will try to take advantage of you if they get the chance • Belief that most people only look out for themselves <p>Quality of neighborhood</p> <ul style="list-style-type: none"> • Parents perceive neighborhood as a safe place for raising children • Safe places for children to gather and play • Perceptions of visible “incivilities” or “social disorder, from graffiti and littering to gangs and drugs <p>Quality of School</p> <ul style="list-style-type: none"> • Teachers’ level of concern for students • Principal’s effectiveness as a leader
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	<ul style="list-style-type: none"> • Safety of school • Relationship between students and teacher <p>Degree of religiosity</p> <ul style="list-style-type: none"> • Frequency of attending religious services • Membership in a religious organization <p>Extracurricular participation</p> <ul style="list-style-type: none"> • Frequency of participation in a club or extracurricular activity
Resources	<p>Neighborhood social control</p> <ul style="list-style-type: none"> • How likely neighbors would intervene if adolescents were skipping school and hanging out on a street corner, adolescents were spray-painting graffiti on a local building, adolescents were showing disrespect to an adult, a fight broke out in front of their house, the fire station closest to their house was threatened with budget cuts • Property crime rates <p>Neighborhood cohesion</p> <ul style="list-style-type: none"> • People are willing to help their neighbors • Neighborhood is close-knit • People in this neighborhood can be trusted • People in this neighborhood generally get along with each other • People in this neighborhood share the same values • Neighborhood potential for community involvement with children <p>Civic engagement</p> <ul style="list-style-type: none"> • Volunteering in a local group • Frequency of volunteer time • Serving as an active member of an organization or club • Participating in community meetings • Speaking with local politicians • Attending a march or political meeting, youth club, or doing community work <p>Others</p> <ul style="list-style-type: none"> • Neighborhood collective efficacy • Sense of personal agency or personal or collective efficacy • Tolerance of diversity • Feelings of being valued by society • Parental psychological sense of community • Feelings of team or connection at work

Peer Social Capital

A limited but growing body of literature has examined social capital among peer groups. Most of these studies have examined the role of adolescents' peer networks in relation to education outcomes. For example, Glanville et al (2008) assessed friends' GPA and truancy and Muller & Ellison (2001) asked youth to share how important it was that among the friends they hung out with that their friends attended classes regularly, studied, got good grades, finished high school, and continued their education past high school. Similarly, another study examined indicators of peer social capital including whether high school students could identify three or more friends who did well in school, worked hard, and planned to go to college (Riegler-Crumb, 2010). In contrast, a couple of studies have examined indicators of peer network structure such as network diversity (e.g., race/ethnic heterogeneity), peer network density (i.e., degree to which network members know each other), network size, popularity,



and level of reciprocity among peers (DiGuseppi et al., 2018; Ryabov, 2009). Finally, another study conducted by Rothon et al. (2012) asked adolescents how many times in the last 7 days the youth had friends “round to house” and how many times the youth has gone out with friends. These studies generally show that youth who engage with peers who share similar academic aspirations and values tend to do better academically and are more likely to graduate from high school (Ream & Rumberger, 2008).

Table 5. Peer Social Capital Indicators

Relationships	<p>Peer relationship quality</p> <ul style="list-style-type: none"> • Number of times friends were “round to house” • Number of times youth have gone out with friends • Select 10 peers who were important to you in the past month • Reciprocity <p>Peer network characteristics</p> <ul style="list-style-type: none"> • Density • Diversity • Popularity/prestige
Resources	<p>Shared goals and aspirations</p> <ul style="list-style-type: none"> • Important that friends attended class regularly • Important that friends studied and got good grades • Important that friends graduated high school and attended postsecondary education • Number of friends who have dropped out of school • Three or more friends who do well in school, work hard in school, and plan to go to college

A Modular Approach Grounded in Measuring Relationships and Resources Advances the Field

As illustrated above in the literature review of common indicators of social capital among YYAs, it is likely that multiple indicators of social capital will need to be measured. Based on this literature review and our conceptual model of social capital measurement, we begin to operationalize constructs that we believe may be valuable for understanding the complexity of social capital among YYAs, that are strengthened through participation in organizations serving YYAs of color and from low-income backgrounds, and which foster positive postsecondary education and occupation outcomes.

Developmental Relationships

Search Institute’s measures of developmental relationships provide a comprehensive and in-depth assessment of the quality of the relational social capital YYAs experience and how specific elements within relationships result in valuable social capital resources. These measures have been shown to be reliable and valid for samples of young people that are diverse in age, sex, race, ethnicity, and socioeconomic status. The emphasis on measuring relationship quality is critical, not only for the field in general (because the more limited indicator of quantity of networks and connections is by far the more common measure in the social capital research), but for SCALE initiative partner organizations. For example, the Christensen Institute Landscape survey found that the **top 2 challenges for programs were measuring the quality of relationships, and “keeping track of the relationships brokered by our program”** (Freeland-Fisher, 2019).



As we anticipate how best to modify or supplement the existing developmental relationships measures for the specific needs of the SCALE project, some of the findings from the Goodwin-Simon Strategic Research report (2019) are instructive. For example, although social capital is most often defined in terms of having a broad, deep, and diverse network of connections, the more than 3500 youth survey participants in that study tended to think more about making connections with one well-positioned person who could help them get where they want to go, in contrast to having many people in their networks who provide different kinds of resources for them. How they are building their connections (“network” and “social capital” had more negative than positive associations for the survey participants) may depend on whether they have adopted that “one special connection” versus “many ties” framing of what “connections” means. That should be assessed, as well as how especially influential and useful any of the connections they do have might be.

Additionally, survey participants identified several types of adults, who could either help or hinder their development of occupational identity and their educational and occupational trajectories. Their descriptions of their connections and contacts suggest that social capital measurement could also include assessing which of these groups their identified people fit:

1. adults who are both supportive and informed about matters relevant to the youth striving to thrive (i.e., high potential social capital);
2. adults who are supportive but not necessarily informed enough—well-intended but not immediately helpful (i.e., low to moderate potential social capital);
3. unsupportive adults who tear the youth down (i.e., negative social capital); and
4. absent adults, those who by their ostensible role (e.g., parent, teacher) could and should be there for the youth, but who are seen as abdicating that role (i.e., unknown practical social capital, but theoretical potential).

A final insight from that youth identity formation report is how youth described “support.” “Provide Support” is one of the five key elements in Search Institute’s developmental relationships framework. Youth gave a broader description of support than is currently operationalized in the developmental relationships items, although some of the meanings of support are tapped by items measuring some of the other relational elements. Specifically, five of the top features of “support” as seen by survey participants were:

- Emotional support (the most frequently named)
- Financial help, especially with education and housing expenses
- Sharing technical know-how
- Providing connections to others
- Offering informed guidance

The existing Provide Support measure includes offering guidance through hard situations and systems, and the Express Care measure at its core is about emotional support and trust. The “support” feature of providing connections is measured as part of Expand Possibilities. However, “sharing technical know-how” could be more sharply measured. And no items anywhere in the developmental relationships framework currently measure providing financial or other instrumental, material kinds of support. So, some additions to the existing developmental relationships measures seem warranted.

Structural Components among Webs of Developmental Relationships

While it is important that YYAs have developmentally-rich relationships, it is also important that YYAs have a web and/or network of these relationships. Scholars have operationalized and measured a web or network of relationships by examining indicators of a social network such as structure, size, density, diversity, and strength. A description of each of these indicators and how they may relate to postsecondary education and employment outcomes follows.



Network Structure

Networks may be closed or open in structure (Coleman, 1988). In a closed structure many individuals know each other and have strong ties with one another (e.g., family network, membership in elite clubs or organizations that are not accessible to others; Burt, 2005). It is believed that a closed network can be beneficial to individual well-being because these networks tend to be high in connectedness, provide support in times of crises, and have more trust and mutual understanding (Burt, 2005; Prell, 2009). Open networks (e.g., religious community or other organizations that are open to all potential members), however, can also be beneficial as people in these networks are less likely to share the same information or have access to the same resources and thus individuals in open networks may have access to more diverse types of resources (Burt, 2000; Prell, 2009). It is hypothesized that an open network would be especially valuable when an individual is seeking new information or trying to obtain a goal that requires connections to relationships outside of their personal network. Open versus closed networks in relation to outcomes such as employment and/or education attainment have rarely been examined in the literature because it requires knowing everyone within a network, which is often impractical or infeasible to accomplish.

Network Size

Networks can range in size and may involve close relations such as family and friends as well as less close relationships such as acquaintances or friends of friends. The size of the network may influence the overall amount of social capital some individuals possess. This is aligned with Bourdieu's (1986) conceptualization of social capital: "The volume of social capital possessed by a given agent thus depends on the size of the network of connections he can effectively mobilize and on the volume of capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected." (p. 249). Individuals with a large number of social relationships may have access to a large amount of social capital while individuals with a smaller number of relationships may have access to a smaller amount of social capital (Hislop, 2005). It is likely that this assumption may depend on the nature and quality of these relationships. For example, a young person may have hundreds or thousands of "friends" in social media, but hardly know the great majority of them in "real life," much less be able to benefit from their knowledge and connections. Conversely, a young person may have only a small number of educationally- or occupationally relevant connections, but each of those connections is close, well-informed and connected to others, and highly motivated to help the young person, thereby representing a high degree of potential social capital that can be mobilized.

Network Density

Network density is the degree to which network membership overlaps. In dense networks, individuals are connected in more than one context. For example, colleagues at work may also be members of the same social club. This density allows the resources of one relationship to be used in other relationships (Coleman, 1988). Network density has often been assessed by measuring the frequency of contact between individuals within a network. For example, researchers may ask individuals to draw lines between network members who regularly had contact with one another. The more lines drawn between individuals; the denser the network (Eggens, Van der Werf, & Bosker, 2008). A couple of studies have shown that denser networks are associated with positive postsecondary education and employment outcomes such as greater odds of graduating from college (Eggens et al., 2008) and greater probability of finding a job through friends and/or relatives (Wahba & Zenou, 2005).

Network Diversity

Network diversity may have advantages, in life and in measurement, over the pure size of the network since an individual in a diverse network may have access to more varied resources, whereas a network described by pure size may contain only many similar resources. It is hypothesized that the more diverse an individual's network is the better the resources to be accessed and mobilized (Lin, 1999). Unfortunately, most people tend to interact and/or come into contact with people who are similar to



them at a higher rate than people who are dissimilar to them. This principle is referred to as homophily. As McPherson et al. (2001) notes in their review, homophily limits people's access and ability to mobilize valuable resources such as the "information they receive, the attitudes they form, and the interactions they experience." (p. 415). Similarly, Jackson (2019b) notes how homophily "limits information and opportunity flows to both parents and children, leading to underinvestment in education among lower-income households that have little experience with colleges or contact with highly educated people (p. 157). Thus, network diversity is often assessed using questions about the type of relationships someone has with other individuals that vary in terms of socioeconomic status, race/ethnicity, sex, and occupation, among other features (Engber, Thompson, & Slaper, 2017).

Network Strength

The willingness of individuals within someone's network to provide resources is influenced by the quality of the social relationship, also commonly referred to as tie strength. Within the social capital literature, the strength of the relationship is typically expressed as "weak" versus "strong" (Granovetter, 1983). Strong ties tend to provide forms of emotional support and help with everyday problems, while weak ties tend to be less intimate. Often a weak tie is a relationship with an acquaintance or someone who is not well known (Marsden & Campbell, 1984). It is hypothesized that although these relationships tend to provide fewer reciprocal services than strong ties, they often link individuals to more diverse relationships, provide access to more diverse information and resources, and may form bridges to other social groups. For example, Lin (2008) has proposed that social capital that results from weak ties is advantageous when associated with instrumental actions (e.g., job referral), where accessing resources dissimilar to one's own resources are important.

Thus, from the standpoint of YYAs accessing education- and occupation-relevant resources, especially those that provide social leverage for getting ahead, the literature suggests the desirable structural features of their social networks would be **open, large, diverse, and having plentiful weak ties as well as a core of strong ties with others**. Because such features maximize the potential for accessing bridging and linking social capital, not just bonding social capital, they may be especially critical for YYAs of color and from low-income backgrounds.

Resources Accrued Through Relationships

As illustrated in the SCALE measurement and improvement logic model, it is hypothesized that a web of strong developmental relationships that is open, large, diverse and includes both weak and strong ties will lead to many valuable resources that are essential to positive postsecondary education and employment outcomes of young people of color and from low-income background. A web of key developmental relationships built through participation in programming that aims to enhance social capital and relationships will promote increased access to and mobilization of key resources such as **social support** and **social leverage**. As discussed above social support is capital that helps individuals get by or deal with daily issues, whereas social "leverage" is capital that helps people get ahead and access information that advances their social mobility.

Relationally-Driven Social Support

Youth and young adults may receive social support through social relationships. This type of support is closely related to "bonding social capital" - support received from individuals who are from similar ethnic and socioeconomic backgrounds. Two of the most common indicators of social support are emotional support and instrumental support. Emotional support refers to the actions an individual may take to make someone else feel cared for and often involves showing feelings of trustworthiness, empathy, and love (Cohen & Wills, 1985). Instrumental support refers to tangible sources of support such as providing a learned skill, material goods, and/or assistance in problem solving (Cohen & Wills, 1985). Social relationships, especially developmentally strong relationships, may provide both of these forms of social support. These forms of social support can be critical to helping YYAs succeed educationally and



occupationally. For example, emotional and instrumental support provided by high school teachers and college faculty are associated with greater social-emotional outcomes and academic motivation (Federici & Skaalvik, 2014; Tennant et al., 2015). Relationships with staff at youth-serving organizations may provide this type of support by expressing care to youth and teaching new skills that enhance YYAs' employment potential. Dill & Ozer (2019) found that adults at a youth-serving organization provide support to youth by serving as non-familial role models, providing loving accountability, and supporting youth's goal-attainment. Social support may also be especially important for YYAs of color, as research shows that social support may mitigate some of the negative effects of discrimination on psychological distress among college students of color (Prelow, Mosher, & Bowman, 2006). This type of support may give YYAs of color the confidence and agency to actively seek educational and employment opportunities.

For example, a Center for Promise mixed methods study of young adults ages 18-25 (Center for Promise, 2015) found that those who had interrupted their high school enrollment (i.e., dropped out) had fewer people overall in their networks, and lacked the kinds of high-quality support they needed. Those who stayed enrolled continuously, despite adversity, or who re-engaged with school, had more sources of support in their networks, and more quality supports (i.e., support that provides what the young adults actually needed and provided by someone the young adult trusts and who feels listens to them).

Relationally-Driven Social Leverage

Social relationships may provide various forms of social leverage, which can be used to advance one's social mobility. This is a closely related concept to "linking" social capital, which refers to individuals' relationships and connections with others across levels of hierarchy and power. Indicators of social leverage may include things such as informational support, collective action and cooperation, and empowerment and political action. Informational support is a common indicator of social leverage and is essential for helping YYAs acquire postsecondary and employment opportunities. For example, information provided through social relationships is likely to be an important resource for improving the efficiency and effectiveness of an individual's job search (Stone et al., 2003) and for receiving important information to help navigate the college application process (Wohn, Ellison, Khan, Fewins-Bliss, & Gray, 2013). Youth-serving organizations may also contribute to YYAs' social leverage. Dill & Ozer (2019) showed that adults in youth-serving organizations may do so by providing access to academic and educational resources, access to employment opportunities, and by enhancing youth's self-esteem and future orientation.

Social leverage may also be achieved through collective action and empowerment. A social group may acquire many valuable resources through collective action (e.g., group rights, group resources). Collective action is often assessed by the level of community and/or social group participation (e.g., membership in organizations, volunteering). Individuals and social groups who are able to enable collective action may also have high levels of empowerment. Individuals and/or social groups may feel empowered when they feel that they are able to have an element of control over the processes and institutions that directly affect their well-being. Indicators of this dimension may include control in making decisions that affect one's everyday activities, power to make important decisions that change the course of one's life, and the impact one has in making the neighborhood or community a better place to live (Grootaert et al., 2004). Stanton-Salazar (2011) suggests that staff at youth-serving organizations and institutions may serve as "empowerment agents - "adults willing to go counter to the established and hierarchical social structures." (p. 1089). These youth-serving staff empower YYAs of color by providing resources and support that enable youth to later go on to effectively navigate and exert control over their environment (e.g., school, community; Stanton-Salazar, 2011). Staff and other important adults who serve as empowerment agents not only help youth access and use resources/relationships that help youth "beat the odds," but they also empower youth "to collaborate with others, to exercise interpersonal influence, to act politically, to confront and contest oppressive



institutional practices, to make tough decisions and work to solve community problems, to organize and perform complex organizational tasks, and to assume demographic leadership.” (Stanton-Salazar, 2011; p. 1093). These skills are needed not only to help YYAs of color from low-income backgrounds secure and thrive in valuable education and employment opportunities, but are also needed to advance socioeconomic and racial/ethnic equity in the current education and employment landscape.

Tools for Measuring Social Capital

From the literature review above, it is clear social capital is a multidimensional construct that can be measured in numerous ways. Social capital is frequently assessed using the dimensions listed above through either qualitative data collection such as interviews or focus groups or surveys that ask specific questions about who is in someone’s network and the resources that they have acquired. Three of the most commonly used tools for measuring social capital include name generators, position generators, and resource generators.

Name Generators

Name generators are administered through interviews or surveys - where an individual is asked to name a certain number of people with whom they share a particular type of social relationship. These are often used to not only detail social relationships but also delineate network characteristics. Name generators have been adapted to identify specific types of relationships. For example, name generators have included asking individuals to share the names of people they discussed important matters with over the last six months (Burt, 1984), names of people who helped healthcare professionals succeed in their professional career (Burt et al., 2012), names of people who play a significant role in their life (Ashida, Wilkinson, & Koehly, 2010), and individuals who were consulted for work-related problems (Creswick, Westbrook, & Braithwaite, 2009). Once a list of names is produced, participants are presented with a series of follow-up questions (e.g., type of relationship, degree of closeness, occupation of person) that gathers information about each of the people identified within the network. Name generators may be useful when trying to understand how a web of relationships affects a particular process or outcome of interest. The name generator would be used to identify all individuals who may affect this particular process or outcome. Although a common tool in measuring social capital, a distinct disadvantage of the name generator approach is that it requires personal identification of individuals in the YYA’s network, i.e., it minimizes anonymity. This could result in biased identification of networks if a YYA was, for example, unwilling to name key people for fear of consequences that might happen to that named person (e.g., deportation for an undocumented immigrant, or arrest for someone who engages in illegal activities).

Position Generators

Position generators are survey and/or interview tools that are used to measure access to resources (Lin & Erickson, 2008). With this technique, individuals are asked to indicate if they know anyone having a specific job and/or position (e.g., physician, teacher). Each occupation or position has been assigned a prestige value, which serves as an indicator of potential access to social capital. This measure assesses several components of social networks including reach (i.e., highest occupation accessed), range (i.e., difference between the highest and lowest occupation accessed), and diversity (i.e., the number of unique occupations accessed; Tindall, Cormier, & Diani, 2012). These measures can also be used to identify the depth of the relationship that the individual has with each occupation-holder. Relationship depth is clearly important to measure, because a young person might “know” someone having a certain job or position, but could have a very limited personal connection with them, making it difficult to tap the potential social capital in that relationship.

Resource Generators

An alternative to the name and position generator measures of social capital is Van der Gaag’s (2008) resource generator approach. With this measure, the individual is asked whether they are acquainted



with people in the network who can provide valuable resources such as information, influence, and/or instrumental support (Van der Gaag & Snijders, 2005). This approach is similar to a position generator except that the questions are designed to measure accessibility to resources rather than positions of relationships (i.e., occupation). This measure can be challenging to design and implement because it requires a comprehensive list of important resources within a specific context.

Commonly Used Measures of Social Capital

Many additional scales have been developed to quickly assess an individual's level of social capital (see Table 5 below). Many of these scales only assess some elements of social capital; thus they may not capture the dimensions of social capital that are most valuable for YYAs of color and from low-income backgrounds for securing and thriving in education and employment opportunities. Additionally, many of these scales have not been well-validated or found to be reliable among young people participating in youth-serving programs and/or organizations (De Silva, McKenzie, Harpham, & Huttly, 2005).

Table 5. Commonly Used Measures of Social Capital

Measure	Source	Key Indicators
Putnam's Social Capital Index	Putnam (2000)	14-variable index covering five key indicators of social capital: <ul style="list-style-type: none"> • Volunteerism • Social trust • Informal sociability • Engagement in public affairs • Community and organizational life
General Social Survey (GSS)	National Opinion Research Center, University of Chicago	Survey instrument used since 1972 for monitoring social changes in American public attitudes and behaviors. Instrument includes indicators of social capital such as: <ul style="list-style-type: none"> • Trust • Fairness • Helpfulness
World Values Survey	Ingelhart et al., (2014)	An international survey that examines several aspects of social capital including: <ul style="list-style-type: none"> • Trust within groups and social associations • Membership in associations • Civic norms and responsibility
World Bank's Social Capital Assessment Tool (SOCAT)	Grootaert et al., (2004)	A synthesis of instruments that have been used across 25 studies conducted in more than 15 countries. The instrument includes three portions: community profile, household survey, and an organization profile, which assess the following indicators: <ul style="list-style-type: none"> • Membership in local associations • Trust and adherence to norms • Collective action
Adapted Social Capital Assessment Tool (A-SCAT)	Harpham, Grant, & Thomas (2002)	Instrument is an adaptation of the Social Capital Assessment Tool. It includes 20 items and assesses the following indicators:

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		<ul style="list-style-type: none"> • Group membership • Trust • Social cohesion • Social control • Social support • Civic engagement
Social Capital Measurement Tool (SCMT)	Kitchen, Williams, & Simone (2012)	<p>Includes six questions that assess the following indicators:</p> <ul style="list-style-type: none"> • Safety • Trust • Help from friends • Multiculturalism • Volunteering • Voting
Personal Social Capital Scale	Chen et al. (2009)	<p>Includes 42 items assessing indicators of bonding and bridging social capital:</p> <p>Bonding</p> <ul style="list-style-type: none"> • Perceived network size • Frequency of contact with network members • Number of network members who are perceived as trustful • The number of network members possessing resources (education, professional job, position) • The number of network members who are reciprocal. <p>Bridging</p> <ul style="list-style-type: none"> • Perceived group size • Participation in group activities • Groups represent personal rights and interests • Resources possessed by these groups • Likelihood to receive help from the groups upon request.
Social Network Index	Cohen (1991)	<p>12-item index that captures:</p> <ul style="list-style-type: none"> • Overall number of people in the network (size) • Number of social roles in which the respondent has regular contact (e.g., spouse, parent, friend, classmate, volunteer) • Number of different network domains (e.g., family, friends, work, church)
Social Capital Index	Onyx & Bullen (2000)	<p>Instrument includes eight indicators of social capital:</p> <ul style="list-style-type: none"> • Participation in local community; • Sense of personal agency or personal or collective efficacy; • Feelings of trust and safety; • Informal neighborhood connections; • Connections with family and friends; • Tolerance of diversity;



		<ul style="list-style-type: none"> • Feelings of being valued by society; and • Feelings of team or connection at work.
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Innovative Tools for Measuring Social Networks

With the spread of social media and newly developed apps, researchers and practitioners are finding novel ways of measuring individuals' social networks - one dimension of social capital. This includes utilizing unique quantitative methods such as social network analysis to map and visualize social networks, and the use of unique data collection methods such as network-proximity sensors, smartphone Bluetooth tools, and smartphone apps. Additionally, some scholars use data collected via social media sites such as LinkedIn and Facebook to assess individuals' social media networks.

Social Network Analysis

Social network analysis is a commonly used quantitative method for assessing many of the network-based dimensions of social capital (e.g., size, structure, diversity, density). This type of analysis maps and measures relationships that exist between people and/or groups. The people within the network are often referred to as "nodes" and the links within a map show the relationships that occur between nodes (Abbasi, Wigand, & Hossain, 2014). This type of analysis allows for visualization of the connections that occur between individuals and groups within an individual's social network. This analysis has the capability of mapping the structural components of social capital such as network size, density, strength tie of social relationships, and the resources that are exchanged within these relationships. Traditionally, social networks have been mapped using survey data by asking individuals to identify who is in their network. This approach can be challenging as it is time consuming and relies on self-report and thus may be sensitive to bias and the framing of survey questions. Nevertheless, mapping such webs of support can be useful both for youth and young adults themselves, in understanding better what relationships and resources they have and/or could cultivate, and for peers and adults helping them. A good example of how position generation (e.g., teacher, ex-boyfriend, case worker, etc.) and resource generation strategies (e.g., informational advice, emotional listening, encouragement, and instrumental help like coordinating food, housing, and transportation) can be used together to create a visual map of an individual's web of support is found in the Center for Promise's report, *Don't Quit on Me* (2015, p. 26). A number of sophisticated open-source and for-profit software tools are available at varying levels of cost for turning survey data into visual depictions of social networks, with extensive analytic capabilities. Examples relevant for SCALE include EgoNet (sourceforge.net/projects/egonet), Gephi (gephi.org), and SocNetV (Social Network Visualizer--socnetv.org).

Technology-Enhanced Methods for Collecting Social Capital Data

Newer technologies are able to collect a vast amount of data in real-time and real-world conditions (Proudfoot, 2013). A variety of methods have been used including badges with embedded sensors to record face-to-face interactions. These badges are often placed on a necklace that participants are asked to wear in order to assess when they interact with other individuals. These badges are most effective when trying to understand the social network of individuals within a specified environment such as a work or school setting. These badges typically assess the frequency and length of different interactions individuals have with each other. Thus, they are able to capture the number of face-to-face relationships an individual has, the overlap of social relationships within a given network (i.e., density), the quality or strength of a social relationship (typically assessed by the length or frequency of contact), as well as the potential prestige of individuals within the network. Although this method is capable of measuring several important aspects of social capital, there are several limitations with this approach. This method requires all individuals within a network to wear sensors. This is often infeasible in real-



world situations and can be a burden to participation. It is also likely that individuals will not wear the sensors at all times and thus may miss many face-to-face interactions and underestimate an individual's social network. And of course, for many persons, it is, on the face of it, an intrusive approach that does not protect either the participant's privacy or the privacy of the people with whom they interact, who also might not have consented to being recorded.

Additionally, because this method assesses relationship quality via frequency and/or length of interactions between individuals, it may not capture many important aspects of relationship quality (e.g., closeness, support, sharing power). This method also does not assess interactions that occur via social media, phone, and other electronic methods and may be limited in scope in terms of the size of an individual's network tapped. Finally, this method is missing many important aspects of social capital such as the resources individuals gain through relationships and connections with other social groups (e.g., organizations).

More recently, sensor-enabled smartphones have also been used to measure social interactions by assessing physical proximity using either Bluetooth, location data, or other data sources. Using this method, an individual's smartphone Bluetooth is turned on and connected when they come into contact with other individuals within their network. Although similar to sensor-enabled badges, this method has several advantages. This method does not require individuals to wear a sensor, thus data is passively being collected without much interference to an individual's day-to-day activities and interactions. This method, however, also relies on the proximity of individuals and is most useful when interested in a specified network in a specific setting such as a workplace or school environment. Although research shows that Bluetooth sensors tend to be more effective than badges (Boonstra, Larsen, Townsend, & Christensen, 2017), many of the limitations of sensor-embedded badges still exist (e.g., missing interactions that occur online, relationships outside of the specific context, and other important dimensions of social capital). Additionally, Bluetooth may also pick up ranges of individuals in neighboring rooms and thus may result in false positives and individuals may also leave their phone behind at times and thus would not capture any interactions during this time. Finally, like the badge method, this approach also fails to account for how consent would be obtained from network participants.

Smartphone applications that help assess social networks have also been developed. One such example is the person-centered network (PCN) app, which serves both as a data collection tool and an analysis tool. It was originally designed for healthcare professionals to visualize the personal support networks of the people they serve. The app has been used to help practitioners identify individuals who may be at risk of poor social connectedness (Varda & Talmi, 2018). This is done by having a patient work with a healthcare provider to map their social network on the app and then answer questions about each of the relationships. Questions include rating the relationships on trust, support, importance, and level of coordination among relationships. Similarly, measures of social networks have been administered and tracked through web-based platforms such as Networker, a social connections assessment that measures students' peer acceptance and connections within a school environment (more information can be found at : <https://xsel-labs.com/assessments/networker/>). Although these methods have the capability to measure many more dimensions of social capital, it may require a lot more interaction on behalf of the individual and includes many similar questions that would be found on a survey. It also has the same consent and privacy issues noted earlier surrounding the identification of persons in the participant's network.

Smartphone applications and other programming tech tools such as online platforms, may also be helpful for not only collecting social networking data but also for promoting relationships among YYAs. For example, the Christensen Institute has identified a number of edtech tools that have been developed to connect students to new relationships, whether that is with peers, teachers, or mentors.



They are more about facilitating connections than serving as data collection tools, but are potentially useful. For more information on these tools, see the link below: <https://whoyouknow.org/focus-area/career-coaching-and-or-networking/>

Social Networking Sites

Social media such as Facebook, Twitter, and LinkedIn make it easy for people to expand and maintain a social network, which may contribute to their overall social capital. LinkedIn, for example, states that it “connects the world’s professionals to make them more productive and successful” (<http://www.linkedin.com/about-us>; retrieved March 16th, 2020). These sites have the potential to increase individual’s access to weak ties such as acquaintances and former connections and colleagues that may provide useful information or introductions to new contacts. This hypothesis is consistent with research that shows that using social network sites primarily increases contact with weaker ties (Ellison, Steinfield, & Lampe, 2011; Steinfield, Ellison, & Lampe, 2008).

One study assessed the informational benefits individuals obtained from use of their LinkedIn, Facebook, and Twitter profiles. The study assessed individuals’ use of each of the social media websites including the number of followers and people in their networks, as well as the informational benefits they received through use of these sites. Informational benefits were assessed by asking questions such as, “The relationships that I maintain are helpful in making career moves,” “I can get access to knowledge that is helpful in mastering job tasks from my network members,” and “Contacts that I have established are essential for my career success.” This study found that LinkedIn users reported the highest amount of professional informational benefits (followed by Twitter users). Furthermore, the study found that both strong and weak ties on LinkedIn contributed to informational benefits and that posting professional content and strategically networking on social networking sites were most consistently related to increased informational benefits (Utz, 2016). This finding suggests that social network sites and in particular, LinkedIn, may be useful tools for increasing professional networks and access to informational benefits.

One potential opportunity is to utilize these social networking sites to collect data in real-time to help inform programs and organizations of the connections and relationships that are being formed. These sites collect information on individual’s networks such as the size of their network, social and professional groups the individual belongs to, and the degree to which individuals are connected. Although LinkedIn and other social networking sites can help increase an individual’s social capital, it can only assess limited indicators of social capital such as network size and online social group membership. It is likely that additional measures will be needed to fully capture the degree of one’s social capital, such as developmental relationships and the range of resources that these relationships provide beyond knowledge sharing. For example, the size of a YYA’s social networks can be measured (often at significant expense), but it is unclear how practically useful that information is. We can measure the number of LinkedIn connections a person has, but analogous to the ambiguity of the Facebook “friends” someone has, how many of those “connections” even know who the person is, much less can help them get a good job?

Overall Measurement Recommendations for Practitioners

There are a number of measurement conclusions and recommendations that arise from this review.

- Most measures do not capture both relationships and/or resources. For example, studies may only assess the size of a network without assessing the resources individuals or a social group obtain through these relationships.

Defining and Measuring Social Capital for Young People



- Measures need to assess whether program participants are gaining access to people who know specific things about education and occupations, and are willing to share that knowledge or those connections, e.g., know about jobs, can recommend the YYA for a job, prepare them for interviews, or know about schools that are a good match for the YYA, how to get into them and afford them, know people at those schools who can help the YYA navigate, etc.
- Because social capital is a multidimensional construct, it is likely that a single instrument may not be able to capture all aspects of social capital. Programs may need to use multiple measures to fully understand how social capital is being promoted within their program. Programs and organizations should measure the aspects of social capital that are aligned with their particular model.
- A “core and more” approach may be most useful, in which all programs in a given coalition, network, collaboration, or initiative measure a common core of social capital constructs, and then add supplemental measures that align more specifically with the individual program or organization’s mission and goals. This approach allows for both comparable data across multiple programs or organizations, and necessary adaptation for a better measurement fit with each organization’s cultural context.
- Useful although limited data about program participants’ social capital may be collected passively through electronic communication tools such as online social media sites (e.g., LinkedIn, Twitter)
- Context is essential when deciding how to measure social capital. As demonstrated in this report, social capital can be operationalized in many different ways. In different contexts, some dimensions may be more valuable than others. For example, some organizations may focus on building a sense of community among program participants with the hope that they form a collective cohesion. A program such as this may develop measures that focus on assessing cohesion and empowerment as potential resources accessed through their programming.
- Social capital is not evenly distributed among individuals and groups – there can be significant differences with some having high levels of social capital and others having low levels of capital.
- Functional forms of social capital such as quality or level of trust within relationships may be more predictive of positive outcomes than structural forms of social capital such as the size of someone’s network (Barman-Adhikari & Rice, 2014; Lund et al., 2019). Thus, it is important to include dimensions of relationships quality and not just the structure of the relationships.
- Measurement efforts should prioritize accurately measuring social capital with broad consensus that adequately captures a concept as nuanced as is social capital. It should provide meaningful information but should not cause undue burden to participants, or present ethical issues with consent and/or privacy, which render less feasible and attractive a number of innovative and technology-inspired measurement approaches.
- When to measure social capital depends on the goals for measuring it. Goals might include measuring a participant’s growth in social capital over the course of the program, comparing their social capital levels to those of people not in the program, evaluating whether higher levels of social capital lead to improved program outcomes, or other objectives. Our recommendations are twofold: 1) assess change in social capital over time (measure social capital at beginning of the program and after program completion and potentially midway if the information is to be used for better service delivery and program improvement); and 2) assess the relationships between social capital and outcomes (assess social capital at beginning of the program, at program completion, and after a follow-up period, perhaps such as the 1-year timeframe we indicate in the logic model).



Conclusion and Critical Issues

We have discussed here a number of conclusions the literature review has yielded about how social capital for YYA's educational and occupational success should be conceptualized and measured. However, several critical issues or questions remain to be examined more deeply.

- As indicated earlier, the existing measure of the developmental relationship element of “Provide Support” should be expanded to include more indicators of instrumental support, including providing financial help.
- The definition of what is a “good job” should be sharpened beyond what was offered in the youth focus groups done for the youth identity formation report, perhaps drawing on criteria used in the Brookings-Child Trends analysis of pathways to high-quality jobs (Ross et al., 2018).
- More specificity is needed to assess the **occupational relevance** of different people in participating youths' networks or world of connections. What resources are they offering, and how pertinent to attaining a high-quality job are those resources? Are some people more immediately relevant for getting a job, and others more medium-term relevant for helping youth do well at that job, or more long-term relevant for helping youth find and train for not just a job but a career?
- Mapping of YYAs' networks should include actual and potential sources of social capital (e.g., supportive + good information, supportive but not especially informed, a negative influence, and not currently helping but possible given their position or role).
- Relatedly, how broad should the measurement of a youth's network or world of connections be? Using peers or friends as an example, should the occupational relevance of friends of friends be the limit, or should measurement include friends of friends of friends, and so on for other kinds of connections, from family to teachers to program leaders or mentors?
- When assessing the “quality” of youths' developmental relationships, is quality something different than or in addition to the other “web of developmental relationships” bullets in our logic model (i.e., size, diversity, etc.), or is quality largely indicated by those size, diversity, etc. features themselves?
- If advancing racial/ethnic and socioeconomic equity is an actual outcome goal, and not only a broad aspirational hope, how can the Equitable Futures partners provide more tools for YYAs to help contribute to change in this larger context of racism and discrimination in which educational and occupational development takes place, and how can those efforts best be measured?
- Family social capital is the most common kind measured in the literature, but given that the great majority of the Equitable Futures partners' participants are young adults and not adolescents still of high school age, what is the extent to which family social capital is relevant for the SCALE project, and therefore what is the extent to which the family social capital of those participants should be measured?
- To what degree is it important, and feasible, to go beyond self-report in measuring YYAs' education- and occupation-relevant social capital? What added value on the one hand, and problematic issues on the other, would arise in collecting social capital data from persons in an individual YYA's network other than the participating YYA?

Future Directions

With this report and SCALE measurement logic model, we have begun to outline which constructs seem theoretically important for the SCALE partners to measure, how social capital has been most



commonly measured, some newer approaches to measuring social capital, and a number of issues needing to be resolved as we move forward.

The June measurement report will focus on what the SCALE partners are doing currently in collecting data on the social capital of their YYA participants, and recommendations for strengthening that measurement based on this literature review. But to the extent that the SCALE partners find the logic model we have proposed here to be useful, then the contours are apparent. At the least, there must be measures capturing key content in all 6 columns of the model: Organizational inputs, characteristics of organizations committed to building social capital, the web of developmental relationships being built in the organization/program, the education- and occupation-relevant resources those developmental relationships provide for YYAs, the catalytic outcomes of autonomy, belonging, and competence the relationships and resources help YYAs accrue by the time they end their program participation, and sometime later (we have suggested 1 year), key education- and occupation-related outcomes the YYA has achieved.

Honoring the principle of not exacting undue burden on those who participate in data collection, it is unlikely that comprehensive, reliable, and valid measures of all the variables and all the possible indicators we've listed in all those 6 categories in the logic model can be administered to all program participants, and to do so several times to track change over time. Therefore, one of our goals for the June report, with additional focus group and interview input from the partner organizations and YYA participants, is to make recommendations for which of the indicators in each of the 6 categories may be the most important, useful, and feasible for SCALE partners to emphasize in measurement, and to suggest a number of options for how partners can balance measuring what is most meaningful to their missions, with what is feasible in terms of resources and minimizing burden on program participants, staff, and volunteers.

Beyond June, to develop useful tools and measures of social capital for practitioners working in this field, we plan to employ a two-phase process that incorporates qualitative and quantitative data (Creswell, 2009). Qualitative data from focus groups and interviews over the next two months will be used to further understand how program participants are experiencing social capital and how relationships and the resources they acquire from those relationships contribute to their education and employment opportunities. Then between June and September, this information will be compiled, analyzed, and used to develop items that are well-aligned with this literature review and program participants' experiences as they relate to social capital. These items will undergo cognitive interviews and will be reviewed by a panel of experts to provide advice on content and face validity. The emerging survey will then undergo psychometric testing and further revision to maintain reliability and validity while achieving an acceptable balance between comprehensiveness and brevity. We hope the resulting measures will be a valuable addition to the tools programs serving YYAs of color and from low-income backgrounds have for strengthening their social capital and increasing their chances of educational and occupational success.



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