

# One Seed at a Time: Prosocial Youth Development in an Urban Agriculture Program

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## Abstract

*The Growing Recruits for Urban Business (GRUB) is an urban agricultural education program in Lubbock, Texas with a focus on youth development. The mission of the program is to provide at-risk youth with the opportunity to learn technical agricultural skills and leadership skills through the management of a 5.5-acre farm. The purpose of this qualitative study was to explore how the program fosters prosocial decision-making in at-risk youth participants. Using grounded theory, a model was created to illustrate the transition youth experience when developing prosocial behaviors through participation in the program. The model that emerged identifies four main antisocial constructs youth exhibited when they began the program and four prosocial constructs they developed during their participation in the program. The results yielded information regarding participants' individual prosocial behavioral development as well as examples of the long-term benefits experienced at the individual and societal levels as a result of prosocial decision-making. Implications for the role of agricultural education and agricultural educators in transforming marginalized communities are discussed.*

**Keywords:** at-risk youth; prosocial behavior; positive youth development; urban agriculture; prosocial decision-making

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## Introduction

Adolescence is a fundamental period of development when youth begin to explore their identity, enhance their individuality, and embrace potential adult roles. During this critical developmental period, adolescents begin considering future opportunities and future selves, as well as constructing a multitude of characteristics necessary to successfully transition into adulthood (Allen, et al., 2008; Nagel, et al., 2016). As adolescents traverse this developmental stage, they are challenged to weigh the risks and benefits of their behavior and often suffer from short-sighted decision-making

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(Nagel et al., 2016). Consequently, youth in this developmental stage are more likely to engage in antisocial behavior (Nagel et al., 2016).

The risks for developing antisocial behaviors tend to be greater in youth residing in impoverished neighborhoods (Allen et al., 2008; Trinidad, 2009). Antisocial behaviors (e.g. drug use, violence, delinquency) yield detrimental long-term effects felt at the self and societal levels (Delia & Krasny, 2018; Draper & Freedman, 2010; Fulford & Thompson, 2013). These negative outcomes can exist in the form of increased poverty levels, increased crime rates, lack of community connectedness, and food insecurity (Allen et al., 2008).

Although negative outcomes can result from antisocial behavior, positive outcomes can be produced through prosocial behavior. Prosocial behavior is defined as actions that benefit others, including helping and cooperation (Simpson & Willer, 2008). While research on this topic is sparse, studies have found that positive youth development programs, such as urban agriculture programs, can act as gateways to ease antisocial behaviors and promote prosocial behaviors, specifically in at-risk youth (Draper & Freedman, 2010). Recent studies indicate that though adolescence can be a period of developmental challenge, it can also serve as a time in which adolescents experience dynamic development, foster personal strengths, and increase the likelihood of positive life outcomes (Delia & Krasny, 2018; Lerner, 2006).

Although researchers have explored the purposes, motivations, and benefits of positive youth development, Ozer (2007) argues there is a large demand for understanding and explaining how these positive effects might be achieved. The purpose of this study was to determine how an urban agriculture program provides disadvantaged youth with opportunities to develop prosocial decision-making and to generate a theory to serve as a framework for understanding how these positive effects are achieved. The following research questions guided this study:

1. What opportunities does the GRUB program provide for youth to develop prosocial decision-making?
2. What experiences during the the GRUB program inspired youth to make prosocial decisions?
3. How does the GRUB program ease antisocial behaviors among youth?

### **Conceptual Framework**

A conceptual framework was developed to guide this study using three theoretical strands: positive youth development, urban agriculture and community gardening programs, and prosocial behavioral development.

#### **Positive Youth Development**

The first 85 years of scientific study of development framed adolescence as a period of disturbance in which adolescents were viewed as both troubled and troublesome (Freud, 1969). However, as the concept of youth development was studied and refined, researchers discovered adolescence was, in fact, not a time of upheaval, but was a transformational period in which youth could be viewed as resources to be developed instead of problems to be managed (Roth, et al., 2003). Recent research indicates that positive youth development can promote wellbeing and societal good (Benson, et al., 1998; Damon, 2004; Lerner, 2004). Lerner (2004) developed the 5C's of positive youth development: competence, confidence, connection, character, and caring. Although the 5C's are helpful in demonstrating the outcomes of positive youth development programs, there still exists a gap in understanding the developmental stages.

## **Urban Agricultural Education in the Form of Community Gardens**

An alternative pathway to providing positive resources has recently emerged in the form of community garden programs (Trinidad, 2009). In U.S. cities, a variety of community organizations and non-profits conduct agricultural-based education programs after school and during the summertime, often with youth who live in low-income neighborhoods and are hired as paid interns (Smith, et al., 2015). A vast majority of these programs are located in urban areas with marginalized populations and are operated by youth organizations focused on providing developmental opportunities for at-risk youth (Draper & Freedman, 2010).

Several existing studies suggest that neighborhood-based community agriculture can positively influence the development of disadvantaged youth by providing opportunities to cultivate assets of constructive activity with multiple benefits (Allen et al., 2008; Ohly, et al., 2016; Ozer, 2007). Some of these benefits have been seen in long-term displays of generosity, independence, mastery, and belonging in youth, which can be felt at the broader community level (Fulford & Thompson, 2013).

## **Prosocial Behavioral Development Through Urban Community Gardening Programs**

The final tier in the conceptual framework for this study is prosocial behavioral development. According to Dovidio, et al. (2006), prosocial behavior is influenced by biological, psychological, and social factors. This behavior includes the actions of helping, sharing, or providing comfort to another in emergency situations (Shotland & Heinold, 1985), as well as in non-emergency situations, such as returning a lost item to a stranger (Levine, et al., 1994). Baumeister and Leary (1995) argue that prosocial behavior inspires people to help each other in order to achieve a healthy and peaceful society. Prosocial involvement not only reduces crime and delinquency, but also serves as a rehabilitation and correctional function in delinquent youth (Kelley, 2003; Urban, et al., 2010).

Evidence from research supports the idea that prosocial involvement affects the wellbeing of an individual. Research indicates that prosocial involvement promotes integration in the community, enhances positive moods, helps individuals stay healthy, and have enhanced life satisfaction (Kelley, 2003). Studies also indicate that prosocial involvement serves as a protective factor that fosters self-enhancement, self-acceptance, and successful psychosocial adaptation (Allen et al., 2008; Bullis, et al., 2001). Several cross-sectional and longitudinal studies provide evidence that high-school students who engage in prosocial community service activities are less likely to smoke marijuana, abuse alcohol, perform poorly in school, become pregnant, or commit delinquent acts (Ludwig & Pittman, 1999; Orpinas & Horne, 2006). There is consistent evidence that prosocial involvement not only reduces crime and delinquency, but also serves as a rehabilitation and correctional function in delinquent youth (Ludwig & Pittman, 1999; Orpinas & Horne, 2006).

## **Methodology**

### **Design**

This qualitative study implemented a grounded theory design. In grounded theory methodology, data collection and analysis continue in an ongoing cycle throughout the research process to ensure rich and accurate data that is used to construct a theory (Charmaz, 2006; Corbin & Strauss, 2015).

### **Data Collection**

Purposive sampling was used to identify research participants. The GRUB program director

provided researchers with contact information for former GRUB youth. After encountering changed or inaccurate contact information, researchers were able to track down 22 former GRUB youth. Of those 22, 12 agreed to participate in the study. One-on-one, semi-structured interviews were used to collect the experiences of these former GRUB youth, determining the kinds of decisions they were making – prosocial or antisocial – before, during, and after the GRUB program. Questions touched on participants' memories concerning their adolescent attitudes, behaviors, and activities both before, during, and following their participation in the GRUB program, including such topics as how they made decisions, the kinds of goals they had, and skills they had pre- and post-program participation. Participants ranged in age from 19 to 30 years old. All interviews were audio-recorded and transcribed. The interviews ranged in duration from 38 minutes to 1 hour and 22 minutes. The semi-structured nature of the interview protocol allowed the researcher to ask follow-up or additional questions and to explore additional information as needed, which resulted in varying lengths of interviews for each participant (Erlandson, et al., 1993).

### Data Analysis

Constant-comparative methods were used to analyze the data. There were three series of coding that aided in the development of the theory. The first series of coding was a basic holistic method. Holistic coding is an attempt to grasp basic themes or issues in the data by absorbing them as a whole (Saldaña, 2013). The second series of coding was axial, a more focused approach to coding; the purpose is to determine which codes are dominant and which ones are of secondary importance. During the axial coding process, the researcher reorganized the data set, removed redundant codes, and focused strictly on the dominant themes (Saldaña, 2013). Theoretical coding was the final step in achieving a robust grounded theory, because it integrates and synthesizes the categories and themes derived from the coding process and reveals the dimensions that enable the creation of a theory (Saldaña, 2013). A theoretical code specifies the possible relationships between categories and moves the analytic story in a theoretical direction (Charmaz, 2006). For this study, after defining the eight themes and the underlying codes within each, we were able to begin constructing diagrams that helped illustrate the transitional process experienced by youth in the GRUB program. Trustworthiness, credibility, transferability, dependability, and confirmability were achieved through multiple sources of data including interview transcripts, reflexive memoing and diagraming, field notes, observations, member checking, document analysis, and peer debriefing (Lincoln & Guba, 1985). Pseudonyms were used with participants to protect their privacy.

In spite of the many techniques employed to reduce bias, we recognize that qualitative researchers must be meticulous about acknowledging and managing possible bias. The primary researcher minimized bias through extensive reflexive writing after each interview to record thoughts and feelings regarding the interview in their raw form. The researcher scheduled ample time to conduct each interview in a comfortable, but neutral, location. Follow up messages were sent to participants to ensure that analytic interpretations were representative of their experiences. To address potential recall bias among participants, the researcher compared the experiences they shared against the other participants' experiences, as well as documents, such as newspaper articles on the GRUB program and internal GRUB reports.

## Results

### Research Question One

Research question one sought to determine the opportunities that the GRUB program provides youth to develop prosocial decision-making. These opportunities are listed in Figure 1. Components of the program include: 1) agricultural education, 2) sense of community, 3) character development, and 4) skills development. In the *agricultural education* component, the youth worked

as paid interns and learned about many aspects of farming, such as preparing the soil, planting, managing weeds and pests, harvesting, and marketing horticultural projects. DJ commented:

I learned a ton about vegetable farming. I've been thinking for years about the information that I picked up about each individual vegetable, times that you have to plant these vegetables, and I guess the overall hardship of being a farmer.

Callie also reflected on the agricultural experiences at GRUB:

I think that there's definitely like value in seeing that you till the soil and you add the compost and stuff to the dirt and then you add the seed and you have to put the water lines and all that stuff down and then the reward of seeing it go from a seed to an actual plant and then harvesting from that plant and eating from that plant made me like vegetables. I would even take home tomatoes and like grow them at home.

Much of the labor was physical, but there were opportunities provided for youth to reflect on their activities and interact with people who came to purchase the produce grown by the youth, as well as each other. Max said:

It showed me a lot of customer service as well. With the shareholders, I saw what it was to speak to someone of a higher ranking. Someone who I guess, the best way I can say it, a different tax bracket than I am, or like different title than I am and like not be intimidated.

In the *sense of community* component, youth began to develop connections with their coworkers, program staff, and shareholders who came regularly to the farm. Nicole stated, "We were a little family and we used to do a lot of teamwork and one-on-one connection." Callie expressed, "You really learned to like have each other's backs. We took care of each other and really became like a family. It was just really close." Youth began to identify with the farm so deeply that they came to do work or just pass the time even when they were not getting paid.

In the *character development* component, young people in the program found their attitudes and ideas changing through their work on the farm. Max talked about how GRUB "taught me how to calm down, because when I was younger I had ADHD, so it taught me to calm down and just see the situation and go on from there." They found a purpose in what they were doing, which motivated them to press on. Nicole reflected:

[GRUB made me feel] like *I was doing something. I was part of something*. It was this amazing feeling when you worked with the plants. It's not the same as flipping burgers. It's different. It kind of opens your mind to like growing things, your health, even just knowing about food that can make you healthier, that you eat and then when you do this or you pull a weed, you have to pull it this way because it's fragile. And it just taught you how to do something that a lot of people don't know about. It just made me happier. *I had something to do. It was just like really special.*

In the *skills development* component, youth in the program participated in a variety of workshops in which they learned practical skills, like budgeting, cooking, and interviewing, as well as interpersonal communication and leadership skills. Callie recalled, "I thought the classes were really helpful because we learned how to write a check and like how to fill out taxes." Alyssa shared, "We did a lot of interviewing, how to put resumes together, how to dress, and what to bring to interviews and just different stuff like that. I feel like that's helped me more in the long run."

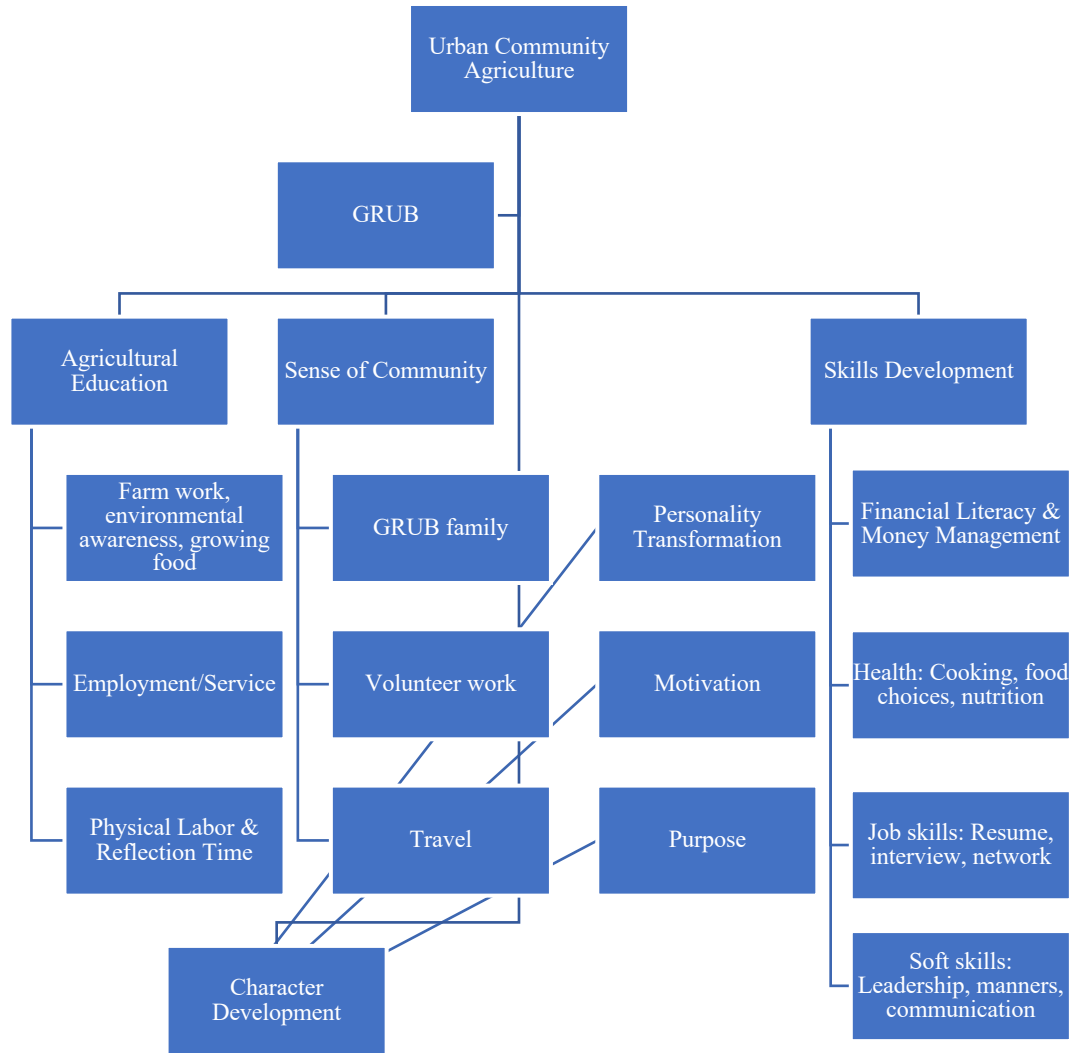


Figure 1. The Model of GRUB Opportunities.

### Research Question Two

Research question two sought to determine the experiences during the GRUB program that inspired youth to engage in prosocial decision-making. Five themes emerged as the answers to this question: farm work, teamwork and peer influence, staff mentoring, life skills, and job skills. When asked what experiences were most helpful during their time in the program, participants said: “The farm work! Everything I learned about business and vegetables has transferred over to my job now.” DJ now owns a landscaping business and utilizes the skills he learned on the farm.

In response to teamwork and peer influence, Vanessa said, “It was about teamwork and how to communicate, how to trust people, how to build, to learn how to do something if you’re afraid to do it. That helped me a lot.”

Callie’s response was to that of the staff mentoring:

The GRUB staff set really good intentions for us and you know, I feel like it helps us to understand, ‘We believe in you. We believe you can do better. You deserve better than whatever life you think you’re set up for’.

The job skills were another experience that helped youth develop prosocial decisions with lasting outcomes. Kylee attributes her current success in the workforce to her experiences in the GRUB program. She talked about activities the youth participated in as part of GRUB: “I put together a lot of résumés and quite a few interviews. Actually, I think that’s the part that helped me get the position I’m at in my job now. Every job I’ve ever gotten was because of GRUB.”

The last positive experience was the life skills. Nicole gives a testimonial of the life skills that enabled her to become self-sufficient as she began to manage her own money:

At GRUB , I was making my own money, so I was able to get myself things that maybe my parents couldn’t afford. Growing up, not having much money and stuff like that, makes me want to have security for me and my children someday.

### **Research Question Three**

The third research question sought to determine how the program eased antisocial behaviors among youth. Throughout the data collection and analysis, a theory emerged that illustrates the transition youth experience as they ease antisocial behaviors and develop prosocial behaviors. The Theory of Emotional-Behavioral Resilience (Figure 2), which emerged from the research, illustrates a developmental process as youth transformed on a continuum schematic scale to reduce antisocial behaviors and develop prosocial decisions. The EBR theory distinctly breaks down four positive constructs: 1) belonging, 2) self-worth, 3) grit, and 4) empathy. Youth developed these during the program and continued to foster them into adulthood. On the opposite side of the positive constructs emerged four negative constructs that represented the antisocial behaviors youth exhibited prior to joining the program: 1) isolation, 2) shame, 3) pity, and 4) apathy. While the constructs that emerged from the data are nuanced and complex, they critical to understanding the process of developing prosocial behaviors in at-risk youth.





participants needed to be fully captured. One example of isolation comes from Jill, whose family environment was not ideal. In this situation, she felt trapped and powerless, restricted from making a choice that would yield a better path:

I came from a pretty unfortunate upbringing. Both my parents are deadbeat drug addicts, alcoholics, not very present in my life. [When I was young] *I observed who I didn't want to be...* I was seeing all the bad things around me and going down that path, even though *that's not really what I wanted*. But *I had no chance*, absolutely no guidance to help me pursue the better path. I didn't have any direction. I was winging it. I didn't have the guidance, you know, to help me pursue those good decisions.... So yeah, I mean this is sad, but I was shoplifting, and smoking weed, and doing things that were getting me into a lot of trouble.

Participants went on to talk about how they felt powerless at home, explaining that they were “selling drugs to survive” and that “some people really don't got no choice.” The feelings of isolation were so severe in participants that a startling statistic was revealed: when asked where they would be had they not participated in the program, six out of the 12 participants said “dead,” “dead before the age of 25,” “dead...or gang-banging and selling drugs,” “dead, or in jail,” “probably dead...dead or in prison or have a whole bunch of kids.”

These statements are a testament to the detrimental effects of severe isolation. As stated by Miller and Striver (1997), isolation can be a psychologically-traumatizing imprisonment:

We believe the most terrifying and destructive feeling that a person can experience is psychological isolation. This is not the same as being alone. It is feeling that one is locked out of the possibility of human connection and of being powerless to change the situation. In the extreme, psychological isolation can lead to a sense of hopelessness and desperation. People will do almost anything to escape this combination of condemned isolation and powerlessness. (p. 72)

The feelings of isolation that participants trudged through were messy and painful, but they came out on the other side of what could have led to death, prison, and other negative outcomes; they came out on the side where they belonged, where they *mattered*.

**Belonging.** Opposite to feelings of isolation were feelings of connection and belonging. Youth described feelings of belonging saying, “Before the GRUB program, I felt lost...now I feel found;” “I felt really accepted;” “I was able to be myself;” “After GRUB, I feel like a whole person...like, completed.” A particular display of belonging comes from Callie, as she attests:

You learn what a *community* is because outside of GRUB, you can have a whole bunch of family problems going on, you may have bad influences in your life, but then at GRUB you see each other every day, you work with each other, you go through all this stuff *together*. We were getting things there that we weren't getting anywhere else.

Brown (2010) offers a definition for connection, which serves as the bridging construct that exists between isolation and belonging in the Theory of Emotional-Behavioral Resilience: “Connection is the energy that exists between people when they feel seen, heard, and valued; when they can give and receive without judgement; and when they derive sustenance and strength from the relationship” (p. 19).

The feelings of *being seen, heard, and valued; being accepted for who I am*, described by Brown (2010) were evidence of the feelings of belonging participants began to develop during their time in the program.

**Shame.** Similar to the opposing positions of belonging and isolation are the conflicting

relationships between self-worth and shame. In the first series of coding, self-worth emerged as the second step in which youth began to develop prosocial decisions. During the second series of coding, feelings of being *ashamed for my actions (embarrassment/remorse)*, *negative image*, and *a need to fit in (hanging around bad crowds)* emerged as codes in which shame served as the overarching category. Participants referred to feelings of shame as they shared, “I was a nerd, but I was hanging out with thugs (to fit in);” “I didn’t bring friends home because I was embarrassed of where we came from;” “I grew up stealing. I knew I was making bad choices; I didn’t want to steal but that was the only option;” “I had Fetal Alcohol Syndrome so that gave me a really bad self-image.” Alyssa shares an account of how she felt ashamed for who she was: “I was hospitalized for homicidal, suicidal tendencies four different times. I hated everybody, including myself. *I legitimately hated the person I was.*”

**Self-Worth.** Unlike the feelings of shame participants experienced, feelings of self-worth emerged as *self-sufficiency (making my own money, growing my own food, securing jobs)*; *control (of my own thoughts, emotions, temper; ability to take ownership of my actions, set boundaries for the people I allow in my environment)*; and *health & wellbeing (positive affirmation, excitement, leadership, reflection, and fostering mental, spiritual, emotional, and physical health)*. Sasha shares: “It taught me to love who I am. That’s not something I would have been able to do without being surrounded by such great people. That’s the main thing I learned there: *self-worth.*” Participants also referred to their feelings of self-worth that grew through self-sufficiency: “Being able to bring vegetables home and cook them for my family made me proud;” “using that money to buy a car...that was cool;” “helping out with my siblings and buying things my parents couldn’t afford made me feel happy.”

When analyzing and constructing the EBR model, it became apparent that the largely impactful transformations occurred when youth overcame isolation and shame and grew into individuals who felt that they belonged and that they mattered. The participants were exposed to boundaries that they were expected to follow, such as showing up on time, managing their teams and farm plots, harvesting and delivering produce to shareholders, and taking responsibility for their actions. When they began to feel connected on the farm and built teamwork and trust with their GRUB family, they had the motivation to show up time and time again and reap the fruits of their labor, both tangibly and metaphorically. Through community and individual work ethic, participants emerged from adolescents who felt ashamed of their antisocial behaviors, unworthy of loving themselves, to teenagers and adults who exhibited self-love, dignity, and confidence.

**Pity.** Just like the juxtaposing relationships between isolation versus belonging and of shame versus self-worth, grit, too, has a dark and twisted counterpart: *pity*. As we combed through the data to find the counterpart to grit, Kylee offered the statement that summed up pity: “*I got handed the short stick.*” Kylee says, “I was definitely an angry kid. Just kinda [had the mindset] that *I got handed the short stick* and so I was mad about that, I was angry at the whole world.”

Kylee’s assertion supports the evidence that many other participants exclaimed: notions that they were victims of their own circumstances *until* they were exposed to new opportunities and developed new perspectives in the program.

**Grit.** Moving into the analysis of grit, one phrase that was mentioned by two participants stuck out: “no matter the circumstance.” As participants began to feel motivated by the program, they were “staying longer on Saturdays so I could beat other youth and win the volunteer hours;” “get up early and make my mom coffee so she’d take me to GRUB.” Nicole testifies that, “It teaches you that no matter the circumstances, you can do whatever you want to, you just gotta put your mind to it.”

In her research on grit, Duckworth (2016) claims that grit is not related to one's particular talents and skills, but rather is related to one's willingness to keep trudging forward in spite of difficulties. These were key concepts that brought to life the feelings of *perseverance*, *meaning*, *motivation*, and *courage* the participants encountered. In this study, grit took shape over three underlying codes: *goals*, *vision*, and *perspective*. What led to grit's placement after worth was the finding that participants not only traversed isolation, shame, and pity to grow strong backbones, they also learned to stand up and to stay up. They built the tenacity to "learn to persevere," "I was always motivated to get another job," "I just wanted to stay in school so I could get scholarships."

They had goals with a vision, and they persevered with healthy perspective.

**Apathy.** Participants described feelings of apathy through *rebellion*, *disregard for others*, and *laziness*. Many participants said that before the GRUB program, they were "running the streets," "not doin' nothing but getting in trouble," and "smoking weed at 14, 'cause that's all we had to do, man." Alyssa gives a testimonial about her rebellious actions, how using drugs was the only option to survive because, "yeah, I didn't really have a purpose at that point." She goes on to describe her apathetic outlook before joining GRUB, "We wanted to *numb* everything. *Didn't want to have to feel anything*. My first addiction was a codeine habit when I was 14...uh, my mom supplied them."

In terms of the definition of apathy, the participants all referred to their lack of direction or motivation to take action on something that normally might cause action or elicit emotion. This was coded as "laziness," one of the three sub-themes under apathy. When asked what their outlook on life was before the GRUB program, and what it was after, they responded with: "I hated it. I did not want to be there. [The first day] I didn't want to work. Like I was antisocial; I saw all them bugs and heat, and I was like 'no way. I ain't doin' it.'" Sarah gives an account of her previously apathetic outlook: "If I hadn't participated GRUB, I probably wouldn't be as responsible as I am now. Before, I wasn't responsible...I didn't care about school or anything, but GRUB motivated me to see that."

However, for many of the participants who didn't want to work the day they arrived, this mindset began to shift around the time of Spring Break, because they had finally formed a bond with each other and the farm. Participants demonstrated how that outlook changed, saying: "Yeah, then I started to love it, like being out there with the plants;" "we had so much fun, like I wanted to show up and be with my friends;" and "we just kept coming back...everyone kept coming back."

This is yet another example of the critical role the first pillar has; once they began to feel like they belonged, they wanted to come back. Not only did they start coming back, they started to work hard and hold each other to higher standards.

**Empathy.** While apathetic behaviors emerged in the form of rebellion, laziness, and disregard for others, empathy allowed participants to begin seeing things from the other person's point of view and putting themselves in that person's shoes. Empathy is defined as the ability to perceive a situation from the other person's perspective – to see, hear, and feel the unique world of the other (Ivey, et al., 2001). Participants alluded to feelings of empathy through *gratitude*, *respect*, and *perspective*.

Next to belonging, empathy was largely the most identifiable theme while analyzing the data. During interviews, participants often told stories of how they "just want to help people now, like how can I help;" "sometimes people need our help;" "I just want to be that person that makes that impact;" "I'm like an advocate for helping people." These 12 individuals, who had openly shared challenges of isolation, loneliness, hopelessness, rebellion, and delinquency were, at the end of our conversations,

telling us about their contributions. Max shared a story about how he and a few other GRUB youth helped community members put gardens in their backyards:

The four of us, we went and did high raised bed gardens in a couple of houses. We were actually in the newspaper; but that's what I'm doing now, too [putting up gardens in people's backyards]. I just love it, like it's who I am.

Kylee demonstrates her empathetic actions, as she shares:

I'm always the first one like, 'Oh, what can I do to help you, like what do you need what can I do?' We didn't have the best growing up, but there's always someone who has it worse. *If I can do something to help somebody else, then I feel like my purpose for the day is complete.*

Perhaps the most moving mention of contribution was shared by DJ. In one of his final reflections, DJ recounts the profound impact GRUB had on his transformation. This statement is evidence of a heart of empathy:

Reflecting on that time in GRUB to now... I mean, I feel like *it essentially shaped what I am*, because it *taught me* another style of responsibility. I wanted to do what other kids were doing, but I couldn't. At the end of it all, if it wasn't for the program and gaining more responsibility and work ethic, and in learning that in life, 'you gotta do what you gotta do,' I certainly wouldn't be as strong-minded as I am today. It's much-needed... You know, if there was a way I could invest a million dollars, it would be to a program like that, because it shaped what I am and what I do today. So, to be able to keep that program going, keep them going and making a difference in someone's life, because I feel like there's got to be another kid out there that *went through what I did*. To be able to say, 'Hey, it's not all bad, there's help out there. You could make a difference.' It's crazy today when you see all these teen suicides, and to me, that wasn't something I ever thought about as a kid. *There was always a way because of GRUB*. Where there's a will, there's a way. Keep on pushing. It ain't been easy, I mean that, it ain't been easy at all, but keep pushing.

DJ's gratitude toward GRUB, his grit to persevere, his empathy to contribute, and his humble testimonial about the program represent the overall message spoken from 12 unique individuals: *I matter. I am worthy. I am able.*

## Discussion

During the construction of a dynamic and complex theory, we discovered that former GRUB youth experienced an array of opportunities to ease antisocial behaviors and promote prosocial decision-making.

Throughout the complex and comprehensive data collection and analysis, participants shared their truths and reflected on the transitional developmental period that transpired at GRUB, voicing their concerns and sharing their stories about isolation, shame, pity, and apathy. This allowed for a deeper and clearer understanding of the pillars leading up to prosocial decision-making: belonging, worth, grit and ultimately, empathy.

At the ages of 12, 13, and 14, when they began the program, participants started out as youth who were *isolated, lost, desperate, and alone*. Some had rocky home lives, some had committed crimes, and some even hated themselves. Yet, as they began to feel welcomed, to work in teams, to nourish plants to harvest, to experience leadership, to interact with shareholders, to contribute, to conquer challenges, to be recognized for their efforts, to dream and achieve and stand tall, the participants realized that they had a choice, they had a voice, and they had a chance. Twelve participants who once saw themselves as powerless individuals have flourished into adults who

decide to act on prosocial decisions. These 12 unique individuals are business owners, aspiring nurses, service providers, aspiring authors, role models, managers, supervisors, volunteers, community service organizers, and contributors. They have perspective, they persevere *no matter the circumstance*, and they lead with empathy. Through an overwhelming consensus, 12 individuals molded a theory that explains how a community agriculture program nourishes a critical transformation from isolation to empathy, one seed at a time.

### **Conclusions, Implications, and Recommendations**

The results of this study present an empirical foundation for a new approach to understanding the process youth undergo when easing antisocial behaviors and developing prosocial behaviors through participation in a community agriculture program. The findings of this study were consistent with existing literature concerning this topic.

The results of previous research found that prosocial behaviors can be achieved through positive youth development. Studies have shown that positive youth development promotes youth assets such as: 1) health benefits—dietary, mental and physical; 2) food security; 3) economic development; 4) youth education; 5) employment and skill development; 6) open space and preservation; 7) crime prevention; 8) leisure and recreation; 9) neighborhood beautification; 10) social capital; 11) cultural preservation and expression; and 12) community organizing and empowerment (Delia & Krasny, 2018).

This study added to the literature through the creation of a model that attempts to identify and explain the processes that youth undergo when transitioning from antisocial to prosocial behaviors in an urban agriculture program.

### **Implications for Agricultural Educators**

As agricultural educators, we recommend the continuance of investigation into community agriculture programs as gateways through which youth are exposed to opportunities to develop prosocial behaviors. Creating agricultural programs that target at-risk youth with the intention of developing both technical agricultural skills, as well as prosocial decision-making skills could both expand the reach of agricultural education to non-traditional audiences and create life-changing educational opportunities for young people (Brown, et al., 2015). One important implication of taking agricultural education to underserved communities may be reconceptualizing the essence of agricultural education – how do we create connections with communities that are bereft of formal agricultural education programs? What is informal agricultural education? How can agricultural educators bridge the gap in access for underserved youth? As we move forward, it will be critical for agricultural educators to consider the environmental influences that promote antisocial behaviors among youth in marginalized communities. Through a deeper understanding of disadvantaged young people's environmental influences, agricultural programs can be developed and implemented with targeted approaches that cater to youth more prone to suffering from antisocial decision-making.

### **Implications for Community and Non-profit Organizations**

Community and non-profit organizations such as the GRUB program should consider the wide array of positive impacts community agriculture programs can promote within urban and rural neighborhoods. It is important to also consider the assets that communities could develop with citizens that are strong in prosocial tendencies and weak in antisocial actions. Research indicates that community agriculture programs can provide assets to communities such as higher employment rates (Allen et al., 2008), decreased poverty (Bumbarger & Greenberg, 2002), social connectedness, lower obesity rates (Hirschi, 2015) and resources that promote a healthy lifestyle, such as sources of healthy

foods and safe places for recreation (Trinidad, 2009). This study reaffirms that community agriculture programs can act as platforms to develop assets at a community level, benefitting individuals and communities alike.

### **Civic Engagement**

In a statement made by GRUB staff, they indicated the future holds many challenges for upcoming generations because they lack the life skills and job skills needed to reach self-sufficiency and food security. It is up to educators, communities, and citizens to ensure our people are armed with the resources to act within prosocial norms. With increased crime rates, higher unemployment rates, and health and wellness issues, we propose that community agriculture programs can serve as a part of the solution to these problems. The findings of this study suggest that programs similar to GRUB can act as developmental programs to aid in those societal challenges. More compelling research could provide evidence to support community agriculture programs as a tool for change in social, health, economic, and environmental factors facing our society (Draper & Freedman, 2010). Researchers need to make strides in performing rigorous, evaluative studies of community agriculture programs and how they can aid in health promotion, fostering community connectedness, respect for society and others, creating jobs, increasing food security and agricultural literacy, and creating a society that does not suffer from the negative outcomes of antisocial citizens, but benefits from the actions of prosocially-driven individuals.

### **Recommendations for Future Research**

This study resulted in a grounded theory that helps us understand the process youth undergo when transitioning from antisocial behaviors to prosocial behaviors through participation in a community agriculture program. This study lays the groundwork for a variety of future research endeavors.

It is critical that the Emotional-Behavioral Resilience (EBR) Theory be implemented to test, refine, and continue developing its use in the field of agricultural education and youth development. Research is needed to implement this theory to compare and contrast the behavioral transformations youth undergo while participating in a community agriculture program. There are several factors to consider when conducting further studies, including: positive psychological development, participants and population size, program type, program delivery methods, length of time participants were involved in the program, youth's role in the program (volunteer and/or paid) and external factors influencing participants' decision-making before, during and after participation in said program. The participants in this study varied greatly in age, ethnicity, gender and their amount of time spent in the program.

Although a majority of the participants spent approximately five years in the program, further research should test the greatest impact of change on youth considering longevity and intensive participation, depending on amount of time and engagement with the program. To explore these effects, we recommend implementing a longitudinal study, using the EBR theory as a backdrop to measure youth development of the four prosocial constructs. The study would be conducted each year that a youth participates. It is also imperative to understand that each construct in this theory is complex. Future studies could be done to explore and analyze how feelings of isolation, shame, pity, and apathy can be depreciated and how belonging, self-worth, grit and empathy can be achieved at an individual and community level. Further research could analyze how youth experience these emotions and how they can be built upon with positive youth development programs like GRUB.

It would also benefit our field to research who benefits most from community agriculture

programs. In this study, youth entered the program as volunteers, often due to court-ordered community service requirements. All of the participants in this study were considered at-risk. Current research suggests that youth in low-socioeconomic communities are more prone to developing and exhibiting antisocial behaviors and benefit more strongly from these types of programs (Allen et al., 2008). It would benefit our field to explore and discover what populations of youth benefit from positive youth development programs delivered in the form of community agriculture programs.

Another consideration is the type of program and the opportunities for development layered within. GRUB offers a comprehensive set of hands-on, experiential activities in addition to the paid internship, requiring youth to work and manage the 5.5-acre farm. It would also be insightful to compare and contrast the GRUB program with similar community agriculture programs and analyze the development youth experience in each program. They may lead us to discover if the program would have the same outcomes if one component of the program was removed.

Finally, further research needs to be done to determine the long-term benefits of community agriculture programs as tools for promoting social, health, economic, and environmental change. This can be achieved through more refined approaches of research designs that rely on a combination of systematic qualitative and quantitative methods. Perhaps a more robust study can be conducted using quantitative mediation/moderation analysis. With further analysis, we can determine how programs of this caliber can promote prosocial decision-making, as well as foster youth who become leaders in their individual lives and societal roles.

### Summary

Although the results from this study are not universal, the Theory of Emotional-Behavioral Resilience suggests that through the attention to positive youth development in the form of community agriculture programs, they can foster youth assets that lead to prosocial decisions, ultimately resulting in positive outcomes such as volunteerism, steady employment, self-sufficiency, and food security. Previous literature tells us that community agriculture programs have the potential to simultaneously promote youth developmental assets, while at the same time alleviating multiple societal ills (Draper & Freedman, 2010). Prosocial development is critical to overall health and wellbeing, not only at an individual level, but at a societal level (Kelley, 2003).

Based on the findings of this study, community agriculture programs should be established, valued, and sustained as a means of fostering prosocial tendencies in youth.

### References

- Allen, J. O., Alaimo, K., Elam, D. & Perry, E. (2008) Growing vegetables and values: Benefits of neighborhood-based community gardens for youth development and nutrition. *Journal of Hunger & Environmental Nutrition*, 3(4), 418-434  
<https://doi.org/10.1080/19320240802529169>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.  
<https://doi.org/10.1037/003329091173497>
- Benson, P. L., Leffert, N., Scales, P. C., & Blyth, D. A. (1998). Beyond the 'village' rhetoric: Creating healthy communities for children and adolescents. *Applied Developmental Science*, 2(3), 138-159. <https://doi.org/10.1207/s1532480xads02033>

- Brown, B. (2010). *The gifts of imperfection: Let go of who you think you're supposed to be and embrace who you are*. Center City, Minnesota: Hazelden Publishing.
- Brown, N.R., Roberts, R., Whiddon, A.S., Goossen, C.E., & Kacal, A. (2015). Paxton revisited: The essence of the lived experiences of urban agricultural education students. *Journal of Agricultural Education*, 56(1), 58-72. <https://doi.org/10.5032/jae.2015.01058>
- Bullis, M., Walker, H. M., & Sprague, J. R. (2001). A promise unfulfilled: Social skills training with at-risk and antisocial children and youth. *Exceptionality*, 9(1-2), 67-90. <https://doi.org/10.1080/09362835.2001.9666992>
- Bumbarger, B., & Greenberg, M. T. (2002). Next steps in advancing research on positive youth development. *Prevention & Treatment*, 5(1). Article ID 16. <https://doi.org/10.1037/1522373651516c>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide though qualitative research*. Thousand Oaks, CA: SAGE Publications.
- Corbin, J. M., & Strauss, A. L. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory. Los Angeles: SAGE.
- Damon, W. (2004). What is positive youth development? *The Annals of the American Academy of Political and Social Science*, 591(1), 13-24. <https://doi.org/10.1177/0002716203260092>
- Delia, J., & Krasny, M. E. (2018). Cultivating positive youth development, Critical consciousness, and authentic care in urban environmental education. *Frontiers in Psychology*, 8(2340). <https://doi.org/10.3389/fpsyg.2017.02340>
- Dovidio, J. F., Piliavin, J. A., Schroeder, D. A., & Penner, L. A. (2006). *The social psychology of prosocial behavior*. New York: Psychology Press.
- Draper, C. & Freedman, D. (2010). Review and analysis of the benefits, purposes, and motivations associated with community gardening in the United States. *Journal of Community Practice*, 18(4), 458 – 492. <https://doi.org/10.1080/10705422.2010.519682>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. New York: Scribner.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Thousand Oaks, CA: SAGE Publications.
- Freud, A. (1969). Adolescence as a developmental disturbance. In G. Caplan & S. Lebovici (Eds.), *Adolescence* (pp. 5-10). New York: Basic Books.
- Fulford, S., & Thompson, S. (2013). Youth community gardening programming as community development: The Youth for EcoAction Program in Winnipeg, Canada. *Canadian Journal of Nonprofit and Social Economy Research*, 4(2). <https://doi.org/10.22230/cjnser.2013v4n2a145>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59 – 82. <https://doi.org/10.1177/1525822X05279903>



- Hirschi, J. S. (2015). *Ripe for change: Garden-based learning in schools*. Cambridge, MA: Harvard Education Press.
- Ivey, A.E., Pedersen, Pl, & Ivey, M.B. (2001). *Intengional group counseling: A microskills approach*. Belmont, CA: Brooks/Cole Thomson Learning.
- Kelley, T.M. (2003). Health realization: A principle-based psychology of positive youth development. *Child & Youth Care Forum*, 32(1), 47-72. <https://doi.org/10.1023/A:1022257625454>
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among American youth*. Thousand Oaks, CA: Sage.
- Lerner, R. M. (2006). Editor's introduction: Developmental science, developmental systems, and contemporary theories. In W. Damon & R. M. Lerner (Ed.). *Theoretical models of human development. Volume 1 of Handbook of Child Psychology* (6th ed.). Hoboken, NJ: Wiley.
- Levine, R.V., Martinez, T.S., Brase, G., & Sorenson, K. (1994). Helping in 36 U.S. cities. *Journal of Personality and Social Psychology*, 67(1), 69 – 82. <https://doi.org/10.1037/0022-3514.67.1.69>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: SAGE Publications.
- Ludwig, K. B., & Pittman, J. F. (1999). Adolescent prosocial values and self-efficacy in relation to delinquency, risky sexual behavior, and drug use. *Youth & Society*, 30(4), 461-482. <https://doi.org/10.1177/0044118x99030004004>
- Miller, J.B. & Striver, I. P. (1997). *The healing connection: How women form relationships in therapy and life*. Boston: Beacon.
- Nagel, A. G., Guarnera, L. A., & Reppucci, N. D. (2016). Adolescent development, mental disorder, and decision making in delinquent youths. In K. Heilbrun, D. DeMatteo, & N. E. S. Goldstein (Eds.) *APA handbooks in psychology series. APA handbook of psychology and juvenile justice* (pp. 117-138). Washington, DC, US: American Psychological Association. <https://doi.org/10.1037/14643006>
- Ohly, H., Gentry, S., Wigglesworth, R., Bethel, A., Lovell, R., & Garside, R. (2016). Erratum to: A systematic review of the health and well-being impacts of school gardening: Synthesis of quantitative and qualitative evidence. *BMC Public Health*, 16(1). <https://doi.org/10.1186/s12889-016-3736-z>
- Orpinas, P., & Horne, A.M. (2006). *Bullying prevention: Creating a positive school climate and developing social competence*. Washington, DC: American Psychological Association.
- Ozer, E. J. (2007). The effects of school gardens on students and schools: Conceptualization and considerations for maximizing healthy development. *Health Education and Behavior*, 34(6), 846–863. <https://doi.org/10.1177/1090198106289002>
- Roth, J., Brooks-Gunn, J., Murray, L., & Foster, W. (2003). Promoting healthy adolescents: Synthesis of youth development program evaluations. *Journal of Research on Adolescence*, 8(4), 423-459. [https://doi.org/10.1207/s15327795jra0804\\_2](https://doi.org/10.1207/s15327795jra0804_2)

- Saldaña, J. (2013). *The coding manual for qualitative researchers*. Los Angeles, CA:SAGE.
- Shotland, R.L., & Heinold, W.D. (1985). Bystander response to arterial bleeding: Helping skills, the decision-making process, and differentiating the helping response. *Journal of Personality and Social Psychology*, 49(2), 347 – 356. <https://doi.org/10.1037/0022-3514.49.2.347>
- Simpson, B., & Willer, R. (2008). Altruism and indirect reciprocity: The interaction of person and situation in prosocial behavior. *Social Psychology Quarterly*, 71(1), 37-52. <https://doi.org/10.1177/019027250807100106>.
- Smith, J.G., DuBois, B., & Krasny, M.E. (2015). Framing resilience through social learning: Impacts of environmental stewardship in youth in post-disturbance communities. *Sustainability Science*, 11, 441 – 453. <https://doi.org/10.1007/s11625-015-0348-y>
- Trinidad, A. M. (2009). Toward kuleana (responsibility): A case study of a contextually grounded intervention for native Hawaiian youth and young adults. *Aggression and Violent Behavior*, 14(6), 488-498. <https://doi.org/10.1016/j.javb.2009.07.008>
- Urban, J. B., Lewin-Bizan, S., & Lerner, R. M. (2010). The role of intentional self regulation, lower neighborhood ecological assets, and activity involvement in youth developmental outcomes. *Journal of Youth and Adolescence*, 39(7), 783- 800. <https://doi.org/10.1007/s10964-01>