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# THE DEVELOPMENT OF SENSE OF AGENCY

by

SHAUN DUGGINS

Under the Direction of Roderick Watts, Ph.D.

## ABSTRACT

Agency, a behavioral and psychological concept, is an individual's sense of what they can do and what they think they can do. It is imperative to understand how a sense of agency in youths can be fostered and transformed into constructive action. This study builds on previous research to better identify predictors of agency, focusing on social and political involvement and opportunity structure. Additionally, it analyzes and proposes the use of a new measure of agency, the Community Leadership (CL) scale. Eighty-five teens (ages 13 to 18) were administered surveys. Involvement was found to be significantly related to agency. It was also related to opportunity structure, but opportunity structure was not significantly related to agency. Opportunity structure seems to partly influence the relationship between involvement and agency. When compared to previously validated measures of agency, the CL scale proved to be a shorter and psychometrically sound alternative measure.

INDEX WORDS: Youth development, Sociopolitical development, Agency, Self-efficacy, Opportunity structure, Measurements of agency

THE DEVELOPMENT OF SENSE OF AGENCY

by

SHAUN DUGGINS

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

in the College of Arts and Sciences

Georgia State University

2011

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2011

THE DEVELOPMENT OF SENSE OF AGENCY

by

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## 1 INTRODUCTION

With the election of an African American president and national debates on political issues like health care reform on every form of media, political and social awareness seem to be on the rise. Now, more than ever, it is important to understand how this awareness can be fostered and transformed into constructive action to address the many social issues that need attention. This is especially true for youth of color whose social and political developments occur within an oppressive society. Paulo Freire (1970) emphasized this point in his assertion that in order to create a truly democratic society, individuals must develop a critical consciousness; the ability to perceive social, political, and economic oppression and to take action against the oppressive elements of society. As Freire posited, "Who are better prepared than the oppressed to understand the terrible significance of an oppressive society? Who suffer the effects of oppression more than the oppressed? Who can better understand the necessity of liberation? They will not gain this liberation by chance but through the praxis of their quest for it, through their recognition of the necessity to fight for it." (pp 45)

Social cognitive theory tells us that learning and action are more likely to occur when the individual involved believes he or she have the capabilities to succeed. According to Bandura (1989), these beliefs "function as an important set of proximal determinants of human motivation, affect, and action which operate on action through motivational, cognitive, and affective intervening processes." Believing that one has the abilities to contribute, succeed, and make a difference is known as a sense of agency. But the question remains, what is the role of sense of agency in youth social and political development? It would be helpful to first explore how this concept of agency has been understood in past literature, and what the relevant findings have been.

A sense of agency has been conceptualized in different ways, and it is oftentimes mentioned in conjunction with (or sometimes interchangeably with) related concepts. It is a construct that has been

used in philosophy and the social sciences, generally to refer to the capacity of individuals to act independently and make their own free choices, and impose those choices on the world (Barker, 2005).

Bandura (2001, 2008) defined agency as the ability to intentionally influence one's functioning and the course of environmental events. According to him, possessing the belief that one can successfully influence the course of events within one's environment is the crucial element to actually being able to do so:

“Unless people believe they can produce desired effects by their actions they have little incentive to act or to persevere in the face of difficulties. Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to effect changes by one's actions.” (Bandura, 2008)

Watts & Guessous (2006) look at sense of agency as the belief that one can make an impact. In their theory of sociopolitical development, which is defined as the “evolving understanding of the political, economic, cultural and other systemic forces that shape society, and the associated process of growth in relevant knowledge, analytical skills, and emotional faculties,” (pp. 3) agency is as an essential feature. It is thought to moderate the association between social beliefs (the beliefs one holds about how society works and their place in it) and sociopolitical behavior, involvement, or action (which may take many forms, including community service, service-learning, civics, voting, campaigning for a political candidate, community and labor organizing, and protesting) because people take action when they believe they can make an impact [see Fig. 1.1].

Watts & Guessous's definition of sense of agency draws from constructs such as self-efficacy and empowerment. Self-efficacy is very often used interchangeably with agency; the two are very similar. Self-efficacy has been described as one's belief in one's ability to succeed in specific situations (Bandura, A., 1977, 1997). It refers to the self, but may also apply in group situations where it is referred to as “collective efficacy”, a belief in the ability of the group to pull together and address shared problems

(Bandura, A. 2001, Brewer, M.B. & Gardner, W., 1996). It is distinct from self-esteem because self-efficacy focuses on perceived behavioral competencies as they relate to a person's perception of their ability to reach a goal, whereas self-esteem relates to a person's sense of self-worth (Mone, M. et al., 1995). For example, a person who is a terrible baseball player would probably have poor self-efficacy with regard to playing baseball, but if that person does not invest much of his/her self-worth into the activity it may not affect his/her self-esteem at all. As a concept, self-efficacy differs from agency in that self-efficacy is a purely behavioral concept (i.e., "what I can do") whereas agency is a psychological and behavioral concept (i.e., not only "what I can do", but also "what I think I can do"). Self-efficacy can be viewed as the behavioral component of agency. Some researchers believe that while the two concepts differ, they may work hand-in-hand. According to Bandura (1982, 1990), self-efficacy plays a central role in the exercise of personal agency by influencing thought patterns, emotional arousal and motivation. What we do influences what we think about what we can do.

A concept from community psychology similar to agency is empowerment. Zimmerman & Rapaport (1988), define it as "a combination of self-acceptance and self confidence, social and political understanding, and the ability to play an assertive role in controlling resources and decisions in one's community." Just as the distinction is made between self-efficacy (behavioral) and agency (psychological/behavioral), researchers (Zimmerman et al., 1992, Spreitzer, 1995, Meyerson & Kline, 2008, & Boudrias et al., 2009) believe that empowerment should be separated into its behavioral and psychological components (i.e., "what I can do to change my community" vs. "what I *think* I can do to change my community). Additionally, empowerment has been described in both personal and collective ways, with some researchers positing the notion that both collective and personal empowerment serve as agents for social change. In this light, personal empowerment, with its psychological and behavioral components, can be viewed as a special case of agency that is specific to community and political action.

Whether it is talked about in terms of self-efficacy, personal empowerment, or any other related terms, it is generally agreed that a sense of agency is necessary for engendering civic engagement, especially with youth. Watts & Guessous (2006) see it as a moderating variable between social beliefs and societal involvement, and Richardson (2004) sees it as the vital connection between youths participating in political discussions and their participation in civic engagement activities.

Each of these related concepts is focused on the self and has been linked to individual development and psychological adjustment. Feelings of self-efficacy are thought to positively influence prosocial behaviors like helping others, sharing, being kind, and cooperating (Bandura, et al., 2003). Self-efficacy and agency are also linked to higher levels of motivation and success with regards to chosen activities (Bandura, A., 1977). Continued successes, especially in activities that individuals have tied to their self-concept, can help to increase a person's self-esteem (Bandura, A. 1997 & Mone, M. et al., 1995). Personal empowerment (psychological and behavioral) is believed to not only lead to greater political and social involvement, but is also associated with fewer symptoms of psychological distress (Zimmerman, et al., 1992). Akin to the concept of empowerment, higher levels of sociopolitical control, defined as the beliefs about one's capabilities and efficacy in social and political systems, predict greater general health, fewer depressive symptoms, and higher self-esteem (Zimmerman, M.C. et al., 1999).

In addition to these aspects of psychological functioning that some researchers associate with increased social and political awareness and activity, some researchers argue that political and civic engagement are linked to positive development and psychological adjustment. Despite the scarcity of information available on this connection, the existing research points to civic engagement as a tool for enhancing academic performance and self-concept (Morgan & Strebb, 2001; Yates & Youniss, 1996). Although there is little empirical evidence to support it at the present time, the theory by Watts & Guessous (2006) predicts positive associations between societal involvement and agency and intellectual development, social competence, and psychological adjustment [see Fig. 1.2].

In sum, this review of the literature supports the idea that a sense of agency is important for fostering sociopolitical involvement, and that both involvement and agency are related to positive youth psychological development. Although much work has been done to establish a link between agency (and its related concepts) and action, little is known about the development of sense of agency. Regardless of its role in sociopolitical development theory, there is value in understanding how a sense of agency develops, and how it can be nurtured.

Sociologists believe that one's agency is "affected by the cognitive belief structure which one has formed through one's experiences, and the perceptions held by the society and the individual of the structures and circumstances of the environment one is in" (Barker, 2005). Yates & Youniss (1996) state that service activities that provide opportunities for intense experiences and social interactions are often associated with prosocial development, including changes in a sense of agency. Gerhardt (2003) provides evidence that the development of self-efficacy is affected by both personal characteristics (e.g., how goal oriented one is) and situational features (e.g., experiences and situational constraints). In one way or another, they seem to agree that personal experiences are key to developing a sense of agency. This sentiment is mirrored in the importance that researchers place on opportunity structures as antecedents of societal involvement (Keeter, Zukin, Andolina, & Jenkins, 2002 & Watts & Guessous, 2006).

The term "opportunity structure" was developed by Cloward & Ohlin (1960) to further understand the pathways that lead to success or delinquency in American culture, particularly for teens and young adults. It refers to the notion that opportunity, the chance to gain certain rewards or goals, is shaped by the way society or an institution is organized (or structured). For example, the opportunity for youth of color to succeed academically may be structured by the racial stratification of the school; such as placing a disproportionate number of white students in advanced classes based on biased indicators (Oakes, 1985 & Ogbu, 1978 & 1996). Cloward & Ohlin posited that when positive pathways are

blocked (for example through failed schooling), other opportunity structures may be found, like gangs that could lead to patterns of deviance.

Other researchers have noted the connection between opportunity structures and youth development. Fraser (1996) viewed youth violence as a result of an impoverished opportunity structure. As he stated, “if, because of social or economic conditions, children lack opportunities for successful social participation, they may be seriously disadvantaged in developing skills that will promote success in school, work, and other life settings... The more often they engage in socially responsive interaction, the more likely they are to help generate or sustain a caring and sharing society.”

In their theory of sociopolitical development, Watts & Guessous view opportunity structure as a moderator of the association between social beliefs and sociopolitical involvement (alongside sense of agency) [see Fig. 1]. As they observed, “action requires opportunity.” Their conceptualization of opportunity structure includes the influence of peers. This is because developmental psychology has established the importance of peer influence during adolescence. Other researchers have also viewed peers as opportunity structures. In their investigation in leadership research, Balkundi & Kilduff (2006) emphasize social networks as “both cognitive structures in the minds of organizational members and opportunity structures that facilitate and constrain action.” In order to measure both aspects of opportunity structure (available organizations/activities and peers), Watts & Guessous developed the Subjective Inventory of Opportunity Structure (SIOS). Because this measure has been used so rarely, the current study will utilize it after assessing its reliability and validity. It will be compared to variables that are expected to be related to opportunity structure, like age and parental involvement.

So, past research has shown that a greater sense of agency is related to healthy development as well as sociopolitical involvement. But a number of researchers also speculate on a relationship between *successful* societal involvement and sense of agency. Although Watts & Guessous do not depict agency as an outcome variable in their model of sociopolitical development, they acknowledge that “...it

is reasonable to predict that successful societal involvement projects also lead to a greater sense of agency, and perhaps a positive feedback loop... it is useful to view agency as an ancillary output of SPD and also as an input for positive youth development.” (pp 9-10)

Consider also Weick’s (1984) concept of small wins. In essence, even minor successful experiences (a small win) can increase a sense-of agency, which, in turn, creates a greater desire to be involved. A question for this study is whether successful societal involvement contributes to a sense of agency directly, rather than moderates the relationship between social analysis and societal involvement as predicted by Watts & Guessous. In addition to this, because of the role that opportunity structure plays in creating chances for involvement and action, this researcher views opportunity structure as a moderating variable between agency and involvement.

In addition to this enhancement of Watts & Guessous’ theory, the current study will use an alternative measure of agency—called the Community Leadership (CL) scale—that Watts and Guessous created but did not use in their test of SPD theory. They considered the Sociopolitical Control Scale (SPCS) (Zimmerman & Zahniser, 1991) and the Perceived Control Scale (PCS) (Schulz, Isreal, Zimmerman & Checkoway, 1995) their principal measures of agency. However, the Community Leadership scale offers some advantages over both of these. Although the measures they chose have been used often in past research to measure agency, the SPCS items seem to refer more to self-efficacy (behavior) than to agency (psychological and behavioral) (i.e. “I can organize people to get things done” and “I am often a leader in groups”). The PCS also seems to refer to self-efficacy rather than agency, and it focuses on the idea of control over one’s environment. Although a belief in control over one’s environment may be related to beliefs in the abilities to affect change, the two concepts are different. For example, in a situation where someone believes he or she has the capabilities to be an effective leader but feels that social constraints prohibit them from taking a leadership role, they would conceivably score high on agency but low on environmental control. The CL scale, in contrast, addresses the behavioral aspect of

agency (self-efficacy), as well as the perception of one's personal abilities. Through comparisons with these previously validated measures, the present research attempts to solidify the Community Leadership scale as a valid and reliable measure of sense of agency.

### **1.1 The Present Study**

Figure 1.3 illustrates the predicted relationships among the principal constructs of interest in the present study. At the broadest level, this study addresses the question: what is the direct relationship between societal involvement and sense of agency in youth? A correlation is expected between the experience of success in civic and political activities, and a young person's sense of what they think they can do. It is also anticipated that positive opportunity structures that afford youth chances to be involved moderates the relationship between societal involvement and sense of agency. Societal Involvement and action may be related to agency, but, as noted by Watts & Guessous, involvement requires opportunity.

In order to better understand how to engender youth social and political action, this study will focus on the role that civic and political involvement play in increasing one's sense of agency. It will do so by addressing these questions:

1. Is the Community Leadership (CL) scale a useful measure of sense of agency?
2. What are the relationships among the societal involvement, opportunity structure, and sense of agency variables?
  - 2a. What role does opportunity structure play in this relationship?

It is expected that the CL scale will prove to be a valid and reliable measure of sense of agency; it is comparable to other validated measures of agency. It is predicted that successful societal involvement is directly related to a greater sense of agency, and that this relationship is moderated by oppor-

tunity structure (having more opportunities for involvement offered increases the chances one has to experience success, which creates the opportunity for greater sense of agency).

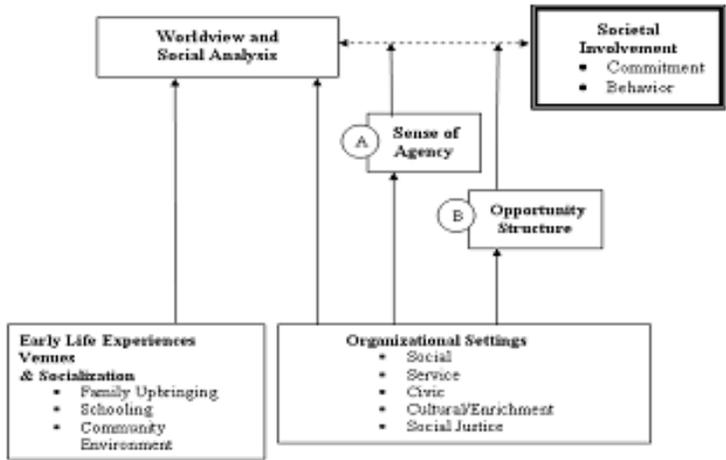


Figure 1.1: A Theory of Sociopolitical Development

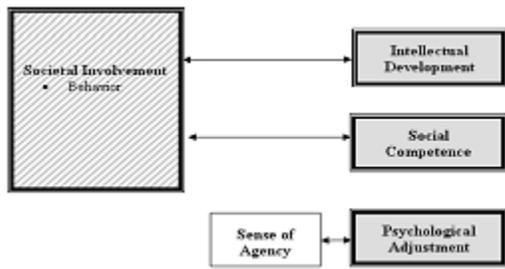


Figure 1.2: Relationships among Indicators of Societal Involvement and Positive Youth Development

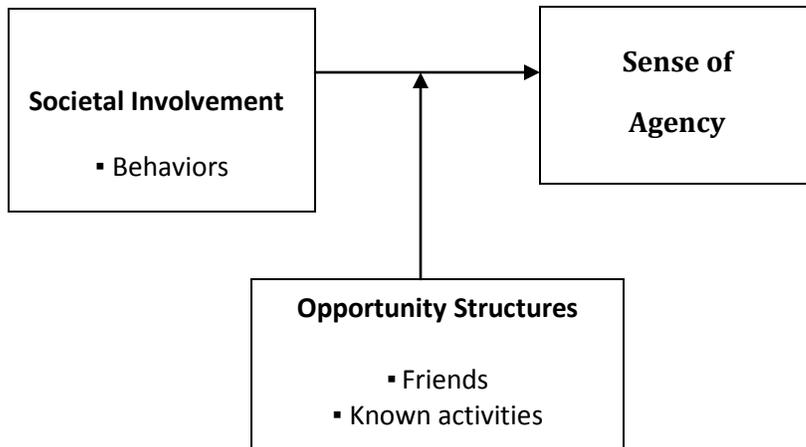


Figure 1.3: Relationship between Involvement activities and Sense of Agency

## 2 METHOD

### 2.1 Participants and Procedures

The present study uses a subset of an existing data base that studied youth's sociopolitical development. The sample consisted of high school students who lived in, or went to school, programs, or organizations in the city of Atlanta. Because of the original study's focus on societal involvement behavior, youth who were involved in some type of civic, community or political activity were over-sampled, by actively identifying and recruiting from settings that encouraged such community engagement. Watts & Guessous' original study utilized 131 youth participants, but because one of the measurements used in the present study (Community Leadership) was only administered to a subset of the sample, only 85 of the original sample are used in this study. Of the 85 students surveyed, over half (71.8%, N=61) were female. The sample was racially diverse and the preponderance of youth of color reflects the city's public-school population: 76.5% self identified as Black or African American (N=65) and 4.7% identified themselves as being biracial, Black and Latino(a) (N=3), or Asian American (N=1). The remaining 18.8% were European American/White (N=16).

Participants ranged in ages from 13 (1.2%, N=1) to 18 (11.8%, N=10), with the mean age being 15.7 (SD = 1.32), but the majority of students (70.6%, N=60) were between ages 14 and 16. All participants were high school students at the time of the study and the sample distribution was fairly even amongst the grade levels.

Youth completed paper-and-pencil surveys in group sessions, administered by trained graduate and undergraduate research assistants. Sessions were usually on-site at the school or organization where youth were recruited, once parental consent was obtained for all participants.

## 2.2 Measures

*Youth Inventory of Involvement (YII)* (Pancer et al., 2000). The YII is a 30-item scale used to assess the type and amount of societal involvement behavior. Respondents used a 6-point scale ranging from 0 (*never*) to 5 (*weekly or more*) to indicate how much, in the past year, they had participated in different types of activities. This measure utilizes four subscales, each of which represents a different kind of societal involvement: political activities (involvement with a political focus, e.g., “Participated in a political party, club or organization”), community/neighborhood activities (involvement focused on the community, e.g., “Was involved in projects to help improve your neighborhood”), helping activities (involvement focused on helping others, e.g., “Visited or helped out people who were sick”), and responding activities (involvement that is a response to a particular issue, e.g., “Joined in a protest march, meeting or demonstration”). A separate score is generated for each subscale by averaging the ratings for the associated items and a total score is created by computing the mean for the ratings of all the items. Total scores are used for the current study. The scale’s authors reported an alpha coefficient of .90.

*Community Leadership (CL)* (Watts & Guessous, 2006). This 10-item scale was created to assess sense of agency. Participants were presented with a hypothetical situation of a perceived injustice (“Imagine your school just passed a rule that you think is unfair. For example: No laughing in the hallways. No talking during lunch. Random searches are allowed.”) and asked how confident they felt that they would be able carry-out different actions to do something about this injustice (e.g., “Create a plan to address the problem” and “Organize and run a meeting”). Respondents used a 4-point scale which ranged from 1 (*not at all confident*) to 4 (*very confident*). A total score is generated by averaging the ratings for the items. The scale’s alpha is examined in the Results section. [See Appendix]

*Sociopolitical Control Scale (SPCS)* (Zimmerman & Zahniser, 1991). The SPCS assesses sociopolitical control, thinking, motivation, and personality as they relate to a person’s belief that their actions in the social and political system can lead to desired outcomes. It does so by utilizing two subscales, Lead-

ership Competence and Policy Control. Participants used a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) to indicate how much they agree with statements pertaining to their perceived control in the social and political realm (e.g., “I would prefer to be a leader rather than a follower” and “Other people usually follow my lead”). This study utilized the Leadership Competence subscale. A total score is obtained by computing the mean for the ratings of all the items. The scale’s authors reported alpha coefficients of .78 to .79 for this subscale.

*Perceived Control Scale (PCS)* (Schulz et al., 1995). The PCS assesses how much control a respondent feels over their social and physical environment. This measure uses three subscales to assess three different levels of control: individual, community and organizational. This study used the 10-item individual and community subscales to measure individual and collective sense of agency. Participants indicated how much they agree with statements regarding their sense of control using a 4 point scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The scale includes such items as “I have control over decisions that affect my life” (individual level) and “I can influence decisions that affect my community” (community level). A score is generated for each subscale by averaging the ratings for the associated items and a total score is obtained by averaging the ratings of all the items. Previous research has yielded reliability coefficients ranging from .81 (Becker et al., 2002) to .63 (Parker et al., 2001). Alphas for the current study are discussed in Results.

*Subjective Inventory of Opportunity Structure (SIOS)* (Watts & Guessous, unpublished). The SIOS was created to measure the amount of opportunity structures available to the youth. It is a subjective measure that captures the options respondents see as accessible or desirable. It does this using two indices; the Friendship index consists of five questions that determine the total number of friends in the youth’s social network who they know to be active in service, civic, or political activities. The score is the sum of the items. The Known-activities index consists of two true/false statements on the respondent’s awareness of community activities that are available to them. The true/false responses are scored 0

(false) and 1 (true), and total score is generated by summing the responses. The range for the total score of this subscale is 0 to 2.

Parental involvement was assessed through the use of six questions which asked respondents to indicate how active their parents have been in different political and civic actions, using a 3-point scale which ranged from 1 (*never*) to 3 (*often*). The measure includes items such as “Parent or Guardian involved in direct action or protests for a political cause” and “Parent or Guardian took you to political events, protests, or party meetings”. A score is generated by averaging the ratings of all the items.

### **2.3 Data Analysis**

The data were entered into SPSS and checked for entry errors and statistical assumption violations. Reliability tests (internal consistency) were performed on the Community Leadership scale to assess its accuracy as a measure of sense of agency. Using PPMC, the CL scale was also tested for concurrent validity (the extent to which the scale is a good measure of sense of agency as compared to the SPCS and the PCS, already established measures of agency). Similar reliability and validity tests were also performed on the Subjective Inventory of Opportunity scale.

Descriptive statistics were computed on the variables of interest in the proposed model (See Figure 1.3). Correlational analyses were then conducted in order to examine the bivariate relationships between the variables of interest. Hierarchical linear regressions were then performed to test for main effects of these variables. This made it possible to test the hypothesis about the existence of a relationship between these variables, as well as the magnitude of these relationships. A moderation analysis was conducted to test the hypothesis that opportunity structure moderates the relationship between societal involvement and sense of agency.

### 3 RESULTS

Before the relationships between involvement, sense of agency, and opportunity structure can be fully explored, the measurements used to assess each variable must meet certain criteria of reliability and validity. The non-validated, experimental scales used in this study were examined for these criteria.

#### 3.1 Community Leadership Scale –Factor Analysis and Reliability

Principal component analysis was used to examine whether the items in the CL scale form a single factor. The factorability of the ten CL items was examined based on correlational criteria. The minimum inter-item correlation was .30 and all values were statistically significant ( $p < .05$ ). Second, the Kaiser-Meyer-Olkin measure of sampling was .86, and Bartlett's test of sphericity was significant ( $\chi^2(45) = 369.11, p < .001$ ). These findings indicate reasonable factorability of the CL scale (Hair et al., 1992).

A principal component analysis, with varimax rotation that converged after three iterations, produced a two-factor solution. A single factor solution, explaining 50.4% of the variance, was selected because it produced the most interpretable solution and items loaded strongly on it (most loadings  $> .57$ ).

The Cronbach's alpha coefficient for a scale composed of the 10 items in the CL was (.89), providing further evidence of the scale's psychometric sufficiency.

A total score was created for the single factor, based on the mean of the items, with higher scores indicating a greater sense of agency. The skewness and kurtosis were well within a tolerable range for assuming a normal distribution and the variable appeared to meet this assumption (see Table 1).

#### 3.2 Community Leadership Scale vs. the SPCS & the PCS

Alpha coefficients for the SPCS (alpha = .68) and the PCS (alpha = .67) fell below conventional criteria, suggesting that these may be less reliable measures of agency than the CL (alpha = .89). Com-

paratively, the CL scale appears to be a more reliable measure of agency with the participants of this study.

Pearson product moment correlations were used to test the concurrent validity of the CL scale as a measure of sense of agency with the SPCS and the PCS. The correlation between CL and SPCS was .45, and .31 between CL and PCS, lower when correlated to the PCS subscales, individual control and community control, .24 and .22 respectively. Although these correlations were statistically significant, they did not meet the generally accepted .80 cut-off for concurrent validity (McIntire & Miller, 2005). This suggests these scales are measuring overlapping, but not identical concepts.

### **3.3 Subjective Inventory of Opportunity Structure**

A principal component analysis was conducted with the items of the SIOS to explore the two separate factors claimed by its authors. First, the factorability of the seven SIOS items was examined based on correlational criteria. The minimum intercorrelation among the five items related to the scale's Friendship index was .30, which suggests reasonable factorability of this index. One of the two items associated with the scale's Known-Activities index met this criteria. Second, the Kaiser-Meyer-Olkin measure of sampling adequacy was calculated to be .74 and Bartlett's test of sphericity was significant ( $\chi^2(21) = 190.00, p < .001$ ). Given these indicators, analysis was conducted using all seven items of the SIOS scale.

A principal component analysis, with varimax rotation that converged after three iterations, produced a two-factor solution. This two-factor solution, which explained a total of 63.44% of the variance, was selected because of the 'leveling off' of eigen values on the scree plot after two factors, it produced the most interpretable solution, and items loaded strongly on each factor (loadings > .57).

The two factors produced from this analysis are believed to be represented by the two indexes, the Friendship index and the Known-activities index, and served as the SIOS scale, with a separate score for each index. The Friendship index was scored as the sum of all the items; higher scores indicated a

greater number of friends in the youth's social network who are active in service, civic, or political activities. The distribution of SIOS\_Friendship scores had a positive skew (2.04) and kurtosis (4.50). The common cutoffs for skewness and kurtosis are  $-1$  to  $+1$  for their values, or, alternately, calculated by dividing the value by its respective standard error and producing a value of 2 or less (Tabachnick & Fidell, 1996). The distribution of scores significantly surpass the accepted cutoffs, therefore, scores were transformed using a  $LG10(X + 1)$  transformation to better approximate a normal distribution. (see Table 1). The Known- activities index was scored as the sum of the responses, with higher scores indicating a higher knowledge of service activities in which to participate. The distribution of SIOS\_Known-activities scores had skewness and kurtosis within accepted limits ( $-.29$  and  $-1.22$ , respectively).

Cronbach's alpha was  $.82$  for the Friendship index of the SIOS and  $.36$  for the Known-activities index. Given that the Known-Activities index consisted of only 2 items, this low alpha coefficient was to be expected and reflects an adequate level of internal consistency (Cortina, 1993 and Schmitt, 1996).

Because no other measures of opportunity structure were used in this study, concurrent validity of the SIOS could not be directly evaluated. Instead, Pearson Product Moment Correlation was used to assess the correlations between the SIOS and variables that are expected to be related to opportunity structure, specifically age (the older one is, the more likely one is to be aware of more opportunities for involvement), parental involvement (youth with parents who are active in political, civic, or service activities are more likely to be aware of such activities), and youth involvement (youth who are involved in political, civic, or service activities are more likely to be aware of such opportunities). Youth involvement was assessed through the use of the YII.

Both SIOS\_Friendship and SIOS\_Known-activities were significantly correlated with youth involvement (both have correlations of  $.43$ ,  $p < .001$ ) and parental involvement (correlations of  $.33$ ,  $p < .01$  and  $.32$ ,  $p < .01$ , respectively). Neither index was significantly correlated with age.

Overall, these analyses suggest that the Subjective Inventory of Opportunity Structure contains two factors, Friendship and Known-Activities. Both indexes were internally consistent, and seemed fairly valid.

### 3.4 Involvement, Opportunity Structure and Sense of Agency

Table 1 presents descriptive statistics for involvement, opportunity structure, and sense of agency. The distribution of scores on the Youth Involvement Inventory (YII) had a skewness that was within tolerable range (.89), and a slightly positive kurtosis (1.34). During all analyses, missing data was deleted using listwise deletion.

Before examining multivariate relationships among the variables of interest, independent samples t-tests and correlation analyses were used to examine between-group differences by gender, race, and age. Only Black/African-Americans and White/European-Americans were included in the analysis. The only significant difference found was for sex: girls reported a higher sense of agency ( $t_{(77)} = -2.18$ ,  $p = .03$ ) than boys. The Friendship index of the SIOS was different by race; White teens scored higher than Black teens ( $t_{(73)} = -2.17$ ,  $p = .03$ ), meaning that white youth in the sample reported having more friends involved in civic, service, or political activities.

As shown in Table 2, correlation analyses revealed that Involvement was correlated significantly with both indexes of opportunity structure (correlations of .43,  $p < .001$  for both friendship and known-activities) and sense of agency (correlation of .39,  $p = .002$ ). The relationship with agency was shown to be stronger when the CL scale was used to measure it, as opposed to the SPCS or PCS. Correlations between involvement and agency were not significant when using the SPCS or PCS to measure sense of agency. Interestingly, when the subscales of the YII were examined, it was found that all involvement subscales were correlated with sense of agency except the responding activities. Additionally, two of the subscales, political activities and helping activities, were significantly correlated with opportunity structure but not the other two, community/neighborhood activities and responding activities.

Whereas the correlation between opportunity structure and involvement was statistically significant, opportunity structure was not significantly correlated with sense of agency.

### **3.5 Involvement, Opportunity Structure and Sense of Agency –Main Effects**

The last phase of the analysis was Hierarchical linear regression to examine main effects of the variables of interest. The data met the assumptions of linear regression; graphical examinations confirmed linearity of the relationship, normality, and homoscedasticity. VIF's under 10 and tolerances above .10 verify lack of multicollinearity and a Durbin-Watson of 2.04 confirms the independence of residuals. There appeared to be three possible outliers, but analysis showed little influence, leverage or discrepancy, so no cases were omitted. A moderation analysis examined the effect of opportunity structure on the relationship between involvement and sense of agency.

Variables were entered hierarchically, controlling for demographics (sex, age, and race). Table 3 displays the results of these analyses. Involvement was shown to be significantly related to sense of agency ( $t = 2.79$ ,  $p = .007$ ), but the relationship between opportunity structure and sense of agency was not statistically significant (this was true for both indexes of the SIOS). The relationship between involvement and agency was only significant when using the CL scale as a measure of agency. Additionally, the interaction term between YII and SIOS\_friendship was not significantly related to the sense of agency outcome variable, but the interaction term between YII and SIOS\_known-activities was ( $t = -2.46$ ,  $p = .02$ ). This indicates that knowledge of service activities may moderate the involvement – sense of agency relationship, such that for those with more knowledge of activities, increased involvement was related to less agency (see Figure 3.1).

### **3.6 Post-hoc Analysis –Mediation Analysis**

In order to further probe the effect of opportunity structure on the relationship between involvement and sense of agency, a post-hoc mediation analysis was employed. The Bootstrap method

was used to examine this relationship. Two separate bootstrap matrices were created to test the indirect effect of each opportunity structure index, using 1000 bootstrap samples in each. The tests demonstrated that involvement was directly related to agency ( $t = 3.17$ ,  $p = .002$  in SIOS\_friendship matrix, and  $t = 3.34$ ,  $p = .002$  in SIOS\_known-activities matrix), as well as both types of opportunity structure ( $t = 3.74$ ,  $p < .001$  for friendships, and  $t = 3.56$ ,  $p < .001$  for known-activities). But opportunity structure was not directly related to agency. In both matrices, the 95% CI's overlapped with zero ( $-.12$ ,  $.06$  for friendship and  $-.04$ ,  $.15$  for known-activities), indicating that the indirect effect of involvement on sense of agency through either type of opportunity structure was not significant.

Bootstrapping was also used to examine the possibility that involvement may mediate the relationship between opportunity structure and agency. Two matrices were created, and the 95% CI's overlapped with zero in both cases ( $-.08$ ,  $.04$  for friendship and  $-.04$ ,  $.17$  for known-activities). This indicated that there was no significant indirect effect of opportunity structure on agency through involvement.

Table 3.1

*Descriptive statistics for sense of agency (CL), involvement (YII), and opportunity structure (SIOS\_friendship & SIOS\_known-activities)*

	N	Mean	Std. Deviation	Skewness	Kurtosis	Alpha
CL	81	3.18	.63	-.93	.65	.89
YII	65	1.42	.81	.43	-.74	.93
SIOS_friendship	78	17.35	18.39	-.42	-.03	.82
SIOS_known-act	78	1.17	.76	-.29	-1.22	.36
Valid N (listwise)	61					

Table 3.2

*Correlations between involvement (YII), opportunity structure (SIOS\_friendship & SIOS\_known-activities), and sense of agency (CL)*

	YII	SIOS_friendship	SIOS_known-act	CL
YII	1	.43**	.43**	.39**
SIOS_friendship	.43**	1	.38**	.04
SIOS_known-act	.43**	.38**	1	.30**
CL	.39**	.04	.30**	1

Notes: \*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 3.3

*Moderation analysis of the involvement - sense of agency relationship*

Model		B	SE B	$\beta$
1 <sup>a</sup>	(Constant)	2.36	1.01	
	sex	.37	.19	.25
	age	.03	.06	.07
	race	-.002	.01	-.05
2 <sup>b</sup>	(Constant)	2.60	.97	
	sex	.24	.18	.16
	age	-.001	.06	-.01
	race	-.003	.01	-.09
	YII	.23	.12	.28
	SIOS_friendship	-.15	.18	-.12
	SIOS_known-act	.22	.12	.28
3 <sup>c</sup>	(Constant)	2.43	.96	
	sex	.21	.18	.15
	age	.01	.06	.02
	race	-.004	.01	-.12
	YII	.20	.27	.25
	SIOS_friendship	-.59	.31	-.45
	SIOS_known-act	.64	.21	.79
	YII X SIOS_friendship	.39	.23	.82
	YII X SIOS_known-act	-.34	.14	-.96

Notes: <sup>a</sup>.  $R^2 = .07$  ( $p = .23$ ).

<sup>b</sup>.  $R^2 = .24$  ( $p = .01$ ).

<sup>c</sup>.  $R^2 = .33$  ( $p = .05$ ).

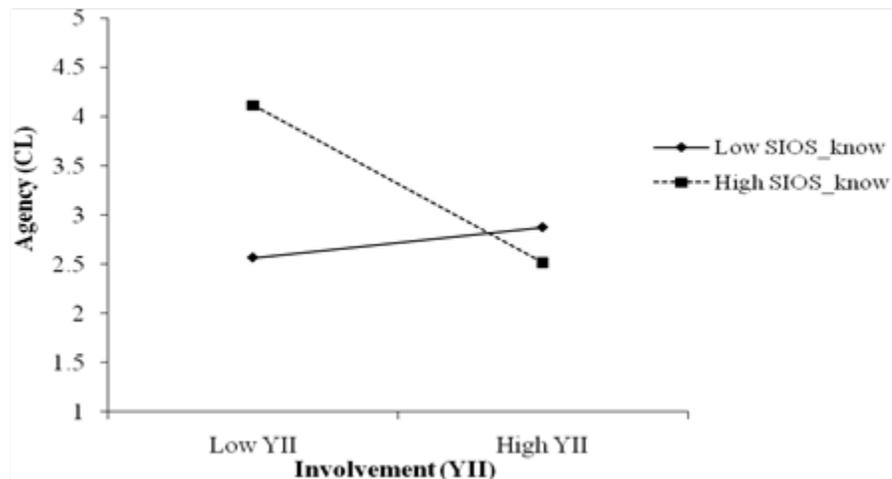


Figure 3.1: Relationship between involvement and agency at different levels of opportunity structure (known activities)

## 4 DISCUSSION

### 4.1 Community Leadership Scale –A New Measure of Sense of Agency

Before a better understanding of the development of sense of agency can be engendered, a valid and reliable measure of sense of agency must be used. The most commonly used measures of agency focus on the presence or absence of assets that are seen as pre-requisites of agency. These proxy measures of agency have included literacy, health status, amount of television watching, employment history, membership in organizations, and property ownership (Alkire, 2008). For more direct measures of agency, previous research has relied on such measures as the Sociopolitical Control Scale and the Perceived Control Scale. But because of past differences in the conceptualization of agency, these scales seem to measure concepts that are similar to, but inherently different than agency, like efficacy. They appear to focus on behaviors (i.e., “what I *can* do”) as opposed to the psychological processes that go along with the behaviors (i.e., “what I *think* I can do” as well as “what I can do”). Efficacy is a purely behavioral concept, whereas agency is both behavioral and psychological. Although the two concepts are similar, and may work hand-in-hand; as Bandura (1982, 1990) pointed out, what we do (efficacy) effects our thoughts and further actions (agency) by influencing our thought patterns, emotional arousal and motivation; it is important to be able to measure both the behavioral and psychological aspects of agency directly. In a situation where a youth believes he or she has the capabilities to accomplish certain goals, like be a leader, but social constraints in his or her opportunity structure prohibit them from taking action, like taking on a leadership role (which is a situation many youth of color find themselves in), it can be very useful to have a scale that directs attention to both the behavioral and psychological aspects of agency. The Community Leadership Scale may prove to be that measure.

Its reliability coefficient was also higher than either the SPCS or the PCS. When the CL scale was correlated with the other two scales to examine its concurrent validity, the correlations were statistically significant, showing that the scales are measuring similar concepts. Although significant, the correla-

tions did not meet the cut-off for concurrent validity. This seems to indicate that though the concepts that are being measured are similar, the two measures can be distinguished psychometrically; the CL scale may be measuring overlapping, but not identical concepts as the other two scales.

Civic, social, and/or political involvement is one of the most common variables associated with sense of agency and sociopolitical development. With the sample in this study, analysis showed that the Community Leadership scale had a stronger relationship to involvement than either the SPCS or PCS, measures that focused exclusively on behavior. Of all the agency measures, only the PCS was significantly related to opportunity structure. In summary, the CL scale proved to be a valid and reliable alternative measure of agency.

#### **4.2 Societal Involvement, Opportunity Structure and Sense of Agency**

As expected, societal involvement was directly related to sense of agency. Correlation and regression analyses confirmed that involvement was significantly associated with youths' sense of what they can successfully do. This relationship was shown to be positive to a greater extent when using the CL scale as a measure of agency as opposed to the alternate scales.

Opportunity structure seemed to have a moderating effect on the relationship between involvement and sense of agency. Contrary to the hypothesis, though, it appeared that with increased knowledge of community activities, involvement was related to less agency. This seems counter-intuitive, but it is possible that with knowledge about a lot of different activities one can participate in comes an inflated sense of what one can do, but then actual participation in those activities "bruises" that sense of agency. But for those with no prior knowledge of activities, there are no expectations or preconceived notions, so actual involvement serves to build agency. This moderating effect of the involvement-agency relationship is only seen when opportunity structure is conceptualized as an awareness of community activities, not as having friends who participate in activities. It is unclear, though, whether the "opportunity structure" scale assessed by inquiring about friends engaged in community

activities shows the power of the peer social network in fostering engagement, or if it is merely an indicator of the people active young people met while participating in activities. Further research is needed to understand this relationship.

Post-hoc mediation analysis demonstrated that involvement was directly related to agency, and opportunity structure was directly related to involvement. But there were no mediating influences on the relationships; opportunity structure does not seem to mediate involvement-agency relationship, and involvement did not mediate the opportunity structure-agency relationship.

Analysis indicated that both the Friendship and Known-activities indices of the SIOS are reliable. But further development of the SIOS is necessary in order to better establish its validity and to understand the relationships between opportunity structure, involvement and agency. Why, in this study, opportunity structure is significantly related to involvement, but is not directly related to agency, and seems to partly influence the relationship between involvement and agency may be better understood by distinguishing whether the friends in question were made before or after the youth's involvement. Further development on both indices of the SIOS (e.g., adding items to the Known-activities index in order to distinguish different types of known activities) may help make the SIOS a more comprehensive measure, representing not only the social network aspect of opportunity structure, but also more directly and reliably representing the youth's awareness and knowledge of opportunities in their environment.

When assessed across gender and culture, involvement appeared to be fairly equal. This was not the case for sense of agency and opportunity structure, though. Generally, girls reported a higher sense of agency than boys, and white respondents reported more opportunity structure (e.g., more friends involved in social, civic, or political activities) than black participants.

### 4.3 Implication for the Future

A better understanding of agency as a concept begins with comprehensive and psychometrically sound measures. I have argued that this study provides some promising findings on a new measure of sense of agency, one that may prove to be a useful alternative to scales of empowerment and efficacy in the area of social activism. The Community Leadership scale offers a new tool in the pursuit to better understand the concept of agency and its development. Research has shown that more direct measures of agency are more reliable and valid than the proxy variables that are most commonly used to measure agency (Alkire, 2008). When researchers have utilized direct measures, they have relied on the same types of measures that Watts & Guessous used (particularly the SPCS and PCS). Analyses demonstrated that the CL scale is a more reliable and valid measure of agency with this sample than the others used for this purpose. It was more useful in analyses intended to test sociopolitical development theory. Further research is needed to solidify its utility as a measure of sense of agency, but because of the scale's potential, this researcher suggests that the name of the Community Leadership scale be changed to one that reflects this, the Sense of Agency scale for example.

There are a number of ways to improve our measurement and understanding of agency as a concept. It would be helpful to look at the similar constructs. For example, Alkire, 2005 described empowerment as a subset of agency specifically associated with elements of political processes, legal structures, and democracy. Many researchers agree that it is a multidimensional concept comprised of behavioral and various psychological components (Zimmerman et al., 1992, Spreitzer, 1995, Meyerson & Kline, 2008, & Boudrias et al., 2009). Recent research has focused on measuring the multidimensional aspect of empowerment, as opposed to using simpler unidimensional conceptualizations. Findings from such research have suggested that defining and/or measuring empowerment unidimensionally may be inadequate (Spreitzer et al., 1997). It has been suggested that by looking at the different behavioral and psychological components of empowerment, we are better able to understand how they interact, and

to better predict the anticipated outcomes of empowerment (Zimmerman et al., 1992, Spreitzer et al., 1997, and Meyerson & Kline, 2008). Perhaps distinguishing the behavioral and psychological aspects of agency as individual subscales may help us to better understand how the two interact to form a sense of agency. The CL scale represents the next step in better understanding agency, but continued development of this measure and further research is necessary to begin answering the lingering questions about sense of agency.

Much of the previous work on agency and involvement has focused on involvement as the outcome of agency. Among others, Watts & Guessous (2006) see it as the result of individual social analysis, opportunity structure and sense of agency; Richardson (2004) views involvement as the product of political discussion, civic knowledge and efficacy; and Zimmerman & Rappaport's (1998) research has spotlighted the influence of empowerment on civic involvement. As Bandura (2008) said, "Unless people believe they can produce desired effects by their actions they have little incentive to act." But as more is understood about agency as a concept, more of the complexity of its relationship to action is revealed. Ibrahim & Alkire, 2007, note that agency may be influenced by such things as opportunity structure and involvement in socially or politically relevant actions. Previous research has indicated that sense of agency can predict involvement (Bandura, 2008 and Richardson, 2004) and the current study confirmed that successful involvement can predict sense of agency. Further research is needed to explore a possible reciprocity within this relationship, as Watts & Guessous (2006) suggested but could not explore.

This further understanding seems especially important for the young black men in our society. The fact that black males in this study scored so much lower in sense of agency [than women] and opportunity structure [than whites] is very telling. Both agency and opportunity structure have been shown to be related to societal involvement, but young black men, who often have the highest need for such constructive and positive activities, are lacking the most in these areas.

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## 6 APPENDICES

## Appendix A

Community Leadership Scale (Watts & Guessous, unpublished)

**Imagine that your school just passed a rule that you think is unfair.** (For example:

**No laughing in the hallways. No talking during lunch. Random searches are allowed.) And**

**YOU decide to do something about it.**

*How confident are you that you could...*

Not At All Confident	Not Very Confident	Sort of Confident	Very Con- fident
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

Please Circle One:

1. Create a plan to address the problem.	1	2	3	4
2. Get other people to care about the problem.	1	2	3	4
3. Organize and run a meeting.	1	2	3	4
4. Express your views in front of a group of peers.	1	2	3	4
5. Express your views in front of a group of adults.	1	2	3	4
6. Identify people or groups who could help you with the problem.	1	2	3	4
7. Write an opinion to a local or school newspaper.	1	2	3	4
8. Contact someone you don't know to get them involved.	1	2	3	4
9. Contact an authority figure about the problem (for example, an elected official or the principle).	1	2	3	4
10. Organize a protest or other event	1	2	3	4

## Appendix B

Subjective Inventory of Opportunity Structure (Watts & Guessous, unpublished)

1. How many friends do you have that you talk to for at least an hour every week on average?	Write the number here: _____	
<i>The Questions below are about the friends you mentioned above. Write a number in the box on the right to answer each question:</i>	Write in a number below 	
1. How many of your friends are involved in extracurricular activities or organizations <i>other than sports</i> (boy/girl scouts, YMCA programs, other youth groups)?		
2. How many of your friends are interested in politics?		
3. How many of your friends talk regularly about racial or cultural topics?		
4. How many of your friends are involved in community activities like neighborhood clean-ups, political or cultural activities, any work that helps people or improves the city or neighborhood?		
5. How many of your friends participate in religious activities (going to religious services or programs at their place of worship)?		

Answer the following by circling "TRUE" OR "FALSE" in a box on the right:

6. I know of community activities like activities about my culture, neighborhood clean-ups, or political work that I could get involved in <i>if I was interested.</i>	TRUE	FALSE
7. I know of community activities like activities about my culture, neighborhood clean-ups, or political work <i>that I am currently interested in.</i>	TRUE	FALSE