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The Jamaica Youth Survey:
Assessing Core Competencies and Risk for Aggression Among Jamaican Youth

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Abstract

We present data on reliability and validity of *The Jamaica Youth Survey*. This instrument was designed to measure five core competencies, propensity for aggression, and aggressive behavior. The five core competencies included were: (a) positive sense of self; (b) self-control; (c) decision-making skills; (d) moral system of belief; and (e) prosocial connectedness. Propensity for aggression was measured by having respondents indicate the likelihood they would respond to aggression to each of 20 provocative situations. Self-reported aggression items included physical and verbal aggression against males and females. The instrument was administered to 183 boys and 195 girls between the ages of 12-18 attending alternative programs for youth in Jamaica. Each of the scales demonstrated adequate reliability (coefficient alpha $>.70$). Concurrent validity was established by significant relations between the core competencies and the Rosenberg Self-Esteem Scale (1965) and between the moral system of belief scale and both aggressive propensity and aggression. Additional analyses suggest that self-esteem and moral system of belief may serve as mediators (short-term outcomes) between promotion of core competencies and positive youth development and prevention of aggression (long-term outcomes).

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There is global interest in promoting healthy youth development and preventing antisocial and problem behavior during adolescence (Naudeau, Cunningham, Lundberg, & McGinnis, 2008). Not only is positive development an important goal in its own right, linked to academic achievement and socioeconomic success (Heckman, 2008), but many social and emotional competencies also decrease risk for antisocial behaviors that compromise individual development and exact costs for society (Guerra & Bradshaw, 2008). Among adolescent problem behaviors, rising rates of youth violence worldwide have been a particular cause for concern. Nowhere is this problem more severe than in the Caribbean region, where homicide rates for this age group are among the highest in the world (World Bank, 2007). Within the Caribbean, the highest documented homicide rates are in Jamaica, at approximately 60 per 100,000 island-wide, rising to 140 per 100,000 in inner-city communities of Kingston, the capital city. (Jamaica Constabulary Force, 2009).

Focusing on Jamaica, these high rates of violence, particularly among youth, have been accompanied by repeated calls to develop and implement effective programs. International donors, governmental ministries, and non-profit agencies have pushed for the development of empirically-supported programs and policies to prevent and mitigate aggression and violence from the early years through adolescence and beyond. However, to date, the majority of available programs have not been carefully evaluated, making it difficult to differentiate programs that are popular and/or garner media attention from those that demonstrate evidence of effectiveness (Caribbean Child Development Centre, 2005). In Jamaica and elsewhere in the Caribbean, there has been relatively little progress in

developing coordinated responses to youth violence prevention and conducting rigorous scientific studies of program outcomes.

An important first step in building capacity for this type of evaluation is to develop a reliable and valid youth self-report assessment tool to measure program impact. This includes long-term impact on aggressive and violent behaviors as well as short-term effects on proposed mediators of change, that is, those attitudes, skills, and beliefs that are targeted directly by the intervention because of their association with aggression and violence. Further, given that many youth violence prevention programs emphasize positive youth development, these mediators should reflect core competencies for positive development that are protective against youth violence and also lead to productive engagement in society. Such an instrument allows for direct assessment of program impact on youth competencies and skills and preventing aggressive and violent behavior, as well as testing whether reductions in youth violence are directly linked to improvements in social competence.

The present study reports on the development and validation of the *Jamaica Youth Survey*. This survey was developed as part of a project funded by the World Bank to evaluate selected individual-level programs for promoting well-being and preventing violence among teenage boys and girls (ages 12-18) in Jamaica. Short-term outcomes (or mediators) included five core competencies for healthy development that have been linked empirically with aggression and violence and that typically are targeted by community-based programs: (a) positive sense of self; (b) self control; (c) decision-making skills; (d) moral system of belief; and (e) prosocial connectedness (Guerra & Bradshaw, 2008). Long-term outcomes emphasized distinct types of aggressive and violent behavior (e.g., verbal aggression, physical aggression) and aggressive propensity (intent to behave aggressively). All items and

scales were modified from previously validated instruments. However, because available instruments and scales typically had not been used with Jamaican or Caribbean samples, all items were first piloted with Jamaican youth to ensure that they were both culturally relevant and easily understood. Items were also added to allow for assessment of demographic characteristics, family status, history of gang involvement, attitudes about masculinity/violence, and client-rated assessment of program impact. However, these latter items are not analyzed in the present study.

Core Competencies, Healthy Development, and Violence Prevention

The *Jamaica Youth Survey* emphasizes five core competencies linked to healthy development and prevention of youth problem behaviors including violence. As we have described elsewhere (Guerra & Bradshaw, 2008), there is a substantial empirical literature linking each competency with adjustment and prevention outcomes. Although the bulk of this research has been conducted on non-Caribbean youth, research with Jamaican youth suggests that they are also important in promoting health and preventing problems during childhood and adolescence (Meeks-Gardner, Powell, & Grantham-McGregor, 2007). From a more global perspective, these social and emotional competencies have been viewed as key indicators of performance in society, including academic achievement throughout childhood and adolescence and socioeconomic success in adulthood (Heckman, 2008).

Positive sense of self. An important marker of adjustment for adolescents is the development of a coherent and prosocial identity grounded in personal accomplishments, connections to family and community, and a productive role in society. We have operationalized positive sense of self as including an affective component reflected in global self-esteem (one's personal regard and feelings towards self) as well as a general sense of

self-efficacy, defined as agency, purpose, and hopefulness for the future. Although these represent distinct aspects of the self, we propose that both components are important for adjustment and well-being.

Self-control. An essential component of adjustment is the ability to effectively control one's feelings (emotional self-control) and behaviors (behavioral self-control). Low levels of self-control (particularly the ability to control angry and impulsive behaviors) have been implicated in aggressive behavior from a very early age (Moffitt, 2003) and have been proposed as leading causes of delinquency and criminality (Gottfredson & Hirschi, 1990).

Decision-making skills. There is a robust empirical literature linking mature social problem-solving and decision-making skills with both adjustment and prevention of youth problem behaviors. Maturity of judgment is evident in solutions that involve careful assessment of problems, consideration of alternate solutions, review of consequences, and concern for how one's actions impact others (Dodge & Pettit, 2003).

Moral system of belief. In addition to discrete problem solving-skills, youth develop underlying cognitive schema or normative beliefs about the appropriateness of behaviors with moral consequences (e.g., harm to others, harm to society). These beliefs involve concepts such as fairness, equity, and personal responsibility as well as moral prescriptions for the acceptability of aggressive and violent behaviors (Guerra & Huesmann, 2004).

Prosocial connectedness. For youth who are navigating the transition to adulthood, positive role models or mentors provide an important grounding in a larger supportive community. Research has shown that youth with more prosocial bonds are less likely to be involved in violence and delinquency and more likely to be productively engaged in society (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999).

Aggression and Aggressive Propensity

By definition, aggression is a heterogeneous set of behaviors aimed at harming others, with violence being the extreme case of aggressive behavior, often involving weapons (Guerra & Leidy, 2008). Non-physical aggression (labeled verbal, social, or indirect aggression) includes yelling, teasing, threatening, insulting someone, shaming, saying mean things, and social exclusion. Physical aggression (and violence when it is severe) includes pushing, shoving, fighting, throwing objects, slapping, and using a weapon. Aggression and violence embedded in close interpersonal relationships and families is often cross-gender (e.g. male to female) suggesting it is also important to consider the gender of the target in assessing an individual's aggressive behavior.

There are many scales that measure self-reported aggressive behavior, typically over a defined period and measured in frequency of behavior (Centers for Disease Control and Prevention, 2005). However, there are also clear demand characteristics when asking youth to report on their prior aggressive and violent behaviors, particularly for at-risk youth who may have previously been in trouble with the law. Further, aggression and violence are low base rate behaviors, meaning that even the most violent youth do so only infrequently. An alternate approach to assessing aggressive behavior involves determining one's "threshold" for aggression, that is, the likelihood that specific provocations would result in aggressive responses. We considered common triggers for aggression and included a scale to measure individual threshold or propensity for aggression.

Linking Core Competencies and Aggression

Although we have proposed that core competencies are important for healthy development and prevention of problem behaviors, each competency alone may be

necessary, but not sufficient, for positive adjustment and prevention of problem behaviors. For example, a youth who has high self-control but antisocial moral system of belief may regulate behavior in service of predatory goals. Different core competencies also may be more directly linked to specific problem behaviors; for instance, moral system of belief (i.e., not causing harm to others) should directly predict aggression but should be less related to high-risk sexual behavior. Further, among the core competencies, we propose that self-esteem is a more global index of adjustment, such that high levels of social-emotional competencies in other domains (self-efficacy, self-control, moral system of belief, decision-making skills, prosocial connectedness) should contribute specifically to higher levels of global self-esteem.

The Current Study

The purpose of the current study was to adapt and validate a set of scales measuring core competencies, aggression, and aggressive propensity for use with Jamaican youth ages 12-18. We initially identified relevant instruments and scales to tap these constructs and revised items to be culturally appropriate. We then combined these scales (along with additional questions relevant to measuring intervention outcomes, related attitudes and behaviors, and demographic characteristics) to form the *Jamaica Youth Survey*, a 107-item youth self-report instrument. The survey was piloted with a small sample of Jamaican youth, and modifications were made to increase cultural relevance, comprehension, and ease of administration. The measure was then administered to a larger sample of males and females. Given variations in reading level and educational achievement, trained interviewers individually administered the survey. A companion fieldwork manual also was developed. We present data on the internal consistency and concurrent validity of each scale. Given the

interconnections among core competencies and adjustment described previously, we examined criterion validity in terms of (a) self-efficacy, self-control, decision-making skills, and prosocial connectedness predicting concurrent self-esteem; and (b) moral system of belief predicting concurrent aggressive propensity and aggressive behavior.

Method

Overview

The data utilized in the present study were collected during 2007-2008 as part of an evaluation to determine the impact of individual-level youth violence prevention programs in urban Jamaica sponsored by The World Bank. The Kingston YMCA conducted the program for males, and the Women's Centre of Jamaica Foundation (WCJF) conducted the program for females. A research team from the University of the West Indies (Mona, Jamaica) collected all data. The Institutional Review Board of that University approved the study and data collection procedures.

Participants

Male sample. All boys who were participating in the YMCA intervention or were currently on a wait list to participate were invited to participate in the survey data collection. Of the 149 intervention participants eligible to complete the survey, 128 boys (86%) received parental permission and youth assent. The research team was able to locate and receive permission from a total of 58 boys who were actively waiting to participate in the YMCA intervention. Thus, data were collected from 183 boys from the intervention and wait-list control groups. The total male sample ranged in age from 12-17 years, and was from poor, urban communities. Approximately 38% of the sample did not have access to indoor plumbing (own inside flush toilet) or piped water (own inside pipe), with the remaining

participants reporting shared inside or outside facilities. Approximately 82% of the sample resided with their mother or grandmother only.

Female sample. All girls who were participating in the WCJF program at the time of the current study were eligible to be interviewed. The program served pregnant or new mothers, operating in seven main centers and six outreach centers throughout Jamaica. Of the 130 girls deemed eligible and initially contacted to participate, 120 (92 %) received parental permission and youth assent. A comparison sample of 75 high school age females was also selected (who were not participating in WCJF programs) to complete the assessment. Thus, data were collected from 195 girls from both the WCJF program and comparison high schools. The total female sample ranged in age from 12-18 years (although only six participants were age 18). Approximately 55% of the sample did not have access to indoor plumbing, and 81% reported residing with their mother or grandmother only.

Data Collection Procedures

All participants were interviewed individually by one of six interviewers from the research team. The interviewer read each question aloud and wrote the respondent's answer on the questionnaire. Interviews were conducted in a quiet room at the YMCA, WCJF, or in the participants' homes (for those who were unable to travel to the program facilities). It was felt that individual administration of the questionnaires was needed to control for difficulties with reading and understanding the questions. Before beginning each interview, the researchers checked the returned consent forms. The field coordinator for the research team observed approximately 6% of the interviews to ensure that the materials were presented correctly, item wording was followed, probes were used, and participants' questions were

handled appropriately. Inter-rater reliability was established by having the field coordinator also record answers during the observational sessions; agreement was between 98-100%.

The project staff met weekly to review and correct any concerns or difficulties. The questionnaire had been piloted prior to administration to ensure that the items were culturally appropriate and easily understood by participants. No difficulties in the administration of the surveys were noted. However, the interviewers noted when probes were needed and for which questions in order to increase youth comprehension. These probes were included in the fieldwork manual for administration of the measure.

The Jamaica Youth Survey

The 107-item instrument was intended to measure five core competencies (55 items), aggressive behavior (15 items), and propensity for aggression (20 items). There were also additional items to assess demographic, family, previous gang history, masculinity/aggression, and intervention response (17 items), although these are not considered in the present analyses. The entire measure is provided in Appendix A.

For each of the five core competencies, we adapted items/scales from previously validated instruments tapping similar constructs, resulting in 55 items to assess core competencies. For each of these items, respondents answered on a 4-point scale ranging from “1” (strongly disagree) to “4” (strongly agree). We also reverse-coded 19 of these items to protect against response set. Higher scores indicate higher levels of competency.

Positive sense of self. To measure general self-esteem (affect towards self), we included nine items from the Rosenberg Modified Self-Esteem Scale (Rosenberg, 1965). A sample item is “I feel that I have a number of good qualities (*good things about me*).” To assess self-efficacy, we included five items from the Cognitive Autonomy and Self-

Evaluation (CASE) Inventory (Beckert, 2007). A sample item is “I think my life has “purpose” or meaning (*I think that there is a reason for my life*).

Self-control. We adapted five items from the Boxer et al. (2008) impulsivity scale. These items tapped impulsive responding and control over angry feelings. A sample item is “I can do things to calm down when I am angry or excited.” Three items were developed specifically for this survey that assessed delay of gratification. A sample item for delay of gratification was “It is hard to wait for something I want.”

Decision-making skills. Items were adapted from the Cognitive Autonomy and Self-Evaluation (CASE) Inventory (Beckert, 2007). Eight items tapped a range of decision-making skills, including searching for relevant information, generating many alternate solutions, and considering consequences for self and others. A sample item was “I consider different choices before making up my mind about something.”

Moral system of belief. The format and items from the *Normative Beliefs about Aggression Scale* (Huesmann & Guerra, 1997) were used to generate a 14-item scale of moral system of belief. Respondents were asked whether it was right or wrong to engage in behaviors that caused harm to others and society, including fighting with others, taking advantage of people, cheating, breaking promises, and not being productively engaged in society. A sample item was “It is important to have a job and be a good worker.”

Prosocial connectedness. This 11-item scale was derived from two measures of perceived social support: The Multidimensional Scale of Perceived Social Support (Canty-Mitchell & Zimet, 2000) and the Presence of Caring Scale (Springer & Phillips, 1995). These items tapped the extent to which individuals had adult mentors, support, and were aware of

prosocial opportunities in their communities. A sample item was “I know an adult I can turn to for help when something is bothering me or I am worried about something.”

Self-reported aggressive behavior. For aggressive behavior, we used 15 items tapping verbal aggression, physical aggression, indirect aggression, and weapon carrying.

Respondents were asked to indicate how often in the past month they had engaged in these behaviors with responses on a 4-point scale including “1” (never), “2” (once or twice), “3” (3-5 times), and “4” (6 or more times). This format was adapted from the Academic Centers of Excellence Youth Violence Self-Report Scale (Henry et al., 2009). Items also measured aggression against males and aggression against females separately. A sample item was “In the last month, how many times have you shoved or pushed a male? a female?” An average score was calculated by summing across and dividing by the total number of items with higher scores reflecting a higher frequency of aggression and vice versa.

Aggressive propensity. We used 20 items from the “what would make you fight?” scale to measure the propensity for youth to engage in aggressive behavior. This scale has been developed and validated by the Academic Centers of Excellence (ACE) Cross-site Analytical Tools Working Group (Chan & Henry, 2009). The underlying logic of this measure is that youth will vary in their threshold for aggression, meaning some will resort to physical aggressive behavior with less provocation than others. The rating scale measures this variability. Respondents were asked whether they would “hit or fight with a male (or female) if he (she) engaged in ten different provocative behaviors, specifically, hit you first, shouted at you or called you names, gave you a dirty look, spread rumors and lies about you behind your back, took something of yours without asking you, others were watching and they dared you to, said something bad about a member of your family, everyone else was

doing it, you were angry or in a bad mood, and you wanted to get revenge. Respondents answered on a 4-point scale ranging including “1” (never), “2” (I might), “3” (I probably would) and “4” (Yes, for sure). An average score was calculated by summing across and dividing by the number of items calculated, with high scores reflecting a greater propensity for aggression than low scores.

Results

Analysis Plan

The primary objective of the analysis was to establish the reliability and validity of the core competency, aggressive behavior, and aggressive propensity measures. Reliability was determined by calculating the internal consistency of each measure. Establishing concurrent validity required using a previously validated and widely accepted criterion variable, with a plausible rationale as to why it should be related to the core competency measures. Even though the positive sense of self scale consisted of both the Rosenberg’ Modified Self-Esteem Scale (Rosenberg, 1965) and the Cognitive Autonomy and Self-Evaluation (CASE) Inventory (Beckert, 2007), the former scale meets the requirements of a criterion variable for the concurrent validity analysis. Hence, it was selected for this purpose, leaving the self-efficacy scale as the sole indicator of positive sense of self. The rationale for anticipating empirical relations between the self-esteem scale and the other core competency measures is straightforward: The more youth feel efficacious about their immediate and future lives, and the more they feel competent in their decision making, their social connections with others, and their ability to control their actions and emotions, the more they will feel positive affect toward themselves.

As described previously, evaluative items pertaining to forms of physical and verbal aggression dominated the moral system of belief scale. Hence, the concurrent validity of this measure was determined by estimating the empirical relation between this scale and the indices of aggressive behavior and aggressive propensity. All concurrent validity analyses were conducted using Ordinary Least Squares (OLS) Regression.

Internal Consistency and Concurrent Validity of the Jamaica Youth Survey

The results of the internal consistency analysis are presented in Table 1. It shows the calculated alpha coefficients for each of the core competency measures as well as the indices of aggressive behavior and aggressive propensity. With the exception of the self control and decision making measures, those coefficients were well above the standard cutoff for “acceptable” internal consistency (.70). Moreover, a comparison of the coefficients across the two samples indicated substantial similarity by gender. A further examination of the two exceptions suggested that the reverse coded items were problematic; that is, they were not interrelated with the positively worded items. Hence, they were excluded, and the alpha coefficients were re-calculated. As noted in parentheses in Table 1, those coefficients for self control and decision making either exceed the acceptability standard (.71 and .73, respectively, for females) or at least approach that standard (.69 for both measures concerning the male sample).

The OLS regression results bearing on the concurrent validity of the self-control, decision-making, and prosocial connectedness measures are shown in Table 2. Observe that the estimated effects of these measures on the self-esteem scale were all statistically significant and positive in direction, as expected. Those effects were strongest in magnitude for the measures of self-control and prosocial connectedness. Like the internal consistency

analysis, a comparison of the effect sizes between the two samples again revealed substantial similarity by gender.

The results of the concurrent validity analysis for the moral system of belief measure are displayed in Table 3. The estimated effects of this measure on self-reported aggressive behavior and both versions of the aggressive propensity measure (a female versus a male provocateur) were statistically significant and negative in direction within the male sample, as expected. Although consistently in the anticipated direction (negative) within the female sample, moral system of belief was not significantly associated with self-reported aggression. Rather, it had a statistically significant estimated effect only on the two versions of the aggressive propensity measure. Notice further that these two versions of the aggressive propensity measure had an interesting gender pattern. Specifically, the female as provocateur version had the strongest estimated effect within the female sample, and the male as provocateur version had the strongest estimated effect within the male sample.

Linkages between Core Competencies and Aggression: Do Self-Esteem and Moral System of Belief Mediate Relations?

The empirical findings thus far suggest that the core competency, aggressive behavior, and aggressive propensity measures were reliable (i.e., internally consistent) and met the standards of concurrent validity, particularly given the consistently significant and positive empirical relations between the core competency measures and the self-esteem scale for both females and males. The same point can be made concerning the moral system of belief scale. With one exception, it too had consistently significant and anticipated (negative) empirical relations with the indices of aggressive behavior and aggressive propensity in both samples. However, can evidence be garnered that links core competencies to the propensity

and/or occurrence of aggression? Addressing this question is important for empirically demonstrating two issues about strength-based youth development programs: (1) that they equip youth with the necessary skills to navigate their challenging environments successfully in the short-run, and (2) that they ultimately (long-term) reduce the aggressive propensity of youth or the likelihood that they will act aggressively on that propensity.

Two additional analyses were conducted to bring evidence to bear on this question, using the two criterion variables incorporated in the concurrent validation analyses. Both rest on the assumption that building core competencies may not directly or immediately reduce the propensity and/or occurrence of aggression, but their influence might be mediated by these criterion variables. First, empirical relations were estimated between the self-esteem scale and the indices of self-reported aggression and aggressive propensity, since all core competency scales were shown to be significantly associated with self-esteem. Second, the effects of the core competency measures on the moral system of belief scale were estimated, since this scale was shown to be significantly associated with aggressive behavior and aggressive propensity. The results for self-esteem are presented in Table 4.

The measure of self-esteem had a significant and negative estimated effect on self-reported aggressive behavior for females but not for males. Conversely, it had a significant and negative estimated effect on both versions of the aggressive propensity measure for males but not for females. In all cases, the estimated effects were in the direction expected (negative), although the effect sizes were relatively small in magnitude. Nonetheless, these findings have promise for future research specifying and estimating the mediating influences of building core competencies on aggression, especially since the aggressive propensity and self-reported aggression measures were significantly and positively associated for females

(female provocateur $r = .374, p \leq .000$ and male provocateur $r = .433, p \leq .000$) and for males (female provocateur $r = .484, p \leq .000$ and male provocateur $r = .432, p \leq .000$).

Recall in Table 3 that moral system of belief is significantly related to aggressive propensity (for females) and aggressive behavior (for males). The findings bearing on the potential mediating influences of the core competencies on aggressive behavior and aggressive propensity via moral system of belief are presented in Table 5. All of the estimated effects in both samples were positive in direction, suggesting that self-efficacy, decision-making skills, self-control, and prosocial connectedness were linked to greater disapproval of aggressive and analogous behaviors. Moreover, with one exception (self-control for females), all estimated effects were statistically significant. As in the previous analyses, especially Tables 1-3, the pattern in the magnitude of the effect sizes for both samples revealed marked similarity by gender.

Discussion

A new scale for measuring core competencies, propensity for aggression, and aggressive behavior was evaluated with a sample of male and female Jamaican youth between the ages of 12-18. Each of the scales demonstrated adequate reliability (coefficient $\alpha > .70$) for both males and females. It is interesting to note that the scales performed quite consistently across both genders. Concurrent validity was established by significant relations between the core competencies and the Rosenberg Self-Esteem Scale (1965) and between the moral system of belief scale and both aggressive propensity and aggression. Additional analyses suggest that self-esteem and moral system of belief may serve as mediators (short-term outcomes) between core competencies, positive youth development, and prevention of aggression (long-term outcomes).

As we noted at the outset of this paper, it has been difficult to conduct systematic evaluations of positive youth development and youth violence prevention programs in Jamaica and elsewhere in the Caribbean, in part, due to the lack of reliable and valid instruments that are culturally-relevant for Caribbean youth. It is also important to include in this assessment tool indicators of short-term proposed mediators as well as longer-term outcomes related to aggression and violence. This allows for direct assessment of whether a program promotes healthy development, prevents aggressive behavior, and whether these short-term and long-term outcomes are linked. In other words, does building core competencies not only enhance well-being but also lead to reductions in aggression and violence?

Of course the proposed mediators (or core competencies) included in the *Jamaica Youth Survey* are not exhaustive and simply represent a recent framework for highlighting some of the more important social and emotional competencies that also have been linked to prevention of youth problems (Guerra & Bradshaw, 2008). In more economically disadvantaged communities and countries, additional skills may be required to successfully navigate daily life that are not included in this measure. Further, specific culturally-linked attitudes, values, and beliefs may have a particular influence vis a vis a specific type of behavior. For example, we included items reflecting attitudes linking masculinity with violence, given that Jamaican culture often promotes images of masculinity linked with control, violence, and guns, such as “get a gun, get a girl” (Moser & Holland, 1999). However, these were part of the core competency framework and were not included in the present analyses, although the items as presented had fairly low reliability (<.50).

An innovative feature of this assessment is the inclusion of a measure of propensity for aggression. Given that aggression is a relatively stable and low-base rate behavior, it may be difficult for brief or even longer-term interventions to yield changes in actual behavior. Further, self-reports of behavior, particularly for at-risk youth enrolled in alternative programs, may be highly subject to demand characteristics resulting in under-reporting. The propensity for aggression scale focuses on “triggers” for aggression and attempts to measure an individual’s threshold for responding with aggressive and/or violent behaviors. A challenge for violence prevention programs is not to prevent aggression or violence under all circumstances (aggression is an adaptive response under some conditions) but to make it less likely, particularly in response to trivial conflicts. The *Jamaica Youth Survey* thus provides a number of scales to measure distinct but complementary intervention outcomes and can be a useful evaluation tool for youth in Jamaica and the Caribbean.

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Table 1

Tests of Internal Consistency (Alpha Coefficients) of the Core Competency, Aggressive Behavior, and Aggressive Propensity Measures

Measures	Females (N = 195)	Males (N = 273)
Positive Sense of Self	.78	.73
Self Control ¹	.41 (.70)	.51 (.69)
Decision Making ¹	.70 (.73)	.66 (.69)
Moral System of Belief	.86	.86
Pro-social Connectedness	.85	.85
Aggressive Behavior	.84	.84
Aggressive Propensity: Female	.75	.75
Aggressive Propensity: Male	.73	.81

¹Alpha Coefficients in parentheses were calculated with reverse-coded items removed.

Table 2

Concurrent Validation: Estimated Effects of the Measures of Core Competencies on the Measure of Self-Esteem

Measures	b	se	Beta
Panel A		Females (N = 195)	
Self-Control	.270	.075	.251*
Decision-Making	.159	.076	.147*
Pro-Social Connectedness	.229	.071	.231*
Panel B		Males (N = 273)	
Self-Control	.269	.057	.270*
Decision-Making	.120	.056	.130*
Pro-Social Connectedness	.211	.057	.233*

Note. Intercept for the females equation = 1.171, and the $R^2 = .228$. Intercept for the males equation = 1.305, and the $R^2 = .232$.

* $p \leq .05$.

Table 3

Concurrent Validation: Estimated Effects of the Measure of Moral System of Belief on the Measures of Aggressive Behavior and Aggressive Propensity (Female and Male)

Measures	b	se	Beta	R ²	Intercept
Panel A			Females (N = 195)		
Aggressive Behavior	-.163	.090	-.129	.017	2.114
Aggressive Propensity: Female	-.441	.092	-.326*	.106	3.340
Aggressive Propensity: Mal	-.340	.097	-.245*	.060	3.002
Panel B			Males (N = 273)		
Aggressive Behavior	-.202	.082	-.148*	.022	2.285
Aggressive Propensity: Female	-.206	.079	-.157*	.025	2.270
Aggressive Propensity: Male	-.410	.104	-.233*	.054	3.379

* $p \leq .05$.

Table 4

Potential Mediation: Estimated Effects of the Measure of Self Esteem on the Measures of Aggressive Behavior and Aggressive Propensity (Female and Male)

Measures	b	se	Beta	R ²	Intercept
Panel A			Female (N = 195)		
Aggressive Behavior	-.235	.082	-.202*	.041	2.282
Aggressive Propensity: Female	-.059	.089	-.048	.002	2.029
Aggressive Propensity: Male	-.132	.091	-.103	.011	2.255
Panel B			Males (N = 273)		
Aggressive Behavior	-.086	.085	-.061	.004	1.002
Aggressive Propensity: Female	-.207	.081	-.154*	.024	2.235
Aggressive Propensity: Male	-.226	.109	-.125*	.016	2.754

* $p \leq .05$.

Table 5

Potential Mediation: Estimated Effects of the Measures of Core Competencies on the Measure of Moral System of Belief

Measures	b	se	Beta
Panel A			
Females (N = 195)			
Positive Sense of Self	.198	.078	.170*
Self-Control	.082	.063	.083
Decision-Making	.351	.065	.352*
Pro-Social Connectedness	.189	.062	.207*
Panel B			
Males (N = 273)			
Positive Sense of Self	.198	.070	.170*
Self-Control	.138	.052	.135*
Decision-Making	.291	.054	.309*
Pro-Social Connectedness	.215	.053	.232*

Note. Intercept for the females equation = 1.087, and the $R^2 = .374$. Intercept for the males equation = .853, and the $R^2 = .414$.

* $p \leq .05$.

4. Tell me about who you lived with before (record relationship, gender, and how long)

Relationship	Gender	How long

5. Do you have the following possessions at home?

Oil, gas, electric stove	1 Yes	0 No
Television (working)	1 Yes	0 No
Cable	1 Yes	0 No
Radio	1 Yes	0 No
Fridge	1 Yes	0 No
DVD player	1 Yes	0 No
Computer	1 Yes	0 No
Motorcycle/bike/bicycle	1 Yes	0 No
Car/Bus/Truck	1 Yes	0 No

6a. What kind of toilet do you have at home?

(For Interviewer circle type of toilet facility)

b. Is your toilet inside or outside?	Own inside flush	5
c. Is it used by your family alone or other families use it too?	Shared inside flush	4
	Own outside flush	3
	Shared outside flush	2
	Pit	1
	None	0

7a. Where do you get your water from at home?

b. Is it used by your family alone or other families use it too?

(For Interviewer circle water supply)

Own inside pipe	5
Shared Inside pipe	4
Own pipe in yard	3
Shared in yard	2
Outside yard	1

Now I am going to ask what you think about yourself. Tell me the answer that is closest to what you choose. Be honest.

	Strongly Disagree	Disagree	Agree	Strongly Agree
8. In general I am satisfied with myself (<i>happy, pleased</i>).	1	2	3	4
9. At times I think that I am no good at all. (probe: 'so you think you are not a no good' / 'so you think you are a no good')	1	2	3	4
10. I feel that I have a number of good qualities (<i>good things about me</i>).	1	2	3	4
11. I am able to do things as well as most other people (<i>I can do things as good as other people</i>).	1	2	3	4
12. I feel I do not have much to be proud of. (probe: 'so you feel you don't have much to be proud of' / 'so you feel you have much to be proud of')	1	2	3	4
13. I definitely feel I am of no use at times. (probe: 'so you feel you are of no use at times' / 'so you feel you are of use at times')	1	2	3	4
14. I feel that I am just as important as anybody else .	1	2	3	4
15. I wish I could think better of myself.	1	2	3	4
16. Overall, I tend to feel that I am a failure (<i>a disappointment, a letdown, or a flop</i>).	1	2	3	4
17. I can make a difference in my own life.	1	2	3	4
18. I know what I need to do to be a better person.	1	2	3	4
19. I think that my life has "purpose" or meaning (<i>I think that there is a reason for my life</i>).	1	2	3	4
20. I think a lot about the future and how I want to live my life.	1	2	3	4
21. I have a positive attitude about myself (<i>I think positive things about myself</i>).	1	2	3	4

These next questions ask about your general behavior in certain situations.

	Strongly Disagree	Disagree	Agree	Strongly Agree
22. I have a hard time finishing what I start.	1	2	3	4
23. I do things without thinking.	1	2	3	4
24. I can stop myself from losing my temper. (probe: 'so you don't lose your temper' if strongly disagree or disagree)	1	2	3	4
25. I can control my angry feelings.	1	2	3	4
26. It is hard to wait for something I want.	1	2	3	4
27. I would prefer to get a small present today than wait to get a big present in a month. (probe: 'so you would prefer to get the big present in a month'/'so you would prefer to get a small present today')	1	2	3	4
28. I find it hard to resist pressure from my friends (<i>I find it hard to resist pressure / I usually do what my friends want me to do</i>)	1	2	3	4
29. I can do things to calm down when I am angry or excited.	1	2	3	4

These next questions ask about making decisions, that is, the things that you make up your mind about.

	Strongly Disagree	Disagree	Agree	Strongly Agree
30. When I am making up my mind about something I think about all the things that could happen (<i>consequences</i>)	1	2	3	4
31. I think of all the bad things that could happen before I make up my mind about something.	1	2	3	4
32. I consider different choices before making up my mind about something.	1	2	3	4
33. I think about how <i>the things I do</i> will affect others.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
34. I think about how the things I do will affect me in the long run (<i>i.e. in the future or 'down the road'</i>).	1	2	3	4
35. Sometimes I will take chances just for the fun of it.	1	2	3	4
36. When making up my mind about something I like to collect a lot of information.	1	2	3	4
37. When I think about what I have made up my mind to do I focus mainly on the good things that could happen (<i>When I think about my decisions, I focus mainly on the positive consequences</i>)	1	2	3	4

These next questions ask about what you think is right and wrong.

	Strongly Disagree	Disagree	Agree	Strongly Agree
38. If you're angry, it is OK to say mean things to others.	1	2	3	4
39. In general, it is OK to shout at others and say bad things.	1	2	3	4
40. It is usually OK to push or shove other people around if you're upset or angry.	1	2	3	4
41. In general, it is OK to take your anger out on others by using physical force (<i>e.g. punch or hit them</i>).	1	2	3	4
42. It is OK to cheat if nobody knows.	1	2	3	4
43. It is important to keep promises.	1	2	3	4
44. It is important to be considerate of other people's feelings.	1	2	3	4
45. It is important to have a job and be a good worker.	1	2	3	4
46. It is important to keep your word.	1	2	3	4

	Strongly Disagree	Disagree	Agree	Strongly Agree
47. In general, it is wrong to hit other people.	1	2	3	4
48. It is wrong to take it out on others by saying mean things when you're upset or angry.	1	2	3	4
49. It is wrong to tell other people bad things to hurt their feelings.	1	2	3	4
50. It is wrong to take advantage of others to get what you want.	1	2	3	4
51. It is generally wrong to get into physical fights with others.	1	2	3	4

The following questions ask about your relationship with others.

	Strongly Disagree	Disagree	Agree	Strongly Agree
52. There are people I can depend on to help me if I really need it.	1	2	3	4
53. I know an adult I can turn to for help when something is bothering me or I am worried about something.	1	2	3	4
54. If something went wrong, nobody at all would come to help me.	1	2	3	4
55. There is an adult I could talk to about important choices in my life.	1	2	3	4
56. There is a trustworthy adult I could turn to for advice if I were having problems.	1	2	3	4
57. There is nobody at all I can depend on for help if I really need it.	1	2	3	4
58. There is no adult at all I can feel comfortable talking about my problems with.	1	2	3	4
59. There are people I can count on in an emergency or bad situation.	1	2	3	4
60. There is a special person in my life who (1998)cares about my feelings.	1	2	3	4
61. I know where to go if I need advice about something.	1	2	3	4
62. I know about opportunities available to me (such as religious activities, sports, clubs, etc.)	1	2	3	4

These next questions ask about how you have behaved with friends and other people your age in the past month (when you were not just playing around).

<i>In the LAST MONTH, that is, since _____ until _____ (give date), how many times have you:</i>	Never	Once or Twice	3 – 5 Times	6 or More Times
63. shoved or pushed a male?	1	2	3	4
64. shoved or pushed a female?	1	2	3	4
65. shouted or screamed really loud at a male?	1	2	3	4
66. shouted or screamed really loud at a female?	1	2	3	4
67. threatened to hit or physically harm another male?	1	2	3	4
68. threatened to hit or physically harm another female?	1	2	3	4
69. been in a fight in which you hit someone?	1	2	3	4
70. thrown something at someone to hurt them?	1	2	3	4
71. hit or slapped someone?	1	2	3	4
72. insulted someone else's family (<i>i.e. say something bad about them</i>)?	1	2	3	4
73. made fun of or mocked someone else to make them angry?	1	2	3	4
74. shamed or embarrassed someone to their face? (<i>shame or embarrass someone to dem face or in front of dem face</i>).	1	2	3	4
75. not let someone be a part of your group anymore because you were upset or angry at them?	1	2	3	4
76. said mean things about someone to make others laugh?	1	2	3	4
77. carried a weapon (<i>e.g. gun, knife, stick/board, etc.</i>)?	1	2	3	4

These questions ask about what you might do - we want to know what would make you get in a fight.

<i>Would you hit or fight with a FEMALE if:</i>	Never	I Might	I Probably Would	Yes, For Sure
78. she hit you first?	1	2	3	4
79. she shouted at you or called you names?	1	2	3	4
80. she gave you a dirty look (<i>dutty look or bad eye</i>)?	1	2	3	4
81. she spread rumors and lies about you behind your back?	1	2	3	4
82. she took something of yours without asking you?	1	2	3	4
83. others were watching and they dared you to do it?	1	2	3	4
84. everyone else was hitting her?	1	2	3	4
85. you were angry or in a bad mood?	1	2	3	4
86. you wanted to get revenge?	1	2	3	4
87. she said something bad about a member of your family?	1	2	3	4

<i>Would you hit or fight with a MALE if:</i>	Never	I Might	I Probably Would	Yes, For Sure
88. he hit you first?	1	2	3	4
89. he shouted at you or called you names?	1	2	3	4
90. he gave you a dirty look (<i>dutty look or bad eye</i>)?	1	2	3	4
91. he spread rumors and lies about you behind your back?	1	2	3	4
92. he took something of yours without asking you?	1	2	3	4
93. others were watching and they dared you to do it?	1	2	3	4
94. everyone else was hitting him?	1	2	3	4
95. you were angry or in a bad mood?	1	2	3	4
96. you wanted to get revenge?	1	2	3	4
97. he said something bad about a member of your family?	1	2	3	4

Some people have ideas about what is OK for men and for women. The next questions ask about your views on this topic.

	Strongly Disagree	Agree	Disagree	Strongly Agree
98. Being violent is just part of being a man <i>(Being violent is a man ting).</i>	1	2	3	4
99. Men have to be prepared or ready to use violence at any time.	1	2	3	4
100. Men always have to be strong and in charge.	1	2	3	4
101. Women should listen to men and do what they say.	1	2	3	4
102. Women need men to give them money and support them.	1	2	3	4
103. Men don't like women who talk back <i>(Men don't like women who answer dem back).</i>	1	2	3	4

These next questions are about gangs, either at school or in your community.

When we say “gang” we mean a group that does wrong things together (like steal things or destroy property), that has been together for a while and that has a name

104. Which of the following is true about you?

1. I don't belong to a gang and never hang out with people in a gang.
2. I don't belong to a gang and sometimes hang out with people in a gang but never do wrong things with them.
3. I don't belong to a gang, but I hang out with people in a gang and do wrong things with them sometimes.
4. I belong to a gang and do wrong things with them.
5. I used to belong to a gang and do wrong thing with them but don't anymore.

(If '1,' end interview)

105. The gang you are a member of/ hang out with/ used to be a member of:

1. Is/was a school gang 2. Is/was a gang in the community 3. Both school and community

106. *(If a school gang)* The gang you are a member of/ hang out with/ used to be a member of:

- | | | |
|--|--------------|-------------|
| a. Protects members from other gangs | 1 Yes | 0 No |
| b. Takes away things from students (e.g. cell phones, money) | 1 Yes | 0 No |
| c. Carries weapons (e.g. knives, guns, ice picks, etc) | 1 Yes | 0 No |

- | | | |
|--|--------------|-------------|
| d. Hurts people sometimes | 1 Yes | 0 No |
| e. Any other activities done (please specify)_____ | 1 Yes | 0 No |

107. (*If a gang in community*) The gang you are a member of/ hang out with/ used to be a member of:

- | | | |
|--|--------------|-------------|
| a. Protects people in the community | 1 Yes | 0 No |
| b. Harms people in the community | 1 Yes | 0 No |
| c. Harms people outside of your community | 1 Yes | 0 No |
| d. Uses guns | 1 Yes | 0 No |
| e. Deals in ganja (sells, trades) | 1 Yes | 0 No |
| f. Deals in drugs (other than ganja) | 1 Yes | 0 No |
| g. Is definitely on one side of politics | 1 Yes | 0 No |
| h. Any other activities done (please specify)_____ | 1 Yes | 0 No |