

Chapter 3

**PREVENTION AND RISK REDUCTION AMONG
ADOLESCENTS: A 16 YEAR COMMUNITY-RESEARCH
PARTNERSHIP**

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ABSTRACT

Utilizing data sets from six community-based research studies (two cross-sectional and four longitudinal covering a span of nearly 15 years) among African American youth residing in low income areas of urban, Baltimore, Maryland, we summarize findings regarding the associations and longitudinal protective effects of parental monitoring on adolescent risk behavior. We present an updated meta-analysis regarding these relationships and new analyses of the effect of a parental monitoring intervention on both adolescent perceptions of parental monitoring and their risk and protective behaviors.

In the second portion of the chapter we attempt to describe the communities and context in which the parents are negotiating the challenging task of parenting through some of our experiences as researchers working with and in these communities. We describe the rich lessons learned from these events. We discuss the implications of our results and the questions that remain to be addressed regarding the role of parents and parental monitoring.

We conclude that more efforts are needed to integrate the lessons researchers learn from the quantitative and qualitative data collected as part of the research paradigm and the lessons learned from the human interactions experienced as part of community-based research outside of the experimental paradigm.

INTRODUCTION

Fueled by the HIV epidemic, the past two decades have witnessed an explosion of adolescent risk prevention research (Jamieson & Romer, 2003; Robin, et al., 2004). No longer is there a question as to whether behavioral prevention efforts can work; numerous effective adolescent risk prevention programs have emerged from these research efforts, leading to reduced rates of sexual risk (Kirby, 2001a; 2001b; Robin, et al., 2004) and substance use, including illicit drugs, alcohol and tobacco (Brounstein & Zweig, 1999).

These research efforts have also resulted in a far richer understanding of adolescent risk behavior, confirming, altering and even rejecting some of the previously held tenets of adolescent development (Byrnes, 2003). Long regarded as the hallmark of adolescent social development, peer relationships and perceptions continue to be implicated in adolescent risk and preventive behavior (Farrell & White 1998; Metzler, Noell, Biglan, Ary, & Smolkowski, 1994; Prinstein, Boergers, & Spirito, 2001). By contrast, we have learned that the concept of adolescent invulnerability, considered for decades to explain the apparently heedless abandonment with which adolescents appear to plunge into risk situations, is far more complex than previously appreciated (Metzler, et al., 1994). Indeed, there is evidence that many adolescents may in fact have a heightened, rather than a decreased, sense of personal vulnerability (Fischhoff, et al., 2000); however adolescents lack experience necessary to avert and/or recognize dangers (Byrnes, 2003) and thus may give the appearance of perceived invulnerability. In risk-dense environments, such as many low-income urban settings, this lack of experience may be especially relevant. The importance of adequate coping skills, be they interpersonal or technical, and perceptions of these skills have emerged as critical predictors of preventive actions (Hagger, Chatzisarantis, & Bibble, 2001; Jemmott III,

Jemmott, Spears, Hewitt, & Cruz-Collings, 1992; Stanton, et al., 2004). Helping adolescents construct and utilize protective behavioral repertoires has replaced earlier notions that simply arming youth with facts would be sufficient to avoid risk situations. Thoroughly disabused in the past decades has been the vilifying of adolescence; rather than a time marked by storm, rebellion and turmoil (Hall, 1904), adolescence is a time of establishing new relationships with self, family, peers and the wider external environment.

Our appreciation of the role of parents during adolescence has undergone substantial alteration over the past few decades. Once viewed as an influence of receding importance, losing out to peer influence during the teen years, there is now substantial evidence that parents remain a robust influence throughout early and mid adolescence (Romer, et al., 1999). Adolescents consistently report that they value what their parents think and believe, and that they would like to discuss complex issues, such as sexuality, with their parents (Dittus & Jaccard, 2000; Jaccard & Dittus, 1991).

Among the more promising constructs for understanding parental influence on adolescent risk and protective behaviors is the activity of parental monitoring. The concept of parental monitoring is most commonly defined as knowledge as to what, with whom, and where a youth has been or will be (Stattin & Kerr, 2000; Dishion & McMahon, 1998). The construct of parental monitoring as a protective factor has been robust across ethnic groups, genre of risk behaviors, and the adolescent years. Moreover, parental monitoring has been effective even in risk dense environments and among adolescents already engaging in risky behaviors. (Li, Fang, Stanton, Su, & Wu, 2003; Romer, et al., 1999; Steinberg, Mount, & Lamborn, 1991).

Much of our group's research in Baltimore, Maryland over the past decade has explored the construct of parental monitoring and its relationship alone, and in combination with, other influences on adolescent risk behavior. In this paper, we summarize our previously reported research findings regarding parental monitoring and risk and protective behaviors among low-income urban adolescents. We also present new analyses exploring the longitudinal effects of behavioral interventions targeting youth and their parents and the influence of parental monitoring on perceptions and prevalence of risk behavior.

THE COMMUNITY DIMENSION TO COMMUNITY-BASED RESEARCH

Health and illness originate, develop, and flourish in communities. In two decades of global community-based HIV behavioral research, we have witnessed significant changes brought about by behavioral prevention interventions. Nevertheless, community-based behavioral interventions continue to strive for sustainability and transferability.

Towards this end, our research team has worked and interacted closely with the great diversity of individuals living and working in communities in an attempt to bridge the gap between publishable research findings and social validity. The process factors involved—observations that are outside of the research design and research hypotheses—merit more attention than our traditional research frameworks have required or even permitted. In community-based research, these observations may be as important as the explicit research agenda, particularly in terms of understanding the process of sustaining intervention impact.

The last two decades have generated extensive collaborations between physicians, epidemiologists and social scientists to alter behaviors across a wide range of communities. These groups are bringing to practice the growing awareness that substantial influences on the health and disease trajectories of populations require integration of culture and behavior as part of any biomedical intervention. Although these collaborations have resulted in many advances, the operative research paradigm imported without substantial modification from clinic-based clinical trials has not allowed us to acknowledge and incorporate our process observations in a manner that will advance community-based behavioral research. This paradigm attempts to diminish extraneous “noise”. In community-based research, it may be better to listen to this noise, analyze it and incorporate it into the findings. Publication of qualitative studies independent from the analysis of the clinical trial does not serve the purpose of truly integrating disciplines, methods, processes and outcomes in our interpretation of the intervention phenomenon. Although more sophisticated statistical analytic techniques have been developed to accommodate some of the “problems” inherent in community-based research (e.g., effects of cluster randomization), we continue to conduct and evaluate our community based research in much the same way as we conduct and evaluate clinic-based clinical trials. During the 15 years we conducted research as part of Focus on Kids, we spent many hours with youths in the recreation centers in and around the housing developments and enjoyed countless wonderful thought-provoking interactions with the people living in these communities. Therefore, in the second part of this article, we explore the humanistic dimensions of our community-based research.

METHODOLOGY

Description of Six Cohorts

Our line of inquiry in Baltimore, Maryland began approximately 15 years ago and involves two cross-sectional and four longitudinal cohorts involving nearly 2600 predominantly African-American youth living in and around public housing developments. Recruitment procedures have been described in detail for all of the cohorts (Li, Howard, Stanton, Rachuba, & Cross, 1998; Li, Stanton, & Feigelman, 2000; Li, Stanton, Feigelman, Black, & Romer, 1994; Rai, et al., 2003; Romer, et al., 1999; Stanton, et al., 2000; Stanton, et al., 2004) and will be briefly summarized here. The research for all six cohorts was approved by the Institutional Review Board at the University of Maryland. Written, informed consent/assent was obtained from parents and youths.

Table 1
Description Of The Six Cohorts Studied From 1992-2002

Cohort Name	Study Years	Sample Size	Age(yrs)	Boy n (%)	Girl n (%)	Recruitment Sites
Cross-sectional 1	1992	455	9-15	217(48)	238(52)	6 public-housing developments
Cross-sectional 2	1994	355	9-17	173(49)	182(51)	8 public-housing developments
Focus on Kids	1993-1997	383	9-15	213(56)	170(44)	9 recreation centers
Neighborhoods in Action	1996-1997	349	9-15	198(57)	151(43)	10 public-housing developments
Informed Parents & Children Together	1997-1999	239	12-16	121(51)	118(49)	8 public-housing developments
Focus on Kids + ImPACT	1999-2002	817	13-16	345(42)	472(58)	35 low-income community sites

As shown in Table 1, the first cross-sectional study involved 455 African-American youth, aged 9 to 15 years, recruited from six public housing developments, and was designed to assess HIV-related perceptions and other risk-and protective behaviors (Li, et al., 1994). This study will be referred to as “Cross-sectional 1”. The second cross-sectional study (subsequently referred to as “Cross-sectional 2”), involved 355 youth, ages 9 to 17, recruited from eight public housing developments, also assessed HIV related perceptions and risk and protective behaviors (Romer, et al., 1999). Our first longitudinal cohort included 383 youth, ages 9 through 15, recruited from nine recreation centers associated with three public housing developments, was part of a randomized controlled trial of “Focus on Kids”, an eight-session, adolescent face-to-face HIV-risk reduction intervention. The Focus on Kids intervention was based on a social cognitive theory, Protection Motivation Theory (PMT) (Rogers RW, 1983). PMT posits that environmental and personal factors combine to form a potential threat, to which the individual may respond in a maladaptive fashion or an adaptive fashion. Consideration of the maladaptive response includes consideration of rewards (both *intrinsic rewards* such as “feels good” and *extrinsic rewards* such as “my friends would think I was cool”) and of costs (the *severity* of and *vulnerability* to possible adverse outcomes). The adaptive response is mediated by balancing the perceived efficacy of the protective action (both *self-efficacy* such as “I know I can obtain condoms” and *response efficacy* such as “Condoms are effective in protecting against HIV transmission) with the *response cost* of the protective action (including barriers or inconveniences). The two appraisal pathways combine to form “protection motivation”—the intention to respond to the potential threat in an adaptive (safe sex) or maladaptive (unsafe sex) fashion. The Focus on Kids intervention

emphasizes decision-making within a cultural context, enhances communication, negotiation and condom-use skills, and addresses perceptions (including those of the youth, their peers and their families) of a range of risk and protective behaviors and values. The trial demonstrated Focus on Kids to be effective in reducing adolescent risk behavior (Li, Stanton & Feigelman, et al., 2000). The cohort was followed semi-annually for two years, and then annually through four years post-intervention. Focus on Kids, along with the parental companion intervention “Informed Parents and Children Together (ImPACT)” (vide infra) has been identified as an intervention with best-evidence of effectiveness by CDC’s Prevention Research Synthesis Project (CDC, 2006; Lyles et al., in press).

The second longitudinal cohort, comprised of 349 youth, ages 9 through 15 who lived in and around 10 public housing developments, was followed for one year as part of a violence prevention intervention, “Neighborhoods in Action” (Li, et al., 1998).

The third longitudinal cohort, entitled “Informed Parents and Children Together” (ImPACT), included 246 parents and youth, ages 12 to 16 years, from eight public housing developments, who were followed for one year as part of an evaluation of a one-session, face-to-face parental monitoring intervention delivered to the youth and their parents (or other guardians) (Stanton, et al., 2000). The intervention was delivered one-on-one by a trained interventionist, and in a majority of cases both the parent (guardian) and his/her adolescent child participated in the activities together. The intervention was delivered in a private setting (typically the home of the parent and child).

ImPACT consists of a 22-minute video, which was developed specifically for this intervention, and was filmed with residents of public housing developments in Baltimore City. After viewing the video, the interventionist reviewed the main points of the video with the parent. These main points included: (1) know where and with whom your children are spending time and what they are doing; (2) even though it will not be comfortable, talk to your children about sex before they are sexually active; (3) know the facts or how to get information about HIV/STIs and who is at risk ; and (4) know and show your child to use a condom Following the review, parents were invited to participate in an interactive role-play with either the interventionist, or if present his/her adolescent child. The role-play focused on a discussion between parent and child about a potentially risky situation in which the child has been involved. The roleplay was designed to increase parental monitoring, parent-adolescent communication, and parent knowledge of condoms and other HIV-preventive actions (Stanton, et al., 2000). The intervention concluded with a condom demonstration and an opportunity for the parent and adolescent to practice the correct steps for using a condom (Focus on Kids Team, 2005)

The final longitudinal cohort of 817 youth (and their parents) was followed semi-annually to evaluate the Focus on Kids intervention versus Focus on Kids embellished with ImPACT (Stanton, et al., 2004). This study will be referred to as “Focus on Kids + ImPACT”. Because we present new analyses regarding Focus on Kids + ImPACT, we describe this study and sample in more detail here. In this randomized, controlled, longitudinal trial, youth were identified through 35 community sites (recreation centers, churches, housing developments, etc.) in and around low-income urban areas. Randomization occurred at the level of the 35 sites. Twenty two sites (n=496 youth) were randomized to received the Focus on Kids risk reduction intervention described above and, along with their parents, the one-session parental-monitoring intervention, ImPACT. The remaining 13 sites (n=321 youth) were randomized to receive the Focus on Kids risk reduction intervention, and a parent-attention control

program providing skills for planning education and employment (“Goal For It”). The median age of the group was 14 years and 58% were female; intervention groups were similar with respect to gender and age at baseline. Follow-up assessments were conducted at 6, 12, 18, and 24 months after intervention. Local facilitators identified eligible youth, described the program to the youths and parents, and established an appointment time for enrollment and baseline data collection from those who were interested. Appointments occurred in the youth’s home or at a designated community site. During the initial appointment, the youth and their parent completed assent/consent forms and baseline questionnaires in separate rooms. Immediately following completion of baseline surveys, parent and youth participated in either the ImPACT program or the parent attention-control “Goal for It” program according to the pre-determined randomization status of the community. The interventionist closed the appointment by giving the youth and parent information about the FOK sessions scheduled for the youth.

Outcome Measurement

In all cohorts, prevalence and perceptions of behaviors were based on self-report through the Youth Health Risk Behavioral Inventory (YHRBI) (Stanton, et al., 1995). Based on the PMT, the YHRBI assesses knowledge, perceptions and self-reports of risk and protective behaviors and presents youth with questions regarding participation in a variety of truant, sexual, and substance-use risk and protective behaviors during the past six months. The YHRBI also queries the youth as to their perceptions of whether their friends or family members are involved in these behaviors according to a five-point Likert scale (1=none; 5=most).

Youth perceptions of parental monitoring were assessed according to the six items of the Silverberg Parental Monitoring Scale (Silverberg & Small, 1991), a scale assessing whether youth perceive that their parents generally know the youth’s whereabouts, their activities and the friends accompanying them, along a five-point Likert Scale [1=never; 5=always]. The six-items in the scale were summed such that the highest monitoring would be reflected in a score of 30 while the lowest possible monitoring would be reflected in a score of 6. Parental perceptions of monitoring (as opposed to youth perceptions of parental monitoring) were assessed by a modified “mirror” image of the parental monitoring scale that was presented to parents, e.g., “Do you know where [with whom/doing what] your child is”, along a five-point Likert scale (1=never, 5=always). Parents were also asked to complete a parent version of the YHRBI in which they were asked to assess their perceptions of their child’s engagement in specified risk or protective behaviors during the previous six months.

RESULTS

Cross-sectional relationship between youth perceptions of parental monitoring and risk/protective behaviors

Review of Previous Findings:

In all six of the datasets described above, a strong inverse correlation was found between perceived parental monitoring and a variety of adolescent risk behaviors such that increased perceived parental monitoring was associated with decreased risk behaviors. In the Cross-sectional 1 cohort, there was a statistically significant inverse correlation between sexual risk behavior, drug-trafficking, and school truancy. In Cross-sectional 2 cohort, the inverse correlation was significant for all three of these behaviors and for substance use and violence. Likewise, among the youth in the Neighborhoods in Action cohort, except for sexual risk behavior, which was not collected, the other risk behaviors were significantly inversely correlated with parental monitoring at baseline (Li, Feigelman, & Stanton, 2000b). Among the youth in the ImPACT cohort, involvement in all 10 of the risk behaviors assessed was inversely correlated with parental monitoring; at baseline these differences were significant for engaging in a physical fight, staying out all night, carrying a bat or stick as a weapon, smoking cigarettes and using drugs (Stanton, et al., 2000). At baseline the 383 youth in Focus on Kids exhibited a significant inverse linear relationship between perceptions of parental monitoring (low, medium and high) and involvement in unprotected sex, drug use and drug-trafficking (Li, Stanton, & Feigelman, 2000).

Subsequently we looked across all six data sets, focusing on a subset of 1478 subjects who were ages 13 to 16 years and were either in the cross-sectional samples (e.g. no intervention was performed) or in the control group of the evaluation studies (e.g. so that there was no potential confounding of results from an intervention). The age range of 13 to 16 years was selected for this set of analyses because this is the mid-adolescent age span in which the transition to risk involvement appears to be particularly steep and was common to all or most of the cohorts. Approximately one half of the subjects in the analyses were male and two-thirds were 13 or 14 years of age. Eight behaviors which were common to most (but not all) of the studies were assessed: sex, unprotected sex, violence, cigarette, alcohol and marijuana use, drug-selling and drug-trafficking. Data were analyzed by frequency distribution, one-way ANOVA, and multiple logistic regressions. We first analyzed the data at the level of each of the six studies for each of the targeted risk behaviors that had been assessed in that particular study, resulting in 39 analytic categories. For 37 of the 39 categories, perceived parental monitoring was protective; although only one-half of these protective relationships were statistically significant. Multiple logistic regression analysis of the pooled data from the six studies revealed that perceived parental monitoring was positively associated with protective behaviors for all eight behaviors, although this

association was only significant for five of these behaviors (engaging in sex, violence, cigarette use, alcohol use, and marijuana). The odds ratios (OR) of participation in these behaviors among youth perceiving that their parents were monitoring them were less than .50, $p < .001$. (An “odds ratio” of less than 1 indicates a reduced likelihood of involvement in a risk behavior, while a value greater than 1 indicates an increased likelihood.) Perceived parental monitoring was marginally protective for drug-delivering (OR and 95% confidence interval = 0.52, 0.2-1.4, $p = .05$), but was not significantly protective for drug-selling or condom-use. Analyses addressing the influence of gender and age on parental monitoring found that girls compared to boys, and younger youth compared to older youth perceived significantly higher rates of parental monitoring. (Rai et al., 2003)

New Analyses

Further analysis of the data from the “Focus on Kids + ImPACT” cohort confirm and expand these cross-sectional findings. Among the 817 youth enrolled in the study, 757 (93%) completed the parental monitoring scale and were thus included in the analyses presented in this manuscript. Two series of analyses were performed: First, youth were categorized into two groups according to their perceptions of the level of parental monitoring displayed by their parents. Those youth who assigned the highest monitoring values of 29 or 30, ($n=240$, 32%) were classified as “high perceived monitoring” while the remaining 517, (68%) of youth perceived lower levels of parental monitoring (values less than 29) and were classified as “lower perceived monitoring” . Youth in the high and lower groups were then compared according to self-reported rates of 16 risk behaviors and two communication practices. As shown in Table 2, of the 16 risk behaviors assessed, eleven were significantly higher among youth who perceived that their parents exhibited lower levels of parental monitoring. Not shown in this table, youth who perceived high levels of monitoring were also significantly more likely to always ask their partners if they consistently used condoms.

Table 2
Relationship Between Prevalence of Self-Reported Risk Behaviors And Parental Monitoring Among The FOK + ImPACT Youth At Baseline

Risk Behavior	Parental Monitoring ^a		Sig ^b
	Low	High	
Missed school because of suspension	.41	.29	.001
Missed school because hooked with friends	.14	.05	.005
Carry a bat or stick to use as a weapon	.19	.08	.000
Carry a knife or razor to use as a weapon	.22	.16	.071
Been in a physical fight	.43	.32	.007
Beat up a person	.35	.15	.000
Smoked cigarette	.32	.18	.000
Drank alcoholic beverage	.48	.33	.000
Smoked marijuana	.35	.15	.000
Used cocaine (smoke or snort)	.02	.01	.207
Used other drug of abuse	.03	.02	.394
Used drug of abuse intravenously	.00	.00	N/A
Sold or delivered illegal drug	.13	.05	.001
Engaged in anal sex	.11	.05	.007
Engaged in sexual intercourse	.50	.28	.000
Used a condom during last sexual encounter	.75	.80	.400

Note. Prevalence rates denote the proportion of youth (N = 757) having engaged in risk behavior within the previous 6 months. ^aYouth categorized according to perceptions of their parents as exhibiting high (n = 240) or low (n = 517) levels of parental monitoring. ^bSignificance of GLM ANOVA.

To further explore monitoring effects on clusters of risk behaviors, and to differentiate possible effects by gender, risk behaviors were classified into three behavioral clusters: delinquent behaviors (comprised of suspended from school, hooked school, carried a bat as a weapon, carried a knife as a weapon, involved in a fight, and beat up another child); substance-use (comprised of cigarette, liquor, marijuana, other illegal drugs, and intravenous drug use); and unprotected sex (having sex without using a condom). The relationship between the percent of youth involved in one or more of these behavioral clusters with level of parental monitoring (high or low) was assessed via general linear model analysis of variance. Baseline relationships were first examined, and as shown in the top third of Table 3, involvement in each of the behavioral clusters was strongly associated with low levels of parental monitoring. Gender differences at baseline were also examined, and although not shown in the table, delinquency and drug use were significantly higher among both males and females with low perception of parental monitoring. In the behavioral cluster of unprotected sex, females who perceived low levels of parental monitoring at baseline demonstrated significantly greater prevalence of unprotected sex compared to high monitored females.

Table 3
Longitudinal Relationship Between Prevalence of Clusters of Self-Reported Risk Behaviors and Parental Monitoring Among The FOK + ImpACT Youth

	All Youth			Only Youth That Engaged in Behavior at baseline			Only Youth That Did Not Engage in Behavior at baseline		
	Parental Monitoring ^a		Sig ^b	Parental Monitoring		Sig	Parental Monitoring		Sig
	Low	High		Low	High		Low	High	
Delinquency bl ^c	.75 (512)	.60 (235)	.000	1 (386)	1 (142)	N/A	0 (126)	0 (93)	N/A
Delinquency 6 mo	.48 (374)	.41 (185)	.103	.57 (273)	.46 (104)	.065	.24 (97)	.32 (76)	.251
Delinquency 12mo	.42 (353)	.37 (180)	.218	.47 (267)	.45 (110)	.810	.26 (83)	.19 (67)	.310
Delinquency 18 mo	.47 (309)	.35 (182)	.011	.54 (222)	.41 (104)	.027	.28 (83)	.25 (76)	.701
Delinquency 24 mo	.42 (288)	.32 (162)	.032	.50 (207)	.40 (96)	.084	.21 (79)	.19 (64)	.685
Drugs bl ^d	.61 (512)	.38 (235)	.000	1 (310)	1 (90)	N/A	0 (202)	0 (145)	N/A
Drugs 6 mo	.38 (374)	.26 (185)	.008	.52 (226)	.43 (65)	.218	.17 (144)	.17 (115)	.878
Drugs 12mo	.35 (353)	.26 (180)	.035	.44 (216)	.38 (63)	.372	.21 (134)	.18 (114)	.627
Drugs 18 mo	.40 (309)	.30 (182)	.028	.52 (168)	.38 (60)	.074	.27 (137)	.26 (120)	.832
Drugs 24 mo	.44 (288)	.23 (162)	.000	.53 (165)	.25 (59)	.000	.33 (121)	.21 (101)	.042
Unprotected Sex bl ^e	.12 (502)	.06 (232)	.005	1 (62)	1 (13)	N/A	0 (440)	0 (219)	N/A
Unprotected Sex 6 mo	.08 (357)	.05 (176)	.290	.24 (42)	.12 (8)	.489	.06 (306)	.05 (161)	.789
Unprotected Sex 12mo	.11 (343)	.07 (162)	.153	.29 (42)	.20 (10)	.592	.08 (293)	.05 (146)	.304
Unprotected Sex 18 mo	.12 (284)	.06 (175)	.035	.33 (31)	.12 (8)	.280	.09 (244)	.06 (161)	.258
Unprotected Sex 24 mo	.12 (270)	.08 (150)	.181	.29 (28)	.22 (9)	.718	.10 (237)	.07 (137)	.431

Note. Prevalence rates (n) denote the proportion of youth (N = 757) having engaged in risk behavior within the previous 6 months. ^aYouth categorized according to perceptions of their parents as exhibiting low (n = 517) or high (n = 240) levels of parental monitoring. ^bSignificance of GLM ANOVA. ^cDelinquency cluster comprised of “suspended” + “hooked” + “bat” + “knife” + “fight” + “beat”. ^dDrugs cluster comprised of “cig” + “liquor” + “pot” + “crack” + “other” + “iv drugs”. ^eUnprotected sex cluster refers to sex in the past 6 months without a condom.

Cross-sectional relationship between youth perceptions of parental monitoring and peer influences

Review of Previous Findings:

In the cross-sectional analysis of the subset of 1478 youth ages 13 to 16 from all six of the cohorts (see above) (Rai, et al., 2003) we explored the relative impact of peer influence compared to parental monitoring on the 8 risk behaviors assessed in these analyses (sex, unprotected sex, violence, cigarette, alcohol and marijuana use, drug-selling and drug-trafficking). Among these youth, the prevalence of sexual intercourse, alcohol use, marijuana use, and drug-selling, increased with age. By contrast, rates of unprotected sex (sexual intercourse without a condom), cigarette use and drug-delivering did not increase with age. When patterns of youth perceptions of peer involvement in these risk behaviors were explored, girls were less likely than boys to perceive their peers involved in sexual intercourse or drug-selling than were boys, but were more likely to perceive peer involvement in alcohol use. Multiple logistic regressions using the inverse of the risk behavior “unprotected sex” as an index of sexual protection (condom use) were conducted. These analyses showed that the odds ratios for the association of peer perception and youth involvement in the risk and protective (condom use) behaviors across 27 analytic categories were all positive, ranging from 1.17 to 2.5 across the six studies; 23 of the 27 categories were statistically significant. When collapsed across studies, overall perceptions of peer involvement were significantly positively correlated with youth risk and protective behaviors (OR ranged from 2.97, $p = .0006$, to 10.32, with all but one exceeding 5, $p < .0001$). These analyses of the relative contributions of peer and parental influences suggested that although in all cases perceptions of peer activity remained significantly correlated with youth behavior, for sexual involvement, cigarette, alcohol and marijuana use, perceptions of parental monitoring could significantly offset this negative peer influence. However, perceptions of parental monitoring did not appear to offset perceptions of peer involvement with regard to condom-use, drug-selling or drug trafficking.

Cross-sectional relationship between parental and youth perceptions of parental monitoring

Review of Previous Findings:

In addition to the analyses of “parental monitoring effects” as perceived by adolescents, we were also interested in assessing parents’ perceptions of their monitoring and the relationship between parent and youth perceptions of parental monitoring. Therefore, in the ImPACT study, we collected data from both the youth and the parents regarding their perceptions of parental monitoring and their perceptions of youth involvement in risk and protective behaviors. On a five-point Likert scale (with “5” indicating very high monitoring), youth and parents ranked parental monitoring with a total score across the six items of 25.74 (SD = 4.02) assigned by youth and 26.16 (SD = 3.30) assigned by parents; these values of perceived parental monitoring provided by parents and by youths were not significantly

different (Stanton, et al., 2000). Parents consistently provided lower estimates of youth involvement in risk behaviors than did the youth themselves. Of particular importance was the finding that increased concordance between parents and youth of parent monitoring was inversely correlated with youth involvement in risk behaviors.

Longitudinal relationship between youth perceptions of parental monitoring and adolescent risk/protective behaviors

Intrigued by the apparent robustness in cross-sectional studies of the association of parental monitoring with adolescent risk and protective behavior throughout adolescence, we next wished to explore its longitudinal nature. Specifically, we wanted to know if perceptions of monitoring were stable, if they predicted subsequent as well as concurrent risk and protective behaviors, and if the longitudinal effects differed as the cohort aged.

Review of Previous Findings:

The Focus on Kids cohort was followed for four years. Perceptions of parental monitoring by the youth were assessed at baseline, and at Years 1, 2 and 4. To address the questions posited above, we assessed stability of perceived parental monitoring through determination of the Pearson correlation coefficients kappa scores (Li, Stanton & Feigelman, 2000). We also used regression models to explore the relationship between current and subsequent perceptions of parental monitoring and self-reported risk behavior, taking into account youth age, gender and other potentially relevant variables. Perceptions of the full-scale score at baseline and all three follow-up assessments were significantly intercorrelated for all time-pairs, except for Year 1 to Year 4, suggesting considerable stability of perceived parental monitoring. As already noted above, there were strong, significant inverse relationships between parental monitoring and youth involvement in risk behavior at baseline. At all subsequent assessment periods (Year 1, 2 and 4), concurrent perceptions of parental monitoring were inversely correlated with unprotected sex (sex without a condom), drug use (including tobacco, alcohol, marijuana, cocaine, and other illegal drugs) and drug-trafficking, although at the Year 1 follow-up the relationship with drug-trafficking was not statistically significant. Thus, even by the Year 4 follow-up, when the mean age of the cohort was 15 years (range, 13 years to 19 years), perceived parental monitoring remained an important factor in risk and protective behaviors. Finally, to determine the prediction potential of parental monitoring to subsequent risk behaviors, regression analyses were conducted in which perceived monitoring was found to be significantly inversely correlated with drug use at 6 and 12 months and with drug-trafficking at 6 months.

New-Analyses

In Tables 3 and 4, and Figure 1, we further confirm and extend these findings regarding the longitudinal relationship between monitoring and risk behavior. As described above and presented in Table 3, using data from the 817 youth of the Focus on Kids + ImPACT cohort, we contrasted those 240 (32%) youth ranking their parents as the highest monitors with the

remaining 68% of youth who had ranked their parents as exhibiting lower monitoring. Consistent with the relationship between perceived parental monitoring and risk behavior at baseline, at each assessment period, youth perceptions of parental monitoring were inversely correlated with involvement in risk behavior. These differences were significant for all assessment periods for drug use, at 18 and 24 months for delinquent behavior and for unprotected sex at 18 months. With a generally stronger effect across all three risk behaviors for females, this gender effect is particularly evident with regard to unprotected sex.

Because monitoring is confounded with risk behavior, the above analyses did not permit examination of monitoring effect in isolation of prior risk experience. That is, for most behaviors, the most important predictor of subsequent risk involvement is prior risk involvement (Stanton, Li, & Black, et al., 1996; Stanton, Fang, Li, Feigelman, Galbraith, & Ricardo 1997). To address these concerns, we then conducted two sub-analyses, shown in the bottom two-thirds of Table 3. First, we examined the subset of youth, all of whom at baseline were engaging in a specific cluster of risk behaviors. These youth would be expected to have a greater likelihood of participating in this cluster of risk behavior again. With regard to delinquent behaviors, although 100% of youth were engaged in the risk behavior at baseline, by six months, those youth who *at baseline* perceived their parents to be high monitors were engaging in lower levels of delinquent behaviors than were their counterparts who at baseline had perceived their parents to be low monitors. Although this difference is only of borderline statistical significance ($.05 < p < .10$) at six and 24 months follow-up, it does achieve statistical significance at 18 months. A similar picture emerges for drug use (achieving borderline significance by 18 months and significance at 24 months). While the differences are not significant for unprotected sex, a trend is present despite the low numbers overall. In the final portion of the table (shown in the bottom third), we present results from that subset of youth who were *not* involved in the risk behavior during the prior six months at baseline. In this case we note a trend across all three categories of risk behaviors for increased risk activity at subsequent follow-up periods among youth who at baseline perceived their parents to be low monitors, even though at baseline none of these youth had been engaging in the risk activities.

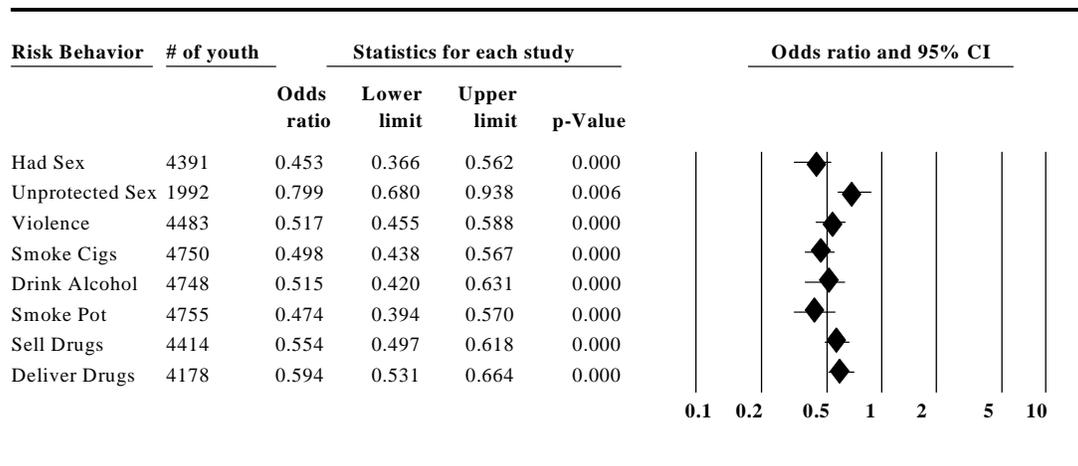
As a follow-up to the Rai et al. (2003) study, in which the relationship between parental monitoring and eight risk behaviors (sex, unprotected sex, violence, cigarette, alcohol and marijuana use, drug-selling and drug-trafficking) was examined in a subset of 1478 youth from the six cohorts, we conducted a meta-analysis using all 2598 youth from the six cohorts in order to examine the overall strength of the associations between parental monitoring and risk behaviors across all study years. For the meta-analysis, Pearson's correlations between the eight risk behaviors and parental monitoring score were first computed across all youth and all study years. This yielded a sample size for the meta-analysis of $N = 5350$ (see Table 4), representing the total number of participant-data points (e.g. provided data at baseline and data at one or more of the follow-up assessments in the longitudinal studies). Next, Comprehensive Meta-Analysis V2 (Biostat) software was used to generate odds ratios (OR), 95% confidence interval and p values, under a random effects model (Rosenthal 1991). As shown in Figure 1, parental monitoring had an overall significant protective effect across all risk behaviors, with OR ranging from 0.45 (for sex) to 0.80 (for unprotected sex).

Table 4
***Parental Monitoring Total Scale Score and Frequencies of Adolescent Risk Involvement
 Across Baseline and Follow-ups Of The Six Cohorts Studied From 1992-2002***

Cohort	Parental Monitoring ^a Mean (SD)	Have Sex n (%)	Unprotected Sex n (%)	Violence n (%)	Smoke Cigs n (%)	Drink Alcohol n (%)	Smoke Pot n (%)	Sell Drugs n (%)	Deliver Drugs n (%)
CS-1 (N=455)	23.68 (4.90)	187 (41)	32 (7)	2 (0.4)	48 (11)	31 (7)	7 (2)	26 (6)	23 (5)
CS-2 (N=355)	23.46 (5.16)	161 (45)	49 (14)	158 (45)	117 (33)	110 (31)	78 (22)	45 (13)	33 (9)
FOK-BL (N=383)	22.54 (6.57)	138 (36)	41 (11)	212 (55)	51 (13)	54 (14)	17 (4)	20 (5)	9 (2)
FOK-12M (N=276)	21.76 (6.40)	93 (34)	21 (8)	164 (59)	47 (17)	40 (15)	24 (9)	10 (4)	9 (3)
FOK-24M (N=245)	22.39 (5.98)	104 (42)	32 (13)	151 (62)	57 (23)	57 (23)	63 (26)	19 (8)	14 (6)
NIA (N=349)	25.57 (4.50)	--	--	150 (43)	44 (13)	54 (16)	32 (9)	--	--
ImPACT (N=239)	25.74 (4.02)	90 (38)	--	103 (43)	27 (11)	39 (16)	28 (12)	28 (12)	--
FOK+ImPACT-BL (N=817)	24.48 (5.54)	342 (42)	82 (10)	490 (60)	223 (27)	347 (43)	232 (28)	71 (9)	35 (4)
FOK+ImPACT-6M (N=608)	22.95 (6.13)	233 (38)	56 (9)	183 (30)	95 (16)	163 (27)	120 (20)	34 (6)	24 (4)
FOK+ImPACT-12M (N=595)	22.43 (6.59)	210 (35)	84 (14)	142 (24)	89 (15)	149 (25)	120 (20)	24 (4)	21 (4)
FOK+ImPACT-18M(N=534)	21.99(6.55)	206(39)	78 (15)	154 (29)	94 (18)	141 (26)	110 (21)	34 (6)	31 (6)
FOK+ImPACT-24M(N=494)	22.23 (6.53)	207(42)	69 (14)	127 (26)	81 (16)	130 (26)	106 (22)	19 (4)	15 (3)
Overall (N=5350)	23.27 (5.74)	1971(37)	544(10)	2036 (38)	973 (18)	1315 (25)	937 (18)	330 (6)	214 (4)

^aMean (SD) score Silverberg Parental Monitoring Scale (Silverberg & Small, 1991), a six-item scale assessing youth perceptions of parental monitoring along a five-point Likert Scale (1=never; 5=always) to yield a total scale score range of 6-30.

Figure 1. Meta-analysis of the relationship between parental monitoring and risk behaviors across baseline and all follow-ups of the six cohorts studied from 1992-2002.



Parental monitoring intervention effects on parental monitoring and adolescent risk and protective behaviors

Review of Previous Findings:

Using the ImPACT cohort, we examined the effect over one year of the parental monitoring intervention ImPACT on parental monitoring, self-reports of adolescent risk behavior, and parent and youth condom-use skills (Stanton, et al., 2000). Youth and parents were assessed at baseline, two, six and 12 months regarding their perceptions of parental monitoring and communication, and their perceptions of youth risk behaviors in regards to condom-use skills. The intervention increased concordance of parents and youth reports of youth risk behavior and condom-use skills, but did not appear to increase either youth or parent perceptions of parental monitoring or youth reports of risk behaviors (Stanton, et al, 2000.; Li, et al., 2002).

Concerned that a parent intervention alone was not sufficiently powerful to reduce adolescent risk behavior, we conducted a randomized, controlled trial assessing the effect of the adolescent intervention which had been shown previously to reduce risk behaviors (Focus on Kids) (Stanton, et al., 1997; Stanton, Li, & Ricardo, et al., 1996) versus the same adolescent intervention combined with the parent intervention (ImPACT). As described earlier in this paper, all youth received Focus on Kids, but only 496 parent-youth dyads were randomized to additionally receive ImPACT. We performed GLM ANOVA and analysis of

covariance. Because the unit of randomization was each of the 35 urban sites, we controlled for the clustering effect by adjusting statistical results for intraclass correlation coefficients. Results revealed that six of sixteen risk/protective behaviors assessed were significantly improved among the youth who received ImPACT in addition to Focus on Kids: mean number of days suspended (.65 versus, 1.17, $p = .046$); carry a bat as a weapon (4.1% versus 9.6%, $p = .021$); smoked cigarettes (12.5% versus 22.7%, $p = .003$); used marijuana (18.3% versus 26.8%, $p = .056$); used other illicit (drugs 1.4% versus 5.6%, $p = .015$); and, asked sexual partner if condom always used (77.9% versus 64.9%, $p = .037$). Focus on Kids was based on a theory of behavioral change, and four of the seven theory-based subscales reflected significant protective changes among youth who received ImPACT. ImPACT did not produce any significant adverse effects on behaviors or perceptions. (Stanton et al., 2004)

New Analyses:

Not addressed in previous analyses is the possible mechanism underlying the positive behavioral and perceptual changes experienced among adolescents who, along with their parents, participated in ImPACT . We hypothesized that one possible explanation for the additive effect of ImPACT beyond the effect of Focus on Kids on adolescent risk behavior was that youth perceived increased parental monitoring as a result of the increased focus on this activity through the ImPACT intervention. To address this hypothesis, utilizing the data from Focus on Kids + ImPACT cohort, we conducted a longitudinal analysis of the effect of ImPACT on perceptions of parental monitoring among youth who received ImPACT as well as Focus on Kids compared to those who only received Focus on Kids. To control for significant baseline differences in perceived parental monitoring scores between youth randomized to ImPACT plus Focus on Kids versus those randomized to Focus on Kids only (25.09 versus 23.53 respectively, $p = .000$), baseline parental monitoring score was used as a covariate in all post-intervention analyses. As shown in Table 5, perceptions of parental monitoring were significantly higher at six months among the youth enrolled in ImPACT plus Focus on Youth compared to those youth who were assigned to Focus on Youth only (23.33 versus 22.33, $p = .049$). The same trend remained at 18 months (22.42 versus 21.34), although the differences were only of marginal significance ($p = .068$).

Table 5
Longitudinal Relationship Between Perception of Parental Monitoring and Intervention
Among The FOK + ImPACT Youth

Assessment Period	Intervention ^a						Sig ^b
	FOK			FOK + ImPACT			
	Mean	SD	n	Mean	SD	n	
Baseline	23.53	6.29	294	25.09	4.93	463	.000
6 Months Post-intervention	22.33	5.77	208	23.33	5.62	329	.049
12 Months Post-intervention	22.21	6.31	215	22.58	6.35	311	.514
18 Months Post-intervention	21.34	6.41	194	22.42	6.33	293	.068
24 Months Post-intervention	22.06	6.12	177	22.34	6.22	268	.635

Note. Mean youth perception of parental monitoring was assessed according to the six items on Silverberg Parental Monitoring Scale (scale scores ranged from 6-30, never to always). ^aFOK = Focus on Kids; FOK + ImPACT = Focus on Kids + Informed Parents and Children Together + or – Boosters. ^bSignificance of GLM ANOVA/ANCOVA; baseline parental monitoring score was used as covariate in all post-intervention analyses.

HUMANISTIC DIMENSIONS OF COMMUNITY-BASED RESEARCH

The experimental methodology and results we have reported from our research on the relationship between parents, peers, and youth risk and protective behaviors have helped to shape adolescent prevention research and intervention. Not reported in our studies, however, is a true description of the communities and context in which the parents are negotiating the challenging task of parenting adolescents who are making decisions around risk and protective behaviors. Although it is impossible for the researchers to capture this context of the parents, what we can share, but rarely do, are our descriptions of the countless experiences we have had working with and in the low-income, urban communities in which the parents are raising their children. These experiences comprise the psychosocial aspects of research and clinical care known as the *humanistic dimension*. Outcome based research suggests that when clinical care providers are perceived as humanistic, patient satisfaction and health outcomes improve (Hauck, Zyzanski, Alemagno, & Medalie, 1990). In contributing to the increasing requests by professional organizations to emphasize the humanistic dimension of medical education (Branch et al., 2001; Weissmann, Branch, Gracey, Haidet, & Frankel, 2006), we describe some experiences that exemplify humanistic attitudes and values.

Despite the fact that for over a decade our researchers and research assistants carried large sums of money and computers throughout Baltimore's housing developments, no threats or robberies occurred—an observation inconsistent with the statistics about high crime rates in Baltimore. (It was years later that we learned that early on when we were leaving the housing developments in the evenings some of the recreation center directors would ask older youth to quietly follow us at a distance to make certain that we reached our cars safely.)

Regardless of our experiences, we maintained a protocol which provided that researchers consider their safety first, and team members were told to make a polite excuse and leave quickly if they felt scared, or concerned about a place or situation.. Recently one of our research colleagues, then the project coordinator and now a staff member at the CDC, recalled:

One time two members of the team came back saying they had felt very uncomfortable in the home and had left. I called the family to make apologies that we could not return but I could pick them up and they could take the survey at our office. When they got in my van and we were chatting they said 'We think your interviewers were scared.' I said, 'no, no, they had just left something in the office'. But, it struck me, what would it be like to have people scared to be in your home?

This researcher also recalled a time when youth from the Focus on Kids program were invited to go with members of the research team to a professional baseball game. The game ended late, so that it was 11:00 p.m. by the time one of the researchers took one of the young boys back to his home in a rise public housing building. Arrangements had been made for a parent or another adult to meet the children at a pick up point near the entrance to the housing development. However, this young boy's parent did not show, and no one could be reached by telephone. The child could not go up alone, and the researcher felt she could not take him up to his 9th floor apartment in a building where hallways and stairwells were often used for drug transactions. She called another research assistant, who came with her husband and their pit bull to accompany the boy to his apartment. She reflected:

I remember being struck by how sad it was that we only felt comfortable with three adults and a pit bull to take this child to an apartment that he called home....But, my other reflection, is that the vast majority of times when going into people's home we were met with warmth and graciousness.

We have often wondered what other factors were at play besides those explicit to the research methods. For example, our mere presence and personalized attention may have elicited positive outcomes different than what might have resulted had we avoided contact in the field.

One Friday morning in September, 1992, two years into our relationship with the community, we were enrolling youth and completing baseline measures using "talking computers" (computers with headphones attached to enable a simultaneous visual and aural presentation of the materials to the youth) at a particular housing development when a policeman was shot in the head by a resident. We were scheduled to return to the Recreation Center in the housing development where the shooting had occurred later that afternoon equipped with portable computers and money for stipends. As the situation in Baltimore quickly deteriorated, especially around the housing developments where rioting was occurring, and schools and businesses were closing, we held an emergency staff meeting to decide whether to cancel's that day's scheduled visit to the housing development in question. We were just in the process of making the decision to cancel the visit when, unbidden and

unaware of our emergency meeting, a member of the Tenant Association from the housing development called us and said, without asking what our plans were, “Thank you so much for coming today. It means so much to us that you will be here”. Needless to say, we changed our plans and went. Typically when we arrived we were alone and would go to the office to collect the key to the Recreation Center and set-up for the day’s activities. On this day when we arrived in the parking lot we were met by several fathers from the community. The men were waiting for us and had “come to help carry the computers.” In fact, they remained with us in the Recreation Center for the entire session, escorting us back to our cars when the session was completed. Although our initial decision not to return to the housing development was based on concern for the safety of the research team, we had not considered that the community with whom we had formed a relationship was also part of the research team. Had we not shown up that afternoon, we would have abrogated that relationship.

There are ethical implications in these relationships. The updated Declaration of Helsinki holds that one condition that must be met for research to be ethical is that an individual or group should not shoulder a disproportionate percentage of the risk nor receive more than a “fair share” of the benefits (WMA, 1996). This issue may be especially complex when investigators from an industrialized nation conduct research in a developing country, but also when funded university researchers work in low-income communities.

Often the discussion addressing “risk” in this context is focused on the direct health risk of the intervention or on economic risk; if a subject becomes ill, that he/she should not shoulder a disproportionate share of the cost. But there is another kind of risk that involves communities: the risk that is inherent in community-based research in communities with higher rates of violence or higher rates of disease which is often the very reasons for which we might be interested in working in those communities. Our community partners were saying that a partnership with a community cannot tolerate a convenience or opportunistic approach to partnering. Most of us were already stretching the concept of partnership by living outside the community, but once we have jointly established the boundaries and expectations for our partnership we cannot unilaterally breach or alter them and particularly not if such an action would be done only to reduce our share of the burden of risk without also reducing their share.

We have often talked about those fathers from the community who reached out to us, met us, and stayed with us. The parenting role that they demonstrated that day was remarkable. They clearly believed in the value that our research team was bringing to their children and so acted in a fashion to make sure not only that that relationship would continue but also that we would not inadvertently undermine it --by not showing up during a time of great need. We never asked but often wondered if they really had assumed that we were going to come or if they recognized that we might not and wanted to forestall that possibility. But we do know how important it was that we did go that day, for we continued to hear about our presence that afternoon from the community over the next several years.

Although we were never assaulted during all of our years of working in the Housing Developments in Baltimore, we did have one frightening experience. Interestingly it did not occur in the city, but rather, in the country.

The intervention procedure for one of the eight sessions of Focus on Kids was an all-day retreat. The purpose of the retreat was to take the youth to a setting with which they were not familiar, both for the joy of the experiences and for the intervention youth, to give them an opportunity to contemplate decision-making outside of familiar surroundings. Many of these

youth had never been outside of a city and so we brought them to a wonderful state park about 45 minutes away. We had what appeared to be more than enough adults, including recreation center directors, research staff and parents.

The morning was outstanding; country walks to the stream were intermixed with practice sessions and discussions. Many of our boldest youth in the city were overwhelmed and even quite timid in this new setting. The discussions were unusually thoughtful and introspective.

After lunch we had a guest speaker.

In retrospect we made several mistakes, but probably the biggest one was asking youth after lunch to sit and listen to a speaker. Mid-way into the lecture a group of boys got up and started a rock fight. Within minutes dozens of youth were flinging sizeable rocks at each other, at the camp buildings and at anyone who tried to stop them. Within minutes we had completely lost control. Although no one had yet been injured, it appeared that injury—and probably serious injury was inevitable.

The late spring in Baltimore hosts the wonderful phenomena of huge storms rolling in and transforming in a matter of minutes what had been a sparkling clear day. Never have we appreciated that phenomenon more than on that day. Who would think that we would rejoice that a major thunderstorm had arrived during the middle of an outing with hundreds of kids! But the downpour and thunder and lightning immediately stopped what we had not been able to do and the day ended—miraculously—without injury.

That day as we watched these children hurling large baseball-size rocks at each other as hard as they could, we gained such a stark understanding of the inadequacy of perceived vulnerability and severity as a motivator for healthy behavior. Even though social cognitive models emphasize the importance of these constructs in decision-making, they do not predict healthy behaviors within a vacuum. As adolescent researchers we have come to understand that contrary to what was once believed about adolescents, they do not perceive themselves to be invulnerable. Indeed, several studies have demonstrated that adolescents and adults risk similarly and rely on similar psychological processes to reach these conclusions (Lapsley 2003). As we contemplated the potential seriousness of the rock-throwing spree in which the youth had so casually engaged and how immediate and great the risks were, we recognized how feeble the concern about a possible HIV infection must appear. Of course we were aware and had written about abstract concepts such as the greater likelihood of imprisonment or death from violence for inner city African American males, but we had not seen it so graphically displayed and certainly not in the context of a day of contemplation about healthy decision-making.

At the same time, looking back on that situation, we have wondered many things. Did we ever “have” control—or was it just an illusion that had not been tested? Or were things not as out-of-control as they appeared? In fact no one did get hurt; were the youth deliberately not throwing rocks AT each other, but rather just near each other? Was the display intended to scare us/to show us something? Or were we pretty irrelevant and this was just between them? We did bring together youth from multiple housing developments among whom there were substantial rivalries, but at least as far as we could determine, such rivalries were not involved in this outburst.

DISCUSSION

For some time, while encouraged that behavioral risk reduction interventions have been effective in the short-term and for a narrow range of targeted risk behaviors, we and other researchers have been concerned and disappointed that intervention effects are neither enduring nor embracing of a wider array of risk and protective behaviors (National Institutes of Health, 1997; Stanton, et al., 2004). The importance of finding intervention approaches that sustain protective practices over time and over a wide range of behaviors is especially important in environments in which resources are limited, and in contexts in which youth are exposed to a high concentration of risks and challenges, such as found in many urban areas. Face-to-face interventions occur over a relatively short duration and do not allow for a constant feedback to youth as they are assaulted with a myriad of potentially threatening or fortifying stimuli and options. Peer relationships may offer some stability, but in most instances are more transient than familial bonds. For the vast majority of youth, parents are a stable, constant feature of their lives.

Our experience with parental monitoring and parental monitoring interventions over the past fifteen years has revealed much about the relationship between monitoring and adolescent behavior. Perceptions of monitoring are strongly correlated with decreases in risk behavior. Although the strength of this relationship varies somewhat by risk category and by gender, the finding is robust. Likewise, its effectiveness is not limited to younger adolescents, but extends through at least the mid-teens.

Perceptions of parental monitoring may be relatively stable over time and perceptions of parental monitoring may impact adolescent risk behavior up to a few years later. Especially exciting, but requiring additional investigation, is the observation that the monitoring effect at least partially counteracts the impact of prior risk involvement. Finally, we have some evidence that the parental monitoring intervention effect on adolescent behavior may result in part from increased perceptions by adolescents of parental monitoring.

Despite this new information, many questions remain regarding the role of parental monitoring and especially interventions directed toward this practice. How is the effect on adolescent behavior and perceptions mediated? Does the parent actually increase monitoring, or do adolescents merely perceive that monitoring has increased? Alternatively, is increased perception of parental monitoring a by-product of adolescents and parents beginning to communicate more? If the later, how does this effect result in reduced adolescent risk behavior and improved perceptions? Perhaps parental monitoring is but one component of a healthy system in which adolescents engage in protective behaviors?

There are some limitations to this multi-year and multi-study review. First, it focuses on our data; there are a large number of researchers examining this field, and while we have attempted to acknowledge their many and continuous contributions to this field, we have overlooked many. Second, this review focuses on the research conducted in one geographic site (Baltimore, Maryland) among one ethnic and socio-economic group (African-American youth living in low-income urban settings). While this narrow focus offers much strength from the perspective of interpretation of findings across cohorts, caution is needed in generalizing the findings to other ethnic groups living in different geographic settings. Nonetheless, we and others are finding similar results in diverse populations and settings (Li,

et al., 2003; Steinberg, et al., 1991) and therefore feel confident in urging communities to invest in efforts to increase parental monitoring.

IMPLICATIONS OF THE FINDINGS

Parental monitoring represents an important protective influence in the lives of adolescents. Parental monitoring interventions can both increase perceived parental monitoring and reduce adolescent risk behavior. This effect is especially strong if a parental monitoring intervention is provided in collaboration with an intervention directly administered among the youth themselves. Intervention programs that have been demonstrated to be effective, such as Focus on Kids and Informed Parents and Children Together (ImPACT), are available for communities to use with or without further research.

The findings that parental monitoring can be increased through intervention and has a powerful prevention effect on many youth risk and protective behaviors is all the more moving when one understand the context in which the research took place and where parents are facing the challenges of raising children. Many of us who are involved in community-based research straddle uncomfortably our dual reservoirs of findings: those consisting of the data which we are seeking through our hypothesis-driven experiments and about which we write and publish; and those resulting from the experiences we encounter, which may change us as individuals—the humanistic dimension. Although there is an initiative in the clinical and research community to promote both the teaching and the application of humanism (Branch et al., 2001; Weissmann et al., 2006), we have not been able to harness the later in a fashion that routinely incorporates it into the research experience or findings, or and health-promotion reports and practices.

When we report our data we describe our communities using demographic indices of presumed relevance to the topic under study such as race or ethnicity, socio-economic status or housing material, or even the political heritage of the community. We do not describe the observations that surprised us, challenged us, or even changed us. We do not describe the occurrences and psychosocial aspects that should have signaled to us that our community-based behavioral research paradigms can be improved.

Researchers have for years worked with communities. Anthropologists have studied individuals, communities and culture; sociologists have studied populations and social phenomenon; social psychologists have studied behavior within a community and social context; epidemiologists have studied patterns of health and illness in populations and communities; physicians have studied vaccination, family planning and the introduction of other technologies into communities (Searight, 1994; Simmons 1997; Tolley 2006). The last two decades have witnessed collaborations among physicians, anthropologists and psychologists working together to understand and alter behavior and culture in communities. The integration of research findings from multiple disciplines and multiple levels of analysis is bringing to practice the growing awareness that health and illness can be influenced by a public-health approach in which culture and behavior are part of any biomedical intervention (Kaplan, Everson, & Lynch, 2000). It is time to move forward and formally incorporate what we are learning from experiences in the humanistic dimension with findings from the hypothesis-driven data into scientific manuscripts reporting community-based research

findings. In so doing, our community-based research efforts will be more successful in creating better health.

GRATEFUL ACKNOWLEDGEMENTS

We wish to thank the myriad of adolescents and parents who have participated in our research over the years. We thank the many investigators who have been involved and the National Institute of Mental Health and the National Institute of Child Health and Development for supporting our efforts. We thank Janet Bothwell for help in preparing the manuscript.

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