

**Predicting Adolescent Participation in Constructive Activities:  
Seeking the Forest Through the Trees**

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## Introduction

Adolescents' involvement in constructive, prosocial activities has been closely linked to the developmental tasks of adolescence, including autonomy promotion and individuation, identity formation, skill development, and social connectedness. Of equal importance, extracurricular or 'co-curricular' activities may play an important role in fostering and maintaining engagement in school for some students. Unfortunately, researchers have had little voice in current public policy debates concerning the role of activities in increasing academic performance and engagement, especially for academically marginal students, or for reducing problem behavior and criminality during after-school hours. One reason for this may be that researchers have focused on understanding the multiple developmental pathways by which *specific* activities impact *specific* aspects of adolescent functioning.

While the explication of the processes linking participation in constructive activities to adolescent functioning clearly furthers our understanding of these important developmental issues, it is also important to keep in the forefront that participation in **any** constructive activities has repeatedly been found to be associated with positive developmental outcomes. For example, Otto's work (Otto, 1975; 1976) indicated a connection between extracurricular activities and educational attainment, occupation and income. More recent work by Mahoney and Cairns (1997) found that participation in extracurricular activities was related to a reduced risk of school dropout for high-risk youth. Jim Youniss' work suggests an inverse relationship between involvement in adult-endorsed activities and rates of substance use. And findings from several researchers have linked involvement in sports to lower rates of school dropout and higher rates of college attendance (Holland & Andre, 1987; McNeal, 1995). Finally, other researchers, such as Marsh (1992), Finn (1989) and Greenberger and Steinberg (1986) have shown a positive impact of participation on students' identification with school or engagement in the learning activities of school. Related to this, some of our other work has shown the effects of various changing ecological contexts on activity participation, most notably the school and peer contexts. Therefore, the often-found links between activity involvement and positive psychological and behavioral functioning may intersect with contextual changes such as changing peer groups, school changes, and family disruptions.

Given all this, it is crucial to understand the multiple predictors of involvement in activities in addition to the more domain-specific mechanisms within the context of the changing ecologies of adolescence. The present study seeks to: (1) identify unique patterns of continuity and change in adolescents' participation in constructive, prosocial activities from the 7<sup>th</sup> to the 12<sup>th</sup> grades, (2) examine the multiple predictors of involvement, and (3) investigate the consequences of involvement for adolescents' psychological and behavioral development.

## Sample

Data are drawn from individual in-home interviews with 1030 adolescents and their parents living in or near a major metropolitan area in the mid-Atlantic U.S. The sample is 50% female, 66% African-American and 34% white. Interviews were completed in 1991, when subjects were in the 7<sup>th</sup> grade, again in 1993 or 9<sup>th</sup> grade and in 1996 as the youths were beginning their senior year in high school. The sample includes a broad representation of socioeconomic status in both the African-American and white families, making this one of the largest and most complete studies of normative development among African-American adolescents.

## Measures

### Activity Involvement

At each wave, participation in the following activities was assessed: sports and recreation, school-based clubs, community-based club, volunteering and religious activities. Adolescents were asked how often during the past year they had spent time on each of the activities and responded on a 6-point Likert-type scale ranging from less than once a month to usually every day. A total involvement score was computed from the sum of the responses at each time point.

### Predictors

In an attempt to assess the impact of various ecological contexts on activity involvement, we included predictors of parent, family, peer and school characteristics. These included:

- *Parents' support for talents and skills*: 7 item scale assessing parents' verbal and active encouragement of youths' talents, skills and activity participation (alpha=.81)
- *Parents' depression*: Total symptom score from the CES-D scale (alpha=.83)
- *Parents' resilience*: a 4 item scale measuring ability to solve problems, carry out plans, recover from set backs, and learn from mistakes (alpha=.75)
- *Family affective climate*: a 6-item scale assessing the extent to which family members support each other, talk about fears and concerns, and care about what happens to each other (alpha=.71)
- *Negative peer characteristics*: 8 item scale of the number of youth's friends who think negative behaviors (e.g., drinking, drugs, breaking rules) are 'cool' (alpha=.83)
- *Positive peer characteristics*: 6 item scale of the number of youth's friends who do well in school, plan to go to college, think it's important to work hard, respect others, etc (alpha=.82)
- *Extrinsic reasons for liking school*: 6 item scale assessing various non-academic reasons for liking school including opportunities to see friends, participate in sports, involvement in special activities, etc (alpha=.78)

### Covariates

We included five demographic indicators as covariates in all analyses. These included parents' highest level of completed education, marital status and occupational prestige, and the gender and ethnicity of the youth.

### Psychological and Behavioral Functioning:

At each wave we assessed adolescents' functioning in four key areas: *Grade point average* (GPA); *Resilience*, a 4 item scale measuring youth's ability to solve problems, carry out plans, recover from set backs, and learn from mistakes (alpha=.74); and *Internalizing and Externalizing*, the total syndrome scores from the Child Behavior Checklist.

## Procedure

We took a person-centered approach to identifying patterns of activity participation across the three waves of data. The 1030 cases were cluster analyzed using Wards method with squared euclidean distance. This procedure maximizes differences between clusters. The number of clusters retained for analysis was determined by analysis of the dendrogram, the meaningfulness of each additional cluster in providing distinctly new and relevant patterns across the cluster variables, and reductions in the error sums of squares. We settled on 5 unique clusters.

The first cluster was made up of low-involved adolescents at all three waves (stable low). The second cluster showed moderate levels of activity involvement at all three waves (stable moderate). Cluster three was comprised of teens evincing relatively high involvement over time (stable high). The fourth cluster showed a linear increase in activity involvement (increasing) and the fifth cluster of adolescents reported relatively high levels of involvement at the first and third waves but very low involvement at wave two (unstable).

## Results

Once the clusters were identified, our first step was to test for any differences across the clusters on basic demographic indicators. First, with regard to gender, only small differences were noted. There were slightly more males than females in the stable-moderate group and slightly more females than males in the unstable group. Several differences by ethnicity across the clusters were found. White adolescents were over-represented in the stable-moderate and increasing groups and African-American adolescents were over-represented in the unstable cluster. There were also differences in parents' education and occupational prestige across the clusters and these were found at each of the three waves. Parents of adolescents in the unstable and stable-low groups reported significantly lower educational and occupational attainment; those in the stable-high group reported the highest levels of educational attainment. Finally, parents' marital status was highly significantly related to the cluster groupings. Adolescents in the stable-moderate, stable-high and increasing clusters were more likely to be in martially-intact families. Teens in the unstable and stable-low clusters were more likely to come from single-parent households.

The activity groups were then compared on the predictor variables using ANCOVA techniques, controlling for the covariates. All analyses were significant at  $p < .01$ . We selected indicators from several ecological domains including characteristics of parents and families, peers and school. First, some of our previous work has shown that parents' own involvement in and encouragement of their children's efforts is an important predictor of activity involvement. As you can see, that is true here as well. Parent reports of encouragement of their adolescents' talents and skills were highest for the stable-high group and lowest for the stable-low or uninvolved group. This finding replicated at each wave. Parents' mental health was also related to our clusters. In this case, parents of the stable-high teens reported the lowest levels of depression and the highest levels of resiliency, with the rest of the groups at virtually the same levels. We also included a global measure of the family affective climate and found adolescents in the stable-low cluster reporting relatively poor family climate.

In addition to parent and family factors, we hypothesized that peers would play an important role in adolescents' participation in activities. When we looked at youth perceptions of both negative and positive characteristics of their peers, significant differences emerged. Once again, the stable-low group showed both high negative and low positive peer characteristics and the stable-high group the opposite pattern.

Finally, there were many differences between the clusters with regard to the characteristics of their school environments. We will report just one of those here. At each of the three waves, we asked adolescents about the various reasons that they liked or disliked going to school, including non-academic reasons such as getting to be with friends, participating in special activities, playing sports, and the like. When we look at trends in these extrinsic motivation factors over time, we find different patterns that map onto our cluster groups. For instance, the Increasing group reported an increase over time in the importance of extrinsic factors. In contrast, the stable-low group showed a steadily decreasing trend in the importance of these factors from waves 1 to 4. We are in the process of working to link changes in various contextual characteristics to changes in activity participation. We cannot yet report fully on these findings but we can say that it appears that changing school and peer contexts significantly impact activity involvement, especially for the Increasing and Unstable clusters of adolescents.

### Relationships with outcomes

When we looked at the psychological and behavioral functioning for youths in these clusters, a clear pattern emerged. Across all of our indicators, the poorest outcomes were noted for subjects who were uninvolved in activities. These teens evinced the lowest school grades, the lowest perceptions of their own resilience, and the highest levels of both internalizing and externalizing symptoms. In contrast, youths in the stable-high category showed the opposite pattern, reporting high grades, high resilience and low internalizing and externalizing. These findings held at each of our three waves of data.

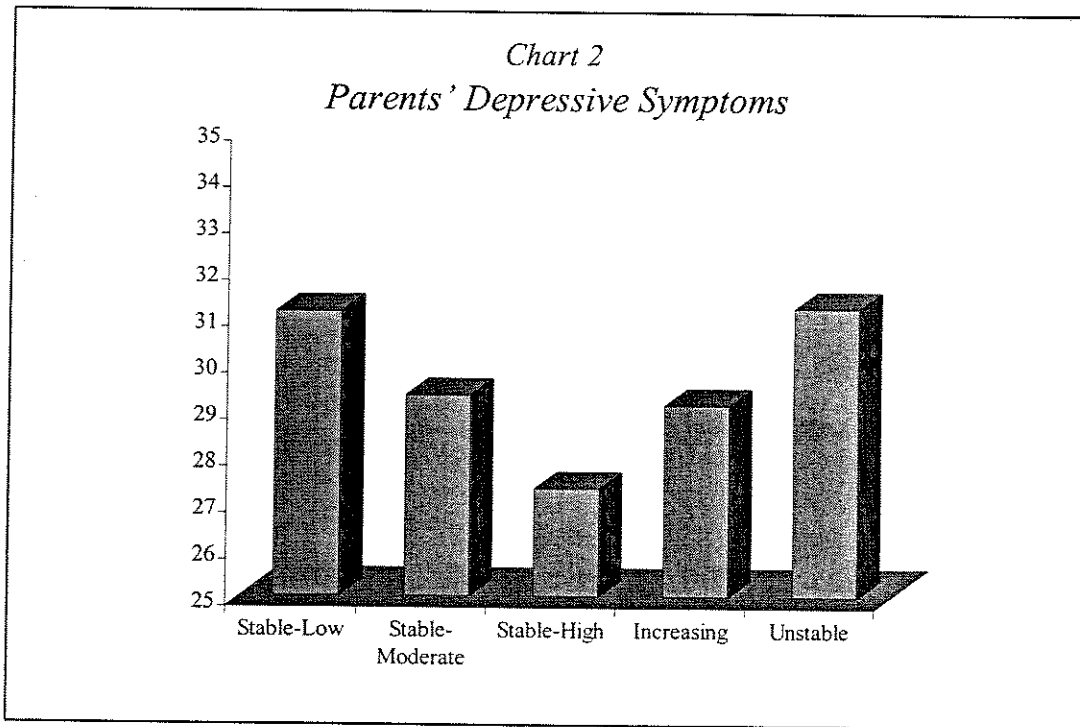
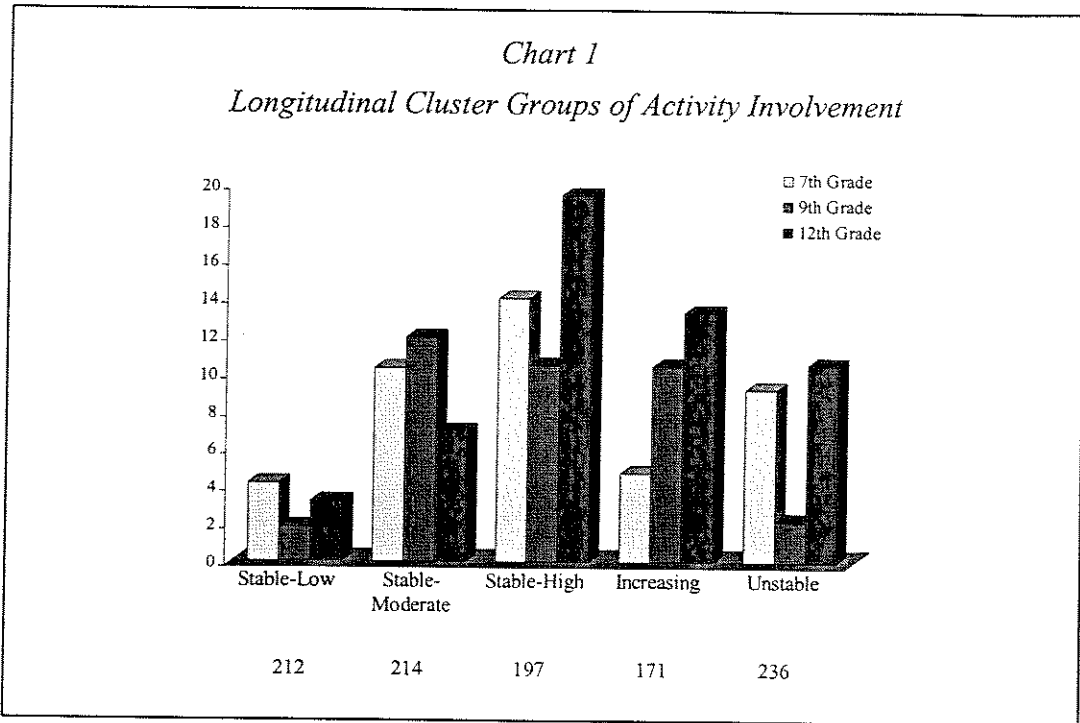
## **Discussion**

The results indicate that participation in structured, prosocial activities is associated with positive functioning for these youths while the poorest outcomes were noted for adolescents who reported little or no involvement in activities over the six year period from 7<sup>th</sup> to 12<sup>th</sup> grades. Further, patterns of activity participation were differentially related to characteristics of parents, families, peers and schools.

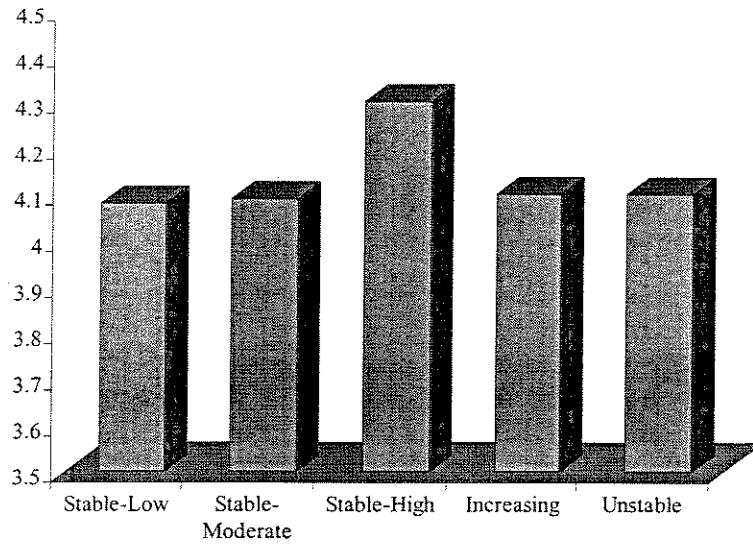
This study has several limitations. First, despite the longitudinal nature of the analyses, we cannot determine the direction of effects between activity participation and adolescent functioning. It is not only plausible but likely that adolescents select themselves into participation in various kinds of activities AND that external influences such as costs, availability and transportation also affect their choices. Second, our list of prosocial activities was limited. For example, we did not ask about the frequency of sibling care, a very common undertaking for many older adolescents. Third, the present analyses focus on only the frequency of involvement and not on the nature or quality of participation in activities, factors which indeed may influence the relationships between performance and outcomes. Despite these limitations, we feel that the person-oriented approach we have taken holds promise for helping us to understand the factors that promote and inhibit participation in activities by adolescents and individual differences in the consequences of participation.

On the policy side, the 1980s and early 1990s saw a decrease in opportunities for youth tied to reductions in funding of programs in schools and communities. At the same time, rates of juvenile crime increased sharply. During the afternoon hours, rates of juvenile crime triple, and many unsupervised youngsters experiment with tobacco, alcohol, drugs and sex. In response to these concerns, the federal

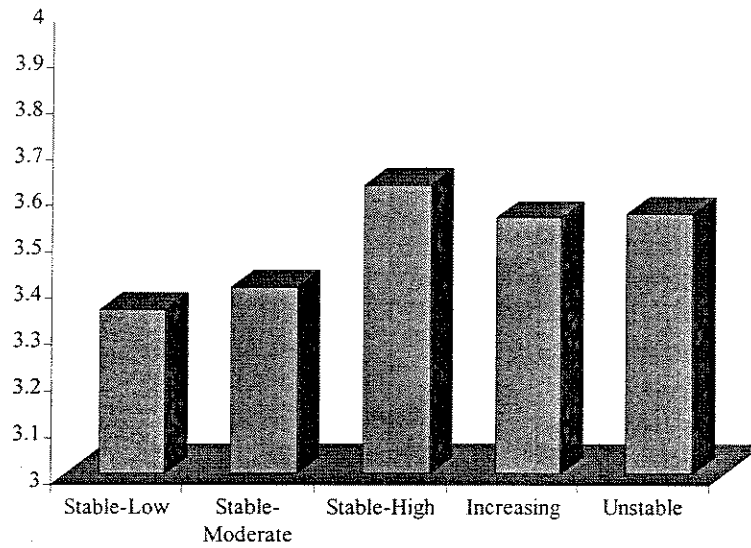
government provided nearly \$200 million dollars in 1999 alone for after-school programs for youth, called 21<sup>st</sup> Century Community Learning Centers, and hundred of millions more will be spent on after-school resources over the next few years. The bulk of this money will be distributed by the Department of Education, with the intent of improving academic performance often through remediation efforts after school hours. These are certainly laudable goals. In addition to preventing school failure and reducing crime, however, a focus on promoting positive youth development should include increased resources for supervised, constructive and engaging programs for teens both in schools and in communities.



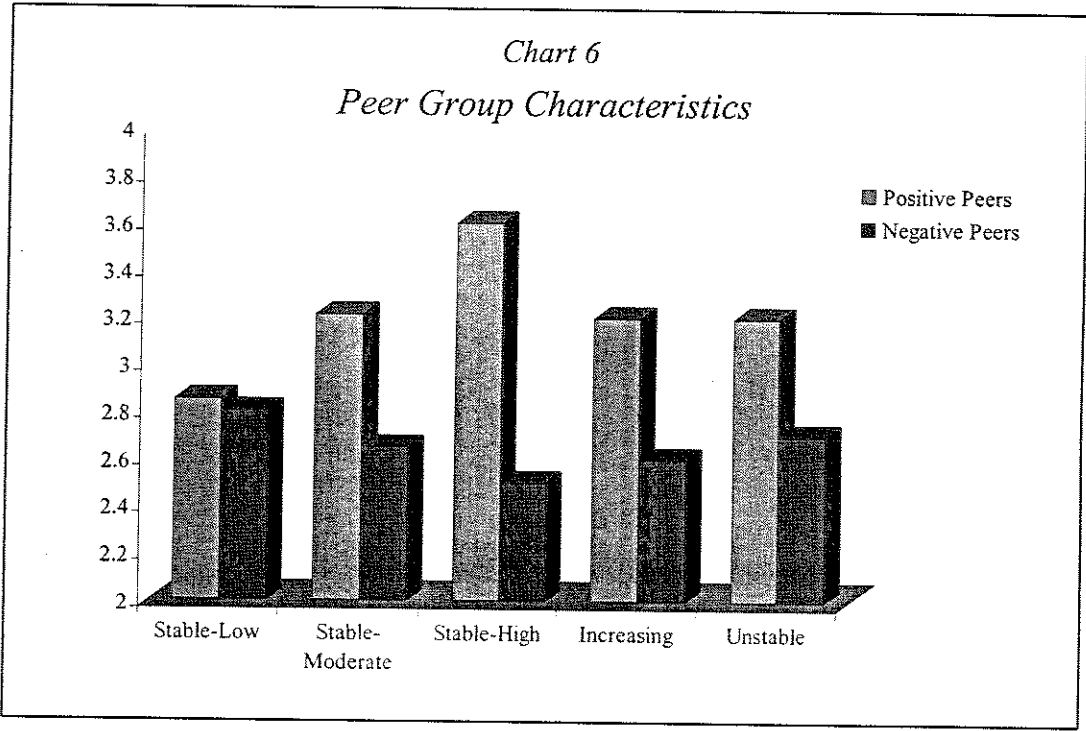
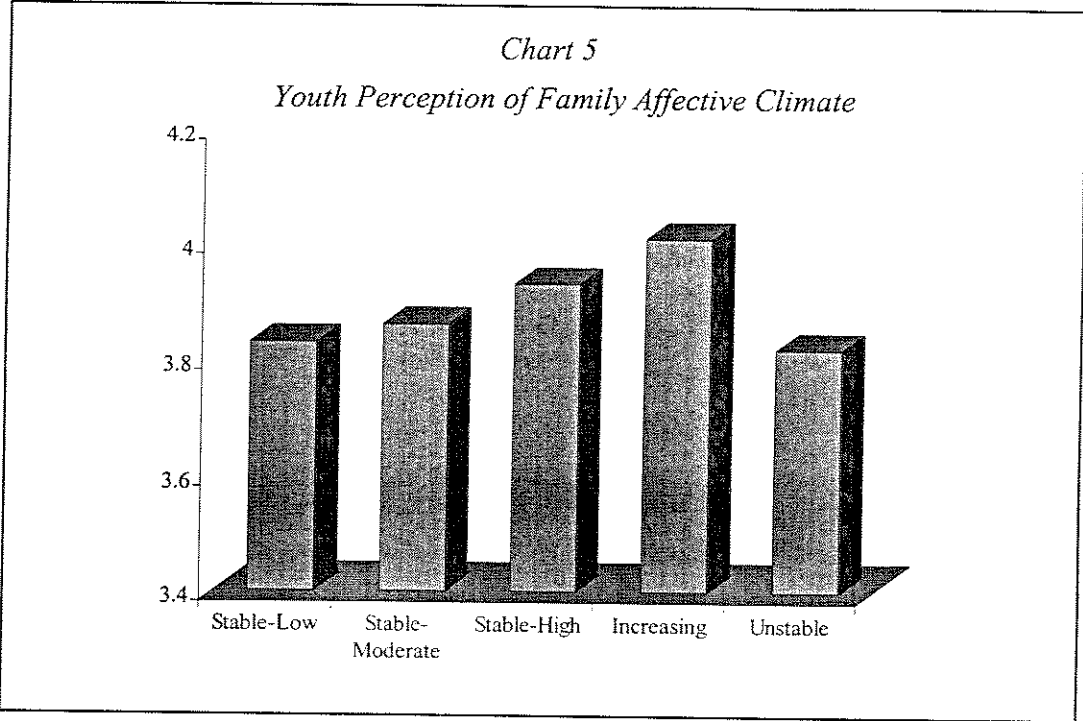
*Chart 3*  
*Parents' Resilience*



*Chart 4*  
*Parents' Encouragement of Talents and Skills*







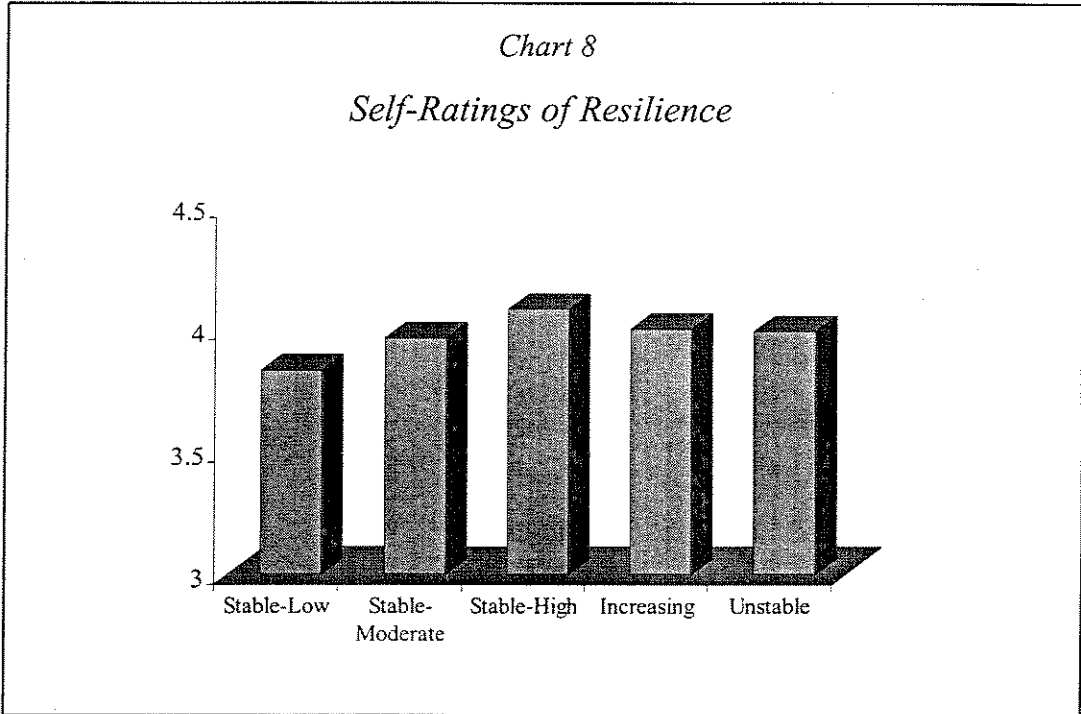
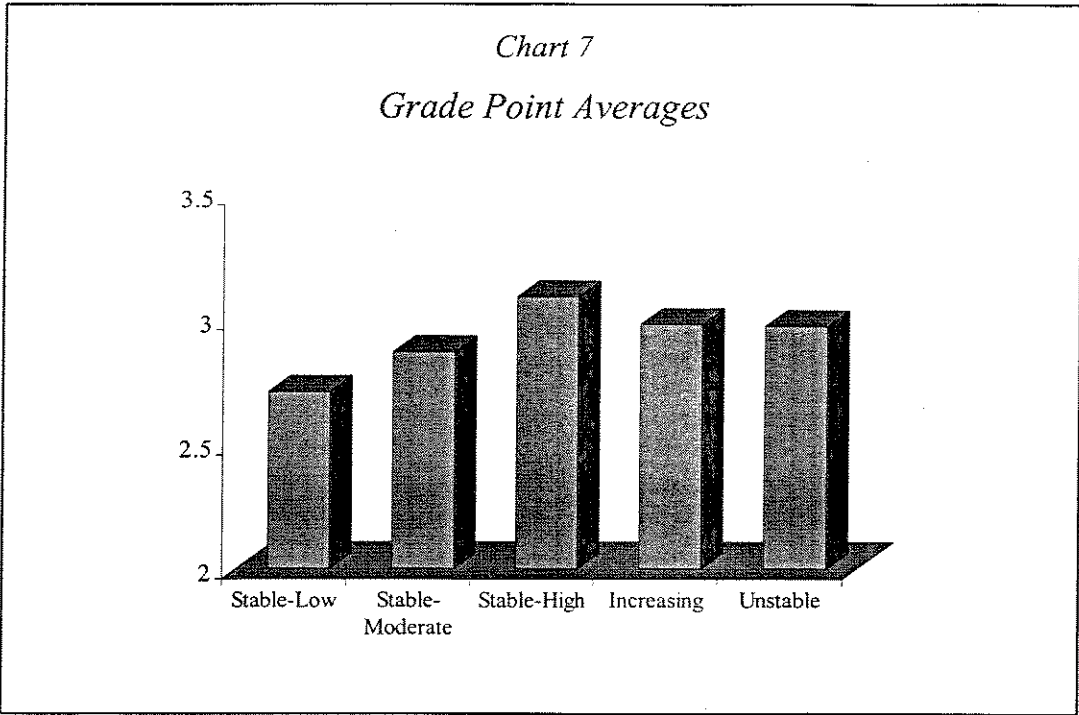


Chart 11

Changes in Externalizing Behaviors for Cluster Groups

