
Title	School and psychosocial adjustments of adolescents in Singapore
Author(s)	Ong Ai Choo and Esther Tan
Source	<i>MERA-ERA Joint Conference, Malacca, Malaysia, 1-3 December 1999</i>

This document may be used for private study or research purpose only. This document or any part of it may not be duplicated and/or distributed without permission of the copyright owner.

The Singapore Copyright Act applies to the use of this document.

SCHOOL AND PSYCHOSOCIAL ADJUSTMENTS OF ADOLESCENTS IN SINGAPORE

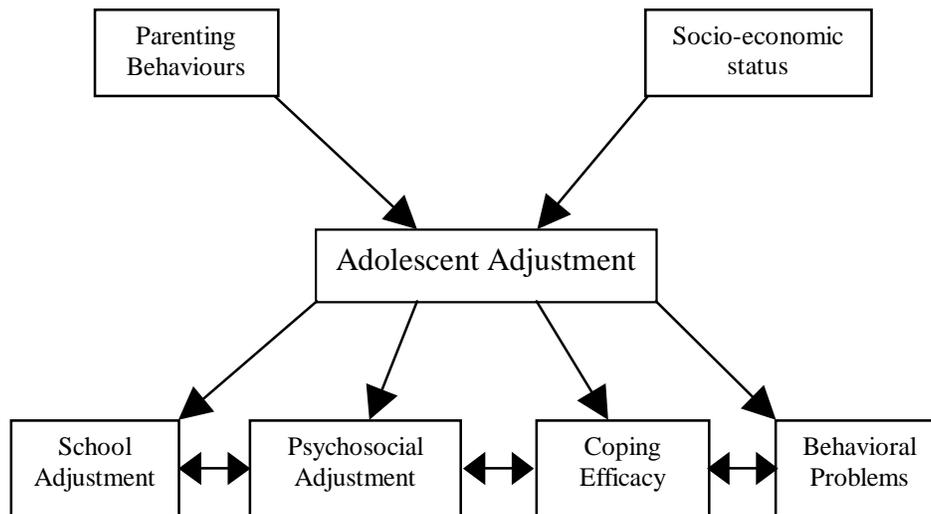
Ong Ai Choo & Esther Tan

Nanyang Technological University, Singapore

Abstract: This study uses a sample of 748 adolescents between 16-19 year old to examine the various areas of adolescent adjustment: psychological, social and school, behavioral problems and coping strategies. A model for viewing psychosocial adjustment of adolescent is outlined. The model assumes that adolescents' behaviors reciprocally interact with the parental behaviors, peer group, and school to influence adolescents' adjustment. In this study, self-reports of adolescents were analyzed to determine adjustment outcomes. The findings showed that adolescents' adjustments differ in varying degree according to gender, age, school types, and socio-economic background. The most striking differences were found for school types and socio-economic status. Implications of the findings are discussed in relation to intervention strategies at school and class level.

Introduction

Adolescence is an important transitional phase of life characterized by complex developmental changes in the physical, interpersonal, and cognitive states of the adolescent. Based on Hill's (1980) heuristic model of adolescent development, Monks and Ferguson (1983) have developed a model for adolescent development which gives a simplified description of transformational processes occurring during adolescence. They identify six psychosocial transformations: attachment, friendship, sexuality, achievement, autonomy, and identity. Transformations in each domain are related, in a reciprocally interactive fashion, to transformations in the other domains. The adolescent's development is affected by interactions in the social settings of the family, peer group, and school/work, and by the adolescents themselves. Other studies on adolescence have focused on similar areas of adjustment (Peterson & Crockett, 1985). For the purpose of this research, four areas of adolescent adjustments were considered: school and psychosocial adjustments, coping efficacy, and behavioural problems. The model (see figure below) posits an interactive relationship between parenting behaviors and the main domains of adolescent adjustment, with socio-economic status as a distal factor in adjustment. The figure shows linkages between four domains of adolescent adjustment.

Figure1: A Model of Adolescent Adjustment

Literature Review

School Adjustment

The role of a positive self-concept as a driving force in the realization of exceptional achievement and actualization of potential capacities is well established in many research studies (Boxtel & Monks, 1992; Faunce, 1984; Scheirer & Kraut, 1979). Many studies have shown that students' self-efficacy for their schoolwork is associated with academic outcomes including motivation, cognitive engagement and performance (e.g. Pintrich & DeGroot, 1990). Students who have a positive view of their ability to master their schoolwork are more likely to select challenging activities, expend effort, persist when tasks become difficult, be resilient to failure, and regulate their own learning (Pintrich & De Groot, 1990). They also tend to have higher achievement at school (Pintrich & De Groot, 1990; Schunk, 1991).

There is substantial evidence that social competence is associated with school success (Ladd, 1990; Patrick, Hicks, & Ryan, 1997) and academic attainments (Bandura et al., 1996). Peer acceptance and friendships led to changes in school attitudes, loneliness, and academic achievement (Ladd, 1996). Students can have a direct impact on each other's academic performance by providing mutual assistance in schoolwork (Sieber, 1979). More likely, the impact of perceived social efficacy on academic achievement may be indirect, by exerting an influence on academic aspirations and lower levels of depression (Bandura et al., 1997; Wentzel, 1990; Wentzer & Caldwell, 1997). Peer influences may either encourage or discourage academic success depending on the academic value of the peer group (Brown, Lohr, & McClanahan, 1986; Kandel, 1978).

Family experience is another very important variable that is associated with adolescent school achievement (e.g. Bronstein, Clauson, Stoll, & Abrams, 1993; Crouter, MacDemind, McHale, & Perry-Jenkins, 1990; Dornbusch et al., 1987). Parental involvement is frequently associated with higher grades, if other factors are equal (e.g. Crouter et al., 1990; Stevenson & Baker, 1987). Personal involvement of the parent expressed in monitoring the child's activities seems to be the most salient parental determinant of school success (Linver & Silverberg, 1997).

The family's level of educational expectations and orientations (Kurdek & Sinclair, 1988) is also associated with academic achievement. However, Amato (1989) found that younger students from high socioeconomic-status families may have a head start but the family socioeconomic status was a poor predictor of achievement, as the child grows older. More important than family resources was the family process, which continued to be associated with competence, mainly in the form of parent's aspirations and expectations.

Psychosocial Adjustment

A global feeling of self-esteem is widely recognized as a central aspect of well being and development. High self-esteem in children and adolescents is related to better mental health, higher educational success, more positive peer relations, and lower likelihood of delinquency (Coopersmith, 1967, O' Malley & Bachman, 1979). In contrast, feelings of low self-esteem are related to adolescent depression (Harter & Jackson, 1993; Robertson & Simons, 1989).

Research studies have identified two primary determinants of self-esteem: self-perceptions of competence and social support. Adolescents distinguish between their self-esteem in various domains (Harter, 1983, Marsh & Shavelson, 1985). All these specific domains of self-perception contribute to adolescents' general esteem or global self-worth. Social competence has been reported by many investigators as a significant factor in the social and emotional development of children and adolescent (Garmezy, Masen, & Tellegen, 1984). It is linked to decreased feelings of loneliness, as well as to increased self-esteem, reduced perceptions of loneliness, satisfaction with college, and with life in general (Riggio, Watring & Throckmorton, 1993).

Comparing the effects of attachment to parents and to peers, Armsden and Greenberg (1987) found that adolescents with strong attachments to parents appear very well adjusted, as demonstrated by their higher than average self-esteem, and frequent and satisfactory communication with their families. In contrast, those with low parent attachment reported feelings of resentment and alienation, and more emotionally and verbally detached quality in their relationship with their parents. Their well being also appeared to be more vulnerable to the deleterious effects of negative life events.

The push toward *autonomy* is also one of the critical psychosocial developments of adolescence. The adolescent's autonomy is strongly reflected in self-esteem, self-confidence, and the types of achievements realized. Parental induction, a process wherein parents attempt to communicate expectations to their children, is found to promote the development of individualism in adolescents, whereas parental coercion leads to compliance (Peterson, Millins, & Ridley-Johnson, 1985).

Coping

Psychological adjustment has been found to be related to the increased use of mature, salutatory coping styles (e.g. seeking advice from professionals, taking a rational approach) and the reduced use of less adaptive and less mature coping actions (e.g. venting negative emotions, alcohol use and avoidance behaviors (Compas, 1987, Holahan & Moos, 1987; Jorgensen & Dusek, 1990). Typically, ineffective problem solving has been found to be related to poor adolescent social adjustment (McCombs, Forehand, & Smith, 1988) and that solving problems in hostile, emotionally explosive ways are associated with lack of social competence.

Behavioral Problems

According to the literature, antisocial behavior peaks in adolescence. They include a wide range of specific activities such as aggressive acts, stealing, vandalism, lying, skipping school, and running away, and are usually considered together, because many times they actually occur together

(Kazdin, 1987). A variety of factors are related to whether or not an adolescent engages in problem behaviors, ranging from individual characteristics such as self-efficacy, poor interpersonal relationship, lack of academic achievement, parental support, family closeness, relationship with other adults in the environment, and relationships with peers (Feldman, Rubenstein, & Rubin, 1988; Leung & Lau, 1989; Rutter, 1985).

In Loeber and Dishion's meta-analysis (1983) low socio-economic status was found to have moderately strong power in the prediction of self-reported and official delinquency. Drake and Vaillant (1988) found that low SES, among other factors predicted alcohol dependence. The effects of low SES on social development and delinquency may be mediated by family interaction variables such as punitive and harsh discipline, inconsistent parental discipline and lack of maternal affection (Elder & Caspi, 1988). However, some researchers have completely challenged the belief that any correlation exists between socioeconomic factors and delinquency (Klein and Mannuzza, 1991) while others have found only meager associations (Gowers et al., 1993).

Methodology

Sample

The subjects were 748 post-secondary students who had completed the O levels. Their age ranged from 16 to 19 years. The subjects were from three school types: junior college, polytechnic, and Institute of Technical education, with equal proportion of males and females in the sub-sample.

Measures

Five salient areas of adjustments were considered in this study: (1) school adjustment, (2) psychological well being, (3) social adjustment, and (4) coping, (5) problem behaviors.

The school adjustment scale was a composite scale of academic achievement, academic self-concept, and school motivation. Academic achievement was assessed based on self-report of O level results. The psychological adjustment was indexed by three subscales: personal self-concept, well being, and personal autonomy, while the social adjustment subscale measures two aspects of social competence: the ability to relate to peers and the ability to relate to adults. Behavioral problems were measured by 14 items from three broad categories: school behavior problems, substance use, and delinquent behavior (e.g., vandalism, shoplifting, fighting). Coping strategies were assessed with the Short Form of the Adolescent Coping Scale (ACS) which is a self-report inventory assessing 18 conceptually distinct coping strategies (Frydenberg & Lewis, 1987). The form was administered as part of the general questionnaire.

Statistical Method

Inter-correlations of variables within and between major domains of adjustment were computed using the Pearson correlational analysis. ANOVAs were conducted to examine differences in adjustments according to age, gender, school types and socio-economic status.

Results

Adjustment Profiles

School Adjustment

Analysis of results showed that academic self-concept and school engagement were positively correlated ($r=.34$, $p<.01$). Adolescents who were successful in school adjustment demonstrate a high psychological functioning ($r=.51$) and less behavioral problems ($r=-.22$). Adolescents who were successfully engaged in school were associated with high personal concept ($r=.46$), a sense of emotional well being ($r=.39$), and better academic efficacy ($r=.34$).

The data revealed that social efficacy was also a significant correlate of school adjustment ($r=.37$, $p<.01$). That is, adolescents who were satisfied with their relations with peers and adults demonstrated a higher level of school engagement and greater motivation to do well ($r=.47$).

Psychosocial Adjustment

Adolescents who had a healthy self-concept were likely to be characterized by emotional well being ($r=.49$) and personal autonomy ($r=.25$, $p<.01$). Social efficacy was strongly related to general psychological functioning ($r=.48$). Adolescents who have satisfying and harmonious friendships typically reported positive self-esteem ($r=.43$) and relatively high sense of emotional well being ($r=.45$). Social competence was also positively related to a problem solving approach to coping ($r=.41$) and negatively to non-productive coping (.29).

Coping

Psychological adjustment was found to be related to the increased use of problem solving coping style ($r=.45$) and the reduced use of less adaptive and less mature coping actions ($r=-.33$). Adolescents who were successfully engaged in school and who were socially adjusted also tended to use problem solving coping methods ($r=.41$, $.41$ respectively). High self-esteem was linked to problem-solving coping ($r=.36$) while inadequate coping in hostile, emotionally explosive ways were more likely to be associated with lack of social competence and school adjustment difficulties ($r=.29$, $.23$), with emotional distress ($r=-.44$) and poor self-esteem ($r=-.34$). Adolescents who were low in personal autonomy tended to use non-productive coping strategies ($r=-.33$).

Behavioral Problems

Behavioral maladjustment was negatively correlated with school engagement ($r=.22$), academic efficacy and poorer academic performance ($r=.15$) and to social competence ($r=-.11$). Among the 14 problem behaviours, losing temper and becoming aggressive ranked top, as reported by 55.9% of the respondents.

In summary, the results indicated that adolescents who were well-adjusted in one domain were likely to function adequately in other domains.

Gender Differences

The most evident differences were in the school and behavioral domains, where girls reported more positive adjustment than boys ($F=9.26$, $p<.01$). Girls exhibited a more positive orientation toward school ($F=7.29$, $p<.01$), and higher academic efficacy than boys ($F=4.42$, $p<.05$).

There were no significant gender differences on overall psychological and social adjustment. Boys were more likely to adopt a proactive approach to coping ($F=5.27, p<.05$), whereas girls were prone to non-productive ways of coping. The most striking gender difference was in behavioral maladjustment with boys reporting a much higher frequency than girls were ($F=62.42, p<.01$). Boys reported more school-related misbehaviours, sexual precocity, vandalism, and fightings. However equal proportion of boys (44.9) and girls (43.3%) reported losing temper and becoming aggressive. Both genders were also equally represented on shoplifting and threatening to run away from home.

Age Differences

There were few and modest age-related differences. Adolescent pubertal maturity was accompanied by a slight increase in engagement in more adult activities such as smoking and sex, suggesting that increasing independence from family is accompanied by greater amount of involvement with peers.

School Type Differences

There was considerable number of statistically significant differences among the three school groups. The most striking differences were in the school domain ($F=44.74, p<.00$). Other significant group differences relate to behavioral maladjustment ($F=7.54, p<.01$) and social competence ($F=4.50, p<.01$), with modest differences found for aspects of psychological functioning. JC students had the highest mean scores on personal self-concept ($F=3.31, p<.05$) and problem-focused coping ($F=5.70, p<.01$), whereas ITE students had the lowest mean scores on both variables.

SES

Significant correlations were mainly in the area of school adjustment. Adolescents from higher socio-economic backgrounds scored higher on academic competence ($r=.29, p<.01$) and academic efficacy ($r=.10, p<.01$). In contrast, adolescents from lower SES were more disengaged from school events, and had a less favorable perception of their academic performance and personal traits. Lower SES was also linked to poorer psychological adjustment ($r=.08, p<.05$) and lower personal self-concept ($r=.12, p<.01$).

Discussion

The results on adolescent adjustment illustrate the complex interrelatedness of variables, in that the success or dysfunction in one domain of development interacts with and contributes to functioning in other domains, demonstrating the fact that the adolescent is an integrated individual.

The findings of the current study are consistent with the conceptualization of the school as an independent social control agent, in which different levels of school bonding may partially account for involvement in delinquent behaviors. Consistent with previous research (Henggeler, 1989; Kazdin, 1987), the quality of relations appears to have a strong influence on emotional and motivational response to school and on delinquent activities. Adolescents with satisfying and harmonious peer friendships and who have positive relationship with teachers tend to behave appropriately in school, are motivated to do well and are positively oriented toward school activities. They also report less problem behaviors.

The importance of enhanced social efficacy is further supported by the close relationship between social competence and psychological well being. Lower levels of emotional well being and self-esteem characterize adolescents who lack social competence. Low social efficacy may also

diminish resources for coping with stress in a rational and productive manner and increase their tendency to resort to nonproductive avoidant approaches of coping. On the other hand, it is likely that the adolescents' coping skills may be important not only for dealing with immediate challenge, but also in influencing the nature of the social support that will be available to the adolescents to help them deal with the challenge (Rice, Herman, & Petersen, 1993).

The findings of the present research show that the development of a positive self-image is central to the well being of adolescents. Adolescents with high self-esteem are emotionally adjusted and more competent in school and interpersonal domains. They have more inner resources to adopt a problem solving coping approach that is characterized by positive reappraisal and guidance.

Interestingly, the current findings show that behavioral maladjustment is negatively linked to academic self-concept although no significant relationship with personal self-concept was found, lending support to the argument that global self-concept is a differentiated construct (Marsh & Yeung, 1997). A possible explanation for the findings may be that scholastic achievement is more strongly emphasized in Singapore society so that a negative self-evaluation of academic competence is more likely to lead to greater susceptibility to influences of deviant subcultures.

This study has yielded significant data on the nature of behavioral adjustment of Singapore youth. The most striking finding is the notable lack of temper restraint leading to aggressive behaviors among Singapore youth. Interestingly alcohol-drinking ranks third in frequency among problem behaviors, which suggests that teenage drinking could become a potential risk behavior that needs to be addressed.

The findings show very few age-related differences in adjustment suggesting that less turbulence and more psychosocial stability may characterize the period after mid adolescence. Only two differences emerged, primarily in the school domain and on behavioral maladjustment. That younger adolescents generally have higher personal self-concept and emotional well being, and are positively engaged in school. As adolescents approach their final year in school, the impending need to compete for a place in the university or in the job market may engender greater stress, which may explain the higher incidence of cheating in exams reported by 19 year olds.

The results reveal marked differences in the adjustment of adolescents from the three school types, suggesting that familial factors may make significant contributions to these developmental differences. Among the three groups, ITE students demonstrate the least school competence, self-esteem and the most behavioral problems. This may in part reflect familial factors as the majority of ITE students come from a lower SES background. At the same time, school factors cannot be ignored, especially in the context of a society that places a very high value on academic achievement. In contrast, JC students are the most academically competent, have higher self-concept and are more likely to adopt problem solving coping, characteristics which may be explained by their perceptions of greater parental support and involvement.

Socio-economic factors are found to be more closely related to school adjustment and personal self-concept. These findings are consistent with a previous study on Singapore high school youths (Isralowitz & Ong, 1990) which found that significantly large numbers of lower-class youths reported not feeling good about themselves, needing help with school work and having conflictual relationship with parents. Similar contributory factors of family and school, which explain school type differences, are likely to account for reduced sense of personal efficacy among youths from lower SES backgrounds.

Contrary to some studies which reported that low family socio-economic background is associated with chronic delinquency (e.g. Pettit, Bates, & Dodge, 1997), the present study does not support such a conclusion. The lack of a significant link between socio-economic status and delinquency points to other factors that may have a stronger influence on the problem behaviors of youth in Singapore. Cheung (1997) found that peer group and the media were even stronger predictors for deviant behaviors among Hong Kong youths.

Summary

A complex of factors contributes to adolescent adjustments ranging from intra-psycho variables to familial and environmental influences. Of these, gender-linked factors and perceptions of parent-adolescent relationships are more significant correlates of adjustment than age-related variables. Other correlates include socio-economic factors and school culture including peer groups, which may act to mediate the direct impact of the family on adolescents.

References

- Amato, P.R. (1989). Family processes and the competence of adolescents and primary school children. *Journal of Youth and Adolescence*, 18(1), 39-53.
- Armsden, G.C. and Greenberg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-453.
- Bandura, A., Barnanelli, C., Carpara, G.V., and Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, 67(3) 1206-1222.
- Bronstein, P., Clauson, J., Stoll, M.F., and Abrams, C.L. (1993). Parenting behavior and children's social, psychological, an academic adjustment in diverse family structures. *Family Relations*, 42, 268-276.
- Brown, B.B., Lohr, M.J., and McClanahan, E.L. (1986). Early adolescents' perceptions of peer pressure. *Journal of Early Adolescence*, 6(1), 139-154.
- Cheung, Y.W. (1997). Family, school, peer, and media predictors of adolescent deviant behavior in Hong Kong. *Journal of Youth and Adolescence*, 26(5), 569-596.
- Compas, B.E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, 102(3), 393-403.
- Coopersmith, S. (1967). *The Antecedents of Self-Esteem*. California: Palo Alto:Consulting Psychologists Press.
- Crouter, A. C., MacDermid, S.M., McHale, S.M. and Perry-Jenkins, M. (1990). Parental monitoring and perceptions of children's school performance and conduct in dual- and -single-earner families. *Developmental Psychology* 26 (4), 649-657.
- Dornbusch, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F., & Fraleigh, M.J. (1987). The relation of parenting style to adolescent school performance. *Child Development*, 58(6), 1244-1257.
- Drake, R.E., and Vailant, G.E. (1988). Predicting alcoholism and personality disorder in a 33-year longitudinal study of children of alcoholics. *British Journal of Addiction*, 83, 799-807.
- Elder, G.H., and Caspi, A. (1988). Economic stress in lives: Developmental perspectives. *Journal of Social Issues*, 44(4), 25-45.

- Feldman, S.S., Rubenstein, J.L. and Rubin, C. (1988). Depressive affect band restraint in early adolescents: Relationships with family structure, family process and friendship support. *Journal of Early Adolescence*, 8, 279-296.
- Frydenberg, E. and Lewis, R. (1987). *Adolescent Coping Scale*. Published by The Australian Council for Educational Research. Hawton: Ltd, Allanby Press Printers Pty Ltd
- Garnezy, N., Masen, A.S, and Tellegen, A. (1984). The study of stress and competence in children: A building block for development pathology. *Child Development*, 55(1) 97-111.
- Gowers, S., Entwistle, K., Gooke, N., Okpalugo, B., and Kenyon, A. (1993). Social and family factors in adolescent psychiatry. *Journal of Adolescence*, 16, 353-336.
- Harter, S. (1983). Developmental perspectives on the self-esteem. In E.M. Hetherington (ed.), *Handbook of Child Psychology: Socialization, Personality, and Social Development* (pp. 273-385). New York:Wiley.
- Harter, S.T. and Jackson, B.K. (1993). Young adolescents' perceptions of the link between low self-worth and depressed affect. *Journal of Early Adolescence*, 13(4), 383-407.
- Henggeler, S. W. (1989). *Delinquency in Adolescence*. Newbury Park, CA:Sage.
- Holahan, C.J. and Moos, R.H. (1987). Risk, resistance, and psychological distress: A longitudinal analysis with adults and children. *Journal of Abnormal Psychology*, 96(1), 3-13.
- Isralowitz, R.E. and Ong, T. H. (1990). Singapore youth: The impact of social status on perceptions of adolescent problems. *Adolescence*, 25(28), 357-362.
- Jorgensen, R.S., and Dusek, J. (1990). Adolescent adjustment and coping strategies. *Journal of Personality*, 58(3), 503-513.
- Kandel, D.B. (1978). Similarity in real-life adolescent friendship pairs. *Journal of Personality and Social Psychology*, 36, 306-312.
- Kazdin, A.E. (1987). Treatment of antisocial behavior in children: Current status and future directions. *Psychological Bulletin*, 102(1), 187-203.
- Klein, R.G. and Mannuzza, S. (1991). Long-term outcome of hyperactive children: a review. *Journal of American Academic Child Adolescent Psychiatry*, 30, 383-387.
- Kurdek, L.A., and Sinclair, R.J. (1988). Relation of eighth graders' family structure, gender, and family environment with academic performance and school behavior. *Journal of Educational Psychology*, 80, 90-94.
- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61(4)1081-1100.
- Leung, K., and Lau, S. (1989). Effects of self-concept and perceived disapproval of delinquent behavior n school children. *Journal of Youth and Adolescence* 18(4), 345-359.
- Linver, M. R. and Silverberg, S.B. (1997). Maternal Predictors of Early Adolescent Achievement-Related Outcomes: Adolescent Gender as Moderator. *Journal of Early Adolescence*, 17, 294-318.
- Loeber, R., and Dishion, T.(1983). Early predictors of male delinquency: A review. *Psychological Bulletin*, 94(1), 68-99.

- Marsh, H.W. and Shavelson, R.J. (1985). Self-concept: Its multifaceted, hierarchical structure. *Educational Psychologist* 20(1), 107-125.
- Marsh, H.W. and Yeung, A. S. (1997). Causal effects of academic self-concept on academic achievement: Structural equation models of longitudinal data, *Journal of Educational Psychology*, 89, 41-54.
- McCombs, A., Forehead, R. and Smith, K. (1988). The relationship between maternal problem-solving style and adolescent social adjustment. *Journal of Family Psychology*, 57-66.
- O'Malley, P.M. and Bachman, J.G. (1979). Self-esteem and education: Sexual cohort comparisons among high school seniors. *Journal of Personality and Social Psychology*, 37, 1153-1159.
- Patrick, H., Hicks, L., and Ryan, A.M. (1997). Relations between social efficacy and social goal pursuit to self-efficacy for academic work. *Journal of Early Adolescence*, 17(2), 109-128.
- Peterson, L., Millins, L.L., and Ridley-Johnson, R. (1985). Childhood depression: Peer reactions to depression and life stress. *Journal of Abnormal Child Psychology*, 13, 597-607.
- Pettit, G.S., Bates, J.E., and Dodge, K.A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development*, 68(5), 908-923.
- Pintrich, P.R., and De Groot, E.V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.
- Rice, K.G., Herman, M.A., and Petersen, A.C. (1993). Coping with challenge in adolescence: a conceptual model and psycho-educational intervention. *Journal of Adolescence*, 16, 235-251.
- Riggio, R.E., Watring, K.P. and Throckmorton, B. (1993). Social skills, social support, and psychological adjustment. *Personality and Individual Differences*, 15(3), 275-280.
- Robertson, J.F., and Simons, R.L. (1989). Family factors, self-esteem, and adolescent depression. *Journal of Marriage and the Family*, 51(1), 125-138.
- Rutter, M. (1985). Resilience in the face of adversity. *British Journal of Psychiatry*, 147, 598-611.
- Scheirer, M.A., and Kraut, R.E. (1979). Increasing educational achievement via self concept change. *Review of Educational Research*, 49, 131-150.
- Schunk, D.H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26, 207-231.
- Sieber, R. T. (1979). Classmates as workmates: Informal peer activity in the elementary school. *Anthropology and Education Quarterly*, 10, 107-235.
- Stevenson, D.L., and Baker, D.P. (1987). The family-school relation and the child's school performance. *Child Development* 58(5) 1348-1357.
- Wentzel, K.R. (1990). Relations between Social Competence and Academic Achievement in Early Adolescence, *Child Development*, 62(5) 1066-1078.
- Wentzel, K.R. and Caldwell, K. (1997). Friendships, peer acceptance, and group membership: Relations to academic achievement in middle school. *Child Development*, 68(6) 1198-1209.