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ABSTRACT

This study examined school-related strains that elementary school students encountered during the transition to middle school. A total of 120 students from two elementary schools completed the Early Adolescent School Role Strain Inventory during pretransition in the elementary school fifth grade, during early transition at the beginning of the middle school sixth grade, and later in the sixth grade. The inventory assessed the number and magnitude of school-related strains related to school demands, teacher relations, peer interaction, and parent control. It was hypothesized that because of differences in the characteristics of students' families, teacher expectations, and school size and location, students from one of the elementary schools would experience an easier transition to middle school in terms of changes in strain. It was also hypothesized that boys would demonstrate a more favorable strain change profile than would girls. Results of repeated measures MANOVAs provided strong support for both hypotheses. Findings suggest that elementary school preparation and gender can significantly affect the quality of the transition to middle school. The study also suggests that the role strain approach is a potentially valuable tool for assessing stress during the transition. Seven figures are included. (RH)

AN ECOLOGICAL STUDY OF CHANGES IN STUDENT ROLE STRAINS DURING THE TRANSITION TO MIDDLE SCHOOL

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ABSTRACT

With the increased interest in the stressfulness of middle and junior high school transitions, a need has arisen for promising new theoretical orientations to guide research. Influenced by the work on role strains among adults, this study examines the school-related strains emanating from teachers, parents, peers, and school structures and changes in strains during the transition to middle school, using the Early Adolescent School Role Strain Inventory (EASRSI), developed by the author. Both quantity and magnitude of strain related to role ambiguity, role overload, role underload, or role conflict are assessed in fifth and sixth grade. Subjects are 120 students from two different elementary schools who make the transition to a common 6-8 middle school.

Because of differences in the characteristics of students' families (SES), teacher expectations, and school size and location, it was hypothesized that students from one elementary school would experience an easier transition to middle school, in terms of changes in strain. In addition, it was hypothesized that boys would demonstrate a more favorable strain change profile than girls. Results, analyzed using repeated measures MANOVAs, provided strong support for both hypotheses.

Findings suggest that elementary school preparation and gender can significantly affect the quality of the middle school transition. The study also suggests that the role strain approach is a potentially valuable tool for assessing stress during the tranisition.

ROLE STRAIN

Individuals experience strain in the normal exercise of everyday roles which, when strain persists, can have detrimental effects on self-esteem (Pearlin, 1982, 1983). Adults in the workplace experience strain due to role ambiguity, role overload, role underload, monotony, perceptions of insufficient control over role demands, and interpersonal conflicts with peers and superiors associated with their roles (Holt, 1982; Pearlin, 1982, 1983).

Adolescents experience similar strains in their roles as students (Fenzel, in press). Demands from teachers, parents, and peers may all contribute to student role strain.

Transitions are a good time to investigate changes in strains. As students move from elementary to middle schools role "senders" and role demands change. The more disruptive the changes in role demands, the more stressful the transition is likely to be.

Early Adolescent School Role Strain Inventory (EASRSI)

Subscale Structure

I: Peer Interaction (9 items; mean alpha* =.85)

Sample Items: Kids make fun of me if I do well in school.
I don't get invited to the homes of my classmates much.
Sometimes I get hit or pushed by other kids at school.
Kids don't want to work with me at school.

II: School Demands (7 items; mean alpha=.76)

Sample Items: My teachers give too much homework.
Much of the work we do in school is boring.
Teachers expect us to do work that hasn't been taught us.
My school has too many rules.

III: Parent Control (6 items; mean alpha=.65)

Sample Items: My parents hassle me about getting my homework done.
My parents think I can do better in school than I really can.
My parents get upset about poor reports from my teacher.

IV: Teacher Relations (5 items; mean alpha=.68)

Sample Items: I don't feel many teachers know me.
Teachers don't treat me fairly.
Teachers don't tell me how well I'm doing.

TOTAL SCALE: 27 items; mean Cronbach's alpha=.88

* Cronbach alphas were averaged over 3 administrations of the EASRSI.

Role Strain Inventory

The EASRSI is a 27-item instrument that assesses the quantity and magnitude of school-related role strains. Students respond "TRUE" or "FALSE" to a statement and if TRUE indicate how much it bothers them (scale of 0 "Not at All" to 6 "A Lot"). Factor analysis of the total scale confirmed the existence of four subscales: School Demands, Teacher Relations, Peer Interaction, and Parent Control.

The total strain scale and subscales possess high internal reliability (Cronbach's alpha) across all three questionnaire administrations (see Fenzel, in press). Total scale reliabilities range from .87 to .90.

Measures: Mean Strain Proportion and Magnitude

Mean Proportion: percentage of items endorsed on scale or subscale. Range: 0 through 1.

Mean Magnitude: mean of magnitude scores on scale or subscale. Range: 0 through 6.

ANALYSES

Changes in strain proportion and magnitude were analyzed using repeated measures analyses of variance for three points in time. Subjects' sex and elementary school of origin were entered as independent variables.

HYPOTHESES

The middle school used a team-teaching approach and prepared students for the transition. Because the middle school differed from traditional departmentalized middle level schools, it is expected that:

1. school-related role strains will not increase during the transition from elementary school to middle school.

Because boys are more likely to be strained in the "feminized" environment of elementary school, it is expected that:

2. strains will decrease more for boys than girls during the transition to middle school.

With respect to between-school differences, it is expected that:

3. strains will decrease more for students from the elementary school whose work demands and size more closely approximate the demands and size of the middle school.

METHOD

Subjects

Subjects completed questionnaires on three occasions: Spring of fifth grade (Pretransition), Fall of sixth grade (Early Transition), and Winter of sixth grade (Settling In). For the first administration, 135 of 144 eligible students completed questionnaires and 121 (all of the 135 who made the transition to middle school in sixth grade) completed the second testing. Only one additional student was lost between T2 and T3, bringing the total longitudinal sample size to 120. Subjects were predominantly white (90%) with 71 percent living with two married parents. Subjects' parents were also very well educated with 82 percent of fathers and 72 percent of mothers having at least one college degree.

Procedures

Students completed the Early Adolescent School Role Strain Inventory (EASRSI) as part of a larger Middle School Transition Study Questionnaire (MSTSQ) in groups of 20-30. In addition to role strains, the MSTSQ assessed students' perceptions of competence, self-worth, social support, and trait anxiety and reported significant life events.

TEST OF HYPOTHESIS 1:

FINDING: As hypothesized, strains (with respect to both strain proportion-or number- and strain magnitude) did not increase during the transition to middle school. The finding holds for the total strain scale as well as for each of the strain subscales. In some cases, strains actually declined especially between T1 (fifth grade) and T2 (early sixth grade).

Figures 1 and 2 illustrate these results. P values reflect significant declines in strain proportion and magnitude.

Figure 1. Changes in Strain Proportion over Time by Subscale

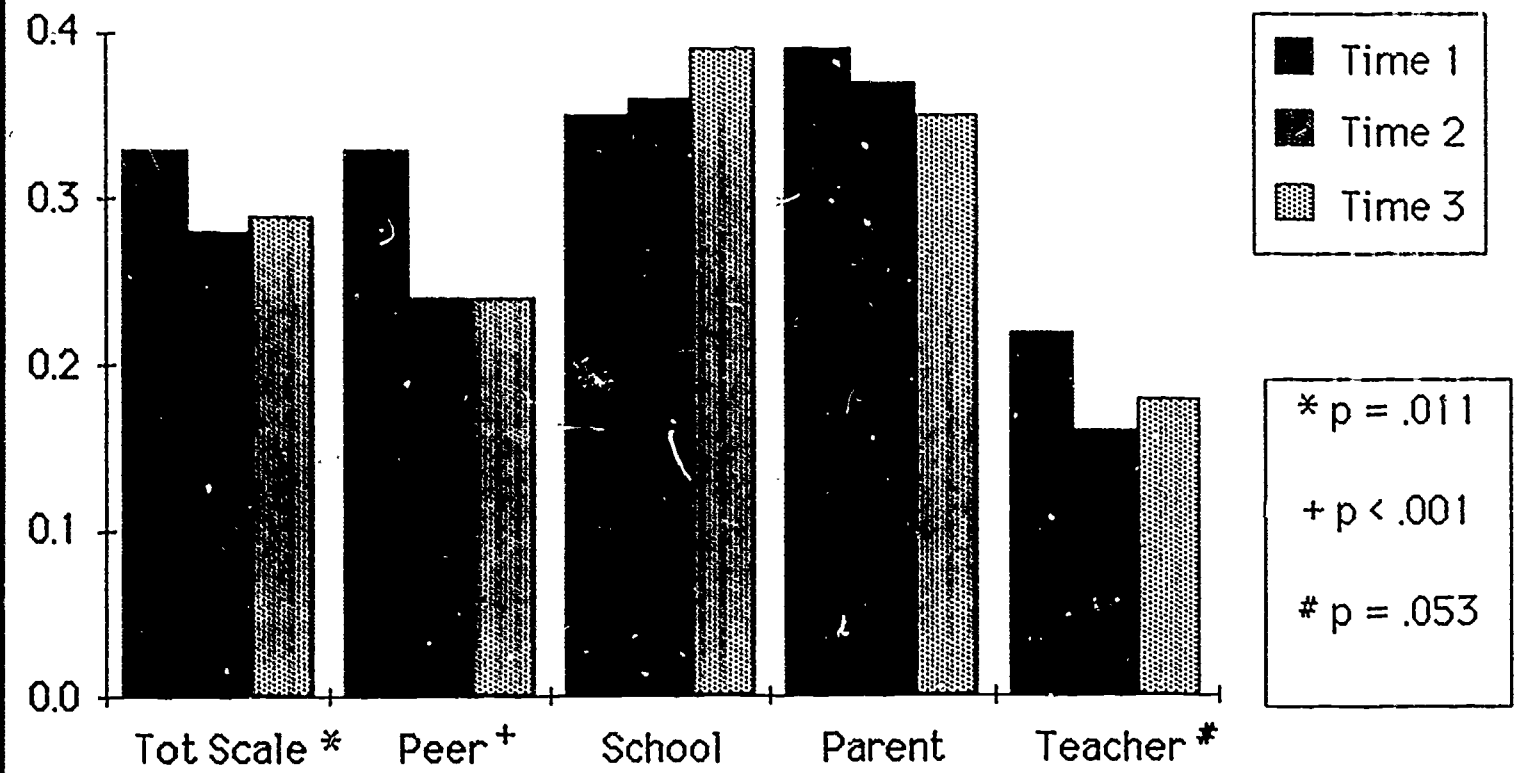
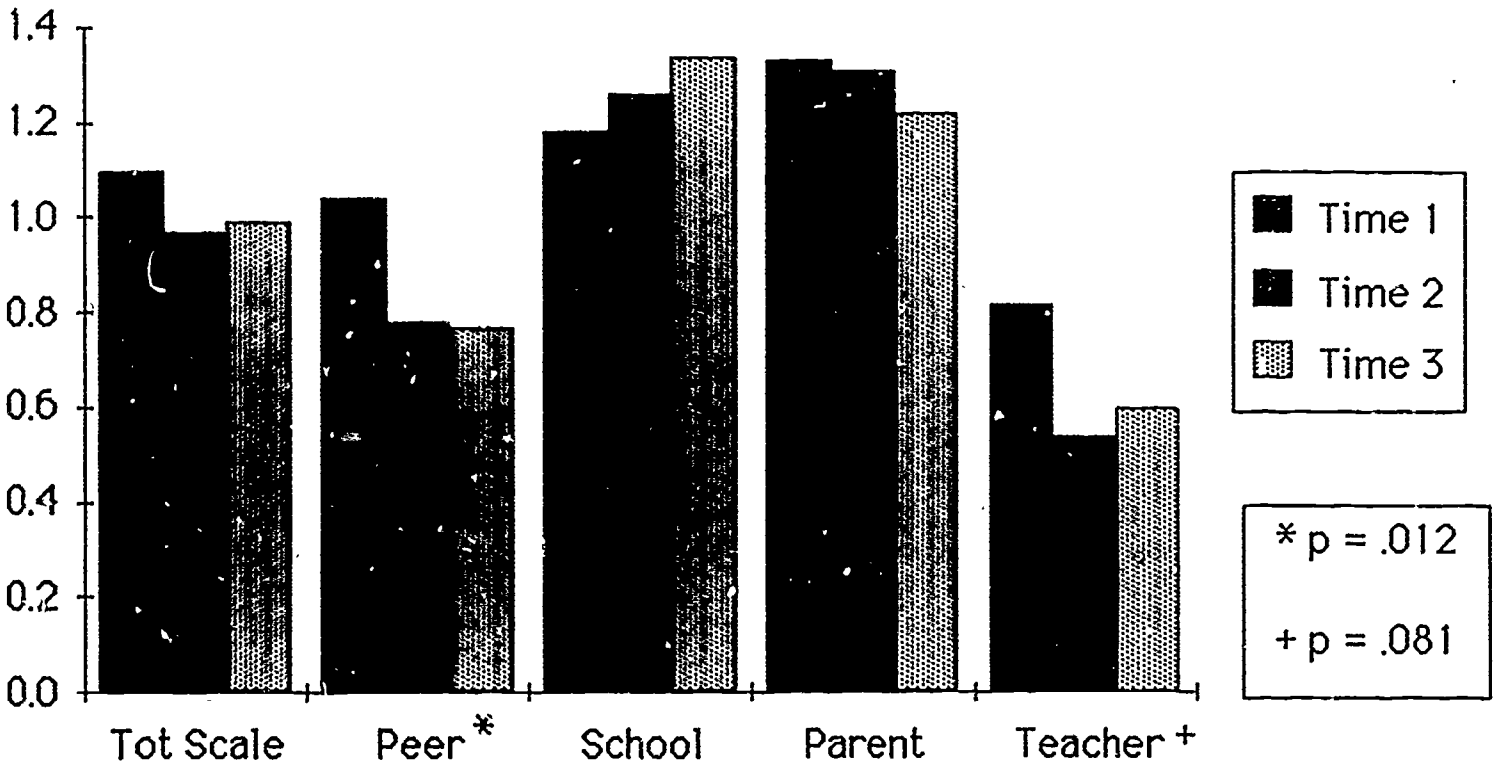


Figure 2. Changes in Strain Magnitude over Time by Subscale



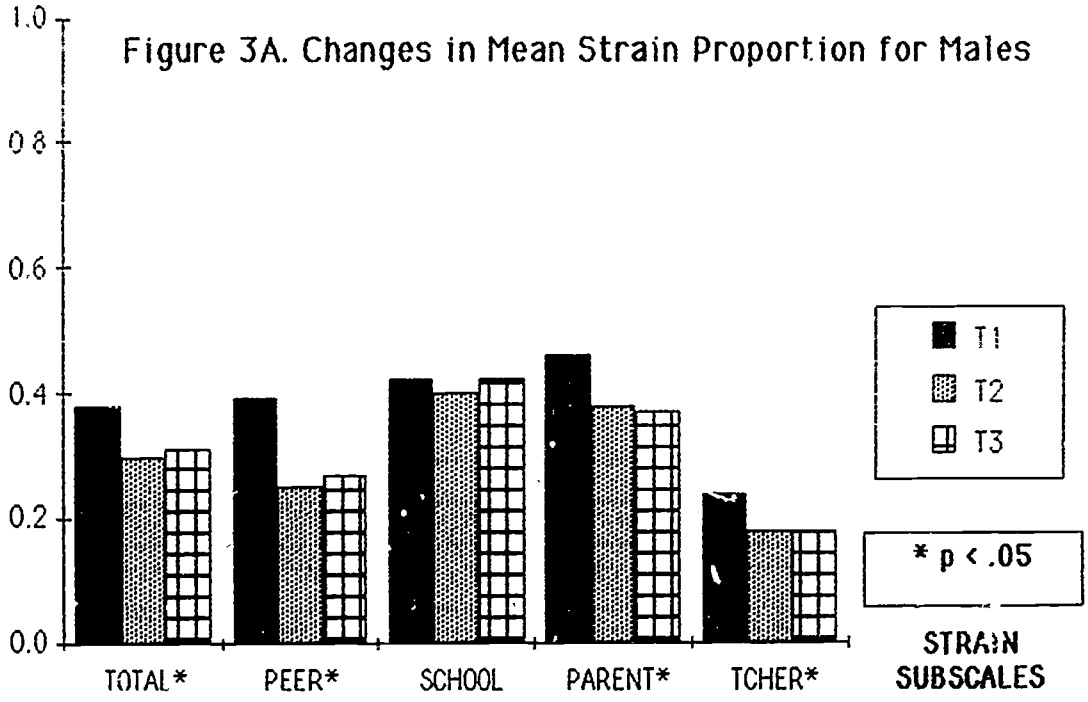
TEST OF HYPOTHESIS 2:

It was first suggested that boys would experience greater strain than girls in the "feminized" environment of elementary school (Humphrey, 1984). It was found that boys reported a greater proportion--or number--of strains than did girls, $F(1,118) = 6.71$, $p = .011$. However, consistent with Maccoby and Jacklin's (1974) contention that boys would tend to report being less affected by stress than girls, boys did not report significantly greater strain magnitude than girls in fifth grade.

Finding: Results showed good support for Hypothesis 2.

As shown in Figure 3, strain proportion declined more more boys than for girls for the total strain scale and for two of the strain subscales. The difference was particularly evident between T1 and T2.

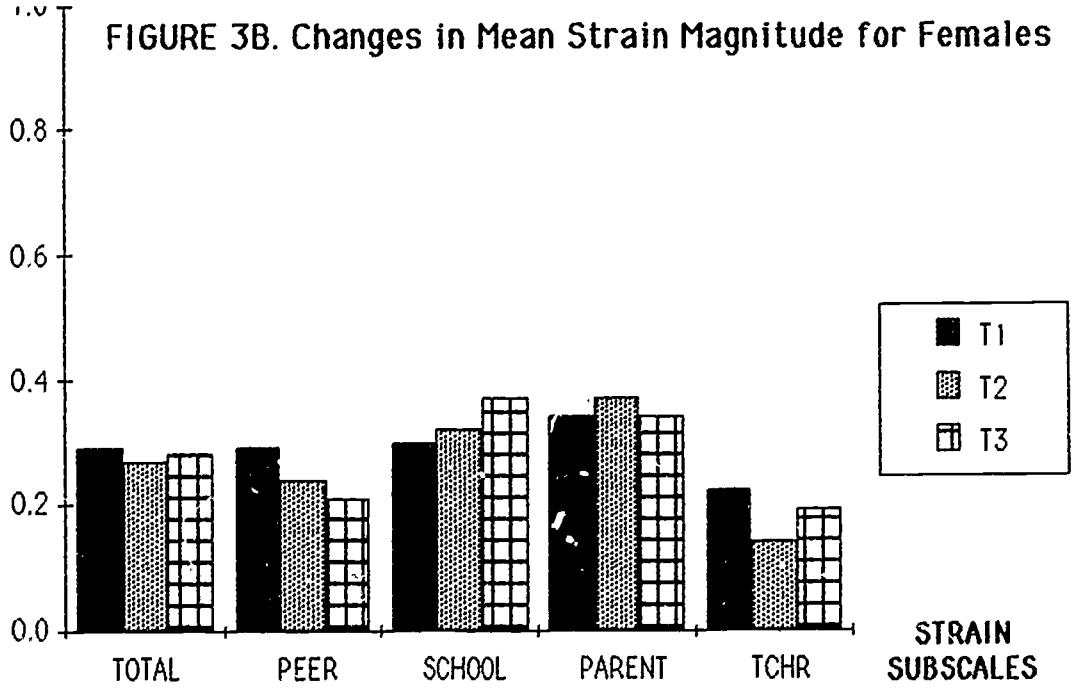
As shown in Figure 4, no significant sex difference for the total strain magnitude scale was found. However, marginally significant sex differences were found for the Parent Control and Teacher Relations subscales.



Total Scale Sex Diff.: F=2.41, p=.095; Sig. contrast: T1-T2 - t=2.19, p=.035.

Peer Interaction Sex Diff.: F=2.39, p=.096; Sig. contrast: T1-T2 - t=2.19, p=.035.

Parent Control Sex Diff.: F=3.54, p= .032; Sig. contrast: T1-T2 - t=2.46, p=.015.



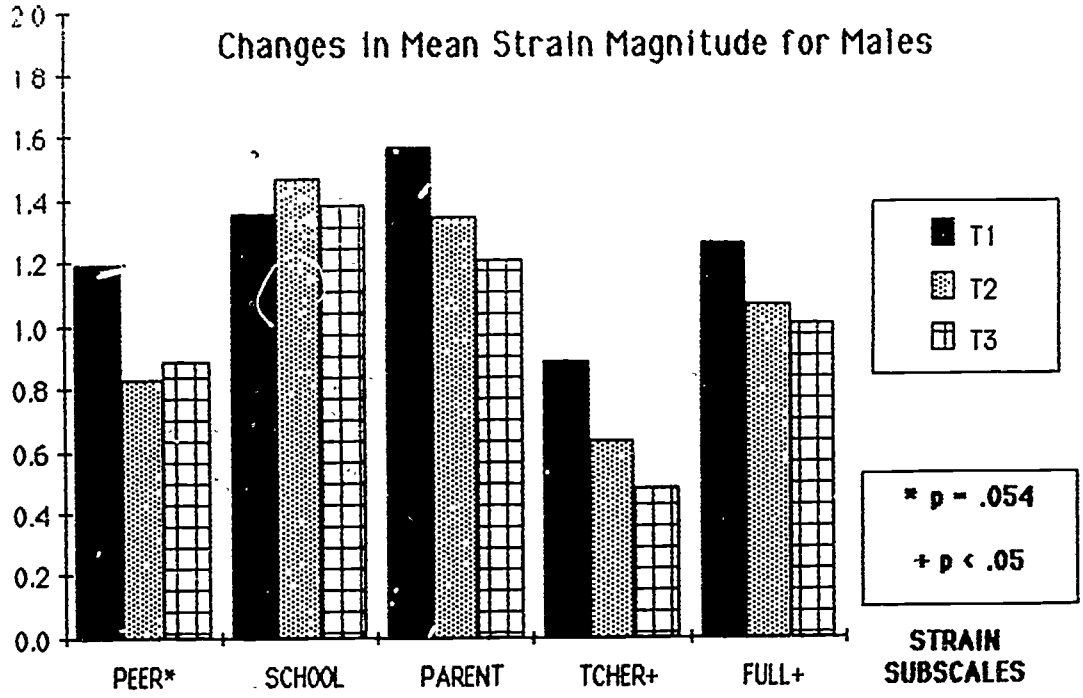
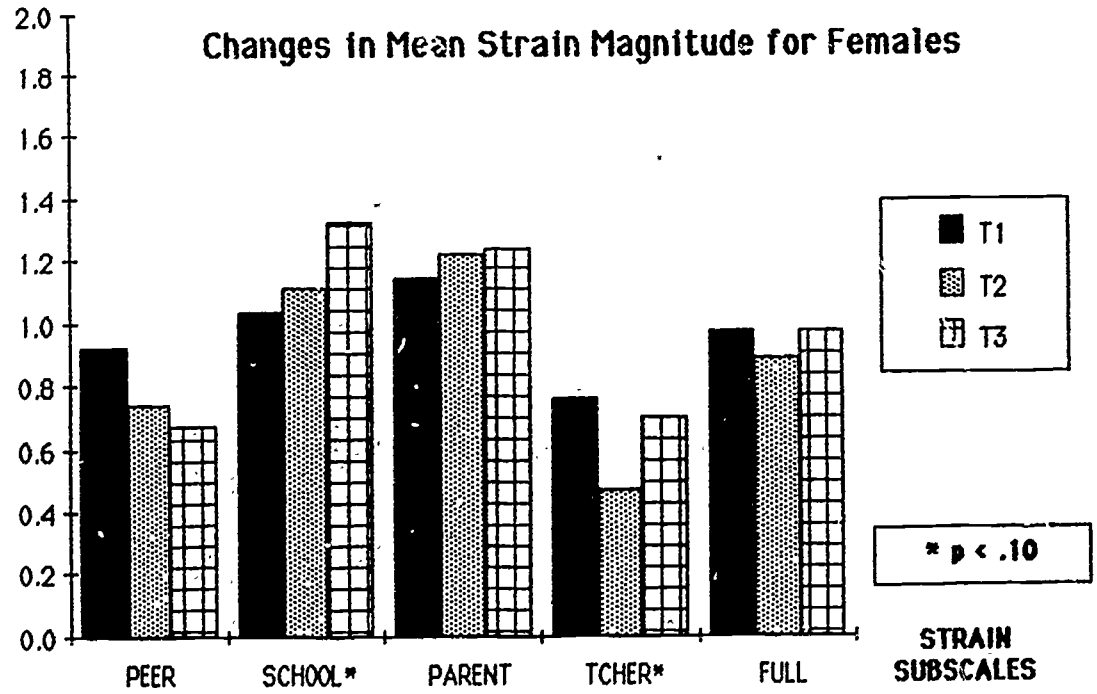


Figure 4. Comparison of changes in mean strain magnitude for males and females.

Parent Relation Sex Diff.: F=2.58, p=.078; no sig. contrasts.

Teacher Relations Sex Diff.: F=2.85, p=.062; no sig. contrasts.



TEST OF HYPOTHESIS 3:

The two elementary schools used in the study differed with respect to parents' SES (a greater proportion of East students were on free or reduced lunch programs), school population and class size (East was smaller with smaller classes), and the amount of independent homework demanded by teachers (East students were expected to do less than North students). The transition was expected to be less abrupt and, therefore, less stressful for North students.

FINDING: Figure 5 shows changes in strain magnitude over time for North students and Figure 6 shows magnitude changes for East students. In support of Hypothesis 3, North students showed a greater decline in strains than East students on the total scale, F (1,118) = 3.25, p = .041, and a marginally greater decline in School Demand strains. In both cases T1-T2 differences were significant.

Similar results (not shown) were found for the mean strain proportion scale and subscales.

Figure 5. Mean Strain Magnitude Subscale Scores for North Elementary School Students

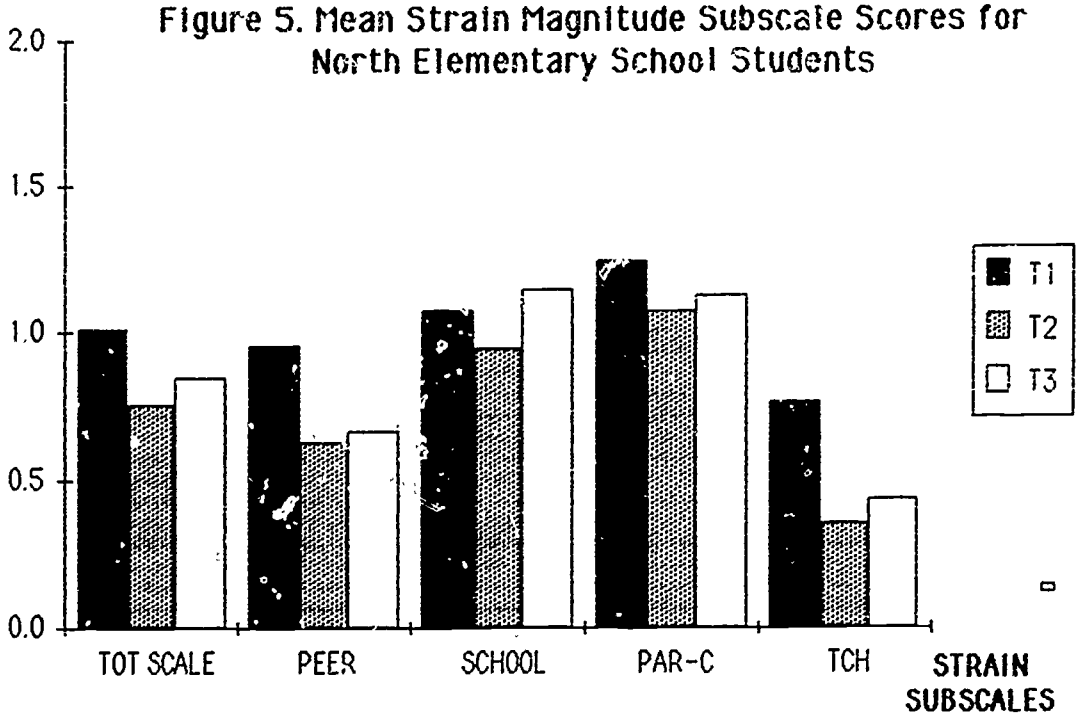
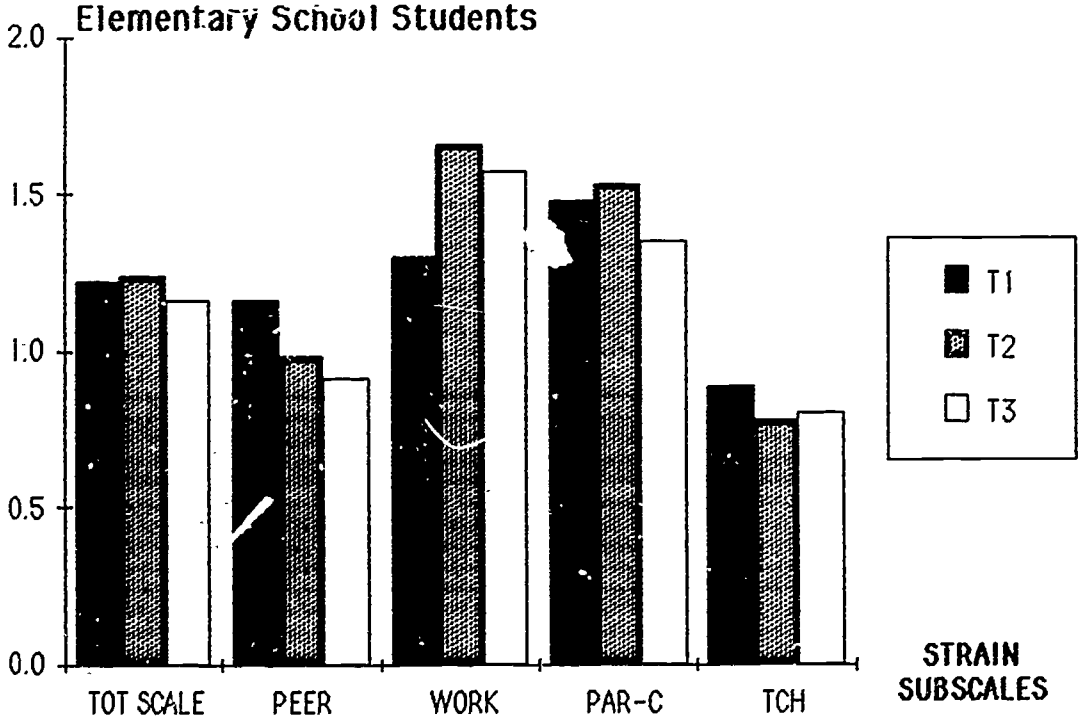


Figure 6. Mean Strain Magnitude Subscale Scores for East Elementary School Students



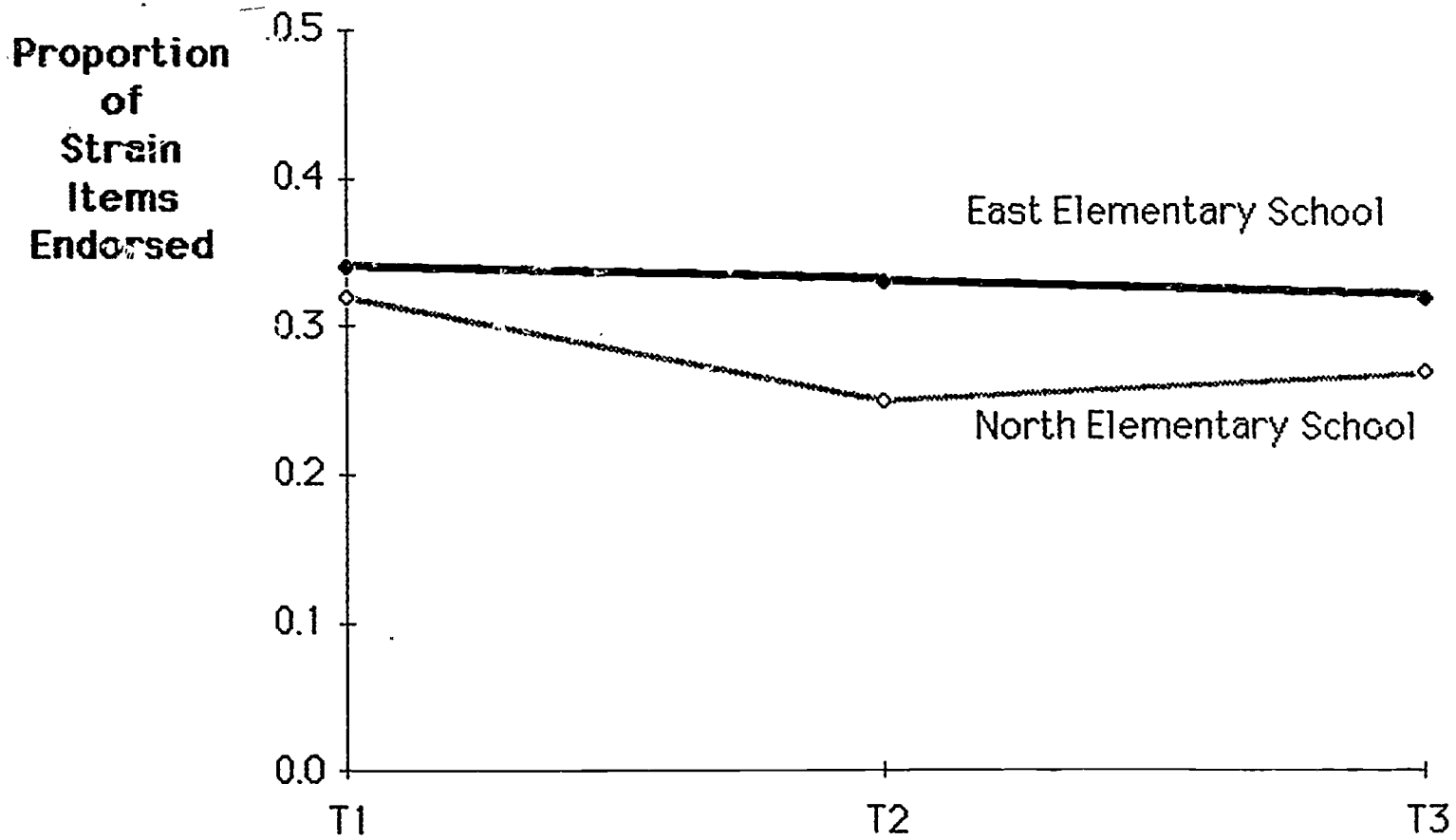


Figure 7. Changes in Subjects' Proportion of Full Strain Scale Items Endorsed over Time by School

CONCLUSIONS

1. The role strain approach used in the present study is a potentially useful and valuable research tool for understanding the stressfulness of the transition to middle school or junior high school in early adolescence.

2. It cannot be concluded that the team-teaching orientation is responsible for the finding that strains did not increase during the transition. Additional research is needed with an appropriate comparison group to address this issue.

3. Sex differences in the changes in strain during the course of the middle school transition may be explained by the stressfulness of the elementary school environment rather than the middle school environment. Boys may be more stressed than girls in elementary school but not in middle school.

4. Demands made upon students in elementary school may differ between schools. These between-school differences may affect the quality of the adjustment students make to middle school. It is recommended that elementary school teachers make demands upon students for independent homework that approximate those made by middle school teachers.

5. Because of the relatively homogeneous ethnic composition of the sample, results cannot be generalized to different samples in different school districts. Similar research using the role strain perspective should be conducted in different kinds of community and school settings.

References

Fenzel, L. M. (in press). Role Strain in early adolescence: A model for investigating school transition stress. Journal of Early Adolescence, 9.

Holt, R. R. (1982). Occupational Stress. In L. Goldberger & S. Breznitz (Eds.), Handbood of stress: Theoretical and clinical aspects (pp. 419-444). New York: Free Press.

Humphrey, J. H. (1984). Some general causes of stress in children. In J. H. Humphrey (Ed.), Stress in childhood (pp. 3-18). New York: AMS Press.

Maccoby, E. E., & Jacklin, C. N. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.

Pearlin, L. I. (1982). The social contexts of stress. In L. Goldberger & S. Breznitz (Eds.), Handbood of stress: Theoretical and clinical aspects (pp. 367-397). New York: Free Press.

Pearlin, L. I. (1983). Role strains and personal stress. In H. B. Kaplan (Ed.), Psychosocial stress (pp. 3-32). New York: Academic Press.