Reconstruct Research Context for Adolescent in East Asia: Rethinking the role of Parenting Practice and Deviant Peer on Adolescent Conduct Problems embed in Classroom Context

Chyi-In Wu (吳齊殷)
Institute of Sociology
Academic Sinica
sss1ciw@gate.sinica.edu.tw

Man-Kit Lei (李文傑)
Center for Family Research
University of Georgia
karlo@uga.edu

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INTRODUCTION

For some adolescents, family and peer environments come together to foster positive social and psychological development, while, for others, the same contexts may put adolescents at hazard for delinquent and health-threatening behaviors. For instance, Patterson et. al.(2000) found that adolescents who bracket together with peers who involve in risky behavior are at risk for the development of problem behavior over time. In addition, adolescents who spend considerably plenty of time hanging out with peers without adult supervision are at the edge for developing conduct problems (Mahoney & Stattin, 200; McHale, Crouter, & Tucker, 2001).

It would be problematical to understand the role of peers in adolescent development without also understanding the critical role of the family in enhancing peer relationships. Actually, family environments can be protective or potentially a risk factor for associating with adolescents who might have a negative influence. Many studies have made known that aspect of the family environment, such as the affective and supportive relationship is associated with peer-group selection (Kim, Conger, Lorenz, & Elder, 2001; Whitbeck, Conger, & Kao, 1993). As mentioned, family environment is particularly important for understanding adolescents' peer selections. Although constructive peer relationships can help diminish problems within the family environment, certain adolescent may be less likely than other adolescents to develop such shielding relationships (Criss, Pettit, Bates, Dodge, & Lapp, 2002). Thus, it is crucial to realize how family processes promote or object to different types of peer relationships and orientations toward peers. For instance, negative parenting practices may push adolescents to be drawn into deviant peer groups where involvement in problem behavior is most likely (Garnier & Stein, 2002). Among many aspects of parenting practices, the nature of affective and supportive parenting (e.g., warmth) and antagonistic parenting (e.g., hostility) is the key factors to be considered.

With these concerns in mind, the study investigates pathways in which parenting practices might lead adolescent to involve in risky peer relationships. We hypothesize that families with lower levels of affective parenting and higher levels of hostile parenting will cultivate environments where the adolescent has a further peer orientation, associates with deviant peer more likely, and eventually has more conduct problems.

Peers and the Development of Conduct Problems

On the other hand, Peer relationships are also important for psychosocial development throughout adolescence (Hartup, 1999; Newcomb & Bagwell, 1998). During adolescence, nonetheless, peer relationships take on unique significance. At this period, friends are providers of companionship, social and emotional support, and intimate self-disclosure and reflection (McNelles & Connolly, 1999). Even though peer relationship and peer influence have eminent potential to contribute to healthy psychosocial development, they can also be a root of threat for adolescents, such as when adolescent's friends engage in problem behavior or when friends embrace beliefs that promote such behavior.

To more fully comprehend the association between peer relationships and adolescent conduct problems, researchers need to consider the context in which peers interaction occur. Namely, in what settings and under whose supervision (or lack of supervision) is adolescent socializing with their peers? One aspect of adolescent socializing that has received rare attention is the context in which adolescent spend their time at school. On a typical school day, for example, in any a Taiwan junior high or high school, there is often more than eight hours for adolescent students to hanging around with their classmates within a classroom. Given the situation that adolescent students, mostly in Taiwan and in East Asian countries, are forced to passing most of their awake hours with their classmates on school days (Yi & Wu, 2004), it is essential to figure out how at school arrangements are related to the development of adolescent conduct problems. When peer are nearby, there is increased opportunity for conduct problems as well as enhanced social reinforcement for them. Friends can reinforce conduct problems in their conversation with one another by reacting positively to discussions of antisocial behaviors (Dishion, Spracklen, Andrews, & Patterson, 1996). Deviant adolescents may meet in the context of classroom activities and form friendships that eventually lead to deviant behavior from the friendship group (Dishion, Andrews, & Crosby, 1995). Adolescents involved in deviant behavior are likely drawn to socialization situations where other adolescent with similar propensities for deviant behavior are also stand around. Thus, a setting of negative mutual influence is created, adolescents who engage in deviant behavior are drawn to similar peers, and deviant peers further advance the development of deviant behaviors (Curran, Stice, & Chassin, 1997). This cycle of reciprocal influence is likely a risk factor for persistent delinquent and disruptive behavior.

Direct Route to Conduct Problem

In the conventional way, family and peer toward child behavior was embedded in social learning and social control theory. Social learning theory was best known for differential association theory. This theory refer to criminal behavior is learned behavior and learned via social interaction with others (Sutherland's, 1947). Some studies have evidenced differential association theory (example: Reed & Rountree, 1997; Bahr et al., 1998). Therefore, social learning considered that criminal behavior

is learned in interaction with others, especially peers and friends. Assumption of social control theory is that deviance is normal and conformity rather than deviation (Hirschi, 1969). Many research indicated that deviant peers had less influence on adolescents who had close relationships with their parents (Coombs, Paulson, and Richardson's, 1991; Rankin & Kern, 1994). In sum, Control theories exclude peer affiliations from their explanations for delinquency; social learning models stress the importance of peer effects and the manner in which parents influence their children's friendship choice (Simons, Simons & Wallace, 2004). First hypothesis was tested both theories, hypothesis is:

(1) Deviant friends and parenting practices have a stronger associate with child conduct problem.

Moderator Route to Conduct Problem

Bronfenbrenner (1986) indicated that the family has the ability to protect against negative peer influence. Another research found that parental monitoring was negatively related to association with a deviant peer (Chassin, Pillow, Curran, Molina, & Barrera, 1993) and family as moderators that may reduce the relationship between peers and adolescent drug use (Mason, Cauce, Gonzonles, & Hiraga, 1994). Ary, Ducan, Biglan, et al. (1999) found that parental monitoring has both direct and indirect influence, through deviant peers, on child problem behavior. The prior research has conceived implying moderator relationship between family and peer. However, Barrera et al. (2002) found that supportive parenting did not directly or indirectly predict problem behaviors. Recently, Weaver and Prelow (2005) suggested that inconsistency between some studies might have the effect of ethnicity. They found that family, peer and conduct problem different by both European American and Africa American. Furthermore, what is difference and consistence in Taiwan or East Asia, whereas ethnicity or culture was important factors influence to role of peer and family on conduct problem? As noted above, we are examined this hypothesis:

(2) Parenting practices as moderators of the relationship between deviant friends and child conduct problem.

Meaning of Classroom in Taiwan: New route?

In Taiwan or other East Asia county, adolescents have use up approximately half their waking hours in the school environment, especially their classroom. For adolescent students in Taiwan, the time they spend in school is lasted even longer. In some occasions, for example, those who are in the last year of schooling (e.g., junior high school third graders and/or high school third graders) may spend more than 12 hours in regular or cram school. What does this mean? It means that, during this time, these adolescent students are exposed to teachers, peers, classes, programs, and policies, all of which are potentially influential socialization agents. Moreover, many studies showed that adolescents are embedded in a rich network of peer relations

(Furman, 1989). Thus, classroom reflects as an important life context in Taiwan. Hence, the fact is, western researches have ignored the effects of classroom, whereas western country without idea of classroom. Wu and Lei (2004) has examined association with school and adolescent mental health in Taiwan. They have evidenced school effect related to adolescent emotional behavior in Taiwan. In additional, classroom is constructed by difference social networks or relation. The previous studies found that density, characteristic and change of friendships network by different classrooms (Wu and Lei, 2001). Therefore, must consider the role of family and peer by different classroom context. This is an important theoretical question:

(3) Relationship between deviant friends in child conduct problem by classroom context differences.

METHOD

Sample

The data used in this study comes from an eight-year longitudinal research with eight-wave surveys scheduled across 2000 to 2007 funded by Academic Sinica, Taiwan (AS-93-TP-C01, acronym: "TYP"). It consists of two-cohort students: a sample of 2,696 7th grade students (first year of the junior high, "2KJ1" for short) and another sample of 2,890 9th grade students (last year of the junior high, 2KJ3"for short") in 2000. Its subjects of study are students of Taipei city, Taipei county and I-Lan county which public and private secondary schools. It is a follow-up study-tracking subject for a long period. Data collected through questionnaire, including students, teachers and parents. Up to 2004, this project finished continuous data collection for five consecutive years. This article only analyzed data by 2KJ1 from Grade 7 to Grade 11 while students were still in school.

The Taiwan Youth Project employs a school-based, stratified sampling design. A sample of junior high schools in Taipei city, Taipei county and I-Lan county, stratified by the level of urbanization was selected. These three areas located in the northern part of Taiwan have different levels of urbanization and different economic structure. Specifically, Taipei city is the largest metropolitan city in Taiwan; I-Lan is a mostly agriculture-based county; and Taipei county is in-between these two regions. Thus, in the first stage of sampling, based on the level of urbanization, we divided Taipei city into three strata, Taipei county into three strata, and I-Lan county into two strata. In the second stage, based on the number of students registered in each stratum, we determine the numbers of schools in each stratum. Finally, 40 schools were selected from the pool: 16 schools from Taipei city, 15 schools from Taipei county, and 9 schools from I-Lan county. In each school, we randomly chose two classes in each grade and interviewed all students. In this study, it used both cohort dataset in first year, and because of listwise deletions of missing data on statistical procedures, our final sample includes 4314 of the students and 162 of the classrooms.

Variables

We used children self-reports reply on the 2000 wave of data. As noted above, we pooled 7th and 9th grade students as a different cohort. Mean and stand deviations for all variables show in Table 1.

TABLE 1. Descriptive Statistics of Variable

VARIABLE NAME	MEAN	SD	MINI	MAX
Level 1 (N=4,314)				
Dependent Variable				
Conduct Problem	10.89	2.09	10	35
Independent Variables				
Gender	0.48	0.5	0	1
Individuals cohesion with Class	3.9	0.86	1	5
Deviant Friends	12.32	3.5	10	43
Parenting				
Mother Warm	19.54	7.22	5	35
Mother Hostility	12.81	6.12	5	35
Father Warm	17.54	7.46	5	35
Father Hostility	11.54	5.93	5	35
Level 2 (N=162)				
Classroom Deviant	11.01	0.61	10.04	13.26
Heterogeneity of Classroom Deviant	2.01	1.26	0.19	7.17
Cohort	1.5	0.5	1	2

Conduct Problem. Participants were asked to rate how frequently they engage in each behavior within the past year on a 5-point scale ranged from never (1) to always (5). The questions focused on skipped home, skipped school, drank alcohol or smoking, threatening someone, destroyed something as not mine, steal, drug use, sexuality, used a betel nut, and violent behavior. The reliability coefficient alpha for the 10-items was .83.

Deviant Friends. The scale of deviant friends based on same questions for target conduct problem to report how many of their friends committing various delinquent behaviors in past year. This scale was a 5-point response scale that ranged none (1) to All (5). The alpha coefficient was .85.

Classroom Deviant and Heterogeneity of Classroom Deviant. Students used a

10-items conduct problem scale to report externalize behavior itself. This scale was averaged across students within each classroom to get a measure of the classroom deviant within each of the 162 classrooms. In addition, the standard deviations of conduct problem scale within 162 classrooms obtain a concept of Heterogeneity of Classroom Deviant. The reliability coefficient for both aggregate variables, assessed by the intraclass correlation, was .77.

Parental Warmth. Adolescents reported on the Warmth of each parent using an 5-item scale revised from the Parental Rejection Scale developed by the Behavioral Research and Evaluation Corporation (Brennan and Huizinga, 1975). This scale included aspect of care, support, listening, love, and affectionate. The response format ranged from 1 (never) to 7 (always) and coefficient alpha for mother and father were .87 and .85., respectively.

Parental Hostility. Participants used a 5-item scale to report the extent to which children considered physical or verbal punishment from their parent (Conger, Elder, Lorenz, Simons, & Whitbeck, 1992; Simons, Wu, Lin, Gondor & Conger, 2000). This scale contained five items, including angry to you, spank and hit, yell at you, shout and at nag you, and argue with you, scale from 1 (never) to 7 (always). Reliability coefficient alpha for the instrument on mother and father were .84 and .85, respectively.

Control Variables. We control for cohort (Both 7^{th} and 9^{th} grades), Individuals cohesion with Class and gender. Half of students (48 %) were female. As regards individual with class, participates reported “How many friends in their classroom?” that ranged from none (1) to all (5).

RESULTS

In this study, we rely on multilevel modeling using the Hierarchical Linear Model (HLM) software (Raudenbush and Bryk, 2002). Multilevel can simultaneous discusses relationship between/across individual (level 1) and classroom (level 2) levels. Table 2 presents four models for response to three research questions. Model 1 shows a baseline model based on ANOVA modeling, indicating that 4.8% of the total variance in child conduct problems was between classrooms. Moreover, random effect (U0) was also significant that it exists in conduct problem different between classrooms. Model 2 shows that conduct problem is predicted by high deviant friends, have lower cohesion with classroom, more male than female, and have lower warm for mother as well as higher hostility for father. In model 2, the model containing independent variables explains 55.4% of the explainable variance. The regression coefficient and explanation of variance has clearly consistency prior studies related to associate with peers or parental to child conduct problem.

TABLE 2. Fixed Model from Hierarchical Linear Model of Conduct Problem

Dependent Variable: Conduct Problem	Model 1	Model 2	Model 3	Model 4
Intercept				
Intercept	10.902 (0.05)***	6.537 (0.21)***	7.469 (0.38)***	8.949 (4.09)**
Classroom Deviant				0.037 (0.42)*
Heterogeneity of Classroom Deviant				-1.122 (0.19)***
Cohort				0.267 (0.39)
Gender				
Intercept		0.281 (0.05)***	0.293 (0.05)***	-0.059 (0.16)
Cohort				0.226 (0.10)**
Individuals cohesion with Class				
Intercept		-0.056 (0.03)**	-0.057 (0.03)**	-0.058 (0.08)
Cohort				0.006 (0.05)
Deviant Friends (DF)				
Intercept		0.339 (0.02)***	0.265 (0.03)***	-0.156 (0.34)
Classroom Deviant				0.028 (0.03)
Heterogeneity of Classroom Deviant				0.088 (0.02)***
Cohort				-0.043 (0.03)
Mother Warm (WM)				
Intercept		-0.010 (0.01)*	0.072 (0.02)***	0.056 (0.02)**
Cohort				0.013 (0.01)
Mother Hostility (HM)				
Intercept		0.007 (0.01)	-0.050 (0.02)***	-0.052 (0.02)**
Cohort				0.000 (0.01)
Father Warm (WF)				
Intercept		0.007 (0.01)	-0.053 (0.02)***	-0.034 (0.02)
Cohort				-0.012 (0.01
Father Hostility (HF)				
Intercept		0.016 (0.01)**	-0.039 (0.02)**	-0.039 (0.03)
Cohort				0.004 (0.01)
DF × WM			-0.007 (0.00)***	-0.007 (0.00)***
DF × HM			0.004 (0.00)***	0.005 (0.00)***
DF × WF			0.005 (0.00)***	0.005 (0.00)***
DF × HF			0.004 (0.00)***	0.004 (0.00)***

*P<.10, **P<.05, ***P<.01

Model 3 includes interaction term between deviant peer and parental concepts. The deviant peer coefficient becomes slightly lower, and all variables of parental also significantly predict conduct problem as well as b coefficient higher than model 2. This finding was relatively consistent with parenting practices as moderators of the relationship between peers and adolescent. However, mother warm toward conduct problem revealed different story, as mother are warmer with children related to high probability of conduct problems.

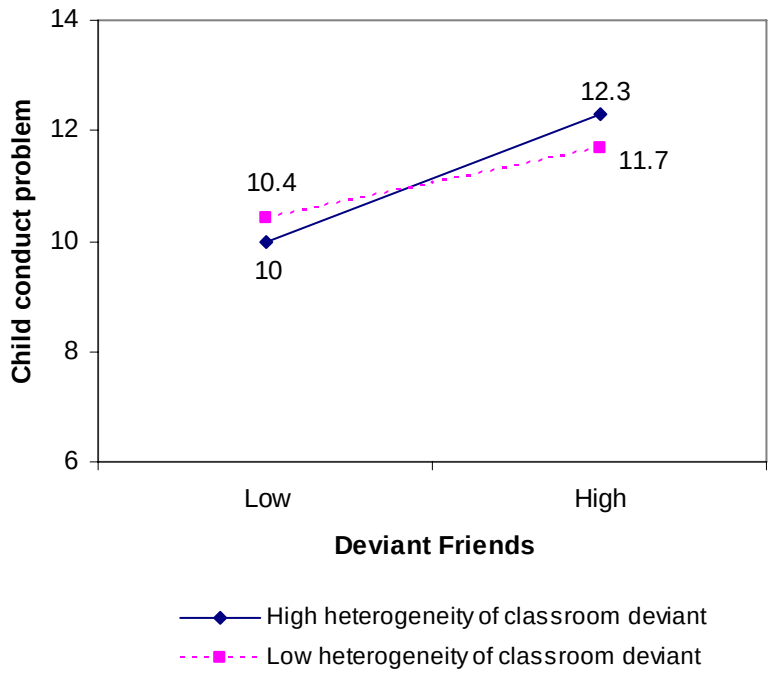
In model 4 included both individual- and classroom-level variables predicted on child conduct problem. This model reveals that class deviant is positively and heterogeneity of classroom deviant is negatively associated with conduct problem respectively. The main effect of gender become no longer significantly, whereas cohort interact with gender. Furthermore, considered classroom deviant and heterogeneity of classroom deviant reduces the coefficients for deviant friends and conduct problem to nonsignificance. In contrast, heterogeneity of classroom deviant interacts with deviant friend significantly predicted conduct problem. This interaction is shown graphically in Figure 1. The figure indicated that deviant friends has a positively influence on conduct problem by heterogeneity of classroom deviant. However, the association between deviant friends and conduct problem is stronger when classroom deviant is high heterogeneity than low. Finally, only mother parental parenting was still significant association with child conduct problem in model 4. These finding suggest that heterogeneity or homogeneity of classroom can moderately the effect of friends.

TABLE 3. Random Effect from Hierarchical Linear Model of Conduct Problem

Variance Component	Model 1	Model 2	Model 3	Model 4
U0	0.21***	3.18***	2.74***	1.04
U1		0.11**	0.11**	0.32**
U2		0.01	0.01	0.10
U3		0.03***	0.02***	0.11***
U4		0.00***	0.00***	0.03***
U5		0.00***	0.00***	0.05***
U6		0.00**	0.00**	0.03**
U7		0.00***	0.00***	0.06***
R	4.17	1.86	1.83	1.82

*P<.10, **P<.05, ***P<.01

FIGURE 1. Association between Deviant Fiends and Conduct Problems by Heterogeneity of Classroom deviant



SUMMARY AND DISCUSSION

In recent years, researchers have become anxious with distinguishing the verity of routes whereby some solid ***daily social contexts*** influences adolescent development. Community context, for instance, is one of the most highly focused conditions to be considered. Using data of African American children, Simons et. al. (2002) pointed out that the impact of particular parenting strategies on child conduct problems varied by neighborhood environment. However, in thinking about the ***daily social contexts*** for adolescent students of East Asian countries, we have a very different thought. Instead of thinking about neighborhood effects on a larger community context, we focus on classroom effects within a smaller school environment. Since as mentioned earlier, there is often more than eight hours for adolescent students in Taiwan, as well as in most of East Asian countries, to hanging around with their classmates within a classroom during a typical school day. We hypothesize that classroom context is the most crucial condition for adolescent students to develop conduct problem, though, we did not rule out the possible influences of parenting practices.

We identified three hypotheses to illustrate our theoretical assumptions related to the mechanism for adolescents to develop conduct problems, that is, ***the direct route, the moderator route and the so-called new route*** (i.e., classroom effect). Our results, essentially, fully supported our theoretical hypotheses. The most important finding of our results is that, for Taiwanese adolescent students, classroom context did hold a crucial influence on their development of conduct problem. The HLM analyses

indicated that class deviant is positively and heterogeneity of classroom deviant is negatively associated with adolescent students' conduct problems respectively. Further, classroom deviant and heterogeneity of classroom deviant reduces the coefficients for deviant friends on conduct problem to become non-significant. In contrast, heterogeneity of classroom deviant interacts with deviant friend significantly predicted conduct problem. This interaction is clearly shown in Figure 1. The graphs indicated that deviant friends has a positively influence on conduct problem varied by heterogeneity of classroom deviant. However, the association between deviant friends and conduct problem is stronger when classroom deviant is high heterogeneity than low. These finding suggest that heterogeneity or homogeneity of classroom can moderately the effect of deviant friends on adolescents' conduct problems.

It should be noted that our findings have implications regarding the ongoing debate over the importance of cultural differences in adolescent developmental theory. The ***no group differences hypothesis*** argues that developmental processes are largely invariant across cultural groups. Furthermore, the impact of various factors on adolescent development is assumed to be the same for all adolescents. Exactly contrast to this view, the ***group differences hypothesis*** posits a culturally relative perspective of child socialization. It asserts that the impact of causes on adolescent development often vary by cultural contexts. Obviously, our results provide strong evidences for the latter perspective and further the theoretical arguments that maybe different avenue for adolescent to develop conduct problem in different cultural contexts.

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