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#### ABSTRACT

The Gang Membership Inventory (GMI) was developed for use with urban high-risk youth and administered as part of a larger survey. The GMI consists of 15 true/false items asking about the respondent's involvement in gang activities in the year just past. Activities range from peripheral involvement to more serious involvement in gangs (e.g., being an actual gang member). The GMI was administered in English or Spanish to fifth through eighth graders at two Chicago (Illinois) elementary schools in predominantly Latino neighborhoods. Usable surveys were obtained from approximately 650 children. Forty percent of the respondents self-identified themselves as Puerto Rican, 28 percent as Mexican, 5 percent as both Mexican and Puerto Rican, and 7 percent as other Latino ancestry. Principal components analysis with varimax rotation produced three factors with eigenvalues greater than 1.0 that together accounted for 50 percent of the total variance. Because the factors do not appear to be well-defined, it was decided to retain the measure as a single scale. Validity of the GMI was assessed through a one-way analysis of variance and other measures. Also examined was the relationship between gang involvement and the subscales of the Teacher-Child Ratirig Scale. As expected, youth rated high or moderate on acting-out behavior were significantly more gang involved than were youth low in acting out. The GMI has been shown to be easy to administer and useful in determining different levels of involvement in youth gangs. One table displays GMI factor loadings, and six figures describe relationships of various variables to gang involvement. An appendix contains the GMI. (SLD)

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#### DETERMINING YOUTH GANG MEMBERSHIP: DEVELOPMENT OF A SELF-REPORT INSTRUMENT

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# Determining Youth Gang Membership: Development of a Self-Report Instrument

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## Introduction

Urban areas are afflicted with the problems of youth street gangs. The costs to individual victims are the violent assaults and feelings of intimidation; the costs to the community are the property damage and the additional law enforcement (Thompson & Jason, 1988). Although most people acknowledge this problem, there is a paucity of information about gang behavior. To date, several theoretical formulations of gang behavior have been put forth, but little research evidence exists both for and against any one theory. Methodologically sound methods of determining gang membership is non-existent in large part because of the difficulties inherent in investigating gangs. Consequently, most researchers have had to depend on either self-report data or police department records, which have been found to be seriously inaccurate (Klein, 1971).

The present measure, the Gang Membership Inventory (GMI), was developed by the authors for use with a sample of urban high-risk youth. The GMI consists of 15 true/false items asking whether the respondent, and in some cases a friend or family member, has taken part in various gang activities in the last year. The activities range from peripheral 'involvement' such as whether there was gang activity in the neighborhood or if any of the respondent's friends joined a gang to minor involvement (e.g., wearing of gang colors, making gang hand signs) to involvement of a more serious degree (e.g., being an actual gang member, hurting a gang member in a fight, delivering drugs for a gang).

## Sample and Method

The *GMI* was administered anonymously, as part of a larger survey, to fifth through eighth graders at two Chicago elementary schools in predominantly Latino neighborhoods. The survey was read aloud in English to most classrooms while a Spanish version was orally administered to bilingual classrooms. Usable surveys were obtained from approximately 650 youth (90% of those enrolled). Forty percent of the youth self-identified themselves as Puerto Rican, 28% as Mexican, 5% as both Mexican and Puerto Rican, and 7% as being of another Latino ancestry such as Cuban, Guatemalan, Brazilian, Salvadorean, etc. Sixteen percent of the youth identified themselves as African American and 2% as European, White, not Hispanic. One percent of the sample described themselves in terms of European, Middle Eastern, or Asian nationalities and are referred to as 'other'.

### Results

A principal components analysis with varimax rotation performed on the 15 item scale produced three factors with eigenvalues greater than 1.0 that together accounted for 50% of the total variance. The first factor accounted for 33% of the variance with the



remaining two factors accounting for 10% and 8%. The first factor appeared to consist of items mainly to do with fighting while the second factor included items relating to peripheral or minor gang involvement. Items of the third factor were split between those concerned with gang related drug activity and actually being a member of or leader of a gang. Because the factors did not appear to be well defined, it was decided to retain the measure as a single scale. This would serve to simplify future analyses and also to ensure greater reliability by utilizing a larger number of items. Items and their exact factor loading can be found in Table 1.

Subsequent item analyses performed on the GMI yielded a coefficient alpha of .83 with the minimum item-total correlation .34.

Validity of the *GMI* was assessed through numerous analyses. One way ANOVA's followed by post hoc Tukey tests of respondent's grade in school and gender revealed that seventh and eighth graders were significantly more gang involved than fifth graders (see Figure 1) and that boys were significantly more gang involved than girls, as expected. Similar analyses showed that students self-reporting academic grades of 'mostly A's' were significantly less gang involved than students self-reporting academic grades of 'mostly C's', 'mostly D's, or 'mostly F's' (see Figure 2). It was also found that youth who reported using drugs (including alcohol or cigarettes) at least once in the last year were significantly more gang involved than youth reporting no drug use in the last year (see Figure 3).

Also examined was the relationship between gang involvement and three subscales of the Teacher-Child Rating Scale (Hightower et. al., 1986) measuring acting out behavior, frustration, and shyness. As expected, youths rated as high or moderate on acting out behavior were significantly more gang involved than youth low in acting out. Youth judged to be highly frustrated were significantly more gang involved than low or moderately frustrated youth. Finally, there was a tendency (p = .07) for very shy and outgoing youth to be more gang involved than moderately shy youth (see Figure 4).

Additional analyses focused on the relationship of gang and family closeness with actual gang involvement. Closeness to gangs and family were concepts measured individually through five pairs of items worded in a parallel fashion. For example, "I felt I could be myse f around gang members" related to gang closeness while "I felt I could be myself around family members" related to family closeness. As hypothesized, youth who felt close to gangs were significantly more gang involved than those reporting they felt only moderately close to gangs who were in turn significantly more involved than those reported feeling close or moderately close to their families were significantly less gang involved than youth who felt they were not close to their families (see Figure 5).

#### Discussion

The Gang Membership Inventory has been shown to be useful in determining different levels of involvement in youth gangs. The GMI takes approximately 3 minutes, is easy to administer, and is written in both English and Spanish. It also correlates well with



other high-risk indicators, including substance use and school problem behaviors. The greatest advantage of the *GMI* is that it appears to be the only published scale to date that assesses youth gang membership. Future work will focus on validating the scale with other high-risk populations.

## References

Hightower, A. D., Work, W. C., Cowen, E. L., Lotyczewski, B. S., Spinelli, A. P., Guare, J. C., & Rohrbeck, C. A. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary children's school problem behaviors and competencies. <u>School Psychology Review</u>, 15, 393-409.

Klein, M. W. (1971). Street Gangs and Street Workers. Englewood Cliffs, NJ: Prentice-Hall.

Thompson, D. W., & Jason, L. A. (1988). Street gangs and preventive interventions. Criminal Justice and Behavior, 15, 323-333.



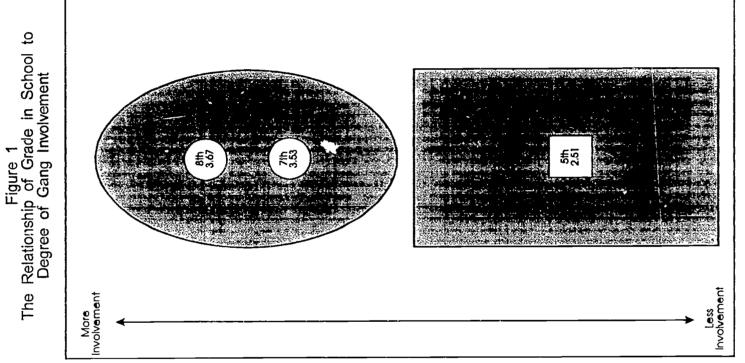
Items	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>
Beaten up by a gang because did not join	.74	-	-
Fought representing a gang	.67	-	-
Hurt a gang member in a fight	.64	-	-
Approached by a gang member to join	.61	-	-
Spray painted gang signs	.53	-	-
Carried weapon to protect self	.41	.41	-
Wore gang colors	-	.66	-
Made gang hand signs	-	.65	-
Friends joined a gang	-	.64	-
Gang activity in neighborhood	-	.60	-
Household member joined gang	-	.43	-
Delivered drugs for gang	-	-	.89
Sold drugs for a gang	-	•	.89
Member of a gang	.47	-	.49
Leader of a gang	-	-	.42
Variance accounted for	32.9%	9.7%	7.6%

 Table 1

 Rotated Factor Loadings of the Gang Membership Inventory

Note: Dashes indicate loadings of less than .40.

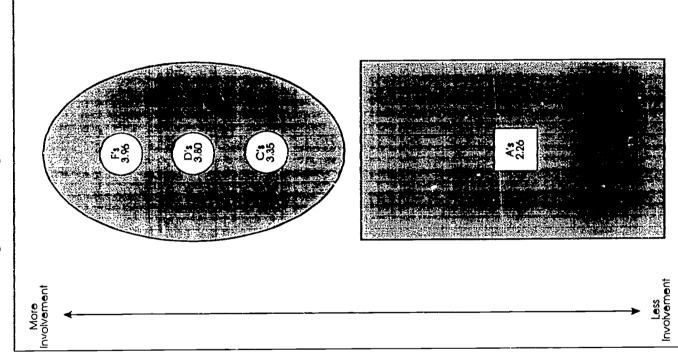




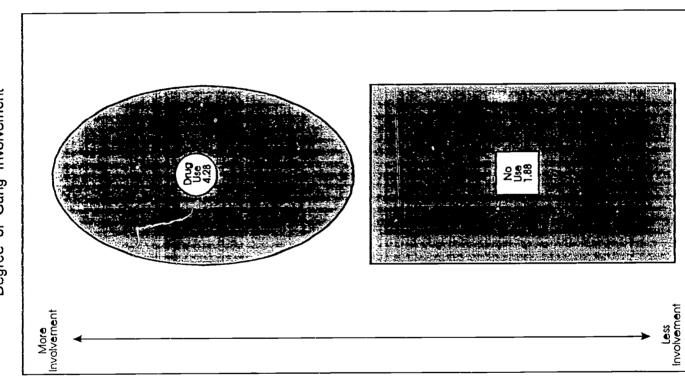
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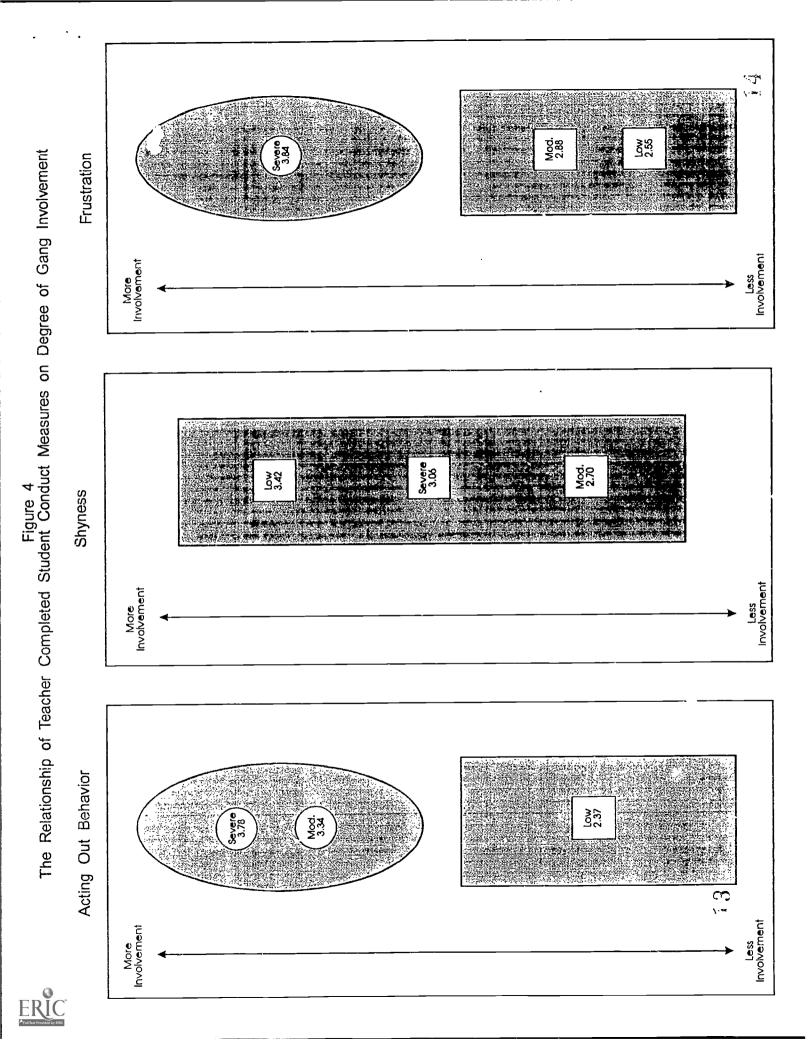
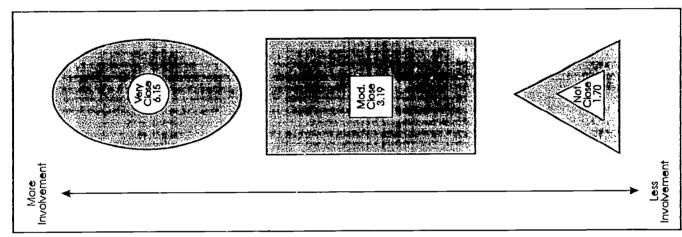


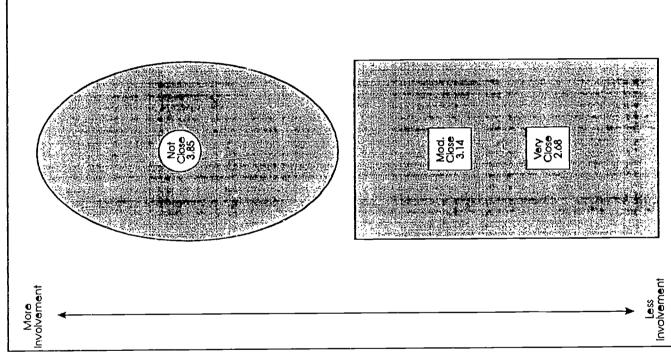


Figure 5 Effects of Closeness to Gangs on Degree of Gang Involvement



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Appendix



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# GANG MEMBERSHIP INVENTORY

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# GANG MEMBERSHIP INVENTORY

We are interested in how much you and your friends are affected by gangs. By gangs, we mean any street club that carries a name, wears colors, and represents. Please check one box for each question.

	$\square$
In the last ;/ear: Yes	s No No
1. Was there gang activity in your neighborhood?	
2. Were you approached by a gang member to join a gang?	
3. Were you beaten up by a gang member because you didn't want to join a gang?	
4. Did any of your friends join a gang?	
5. Did anyone in your household join a gang?	
6. Were you a member of a gang?	
7. Did you wear gang colors on purpose?	
8. Did you make gang hand signs on purpose?	
9. Did you take part in a fight representing a gang?	
10. Did you spray paint gang signs on a wall?	
11. Did you deliver drugs for a gang	
12. Did you carry a weapon to protect yourself?	
13. Die you hurt a gang member in a fight?	
14. Die you sell drugs for a gang?	
15. Did you become a leader of a gang?	



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# Supplemental Survey Questions

# Family Closeness Scale

In the last year:	Almost always	Sometimes	Almost
I felt close to my family.		▫⋌	Nº N
My family offered me help when I was in a bad situation.	Ĺ		$\langle \rangle$
I asked family members for help.			
I felt I could be myself around family members.	ET .	$\left( \left( \mathcal{P} \right) \right)$	
I felt it was important to go along with family members.			
Gang Closeness Sc	ale		
In the last year:	Almost always	Sometimes	Almost never
Gang members offered me help when I was in a bad situation.			
I asked gang members for help.			
I telt I could be myself around gang members.			
Helt it was important to go along with gang members.			
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