

DOCUMENT RESUME

ED 371 290

CG 025 592

AUTHOR Erdley, Cynthia A.; Asher, Steven R.  
 TITLE Linkages between Aggression and Children's Legitimacy of Aggression Beliefs.  
 PUB DATE Aug 93  
 NOTE 39p.; Paper presented at the Annual Meeting of the American Psychological Association (101st, Toronto, Ontario, Canada, August 20-24, 1993).  
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Aggression; Antisocial Behavior; Elementary Education; \*Elementary School Students; Peer Evaluation; Prosocial Behavior; Questionnaires; Self Evaluation (Individuals); Social Behavior; Student Attitudes; \*Student Behavior; Student Characteristics; \*Value Judgment

ABSTRACT

To determine whether Slaby and Guerra's (1988) measure of aggression would reliably assess younger children's belief about aggression and whether children's belief about the legitimacy of aggression relates to their self-reports of it and to their levels of aggression as evaluated by peers, 781 fourth and fifth graders were asked to complete an adapted questionnaire assessing their beliefs about the legitimacy of aggression. Children also viewed a series of hypothetical ambiguous provocation vignettes and answered questions about the situations. Two to three months afterwards, peer evaluations of children's aggressive, withdrawn, and prosocial behaviors were obtained. The children were then classified as low, medium, or high in their endorsement of the legitimacy of aggression. The high-legitimacy group was consistently more aggressive than the average-legitimacy group, which was more aggressive than the low-legitimacy group. Peers evaluated high-legitimacy children as most aggressive, average-legitimacy ones as less, and low-legitimacy children as least aggressive. High-legitimacy children were significantly less likely to choose withdrawal or prosocial acts as their most likely response to provocation. The adapted legitimacy of aggression questionnaire provides a reliable instrument for measuring children's thoughts about aggression, and beliefs about the legitimacy of aggression are significantly related to behavior.  
 (MSF)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 371 290

Linkages between Aggression and Children's Legitimacy  
of Aggression Beliefs

Cynthia A. Erdley

University of Maine

Steven R. Asher

University of Illinois at Urbana-Champaign

Paper presented in the symposium, "Social Relationships, Social Beliefs, and Aggression" (Steven R. Asher, Chair) at the annual meeting of the American Psychological Association, August 20-24, 1993, Toronto, Ontario, Canada.

Please address correspondence to Cynthia A. Erdley, Department of Psychology, University of Maine, 5742 Little Hall, Orono, ME 04469-5742.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C. Erdley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

025592



## Linkages Between Aggression and Children's Legitimacy of Aggression Beliefs

Several studies point to the possibility that aggressive children believe that aggressive behavior is justified. For example, Bandura (1979, 1986) reported that individuals who aggress typically justify their negative actions in various ways, such as blaming the victim. In other work investigating reactions to aggressive behavior, Boldizar, Perry, and Perry (1989) asked children to respond to hypothetical situations in which they directed aggressive acts toward peers. Those children who were aggressive, as rated by peers, were less apt than their nonaggressive peers to make negative self-evaluations following aggressive behavior. A study by Perry and Bussey (1977) also provides relevant data. Children were given the opportunity to reward themselves after being led to believe that they had hurt another child. Perry and Bussey found that aggressive children rewarded themselves more than did nonaggressive children. Thus, for aggressive children, the injury of another child elicited positive self-reactions.

Even more direct evidence concerning children's beliefs about the appropriateness of aggression comes from a study of 15- to 18-year-old adolescents by Slaby and Guerra (1988). Slaby and Guerra administered a six-item true/false measure that assessed individuals' beliefs about whether aggression is acceptable (e.g., It's o.k. to hit someone if he or she hits you first). Adolescents who were highly aggressive, as assessed by teachers, were more likely than their nonaggressive counterparts to believe that aggression is legitimate.

One purpose of our study was to learn whether adapting Slaby and Guerra's (1988) measure for younger children would result in a reliable assessment of children's beliefs about the legitimacy of aggression. A second purpose was to learn whether children's beliefs about the legitimacy of aggression relate to their self-reports of aggression and to their levels of aggression as evaluated by peers.

## Method

### Subjects

Participants were 781 children recruited from 37 fourth- and fifth-grade classrooms in six elementary schools in two small Midwestern cities. A total of 400 boys and 381 girls (377 fourth graders and 404 fifth graders) were involved. (Parents of only three potential participants denied consent.) Children's mean age was 9.9 years. The ethnic composition of the sample was 64% Caucasian, 28% black, 4% Hispanic, and 4% Asian.

### Measures

Legitimacy of aggression beliefs. Children completed a 16-item questionnaire which assessed their beliefs about the legitimacy of aggression (see Figure 1). The questionnaire was an adaptation of Slaby and Guerra's (1988) 6-item legitimacy of aggression subscale for adolescents. Several modifications were made. First, the wording of some of the items was simplified to be appropriate for younger children. For example, the Slaby and Guerra item, "It's really not o.k. to hit someone just because he or she insults you" was changed to "It's o.k. to hit someone if he or she does something mean to you." This revision simplified the wording and eliminated the necessity for children to think in terms of double negatives. Second, instead of answering true/false, a 1 (really disagree) to 5 (really agree) scale was used to allow for more variability in responses. Third, a wider variety of contexts that might evoke aggression was included. To do this, the stem "It's o.k. to hit someone ..." was paired with eight different ending clauses (e.g., "to get even," "to get what you want," and "to protect yourself"). Eight contexts were used to include various situations that may be meaningful to children and to increase the internal reliability of the scale. Finally, in addition to the stem "It's o.k. to hit someone ...," the stem "It's o.k. to say something mean to someone..." was paired with each of the eight ending statements. This enabled us to include beliefs about both physical and verbal aggression. The total set of 16 items was randomly ordered.

The psychometric characteristics of the legitimacy of aggression questionnaire were examined. A principal components factor analysis (varimax rotation) of the legitimacy of aggression measure revealed that the 16 items loaded on one factor with an eigenvalue of 8.28 (see Table 1). This factor accounted for 52% of the variance. In addition, the coefficient alpha for the 16 items comprising the legitimacy of aggression questionnaire was .94, suggesting that these 16 items form a very reliable scale. A child's legitimacy of aggression score was the mean rating given to the 16 items.

Self-reported aggression. Children's self-reported aggression was examined by showing children a series of hypothetical ambiguous provocation situations and asking children how they would respond. This kind of situation was selected because it is a situation that tends to elicit high levels of aggression, especially among children who are prone to engage in aggressive activity (Dodge, 1980; Dodge & Frame, 1982).

In this study, children responded to ten ambiguous provocation vignettes (see Figure 2 for a sample vignette). Each vignette described a hypothetical situation in which a same-sex peer does something that brings harm to the subject (e.g., milk is spilled on the child), but it is not clear whether the peer has caused the harm on purpose or by accident.

After each vignette, children answered four questions. The first two questions assessed children's judgments regarding the protagonist's intent. In Question 3, children reported how they would respond to the provocation. First, they answered "no," "maybe," or "yes" to each of the behavioral alternatives. The behavioral alternatives included two aggressive responses - one physical (e.g., pour milk on the boy's back the next day) and one verbal (e.g., say something mean to him); two withdrawn responses - one passive (e.g., ignore it) and one avoidant (e.g., leave the table); and two prosocial responses - one involving repairing the problem created by the protagonist (e.g., ask the teacher to get a towel), and one requesting clarification about why the act occurred (e.g., ask him how it happened). After rating the behaviors, children were instructed to

circle the one behavior they thought they would be most likely to do in response to the provocation.

In Question 4, children were asked if the protagonist should be punished, and they responded on a 3-point scale with 0 = "not at all," 1 = "a little," and 2 = "a lot." It was hypothesized that children who believe aggression is legitimate would be more likely to think that punishment was called for to deal with the harmful act.

Peer assessment of aggressive behavior. To test further the validity of the legitimacy of aggression measure, two to three months after children had completed the legitimacy of aggression and ambiguous provocation questionnaires, we obtained peer evaluations of children's aggressive, withdrawn, and prosocial behavior in everyday school life. A total of twelve items were used (Rockhill & Asher, 1992), with the aggression, withdrawal, and prosocial subscales each consisting of four items (see Figure 3). The class roster appeared underneath each item, and children were asked to circle the names of all of those children who fit the item description. Children's scores for each factor were the mean proportion of times they were nominated for each of the items comprising the factor. To normalize the distribution of these factor scores, an arcsine transformation was done. Finally, the aggressive, withdrawn, and prosocial scores were standardized by classroom.

To investigate the relation between children's beliefs about aggression and their self- and peer-reported behavior, children were classified as low, average, or high in their endorsement of the legitimacy of aggression. The low-legitimacy group had a legitimacy score that was more than one standard deviation below the mean for the entire sample. The high-legitimacy group had a legitimacy score that was greater than one standard deviation above the mean. The remaining children were classified as average in their beliefs about the legitimacy of aggression. Figure 4 shows the number of children in each group and the groups' mean scores on the legitimacy of aggression questionnaire.

## Results

It is interesting to note that for all of the dependent variables that assessed manifestations of children's aggressiveness, the high-legitimacy group was consistently more aggressive than the average-legitimacy group, which in turn was more aggressive than the low-legitimacy group. Specifically, on the ambiguous provocation vignettes, the high-legitimacy group rated aggressive responses higher, more often selected aggression as their most likely response to provocation, and believed the protagonist deserved a greater amount of punishment. In addition, the average-legitimacy group was significantly more aggressive in these responses than was the low-legitimacy group (see Figures 5, 6, and 7).

In further support of the connection between children's legitimacy of aggression beliefs and their aggressive behavior are the findings from peer assessments of children's everyday aggressive behavior (see Figure 8). Children in the high-legitimacy group were evaluated by peers as the most aggressive. Average-legitimacy children were judged to be less aggressive than the high-legitimacy group, but more aggressive than the low-legitimacy group. Finally, low-legitimacy children were viewed as the least aggressive. Thus, children's beliefs about the appropriateness of aggression are related to their actual aggressive behavior among peers as well as to their self-reported aggressive responses to ambiguous provocations.

The relation of children's legitimacy of aggression beliefs to two kinds of nonaggressive behavior, withdrawn and prosocial behavior, was also investigated. On the ambiguous provocation vignettes, the high-legitimacy group gave significantly lower ratings to both withdrawn and prosocial responses (see Figures 9 and 10). Furthermore, the high-legitimacy group was less likely to select withdrawn and prosocial behavior as their most likely response to provocation (see Figures 11 and 12). The average- and low-legitimacy groups were similar in their withdrawn and prosocial responses, with the only exception being that the average-legitimacy group

was less likely to choose prosocial responses than was the low-legitimacy group. These results suggest that although the average-legitimacy group is similar to the low-legitimacy group in their ratings of nonaggressive responses, they are somewhat less apt ultimately to select a prosocial response to provocation. However, this difference can be accounted for by the fact that the average-legitimacy group was more likely than the low-legitimacy group to choose an aggressive response as their most likely reaction to provocation. Since the average-legitimacy group sometimes endorsed aggressive responses, this decreased the number of times they were free to endorse prosocial responses.

According to peer ratings of everyday nonaggressive behavior, the low-legitimacy group was more withdrawn than both the average- and high-legitimacy groups, who did not differ in peer-assessed withdrawn behavior (see Figure 13). On prosocial characteristics, the high-legitimacy group was viewed as less prosocial than the low-legitimacy group, but the average-legitimacy group did not vary significantly from the other two groups (see Figure 14).

#### Discussion

The legitimacy of aggression questionnaire used in this study provides a reliable and valid instrument for measuring children's thoughts about aggression. It is clear that children's beliefs are related to their behavior. Children who strongly believe in the legitimacy of aggression are more likely to engage in aggression and less apt to be prosocial or withdrawn with peers. In contrast, children who think that aggression is unjustified are quite prosocial and not aggressive. Interestingly, the low-legitimacy group was judged by peers to be the most withdrawn among the groups in their everyday behavior. Perhaps in some situations these children's beliefs about the illegitimacy of aggression lead them to withdraw. Nevertheless, the low-legitimacy group was evaluated by peers as fairly prosocial. Finally, the average-legitimacy group appears to be relatively prosocial. Their beliefs that aggression is sometimes justified perhaps



contribute to the finding that they are more aggressive than their low-legitimacy counterparts. However, compared to the low-legitimacy group, the average-legitimacy group is equally prosocial, but less withdrawn. These results suggest that the average-legitimacy children are fairly prosocial but will sometimes be aggressive, though not to the more extreme degree of the high-legitimacy group.

Although the results show that there are linkages between children's behavior and their legitimacy of aggression beliefs, this study does not indicate whether beliefs contribute to behavior, or if children act in particular ways and then form attitudes that support such behavior. An important direction for future research would be to explore how these normative beliefs about aggression are developed and transmitted. It seems likely that children's beliefs about the legitimacy of aggression are influenced by multiple sources, including mothers, fathers, siblings, friends, and the media.

The present study and the earlier study by Slaby and Guerra (1988) indicate that beliefs about the legitimacy of aggression are significantly related to behavior. Therefore, when attempting to modify children's aggressive behavior, it may be important to address their attitudes about aggression. A recent intervention study by Guerra and Slaby (1990) supports the notion that modifying individuals' beliefs about aggression does affect their behavior. In this study, adolescents incarcerated for offenses involving aggression participated in a 12-session intervention that focused on several cognitive factors identified as correlates of aggression, including beliefs about the legitimacy of aggression. The results of this intervention were encouraging, since those adolescents who participated showed decreased endorsement of beliefs supporting aggression, decreased aggressive behavior, and increased skills in solving social problems. However, following their release from the institution, the treatment group did not have a significantly lower recidivism rate than did the nontreatment control groups.

It must be recognized that modifying attitudes about aggression is apt to be quite challenging, particularly if individuals are in an environment that reinforces antisocial behavior. Especially as children get older, they are likely to adopt approaches to the social world that become solidified through years of experiences with peers. Perry, Perry, and Rasmussen (1986) have found that for many aggressive children, aggression brings a variety of instrumental rewards, so aggression may be viewed quite positively. Perhaps future intervention efforts would be potentially more successful, especially in the long term, if they were attempted with children at earlier ages (i.e., preschool) before thought patterns become relatively stable (see Zahavi & Asher, 1978, for a relevant intervention effort). In addition, because children might be in a peer group that encourages aggression, it may be important to conduct interventions with groups of children who might then reinforce one another's prosocial behavior and discourage aggressive behavior.

Finally, we would like to suggest that researchers doing interventions aimed at reducing aggression assess not only changes in children's behavior but also changes in their beliefs about the legitimacy of aggression. Hopefully the measure we have presented here, along with the measure developed by Slaby and Guerra (1988), will prove useful toward this goal.

## References

- Bandura, A. (1979). Psychological mechanisms of aggression. In M. von Cranach, K. Foppa, Lepenies, & D. Ploog (Eds.), Human ethology: Claims and limits of a new discipline (pp. 316-379). Cambridge: Cambridge University Press.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Boldizar, J. P., Perry, D. G., & Perry, L. C. (1989). Outcome values and aggression. Child Development, 60, 571-579.
- Dodge, K. A. (1980). Social cognition and children's aggressive behavior. Child Development, 51, 162-170.
- Dodge, K. A., & Frame, C. L. (1982). Social cognitive biases and deficits in aggressive boys. Child Development, 53, 620-635.
- Guerra, N. G., & Slaby, R. G. (1990). Cognitive mediators of aggression in adolescent offenders: 2. Intervention. Developmental Psychology, 26, 269-277.
- Perry, D. G., & Bussey, K. (1977). Self-reinforcement in high- and low-aggressive boys following acts of aggression. Child Development, 48, 653-657.
- Perry, D. G., Perry, L. C., & Rasmussen, P. (1986). Cognitive social learning mediators of aggression. Child Development, 57, 700-711.
- Rockhill, C. M., & Asher, S. R. (1992, April). Peer assessment of the behavioral characteristics of poorly accepted boys and girls. Paper presented at the meeting of the American Educational Research Association, San Francisco.

Slaby, R. G., & Guerra, N. G. (1988). Cognitive mediators of aggression in adolescent offenders: 1. Assessment. Developmental Psychology, 24, 580-588.

Zahavi, S., & Asher, S. R. (1978). The effect of verbal instructions on preschool children's aggressive behavior. Journal of School Psychology, 16, 146-153.

**Figure 1: Questionnaire for Assessing Beliefs About the Legitimacy of Aggression**

**Practice**

	<b>really disagree</b>			<b>really agree</b>	
1. I like to eat pizza.	1	2	3	4	5
2. I like to eat apples.	1	2	3	4	5

---

	<b>really disagree</b>			<b>really agree</b>	
1. It's o.k. to hit someone if you don't like that child.	1	2	3	4	5
2. It's o.k. to say something mean to someone if that child really makes you angry.	1	2	3	4	5
3. It's o.k. to say something mean to someone to get what you want.	1	2	3	4	5
4. It's o.k. to hit someone to protect yourself.	1	2	3	4	5
5. It's o.k. to say something mean to someone to get even with that child.	1	2	3	4	5
6. It's o.k. to hit someone if that child really makes you angry.	1	2	3	4	5

**Figure 1 (continued).**

	<b>really disagree</b>			<b>really agree</b>	
	1	2	3	4	5
7. It's o.k. to say something mean to someone if you don't like that child.	1	2	3	4	5
8. It's o.k. to say something mean to someone if that child does something mean to you.	1	2	3	4	5
9. It's o.k. to hit someone if that child hits you first.	1	2	3	4	5
10. It's o.k. to say something mean to someone to show you can't be pushed around.	1	2	3	4	5
11. It's o.k. to hit someone to get even with that child.	1	2	3	4	5
12. It's o.k. to hit someone if that child does something mean to you.	1	2	3	4	5
13. It's o.k. to say something mean to someone to protect yourself.	1	2	3	4	5
14. It's o.k. to hit someone to get what you want.	1	2	3	4	5
15. It's o.k. to say something mean to someone if that child hits you.	1	2	3	4	5
16. It's o.k. to hit someone to show you can't be pushed around.	1	2	3	4	5

**Table 1.**

**Factor Loading for Each Item and the Correlations of Each Item with the Total Score for the Legitimacy of Aggression Questionnaire**

---

<b>Item</b>	<b>Factor Loading</b>	<b>Item-to-Total Score Correlation</b>
1. It's o.k. to hit someone if you don't like that child.	.61	.61
2. It's o.k. to say something mean to someone if that child really makes you angry.	.78	.60
3. It's o.k. to say something mean to someone to get what you want.	.56	.68
4. It's o.k. to hit someone to protect yourself.	.56	.44
5. It's o.k. to say something mean to someone to get even with that child.	.78	.60
6. It's o.k. to hit someone if that child really makes you angry.	.79	.63
7. It's o.k. to say something mean to someone if you don't like that child.	.71	.61
8. It's o.k. to say something mean to someone if that child does something mean to you.	.79	.67

---

(Table 1 continued on next page.)

Table 1 (continued).

---

Item	Factor Loading	Item-to-Total Score Correlation
9. It's o.k. to hit someone if that child hits you first.	.74	.62
10. It's o.k. to say something mean to someone to show you can't be pushed around.	.75	.59
11. It's o.k. to hit someone to get even with that child.	.81	.66
12. It's o.k. to hit someone if that child does something mean to you.	.81	.68
13. It's o.k. to say something mean to someone to protect yourself.	.67	.54
14. It's o.k. to hit someone to get what you want.	.55	.60
15. It's o.k. to say something mean to someone if that child hits you.	.75	.65
16. It's o.k. to hit someone to show you can't be pushed around.	.76	.60

---



## Figure 2: Example of Ambiguous Provocation Vignettes and Follow-up Questions

Imagine that you are sitting at the lunch table at school, eating lunch. You look up and see another boy coming over to your table with a carton of milk. You turn around to eat your lunch, and the next thing that happens is that the boy spills milk all over your back. The milk gets your shirt all wet.

1. Why did the boy get milk all over your back?
  - A. He slipped on something.
  - B. He just does stupid things like that to me.
  - C. He wanted to make fun of me.
  - D. He wasn't looking and didn't see me.
  
2. Do you think that he got milk all over you:
  - A. on purpose?
  - B. by accident?
  
3. What would you do next after the boy poured milk on you?

A. Ignore it.	no	maybe	yes
B. Say something mean to him.	no	maybe	yes
C. Leave the table.	no	maybe	yes
D. Ask the teacher to get a towel or something.	no	maybe	yes
E. Pour milk on the boy's back the next day.	no	maybe	yes
F. Ask him how it happened.	no	maybe	yes
  
4. Do you think the boy should be:
  - A. punished a lot?
  - B. punished a little?
  - C. not punished?

### Figure 3: Behavior Nomination Items

#### Aggression subscale (alpha = .97)

- Who starts fights?
- Who is mean?
- Who gets mad easily?
- Who hits, pushes, or kicks?

#### Withdrawal subscale (alpha = .83)

- Who likes to be alone a lot?
- Who is easy to push around?
- Who is afraid to join in a group?
- Who is shy?

#### Prosocial subscale (alpha = .95)

- Who is friendly?
- Who shares, takes turns, and cooperates?
- Who is helpful?
- Who has a good sense of humor?

(Rockhill & Asher, 1992)

## Figure 4

### Mean Legitimacy of Aggression Scores for Low-, Average-, and High-Legitimacy Beliefs Groups

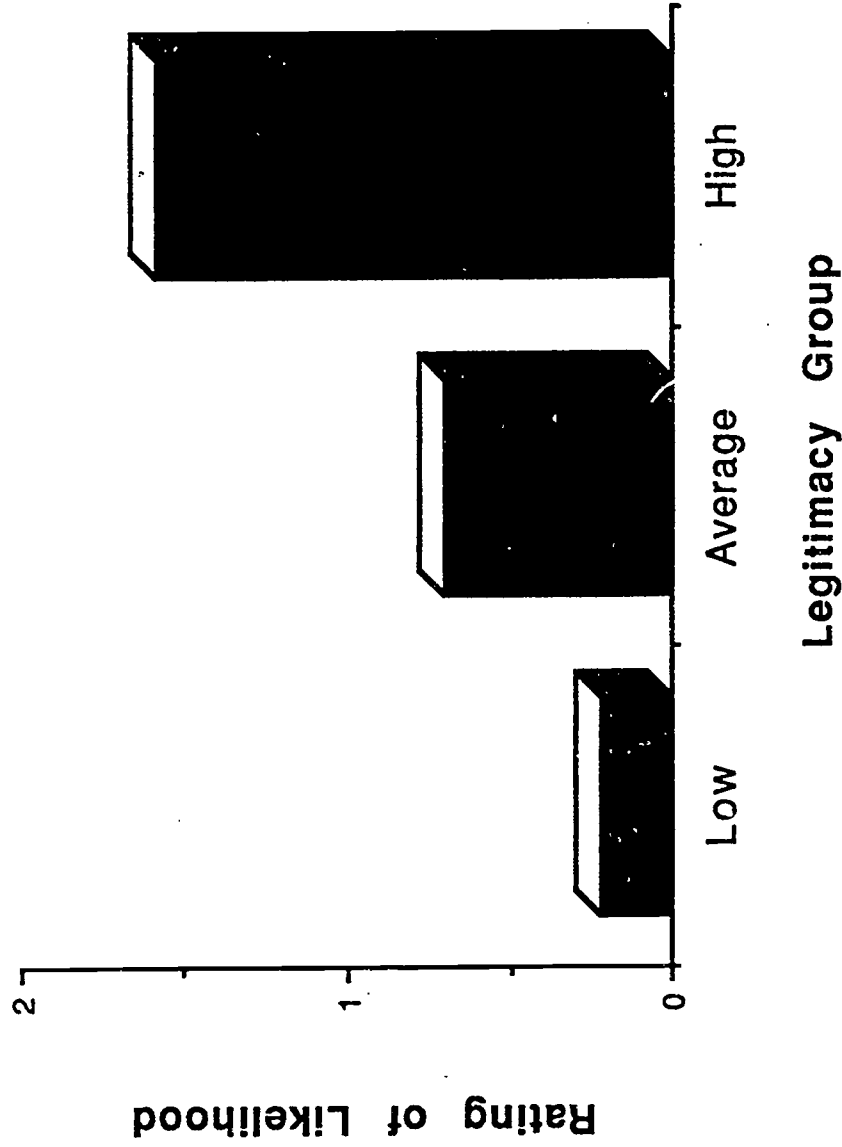
---

Group	n	Mean	Standard Deviation
Low-legitimacy	169	1.25	0.19
Average-legitimacy	482	2.68	0.59
High-legitimacy	130	4.28	0.41

---

Note: Ratings were made of a 1 (really disagree) to 5 (really agree) scale.

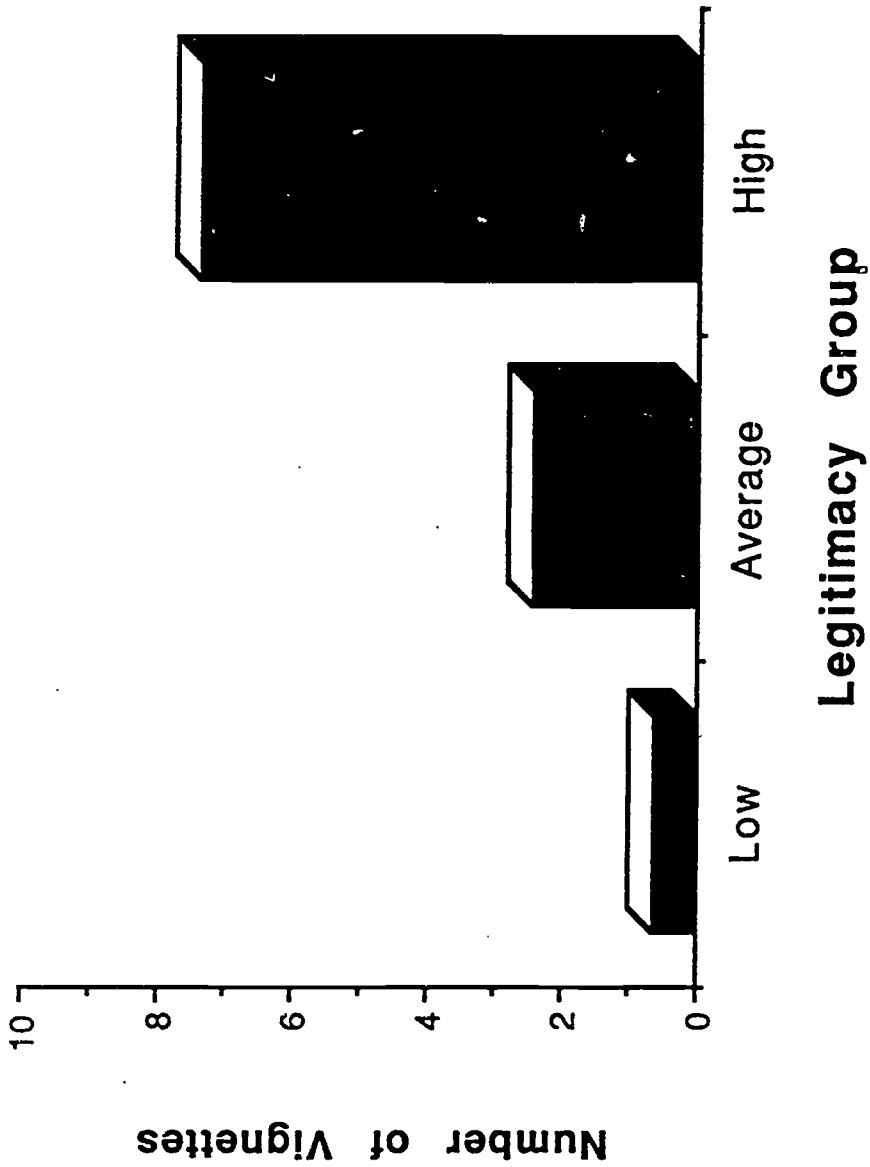
**Figure 5: Likelihood of Responding Aggressively**



**Note.** The three groups differ significantly from one another (Tukey).

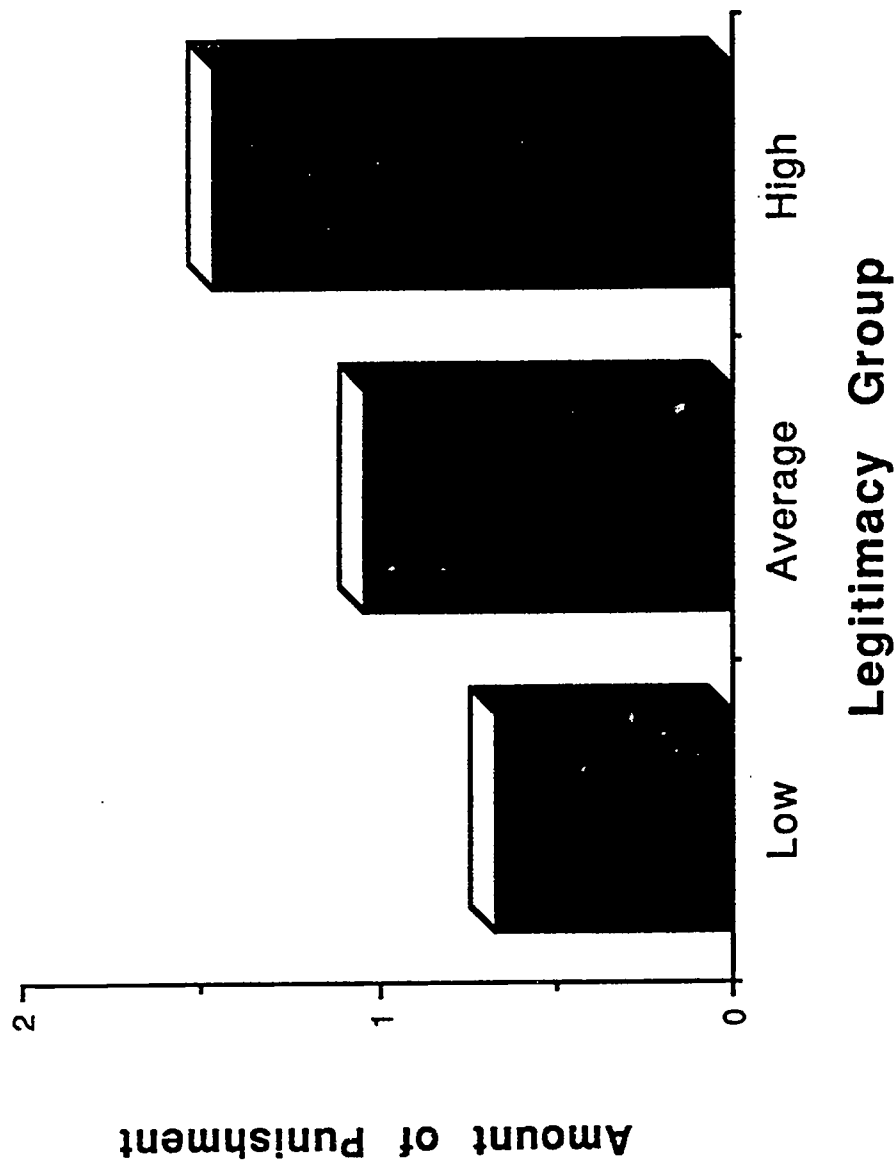
Ratings were made on a 0 (No), 1 (Maybe), 2 (Yes) scale.

**Figure 6: Number of Vignettes for Which Aggression Was the Most Likely Response**



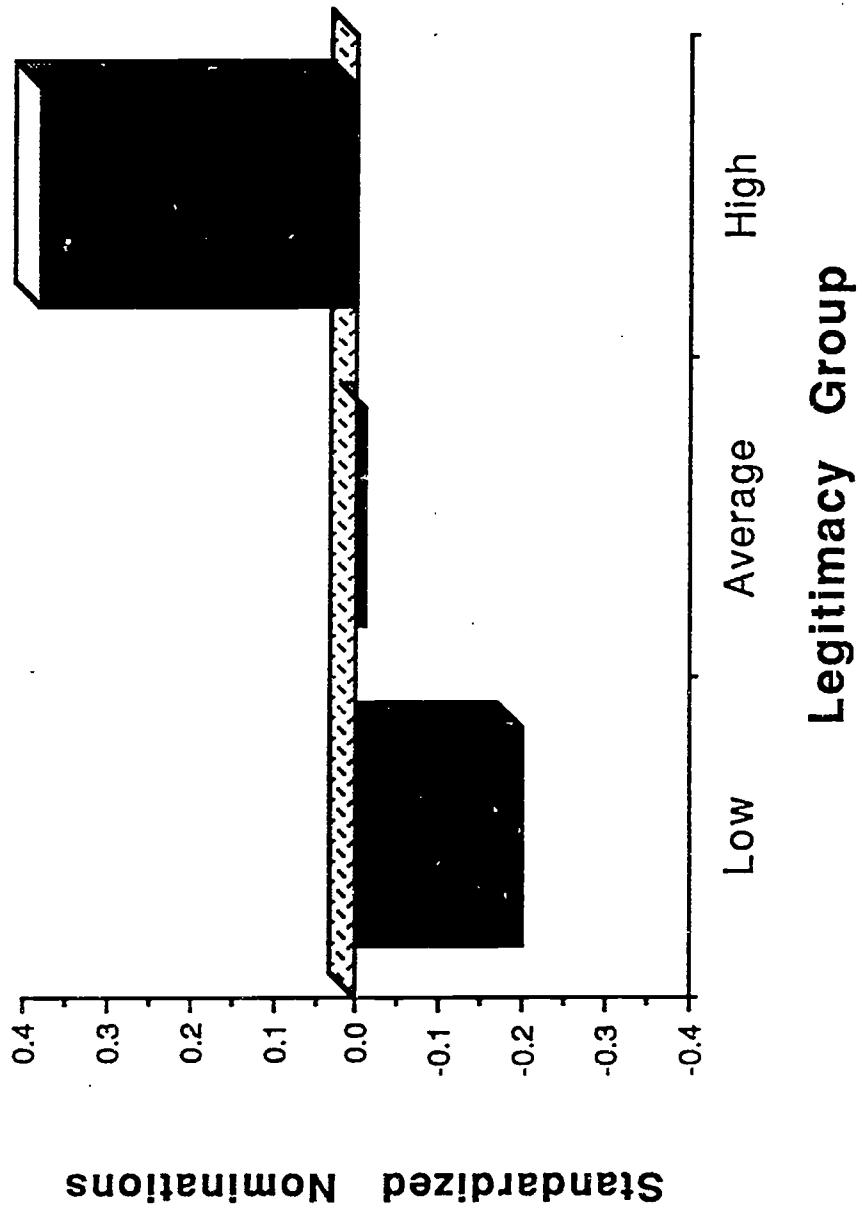
**Note.** The three groups differ significantly from one another (Tukey)

**Figure 7: Amount of Punishment Recommended**



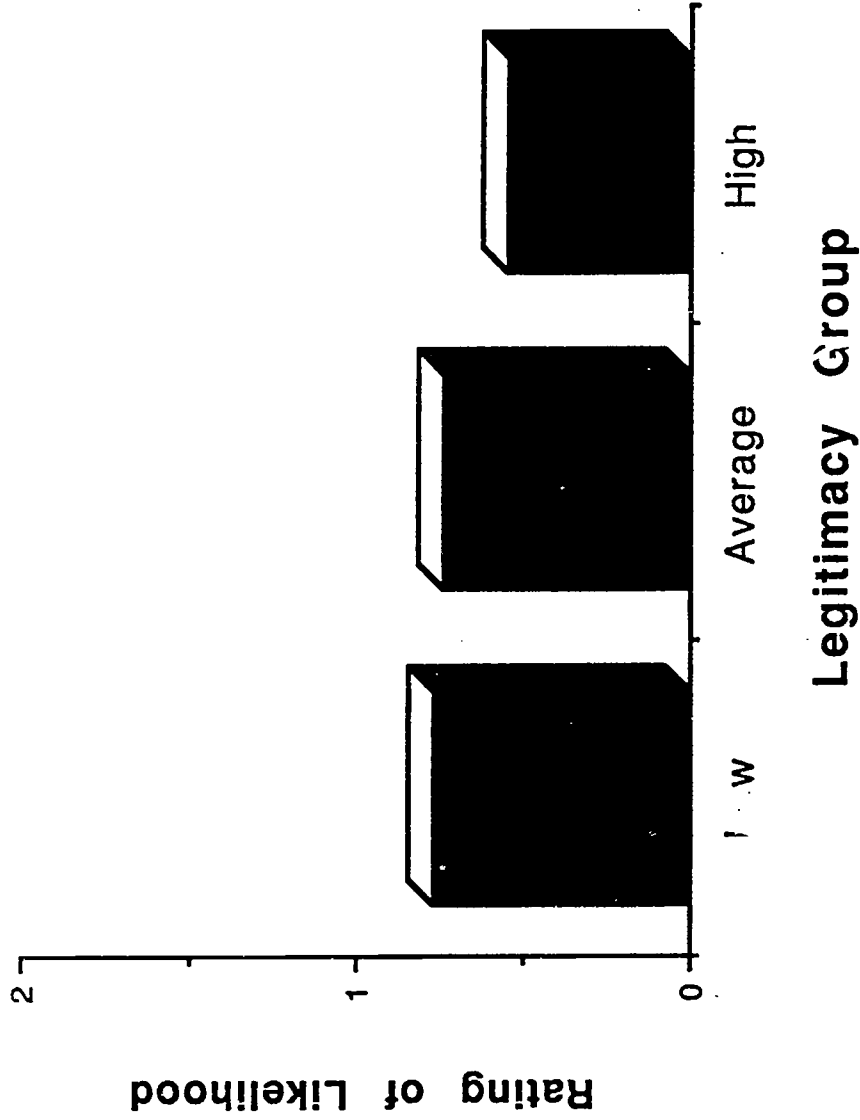
**Note.** The three groups differ significantly from one another (Tukey).  
Ratings were made on a 0 (Not at all), 1 (A little), 2 (A lot) scale.

**Figure 8: Peer Nominations for Aggression**



**Note.** The three groups differ significantly from one another (Tukey)

**Figure 9: Likelihood of Responding With Withdrawn Behavior**

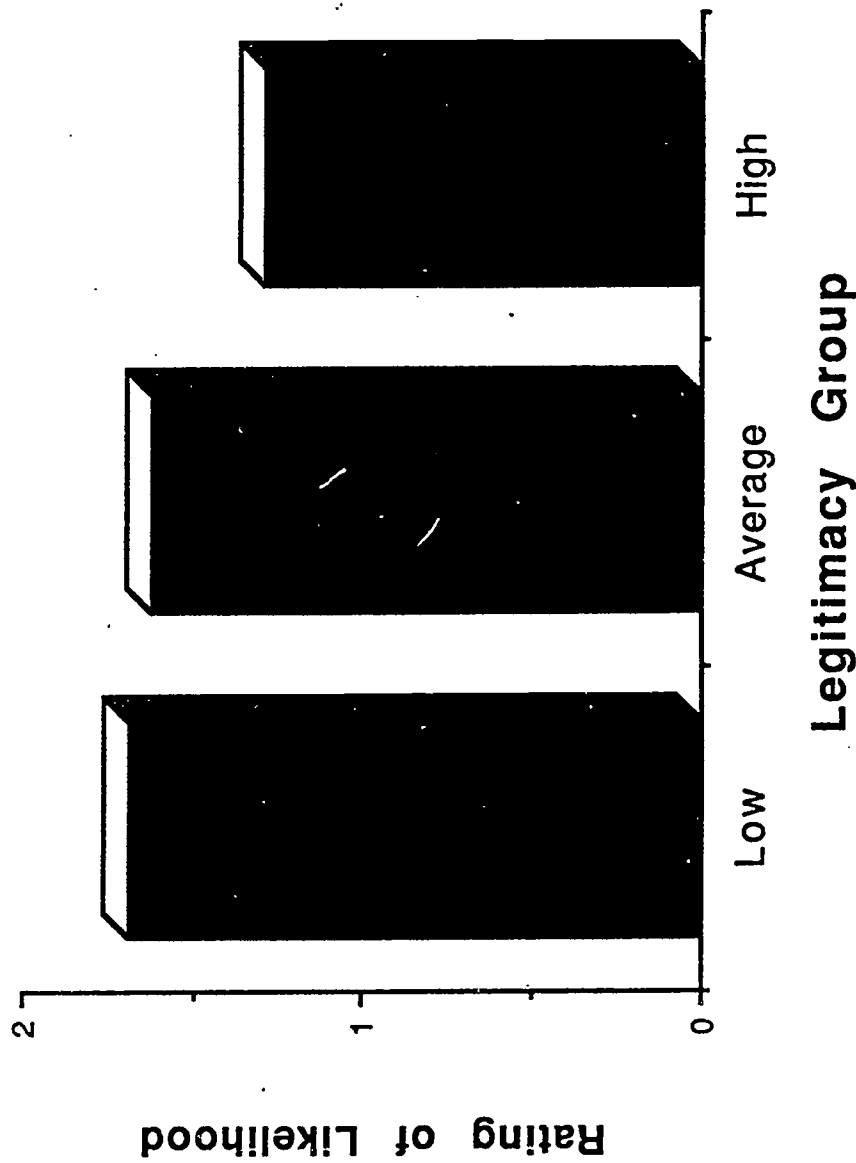


**Note.** Low differs significantly from High; Average differs significantly from High (Tukey).

Ratings were made on a 0 (No), 1 (Maybe), 2 (Yes) scale.



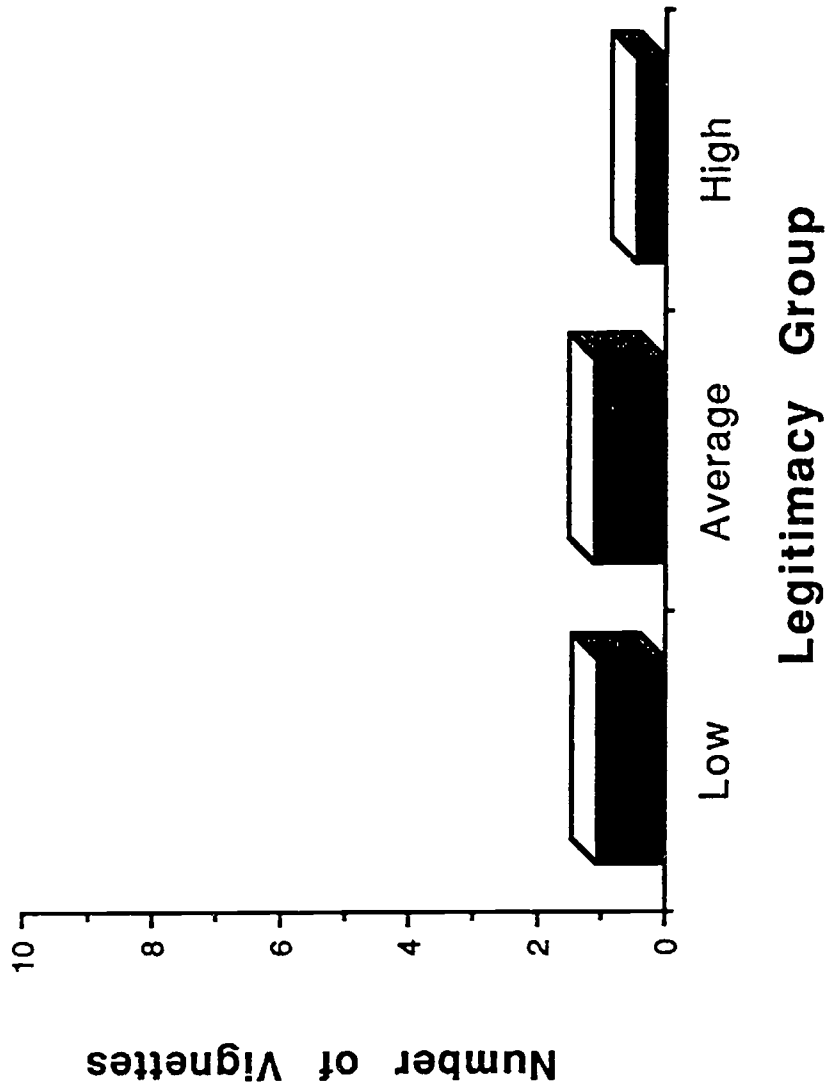
**Figure 10: Likelihood of Responding With Prosocial Behavior**



**Note. Low differs significantly from High; Average differs significantly from High (Tukey).**

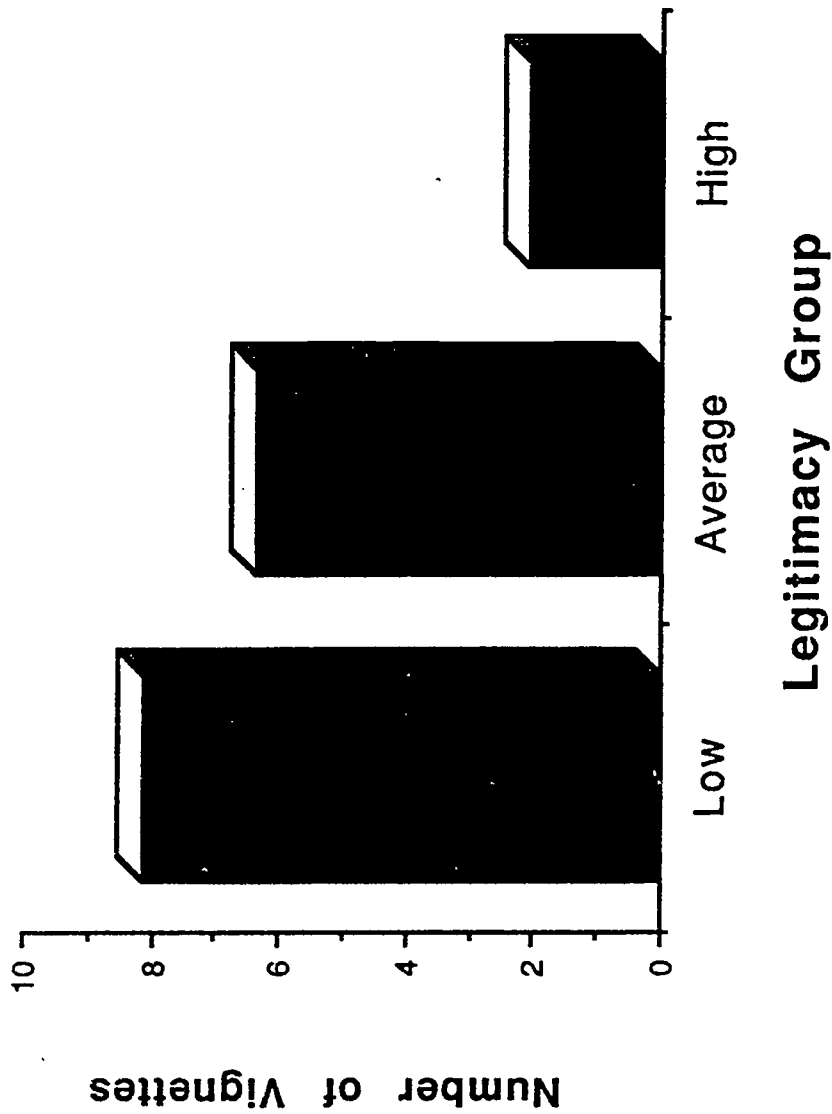
**Ratings were made on a 0 (No), 1 (Maybe), 2 (Yes) scale.**

**Figure 11: Number of Vignettes for Which Withdrawal Was the Most Likely Response**



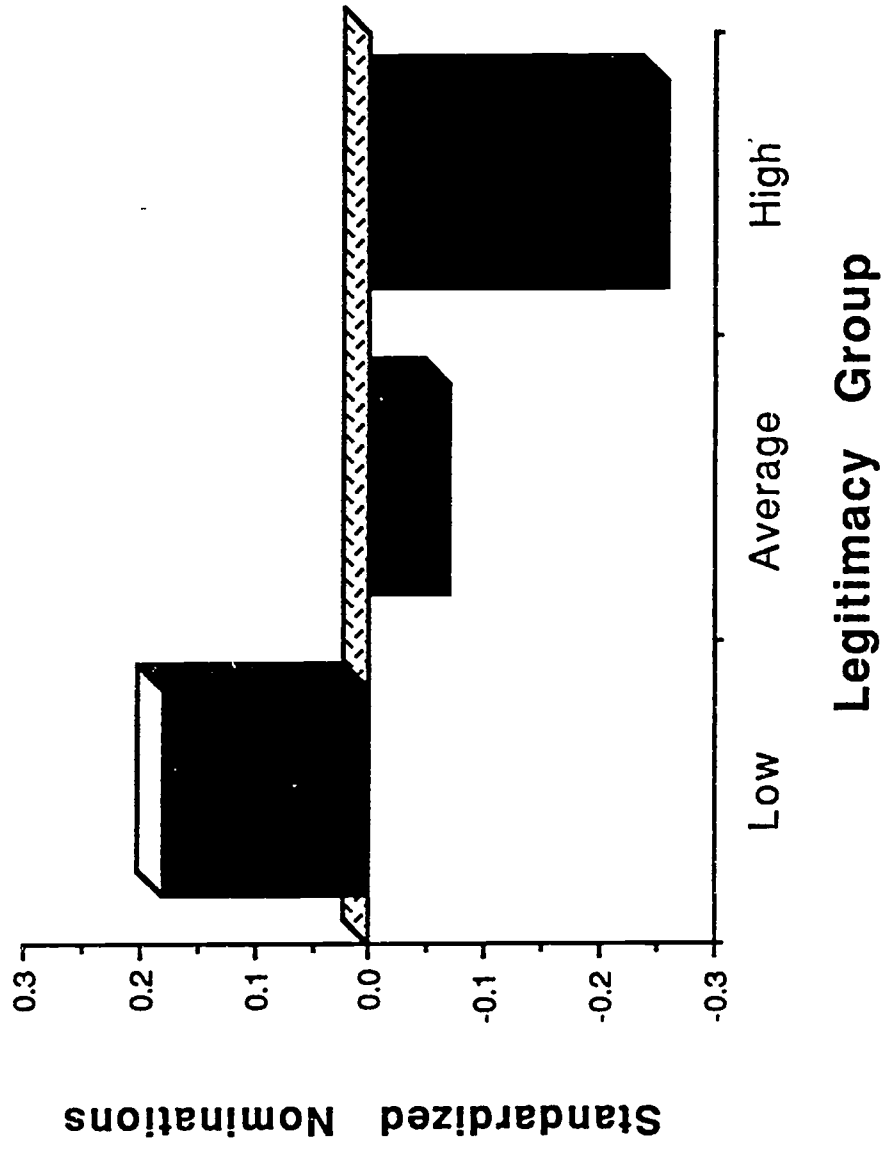
**Note.** Low differs significantly from High; Average differs significantly from High (Tukey).

**Figure 12: Number of Vignettes for Which Prosocial Behavior Was the Most Likely Response**



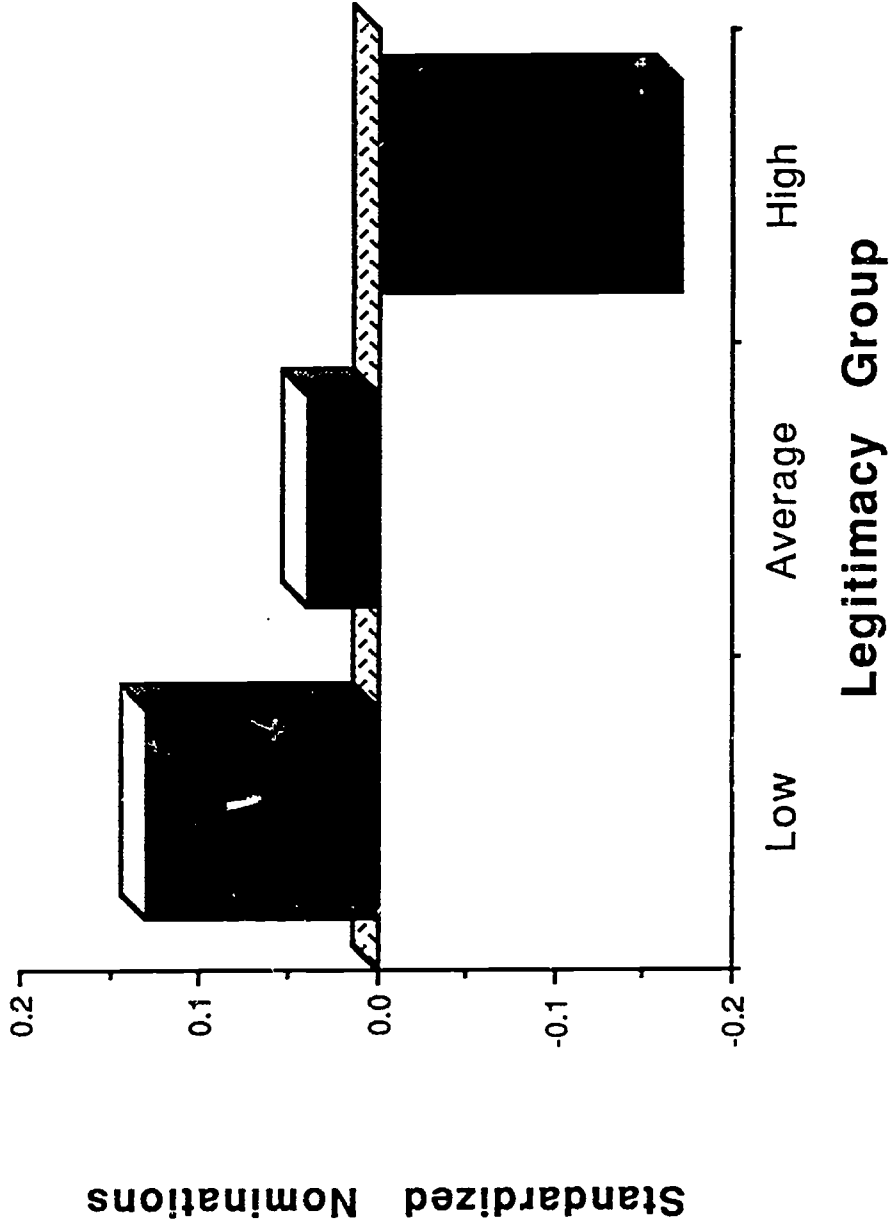
**Note.** The three groups differ significantly from one another (Tukey)

**Figure 13: Peer Nominations for Withdrawn Behavior**



**Note.** Low differs significantly from Average; Low differs significantly from High (Tukey).

**Figure 14: Peer Nominations for Prosocial Behavior**



**Note. Low differs significantly from High (Tukey).**