

Maternal Rules, Child Compliance and Injuries to Preschool Children

University of Rochester School of Nursing
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Background

- Injuries are the leading cause of childhood mortality and morbidity
- Injuries lead to over 600,000 deaths and 16,000,000 emergency department visits annually
- Every year nearly 25% of children seek medical attention for an injury

Background

- Mothers most often rely on direct supervision to protect their children from unintentional injury
- Direct supervision is only a partial solution
- Establishing safety rules and promoting child compliance are believed to be a critical means of protection in the absence of direct supervision
- Unfortunately there is only mixed evidence that safety rules provide protection
- Weakness of the evidence may result from poor methodology

Research Questions

- Do self-reported rules, rule insistence or actual rule enforcement provide protection against unintentional injuries?
- Does reported or observed child compliance with rules provide protection against injuries?
- Are there differences in the predictive value of self-report and direct observation of rule enforcement and child compliance?

Hypotheses

- The number of safety rules reported, mother's rule insistence and rule enforcement would be inversely related to child injuries
- Child compliance would be inversely related to injuries

Methods

- Design: One year longitudinal, descriptive study
- Sample: 278 socio-demographically diverse mothers and their 3-year-old children; 264 at one-year follow-up (95% retention)
- Setting: Sample drawn from 4 pediatric practices in Rochester, NY
- Measurement: Interview and observation

Sample Demographics

Marital Status

Married	43%
Has a partner	72%

Race/Ethnicity

White	40%
Black	54%
Hispanic	6%

Education

Less than high school	10%
High school/some college	63%
College graduate or post graduate	27%

Sample Demographics

Employment – past 12 months

Worked part or full time 12 months	43%
Worked part or full time < 12 months	34%
No employment	23%

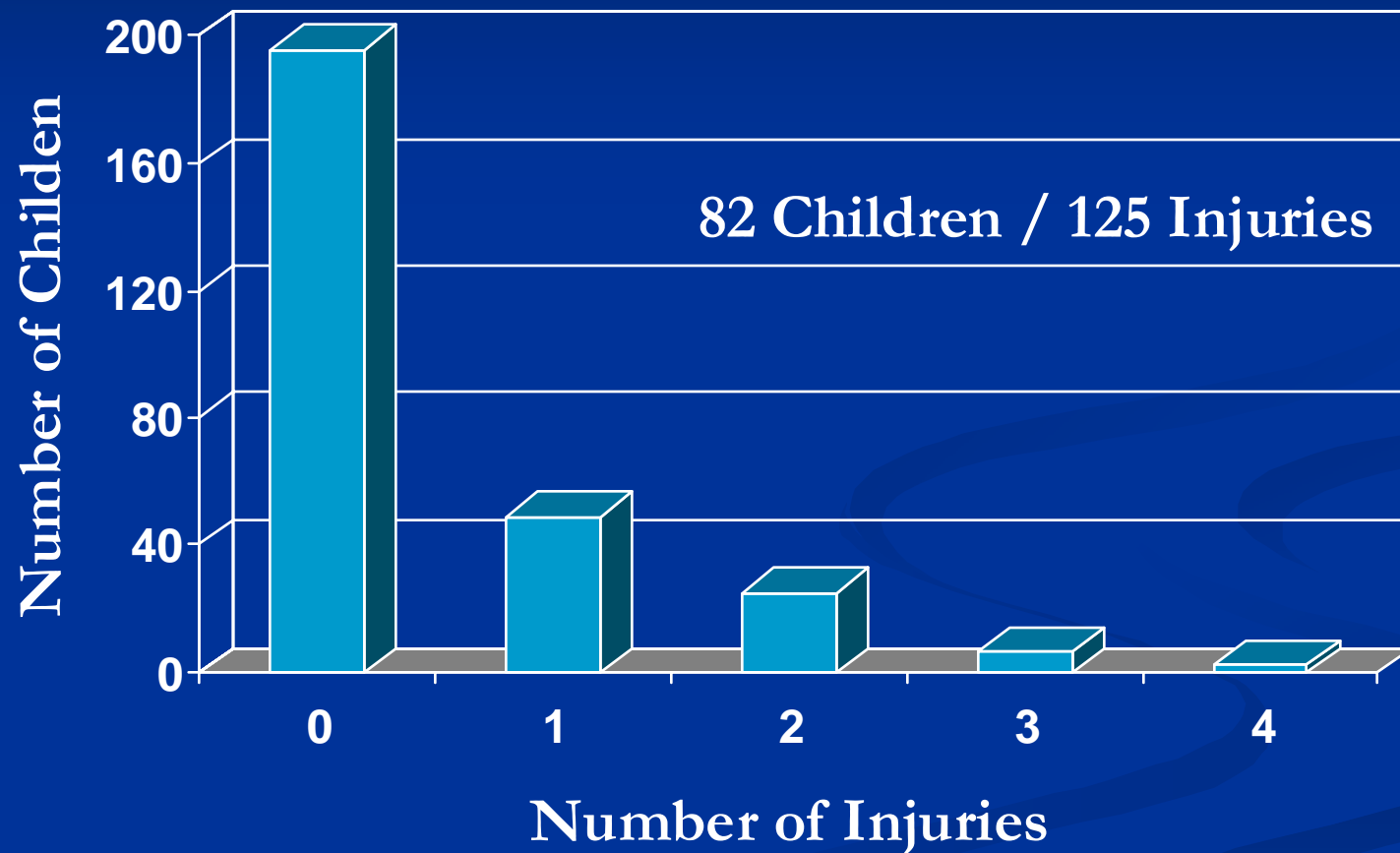
Family Income

< \$25,000	50%
< 133% Federal Poverty Guidelines	49%

Measures

- Self-report of number of rules, rule insistence and child compliance (Gralinski & Kopp, 1993)(Time 1 – Age 3)
- Observed rule enforcement and child compliance (Kochanska, et. al., 2001) (Time 1 – Age 3)
- Number of medically attended injuries between 18 and 48 months by record review and maternal report (Time 2 – Age 4)

Injury Results



Self-Report Measures

	Mean (SD)	Reliability
N Important Rules	15.4 (6.6)	-
Mothers' Insistence Overall	4.14 (.50)	0.75
Mothers' Insistence with Safety Rules	4.67 (.53)	0.77
Child Compliance Overall	3.89 (.50)	0.80
Child Compliance with Safety Rules	4.34 (.54)	0.82

Observation Procedure

- Playroom and living room connected to an observation room
- Five phases: introduction, snack, mother busy, free play and toy clean-up
- Living room with permitted and forbidden toys
- Playroom filled with toys to clean-up

Observation Measures

Reliability

Mother's Involvement

No Interaction .86

Talk/Gentle Guidance .47

Assertive Control .59

Suspended Prohibition .98

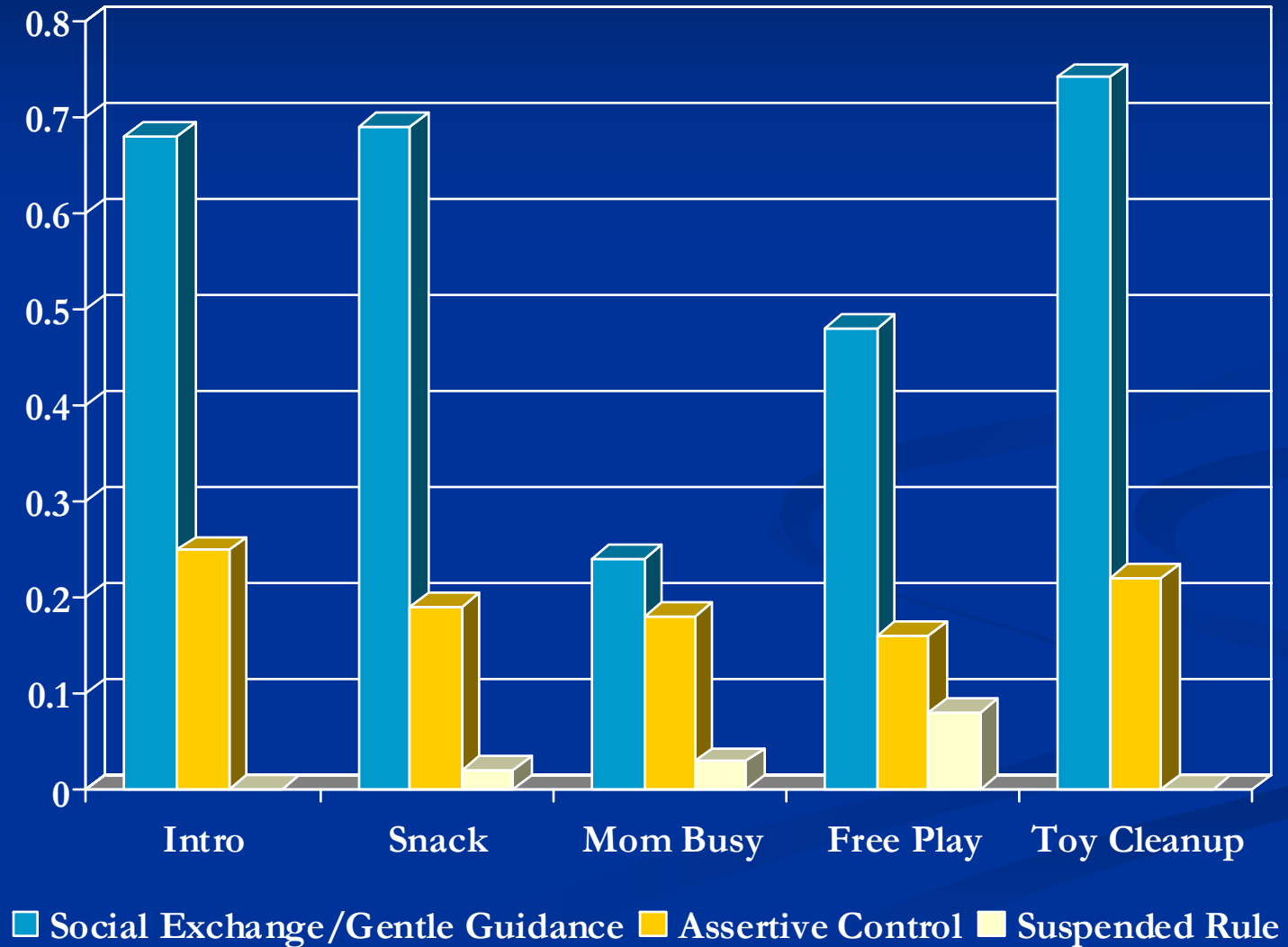
Child Compliance

Committed .89

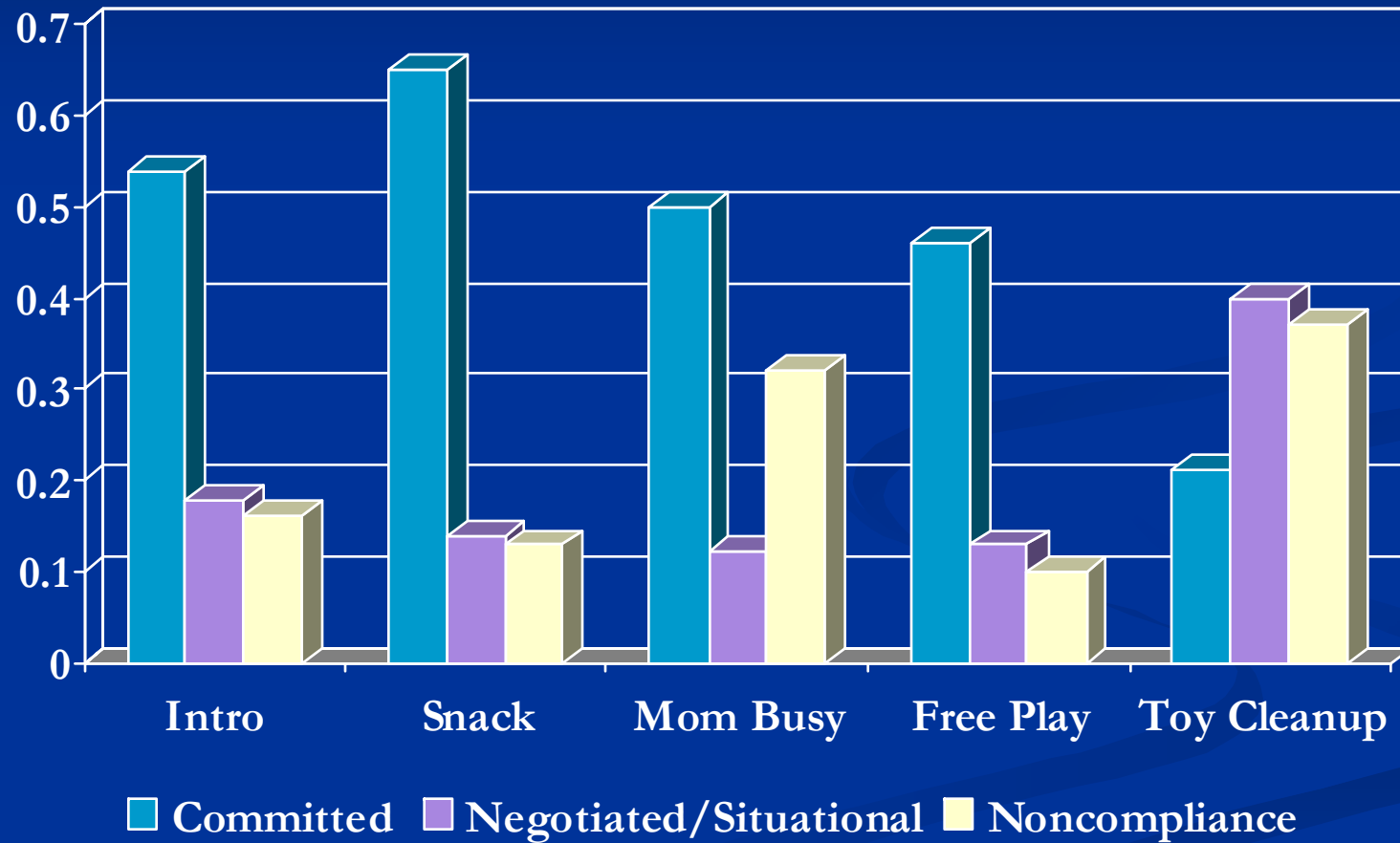
Negotiated/Situational .64

Noncompliance .92

Mother's Involvement



Child Compliance



Rules, Rule Enforcement and Injuries

- None of the self-reported rules measures predicted injuries
- None of the self-reported rules measures related to actual enforcement of the rule in the observation
- Mothers overt suspension of the rule did predict injuries, even after controlling for race, education, SES, neighborhood poverty and child gender ($\beta = .018, p = .029$)

Child Compliance & Injuries

- Mother's assessment of child compliance is not related to child injuries although it is related to observed committed compliance ($r=.14, p=.018$)
- Child committed compliance is inversely related to injuries, after controlling for race, education, SES, neighborhood poverty and gender ($p=-.011, p=.044$)
- Also controlling for child temperament reduced this relationship slightly ($\beta=-.010, p=.06$)

Conclusions

- Self-report rule measures characterize mother's concern with her child's safety and development, but not her actual implementation
- Suspension of the rule reflects the compromises mothers make in what they perceive to be low risk situations
- These compromises are related to the frequency of child injuries
- Child compliance, but only committed compliance, provides protection from injuries

Limitations

- Relatively low number of injuries
- A single direct observation session
- Artificial prohibition measure