

## GUIDED PLAY

### Reference

Hembree, S., & Maas, F. (1996). *24-month guided play coding manual*. Unpublished manual, University of Wisconsin-Madison.

### Secondary References

Belsky, J., & Most, R. K. (1981). From exploration to play: A cross-sectional study of infant free play behavior. *Developmental Psychology, 17*(5), 630-639.

Goldsmith, H. H., Aksan, N., Essex, M., Smider, N. A., & Vandell, D. L. (2001). Temperament and socioemotional adjustment to kindergarten: A multi-informant perspective. In T. D. Wachs & G. A. Kohnstamm (Eds.), *Temperament in context* (pp. 103-138). Mahwah, NJ: Erlbaum.

### Companion Documents

Spiegel, G. (1997). *A study of the relationship between maternal report of infant behavior at 6 months and observation of behavioral inhibition at 15 and 24 months*. Unpublished manuscript, University of Wisconsin-Madison.

Spiegel, G. F. (2003). Child temperament and mother-toddler interaction in a socialization task (Doctoral dissertation, University of Wisconsin-Madison, 2003). *Dissertation Abstracts International, 64*(5-A), 1530.

### Description

The guided play procedure is a 30-minute play session designed to assess (1) children's separations from and reunions with their mothers; (2) children's levels of social, solitary, and pretend play; and (3) children's emotionality and behavior during the procedure. Prior to the start of the play session, children are asked to separate from mother and go to the playroom with research staff. Upon entering the playroom, free play is conducted for 5 minutes, followed by 25 minutes of structured, guided play. At the end of the session, the child is reunited with mother.

The guided play procedure is videotaped for later coding, as follows.

- Separation from mother is rated on a 4-point scale (1 = *easy separation*, 4 = *will not separate*).
- The complexity and cognitive sophistication of the child's level of play during both the free play and guided play components are rated using a 5-step system adapted from Belsky & Most (1981) that includes 1 = *unfocused play*, 2 = *exploratory play*, 3 = *functional/relational play*, 4 = *simple pretend play*, and 5 = *elaborate pretend play*. Free play is coded in 15-second intervals (up to 18 intervals). For guided play, the child's response to each of four standard prompts is coded. Two "other", nonstandard prompts also can be provided. The prompts are designed to involve the child in increasingly higher levels of social and pretend play as the administrator goes from Prompt 1 to Prompt 2 to Prompt 3 to Prompt 4.
- Reunion behavior with mother in terms of anger, pleasure/positive affect, contact, and avoidance is rated on a 4-point scale (0 = *low*, 3 = *high*).
- Eleven indicators of child emotionality observed during the procedure are rated on a 5-point scale (1 = *low*, 5 = *high*). These ratings are adapted from a set of 26 emotionality/temperament ratings that were developed to represent temperament

dimensions that appear on popular questionnaire measures of child temperament (e.g., *Child Behavior Questionnaire, Toddler Behavior Assessment Questionnaire*; Goldsmith et al., 2001).

See Hembree & Maas (1996) for additional information about administration of the guided play procedure, coding of play levels, and definitions of the separation, reunion, and child ratings.

Spiegel (1997, 2003) used the guided play data for her in-lieu-of master's research project and her doctoral research, in conjunction with data from several common protocol measures. We do not have the data sets nor the paper forms from these projects.

### **Administration: 24 months**

The guided play procedure was administered to children ( $n = 117$ ) during the common protocol lab visit at 24 months. Note that similar coding of play levels was done for the solitary play procedure conducted for the common protocol at 15, 24, and 36 months.

### **Interrater Reliability**

Two raters scored 12 (10%) of the guided play videotapes for purposes of calculating interrater reliability. One of two types of reliability statistics, Cohen's kappa coefficient or intraclass correlation, was computed depending on the type of variable. These coefficients are shown in the scoring section below. Kappa coefficients for the separation, reunion, and child emotionality ratings were computed with linear weighting. Kappas for levels of play are unweighted.

### **Scoring**

#### Separation

Higher scores indicate greater difficulty separating from mother prior to the guided play procedure.

#### **GPSEPARA**

$N = 113, M = 1.86, SD = 1.22, \text{range} = 1-4, \text{kappa} = .75$

#### Reunion

Higher scores indicate greater intensity of the indicated affective quality of the child's reunion with mother.

#### Anger = **GPREUANG**

$N = 88, M = 0.02, SD = 0.15, \text{range} = 0-1, \text{kappa} = 1$

#### Pleasure/positive affect = **GPREUPLE**

$N = 88, M = 1.61, SD = 0.90, \text{range} = 0-3, \text{kappa} = .64$

#### Contact = **GPREUCON**

$N = 88, M = 2.03, SD = 0.60, \text{range} = 0-3, \text{kappa} = .89$

#### Avoidance = **GPREUAVO**

$N = 88, M = 0.23, SD = 0.62, \text{range} = 0-3, \text{kappa} = .56$

#### Free Play: Levels of Play

The child's level of play during the free play session was coded for 15-second intervals. Up to 18 intervals could be coded. Scores are adjusted frequencies: # intervals in which the play level was

observed / # coded intervals, multiplied by 18.

Unfocused play = **FPUNFOC**

$N = 110, M = 2.07, SD = 4.25, \text{range} = 0-18, \text{intraclass } r = .79$

Exploratory play = **FPEXPLO**

$N = 110, M = 8.30, SD = 4.50, \text{range} = 0-18, \text{intraclass } r = .95$

Functional/relational play = **FPFUNREL**

$N = 110, M = 6.77, SD = 4.36, \text{range} = 0-16, \text{intraclass } r = .94$

Simple pretend play = **FPSIPRET**

$N = 110, M = 0.76, SD = 1.50, \text{range} = 0-7, \text{intraclass } r = .30$

Elaborative pretend play = **FPELRET**

$N = 110, M = 0.09, SD = 0.38, \text{range} = 0-2.12; \text{intraclass } r \text{ could not be computed because all reliability cases were scored } 0$

### Guided Play: Levels of Play

The child's level of play in response to prompts from the administrator was coded for two play activities, the car and the kitchen. All levels of play in response to each prompt were coded. Scores for highest level of play (car and kitchen) are means of the highest level of play in response to each delivered prompt.

Car, number of prompts delivered = **GPCARNPR**

$N = 117, M = 3.91, SD = 0.76, \text{range} = 1-6, \text{intraclass } r = .93$

Car, highest standard prompt delivered = **GPCARHPR**

$N = 117, M = 3.92, SD = 0.37, \text{range} = 1-4, \text{kappa} = 1$

Car, highest level of play = **GPCARLEV**

$N = 116, M = 3.24, SD = 0.50, \text{range} = 1.50-4.60, \text{intraclass } r = .81$

Car, number of prompts to which child played with other toys = **GPCAROTH**

[Score is adjusted for the number of prompts delivered: # prompts to which child played with other toys / # prompts delivered, multiplied by 6]

$N = 116, M = 0.46, SD = 0.96, \text{range} = 0-4, \text{intraclass } r = .77$

Kitchen, number of prompts delivered = **GPKITNPR**

$N = 117, M = 4.38, SD = 0.88, \text{range} = 3-6, \text{intraclass } r = .73$

Kitchen, highest standard prompt delivered = **GPKITHPR**

$N = 117, M = 3.87, SD = 0.34, \text{range} = 3-4, \text{kappa} = 1$

Kitchen, highest level of play = **GPKITLEV**

$N = 116, M = 3.67, SD = 0.60, \text{range} = 2-5, \text{intraclass } r = .89$

Kitchen, number of prompts to which child played with other toys = **GPKITOTH**

[Score is adjusted for the number of prompts delivered: # prompts to which child played with other toys / # prompts delivered, multiplied by 6]

$N = 117, M = 0.39, SD = 0.90, \text{range} = 0-6, \text{intraclass } r = .88$

### Overall Highest Levels of Play

The child's highest level of play throughout the guided play sessions with the car and the kitchen, either in response to a prompt or independent of a prompt, was coded as the highest

level of play for that activity.

Car, overall highest level of play = **GPCARHI**  
 $N = 117, M = 4.07, SD = 0.75, \text{range} = 2-5, \text{kappa} = .86$

Kitchen, overall highest level of play = **GPKITHI**  
 $N = 117, M = 4.68, SD = 0.57, \text{range} = 2-5, \text{kappa} = .76$

Child's Emotionality

Higher scores indicate greater intensity of the indicated temperamental or emotionality dimension during the free play and guided play segments.

Positive affect = **GPNA**  
 $N = 117, M = 2.91, SD = 1.00, \text{range} = 1-5, \text{kappa} = .76$

Negative affect = **GPNA**  
 $N = 117, M = 1.17, SD = 0.50, \text{range} = 1-4, \text{kappa} = .45$

Adaptation = **GPADAPT**  
 $N = 117, M = 3.72, SD = 0.93, \text{range} = 2-5, \text{kappa} = .69$

Exploration = **GPEXPLO**  
 $N = 117, M = 2.80, SD = 0.87, \text{range} = 1-5, \text{kappa} = .22$

Social engagement = **GPSOCENG**  
 $N = 117, M = 3.41, SD = 1.06, \text{range} = 1-5, \text{kappa} = .66$

Cooperation = **GPCOOP**  
 $N = 117, M = 3.31, SD = 1.01, \text{range} = 1-5, \text{kappa} = .68$

Compliance = **GPCOMPLY**  
 $N = 117, M = 4.04, SD = 0.67, \text{range} = 2-5, \text{kappa} = .57$

Energy/enthusiasm = **GPENERGY**  
 $N = 116, M = 3.26, SD = 1.17, \text{range} = 1-5, \text{kappa} = .52$

Initiative = **GPINITVE**  
 $N = 117, M = 3.20, SD = 0.97, \text{range} = 1-5, \text{kappa} = .77$

Social avoidance = **GPSOCAV**  
 $N = 117, M = 4.75, SD = 0.49, \text{range} = 3-5, \text{kappa} = .74$

Attention = **GPATTN**  
 $N = 117, M = 3.49, SD = 0.89, \text{range} = 2-5, \text{kappa} = .57$

Flags

Data were flagged during free play or guided play if certain conditions existed, such as mother's presence in the playroom, play session cut short, child distressed, etc. Where flagged, the variables below are scored 1.

Free play flag = **FPFLAG**  
 # cases flagged = 29

Guided play flag = **GPFLAG**  
 # cases flagged = 34

Reunion flag = **REUFLAG**

# cases flagged = 45

**Analysis Data Set**

SS24MO

**Raw Data Sets**

C24GP

C24GPR

**GUIDED PLAY  
Data Entry Key**

ID \_\_\_\_\_

Reliability? Yes No

Coder ID \_\_\_\_\_

Date of interaction \_\_\_\_\_

\_\_\_\_\_ SEPARATE = rating for separation from mother; missing = 9

\_\_\_\_\_ FPLAYINT = number of intervals coded (possible range = 1-18)  
If “blocked/uncodeable” is marked in any interval and no other code is marked, do not count that interval in the tally.

\_\_\_\_\_ FPLAYUNF = number of intervals marked Unfocused

\_\_\_\_\_ FPLAYEX = number of intervals marked Exploratory Play

\_\_\_\_\_ FPLAYFR = number of intervals marked Functional/Relational

\_\_\_\_\_ FPLAYSP = number of intervals marked Simple Pretend

\_\_\_\_\_ FPLAYEP = number of intervals marked Elaborative Pretend

\_\_\_\_\_ MOMENTER = mother enters room; yes = 1, no = 0

\_\_\_\_\_ MOMENTIN = interval when mother enters room  
If mother did not enter, code 99

\_\_\_\_\_ FPLAYFLG = free play flag; yes = 1, no = 0  
If neither is circled, enter 0 for “no” unless a reason is written, the full 5 minutes are not coded, or mother enters the room (enter 1 for “yes”). Other possible reasons for a flag listed in the coding manual include:

- Camera malfunctioned or child not visible
- Child obviously distressed

\_\_\_\_\_ CARHIGH = highest level of play with prompt for the car activity

\_\_\_\_\_ KITHIGH = highest level of play with prompt for the kitchen activity

For both CARHIGH and KITHIGH, use the following codes for the highest level of play:

Blocked/uncodeable = 0	Functional/relational = 3
Unfocused = 1	Simple pretend = 4
Exploratory = 2	Elaborate pretend = 5

\_\_\_\_\_ SPLAYFLG = structured play flag; yes = 1, no = 0  
If neither is circled, enter 0 for “no” unless a reason is written (enter 1 for “yes”). Possible reasons for a flag listed in the coding manual include:

- Played with car or kitchen for less than 3 minutes
- RA provided fewer than 2 standard prompts (check this on Pages 2-3)
- Mother entered the room
- Camera malfunctioned or child not visible
- Child obviously distressed

**CAR LEVEL OF PLAY WITH PROMPT**

For the following variables, code whether the prompt was provided; yes = 1, no = 0. If Y or N is not circled and no marks appear in any of the cells in that column, code 0. If Y or N is not circled and something is marked in that column, code 1.

- \_\_\_\_\_ CARP1 = Prompt 1
- \_\_\_\_\_ CARP2 = Prompt 2
- \_\_\_\_\_ CARP3 = Prompt 3
- \_\_\_\_\_ CARP4 = Prompt 4
- \_\_\_\_\_ CAROP1 = Other Prompt 1
- \_\_\_\_\_ CAROP2 = Other Prompt 2

For the following variables, code whether “plays with other toy” is marked; yes = 1, no = 0. Code missing = 9 if:

- the prompt was not given (a 0 code in the variables directly above)
- either “blocked/uncodeable” or “not enough time to code” is marked

- \_\_\_\_\_ CARTOY1 = Plays with other toy for Prompt 1
- \_\_\_\_\_ CARTOY2 = Plays with other toy for Prompt 2
- \_\_\_\_\_ CARTOY3 = Plays with other toy for Prompt 3
- \_\_\_\_\_ CARTOY4 = Plays with other toy for Prompt 4
- \_\_\_\_\_ CARTOYO1 = Plays with other toy for Other Prompt 1
- \_\_\_\_\_ CARTOYO2 = Plays with other toy for Other Prompt 2

For the following variables, code the highest level of play as shown below the double line. If more than one level of play is marked for a prompt, code only the highest level for that prompt. Note that the level of play may be marked with an X or with a written description of the play.

- Unfocused = 1
- Exploratory = 2
- Functional/relational = 3
- Simple pretend = 4
- Elaborate pretend = 5

Code missing = 9 if:

- the prompt was not given (a 0 code in the prompt variables above)
- the prompt was given and “blocked/uncodeable”, “plays with other toy”, or “not enough time to code” is coded 9 and nothing is marked below the double line

- \_\_\_\_\_ CARPL1 = Prompt 1 highest level of play
- \_\_\_\_\_ CARPL2 = Prompt 2 highest level of play
- \_\_\_\_\_ CARPL3 = Prompt 3 highest level of play
- \_\_\_\_\_ CARPL4 = Prompt 4 highest level of play
- \_\_\_\_\_ CAROPL1 = Other Prompt 1 highest level of play
- \_\_\_\_\_ CAROPL2 = Other Prompt 2 highest level of play

**KITCHEN LEVEL OF PLAY WITH PROMPT**

For the following variables, code whether the prompt was provided; yes = 1, no = 0. If Y or N is not circled and no marks appear in any of the cells in that column, code 0. If Y or N is not circled and something is marked in that column, code 1.

- \_\_\_\_\_ KITP1 = Prompt 1
- \_\_\_\_\_ KITP2 = Prompt 2
- \_\_\_\_\_ KITP3 = Prompt 3
- \_\_\_\_\_ KITP4 = Prompt 4
- \_\_\_\_\_ KITOP1 = Other Prompt 1
- \_\_\_\_\_ KITOP2 = Other Prompt 2

For the following variables, code whether “plays with other toy” is marked; yes = 1, no = 0. Code missing = 9 if:

- the prompt was not given (a 0 code in the variables directly above)
- either “blocked/uncodeable” or “not enough time to code” is marked

- \_\_\_\_\_ KITTOY1 = Plays with other toy for Prompt 1
- \_\_\_\_\_ KITTOY2 = Plays with other toy for Prompt 2
- \_\_\_\_\_ KITTOY3 = Plays with other toy for Prompt 3
- \_\_\_\_\_ KITTOY4 = Plays with other toy for Prompt 4
- \_\_\_\_\_ KITTOYO1 = Plays with other toy for Other Prompt 1
- \_\_\_\_\_ KITTOYO2 = Plays with other toy for Other Prompt 2

For the following variables, code the highest level of play as shown below the double line. If more than one level of play is marked for a prompt, code only the highest level for that prompt. Note that the level of play may be marked with an X or with a written description of the play.

- Unfocused = 1
- Exploratory = 2
- Functional/relational = 3
- Simple pretend = 4
- Elaborate pretend = 5

Code missing = 9 if:

- the prompt was not given (a 0 code in the prompt variables above)
- the prompt was given and “blocked/uncodeable”, “plays with other toy”, or “not enough time to code” is coded 9 and nothing is marked below the double line

- \_\_\_\_\_ KITPL1 = Prompt 1 highest level of play
- \_\_\_\_\_ KITPL2 = Prompt 2 highest level of play
- \_\_\_\_\_ KITPL3 = Prompt 3 highest level of play
- \_\_\_\_\_ KITPL4 = Prompt 4 highest level of play
- \_\_\_\_\_ KITOPL1 = Other Prompt 1 highest level of play
- \_\_\_\_\_ KITOPL2 = Other Prompt 2 highest level of play

**CHILD RATINGS**

GPPA = positive affect

GPNA = negative affect

GPADAPT = adaptation

GPEXPLORE = exploration

GPSOCENG = social engagement

GPCOOP = cooperation

GPCOMPLY = compliance

GPENERGY = energy/enthusiasm

GPINITIVE = initiative

GPSOCAV = social avoidance

GPATTN = attention

**REUNION RATINGS**

REUANGER = anger

REUPLEAS = pleasure

REUCONT = contact

REUAVOID = avoidance

REUFLAG = reunion flag