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# VISUAL FIXATION IN THREE MONTH OLD INFANTS: THE EFFECT OF CONCENTRICITY, CURVILINEARITY, AND NUMBER OF DIRECTIONS

by

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A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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Abstract

VISUAL FIXATION IN THREE MONTH OLD INFANTS:
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In order to understand the development of visual perception it is necessary to know how an organism organizes his visual world and what dimensions are most effective in eliciting and maintaining visual attention. The present study was an attempt to gather information about effective stimulus dimensions for the young human infant by studying the widely observed preference for the bullseye figure. On the basis of the literature three dimensions were chosen for study: 1) concentricity versus nonconcentricity, 2) curvilinearity versus straightness, and 3) number of line directions. It was hypothesized that the infants would prefer concentric stimuli to nonconcentric stimuli, stimuli with curved segments to those with straight segments, and stimuli with three directions to those with two and one directions. It was further hypothesized that the bullseye would be effective because it was concentric, curved and had three directions. Ten stimuli were designed to include all possible combinations of the three dimensions.

The subjects were 18 three-month-old infants (9 male and 9 female) who were tested in their homes. The stimuli were shown through a portable viewing chamber in which the mother and the infant sat. In three sessions each infant was presented with 90 pairs of stimuli while he looked over his mother's shoulder. The study represented a complete paired comparisons design, so that each infant saw the stimuli in all

possible pairs (45) and saw each pair twice with positions reversed.

The dependent measure was fixation time to each stimulus; the data were analyzed with ranking procedures, including paired comparisons analyses, and with multiple regression analyses. A correction for position bias was suggested and carried out. The results confirmed the three major hypotheses and with all measures the bullseye was preferred over all of the other stimuli. The results further suggested that fixation time was determined most by concentricity and that curvilinearity was more important than number of directions. When individual results were analyzed, however, it appeared that some infants were most strongly influenced by either curvilinearity or number of directions. There was the suggestion of a sex difference in dimensional hierarchy with boys favoring concentricity and girls favoring the other two dimensions.

Other aspects of looking behavior were analyzed. The results indicated that there was a significant decrease in the amount of looking time from the beginning of each session to the end, but not from session to session. The number of times that an infant shifted his fixation from one stimulus to the other appeared to be affected by the similarity of the two stimuli that he was viewing. There was also a significant tendency in the group to prefer the right side over the left, even though position had been controlled for.

The results were discussed in terms of their implications for perceptual development. Underlying mechanisms for the effectiveness of the different dimensions were also discussed and an information processing approach to preference behavior was suggested.

## ACKNOWLEDGMENTS

A number of people have been important in making this project a success. I am especially grateful to my two advisors: to Dr. Herbert Birch, for giving me the inspiration for the study and for his continued encouragement and advice; and to Dr. Charles Smith for his patient and careful attention to all phases of the study. I wish to thank Dr. Peter Carey for serving on the supervisory committee and Dr. Joseph Glick and Dr. Robert Fantz for advice given during the planning stages. For help with the statistics, I wish to thank Dr. Leonard Kogan and Larry Jordan.

Christine Masters and Marga Böhm helped with the pilot testing and measurement of interrater reliability and I am grateful for their assistance. Acknowledgment is also due to Dr. Virginia Pomeranz, Dr. Elizabeth Watkins and Dr. Catherine Lodyjensky, the three pediatricians who kept me supplied with the names of infants.

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# CHAPTER I

# INTRODUCTION

Kessen, Haith and Salapatek (1970) in their review of infant visual development point out that, although the infant's visual system is not fully developed at birth, he still indicates an ability to respond differentially to visual stimuli. The physical immaturities obviously place some restrictions on what use can be made of the visual system, but the important question is to what extent are the available capabilities being used. Behavioral tests must answer this question; although the visual system can be described in terms of its level of maturity and the stimuli in terms of physical characteristics, it is the organism's response to stimuli which leads to information about what variables are actually effective (Klüver, 1933). In the past thirteen years psychologists have endeavored to answer the question of what the infant sees, and most investigators, inspired mainly by Fantz's work on visual preferences (1956, 1961, 1965a, 1965b, 1966) have shown that the infant begins to use his visual apparatus from birth. Knowing this, one can reasonably hypothesize that vision plays an important role in early development, especially before the infant is physically mature enough to explore his environment in a motoric way. What needs to be described is the nature of this early organization of the visual world in terms of the stimulus dimensions effective in obtaining and maintaining visual responsiveness.

Some describing has already been done, but the nature of the human organism in the first few months of life and the lack of systematic investigation make it difficult to understand and interpret some of the behavior which has been observed. In their section on dimensions of effective stimulation Kessen et al. (1970) suggest as effective variables brightness, color, movement, distance and depth, orientation and finally, "complexity, form and faces." In most cases the evidence does not clearly establish these variables as important for visual responsiveness, but the best evidence suggests that the most consistent responses are to brightness, movement and pattern. The fact that infants, including newborns, prefer (i.e. look longer at) a stimulus which is patterned to one which is unpatterned is significant mainly in that the visual system must be operating for this kind of differentiation to take place. What is more interesting is the evidence for differential responses to various patterns. This kind of response has been interpreted as form perception or perception of configuration, particularly by Fantz (Fantz and Nevis, 1967), but the mere differentiation of patterns is insufficient support for such a statement even when other variables such as brightness have been held constant. As Attneave (1967) has outlined them, the criteria for form perception involve perceiving invariance over changes in brightness, color, spatial orientation and context; any attempt to prove that infants have form perception would require extensive work of a kind which has not been done. What is it, then, in a face or a bullseye which attracts the infant's attention and makes him look at these longer than at other stimuli?

The most common way to deal with this general problem has been to choose a stimulus dimension, to vary it systematically and to see if the infant responds in some systematic fashion. A different approach is to ask what dimensions are effective in a particular preference. Though these two approaches are similar, they lead to somewhat different experimental questions and procedures. For example, having looked at various preferences which do occur, many investigators have chosen to manipulate complexity as an independent variable. Several different definitions of complexity have been offered (Brennan, Ames and Moore, 1966; Haith,Kessen and Collins, 1969; Hershenson, Kessen and Munsinger, 1967; Hershenson, Munsinger and Kessen, 1965; Moffett, 1969) and the work in complexity has probably led to more conflict of results and more discussion than any other variable, with the exception of faceness. This situation is due mainly to the vague nature of the concept "complexity" and to the necessity of deciding upon a physical attribute to represent it. If, on the other hand, the investigator chooses to explore a particular preference, he is then forced to stay within the confines of the physical attributes of the stimulus pair being investigated and a concept like complexity is not necessary. Another difference between the two approaches is that more than one variable can usually be hypothesized to be effective in a given preference, so the approach using a specific preference is more likely to lead to an investigation of several dimensions at a time. Only a few researchers (Karmel, 1969; Spears, 1964) have systematically varied two dimensions at a time, although only in such an investigation is it possible to see the interaction among different stimulus dimensions.

## Dimensions of Stimulation and Hypotheses

Central to the present study is the view that a better understanding of early visual organization could result from an analysis of the effectiveness of different dimensions in highly preferred stimuli. To this end, a stimulus pair which has elicited strong and consistent preferences was chosen from the literature. Fantz and his co-workers (Fantz, 1966; Fantz and Nevis, 1967) have found that infants over six weeks of age look longer at a segmented bullseye than at a pattern of horizontal stripes which has the same number of segments, the same brightness ratio and the same area. See Figure 1. The pair was then used as a reference pair in the present study to analyze effective dimensions in the bullseye, in particular, and to shed light on the dimensions effective in the infant's visual organization, in general.

Three dimensions selected on the basis of the literature are 1) direction of line, 2) curvilinearity, and 3) concentricity. It is apparent that the bullseye differs from the stripes in all three ways, whereas other potentially important dimensions such as black/white ratio have been held constant. The three dimensions are not completely independent of one another, a fact which will be discussed further.

Direction of Line: This dimension refers to the orientation of lines--horizontal, vertical and oblique. The behavioral evidence which suggests that this may be an important variable in visual behavior covers

Figure 1: The Reference Pair

a wide range. Newborns react to a vertical contour but not to a horizontal one (Kessen, 1970). In one to thirteen-month-old infants, Graefe (1963) found that preferences for stimuli depended in part on the general direction of the stimulus; for example, infants differentiated a square from a vertical rectangle, but not from a horizontal one. Using visual fixation Moffett (1969) found that infants from ten to seventeen weeks did not differentiate between vertical and horizontal lines, but looked significantly longer at a pattern containing both directions. With operant conditioning, McKenzie and Day (1971) found discrimination between patterns containing vertical lines and those containing horizontal lines in infants seven to twelve weeks of age.

The importance of a line's direction may stem from two underlying mechanisms. The evidence on infant scanning patterns suggests that directions of scan may be related to the effectiveness of a line's orientation. Kessen (1970) and Salapatek (1969) note that newborns and somewhat older infants have a predominantly horizontal scan, and other research (Kerpelman and Pollack, 1964) indicates that even preschool children do not use up and down scanning as much as school age children. If horizontal scanning is dominant in infants, then a stimulus with vertical or oblique lines would probably be more stimulating than one with horizontal lines because of the greater chance of crossing boundaries and experiencing changes in brightness. It is of interest, however, that neither Moffett (1969) nor McKenzie and Day (1970) found a difference in fixation time to vertical lines as opposed to horizontal lines, a fact which suggests that the effectiveness of direction of line must be determined in part by a second mechanism.

The electrophysiological studies on cats and monkeys by Hubel and

Wiesel (1959, 1960, 1962, 1963, 1965, 1968) show that there are cortical units or receptive fields each of which fires only to a specific stimulus. For example, bars of light in horizontal, vertical and various oblique orientations fired different receptive fields. It would follow that the more orientations represented in a stimulus, the more stimulating it would be.

In the bullseye, there are a number of directions, so that the bullseye would be considered multidirectional, while the horizontal stripes would be unidirectional. However, the bullseye might be differentiated because it has more directions or because it has oblique and vertical lines while the stripes have only horizontal lines. Since it is impossible to have three directions without having horizontal, vertical and oblique lines, number of directions and orientation of line are somewhat confounded. For the present study, however, number of directions in a stimulus was manipulated and the variable was defined in the following way: 1) a stimulus has one direction if all segments go in only one direction; 2) a stimulus has two directions if both horizontal and vertical segments are present; and 3) a stimulus has three directions if horizontal, vertical and oblique lines are in it.

Curvilinearity versus Straightness: This dimension refers to the difference between curved and straight lines. Preference for circular figures has been demonstrated in studies of both human and lower animal infants. To review these findings briefly, examples where circles were compared to other stimuli will be listed.

1) Two bullseye-horizontal stripes pairs differing in size, brightness, color and degree of segmentation showed the bullseye to be preferred in both cases (Fantz and Nevis, 1967).
2) Bullseye preferred to horizontal stripes, radial stripes and scattered stripes (Fantz, 1966).

3) Filled in circle preferred to filled in square (Graefe, 1963).
4) Bullseye preferred to four square checkerboard (Spears, 1964).
5) Infant monkeys: Bullseye preferred to horizontal stripes, circle preferred to "line on square" (Fantz, 1965a).
6) Chicks: Plain sphere elicited following more efficiently than either sphere with wings and tail or sphere with wings, tail and head, all of which were angular (Hess, 1959).

There is a little evidence that it is not the circular outline as such but the curvilinearity of the segments which is preferred. For example, Graefe (1963) found no preference for a circle over a distorted curvilinear form.

It is important to note that a given segment of any curvilinear form involves a directional change or more than one direction. Since there is more to curvilinearity, however, than just number of directions or directional change, it was felt that curvilinearity could be profitably separated from number of directions and considered as a separate dimension. This issue will be dealt with in more detail in Chapter II.

Concentricity versus Nonconcentricity: Concentricity involves redundant patterns which have a common center. Concentricity is certainly one of the most striking attributes of the bullseye pattern for the adult, and it has been added to explore the general importance of configuration. How would the infant respond to concentric squares or to concentric hexagons? While there is little evidence on this specific question, there is some evidence which suggests that arrangement of elements may be important to visual preferences. Fantz (1966) found some differentiation when stripes were put into different configurations (see Figure 2, line A), with infants of three and one-half months preferring the stimuli in the order 1a, 2a, and 3a. Using little squares, Fantz and Nevis (1967) found that 4b in Figure 2 was fixated a significantly

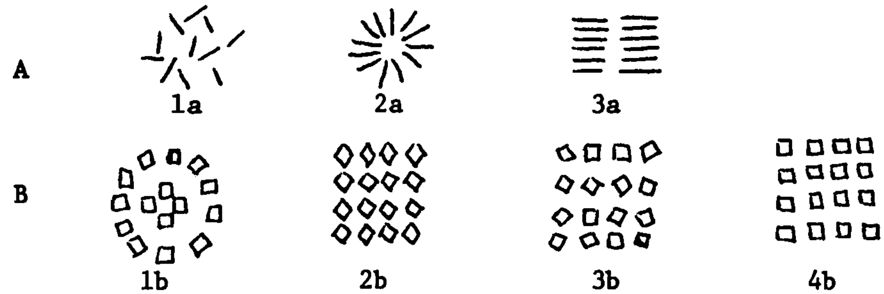


Figure 2: Examples taken from Fantz (1966) and Fantz and Nevis (1967)

shorter time than 1b, 2b or 3b. Kagan (1970) using an habituation technique found that infants responded differentially when the original pattern of four elements was rearranged. On the other hand, Wilcox (1969) found that when elements of a schematic face were scattered, infants of four, ten and sixteen weeks of age did not respond differently than they had to the intact schematic face. The evidence does not clearly support the contention that configuration itself is effective for infants, but it is an important theoretical dimension and should be explored further.

Hypotheses: The literature cited above suggests that the three dimensions may be important in the preference for the bullseye and for other aspects of infant visual perception. There are no reported results which would justify an hypothesis stating which dimension was going to be most important. However, the following three hypotheses are implicit in the foregoing discussion and will be crucial to the analysis of the results: 1) stimuli with three directions will be preferred to those with two directions, and stimuli with two directions will be preferred to those with one direction; 2) stimuli made of curved lines will be preferred to those with straight lines; and 3) stimuli of concentric configuration will be preferred to those of other configurations.

## Dependent Variables

Since the major response to be considered is that of "preference," it is important to indicate on what basis the judgment of preference will be made. Preference has generally been operationally defined as significantly longer fixation to one stimulus than to another. Fantz (1958) first defined a fixation as the superimposition of the stimulus reflection on the cornea of at least one eye, and investigators since have maintained this as a criterion for fixation, though they may have been more stringent about how much of the stimulus had to show on the cornea (Judisch, 1971). In the present study, however, it was found that trying to determine whether the reflection was on the cornea at all, much less to what extent, interfered with a simpler and more direct judgment of where the infant was looking. Since humans are sensitive to whether someone is looking directly at them or not, it was found that reliable judgments of fixation could be made solely on the basis of the direction of the infant's gaze. This judgment would not be as accurate, however, if the observer were not recording from a position directly in front of the infant's face and in the middle of the two stimuli, for then he would not be able to use himself as a reference point.

What does the preference response mean? What internal processes underlie it? It has been assumed that when an infant fixates one of a pair of stimuli longer than the other he must be discriminating between the two. This assumption has not been questioned, for a discrimination must underlie a differential response. Of course, a differential response does not necessarily accompany a visual discrimination, i.e., an infant may be discriminating between two stimuli but not indicating it in his behavior. In determining the effectiveness of different dimensions, however, it is not necessary to know whether the infant discriminates or not. This aspect of the study's logic will be discussed more fully in the next section.

Fixation time has also been considered an index of attention (Fantz, 1966; Lewis et al., 1969; McCall and Kagan, 1967). Why the infant attends is another question. It could be that an infant attends to a stimulus longer because there is more information to process or because the stimulus is novel or unclear. Mackworth and Bruner (1970) found that adults and six-year-old children fixate longer on pictures where the identity has been obscured, and Kagan (1970) suggests that infants look longer at stimuli which are discrepant with their experience than at those stimuli which coincide with it. Fantz (1964) and Fagan (1970, 1971) report that when a familiar stimulus is paired with a novel one the infants look longer at the novel stimuli. On the other hand, some stimuli may be looked at longer because they elicit stronger physiological or neurological reactions; for example, if more receptive fields are fired the reaction may be stronger. It could also be that fixation time is determined in part by pleasurable feelings aroused in the infant by the stimuli as when certain aspects of stimulation have been associated with contact with the mother.

It seems best at this point, however, to avoid giving connotations of volition or liking to the preference response, so the word "preference" will be used as a convenient shorthand for any measure which indicates differential attention to stimuli. Further speculation about the internal processes governing the preference response will be aided by a more precise knowledge of what stimulus attributes are attracting the infant's attention. A further aid would be a greater understanding of the behavior which makes up looking behavior in general, such as overall fixation time and the number of times an infant shifts his gaze among the available stimuli.

## Rationale of the General Method

There are several methods which might be useful in exploring further the question of important stimulus dimensions. The most recent technique to be employed has been the photography of eye movements (Salapatek and Kessen, 1966; Salapatek, 1968, 1969). The data from scanning records suggest that after two months of age, infants exhibit a broader scan covering more of the stimulus contour, that they attend more to internal features of a stimulus and that they tend to look more to the right hand part of a stimulus. Information about the location of fixation and the pattern of scanning the bullseye and the striped pattern would be most helpful, but would not in itself allow a definite interpretation of what variable was eliciting the response.

Another method utilizes habituation to stimuli; fixation or other responses such as sucking for visual reinforcement (Siqueland, 1969) can be used. When the infant's response to the original stimulus declines, then a new stimulus, varied from the original in a specific way, is presented. If the infant's response does not increase with the presentation of the new stimulus, then it is assumed that he does not discriminate the new from the original. This method provides a sensitive test of discriminative abilities and could be used to explore the problem of effective stimulation.

A third method which has been used successfully with animals is the transfer of training technique. Sutherland (1960, 1963), Klüver (1933) and Lashley (1938) all used discrimination training with subsequent transfer tests to help determine the effective aspect of stimulation in the original training. Klüver (1933, 1936), who has most thoroughly discussed the logic of this method, writes that the interpretation of data is based on the tendency of animals to give similar responses to objectively different stimuli, that is, they respond to some stimuli as equivalent in some way. The existence of equivalence means that the stimuli have been grouped together on some basis; it does not mean necessarily that the stimuli cannot be discriminated. This use of transfer of training might be said to be investigating organization of visual stimuli.

T. G. R. Bower (1965, 1966a, 1966b, 1967a, 1967b) has made extensive use of transfer of training with infants. His technique was to train infants to turn their heads to the left only when the training stimulus was present. When the infants had been trained to criterion, Bower then showed several transfer stimuli and measured the degree of transfer. Other investigators (Caron, Caron and Caldwell, 1971; McKenzie and Day, 1971) have successfully used head turning as an operant response in transfer of training studies. McKenzie and Day compared the operant conditioning technique with the method using visual fixation and found that operant conditioning led to discrimination of direction of line when visual fixation did not. There were, however, several methodological problems, the main one being that the investigators used many fewer trials for the visual fixation method, leaving less opportunity for discrimination to take place.

In the present study, the preference response was chosen to investigate the infant's organization of stimuli, just as Klüver used the trained response. The way in which stimuli are grouped depends partly upon the response, and a trained discrimination response might yield somewhat different results. The preference method has the advantage, however, of using a response which occurs even though there are no extrinsic rewards for differential responding, and the results may more nearly indicate what dimensions are immediately and directly effective in the daily life of the infant.

In order to learn something about the important dimensions in a visual preference, there are two necessary steps. First of all, the stimuli must be designed so that the dimensions are systematically varied. In this case ten stimuli were designed so that all possible combinations of the three dimensions were represented. As in all studies, the results necessarily depend on the sampling of the dimensions, so that if one dimension is analyzed as ineffective it may be due to the particular sampling.

Secondly, the order in which the infant responds to the stimuli must be determined. If the stimuli are ranked in order of preference and all stimuli in the top part of the ranking are characterized by one of the dimensions, then it can be assumed that that dimension is the most important one. For example, if the concentric stimuli occupy the first four ranks while the nonconcentric stimuli occupy the last six positions, then concentricity would appear to be the central factor in determining the ranking, because concentric stimuli have been preferred regardless of number of directions or whether the segments are curved or straight. Within the classification of stimuli as concentric and nonconcentric, it could be that there are further groupings according to one or both of the other dimensions; the infant's preferences may show that the curved concentric stimuli are ranked above the straight concentric stimuli regardless of number of directions. And to carry the example one step further, within the curved-straight classification, the stimuli with more directions may be ranked above those with fewer directions. In this way ranking of the stimuli and statistics analyzing ranks should lead to a fairly straightforward analysis of the effectiveness of the dimensions.

## Goals of the Study

The present study has used the preference method with some of the logic of Klüver's method of equivalence toward the major goal of exploring effective dimensions in the infant's visual world by investigating some dimensions in the widespread preference for the bullseye. Further goals included 1) an investigation of individual differences within the above framework to determine what dimensions were effective in each subject's ranking and to explore the possibility that there might be differences with respect to the saliency of the three dimensions; and 2) a consideration of other aspects of looking behavior in order to offer a more complete picture of general preference behavior.

# CHAPTER II

# METHOD

## Subjects

The subjects were 18 infants all of whom were seen for the first time within five days of thirteen weeks of age. All were from middle to upper middle class families; with the exception of one Chinese infant, all were white. There were nine males and nine females; seven infants of each sex were first born and two of each sex were second born. Seven were obtained through pediatricians, eight through the suggestion of friends and three through an ad in the Village Voice. Only one mother of those contacted refused, and with the exception of two infants eliminated because of a change in procedure, all infants tested were included in the study. See Table 1 for a more complete description of the subjects.

## Apparatus

The apparatus is pictured in Figures 3, 4 and 5. The basic piece of equipment consisted of an aluminum frame which could be dismantled and reassembled. The complete apparatus was similar to the viewing chambers used by Fantz. Attached to the front of the frame was a masonite board with two eight inch squares cut out; there were seven and one-half inches between the squares which were visible only on the inside of the frame. These measurements are generally consistent with previous studies using simultaneous presentations. On the side of the masonite board which faced the infant was a cardboard flap which could be pulled up or down by a string on the outside. A blue cloth covered the frame to provide a uniformly blue chamber in which the infant and his mother

TABLE 1
Description of the Subjects

| Subjects[1] | Sex | Age | Birth Weight | Birth Order | State during the three sessions[2] | | | Shoulder held on | Time of day seen |
|---|---|---|---|---|---|---|---|---|---|
| A | M | 94 days | 8-6 | 1 | F | S | F | Left | 11:00 |
| B | M | 91 days | 7-15 | 1 | C | F | C | Right | 12:30 |
| C | M | 89 days | 7-15 | 1 | C | C | F-F+ | Right | 12:00 |
| D | M | 89 days | 7-10 | 1 | C | C | F | Right | 11:00 |
| E | M | 90 days | 7-6 | 2 | C-S | C-S | C-S | Left | 1:00 |
| F | M | 88 days | 5-13 | 1 | C+ | C-F | F+ | Right | 11:00 |
| G | M | 94 days | 6-15 | 1 | C | C+ | C | Left | 10:30 |
| H | M | 90 days | 9-2 | 1 | C | C+ | C | Right | 4:30 |
| I | M | 91 days | 6-13 | 2 | S | S | C | Right | 6:00 |
| J | F | 91 days | 7-2 | 1 | C | C | C | Left | 10:30 |
| K | F | 91 days | 6-12 | 1 | F | C | C | Left | 12:00 |
| L | F | 96 days | 6-3 | 2 | F+ | F+ | C | Right | 3:00 |
| M | F | 95 days | 8-12 | 2 | C | C+ | C | Left | 10:00 |
| N | F | 89 days | 7-3 | 1 | C | F | C+-F | Left | 10:30 |
| O | F | 92 days | 5-4 | 1 | F | F | F+ | Left | 10:30 |
| P | F | 89 days | 7-0 | 1 | C | C | F-F+ | Right | 5:00 |
| Q | F | 95 days | 6-14 | 1 | C+ | C+ | C-F | Left | 3:00 |
| R | F | 88 days | 7-9 | 1 | C | C-F+ | C+ | Right | 2:00 |

1 The letters as given in this table will designate the same subject in all tables to follow.

2 C indicates that the infant was content during the session. C+ means that the infant was especially happy or excited. S means that the infant was sleepy. F indicates some fussiness. F+ means that the infant was very fussy and several breaks were necessary. These ratings were made from comments written after each session.

Figure 3: The Outside of the Apparatus

Figure 5: Experimenter about to begin Recording

Figure 4: Infant inside the Apparatus

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| Subjects[1] | Sex | Age | Birth Weight | Birth Order | State during the three sessions[2] | | | Shoulder held on | Time of day seen |
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| B | M | 91 days | 7-15 | 1 | C | F | C | Right | 12:30 |
| C | M | 89 days | 7-15 | 1 | C | C | F-F+ | Right | 12:00 |
| D | M | 89 days | 7-10 | 1 | C | C | F | Right | 11:00 |
| E | M | 90 days | 7-6 | 2 | C-S | C-S | C-S | Left | 1:00 |
| F | M | 88 days | 5-13 | 1 | C+ | C-F | F+ | Right | 11:00 |
| G | M | 94 days | 6-15 | 1 | C | C+ | C | Left | 10:30 |
| H | M | 90 days | 9-2 | 1 | C | C+ | C | Right | 4:30 |
| I | M | 91 days | 6-13 | 2 | S | S | C | Right | 6:00 |
| J | F | 91 days | 7-2 | 1 | C | C | C | Left | 10:30 |
| K | F | 91 days | 6-12 | 1 | F | C | C | Left | 12:00 |
| L | F | 96 days | 6-3 | 2 | F+ | F+ | C | Right | 3:00 |
| M | F | 95 days | 8-12 | 2 | C | C+ | C | Left | 10:00 |
| N | F | 89 days | 7-3 | 1 | C | F | C+-F | Left | 10:30 |
| O | F | 92 days | 5-4 | 1 | F | F | F+ | Left | 10:30 |
| P | F | 89 days | 7-0 | 1 | C | C | F-F+ | Right | 5:00 |
| Q | F | 95 days | 6-14 | 1 | C+ | C+ | C-F | Left | 3:00 |
| R | F | 88 days | 7-9 | 1 | C | C-F+ | C+ | Right | 2:00 |

1 The letters as given in this table will designate the same subject in all tables to follow.

2 C indicates that the infant was content during the session. C+ means that the infant was especially happy or excited. S means that the infant was sleepy. F indicates some fussiness. F+ means that the infant was very fussy and several breaks were necessary. These ratings were made from comments written after each session.

Figure 3: The Outside of th[redacted]
Apparatu[redacted]

[redacted]gure 5: Experimenter about to
begin Recording

Figure 4: Infant inside the
Apparatus

sat. Two rollers could be attached to the outside of the frame on the masonite in such a way that only two 8 inch squares of paper showed on the inside. See Figures 3 and 4. Through the paper and the masonite was an opening of one-fourth inch for the experimenter (E) to look through. A tape recorder was used to let the E know when to roll the paper. On the tape was recorded a series of tones marking both the duration of trials (10 seconds) and the intertrial intervals (10 seconds); E listened to the tape through an earphone. To measure fixation time, a Rustrak four channel event recorder was used with a chart speed of one-fourth inch per second. The buttons which controlled the readings on channels 1 and 2 were strapped to E's wrist; the button on E's left recorded the fixation on the right hand stimulus and the one on E's right recorded length of fixation on the left hand stimulus. A button was held down for the duration of each fixation so that both duration and number of fixations were recorded in sequence. An 8 watt fluorescent bulb could be attached to the back of the frame in such a way that uniform light was shed on both stimuli. The lamp was not used if there was sufficient daylight. This liberty was taken because the lighting could not, in any case, be made uniform given the variety of environments, and because it seemed possible that natural light would be more comfortable for the infants. It would, of course, have been desirable to have had the lighting constant over all subjects.

## Stimuli

The stimuli were made with black ink on white paper to provide the highest degree of contrast. There were ten stimuli shown in all possible combinations yielding forty-five pairs. Since each pair was shown twice with left-right positions reversed, each subject was shown a total of ninety pairs. There were two rolls each containing 45 pairs which were randomized with the following restrictions: 1) each stimulus had to appear three times in each fifteen pairs; 2) each stimulus had to appear approximately the same number of times on the right and on the left in each roll; and 3) the same stimulus could not appear in two consecutive pairs. The order of the stimulus pairs is given in Appendix B. Each stimulus can be considered as sampling one of the conditions in the design pictured in Figure 6. It should be noted that the Roman numeral accompanying each stimulus will later be used in all tables to designate that stimulus. It should be further noted that the stimuli are equated for 1) number of segments (twelve); 2) length of each segment; 3) overall black/white ratio; and 4) area.

It was mentioned previously that the dimensions were not completely independent. Careful note should be made of the fact that number of directions refers to the number of directions in the stimulus as a whole and not to the number of directions within a segment. In this way it was possible to have a curvilinear stimulus, such as IX, in which the segments were lined up in the same direction. Also the variable of concentricity is dependent in part upon the number of directions; there was no such condition as concentric, one direction, which explains the two blank cells in Figure 6.

## Procedure

The equipment was first set up in the home of each infant within five days of his thirteen week birthday. Three visits were made within the span of one week, with at least 48 hours between visits. The time of day was determined by the mother's recommendation concerning the infant's time of greatest alertness, and was then kept fairly constant

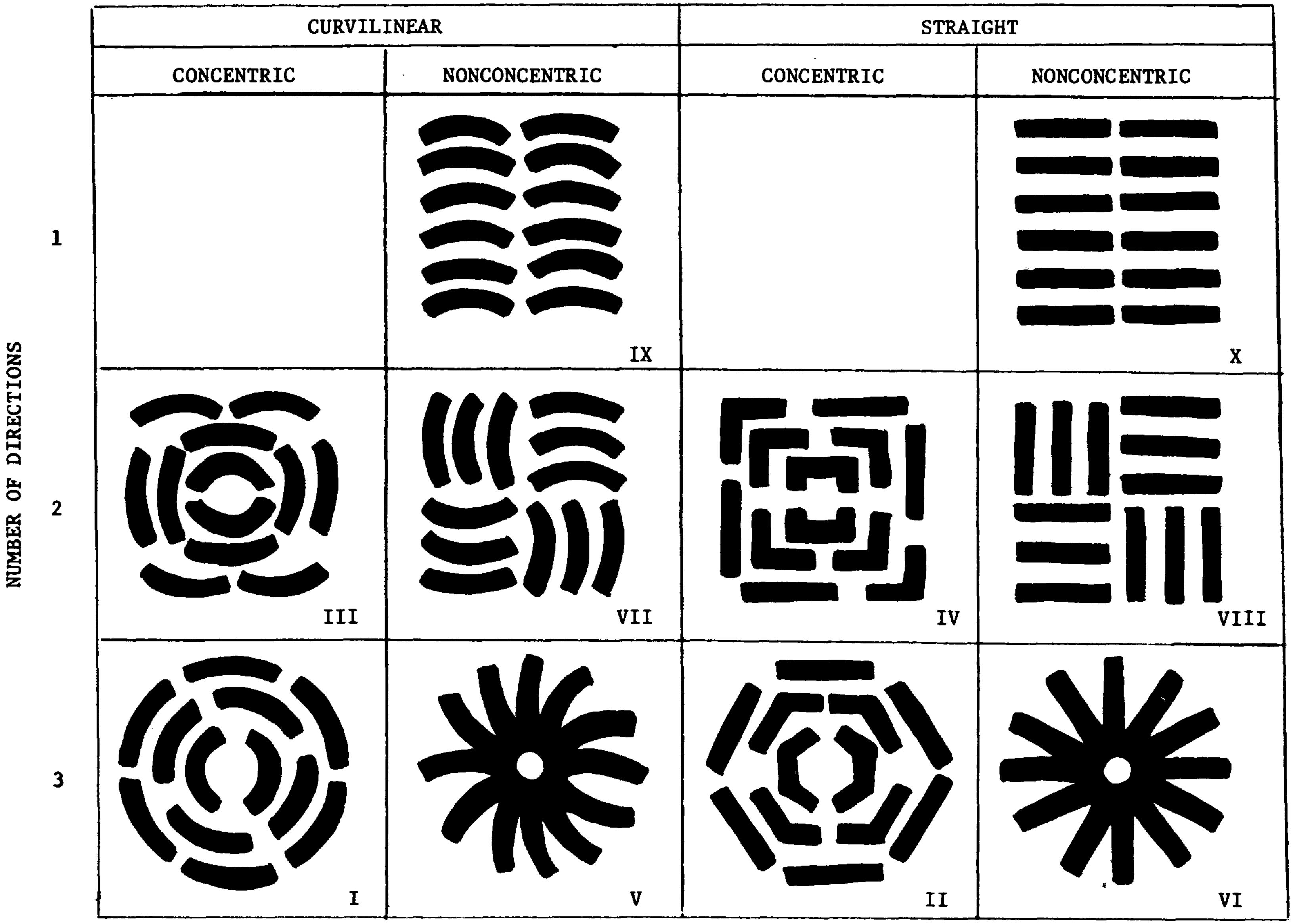



FIGURE 6 : The Ten Stimuli in a Factorial Design

over the three visits.

After the apparatus was assembled and the recording equipment made ready, the mother was asked to sit in a chair and hold her baby on her shoulder. The mother, therefore, was facing away from the stimuli and her chair was placed slightly to one side, so that the infant's head was in line with the center of the two stimuli. The infant's head was approximately 15 inches from the stimuli. The mother was asked to hold her infant on whichever shoulder was more comfortable but not to switch shoulders.

The shoulder position proved to be an important factor in keeping the infants content. The first two infants tested with the present stimuli were held on their mothers' laps, and they were fussy enough to make four to five visits necessary. On the shoulder the infants were happier and could be shown more pictures; at no time was a pacifier necessary. The infants were also more active in shifting their gaze from one stimulus to the other. Although this position has not been used in previous studies of visual preference, Korner and her associates (Korner and Grobstein, 1966; Korner and Thoman, 1970) have found that newborns are significantly more alert when held on the shoulder than when lying down or being held in the arms.

The experimenter listened for the tone on the tape recorder and lifted the flap. The left hand button on the wrist was pushed down when the infant looked to his right and the right hand button was used to record his left hand fixations. If the infant did not look at either stimulus during the 10 seconds, the trial was repeated to a maximum of three times. A generous estimate of the percentage of trials in which repetition was necessary would be 2.5 per cent; the estimate is necessary because an accurate record of repetitions was not kept. Each trial was 10 seconds in length; a tone signaled the lowering of the flap and during the 10 second intertrial interval the next stimulus pair was rolled into place. Approximately 30 pairs were shown at each visit, although some infants required one or two short breaks in order to complete that many trials.

In other preference studies the presentation and intertrial intervals have varied from 15 seconds each (McCall and Melson, 1970) to 30 seconds for the presentation and 2 seconds for the intertrial interval (Greenberg and Weizmann, 1971) and 18 seconds for the presentation and one half second for the intertrial interval (Wilcox, 1969). Fantz has found that 10 seconds is sufficient to allow differentiation of the stimuli (personal communication). The stimulus duration and intertrial intervals were set at 10 seconds each in the present study to minimize habituation.

A certain amount of control in the experiment was sacrificed in order to have the most natural situation for the infant. For this reason infants were seen in their homes, were held on the shoulder and were not restricted by head pieces. This situation led to generally more content infants which was important since the procedure called for extensive testing of each infant.

## Interrater Reliability

In order to estimate interrater reliability, a mirror was placed beneath the center viewing hole inside the apparatus and turned up so that the second observer could view the infant's face while standing at the back of the apparatus. The blue cover was extended so the infant could not see the observer as she looked through a small hole in the cover. This procedure gave the second observer a satisfactory view of the infant's face because she was, like the experimenter, in the mid-line of the infant and could readily use herself as a reference point. The product moment correlation in 30 trials for the right hand fixations was .92 and for the left hand fixations, .98. The infant was held so that he was looking over the mother's shoulder.

# CHAPTER III

# RESULTS

## Analysis of Dimensions

In the following account of the results a number of different statistical techniques are employed to analyze the data. For the sake of clarity the presentation of the results will generally proceed in chronological order, that is, the order in which the statistics were first done.

### Group Results

The main dependent variable used in the following procedures was total fixation time. In order to obtain a score for one stimulus, fixation time was summed across all trials in which that stimulus appeared; total fixation time for each stimulus was computed for each subject and the mean fixation time was found for each stimulus for the whole group.

The first problem was to determine the significance of the effect of each dimension in the responses of the infants. Although the stimuli were designed to fit into a factorial design, an analysis of variance was judged to be inappropriate for two reasons. First of all, fixation scores from the same trial are not independent. The possibility that the dependence would affect the results is minimized, but not eliminated, when scores for each stimulus represent sums of fixation time over all trials in which that stimulus appeared and when each stimulus has been paired with every other one. However, the second and more serious reason is that concentricity and number of directions are not independent of each other; consequently, the interaction scores would not be valid. For this reason it was decided that tests which allowed each dimension to be tested independently of the others should be used. For the two dimensions where there were only two levels, concentricity and curvilinearity, the Wilcoxon Matched-Pairs Signed-Ranks test was used. For number of directions where there were three levels, the Friedman Two-Way Analysis of Variance by Ranks (Siegel, 1956) was used. Although these tests also assume independence of scores of left and right stimuli within a trial, it was thought that they would provide a good basis for evaluating the obtained effects and would enable, as would an analysis of variance, a comparison of all concentric stimuli to all nonconcentric ones, all curvilinear to all straight, and the stimuli within each direction category to each other. The data for these tests are presented in Table 2 and the results can be summarized as follows:

1) Concentric stimuli were preferred to nonconcentric stimuli, $T = 6$, $p < .005$

2) Curvilinear stimuli were preferred to straight stimuli, $T = 9$, $p < .005$

3) Number of directions was an effective dimension with three direction stimuli looked at longer than either the two or one direction stimuli, $X_r^2 = 11.22$, $p < .01$

All three dimensions significantly affected the infants' responses in the direction hypothesized. Since there was no way to test the significance of interactions, the graphs in Figure 7 are intended to convey some information about interactions. There appear to be no strong indications of interactions except for the possibility in the top graph of Figure 7; this graph suggests that the curved and straight three direction stimuli are not as differentiated as the curved and straight stimuli in the one and two direction categories.

TABLE 2

Fixation Time Data Used to Determine Significance of each Dimension

| Subjects[a] | Concentric Stimuli | Nonconcentric Stimuli | Curved Stimuli | Straight Stimuli | Number of Directions 3 | 2 | 1 |
|---|---|---|---|---|---|---|---|
| A | 44.81 | 34.54 | 40.50 | 36.80 | 38.19 (2)[b] | 42.63 (1) | 31.63 (3) |
| B | 60.13 | 48.79 | 55.65 | 51.00 | 61.13 (1) | 48.75 (2) | 46.88 (3) |
| C | 65.63 | 52.00 | 57.15 | 57.75 | 63.81 (1) | 53.06 (3) | 53.50 (2) |
| D | 53.44 | 47.29 | 50.75 | 48.75 | 53.81 (1) | 49.06 (2) | 43.00 (3) |
| E | 73.75 | 57.79 | 69.60 | 58.75 | 69.13 (1) | 62.06 (2) | 58.50 (3) |
| F | 65.56 | 64.00 | 72.05 | 57.20 | 68.56 (1) | 59.44 (3) | 67.13 (2) |
| G | 93.69 | 70.42 | 89.45 | 70.00 | 72.31 (3) | 84.94 (1) | 84.25 (2) |
| H | 62.63 | 60.42 | 67.85 | 54.75 | 69.69 (1) | 62.56 (2) | 42.00 (3) |
| I | 69.31 | 65.04 | 71.00 | 62.50 | 59.00 (3) | 64.94 (2) | 85.88 (1) |
| J | 68.06 | 64.04 | 68.35 | 62.95 | 64.94 (2) | 71.38 (1) | 55.63 (3) |
| K | 72.69 | 65.00 | 73.20 | 62.95 | 70.06 (1) | 69.69 (2) | 60.99 (3) |
| L | 71.12 | 63.75 | 72.40 | 61.00 | 72.69 (1) | 63.63 (2) | 60.88 (3) |
| M | 73.56 | 67.54 | 78.65 | 61.25 | 67.75 (1) | 74.63 (2) | 65.00 (3) |
| N | 72.81 | 64.38 | 79.65 | 55.85 | 66.50 (2) | 64.19 (3) | 77.38 (1) |
| O | 47.19 | 39.63 | 43.85 | 41.45 | 51.13 (1) | 35.13 (3) | 40.75 (2) |
| P | 56.81 | 48.83 | 53.65 | 50.40 | 57.56 (1) | 50.44 (2) | 44.13 (3) |
| Q | 80.69 | 67.25 | 78.00 | 67.25 | 80.31 (1) | 66.88 (3) | 68.75 (2) |
| R | 61.38 | 64.71 | 58.90 | 67.25 | 63.88 (1) | 63.69 (2) | 61.75 (3) |
| Mean | 66.29 | 58.08 | 65.59 | 57.10 | 63.91 | 56.95 | 58.22 |

a Refer to Table 1 for subject information.

b Numbers in parentheses represent ranks used in Friedman Two-Way Analysis of Variance by Ranks

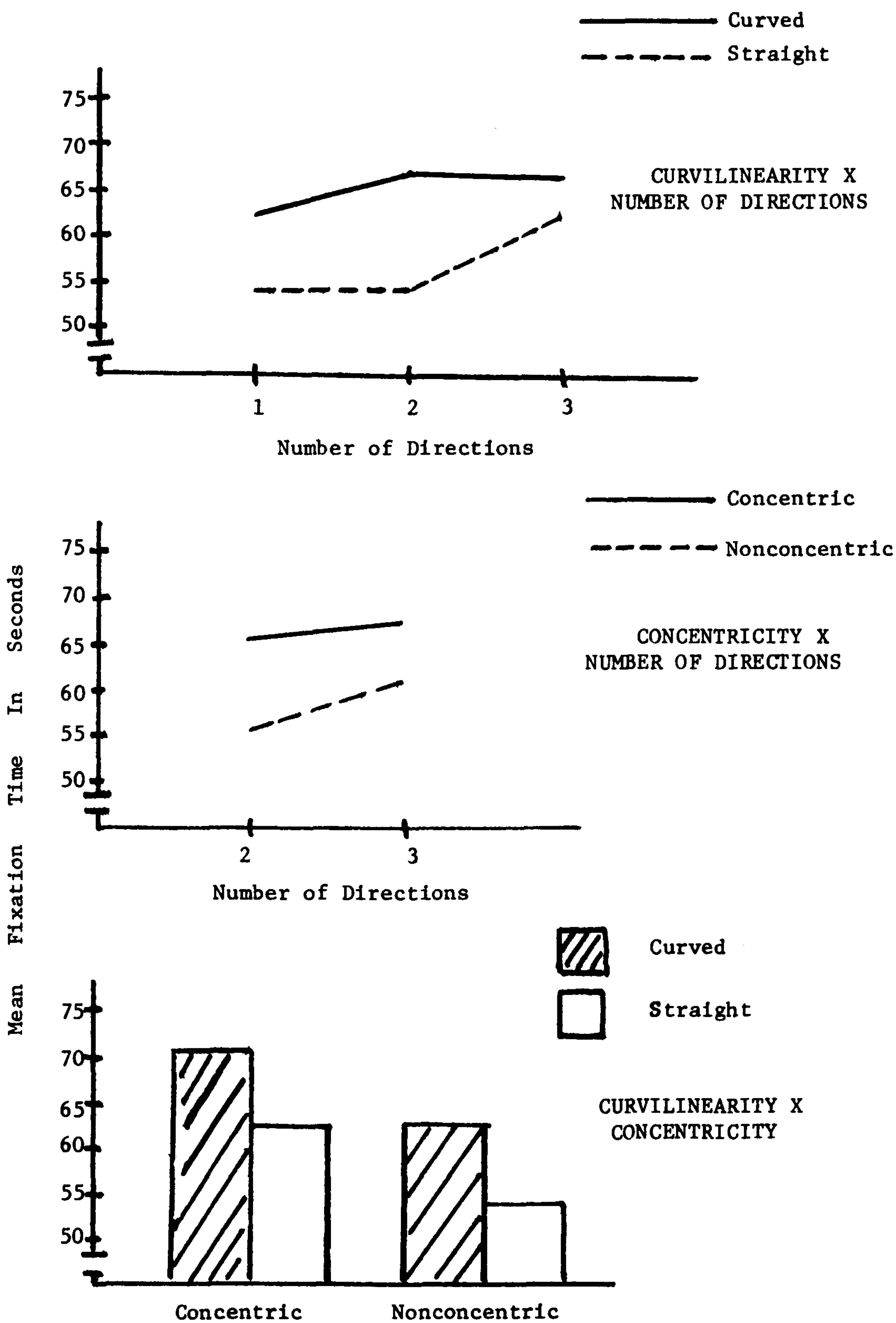



Figure 7: Graphic Representation of Mean Fixation Times by Pairs of Dimensions

The stimuli were then ranked according to total fixation time. The ranking which appears in Table 3 was based on the mean fixation time to each stimulus and used data from all subjects. A table giving the individual total fixation times for each stimulus may be found in Appendix D.

While the results above answered the question of the effectiveness of the dimensions, further tests were done to corroborate the findings. The paired comparisons analysis (Gülliksen, Gulliksen and Bowen, 1965) is another way to analyze these data using fixation time to determine which stimulus of each pair was preferred. The dependent variable becomes a less precise one in that the magnitude of difference is not included, but the analysis completely avoids the problem of dependence. Since each pair was shown twice to each subject, the two trials were combined to determine which member of the pair was preferred; each subject then had a preference in each of the 45 pairs.

The ranking of the stimuli resulting from this procedure is shown in Table 4. The correlation between the paired comparisons ranking and that obtained with total fixation time as computed with Kendall's tau is .69 ($p < .002$). The paired comparisons analysis also produced the scale values shown in Table 4; these values indicate how far apart the stimuli are. Even though some of the stimuli received the same number of votes the scale values for the stimuli may be different, providing a more precise basis for ranking. It should be noted that the stimuli on either end of the ranking are farther apart than those stimuli in the middle.

The fact that all three dimensions had a significant effect would lead to the inference that the infants' preferences were based on a

TABLE 3
The Ranking of the Ten Stimuli as Determined by the Mean Total Fixation Time

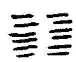
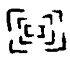
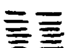
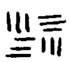
| Rank | Stimulus | Mean Time |
|---|---|---|
| 1 |  (I) | 71.03 |
| 2 |  (III) | 69.82 |
| 3 |  (VII) | 63.83 |
| 4 |  (II) | 63.43 |
| 5 |  (IX) | 62.60 |
| 6 |  (IV) | 60.89 |
| 7 |  (V) | 60.68 |
| 8 |  (VI) | 60.51 |
| 9 |  (X) | 53.83 |
| 10 |  (VIII) | 47.04 |

TABLE 4

The Ranking of the Ten Stimuli as Determined by the Paired Comparisons Analysis

| Rank | Stimulus | Number of Votes | Scale Values |
|---|---|---|---|
| 1 |  (I) | 102 | .3234 |
| 2 |  (III) | 101 | .3181 |
| 3 |  (IV) | 85 | .0565 |
| 4 |  (IX) | 84 | .0482 |
| 5 |  (II) | 84 | .0431 |
| 6 |  (V) | 82 | .0200 |
| 7 |  (VII) | 82 | .0143 |
| 8 |  (VI) | 74 | -.1044 |
| 9 |  (X) | 67 | -.2328 |
| 10 |  (VIII) | 49 | -.4864 |

combination of the three factors. Paired comparisons analysis leads to two tests of consistency or unidimensionality. The first comes from the analysis of variance and chi square tests as used by Gulliksen and Tukey (1958). The results of this analysis can be seen in Table 5. For the test of unidimensionality the important chi square is the one measuring the significance of the deviation from a linear scale or the residual. The chi square value of 41.93 with 36 d.f. has a probability of less than .10, not quite small enough clearly to reject the interpretation that the scale is unidimensional. The second test of consistency involves a calculation of circular triads; as Kendall (1962, pp. 144-148) points out, if preferences are determined by a number of different factors, circular triads appear and a coefficient of consistency can be derived from the number of circular triads. The mean coefficient based on the number of circular triads in the individual data was .34, with individuals ranging from .12 to .60. The coefficient of consistency based on group data was .54. Though the consistency for the group data was higher, the coefficient is still based on 17.5 circular triads out of a possible 40 which suggests that a single dimension was not determining the preferences.

A further result stemming from the paired comparisons analysis is a coefficient of reliability (Gulliksen and Tukey, 1958). The estimates of reliability proposed by Gulliksen and Tukey indicate the extent to which the linear model fits the observed cell entries. Although the analysis of variance does not indicate a significant departure from linearity, the reliability of the scale tends to be low (.50). See Table 5. Low reliability despite a nonsignificant chi square on the residual factor may stem from the similarity of the stimuli (see Gulliksen and

TABLE 5

Analysis of Variance of the Paired Comparisons Analysis

| Source | df | SS | MS | Chi Square | Probability |
|---|---|---|---|---|---|
| All | 45 | 5.13 | .114 | 92.42 | .001 |
| Comparative Judgment | 9 | 3.16 | .351 | 56.91 | .001 |
| Residual | 36 | 2.33 | .065 | 41.93 | .100 |

Reliability of Scale

$r_s = .502$

$r_{ss} = .433$

$r_b = .513$

Variance Components Analysis

| Source | Estimate of Variance |
|---|---|
| Binomial Sampling | .056 |
| Deviations from Linear Scale | .009 |
| Linear Scale Values | .029 |

Tukey, 1958, p. 109).

The next step in the analysis of dimensions was to determine the relative value of the three dimensions in the group data. In order to do this a version of Kendall's tau was employed; this version permits one set of scores to be on a nominal scale while the other set is on an ordinal scale as is customary (Kendall, 1962, pp. 41-42). The goal of the test in the present study was to determine the degree of association between each dimension and fixation time or order of preference as shown in the ranking based on fixation time. To accomplish this rankings such as those shown in Table 6 were set up for each dimension. The assumption in this test is that all C's are tied and that all NC's are tied; the calculation of the tau then proceeds as usual. Because of the extensive ties, the limits of tau are not +1 and -1 as is usually the case, but the relative values are maintained. For the group ranking in Table 3, the results were 1) curvilinearity = .57, 2) concentricity = .55 and 3) number of directions = .16. Curvilinearity and concentricity appear to be almost equal in importance with number of directions considerably less important.

To make sure that the Kendall's tau was providing a good test of the relative values of the dimensions, a multiple regression analysis was devised (Cohen, 1968). It was thought that a regression equation would provide helpful information about the relative weights of the three dimensions and provide a model for the prediction of looking time based on the dimensions embodied in the right and left stimuli. The specific procedure involved predicting a dependent variable (either time spent looking at the left stimuli or time spent looking at the right stimuli) from the stimulus dimensions of the left and right stimuli in

TABLE 6

Hypothetical Case showing Perfect Relationship between Ranking of Stimuli and Concentricity

| Stimuli | I | II | III | IV | V | VI | VII | VIII | IX | X |
|---|---|---|---|---|---|---|---|---|---|---|
| Ranking according to fixation time | 2.5 | 2.5 | 2.5 | 2.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 |
| Designation of stimuli as concentric (C) or nonconcentric (NC) | C | C | C | C | NC | NC | NC | NC | NC | NC |

each of the 90 pairs. Row entries in these analyses represent data from the same subjects and are therefore not independent of one another as is usually the case in a multiple regression analysis. The independent variables (X) and the dependent variables (Y) are as follows:

$X_1$ = 1 if left stimulus is concentric, 0 if nonconcentric

$X_2$ = 1 if left stimulus is curvilinear, 0 if straight

$X_3$ = 1 if left stimulus has one direction, 2 if it has two directions and 3 if it has three directions

$X_4$ = 1 if right stimulus is concentric, 0 if nonconcentric

$X_5$ = 1 if right stimulus is curvilinear, 0 if straight

$X_6$ = 1 if right stimulus has one direction, 2 if it has two directions and 3 if it has three directions

$Y_1$ = fixation time to left hand stimuli

$Y_2$ = fixation time to right hand stimuli

$Y_3$ = time spent looking at neither stimulus

The mean times for the left and right stimulus in each trial were obtained for all 18 subjects, and the multiple regression was calculated using these means. See Table 7 for the means and standard deviations of the dependent variables and the table of intercorrelations among all variables.

Using $X_1$ through $X_6$ as independent variables and $Y_1$ as the dependent variable, the multiple correlation was .45, $p < .01$. With the same independent variables and $Y_2$ as the dependent variable the multiple correlation was .44, $p < .01$. Table 7 also shows the standard weights and standard errors of weights for the six independent variables for both $Y_1$ and $Y_2$. Separate analyses were run using only the independent variables in the left hand stimuli ($X_1$ through $X_3$) with left looking time ($Y_1$) and $X_4$ - $X_6$ with right looking time ($Y_2$). These multiple correlation coefficients were .38 ($p < .01$) and .32 ($p < .05$), respectively.

TABLE 7
Group Results from the Multiple Regression Analysis

I. Means and standard deviations of the dependent variables

| | $Y_1$ (left looking) | $Y_2$ (right looking) | $Y_3$ (neither) |
|---|---|---|---|
| Mean | 2.87 | 3.93 | 3.20 |
| S.D. | 0.715 | 0.801 | 0.758 |

II. Table of Intercorrelations

| | $X_1$ | $X_2$ | $X_3$ | $X_4$ | $X_5$ | $X_6$ | $Y_1$ | $Y_2$ | $Y_3$ |
|---|---|---|---|---|---|---|---|---|---|
| $X_1$ | -- | .00 | .33 | -.11 | .00 | -.04 | .28 | -.18 | -.13 |
| $X_2$ | | -- | .00 | .00 | -.11 | .00 | .25 | -.30 | .09 |
| $X_3$ | | | -- | -.04 | .00 | -.11 | .17 | -.05 | -.11 |
| $X_4$ | | | | -- | .00 | .33 | -.24 | .21 | .00 |
| $X_5$ | | | | | -- | .00 | -.11 | .25 | -.15 |
| $X_6$ | | | | | | -- | -.11 | .05 | .05 |
| $Y_1$ | | | | | | | -- | -.50 | -.41 |
| $Y_2$ | | | | | | | | -- | -.58 |
| $Y_3$ | | | | | | | | | -- |

III. Multiple correlations and standard weights

| | $X_1 - X_6$ with $Y_1$ | | $X_1 - X_6$ with $Y_2$ | |
|---|---|---|---|---|
| | $R = .45$, $p < .01$ | | $R = .44$, $p < .01$ | |
| | Standard Weights | Standard Error of Weight | Standard Weights | Standard Error of Weight |
| $X_1$ | .2251 | .1518 | -.0989 | .1708 |
| $X_2$ | .2415 | .1405 | -.2808 | .1581 |
| $X_3$ | .0886 | .0994 | -.0086 | .1118 |
| $X_4$ | -.2011 | .1518 | .2062 | .1708 |
| $X_5$ | -.0853 | .1418 | .2140 | .1581 |
| $X_6$ | -.0250 | .0994 | -.0233 | .1118 |

These results suggest that the prediction is improved by considering the dimensions in the stimuli on the opposite side, even though the coefficients are in all cases significant.

The multiple regression equation shows that time spent looking at a stimulus is a function of not only the three dimensions in that stimulus, but also the dimensions in the stimulus with which it is paired. The results of $X_1 - X_6$ with $Y_1$ suggest that a left stimulus was most effective when it was curvilinear and/or concentric, but that it would be looked at less if the right stimulus were concentric. Right looking time was also affected most by concentricity and curvilinearity, but it was looked at somewhat less if the left stimulus were curvilinear. The fact that looking time on the right and on the left were not affected in quite the same way is interesting and will be discussed later. The standard regression weights do provide a model for the prediction of looking time as a function of the three dimensions of the left and right stimuli so that a dependent variable score could be predicted from the independent variables given these weights. The fact that more variance was not accounted for, however, suggests either that other unmeasured factors were operating or that error variance was high.

In order to compare the multiple regression results with those obtained by computing Kendall's tau, an average standard weight was derived by averaging the four standard weights involving each dimension. For example, $X_1$ and $X_4$ with $Y_1$ and $X_1$ and $X_4$ with $Y_2$ are all weights given to the dimension of concentricity. To average these four weights seemed to be appropriate since in almost every case the four standard weights were very similar. The mean standard weights were as follows: 1) concentricity = .1828; 2) curvilinearity = .2054; and 3) number of directions=

.0364. These results closely correspond to the values obtained from Kendall's tau ( see page 33). The relative values for curvilinearity and concentricity in both cases are very close and both dimensions have higher values than number of directions.

Neither the results from the tau nor the multiple regression analysis show much differentiation between the two dimensions of concentricity and curvilinearity, though curvilinearity tends to be slightly higher. When Kendall's tau is applied to the ranking obtained from the paired comparisons analysis, concentricity is clearly the more effective dimension. The results are as follows: 1) concentricity = .75 (maximum); 2) curvilinearity = .39; and 3) number of directions = .16. Despite the high correlation between the rankings obtained from total fixation time and from the paired comparisons analysis, the rank orderings were just different enough to lead to different weightings for the three dimensions. The relative values will be discussed further in a later section.

## Individual Results

Since a ranking of the ten stimuli was available for each infant, the same use of Kendall's tau was appropriate. Table 8 presents the tau's for each dimension for each subject. The results suggest that there are individual differences in the salience of the three dimensions. Although the tau's are not significant in all cases, six infants appear to be most strongly influenced by concentricity; six showed curvilinearity as the strongest dimension; and four had number of directions as the strongest dimension. One infant (I) preferred the pattern of horizontal stripes to the bullseye, and had a high, but nonsignificant, negative correlation on the directions dimension. Another infant (R) showed a

TABLE 8

Summary of the Relative Values of the Three Dimensions As Determined by Kendall's tau using Total Fixation Time

| Subjects[1] | Concentricity | Curvilinearity | Directions |
|---|---|---|---|
| A | .61* | .21 | .21 |
| B | .37 | .27 | .29 |
| C | .49Δ | -.03 | .21 |
| D | .49Δ | .15 | .69** |
| E | .49Δ | .21 | .00 |
| F | .30 | .57* | .08 |
| G | .37 | .27 | -.21 |
| H | -.06 | .39 | .53* |
| I | .06 | .33 | -.58 |
| J | .24 | .27 | .16 |
| K | .30 | .39 | .21 |
| L | .24 | .39 | .32 |
| M | .18 | .51* | .05 |
| N | .24 | .63* | -.26 |
| O | .30 | .09 | .39 |
| P | .30 | .03 | .42 |
| Q | .43 | .27 | .37 |
| R | -.12 | -.21 | .16 |

1 See Table 1 for subject information

Δ probability of .06 (one-tailed)
* probability of .05 or less
** probability of .01 or less

tendency to prefer nonconcentric stimuli to concentric ones and straight to curved. These two infants represent deviations from the group and so will be labelled deviators and excluded from the subgroup analyses to be reported.

If all infants are categorized according to the dominant dimension in their ranking, then stable subgroups do appear. Kendall's Coefficient of Concordance (W) was used to test the degree of agreement among subjects of the whole group and of each subgroup. The total group had a W of .24 ($p < .001$). The subgroup of infants who responded most to concentricity were characterized by a Kendall's W of .38 ($p < .001$). When the mean fixation time for each stimulus was computed for the subgroup and the ranking used with Kendall's tau, the relative values of the three dimensions were as follows: 1) concentricity = .73 (maximum); 2) curvilinearity = .39; and 3) number of directions = .16.

The subgroup favoring curvilinearity had a Kendall's W of .46 ($p < .001$) with tau's of .75 (maximum) for curvilinearity, .12 for concentricity and .11 for number of directions. The number of directions subgroup had a Kendall's W of .47 ($p < .001$) with tau's of .69 for number of directions, .43 for concentricity and .27 for curvilinearity.

The subgroup results just reported represent, of course, a _post hoc_ analysis and these data are intended to be only descriptive. However, as a check on the Kendall's tau as a means of identifying subgroups, the multiple regression described above was used to analyze the contribution of each dimension to the fixation time on the left and on the right stimuli for each subgroup[1]. Mean fixation times were computed for each

1 Originally it was hoped that a multiple regression analysis could be done on each subject, but the results from two individual analyses gave nonsignificant R's and standard errors were very high.

of the trials, using only the members of each subgroup. The results of the multiple regression analysis are shown in Table 9 along with the results from the ranking procedures. Each subgroup shows a significant multiple R despite the small number of subjects and, with one exception, the relative weightings maintain the same order as those obtained with the tau. The exception is in the number of directions subgroup where the regression analysis gives curvilinearity a higher weight than concentricity while Kendall's tau gives the reverse results. Table E in the Appendix shows standard weights and standard errors of weights for each subgroup.

## Correction for Position Bias

A major source of variability within individuals was the tendency to look more toward one side than the other. Giving the infants freedom of movement kept them happier, but it meant that it was impossible to insure that they were looking directly ahead the moment the flap was raised. There was also a general tendency in the group to look to the right. A position bias, even in an individual, however, was not always consistent; two infants, for example, showed a striking tendency to look to the left one time and to the right the next time. Because of this variability, it was decided that it would be desirable to correct fixation times for the position bias to see if individual variability could be reduced.

The correction consisted simply of taking the time looked at one stimulus when it was on the left, for example, and finding what percentage that time was of the total left looking time in the particular session in which that stimulus appeared. If the infant looked 50 seconds to the left and 200 seconds to the right in one session, and in

TABLE 9
The Relative Value of Each Dimension according to the Multiple Regression Analysis and Kendall's tau

Concentricity Subgroup

| | | |
|---|---|---|
| Multiple R (left stimuli) | = .56*** | |
| Multiple R (right stimuli) | = .50*** | |
| Mean standard weight for concentricity | = .2745[a] | tau = .73 |
| Mean standard weight for curvilinearity | = .1864 | tau = .39 |
| Mean standard weight for directions | = .0388 | tau = .16 |

Curvilinearity Subgroup

| | | |
|---|---|---|
| Multiple R (left stimuli) | = .44** | |
| Multiple R (right stimuli) | = .44** | |
| Mean standard weight for curvilinearity | = .2593 | tau = .75 |
| Mean standard weight for concentricity | = .1109 | tau = .12 |
| Mean standard weight for directions | = .0389 | tau = .11 |

Number of Directions Subgroup

| | | |
|---|---|---|
| Multiple R (left stimuli) | = .43** | |
| Multiple R (right stimuli) | = .45** | |
| Mean standard weight for directions | = .2323 | tau = .69 |
| Mean standard weight for curvilinearity | = .1215 | tau = .27 |
| Mean standard weight for concentricity | = .0605 | tau = .43 |

---

a Since there were four standard weights for each dimension in the two multiple regression analyses, the mean of the four was computed ignoring sign in order to give a general value for that dimension.

** probability is less than .01
*** probability is less than .001

a given trial, looked at A which was on the left for 1 second and B which was on the right for 9 seconds, then the corrected percentages would be .02 and .045, respectively. The rationale behind this correction is that if an infant has a strong tendency to look at the right side, then his left looking time should be given more weight, because the stimulus on the left has to be especially attractive to pull his attention from the preferred side. The more deviation from a 50 - 50 split there is in the left and right totals, the more difference the correction will make.

Consider the following hypothetical example, which supposes that theoretically the stimuli should be ranked A B C D E in order of preference. The expectation would be that A would be preferred in all pairs, but with a right hand bias the results might look like those in Table 10 (Part A). In example 1, A is on the left when it is paired with the fairly attractive B and C, and on the right when it is paired with the much less attractive E and D. In the second example, the situation is reversed. The corrected percentages are presented in Table 10 (Part B). In both examples the uncorrected scores would have shown A preferred in only 4 of the 8 pairs, while the corrected scores have A preferred in 8 of the 8 pairs. The correction cannot be a perfect one because more than position bias entered into the variability, and because exactly the same pairs were not shown in every session, but the correction does transform the raw scores into scores which are more consistent.

The fixation times for each infant were corrected separately; each fixation time was divided by the left or right total for the session, and the sum of these corrected scores were divided by two to give a session mean. The sum of the session means was then divided by three to

TABLE 10

Hypothetical Examples to Demonstrate Position Bias Correction

A. Hypothetical data which are uncorrected

| Example 1 | | Example 2 | |
|---|---|---|---|
| L | R | L | R |
| A (2") | B (7") | B (3.5") | A (5.5") |
| A (4") | C (6") | C (4") | A (6") |
| D (1") | A (9") | A (4") | D (5") |
| E (.5") | A (9.5") | A (3") | E (4") |

B. Hypothetical corrected data

| Example 1 | | Example 2 | |
|---|---|---|---|
| L | R | L | R |
| .267 | .222 | .241 | .268 |
| .533 | .191 | .276 | .293 |
| .133 | .286 | .276 | .244 |
| .007 | .302 | .207 | .195 |

give a percentage of total experiment fixation time for each stimulus; in this way the scores for all ten stimuli added up to 1.00. To obtain the group score for each stimulus, the mean percentage scores for each stimulus were summed and divided by N.

Group and Individual Results from the Corrected Data

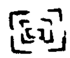
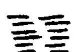
Table 11 and Figure 8 present the group results using the corrected data. The scores are now in the form of percentages but were handled in exactly the same way as total fixation time. The results are similar to those obtained by using total fixation time, with the exception that concentricity is clearly a stronger dimension than curvilinearity, and there is still the suggestion of an interaction in the curvilinearity times number of directions graph in Figure 8.

A paired comparisons analysis was also done with these data. The ranking obtained is shown in Table 12, and the analysis of variance in Table 13. The results were generally of the same nature as those obtained from the analysis based on uncorrected fixation time. It should be noted, however, that the reliability of the scale is .63 instead of .50, the scale values farther apart and the coefficient of consistency .77 instead of .54, all indications that the corrected data provide a more precise measure of the dependent variable.

Kendall's tau used on the individual rankings gives generally higher correlations than the individual results based on uncorrected total fixation time. A comparison of Tables 14 and 8 will show that the corrected data results in 15 significant tau's compared to 9 for the uncorrected data. It should be noted that four infants changed categories as a result of this analysis, though the resulting subgroups still have the

TABLE 11
Summary of Group Results Using Corrected Total Fixation Time

I. Group Ranking

| Rank | Stimulus | | Corrected Score |
|---|---|---|---|
| 1 |  | (I) | .1185 |
| 2 |  | (II) | .1101 |
| 3 |  | (III) | .1098 |
| 4 |  | (VII) | .1046 |
| 5 |  | (IV) | .1004 |
| 6 |  | (IX) | .1001 |
| 7 |  | (VI) | .0993 |
| 8 |  | (V) | .0984 |
| 9 |  | (X) | .0803 |
| 10 |  | (VIII) | .0776 |

II. Significance of Each Dimension

A) Concentric stimuli were preferred to nonconcentric ones,
$T = 6$, $p < .005$

B) Curved stimuli were preferred to straight stimuli,
$T = 25$, $p < .005$

C) Number of directions was a significant variable with three direction stimuli looked at longest, two direction stimuli next longest and one direction stimuli least long.
$X_r^2 = 9.03$, $p < .01$

III. Relative Values of Each Dimension according to Kendall's tau

Concentricity = .67
Curvilinearity = .33
No. of Directions = .32

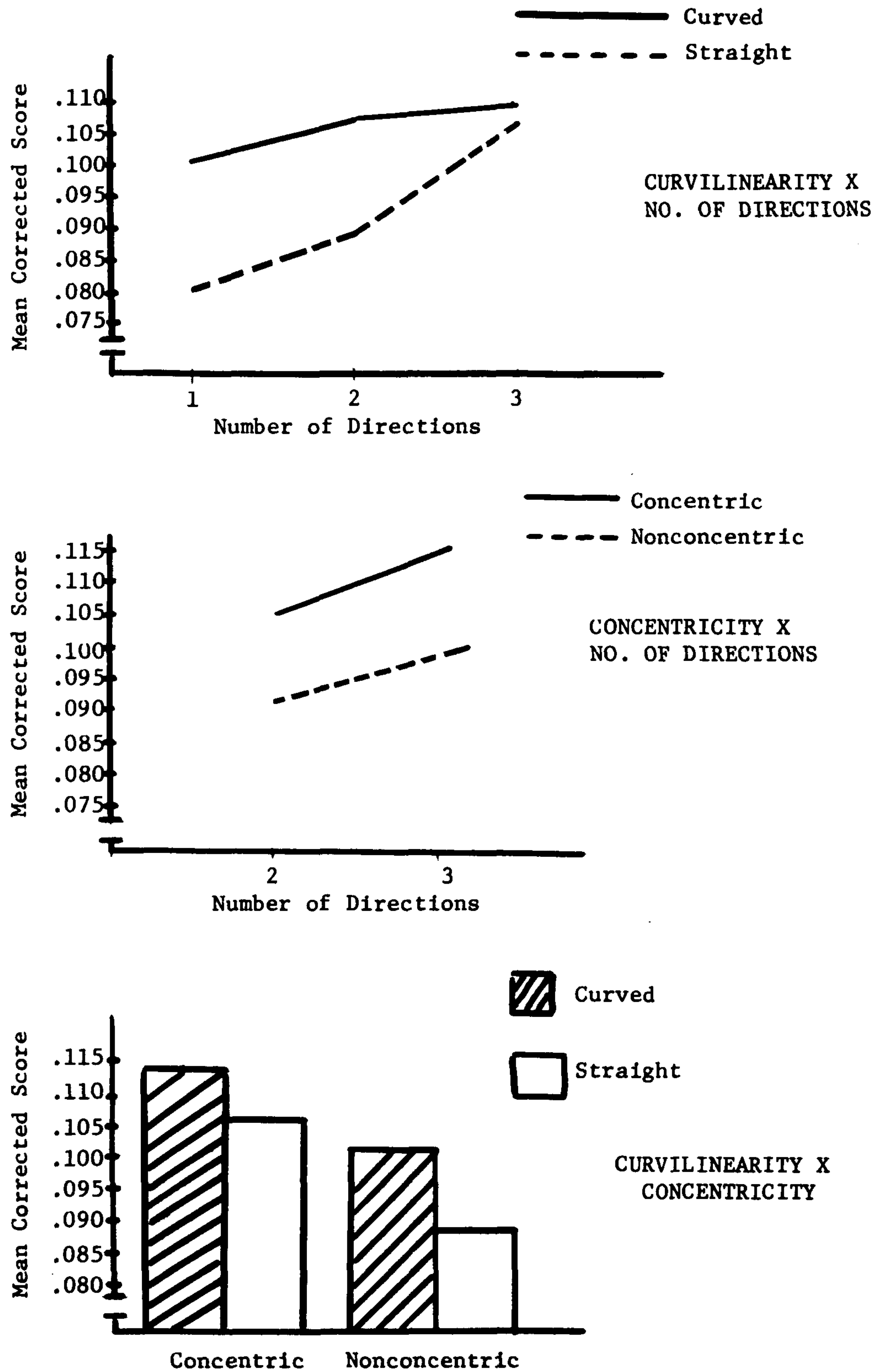



Figure 8: Graphic Representation of Mean Corrected Scores by Pairs of Dimensions

TABLE 12
The Ranking of the Ten Stimuli as Determined by the Paired Comparisons Analysis based on Corrected Total Fixation Time

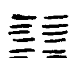
| Rank | Stimulus | Number of Votes | Scale Values |
|---|---|---|---|
| 1 |  (I) | 107 | .4286 |
| 2 |  (III) | 102 | .3461 |
| 3 |  (II) | 96 | .2205 |
| 4 |  (IX) | 85 | .0476 |
| 5 |  (V) | 82 | .0244 |
| 6 |  (VII) | 82 | .0110 |
| 7 |  (IV) | 77 | -.0546 |
| 8 |  (VI) | 76 | -.0729 |
| 9 |  (X) | 57 | -.3914 |
| 10 |  (VIII) | 46 | -.5681 |

TABLE 13

Analysis of Variance for Paired Comparisons Using Corrected Data

| Source | df | Sum of Squares | Mean Square | Chi Square | Probability |
|---|---|---|---|---|---|
| All | 45 | 6.999 | 0.156 | 125.99 | .001 |
| Comparative Judgment | 9 | 5.057 | 0.562 | 91.03 | .001 |
| Residual | 36 | 2.660 | 0.074 | 47.87 | .100 |

Reliability of Scale

$r_s = 0.63$

$r_{ss} = 0.53$

$r_b = 0.64$

Variance Components Analysis

| Source | Estimate of variance Component |
|---|---|
| Binomial Sampling | 0.0556 |
| Deviations from Linear Scale | 0.0183 |
| Linear Scale Values | 0.0488 |

TABLE 14

Summary of the relative value of the three dimensions as determined by Kendall's tau using corrected fixation time

| Ss | Concentricity | Curvilinearity | Number of Directions |
|---|---|---|---|
| A | .61* | .27 | .21 |
| B | .43 | .15 | .32 |
| C | .61* | -.03 | .11 |
| D | .67** | .15 | .32 |
| E | .49Δ | -.15 | .21 |
| F | .12 | .63* | .21 |
| G | .43 | .45 | -.05 |
| H | .18 | .51* | .61* |
| I | .18 | .21 | -.47 |
| J | .37 | .27 | .21 |
| K | .24 | .51* | .21 |
| L | .18 | .39 | .37 |
| M | .06 | .52* | .32 |
| N | .18 | .63* | -.11 |
| O | .55* | -.03 | .63* |
| P | .49Δ | -.03 | .58* |
| Q | .37 | .21 | .42 |
| R | -.30 | -.03 | -.16 |

Δ probability of .06
* probability of .05 or less
** probability of .01 or less

same number of subjects in them.

If the infants are again categorized by dominant dimension, the Kendall's W's are higher and the relative values of the dimensions within each subgroup slightly different than in the results of uncorrected data. The group as a whole had a Kendall's W of .30 ($p < .0001$). The subgroup favoring concentricity was characterized by a Kendall's W of .56. When the ranks for the stimuli were summed for this subgroup the composite ranking of the ten stimuli led to a tau of .73 (maximum) for concentricity, .37 for number of directions and .15 for curvilinearity. The curvilinearity subgroup had a W of .52 with tau's of .75 (maximum) for curvilinearity, .30 for concentricity and .11 for number of directions. The number of directions subgroup had a W of .70 with tau's of .65 for number of directions, .50 for concentricity and .21 for curvilinearity. The Kendall's W's indicate that with the corrected data all subgroups show better agreement. Because the corrected data in general lead to somewhat less variable individual results, the subgroups based on corrected scores will be used for further discussion.

The next problem was to explore the subject characteristics which might be correlated with the subgroup differences. Age was carefully controlled in the experiment, and the subgroups do not differ in their mean age at first testing. The concentricity subgroup had a mean age of 90.67 days (89 to 94 days); the curvilinearity subgroup had a mean age of 92.17 days (88 to 96 days); and the directions subgroup had a mean age of 91.50 days (89 to 95 days).

Birth weight and condition of mother during pregnancy were two other variables to be considered. The average birth weight for the concentricity subgroup was 7 lbs., 12 ozs. with a range of 7-2 to 8-6.

The mean birth weight for the curvilinearity subgroup was 6-15 with a range of 5-13 to 8-12. The mean birth weight for the direction subgroup was 7-1 with a range of 5-4 to 9-2. These differences were not significant. Two of the infants had birth weights under 6 pounds; one was in the curvilinearity subgroup, the other in the directions subgroup. Most of the mothers reported no complications during pregnancy.

The last subject variable to be considered was that of sex. Of the nine boys, five had concentricity as the strongest dimension; two preferred curvilinearity and one preferred number of directions. One was a deviator. Of the nine girls, four favored the dimension of curvilinearity, three showed a preference for number of directions and one preferred concentricity. One was a deviator. The above breakdown suggests a possible sex difference in the effectiveness of the three dimensions. In order to test this possibility with such a small sample, it was necessary to collapse two categories, curvilinearity and number of directions, and to do a Fisher's exact probability test; the exact probability was .059.

## Summary of the Analysis of Dimensions

When the stimuli belonging to each dimensional group are combined and the dimensions tested separately, the results show that all three dimensions significantly affected the visual behavior of the infants and in the directions which were originally hypothesized. The results of tests for unidimensionality were somewhat ambiguous but did not clearly contradict the inference that three dimensions were operating in the preferences of the infants. When the group was considered as a whole, the techniques used to find which dimension was most effective did not yield clear-cut results. When concentricity and curvilinearity were well differentiated, as in the ranking based on the uncorrected paired comparisons or in the ranking based on corrected total fixation time, then concentricity seemed to be clearly more effective. Most of the other measures, however, resulted in nearly equal values for these two dimensions. In all cases, however, curvilinearity and concentricity were more effective than number of directions.

Individual rankings were found using both the corrected and uncorrected data. While the corrected scores did not yield very different group results, the corrected scores were more consistent in all measures of individual behavior. These corrected scores were considered less variable, though not widely different, than the uncorrected scores and were therefore used in considering subgroup differences. Three subgroups emerged from the analysis, with the concentricity subgroup being made of 5 males and 1 female. Though the Fisher's exact probability was not quite significant, there seemed to be suggestive evidence for a sex difference in the salience of the different dimensions, with boys favoring concentricity and girls favoring either curvilinearity or number of directions.

## Other Aspects of Looking Behavior

This section deals not with preferences but with other kinds of looking behavior which were observed during the experiment. These analyses were carried out to see if a better understanding of the processes involved in visual preferences could be reached.

### Total Looking Time

Table 15 presents the mean looking time per trial per half session for each subject. The table was set up in this manner so that a 2 X 3 X 2 analysis of variance could be done (Winer, 1962, pp. 319-337).

TABLE 15

Mean Seconds Fixation Time Per Trial

| | 1st Session | | 2nd Session | | 3rd Session | |
|---|---|---|---|---|---|---|
| | 1st half | 2nd half | 1st half | 2nd half | 1st half | 2nd half |
| A | 4.09 | 4.19 | 4.53 | 5.92 | 4.34 | 2.76 |
| B | 7.39 | 7.24 | 5.00 | 3.10 | 5.76 | 7.17 |
| C | 7.22 | 4.93 | 4.34 | 8.48 | 6.90 | 6.43 |
| D | 6.67 | 5.87 | 5.92 | 3.97 | 5.45 | 5.30 |
| E | 8.77 | 7.82 | 8.07 | 6.67 | 4.77 | 6.70 |
| F | 8.72 | 8.88 | 7.28 | 6.22 | 6.47 | 5.73 |
| G | 8.28 | 8.73 | 9.40 | 9.78 | 8.58 | 8.43 |
| H | 7.03 | 5.11 | 8.14 | 5.12 | 8.16 | 7.57 |
| I | 8.58 | 6.55 | 8.62 | 6.43 | 7.63 | 6.68 |
| J | 8.42 | 9.08 | 7.53 | 8.65 | 6.87 | 3.25 |
| K | 8.48 | 6.00 | 9.05 | 8.15 | 7.72 | 5.98 |
| L | 8.52 | 6.13 | 7.75 | 4.35 | 8.48 | 9.23 |
| M | 8.23 | 6.82 | 8.28 | 8.02 | 7.13 | 8.02 |
| N | 7.83 | 5.67 | 5.78 | 8.68 | 9.38 | 7.83 |
| O | 6.15 | 5.62 | 4.58 | 6.03 | 4.35 | 1.52 |
| P | 6.48 | 5.63 | 6.20 | 7.82 | 5.17 | 3.38 |
| Q | 9.07 | 9.28 | 9.72 | 8.83 | 6.75 | 4.75 |
| R | 8.28 | 7.52 | 6.62 | 4.30 | 8.33 | 6.57 |
| Mean | 7.68 | 6.73 | 7.05 | 6.70 | 6.79 | 5.96 |
| Session Mean | 7.21 | | 6.88 | | 6.38 | |

Sex is the first factor (A) and sessions (B) and halves of sessions (C) are the two factors with repeated measures. The results of the analysis are summarized in Table 16. The F values in the table show that neither sex nor sessions is significant, but that the decrease in looking time from the first to the second half of each session is highly significant. Although the analysis indicates that there is not a significant decrease in looking time from session to session, it should be noted that there is a steady decrease from one session to the next.

It is of interest that the subgroups differ in mean looking time per trial. The curvilinearity subgroup looked an average of 7.72 seconds per trial while the concentricity and number of directions groups looked 6.10 seconds and 6.36 seconds, respectively. The differences among these means were tested by a one way analysis of variance and the differences were significant at the .05 level ($F_{2,13} = 4.08$).

Number of Shifts

Another behavior is the number of times in one trial that an infant shifted his gaze from one side to the other; this behavior will be referred to as "shifts" for convenience. Since it seemed likely that number of shifts in a given trial would be partly dependent on length of fixation time for that trial, shifts were corrected for looking time by calculating the mean number of shifts per second. There were no significant subgroup differences in mean number of shifts per second, though the curvilinearity group had fewer (.363) than either the concentricity or number of directions groups which had .455 and .483, respectively. Table 17 shows the mean number of shifts per second for each session and for each half session. The same kind of 2 X 3 X 2 repeated measures analysis was appropriate, but it revealed no significant differences

TABLE 16
Three Way Analysis of Variance with Mean Looking Time per Trial as the Dependent Variable

| Source | SS | df | MS | F |
|---|---|---|---|---|
| Between | | | | |
| A (sex) | 3.84 | 1 | 3.84 | 1 |
| error a | 136.28 | 16 | 8.52 | |
| Within | | | | |
| B (sessions) | 12.44 | 2 | 6.22 | 2.15 |
| AB | 2.53 | 2 | 1.26 | 1 |
| error b | 92.66 | 32 | 2.90 | |
| C (halves) | 13.63 | 1 | 13.63 | 17.26** |
| AC | 0.87 | 1 | 0.87 | 1.11 |
| error c | 12.64 | 16 | 0.79 | |
| BC | 1.83 | 2 | 0.91 | 1.42 |
| ABC | 4.19 | 2 | 2.10 | |
| error bc | 47.11 | 32 | 1.47 | |

** $p < .01$

TABLE 17

Mean Number of Alternations per Second

| | 1st Session | | 2nd Session | | 3rd Session | |
|---|---|---|---|---|---|---|
| | 1st half | 2nd half | 1st half | 2nd half | 1st half | 2nd half |
| A | .743 | .477 | .746 | .084 | .341 | .500 |
| B | .419 | .338 | .506 | .429 | .524 | .228 |
| C | .535 | .349 | .445 | .205 | .541 | .280 |
| D | .250 | .397 | 1.397 | 1.292 | 1.077 | .730 |
| E | .213 | .332 | .471 | .319 | .153 | .100 |
| F | .192 | .195 | .615 | .347 | .706 | .489 |
| G | .233 | .214 | .220 | .457 | .498 | .688 |
| H | .707 | .689 | .585 | .336 | .438 | .236 |
| I | .210 | .427 | .348 | .311 | .550 | .299 |
| J | .198 | .264 | .345 | .239 | .349 | .594 |
| K | .708 | .288 | .604 | .515 | .751 | .414 |
| L | .743 | .501 | .370 | .430 | .236 | .108 |
| M | .106 | .293 | .112 | .141 | .187 | .291 |
| N | .128 | .259 | .208 | .061 | .334 | .425 |
| O | .488 | .404 | .480 | .332 | .398 | .349 |
| P | .679 | .723 | .440 | .886 | .528 | .473 |
| Q | .014 | .668 | .404 | .513 | .514 | .295 |
| R | .057 | .230 | .773 | .130 | .357 | .209 |
| Mean | .368 | .392 | .504 | .390 | .471 | .373 |
| Session Mean | .38 | | .45 | | .42 | |

on any factor. Again, although there were no significant differences among the number of shifts for each session, it should be noted that the number of shifts increases toward the second session despite the fact that looking time is decreasing. In an attempt to clarify the relationship between sessions and the number of shifts, the 18 subjects were divided into those who showed an increase of shifts per second from the first session to the second session (N = 10) and those who showed a decrease (N = 8). It was found that the group of subjects who showed a decrease started with a significantly higher number of shifts than those who showed an increase ($t = 3.34$, $p < .01$). This difference is probably an example of regression toward the mean, but it is interesting to speculate that there may be a relationship between number of shifts and sessions, which could be described as a curvilinear one for those infants who start shifting at a low level and linear decrease for those who begin to shift readily from the beginning of the experiment. It is a possibility which deserves further study.

Sessions, however, is not the only variable of interest in relation to number of shifts. It could be hypothesized that the number of shifts would be related to the similarity of the two stimuli in the pair. It was decided that a subject determined criterion of similarity should be employed and therefore the number of steps between any two stimuli on the individual's ranking of stimuli was used as a measure of similarity with the stimuli being more similar the fewer the steps between them. The hypothesis concerning the relationship between number of shifts and similarity of stimuli in a pair was that the more similar the two stimuli were the greater the number of shifts the infants would exhibit. To test this hypothesis, the number of steps between stimuli was calculated from the ranking for each subgroup as determined by the corrected fixation times. Then for each subject in the subgroup the mean number of shifts for the pairs which came under each number of steps was calculated. For each subject in the whole group, then, there was a score representing the mean number of shifts for each number of steps that was possible. The number of steps were then ranked from 1 to 9, and the mean shifts scores were ranked from lowest to highest. The resulting Kendall's tau was -.50 ($p < .038$, one-tailed), so that it can be said that there was some relationship between number of shifts and the subjective degree of similarity between two stimuli as measured by the number of steps between them on the subgroup ranking. The relationship is such that as number of steps increase or similarity decreases, the number of shifts per second decreases. Further discussion of the meaning of shifts will be delayed until Chapter IV.

Position Bias

A third behavior to be considered is the position bias which was prominent enough to make a correction for it desirable. The biases are represented by the percentage of total looking time spent on one side or the other; the individual data are given in Table 18. There are 3 sessions for each of the 18 subjects. If these are viewed as 54 independent events, it is possible to ask whether the 37 times that the right was preferred to the left is significantly greater than chance. The binomial test gives a z of 2.86 with a probability of .002. This result suggests that the right is significantly preferred, so that even in sessions where the percentage of right looking time for an individual is not a great deal higher than 50 per cent, a true bias may still be present. For the sake of categorizing the sessions into those showing

TABLE 18

Percentages of Total Fixation Time for each Position for each Session

| Subjects | 1 L | 1 R | 2 L | 2 R | 3 L | 3 R |
|---|---|---|---|---|---|---|
| A | 53 | 47 | 37 | 63 | 39 | 61 |
| B | 34 | 66 | 37 | 63 | 41 | 59 |
| C | 42 | 58 | 70 | 30 | 42 | 58 |
| D | 74 | 26 | 54 | 46 | 46 | 54 |
| E | 36 | 64 | 57 | 43 | 73 | 27 |
| F | 43 | 57 | 33 | 67 | 29 | 71 |
| G | 44 | 56 | 25 | 75 | 39 | 61 |
| H | 40 | 60 | 24 | 76 | 10 | 90 |
| I | 30 | 70 | 45 | 55 | 66 | 34 |
| J | 9 | 91 | 24 | 76 | 37 | 63 |
| K | 64 | 36 | 58 | 42 | 57 | 43 |
| L | 50 | 50 | 41 | 59 | 76 | 24 |
| M | 31 | 69 | 37 | 63 | 72 | 28 |
| N | 25 | 75 | 11 | 89 | 33 | 67 |
| O | 16 | 84 | 47 | 53 | 85 | 15 |
| P | 49 | 51 | 56 | 44 | 57 | 43 |
| Q | 17 | 83 | 32 | 68 | 36 | 64 |
| R | 55 | 45 | 32 | 68 | 25 | 75 |

a right bias, left bias or no bias, a liberal significance level was set, .10 instead of .05. With the .10 level of significance the binomial indicates that a 37 - 63 per cent split could be considered significantly different from chance. So each session was designated accordingly as showing a right, left or no bias. If an infant had only one session with a significant bias, he was characterized as showing a mild bias. If two or more sessions showed a bias to the same side, the infant was characterized as showing a strong bias. If there was a bias to one side in one session and a bias to the other side in another session, the infant was characterized as variable. The results of this categorization show that 7 infants had a strong right bias, 1 had a mild right bias, 4 had mild left biases, 4 were variable and 2 had no significant bias. Within each sex group, there were 4 infants with a right bias, 2 with a left, 2 variable and 1 equal. The relationship between an infant's bias and the shoulder he was held on also appeared to be negligible with 4 infants on each shoulder showing a right bias.

Summary

Three different looking behaviors have been considered. The infants in this study significantly decreased the amount of time that they looked at the stimuli within each session, and there was a nonsignificant but steady decrease in looking time from one session to the next. The number of shifts from one side to the other showed a tendency to increase in the second session, although the total time looking decreased. The subjects differed in the readiness with which they shifted during the first session and those who shifted readily tended to decrease the shifting in the second session, while those subjects who were slower to start shifting increased in the second session. There was some relationship between the degree of similarity between the two stimuli of a pair and the number of shifts, such that as the similarity increased so did the number of shifts.

Even though the experimental method included showing each pair with left and right reversed in order to control for position biases, it was decided that the position biases which did occur could be studied with profit. There was a significant tendency to look to the right, although a few infants showed a mild tendency to prefer the left side. There was no subject characteristic which was related either to the direction or the degree of bias. The results suggest, however, that visual behavior in the presence of visual stimuli is influenced by such internal factors as position preference as well as by the stimuli.

# CHAPTER IV

# DISCUSSION

The major goal of the study was to find effective dimensions in the infant's visual world and information about his visual organization by studying the observed preference for a bullseye over a pattern of horizontal stripes. To learn more about the bullseye three hypotheses were made concerning possibly effective dimensions of stimulation embodied in the bullseye; the three dimensions were concentricity, curvilinearity and number of directions. All three dimensions were found to be effective in determining the responses of the infants to the experimental stimuli. Since the bullseye differs from the stripes in being curved, in having three directions and in being concentric, the results can be interpreted as showing that the bullseye is preferred to the stripes because of all three dimensions. The results from all tests, however, suggest that the three experimental dimensions were not the sole determinants of the infants' preferences and that other uncontrolled dimensions may have been operating. The study, then, provides supporting evidence for the empirical question that it was designed to investigate. In this chapter the theoretical implications of the results will be explored.

## Processing of Dimensions

Before a discussion of how the infants processed the information from the stimuli can take place, the three dimensions must first be considered separately.

### Direction of Line

As mentioned in Chapter I, the dimension of direction of line represents a confounding of number of directions and actual orientation of the lines, since it is impossible to have a three direction stimulus without having oblique lines. Although number of directions was the variable manipulated in this study, a further study would be necessary to sort out the two possible effects of direction of line. It is apparent, however, that direction of line was significant in one of the two ways. Also in Chapter I were some tentative suggestions concerning the underlying processes which make this dimension effective. One of these suggestions involved the notion of receptive fields as defined by Hubel and Wiesel. If number of directions is the dimension which held the infant's attention to the three direction stimuli, then the most likely explanation is that the three direction stimuli were preferred because such stimuli excited more receptive cells and so elicited a stronger response, that is, there was a summation effect.

If it is the specific orientation of lines which is important, however, then the bullseye may be preferred because it has vertical and/or oblique lines, that is, the infant is responding not just to the quantity of stimulation but to the particular kind. This behavior could be explained by something as simple as the direction of the infant's scan as suggested in Chapter I, although this explanation is weakened by studies showing lack of differentiation between horizontal and vertical stripes (Moffett, 1969; McKenzie and Day, 1971). In any case, the results of the present study cannot adequately answer this question, but it is a problem worth further study.

<u>Curvilinearity</u>

The discussion on curvilinearity in Chapter I suggested that curvilinearity could be more specifically defined as a dimension involving smooth continuous directional change. If it were solely the characteristic of directional change or the fact that a curve embodies more than one direction, then one would expect angles to be as effective as curves. In the present experiment, the concentric squares contained several angles and yet both curved concentric stimuli were generally preferred to it. Dodd and Lewis (1969) report that, in three-year-old children, a stimulus made of curved lines consistently elicited stronger orienting responses than a similar pattern of straight lines and angles. Schneirla (1965) cites studies which show a preference for round objects over angular ones in infrahuman species, so that there seems to be a phylogenetic and ontogenetic continuity in the effectiveness of curvilinearity. The evidence also suggests that it is more than number of directions which makes curves effective.

The Gestalt psychologists (Koffka, 1935) included in their principles the law of good continuation, which states that a straight or curved line will be preferred if it continues in its projected direction, that is, a curved line that continues in a circle will be preferred to a straight line broken by a change in direction. If the curved segments conform to the law of good continuation and angles do not, this may be one reason why curves are preferred.

It also might be hypothesized that because the human face, which is one of the most pervasive stimuli in a young infant's world, is 1) made up of more curves than angles and 2) is associated with the pleasure of feeding and contact comfort, curves may be more reinforcing than angles. On the other hand, there is some evidence that experience is not necessary for a face-like stimulus to be highly attractive (Fantz, 1963). A better hypothesis would combine the two explanations above, that is, that the human infant is born with a capacity to respond to certain features such as curves, that the effectiveness of these stimulus dimensions maintains the infant's attention to stimuli such as the face and this in turn promotes learning and further development of the capacity to process visual stimuli. It is not necessary to assume that the stimulus characteristics which cause the infant to respond to the bullseye or a face at birth are the same characteristics which make the stimulus effective at three months, for much learning has taken place in that time.

Concentricity

The infants in the present study significantly preferred those stimuli whose elements were arranged in a concentric pattern, but, unfortunately, concentricity may not be the only explanation for these results. It is possible that the concentric stimuli were preferred because they were generally closed figures while the nonconcentric stimuli were more open around the edges. If the infants attended more to closed figures because such figures conform to the Gestalt laws of good continuation and closure, then the four concentric stimuli would have been preferred to the six nonconcentric ones. This possibility could, of course, be tested, but for the present study, the interpretation of the preference for concentric stimuli is somewhat ambiguous.

Multidimensionality

Although the bullseye is obviously a multidimensional stimulus from an objective viewpoint, the overall results suggest that the bullseye is also a psychologically multidimensional stimulus. Lewis and Freedle (1970) have devised a model which will predict visual "choices" in viewing unidimensional stimuli, for example, how much time an infant will spend looking at each of two circles varying in size when they are both available. If the predictions from this simple model are systematically violated when several stimuli are presented simultaneously, then the effectiveness of more than one dimension can be assumed. Much the same logic underlies the paired comparisons analysis, although it makes use of simple preferences rather than magnitude of preferences. The multiple regression analysis, as used in the present study, adds further information by computing the relative weights of each dimension, as well as providing a model for predicting fixation time.

Assuming that the bullseye was a multidimensional stimulus for the infants in the present study, it is then possible to ask about the manner in which the stimulus information was processed. It is known that visual information is processed at different levels with brightness being processed at a subcortical level and direction of line at a cortical level (Hubel and Wiesel, 1961). Hubel and Wiesel (1962) suggest further that the simple corical units responding to direction of line relay information to the more complex or higher order units. Dick and Dick (1969) also found some support for hierarchical processing of visual information, so that it may be reasonable to hypothesize that some dimensions are processed temporally before others. It is possible, for example, that direction of line must be processed before the spatial relationship of several lines can be processed. In this way, stimuli would be looked at longer to process information like arrangement of lines than to process direction of lines; this might explain why concentricity was more effective than number of directions in terms of fixation time. If curves contain more information than direction of line then curves might take longer to process than number of directions but not as long as integration of several segments. Further, after spatial arrangement of segments has been analyzed it is possible that something like the Gestalt principles of organization or learned associations would enter in and stimuli would be fixated even longer because they were more pleasing or more reinforcing.

The present study was not designed to deal with the problem of information processing and the discussion can serve only to suggest possible explanations for the behavior observed. However, the preference for the bullseye over the stripes might be explained as follows: considering the group as a whole, concentricity appeared to be the most important determinant of fixation time, curvilinearity next most and number of directions next most. The bullseye may have been preferred to the stripes in the first place because the response of cortical units to three different directions summed to produce a stronger response to the bullseye than to the one direction stripes. It was also looked at longer because more time was required to process the curves than the straight lines. Thirdly the arrangement of lines in the two patterns may have required different amounts of time to process since the redundancy in the stripe pattern is greater than in the bullseye pattern. Even if the two patterns had required the same amount of time to process, the bullseye may have been looked at longer because it conformed to the Gestalt principles of good continuation and closure. The bullseye would have been looked at longer at each step of the processing procedure because it elicited the stronger response along each dimension. Preference as measured by fixation time may represent a combination of factors including summation effects, time for processing, learned associations and conformity to Gestalt principles of organization, which in turn might involve organizing processes in the brain. There is no reason to assume that a single underlying mechanism accounts for the preference behavior of the infants.

Because the paired comparisons analysis did not unambigously reject the hypothesis of unidimensionality, it is possible that a single dimension would account for all the preferences. It is also possible, however, that a single dimension, such as amount of information, may have contributed to the results along with the three dimensions discussed above.

## Individual Differences

The group results suggest that the infants responded to the stimuli mainly on the basis of concentricity (corrected data). Investigation of individual records, however, reveals differences in the relative effectiveness of the three dimensions; this fact raises the possibility that the individual infants did not always respond to stimuli on the same basis. Three subgroups, identified according to the dimension which was most important in their preferences, were used in the analysis of these possible individual differences.

Reasons for the observed differences were explored to some extent in Chapter III. Although the relationship did not reach significance there appeared to be a possible relationship between sex and the dimensional hierarchy which an infant exhibited. For the most part no systematic sex differences in visual fixation have been reported in the literature. Greenberg and Weizmann (1971) report that females looked significantly longer than males at the most complex patterns in a paired comparisons design even though all subjects looked longest at the most complex patterns. Weizmann, Cohen and Pratt (1971) in a study of novelty and familiarity found that in babies of six to eight weeks of age males fixated significantly longer in general but females looked longer at the novel stimuli than did the males. Since there are no clear and consistent sex differences reported it may be that individual differences and some observed sex differences may be related to a general factor of maturity. One sex may mature faster than the other at some ages, so that within a single age group one would find sex differences. In order to determine whether a sex difference or a difference in level of maturity was responsible for the observed individual differences in the present study, a study which involved more subjects and covered a wider age range would be needed.

There are other less obvious individual differences which could account for some of the differences in dimensional salience. McCall and Kagan (1970), for example, classified their infants into fast and slow habituators and found some evidence for the stability of this trait over time. In the subgroups of the present study, the curvilinearity group had the longest overall looking time, but the fewest number of shifts per second. This may suggest that they habituated more slowly than the other infants, that is, they looked longer before shifting. On the other hand, the differences might be explained if there were individual differences in the speed of processing different stimulus characteristics. Let us assume that number of directions is processed on a lower level than curvilinearity. If an infant were slow to process then he would spend more time looking at the stimuli because of the number of directions than would an infant who processed number of directions quickly and began to look at the stimuli more in order to process curves.

Within subject variability was high, but the results suggest that there may be individual differences within one age group which must be accounted for. On a surface level, these differences may represent differences in maturity or differences in experience, but it would still be important to explore the mechanisms, such as habituation, which are facilitated by increased maturity or richer experience.

Another kind of difference involved the two deviators, subjects whose preferences ran counter to the general group trends. There seemed to be no subject characteristic which would account for the preference of fewer directions to more directions or nonconcentric to concentric stimuli. The fact that one infant (I) was very sleepy for the first two sessions raises the possibility that an infant's state may play a part in his preferences, that is, an infant who is sleepy may prefer to look at the less stimulating stimuli. It would be interesting to follow up these infants with further tests to see whether the differences are stable individual traits or the transient effects of state.

## Other Aspects of Looking Behavior

These other aspects of the infants' behavior in the experiment were analyzed in Chapter III with the hope that the results would contribute to our understanding of visual exploratory behavior. Again, each aspect will be considered separately before discussing how they can be integrated with fixation time.

### Looking Time

The analysis of overall looking time showed that looking time decreased significantly within each session. Fagan's work (1970, 1971) indicates that three-month-old infants are capable of storing enough information from a visual stimulus so that the stimulus can be recognized as familiar when it is paired with an experimentally novel one. The infants in the present study also appeared to become more familiar with the stimuli as each session proceeded and the decrease was probably due to habituation to some or all of the stimuli. It cannot be shown conclusively that the decrease was not due to fatigue, but most of the infants were as wide awake and alert after the testing as before. The fact that the decrease from session to session was not significant may indicate that the 48 hours between sessions was too long for memory traces of the stimuli to be carried over.

Number of Shifts

The number of shifts offered several interesting possibilities but no clear-cut relationships emerged. Several *post hoc* hypotheses were tested. There appeared to be some relationship between sessions and the number of shifts per second, such that shifts started out at a low point, increased through the first session, and reached a peak in the second session before beginning to decline again. Although this relationship was not significant it is interesting to speculate that there may be a curvilinear relationship between familiarity and number of shifts. As the stimuli become more familiar the infant begins to actively compare the two stimuli in a pair, and as the stimuli become very familiar, the infant tends to look only at the preferred one or perhaps briefly at both before turning away. As the stimuli become very familiar comparisons would no longer be necessary for the stimuli to be recognized.

Another possible factor in the number of shifts was the degree of similarity between the two stimuli of a pair, with more shifts required to distinguish two similar stimuli than two stimuli which are immediately seen as different. When a subject-determined criterion of similarity was used, there was a significant positive, but not high, correlation between similarity and number of shifts.

Finally, it is of interest to note that the number of shifts was increased when the infants were held in the shoulder position. The two subjects who were discarded when the shoulder position was adopted showed only 57 and 89 shifts during the 90 pairs while the experimental group ranged from 129 to 407. It may be that infants experience greater freedom of movement when held upright against the mother's body, but the greater number of shifts also suggests that the infant is more active visually and may learn more from that position.

Position Bias

The third aspect of looking behavior to be considered was the position bias. With the exception of Wicklegren (1967) no previous studies have reported on observed position biases, although all investigators recognize the need to control for such a bias. The biases in the present study were strong enough that they were considered worth further exploration. As could have been predicted, the right side was favored just as it is in the tonic neck reflex after birth and handedness later on. The infants who showed a variable position bias may not have had a strong tendency to begin with and consequently may have been more sensitive to slight changes in the mother's position. In any case, it would appear that for most of the infants, position choices were determined by an internal tendency to favor one side as well as by the stimuli.

If the infants in this study tended to show stronger position biases than in other studies, although this is impossible to determine since such data are not reported, the similarity among the stimuli may have been responsible. Since the stimuli were made up of the same number of segments, the same area and the same brightness, they may have been perceived as fairly similar. The variance in the paired comparisons analysis tends to support this conclusion. If all the stimuli were interesting and similar, there may have been less tendency to respond on the basis of the stimuli alone, and another response factor like position bias may have entered in; White (1969) reports, for example, that preschool children will choose on the basis of position when a discrimination problem is too difficult for them. On the other hand, if two stimuli differ strikingly in their attractiveness, the infant may always look longer at the more effective one regardless of side.

Contribution to Understanding the Preference Response

In Chapter I there was some discussion concerning the meaning of the preference response and in this chapter the discussion so far has suggested that the infants may have attended to the stimuli for more than one reason. What do the other aspects of visual behavior tell us about the preference response? When an infant is faced with pairs of stimuli in a paired comparisons design there are apparently several factors in his response. Which stimulus he looks at first may depend on a combination of the characteristics of that stimulus and the infant's general tendency to turn to one side. How long his attention is maintained depends upon the characteristics of the stimulus he is looking at but also on the characteristics of the other stimulus in the pair. This was suggested by the results of the multiple regression analysis. If the other stimulus is a highly attractive one it competes more for the infant's attention than a stimulus which is not so attractive. If the two stimuli are perceived as similar then the infant tends to look back and forth between them more than if they are perceived as different. This may be a kind of comparison behavior or may reflect a greater competition between the two stimuli. Also since all of the stimuli tend to be similar to one another, a response factor like the position bias may enter in again, so that the infant tends to fixate the stimulus on his preferred side for longer than the stimulus on his nonpreferred side. As he is presented with the stimuli over and over, there is less tendency to maintain fixation on the first stimulus fixated and the number of shifts increases. At the same time, however, there is habituation, probably to all of the stimuli, and he spends less time looking as the session proceeds.

The preference response is apparently made up of a number of factors some of which act together to produce a longer fixation time at a given moment and some of which compete with each other making any given fixation time shorter and increasing behavior like shifts.

## Implications for Perceptual Development

Eleanor Gibson (1969) has interpreted the findings of infant perception as showing that newborns start out by responding to visual stimuli with a "primitive fixation." As they grow older, the infants begin to actively explore visual stimuli and thereby begin to pick up distinctive features of the stimuli. Only later do they begin to see stimuli as integrated wholes. Gibson cites Bower's (1966) work on heterogeneous summation as support for a developmental tendency to go from the whole as being the sum of its parts to a later stage where the whole is perceived as more than the sum of its parts.

In agreement with Gibson's characterization of early perceptual development is Munsinger's (1970) theory that in the newborn only the energy detection system is working, and because it is working the young infant orients to potential sources of information. After having oriented many times to generally patterned objects, the infant begins to receive information and slowly develops his perceptual system which in the end is responsible for pattern recognition. Munsinger's theory is similar to Schneirla's (1965) theory that young organisms will approach objects of moderate intensity and will withdraw when the intensity is too great. This orienting to or approaching stimuli of moderate intensity insures that the infant has a manageable amount of stimulation with which to begin learning.

The infants in the present study were three months old and their experience had been extensive enough that they may well have been using information coming from patterned stimuli. But what is the nature of that information? Do the results of this study have some relevance for that question?

The results indicate that three dimensions at least contribute to the observed preference for the bullseye, but that the dimensions may have different relative values for individuals. Since the bullseye is responded to as a multidimensional stimulus, perhaps the dimensions could be considered distinctive features which combine to produce a stronger response. The bullseye is an effective stimulus because it combines all three preferred features.

This effectiveness by virtue of the multiplicity of effective features would argue against the infant's perceiving the bullseye as an integrated pattern or form as the adult presumably sees it. It is more likely that three-month-old infants are in a period of perceptual development when they are learning to distinguish features of a pattern. It might be that during this period there are more shifts when two or more patterned stimuli are available than would be found earlier, that is, there is more comparison behavior going on at three months. There may also be more shifts than would be found later when the same stimuli would require very little looking time for the stimulus information to be received. Another developmental possibility is that infants younger than three months may respond to the same stimuli as unidimensional and that more dimensions become effective in the same stimuli as the infants mature.

## Summary

Methodologically, the study is the first to have infants held so that they were upright against the mother's body and able to look over her shoulder. While not as controlled as studies where infants sit in the same seat and are restricted by head pieces, this position made it possible to have longer sessions, and therefore, fewer, and to keep all of the subjects tested. The latter is particularly important since infant studies generally have a high rate of subject rejection due to fussiness; this rate of rejection in the long run may produce a biased sample.

Several new analyses were introduced mainly in order to deal with the statistically difficult paired comparisons design. At the same time, some new aspects of preference studies were analyzed providing new kinds of information, particularly concerning dimensional weighting and multidimensionality. A correction for position bias was also introduced and in further studies special care could be taken in the design of experiments to make the correction an even better one.

The results contributed to the major goal of finding some dimensions which account for the bullseye's effectiveness. The fact that concentricity, curvilinearity and number of directions were all effective has implications for all of infant perception and not just for the preference for the bullseye. The study represents an attempt not only to identify dimensions but also to look for differences in the salience of each dimension; this attempt led to some interesting questions concerning the process of responding to multidimensional stimuli.

Although the exploration of individual differences did not lead to conclusive results the possibility was raised that individuals differ in their responses to different dimensions and possibly in their speed of processing or habituation. The sex difference suggested should be explored further.

The fact that other visual activity, such as shifts and position bias, were studied in conjunction with the fixation response created a complicated model for preference behavior, but one which may shed more light on underlying mechanisms in visual exploration. These other activities must be investigated with different age groups and with other stimuli before generalizations concerning them can be made.

# APPENDIX A

## Letter Written to Parents Referred by Pediatricians

Dear Mr. and Mrs. ____________:

Your pediatrician, Dr. ___________, has suggested that, as parents of a normal alert baby, you might be interested in helping with a study being sponsored by the City University. I am a graduate student in developmental psychology and the goal of my study is to learn more about what young babies look at and why.

The study would involve three to four visits to your home when the baby is three months old. Each time the baby would be shown a number of pictures while being held by the mother. There is a special frame to show the pictures without distractions and some recording equipment, but there is no equipment which touches the baby. A previous study has shown that infants are generally content to look at the pictures and that it is not a stressful situation.

Dr. _____________ has been informed of the details of the study and approves it. I will telephone soon to explain more and to answer any questions you may have. I hope that you will be willing to help. However, because the study involves several visits, I realize that some mothers may not be able to participate even if they are interested. If this is the case, please feel free to say no.

Thank you.

Yours sincerely,

# APPENDIX B

## The Two Orders of Stimulus Pairs

Table B1: Order A

| Trial | Stimuli Left | Stimuli Right | Trial | Stimuli Left | Stimuli Right |
|---|---|---|---|---|---|
| 1-A | I | III | 24-A | III | VII |
| 2-A | VIII | X | 25-A | X | IV |
| 3-A | II | V | 26-A | I | II |
| 4-A | VI | VII | 27-A | V | IX |
| 5-A | X | I | 28-A | IV | VIII |
| 6-A | IV | V | 29-A | IX | II |
| 7-A | VIII | III | 30-A | VI | X |
| 8-A | V | VII | 31-A | VIII | I |
| 9-A | IX | IV | 32-A | III | IV |
| 10-A | II | III | 33-A | VII | II |
| 11-A | VIII | IX | 34-A | VI | VIII |
| 12-A | II | VI | 35-A | IX | III |
| 13-A | VII | X | 36-A | VII | I |
| 14-A | VI | IX | 37-A | II | IV |
| 15-A | I | IV | 38-A | V | X |
| 16-A | III | V | 39-A | IV | VI |
| 17-A | VI | I | 40-A | I | V |
| 18-A | X | II | 41-A | VII | II |
| 19-A | VII | VIII | 42-A | VII | IX |
| 20-A | III | VI | 43-A | X | III |
| 21-A | IV | VII | 44-A | V | VI |
| 22-A | V | VIII | 45-A | IX | X |
| 23-A | IX | I | | | |

Table B2: Order B

| Trial | Stimuli Left | Stimuli Right | Trial | Stimuli Left | Stimuli Right |
|---|---|---|---|---|---|
| 1-B | VII | III | 24-B | X | V |
| 2-B | II | IX | 25-B | III | IX |
| 3-B | VIII | IV | 26-B | VIII | VI |
| 4-B | X | VI | 27-B | IX | VII |
| 5-B | I | IX | 28-B | V | I |
| 6-B | IV | X | 29-B | II | VII |
| 7-B | VIII | V | 30-B | III | X |
| 8-B | I | VI | 31-B | IX | VI |
| 9-B | IX | V | 32-B | III | II |
| 10-B | VI | III | 33-B | I | X |
| 11-B | VIII | VII | 34-B | IX | VIII |
| 12-B | II | X | 35-B | X | VII |
| 13-B | V | III | 36-B | VI | II |
| 14-B | VII | IV | 37-B | IV | I |
| 15-B | II | I | 38-B | X | VIII |
| 16-B | VI | IV | 39-B | VII | V |
| 17-B | II | VIII | 40-B | IV | IX |
| 18-B | VI | V | 41-B | III | VIII |
| 19-B | I | VII | 42-B | VII | VI |
| 20-B | IV | III | 43-B | V | IV |
| 21-B | X | IX | 44-B | III | I |
| 22-B | I | VIII | 45-B | V | II |
| 23-B | IV | II | | | |

## APPENDIX C

### Raw Data for Each Subject

The tables in this appendix represent running accounts of each infant's visual behavior. The fixation times were taken directly from the Rustrak chart paper, the speed of which was one-fourth inch per second, and each fixation time was rounded to the nearest quarter of a second. Should all the numbers in one trial fall on either the left or the right, then it can be assumed that the infant did not look at the stimulus on the other side. Since each trial was 10 seconds long, the numbers in each trial will not add up to more than 10; should they add up to less than 10, then it can be assumed that the infant spent some time looking at something other than the two stimuli.

Table C1: Raw Data for Subject A, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | | 2.25 |
| 2-A | | 2.50 |
| 3-A | | 0.25 |
| | 2.00 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.25 |
| 4-A | | 1.50 |
| 5-A | | 0.75 |
| 6-A | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| 7-A | 0.75 | |
| | | 2.00 |
| | 0.25 | |
| 8-A | 3.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| | 1.50 | |
| 9-A | 1.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| 10-A | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| | | 0.25 |
| | | 0.75 |
| 11-A | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.25 |
| | | 1.25 |
| 12-A | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | 3.00 | |
| | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| 13-A | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.25 |
| | 6.00 | |
| 14-A | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.50 |
| | | 3.00 |
| 15-A | 0.50 | |
| | 0.75 | |
| | | 0.25 |
| | 5.25 | |
| 16-A | 4.00 | |
| | | 0.25 |
| 17-A | 1.25 | |
| | | 0.50 |
| | 0.50 | |
| | 0.75 | |
| | | 0.25 |
| | | 3.00 |
| 18-A | | 5.00 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| 19-A | 1.00 | |
| | | 0.25 |
| | 2.00 | |
| | 3.00 | |
| 20-A | | 0.25 |
| | 0.25 | |
| | 1.75 | |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| 21-A | 3.00 | |
| 22-A | 1.50 | |
| | | 1.25 |
| | 0.75 | |
| 23-A | | 0.75 |
| 24-A | | 0.25 |
| | 1.00 | |
| | | 0.50 |
| | | 1.50 |
| | 0.50 | |
| 25-A | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| 26-A | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| 27-A | 1.25 | |
| | 1.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |

Table C1 (cont'd ): Subject A, Session 2

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 28-A | | 2.50 | 34-A | 0.75 | | 3-B | | 7.75 |
| | 0.25 | | | | 2.50 | 4-B | 5.75 | |
| | | 1.50 | | 1.50 | | 5-B | 9.00 | |
| | 0.50 | | | | 0.75 | 6-B | 6.75 | |
| | 1.25 | | | | 0.25 | | | 2.25 |
| | | 0.25 | 35-A | | 0.50 | 7-B | | 4.50 |
| | 0.75 | | | 0.50 | | | 0.75 | |
| 29-A | 1.00 | | | | 5.00 | 8-B | | 2.25 |
| | | 0.75 | | 0.25 | | | | 3.00 |
| | 0.75 | | | | 0.75 | | | 2.25 |
| | | 0.50 | 36-A | | 0.50 | 9-B | | 7.25 |
| | 0.50 | | | 1.75 | | | | 0.25 |
| | | 0.50 | | 0.75 | | 10-B | 1.25 | |
| 30-A | 0.75 | | | | 0.25 | | | 1.00 |
| | | 0.75 | | 0.25 | | | | 2.25 |
| | 0.75 | | 37-A | | 0.50 | | | 0.25 |
| | | 1.25 | | 0.75 | | 11-B | 4.75 | |
| | 1.00 | | | 1.00 | | | | 0.50 |
| | 0.75 | | 38-A | 0.50 | | | | 0.25 |
| | | 0.75 | | | 2.75 | | 0.25 | |
| | 0.25 | | | | 0.50 | 12-B | | 3.75 |
| 31-A | 0.75 | | 39-A | 0.25 | | | | 0.25 |
| | | 1.00 | | 0.25 | | 13-B | | 2.50 |
| | 0.75 | | | 0.25 | | | | 3.00 |
| | | 1.00 | 40-A | 1.00 | | 14-B | | 1.75 |
| | 0.50 | | | 0.25 | | | 0.50 | |
| | | 0.75 | 41-A | | 1.00 | | | 2.75 |
| | 0.75 | | | 1.00 | | | | |
| | 0.25 | | | | 0.25 | | | |
| | | 0.50 | | | 0.50 | | | |
| | 0.50 | | | 0.25 | | | | |
| | | 0.50 | 42-A | 0.75 | | | | |
| 32-A | 0.50 | | | 0.50 | | | | |
| | | 0.75 | | | 0.50 | | | |
| | 1.75 | | | | 0.25 | | | |
| | 0.50 | | | | 1.00 | | | |
| | | 0.50 | | | 1.00 | | | |
| | 0.50 | | 43-A | | 0.50 | | | |
| | | 0.75 | | | 3.75 | | | |
| | 0.75 | | 44-A | | 0.50 | | | |
| | | 1.00 | | | 0.75 | | | |
| | 0.50 | | | | 0.50 | | | |
| 33-A | 0.50 | | | | 1.25 | | | |
| | | 1.25 | | | 0.50 | | | |
| | 1.00 | | 45-A | | 0.50 | | | |
| | | 0.50 | | 1.75 | | | | |
| | 0.75 | | 1-B | | 1.50 | | | |
| | | 0.75 | | | 3.50 | | | |
| | | 0.25 | 2-B | | 2.00 | | | |
| | | | | | 5.25 | | | |

Table C1 (cont'd ): Subject A, Session 3

| Trial | Left | Right |
|---|---|---|
| 15-B | | 2.00 |
| | 1.75 | |
| | 2.75 | |
| 16-B | | 5.00 |
| | 0.25 | |
| 17-B | 1.25 | |
| | | 3.50 |
| | 2.00 | |
| | 0.25 | |
| | | 0.50 |
| 18-B | | 6.00 |
| | 2.25 | |
| 19-B | | 0.75 |
| | | 1.25 |
| 20-B | | 1.00 |
| | | 1.00 |
| | 1.00 | |
| 21-B | | 0.25 |
| 22-B | 0.50 | |
| | | 1.00 |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | | 0.50 |
| | 0.50 | |
| 23-B | 0.75 | |
| | | 1.50 |
| | | 0.50 |
| | 1.25 | |
| 24-B | | 1.00 |
| | 0.25 | |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| 25-B | | 1.50 |
| | 1.25 | |
| 26-B | | 0.50 |
| | 1.25 | |
| | 1.00 | |
| | 0.50 | |
| | | 3.50 |
| 27-B | | 1.50 |
| | | 0.50 |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| 28-B | 0.75 | |
| | 0.25 | |
| | 0.25 | |
| | | 1.50 |
| | | 0.50 |
| 29-B | 2.00 | |
| | | 1.75 |
| | | 0.75 |
| | 0.25 | |
| | 0.50 | |
| 30-B | | 1.25 |
| | 0.75 | |
| 31-B | | 0.75 |
| 32-B | 0.50 | |
| | | 1.00 |
| 33-B | 0.75 | |
| | | 1.50 |
| 34-B | 0.25 | |
| | | 0.25 |
| | 1.00 | |
| | 0.25 | |
| 35-B | | 0.75 |
| | 0.25 | |
| | 0.25 | |
| 36-B | | 1.00 |
| | | 0.25 |
| | | 0.25 |
| 37-B | 0.75 | |
| | | 0.25 |
| | 0.25 | |
| 38-B | 2.25 | |
| | | 0.75 |
| | | 0.50 |
| | | 1.25 |
| | | 0.25 |
| 39-B | | 3.50 |
| | | 1.25 |
| | 0.25 | |
| | 0.75 | |
| 40-A | | 0.75 |
| | | 0.50 |
| | 0.25 | |
| | | 1.50 |
| | 0.50 | |
| | 0.25 | |
| | | 0.50 |
| 41-A | 5.00 | |
| | 1.25 | |
| 42-A | | 1.00 |
| | | 0.50 |
| | 0.25 | |
| 43-A | | 0.50 |
| | 2.25 | |
| | | 0.25 |
| | | 0.75 |
| | | 0.25 |
| 44-B | | 1.25 |
| | 0.25 | |
| | 0.25 | |
| | | 0.25 |
| 45-B | | 0.75 |
| | | 1.25 |
| | | 0.50 |

Table C2: Raw Data for Subject B, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 4.50 | |
| 2-A | 0.50 | |
| | 3.50 | |
| 3-A | 4.50 | |
| | | 2.25 |
| | 0.75 | |
| | | 2.50 |
| 4-A | | 5.50 |
| | 0.75 | |
| | | 1.50 |
| 5-A | 1.75 | |
| | | 6.75 |
| | 0.50 | |
| 6-A | | 2.00 |
| | 0.50 | |
| | | 1.75 |
| | 0.75 | |
| | | 2.50 |
| | 0.50 | |
| | | 0.75 |
| 7-A | 2.25 | |
| | | 6.75 |
| | | 1.00 |
| 8-A | | 2.75 |
| | 1.50 | |
| | | 1.00 |
| | 1.25 | |
| | | 0.50 |
| | | 2.00 |
| 9-A | 6.75 | |
| | | 1.25 |
| 10-A | 2.75 | |
| | | 0.25 |
| | 1.25 | |
| | 2.50 | |
| | | 0.50 |
| | 0.25 | |
| 11-A | | 3.50 |
| | 1.00 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.25 |
| | | 0.75 |
| 12-A | | 0.75 |
| | 1.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.25 |
| 13-A | 1.25 | |
| | | 1.75 |
| | | 1.50 |
| | | 0.25 |
| 14-A | | 1.25 |
| | 0.75 | |
| | | 2.00 |
| | | 1.25 |
| 15-A | 1.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.50 |
| 16-A | 2.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.50 |
| | | 0.75 |
| | 0.50 | |
| | | 1.25 |
| 17-A | | 7.50 |
| | | 2.25 |
| 18-A | | 2.75 |
| | 0. 25 | |
| | | 1.75 |
| | 0.75 | |
| | | 3.75 |
| 19-A | | 1.25 |
| | 1.25 | |
| | | 0.75 |
| 20-A | | 2.00 |
| | | 5.75 |
| 21-A | | 3.25 |
| | 0.50 | |
| | | 4.00 |
| 22-A | | 0.25 |
| | | 0.75 |
| | | 1.25 |
| | 1.00 | |
| 23-A | | 3.50 |
| | | 2.00 |
| | 0.75 | |
| | | 0.50 |
| 24-A | | 1.00 |
| | | 1.00 |
| | 0.75 | |
| | | 2.75 |
| | | 3.75 |
| 25-A | | 1.00 |
| | | 2.25 |
| | | 1.75 |
| | 0.50 | |
| | | 0.75 |
| | | 0.50 |
| | 0.75 | |
| 26-A | | 1.50 |
| | 2.25 | |
| | | 0.50 |
| | 2.00 | |
| | 1.00 | |
| | | 1.00 |
| 27-A | | 3.25 |
| | | 4.25 |
| | 0.50 | |
| 28-A | 1.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | | 1.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.75 | |
| 29-A | | 1.75 |
| | 0.75 | |
| | | 2.25 |
| | | 1.50 |
| | | 1.50 |
| | 0.50 | |
| 30-A | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | 3.50 | |

Table C2 (cont'd ): Subject B, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | | 0.75 |
| 32-A | 2.00 | |
| | | 4.00 |
| 33-A | 2.25 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 2.25 |
| | | 1.25 |
| 34-A | 1.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | | 0.75 |
| 35-A | 1.75 | |
| | | 0.50 |
| | 3.50 | |
| | | 0.25 |
| 36-A | | 1.50 |
| | 1.00 | |
| | | 1.50 |
| | 1.00 | |
| | | 1.25 |
| 37-A | 1.50 | |
| | | 0.75 |
| | 1.00 | |
| | 0.25 | |
| | | 1.00 |
| 38-A | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | 1.00 | |
| | | 2.00 |
| | | 1.50 |
| 39-A | 1.50 | |
| | | 4.50 |
| 40-A | | 0.50 |
| | | 0.75 |
| 41-A | | 2.75 |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |
| 42-A | | 1.75 |
| 43-A | | 1.75 |
| | 0.25 | |
| | | 2.00 |
| | 0.25 | |
| | | 0.75 |
| | | 0.25 |
| 44-A | 1.25 | |
| | | 0.25 |
| | 2.00 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.75 |
| | | 1.00 |
| | | 0.25 |
| 45-A | | 2.00 |
| | 1.00 | |
| | | 0.75 |
| 1-B | 2.00 | |
| | | 2.00 |
| | 0.75 | |
| | | 0.25 |
| 2-B | | 1.75 |
| | 1.00 | |
| | | 1.00 |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| | 0.25 | |
| 3-B | 0.50 | |
| | | 0.75 |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | | 1.00 |
| 4-B | | 1.00 |
| | | 1.00 |
| | | 0.75 |
| 5-B | 1.50 | |
| | | 0.25 |
| | 1.25 | |
| | | 0.25 |
| | | 0.75 |
| 6-B | 1.00 | |
| 7-B | 1.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.25 |
| | | 0.50 |
| 8-B | 3.75 | |
| | | 0.75 |
| 9-B | 0.50 | |
| | | 0.50 |
| | | 0.75 |
| 10-B | 2.00 | |
| 11-B | | 1.50 |
| 12-B | | 0.25 |
| | | 0.25 |
| | 1.00 | |
| | | 1.75 |
| | | 1.25 |
| 13-B | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | | 1.00 |
| 14-B | | 0.75 |
| | | 1.25 |
| 15-B | | 3.50 |
| 16-B | | 0.50 |
| | | 1.75 |

Table C2 (cont'd ): Subject B, Session 3

| Trial | Left | Right |
|---|---|---|
| 17-B | | 2.50 |
| | 1.25 | |
| | | 0.75 |
| 18-B | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| | 1.50 | |
| | | 0.25 |
| 19-B | | 0.75 |
| | 1.25 | |
| | | 0.25 |
| | | 1.00 |
| | 0.25 | |
| 20-B | 0.75 | |
| | | 0.50 |
| | 1.25 | |
| | | 1.25 |
| | 0.25 | |
| | 0.75 | |
| | | 0.75 |
| 21-B | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| 22-B | | 1.00 |
| | 3.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| 23-B | | 0.75 |
| | 1.75 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.50 |
| 24-B | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.50 |
| | | 1.00 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 25-B | 0.50 | |
| | | 1.75 |
| | 1.00 | |
| | 3.00 | |
| | | 0.75 |
| 26-B | | 3.25 |
| | 1.00 | |
| 27-B | | 4.50 |
| | 3.75 | |
| | 1.25 | |
| 28-B | 1.75 | |
| | | 8.00 |
| | 0.25 | |
| 29-B | | 3.50 |
| 30-B | 3.75 | |
| | | 3.00 |
| 31-B | | 3.50 |
| | 3.50 | |
| 32-B | 0.75 | |
| | | 2.50 |
| | 0.25 | |
| | | 4.75 |
| 33-B | 4.75 | |
| | | 0.75 |
| | | 3.50 |
| 34-B | 3.25 | |
| | | 0.75 |
| | | 0.75 |
| 35-B | 0.50 | |
| | | 3.00 |
| | 1.00 | |
| | | 2.75 |
| 36-B | 1.25 | |
| | | 0.75 |
| | | 1.25 |
| | 0.25 | |
| | | 2.25 |
| | | 0.25 |
| | 2.25 | |
| 37-B | 1.00 | |
| | | 2.25 |
| | 0.75 | |
| | | 0.50 |
| 38-B | | 2.25 |
| | 2.25 | |
| | | 4.00 |

| Trial | Left | Right |
|---|---|---|
| 39-B | | 0.50 |
| | | 4.75 |
| 40-B | 4.25 | |
| | | 1.00 |
| | 1.50 | |
| 41-B | 2.50 | |
| | | 1.25 |
| | | 1.00 |
| 42-B | | 9.50 |
| 43-B | | 7.75 |
| | | 0.25 |
| 44-B | 3.00 | |
| | 2.00 | |
| | | 0.75 |
| 45-B | | 5.25 |
| | 4.75 | |

Table C3: Raw Data for Subject C, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | 1.50 | | 11-A | 1.75 | | 21-A | | 1.50 |
| | | 4.25 | | | 2.00 | | 0.50 | |
| | 1.00 | | | 0.50 | | | | 0.75 |
| | | 1.25 | | | 1.25 | | 0.25 | |
| 2-A | | 5.50 | | 1.00 | | | | 1.00 |
| 3-A | 3.75 | | | | 1.00 | 22-A | 2.25 | |
| | | 3.75 | 12-A | 2.00 | | | | 1.25 |
| | 0.50 | | | | 0.75 | | | 2.50 |
| 4-A | 2.50 | | | 1.25 | | | | 1.00 |
| | | 1.00 | | | 0.75 | 23-A | 2.00 | |
| | 0.50 | | | 0.75 | | | | 3.00 |
| | | 0.25 | | | 1.00 | | | 1.75 |
| | 1.25 | | | 0.75 | | | 0.25 | |
| | | 0.50 | | | 0.75 | 24-A | 2.50 | |
| 5-A | | 8.25 | | 0.75 | | 25-A | | 3.75 |
| 6-A | 1.25 | | | | 0.75 | 26-A | 2.25 | |
| | | 3.00 | | 0.50 | | | | 0.50 |
| | 1.00 | | 13-A | | 0.25 | | 0.50 | |
| | | 2.00 | | 0.75 | | | | 1.00 |
| | 0.25 | | | | 3.75 | | | 0.75 |
| | 0.25 | | 14-A | 0.50 | | 27-A | 0.75 | |
| | | 0.25 | | | 1.50 | | | 2.00 |
| 7-A | 0.75 | | | | 3.50 | 28-A | 4.00 | |
| | | 1.50 | | 0.75 | | | 1.00 | |
| | 0.50 | | 15-A | | 2.00 | | | 0.50 |
| | | 2.50 | | | 0.75 | 29-A | 0.75 | |
| 8-A | 1.25 | | | | 0.25 | | | 0.75 |
| | | 1.00 | | 1.00 | | | | |
| | 0.50 | | 16-A | 6.00 | | | | |
| | | 0.75 | | | 0.50 | | | |
| | 0.50 | | | 0.25 | | | | |
| | | 0.75 | | | 0.75 | | | |
| | 0.50 | | | | 1.00 | | | |
| | | 2.75 | 17-A | 0.50 | | | | |
| | 0.25 | | | | 3.00 | | | |
| 9-A | 2.75 | | | | 1.00 | | | |
| | 1.00 | | 18-A | 0.75 | | | | |
| | | 0.50 | | | 4.00 | | | |
| | 1.00 | | | | 1.00 | | | |
| | | 0.50 | 19-A | | 2.25 | | | |
| | 0.75 | | | | 0.25 | | | |
| | | 1.75 | | 0.25 | | | | |
| 10-A | 1.75 | | | 2.00 | | | | |
| | | 1.00 | | 1.00 | | | | |
| | 1.50 | | 20-A | 2.00 | | | | |
| | | 0.50 | | | 1.25 | | | |
| | 2.25 | | | 1.25 | | | | |
| | | 0.25 | | | 0.25 | | | |
| | 1.50 | | | | 0.25 | | | |
| | | | | 0.25 | | | | |
| | | | | | 0.75 | | | |

Table C3 (cont'd ): Subject C, Session 2

| Trial | Left | Right |
|---|---|---|
| 30-A | 4.25 | |
| 31-A | 2.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | | 0.75 |
| 32-A | 2.00 | |
| | | 0.50 |
| | | 1.50 |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |
| 33-A | | 1.75 |
| | | 1.50 |
| | | 1.25 |
| 34-A | | 1.00 |
| | 1.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | | 0.75 |
| | 0.25 | |
| | 0.25 | |
| | | 0.25 |
| 35-A | 1.75 | |
| | | 0.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| | | 0.75 |
| | 0.50 | |
| 36-A | 1.50 | |
| | | 1.00 |
| | | 0.50 |
| | 3.75 | |
| 37-A | 1.25 | |
| | | 0.25 |
| 38-A | | 2.00 |
| | 2.00 | |
| 39-A | | 1.75 |
| | 1.75 | |
| | 0.25 | |
| | | 0.75 |
| 40-A | 0.50 | |
| | 2.50 | |
| | 1.00 | |

| Trial | Left | Right |
|---|---|---|
| 41-A | | 1.00 |
| | | 1.00 |
| | | 1.75 |
| | | 0.25 |
| 42-A | 1.75 | |
| | | 0.75 |
| | | 0.75 |
| | | 0.75 |
| 43-A | 1.75 | |
| | 1.50 | |
| | | 0.50 |
| 44-A | | 1.75 |
| 45-A | 0.25 | |
| | 0.75 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.50 |
| 1-B | 0.25 | |
| | | 1.75 |
| | | 1.50 |
| | | 1.50 |
| 2-B | 2.00 | |
| | | 0.75 |
| | 1.25 | |
| 3-B | 3.25 | |
| | | 0.75 |
| | 4.25 | |
| 4-B | 8.00 | |
| 5-B | 10.00 | |
| 6-B | 10.00 | |
| 7-B | 9.75 | |
| 8-B | | 1.25 |
| | 4.75 | |
| | | 0.75 |
| | 3.25 | |
| 9-B | | 3.00 |
| | 3.25 | |
| | | 0.50 |
| | 2.75 | |
| 10-B | 2.25 | |
| | | 1.75 |
| | 0.75 | |
| | | 3.00 |
| | 2.25 | |

| Trial | Left | Right |
|---|---|---|
| 11-B | 2.50 | |
| | | 1.50 |
| | | 1.50 |
| | | 1.50 |
| | 0.50 | |
| | | 2.00 |
| 12-B | 2.25 | |
| | | 7.00 |
| 13-B | 3.50 | |
| | 3.00 | |
| 14-B | | 1.50 |
| | 7.75 | |
| | 0.75 | |
| 15-B | 1.00 | |
| | 2.50 | |
| | 1.00 | |
| | | 0.75 |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| | 0.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.50 |

Table C3 (cont'd ): Subject C, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | 2.00 | |
| | | 2.50 |
| | 1.25 | |
| | | 1.25 |
| | 0.25 | |
| | | 0.50 |
| 17-B | | 2.25 |
| | 1.25 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.50 |
| | 0.25 | |
| 18-B | | 2.75 |
| | 0.75 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| 19-B | | 0.25 |
| | 2.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 1.50 | |
| | | 1.50 |
| | 1.00 | |
| 20-B | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 2.00 |
| | 0.25 | |
| | | 0.50 |
| | 1.25 | |
| | | 1.25 |
| 21-B | | 1.25 |
| | 1.50 | |
| | | 0.75 |
| | | 0.75 |
| | | 1.50 |
| 22-B | 1.75 | |
| | | 1.25 |
| | 0.75 | |
| | 0.75 | |
| | | 0.25 |
| 23-B | | 4.00 |
| | | 1.25 |
| | | 0.25 |
| | 2.50 | |
| | | 0.50 |
| | | 0.25 |
| 24-B | | 1.00 |
| | 0.75 | |
| | | 1.25 |
| | 1.00 | |
| | | 1.50 |
| | | 0.75 |
| | 0.75 | |
| | | 1.25 |
| 25-B | 2.00 | |
| | | 7.00 |
| | 1.00 | |
| 26-B | 2.00 | |
| | | 0.50 |
| | | 0.25 |
| | | 0.25 |
| | | 1.75 |
| 27-B | 2.00 | |
| 28-B | 1.75 | |
| | 1.00 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.75 |
| 29-B | 1.50 | |
| | 1.25 | |
| 30-B | 2.00 | |
| | | 3.75 |
| | 2.00 | |
| 31-B | 4.25 | |
| | | 2.50 |
| | 1.00 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.25 |
| 32-B | 1.25 | |
| | | 8.75 |
| 33-B | 2.00 | |
| | | 1.25 |
| | 1.50 | |
| | | 0.50 |
| 34-B | 1.50 | |
| | | 0.50 |
| | | 1.50 |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| 35-B | 4.00 | |
| | 0.25 | |
| | | 0.50 |
| 36-B | | 1.00 |
| | | 2.50 |
| | 1.25 | |
| | | 1.00 |
| 37-B | 3.00 | |
| | | 2.00 |
| | | 3.25 |
| | | 1.75 |
| 38-B | 3.00 | |
| | | 6.50 |
| 39-B | | 1.25 |
| | 1.50 | |
| | | 2.25 |
| 40-B | | 2.50 |
| | | 0.50 |
| | | 0.25 |
| | 0.25 | |
| 41-B | 1.50 | |
| | | 2.50 |
| | | 0.75 |
| | 2.25 | |
| 42-B | 2.25 | |
| | | 3.75 |
| | 0.25 | |
| | | 0.25 |
| 43-B | | 1.75 |
| | 3.00 | |
| 44-B | | 1.50 |
| | 1.75 | |
| 45-B | | 6.00 |

Table C4: Raw Data for Subject D, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 5.50 | |
| 2-A | 4.25 | |
| 3-A | 2.50 | |
| 4-A | 4.25 | |
| 5-A | 2.75 | |
| | | 0.75 |
| | 1.00 | |
| 6-A | 2.75 | |
| | | 0.75 |
| | 3.25 | |
| 7-A | 1.50 | |
| | | 2.75 |
| | 1.50 | |
| | | 2.00 |
| | 0.50 | |
| 8-A | 1.00 | |
| | | 5.50 |
| | 0.50 | |
| 9-A | 4.25 | |
| | | 1.50 |
| | 3.00 | |
| | | 1.25 |
| 10-A | 1.25 | |
| | 8.50 | |
| 11-A | 1.75 | |
| | | 2.50 |
| | 0.50 | |
| 12-A | 3.00 | |
| | | 2.25 |
| | 1.75 | |
| 13-A | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.25 |
| | 1.00 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.00 |
| | 1.75 | |
| 14-A | 1.00 | |
| | | 2.25 |
| | 2.25 | |
| | | 0.50 |
| | 2.50 | |
| 15-A | | 7.25 |
| 16-A | 5.25 | |

| Trial | Left | Right |
|---|---|---|
| 17-A | 0.25 | |
| | | 3.25 |
| 18-A | 0.75 | |
| | 1.00 | |
| | 2.50 | |
| | 0.50 | |
| 19-A | 10.00 | |
| 20-A | 6.00 | |
| 21-A | 2.00 | |
| | 0.25 | |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 1.25 | |
| 22-A | | 0.25 |
| | 2.00 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.50 |
| | 1.25 | |
| | 0.75 | |
| | | 0.75 |
| 23-A | 1.25 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | 0.75 | |
| 24-A | 2.00 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | 0.50 | |
| | 1.00 | |
| 25-A | 1.50 | |
| | | 1.00 |
| | 1.25 | |
| 26-A | 6.75 | |
| 27-A | 5.00 | |
| | 4.25 | |
| 28-A | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.50 |
| | 0.75 | |

| Trial | Left | Right |
|---|---|---|
| 29-A | 0.50 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| | 0.75 | |
| 30-A | 3.25 | |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | 0.25 | |
| | | 1.25 |
| | 1.00 | |

Table C4 (cont'd): Subject D, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| 32-A | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.75 | |
| 33-A | 1.25 | |
| | | 0.25 |
| | 0.50 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.50 |
| | 0.25 | |
| | | 1.25 |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| 34-A | | 0.50 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 2.50 | |
| | 2.00 | |
| 35-A | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |

| Trial | Left | Right |
|---|---|---|
| 36-A | 1.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| 37-A | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | | 0.25 |
| | 0.25 | |
| 38-A | 0.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| | 0.50 | |
| | | 0.25 |
| | | 0.50 |
| | 1.00 | |
| | | 0.25 |
| | 2.50 | |
| 39-A | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.50 |
| | | 0.50 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 40-A | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.50 |
| | 2.25 | |
| 41-A | | 0.50 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 2.00 |
| | 0.25 | |
| 42-A | 1.00 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |
| 43-A | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| 44-A | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | | 0.25 |
| 45-A | 1.00 | |
| | 0.50 | |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |
| | 0.50 | |
| | | 1.50 |
| | 0.25 | |

Table C4 (cont'd): Subject D, Session 2, cont'd.

| Trial | Left | Right |
|---|---|---|
| 1-B | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| | 0.75 | |
| | 0.50 | |
| 2-B | 0.75 | |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| 3-B | 0.75 | |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| 4-B | 0.50 | |
| | 0.50 | |
| | 1.25 | |
| 5-B | 0.50 | |
| | | 0.25 |
| | 0.75 | |
| | 1.25 | |
| | 0.50 | |
| 6-B | 1.00 | |
| | 0.25 | |
| | 2.00 | |
| 7-B | | 0.50 |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |
| | | 1.00 |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| 8-B | 0.75 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| | 1.75 | |
| | | 0.50 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 9-B | 0.75 | |
| | 0.25 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| 10-B | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | 1.00 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| 11-B | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | | 0.50 |
| | | 0.25 |
| | 0.25 | |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| 12-B | 1.00 | |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | 1.50 | |
| 13-B | 0.50 | |
| | | 0.75 |
| | 1.25 | |
| | 0.25 | |
| | | 0.25 |
| | 1.25 | |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |

| Trial | Left | Right |
|---|---|---|
| 14-B | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | | 0.25 |
| | | 0.75 |
| | 1.00 | |
| 15-B | | 1.25 |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.25 |

Table C4 (cont'd): Subject D, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 1.00 |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 2.00 |
| | 0.25 | |
| | 0.50 | |
| 17-B | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| | 0.25 | |
| | | 1.50 |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| 18-B | 1.00 | |
| | | 2.00 |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| 19-B | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| 20-B | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 21-B | 0.25 | |
| | | 0.75 |
| | | 0.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| 22-B | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| | | 1.75 |
| | 0.25 | |
| | | 0.50 |
| | 0.75 | |
| | 0.25 | |
| | 0.25 | |
| | | 0.50 |
| 23-B | 1.00 | |
| | | 1.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| 24-B | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | 0.50 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |

| Trial | Left | Right |
|---|---|---|
| 25-B | 0.25 | |
| | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| 26-B | 0.75 | |
| | 0.50 | |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.75 | |
| 27-B | 4.50 | |
| | 0.25 | |
| | 0.25 | |
| | 0.50 | |
| | 0.50 | |
| 28-B | | 0.75 |
| | 0.75 | |
| | 0.75 | |
| | 0.50 | |
| 29-B | 0.75 | |
| | | 0.25 |
| | 2.25 | |
| | 1.25 | |
| | | 0.50 |
| 30-B | 0.50 | |
| | 0.50 | |
| | 0.75 | |
| | 0.50 | |
| 31-B | | 3.00 |
| | 0.25 | |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.75 |

Table C4 (cont'd): Subject D, Session 3, cont'd.

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 32-B | 0.25 | | 39-B | 0.25 | | | | |
| | | 0.50 | | | 0.75 | | | |
| | | 1.75 | | 0.25 | | | | |
| | 0.25 | | | | 1.00 | | | |
| | | 0.75 | | 0.75 | | | | |
| | 0.25 | | | | 0.50 | | | |
| | | 0.75 | | 0.50 | | | | |
| 33-B | | 2.00 | 40-B | 0.25 | | | | |
| | 0.50 | | | | 0.75 | | | |
| | 2.25 | | | | 0.50 | | | |
| 34-B | | 1.50 | | | 0.50 | | | |
| | 1.00 | | | 0.25 | | | | |
| | | 1.00 | | | 0.25 | | | |
| | 1.00 | | | | 0.25 | | | |
| | | 0.75 | | 0.25 | | | | |
| | 1.50 | | 41-B | 0.25 | | | | |
| | | 0.50 | | | 3.00 | | | |
| 35-B | 0.50 | | | 4.25 | | | | |
| | | 0.50 | 42-B | 0.25 | | | | |
| | 0.75 | | | 1.25 | | | | |
| | 0.25 | | | 0.75 | | | | |
| | | 1.00 | | | 1.50 | | | |
| | 0.25 | | | | 1.25 | | | |
| | | 0.75 | | 0.25 | | | | |
| | 0.50 | | 43-B | 3.25 | | | | |
| 36-B | 0.50 | | | 1.00 | | | | |
| | | 1.25 | | 1.25 | | | | |
| | | 0.75 | 44-B | | 2.75 | | | |
| | 0.50 | | | | 0.50 | | | |
| | | 1.00 | | | 1.25 | | | |
| | | 0.75 | 45-B | 0.25 | | | | |
| | | 0.50 | | | 2.50 | | | |
| | 0.75 | | | | 0.50 | | | |
| | | 0.25 | | 0.25 | | | | |
| 37-B | 0.50 | | | | 0.25 | | | |
| | | 0.50 | | 0.25 | | | | |
| | 0.50 | | | | 1.25 | | | |
| | | 1.25 | | 0.25 | | | | |
| | 0.25 | | | | 1.25 | | | |
| | | 1.25 | | | 1.00 | | | |
| | | 0.50 | | | | | | |
| 38-B | 0.25 | | | | | | | |
| | | 1.25 | | | | | | |
| | 0.25 | | | | | | | |
| | 0.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | 0.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | | 0.75 | | | | | | |
| | | 0.50 | | | | | | |

Table C5: Raw Data for Subject E, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 5.50 | |
| | | 2.75 |
| 2-A | | 3.50 |
| | | 2.00 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.25 |
| 3-A | 3.75 | |
| | | 1.75 |
| | 0.75 | |
| | | 2.00 |
| | 1.25 | |
| 4-A | 0.75 | |
| | 3.50 | |
| | | 1.50 |
| | 0.50 | |
| | | 0.75 |
| 5-A | | 6.50 |
| | | 1.00 |
| | | 1.00 |
| 6-A | | 3.50 |
| | | 3.75 |
| | 1.00 | |
| 7-A | | 10.00 |
| 8-A | | 8.00 |
| | 0.50 | |
| | | 1.25 |
| | | 0.25 |
| 9-A | 5.50 | |
| | 1.00 | |
| | | 2.00 |
| 10-A | 1.50 | |
| | 3.50 | |
| | | 4.00 |
| | 0.50 | |
| | | 0.50 |
| 11-A | | 10.00 |
| 12-A | | 0.75 |
| | 6.00 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.50 |
| 13-A | 1.25 | |
| | | 2.50 |
| | | 4.50 |
| 14-A | 1.25 | |
| | | 7.00 |
| 15-A | | 1.00 |
| | 1.00 | |
| | | 1.00 |
| 16-A | | 5.75 |
| | 0.75 | |
| 17-A | 0.25 | |
| | | 2.50 |
| | 1.00 | |
| | 0.50 | |
| | | 0.75 |
| | | 2.75 |
| 18-A | | 2.75 |
| | 0.50 | |
| | | 0.50 |
| | 1.50 | |
| | | 3.25 |
| 19-A | | 3.75 |
| 20-A | | 1.50 |
| | 1.50 | |
| | | 3.50 |
| | 1.25 | |
| | | 0.75 |
| | 0.50 | |
| 21-A | 2.00 | |
| | | 1.75 |
| | 2.75 | |
| | | 3.50 |
| 22-A | 1.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.25 |
| | 0.25 | |
| 23-A | 1.75 | |
| | | 6.00 |
| | 0.25 | |
| | | 2.50 |
| 24-A | | 0.25 |
| | | 2.75 |
| | | 4.00 |
| 25-A | | 0.25 |
| | 0.75 | |
| | | 8.50 |
| 26-A | 5.00 | |
| | 3.00 | |
| 27-A | 1.75 | |
| | 1.50 | |
| | | 4.00 |
| 28-A | 5.00 | |
| | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| 29-A | | 1.50 |
| | 1.50 | |
| | | 3.00 |
| | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| 30-A | 1.75 | |
| | 5.00 | |

Table C5 (cont'd): Subject E, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | 2.50 | |
| | | 3.25 |
| | 1.00 | |
| | | 0.50 |
| 32-A | | 4.50 |
| | 2.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| | 0.75 | |
| 33-A | 7.50 | |
| | | 0.25 |
| | 1.75 | |
| | | 0.25 |
| 34-A | 3.75 | |
| | | 0.25 |
| | 2.00 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.25 |
| | 1.25 | |
| 35-A | 2.25 | |
| | | 0.25 |
| | 2.00 | |
| | | 1.50 |
| | | 2.25 |
| 36-A | 3.75 | |
| | | 1.00 |
| | 3.50 | |
| | | 0.25 |
| 37-A | 3.25 | |
| | | 2.25 |
| | 2.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| 38-A | 2.25 | |
| | | 0.25 |
| | | 0.25 |
| | 5.00 | |
| 39-A | | 0.25 |
| | 3.25 | |
| | | 0.50 |
| | 1.75 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |

| Trial | Left | Right |
|---|---|---|
| 40-A | 4.00 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| 41-A | | 1.25 |
| | 1.25 | |
| | | 0.25 |
| | 2.25 | |
| | | 0.25 |
| | 2.00 | |
| | | 0.25 |
| 42-A | 3.75 | |
| | 2.50 | |
| | | 2.25 |
| 43-A | | 2.75 |
| | 1.25 | |
| | | 1.50 |
| | 2.00 | |
| 44-A | | 1.00 |
| | 0.25 | |
| | | 1.00 |
| | 1.25 | |
| | 0.25 | |
| | | 1.00 |
| | 1.50 | |
| 45-A | 4.75 | |
| | 1.50 | |
| 1-B | | 3.75 |
| | 2.00 | |
| | | 1.75 |
| 2-B | | 2.75 |
| | 0.50 | |
| | | 1.50 |
| 3-B | | 2.00 |
| | 0.50 | |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |
| | | 3.50 |
| 4-B | | 2.50 |
| | | 5.75 |
| 5-B | | 2.75 |
| | 0.50 | |
| | | 1.50 |
| | 4.50 | |

| Trial | Left | Right |
|---|---|---|
| 6-B | | 1.00 |
| | | 2.25 |
| | 0.50 | |
| | | 2.00 |
| 7-B | 1.25 | |
| | | 1.75 |
| | | 2.00 |
| 8-B | | 0.25 |
| | 0.75 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.75 |
| | 2.00 | |
| 9-B | | 1.25 |
| | 0.25 | |
| | | 1.00 |
| | 2.75 | |
| 10-B | 2.00 | |
| 11-B | | 4.00 |
| 12-B | 6.25 | |
| | 1.50 | |
| 13-B | 1.25 | |
| | | 2.50 |
| | 1.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 2.00 | |
| 14-B | 1.50 | |
| | | 4.75 |
| | 1.75 | |
| | | 1.50 |
| 15-B | 7.75 | |
| | | 2.25 |

Table C5 (cont'd): Subject E, Session 3

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 16-B | | 3.50 | 31-B | | 7.75 | | | |
| | | 1.75 | | 0.75 | | | | |
| 17-B | | 1.25 | 32-B | 9.00 | | | | |
| | | 0.75 | 33-B | 9.00 | | | | |
| | | 1.50 | 34-B | 8.75 | | | | |
| | | 0.75 | 35-B | 8.50 | | | | |
| | 1.00 | | 36-B | | 0.75 | | | |
| 18-B | | 0.75 | | 5.25 | | | | |
| | 3.00 | | 37-B | 3.25 | | | | |
| | 0.75 | | | 0.25 | | | | |
| | 0.75 | | | 3.50 | | | | |
| 19-B | 1.50 | | 38-B | 4.75 | | | | |
| | | 0.75 | | | 0.50 | | | |
| 20-B | | 1.50 | | 0.50 | | | | |
| | 0.75 | | | | 1.00 | | | |
| 21-B | | 1.50 | | 0.25 | | | | |
| | | 1.00 | 39-A | 5.00 | | | | |
| | | 0.50 | | 1.25 | | | | |
| 22-B | | 1.00 | 40-A | 8.25 | | | | |
| | 0.25 | | 41-A | 3.75 | | | | |
| | 1.75 | | 42-A | 2.75 | | | | |
| 23-B | | 2.50 | | 0.75 | | | | |
| | | 1.00 | 43-A | 1.75 | | | | |
| | 0.25 | | | 1.25 | | | | |
| | 1.25 | | | | 3.00 | | | |
| 24-B | 1.00 | | | 0.25 | | | | |
| | 1.75 | | 44-A | 1.50 | | | | |
| | | 0.75 | | | 0.25 | | | |
| 25-B | | 0.50 | | 1.25 | | | | |
| | | 0.25 | | 0.25 | | | | |
| | | 0.75 | 45-A | | 5.50 | | | |
| | 0.25 | | | | | | | |
| | | 0.25 | | | | | | |
| 26-B | | 2.25 | | | | | | |
| | 0.50 | | | | | | | |
| | 0.50 | | | | | | | |
| 27-B | 2.50 | | | | | | | |
| | 0.50 | | | | | | | |
| | | 3.25 | | | | | | |
| 28-B | 5.75 | | | | | | | |
| | 2.25 | | | | | | | |
| 29-B | 8.00 | | | | | | | |
| 30-B | 9.25 | | | | | | | |

Table C6: Raw Data for Subject F, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | 2.50 | | 16-A | 1.00 | | | | |
| | | 5.50 | | | 2.00 | | | |
| | 1.00 | | | 2.50 | | | | |
| 2-A | 0.75 | | | | 2.00 | | | |
| | | 7.75 | | 1.50 | | | | |
| 3-A | 5.50 | | | | 1.00 | | | |
| | | 4.25 | 17-A | 3.75 | | | | |
| | 0.25 | | | | 1.25 | | | |
| 4-A | 8.50 | | | 1.25 | | | | |
| | | 1.50 | | | 0.75 | | | |
| 5-A | 1.25 | | | 0.75 | | | | |
| | | 7.00 | | | 1.00 | | | |
| 6-A | 1.50 | | 18-A | 2.00 | | | | |
| | | 3.75 | | | 7.50 | | | |
| | | 1.50 | 19-A | 9.75 | | | | |
| | 1.50 | | 20-A | | 8.75 | | | |
| | | 1.00 | 21-A | | 8.75 | | | |
| 7-A | 0.75 | | 22-A | | 9.50 | | | |
| | | 4.50 | 23-A | | 4.50 | | | |
| | 1.75 | | 24-A | 0.50 | | | | |
| | 0.25 | | | | 9.50 | | | |
| | | 1.00 | 25-A | 8.50 | | | | |
| 8-A | 10.00 | | | | 1.50 | | | |
| 9-A | 8.50 | | 26-A | 4.25 | | | | |
| 10-A | 3.25 | | | | 1.00 | | | |
| | | 6.75 | | 1.25 | | | | |
| 11-A | 2.50 | | | | 1.00 | | | |
| | | 6.75 | | 1.25 | | | | |
| 12-A | | 5.25 | | | 0.25 | | | |
| | 4.00 | | 27-A | | 4.00 | | | |
| 13-A | 4.00 | | | | 4.50 | | | |
| | | 1.50 | 28-A | 3.75 | | | | |
| | 0.50 | | | | 1.00 | | | |
| | 0.50 | | | 0.50 | | | | |
| | | 1.25 | | | 0.50 | | | |
| | 1.00 | | | 2.00 | | | | |
| | | 0.25 | 29-A | | 8.25 | | | |
| | 0.75 | | 30-A | 0.75 | | | | |
| 14-A | | 6.00 | | | 0.75 | | | |
| 15-A | | 1.25 | | 3.50 | | | | |
| | 0.50 | | | | 3.50 | | | |
| | | 0.25 | | 1.25 | | | | |
| | 2.75 | | | | | | | |

Table C6 (cont'd): Subject F, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | | 1.50 |
| | 2.00 | |
| | | 3.50 |
| 32-A | | 0.25 |
| | 1.25 | |
| | | 2.00 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| 33-A | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 1.25 | |
| | | 1.50 |
| 34-A | 1.00 | |
| | | 0.75 |
| | 2.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| 35-A | 3.25 | |
| | | 1.25 |
| | 0.50 | |
| | | 2.25 |
| | 1.00 | |
| | | 1.25 |
| 36-A | | 0.75 |
| | 0.50 | |
| | | 1.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.25 |
| | | 1.50 |
| | 0.25 | |
| 37-A | 2.75 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 1.00 |
| | 1.50 | |
| 38-A | 3.00 | |
| | | 0.75 |

| Trial | Left | Right |
|---|---|---|
| 39-A | 0.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 2.75 |
| 40-A | | 1.25 |
| | 0.75 | |
| | | 3.25 |
| | 1.00 | |
| | | 2.00 |
| 41-A | | 4.25 |
| | 0.50 | |
| | | 2.25 |
| 42-A | | 3.75 |
| | | 2.00 |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| 43-A | 0.25 | |
| | | 9.00 |
| 44-A | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| | 1.50 | |
| | | 1.25 |
| | 2.50 | |
| | | 0.75 |
| 45-A | 3.75 | |
| | | 0.50 |
| | 3.25 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.50 |
| 1-B | | 7.75 |
| 2-B | | 5.75 |
| 3-B | | 0.75 |
| | | 2.00 |
| 4-B | | 0.75 |
| | 0.50 | |
| | | 5.00 |
| 5-B | | 3.25 |
| | | 2.50 |
| | | 1.25 |

| Trial | Left | Right |
|---|---|---|
| 6-B | 2.00 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| | | 1.75 |
| | 0.50 | |
| | | 0.25 |
| 7-B | 0.00 | 0.00 |
| 8-B | 1.75 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | 1.00 | |
| | 1.25 | |
| 9-B | | 3.25 |
| | | 2.50 |
| 10-B | | 5.00 |
| | | 1.00 |

Session 3 begins here

| Trial | Left | Right |
|---|---|---|
| 11-B | 1.75 | |
| 12-B | | 6.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| 13-B | 0.25 | |
| | | 2.00 |
| | | 2.25 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.50 |
| 14-B | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |

Table C6 (cont'd): Subject F, Session 3, cont'd.

| Trial | Left | Right |
|---|---|---|
| 15-B | | 2.50 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 2.50 |
| 16-B | | 1.00 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 3.00 |
| | | 1.25 |
| | 0.25 | |
| | | 1.25 |
| 17-B | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.25 |
| | | 2.00 |
| 18-B | 0.25 | |
| | | 2.00 |
| | 0.25 | |
| | | 1.25 |
| | | 0.75 |
| | | 0.75 |
| | | 1.75 |
| | 0.25 | |
| | | 1.25 |
| 19-B | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.50 |
| | 0.25 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| 20-B | | 2.25 |
| | | 3.00 |
| | 0.75 | |
| | | 2.00 |

| Trial | Left | Right |
|---|---|---|
| 21-B | | 2.75 |
| 22-B | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| 23-B | | 1.25 |
| | 0.25 | |
| | | 2.50 |
| 24-B | | 1.75 |
| | 4.25 | |
| | | 0.75 |
| | 1.50 | |
| 25-B | | 3.25 |
| | | 2.50 |
| | 0.25 | |
| | | 0.50 |
| 26-B | | 0.75 |
| | 4.75 | |
| | | 1.00 |
| 27-B | | 1.50 |
| | 0.75 | |
| | | 3.00 |
| 28-B | | 1.25 |
| | 2.00 | |
| | | 0.75 |
| | 0.75 | |
| 29-B | | 4.50 |
| | 0.25 | |
| | | 1.25 |
| | 1.25 | |
| 30-B | | 0.50 |
| | 2.00 | |
| | | 2.00 |
| 31-B | | 2.75 |
| | 0.25 | |
| | | 0.25 |
| 32-B | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 2.75 |
| | | 2.50 |
| 33-B | 0.75 | |
| | | 2.25 |

| Trial | Left | Right |
|---|---|---|
| 34-B | | 2.25 |
| | | 2.50 |
| 35-B | | 0.25 |
| | 1.00 | |
| | | 3.00 |
| | | 0.50 |
| | 0.25 | |
| | | 0.25 |
| 36-B | | 1.75 |
| | 2.75 | |
| 37-B | | 3.50 |
| 38-B | | 0.25 |
| | 0.50 | |
| | | 1.00 |
| | 2.25 | |
| | | 0.50 |
| 39-B | 0.25 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.50 |
| | 1.50 | |
| 40-B | | 3.50 |
| | 1.75 | |
| | | 2.25 |
| 41-B | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 2.00 | |
| | | 0.75 |
| | 2.00 | |
| | | 0.50 |
| 42-B | | 3.75 |
| 43-B | | 0.50 |
| | 0.50 | |
| | | 3.00 |
| | 3.25 | |
| | | 2.50 |
| 44-B | | 3.75 |
| 45-B | | 3.00 |
| | 0.75 | |
| | | 3.75 |

Table C7: Raw Data for Subject G, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 1.25 | |
| | | 1.00 |
| | | 2.25 |
| | | 2.00 |
| | | 1.50 |
| 2-A | | 5.25 |
| | | 2.25 |
| | | 0.25 |
| | 0.25 | |
| 3-A | | 2.00 |
| | 3.50 | |
| | | 2.75 |
| 4-A | | 2.00 |
| | 2.50 | |
| | | 4.00 |
| | 0.25 | |
| | | 0.75 |
| 5-A | | 9.50 |
| 6-A | | 5.50 |
| | | 1.00 |
| | | 0.50 |
| | | 0.75 |
| 7-A | | 9.00 |
| 8-A | | 2.25 |
| | 1.75 | |
| | | 1.50 |
| | 1.25 | |
| | | 1.75 |
| 9-A | 4.00 | |
| | | 0.75 |
| | | 2.25 |
| 10-A | | 3.25 |
| | 2.50 | |
| | 1.25 | |
| | | 1.50 |
| 11-A | | 4.00 |
| | 1.50 | |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.50 |
| 12-A | | 1.00 |
| | 1.50 | |
| | | 0.25 |
| | | 0.25 |
| | 0.75 | |
| | | 1.00 |
| 13-A | | 2.50 |
| | 0.25 | |
| | | 4.50 |
| | | 0.50 |
| | 0.75 | |
| 14-A | | 1.00 |
| | | 4.50 |
| | | 3.00 |
| 15-A | | 1.25 |
| | 0.25 | |
| | | 7.00 |
| | 1.00 | |
| 16-A | 8.50 | |
| 17-A | 6.25 | |
| | | 3.50 |
| 18-A | 3.00 | |
| | | 6.75 |
| 19-A | 3.50 | |
| | | 1.25 |
| | 2.75 | |
| | 1.00 | |
| 20-A | 9.00 | |
| 21-A | | 1.25 |
| | 0.75 | |
| | | 4.25 |
| | 1.25 | |
| | | 1.25 |
| 22-A | | 1.00 |
| | 1.00 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.00 |
| | 1.50 | |
| | | 1.25 |
| 23-A | 2.50 | |
| | | 1.25 |
| | | 2.50 |
| 24-A | 1.50 | |
| | | 1.50 |
| | 4.25 | |
| | | 0.50 |
| | | 0.75 |
| 25-A | 9.00 | |
| 26-A | 9.50 | |
| 27-A | 6.50 | |
| | 2.50 | |
| | 0.75 | |
| 28-A | 4.00 | |
| | 4.25 | |
| | | 0.75 |
| | 0.25 | |
| 29-A | | 1.50 |
| | | 1.50 |
| | 1.25 | |
| | | 4.75 |
| 30-A | | 1.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.25 |
| | 1.50 | |
| | | 1.00 |
| | | 0.50 |
| | | 0.50 |

Table C7 (cont'd): Subject G, Session 2

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 31-A | | 9.25 | 45-A | | 2.25 | 10-B | 1.75 | |
| 32-A | | 5.75 | | | 7.75 | | | 1.25 |
| | 3.50 | | 1-B | | 10.00 | | 0.75 | |
| | | 0.50 | 2-B | 0.75 | | | | 2.75 |
| 33-A | | 2.25 | | | 2.00 | | 0.50 | |
| | 2.00 | | | 2.00 | | | | 3.00 |
| | | 2.25 | | | 2.25 | 11-B | 0.50 | |
| | 1.25 | | | 1.00 | | | | 1.25 |
| | | 1.75 | | | 1.50 | | 0.50 | |
| 34-A | | 3.75 | | 0.50 | | | | 1.25 |
| | 0.25 | | 3-B | | 10.00 | | 1.25 | |
| | | 3.00 | 4-B | | 2.00 | | | 2.25 |
| | | 0.50 | | 0.75 | | | 0.75 | |
| | 0.50 | | | | 1.75 | | | 2.00 |
| | | 0.50 | | 0.50 | | 12-B | | 1.50 |
| 35-A | | 2.75 | | | 4.75 | | | 3.25 |
| | | 2.75 | 5-B | | 4.00 | | 0.50 | |
| | | 1.75 | | | 5.50 | | | 1.25 |
| 36-A | 7.50 | | | | 0.25 | | 1.75 | |
| | | 1.75 | 6-B | 1.50 | | | | 1.75 |
| 37-A | | 2.25 | | | 8.50 | 13-B | | 2.75 |
| | | 2.25 | 7-B | | 4.00 | | 1.25 | |
| | | 3.25 | | 0.25 | | | | 2.00 |
| | 0.25 | | | | 1.50 | | 1.00 | |
| 38-A | 0.25 | | | 2.00 | | | | 2.75 |
| | | 9.75 | | | 1.75 | | 0.25 | |
| 39-A | 10.00 | | 8-B | | 0.50 | 14-B | 1.25 | |
| 40-A | 2.50 | | | 1.00 | | | | 1.50 |
| | | 2.00 | | | 1.00 | | 0.75 | |
| | 1.50 | | | 1.00 | | | | 1.50 |
| | | 1.75 | | | 1.75 | | 1.25 | |
| | 1.50 | | | 0.75 | | | | 1.50 |
| | | 0.75 | | | 1.25 | | 1.00 | |
| 41-A | | 9.50 | | 0.75 | | 15-B | | 1.50 |
| 42-A | 3.00 | | | | 0.75 | | 1.00 | |
| | | 2.00 | | 0.25 | | | | 1.50 |
| | 0.50 | | | | 0.25 | | 0.50 | |
| | | 2.00 | | 0.75 | | | | 2.25 |
| | 0.50 | | 9-B | | 2.75 | | 0.50 | |
| | | 2.00 | | | 1.25 | | | 1.75 |
| 43-A | | 5.50 | | 0.75 | | | 0.75 | |
| | 1.00 | | | | 1.50 | | | 0.25 |
| | | 3.50 | | 1.00 | | | | |
| 44-A | | 1.25 | | | 1.25 | | | |
| | 1.25 | | | 1.00 | | | | |
| | | 1.75 | | | 0.75 | | | |
| | 0.75 | | | | | | | |
| | | 2.50 | | | | | | |
| | 1.00 | | | | | | | |
| | | 1.50 | | | | | | |

Table C7 (cont'd): Subject G, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 7.50 |
| 17-B | | 1.00 |
| | 2.00 | |
| | | 2.50 |
| | 1.00 | |
| | | 1.75 |
| | 1.75 | |
| 18-B | | 3.00 |
| | 0.25 | |
| 19-B | 1.50 | |
| | | 1.75 |
| | 2.25 | |
| | | 2.25 |
| | 1.00 | |
| | | 0.75 |
| 20-B | | 5.00 |
| 21-B | | 0.50 |
| | 0.50 | |
| | | 2.50 |
| | 1.25 | |
| | | 2.75 |
| | 1.75 | |
| | | 0.75 |
| 22-B | 2.75 | |
| | | 1.50 |
| | 3.00 | |
| | | 1.50 |
| | 0.25 | |
| | | 0.25 |
| | 0.75 | |
| 23-B | | 0.75 |
| | 1.50 | |
| | | 1.25 |
| | 1.25 | |
| | | 1.50 |
| | 3.50 | |
| 24-B | | 1.75 |
| | 0.75 | |
| | | 1.25 |
| | 2.25 | |
| | | 1.50 |
| | 1.00 | |
| 25-B | 2.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 1.50 | |
| | | 1.00 |
| | 1.75 | |

| Trial | Left | Right |
|---|---|---|
| 26-B | 0.75 | |
| | | 1.00 |
| | 1.00 | |
| | | 1.25 |
| | 1.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| 27-B | 1.25 | |
| | | 1.50 |
| | 4.25 | |
| | | 2.25 |
| 28-B | 0.75 | |
| | | 1.25 |
| | 2.75 | |
| | | 1.00 |
| | 1.50 | |
| | | 1.25 |
| | 1.25 | |
| 29-B | 1.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| | 3.25 | |
| | | 1.00 |
| | 1.50 | |
| | | 0.75 |
| 30-B | 0.75 | |
| | | 0.50 |
| | 4.75 | |
| | 4.00 | |
| 31-B | 7.25 | |
| | | 0.75 |
| | 1.00 | |
| 32-B | | 1.50 |
| | 2.75 | |
| | | 1.25 |
| | 2.75 | |
| | | 0.75 |
| 33-B | 4.00 | |
| | | 0.25 |
| | 1.50 | |
| | | 0.25 |
| | 2.00 | |
| | | 0.50 |
| | 1.00 | |

| Trial | Left | Right |
|---|---|---|
| 34-B | 1.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.75 |
| | 2.25 | |
| | | 0.75 |
| 35-B | 2.00 | |
| | | 1.25 |
| | 2.75 | |
| | | 0.75 |
| | 1.25 | |
| | | 1.75 |
| 36-B | 3.25 | |
| | | 0.75 |
| 37-B | 1.50 | |
| | | 1.00 |
| | 2.00 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.25 |
| | 0.50 | |
| 38-B | 3.00 | |
| | | 1.00 |
| | 1.75 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.75 |
| 39-B | | 0.50 |
| | 1.50 | |
| | | 0.75 |
| | 1.75 | |
| | | 0.75 |
| 40-B | 3.50 | |
| | | 0.75 |
| | 2.25 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.75 |
| 41-B | 3.00 | |
| | 1.00 | |
| | | 2.00 |
| | 1.00 | |
| | | 0.75 |
| | 0.25 | |

Table C7 (cont'd): Subject G, Session 3, cont'd.

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 42-B | 1.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.00 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.75 | | | | | | | |
| | | 1.50 | | | | | | |
| | 1.00 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.25 | | | | | | | |
| 43-B | | 0.25 | | | | | | |
| | 1.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.50 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | 1.00 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.50 | | | | | | | |
| 44-B | 1.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.00 | | | | | | | |
| | | 0.25 | | | | | | |
| | 1.50 | | | | | | | |
| | | 0.50 | | | | | | |
| | 1.00 | | | | | | | |
| | 0.50 | | | | | | | |
| | | 0.25 | | | | | | |
| 45-B | 0.50 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.50 | | | | | | | |
| | | 1.00 | | | | | | |
| | 1.25 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.50 | | | | | | | |

Table C8: Raw Data for Subject H, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | | 3.25 |
| | 0.75 | |
| | | 2.25 |
| | 0.50 | |
| | | 1.25 |
| 2-A | 1.50 | |
| | | 1.00 |
| | 1.25 | |
| | | 1.25 |
| | 3.25 | |
| 3-A | | 0.50 |
| | 1.25 | |
| | | 5.50 |
| | 0.75 | |
| | | 0.50 |
| 4-A | | 2.00 |
| | 1.00 | |
| | | 1.75 |
| | 0.75 | |
| | | 1.75 |
| | 0.75 | |
| | | 1.25 |
| 5-A | | 6.75 |
| | 1.00 | |
| | | 0.75 |
| 6-A | 1.25 | |
| | | 3.75 |
| | 0.75 | |
| 7-A | | 1.75 |
| | 0.75 | |
| | | 2.00 |
| | 0.75 | |
| | | 1.25 |
| 8-A | | 2.50 |
| | 0.50 | |
| | | 1.50 |
| | 0.75 | |
| | | 1.50 |
| | 0.50 | |
| | | 1.50 |
| 9-A | 1.00 | |
| | | 1.75 |
| | 1.25 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.50 |

| Trial | Left | Right |
|---|---|---|
| 10-A | | 1.75 |
| | 1.25 | |
| | | 1.25 |
| | 1.25 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| 11-A | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.00 |
| 12-A | | 1.75 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| 13-A | | 1.50 |
| | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |
| 14-A | | 0.75 |
| | 1.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| 15-A | | 2.25 |
| | 4.25 | |
| | 1.75 | |

| Trial | Left | Right |
|---|---|---|
| 16-A | | 1.75 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| 17-A | | 2.50 |
| | 0.25 | |
| | | 5.75 |
| 18-A | | 0.25 |
| | 0.50 | |
| | | 1.75 |
| | | 0.75 |
| | | 0.50 |
| 19-A | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 2.50 |
| | 0.50 | |
| | | 0.50 |
| | 1.75 | |
| 20-A | | 2.00 |
| | 1.25 | |
| | | 1.25 |
| | 0.75 | |
| | | 2.00 |
| | 0.25 | |
| | | 0.25 |
| 21-A | 1.25 | |
| | | 1.00 |
| | 1.00 | |
| | | 1.25 |
| | 1.25 | |
| 22-A | | 2.00 |
| | 1.25 | |
| | | 2.75 |
| 23-A | | 2.00 |
| | 0.25 | |
| | | 1.75 |
| 24-A | 1.50 | |
| | | 1.50 |
| 25-A | 1.50 | |
| | | 0.25 |
| | 1.00 | |
| | | 0.50 |
| | 0.50 | |

Table C8 (cont'd): Subject H, Session 1, cont'd.

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 26-A | 1.25 | | | | | | | |
| | 6.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.25 | | | | | | |
| 27-A | 2.25 | | | | | | | |
| | 1.75 | | | | | | | |
| | | 1.50 | | | | | | |
| | 0.50 | | | | | | | |
| 28-A | 0.25 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.50 | | | | | | | |
| | | 1.00 | | | | | | |
| | 0.50 | | | | | | | |
| | 0.75 | | | | | | | |
| | | 1.50 | | | | | | |
| 29-A | | 0.75 | | | | | | |
| | 0.50 | | | | | | | |
| | | 2.00 | | | | | | |
| 30-A | 0.50 | | | | | | | |
| | | 1.00 | | | | | | |
| | 3.00 | | | | | | | |
| 31-A | 0.25 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.75 | | | | | | | |
| | | 1.75 | | | | | | |
| | | 0.25 | | | | | | |
| | | 2.25 | | | | | | |
| 32-A | | 0.25 | | | | | | |
| | 0.25 | | | | | | | |
| | | 1.25 | | | | | | |
| | 2.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 1.25 | | | | | | | |
| 33-A | 0.75 | | | | | | | |
| | | 0.50 | | | | | | |
| | 1.25 | | | | | | | |
| | | 1.50 | | | | | | |
| | 0.75 | | | | | | | |

Table C8 (cont'd): Subject H, Session 2

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 34-A | | 0.75 | 41-A | | 1.25 | 6-B | | 0.50 |
| | 1.50 | | | 0.75 | | | 1.00 | |
| | | 2.50 | | | 1.00 | | | 0.50 |
| | 0.75 | | | 0.25 | | | 0.50 | |
| | | 2.25 | | | 0.75 | | 1.00 | |
| | 0.25 | | | 0.50 | | 7-B | | 1.50 |
| | | 0.75 | | | 4.75 | | | 0.50 |
| 35-A | | 6.00 | | 0.50 | | | | 0.50 |
| | 0.75 | | | | 0.25 | | | 0.25 |
| | | 2.50 | 42-A | | 1.00 | | | 0.25 |
| | 0.50 | | | 1.25 | | | | 0.75 |
| | | 0.25 | | | 1.50 | 8-B | 0.50 | |
| 36-A | | 2.50 | | 1.50 | | | 1.00 | |
| | 0.75 | | | | 1.00 | | | 1.75 |
| | | 1.75 | | 1.50 | | | | 1.25 |
| | 0.50 | | | 1.00 | | | 1.50 | |
| | | 1.50 | 43-A | | 0.75 | 9-B | | 1.50 |
| | 0.25 | | | 0.50 | | | | 2.00 |
| | | 0.50 | | | 2.50 | | | 0.25 |
| 37-A | | 0.75 | | 0.75 | | | | 2.75 |
| | 1.00 | | | | 3.00 | | | 1.00 |
| | | 1.75 | | | 0.75 | 10-B | | 2.00 |
| | 0.50 | | 44-A | | 1.50 | | 0.50 | |
| | | 1.50 | | 0.25 | | | | 1.00 |
| | 0.50 | | | | 2.00 | 11-B | | 1.25 |
| | | 1.00 | | 0.50 | | | 0.25 | |
| | 1.00 | | | | 0.50 | | | 1.00 |
| | | 1.50 | 45-A | | 0.50 | | 0.50 | |
| | 0.50 | | | 1.25 | | 12-B | | 1.25 |
| 38-A | | 0.50 | | | 0.50 | | | 0.75 |
| | 0.75 | | | | 1.25 | 13-B | | 1.00 |
| | | 1.50 | | 1.25 | | | | 2.00 |
| | 1.25 | | | | 1.25 | | 1.00 | |
| | | 1.25 | 1-B | | 2.25 | | | 1.75 |
| | | 1.00 | | 1.75 | | 14-B | | 2.00 |
| | 0.75 | | | 0.25 | | | 0.25 | |
| | | 1.25 | | | 0.75 | | 1.75 | |
| 39-A | | 1.25 | 2-B | | 2.50 | | | 1.50 |
| | 1.00 | | | 0.75 | | 15-B | | 2.00 |
| | | 1.25 | | 1.75 | | | 0.50 | |
| | 1.00 | | 3-B | 0.75 | | | | 1.25 |
| | | 2.50 | | | 2.00 | 16-B | | 1.50 |
| | 0.75 | | | | 1.50 | | | 1.00 |
| | | 2.25 | | | 0.75 | | | 0.25 |
| 40-A | | 0.75 | 4-B | | 5.75 | | | 1.75 |
| | 0.50 | | | 0.25 | | | | 1.25 |
| | | 3.75 | | | 2.25 | 17-B | | 0.50 |
| | 0.75 | | 5-B | | 2.50 | | 0.50 | |
| | | 1.75 | | 0.50 | | | | 6.50 |
| | 1.00 | | | | 2.50 | | | |
| | | 1.00 | | 1.25 | | | | |

Table C8 (cont'd): Subject H, Session 3

| Trial | Left | Right |
|---|---|---|
| 18-B | | 0.50 |
| | 0.75 | |
| | | 1.75 |
| | 0.25 | |
| | | 1.75 |
| | 0.50 | |
| | | 4.25 |
| | 0.25 | |
| 19-B | | 0.75 |
| | 0.25 | |
| | | 1.25 |
| | 0.25 | |
| | | 2.25 |
| | 0.25 | |
| | | 3.25 |
| | 0.25 | |
| | | 1.00 |
| 20-B | | 4.50 |
| | | 1.75 |
| | 0.25 | |
| | | 3.50 |
| 21-B | | 0.75 |
| | 0.25 | |
| | | 3.00 |
| | | 5.00 |
| 22-B | | 0.25 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 2.50 |
| | 1.00 | |
| | | 2.00 |
| | 1.00 | |
| | | 1.25 |
| 23-B | 0.25 | |
| | | 6.75 |
| | 0.75 | |
| | | 1.50 |
| 24-B | | 4.25 |
| | | 2.75 |
| | 0.25 | |
| | | 1.00 |
| 25-B | | 0.25 |
| | 0.75 | |
| | | 1.75 |
| | | 2.00 |
| | | 4.00 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 26-B | | 1.25 |
| | 0.25 | |
| | | 1.50 |
| | 0.50 | |
| | | 0.50 |
| | | 2.25 |
| 27-B | | 1.75 |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| | | 1.50 |
| | | 0.75 |
| | | 0.75 |
| 28-B | 0.25 | |
| | | 1.75 |
| | 0.50 | |
| | | 2.00 |
| | 0.25 | |
| 29-B | 0.50 | |
| | | 3.75 |
| | 0.50 | |
| | | 0.75 |
| | | 1.50 |
| 30-B | | 0.50 |
| | 1.25 | |
| | | 0.50 |
| | | 0.25 |
| 31-B | | 3.00 |
| | | 4.25 |
| 32-B | | 2.25 |
| | 0.50 | |
| | | 0.50 |
| | | 1.00 |
| | | 2.00 |
| 33-B | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | | 1.25 |
| | 1.00 | |
| | | 2.00 |
| 34-B | | 4.50 |
| | | 1.25 |
| | | 1.00 |
| 35-B | | 6.00 |
| | | 1.50 |
| | | 0.25 |

| Trial | Left | Right |
|---|---|---|
| 36-B | | 0.50 |
| | 0.25 | |
| | | 1.75 |
| | | 1.50 |
| 37-B | | 0.50 |
| | | 0.75 |
| | | 6.50 |
| 38-B | | 8.25 |
| 39-B | | 4.00 |
| | | 2.50 |
| 40-B | | 8.75 |
| 41-B | | 2.00 |
| | 0.25 | |
| | | 2.75 |
| | 0.25 | |
| | | 1.75 |
| 42-B | | 4.50 |
| | 0.25 | |
| | | 2.50 |
| | 0.25 | |
| | | 0.50 |
| 43-B | | 1.75 |
| | 0.50 | |
| | | 0.25 |
| | 3.75 | |
| 44-B | | 1.75 |
| | 0.25 | |
| | | 3.50 |
| | 0.25 | |
| | | 2.25 |
| | 0.25 | |
| | | 1.00 |
| 45-B | | 4.50 |
| | | 1.75 |

Table C9: Raw Data for Subject I, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 0.25 | |
| | | 8.25 |
| 2-A | 0.50 | |
| | | 4.75 |
| | 1.50 | |
| | | 2.00 |
| 3-A | 1.00 | |
| | | 6.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| 4-A | | 6.00 |
| | 1.00 | |
| | | 1.50 |
| 5-A | | 8.25 |
| 6-A | 0.75 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.25 |
| | 0.25 | |
| | | 1.00 |
| | 1.50 | |
| | | 1.25 |
| 7-A | 0.50 | |
| | | 5.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.75 |
| 8-A | | 9.75 |
| 9-A | 2.25 | |
| | | 1.75 |
| | 0.50 | |
| | 0.75 | |
| | | 2.50 |
| 10-A | 1.75 | |
| | | 7.00 |
| 11-A | | 9.00 |
| 12-A | 7.00 | |
| | | 2.00 |
| | 0.75 | |
| 13-A | | 9.75 |
| 14-A | | 8.75 |
| 15-A | 1.25 | |
| | | 7.00 |
| 16-A | 4.25 | |

| Trial | Left | Right |
|---|---|---|
| 17-A | 1.25 | |
| | | 3.75 |
| | 1.25 | |
| | | 0.75 |
| | 0.50 | |
| 18-A | 0.25 | |
| | 7.25 | |
| 19-A | 0.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 4.50 |
| 20-A | | 0.50 |
| | 0.50 | |
| | | 2.00 |
| | 1.25 | |
| | 0.75 | |
| | | 1.75 |
| | 0.75 | |
| 21-A | 1.25 | |
| | | 1.25 |
| | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| | 0.25 | |
| | | 2.00 |
| 22-A | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 5.50 |
| 23-A | 0.50 | |
| | | 0.50 |
| | 1.50 | |
| | | 1.00 |
| | 1.00 | |
| | | 2.75 |
| | 1.25 | |
| 24-A | 0.50 | |
| | | 1.25 |
| | | 0.50 |
| | | 0.50 |
| | 2.00 | |
| | | 0.25 |
| | | 1.00 |

| Trial | Left | Right |
|---|---|---|
| 25-A | 0.75 | |
| | | 1.00 |
| | | 2.50 |
| | 0.50 | |
| | | 1.50 |
| 26-A | 9.25 | |
| 27-A | | 2.25 |
| | 1.00 | |
| | | 0.25 |
| | 3.50 | |
| 28-A | | 0.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| | | 2.50 |
| 29-A | | 2.50 |
| | 1.00 | |
| | | 4.50 |
| 30-A | | 1.75 |
| | | 1.50 |

Table C9 (cont'd): Subject I, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | | 8.50 |
| 32-A | | 5.25 |
| | 1.00 | |
| | | 2.25 |
| | 0.25 | |
| 33-A | | 7.50 |
| | 1.25 | |
| 34-A | | 3.50 |
| | 0.75 | |
| | | 1.50 |
| | 1.00 | |
| | | 1.00 |
| | 1.25 | |
| 35-A | 8.25 | |
| | 0.50 | |
| 36-A | 1.25 | |
| | | 3.00 |
| | 2.00 | |
| | | 1.00 |
| | 1.50 | |
| 37-A | 1.25 | |
| | | 3.25 |
| | 1.00 | |
| | | 2.00 |
| 38-A | | 4.50 |
| | 0.75 | |
| | | 1.75 |
| | 1.00 | |
| | | 1.00 |
| 39-A | 0.75 | |
| | | 1.75 |
| | 1.00 | |
| | | 1.75 |
| | 0.50 | |
| | | 0.25 |
| | | 1.50 |
| | 0.75 | |
| | | 0.50 |
| 40-A | 2.00 | |
| | | 1.50 |
| | 2.00 | |
| | 2.50 | |
| 41-A | | 3.00 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.00 |

| Trial | Left | Right |
|---|---|---|
| 42-A | | 1.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.25 |
| | | 1.00 |
| | 0.25 | |
| | | 1.00 |
| 43-A | | 3.00 |
| | 1.00 | |
| | | 5.50 |
| | 0.25 | |
| 44-A | 9.50 | |
| 45-A | | 1.00 |
| | 2.50 | |
| | | 5.75 |
| 1-B | | 2.50 |
| | 1.00 | |
| | | 2.75 |
| | 1.25 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.25 |
| 2-B | 0.50 | |
| | | 2.50 |
| | 0.50 | |
| | | 1.00 |
| | 2.50 | |
| 3-B | | 1.25 |
| | 0.75 | |
| | | 0.25 |
| | 2.50 | |
| | | 1.50 |
| | 1.75 | |
| | | 0.50 |
| | 0.25 | |
| 4-B | 9.00 | |
| 5-B | 0.50 | |
| | | 2.25 |
| 6-B | 0.50 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.00 |
| | | 1.25 |
| | 1.00 | |
| | | 1.25 |
| 7-B | | |

| Trial | Left | Right |
|---|---|---|
| 7-B | | 0.25 |
| | | 0.25 |
| | | 0.50 |
| | 0.75 | |
| | | 1.50 |
| 8-B | | 1.00 |
| | | 0.50 |
| | | 0.75 |
| | 0.50 | |
| | | 1.50 |
| 9-B | | 1.25 |
| | | 1.25 |
| | | 0.25 |
| 10-B | | 1.25 |
| | | 1.25 |
| 11-B | 3.50 | |
| | | 5.75 |
| 12-B | | 5.75 |
| | 1.75 | |
| 13-B | 8.50 | |
| 14-B | 8.00 | |
| 15-B | | 1.25 |
| | 4.75 | |

Table C9 (cont'd): Subject I, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 2.00 |
| | 4.50 | |
| | | 1.50 |
| | 0.50 | |
| 17-B | 0.50 | |
| | | 2.25 |
| | 1.00 | |
| 18-B | | 1.00 |
| | 3.50 | |
| | | 1.25 |
| | 2.50 | |
| | | 1.25 |
| 19-B | 4.50 | |
| | 1.00 | |
| | | 1.00 |
| | 1.25 | |
| | | 0.75 |
| 20-B | | 1.25 |
| | 0.25 | |
| | | 1.00 |
| | 1.00 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| 21-B | 0.25 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.50 |
| | 1.50 | |
| | 0.50 | |
| | | 2.00 |
| 22-B | 4.00 | |
| | | 0.75 |
| | 2.75 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.50 |
| 23-B | | 1.75 |
| | 0.50 | |
| | | 1.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| 24-B | 1.25 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.75 |
| | 2.50 | |
| | | 1.00 |
| 25-B | | 1.50 |
| | 1.50 | |
| | | 1.50 |
| | 1.00 | |
| | | 1.25 |
| 26-B | | 6.50 |
| | 0.50 | |
| 27-B | | 1.25 |
| | 6.25 | |
| | | 1.00 |
| | 0.50 | |
| 28-B | 2.75 | |
| | 0.25 | |
| 29-B | 1.75 | |
| | | 1.00 |
| | 2.25 | |
| | | 1.00 |
| | 1.00 | |
| | 1.50 | |
| 30-B | 1.25 | |
| | | 1.25 |
| | 1.00 | |
| | | 0.50 |
| | 1.00 | |
| | | 2.00 |
| | 1.00 | |
| 31-B | 10.00 | |
| 32-B | 1.50 | |
| | | 2.25 |
| | 0.50 | |
| | | 1.25 |
| | 1.25 | |
| 33-B | | 3.75 |
| | 0.75 | |
| | 3.25 | |
| 34-B | 0.25 | |
| | | 2.25 |
| | 1.25 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.75 |
| | 1.00 | |
| 35-B | 1.25 | |
| | 3.75 | |
| | | 1.75 |
| | 0.25 | |
| | | 1.00 |
| 36-B | | 1.25 |
| | 4.00 | |
| | | 1.50 |
| | 1.50 | |
| | | 0.75 |
| 37-B | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |
| 38-B | | 0.75 |
| | 1.50 | |
| | 4.25 | |
| | 1.75 | |
| 39-B | 6.00 | |
| | 1.50 | |
| | 0.75 | |
| 40-B | 3.00 | |
| | 1.00 | |
| | 1.75 | |
| | 0.25 | |
| 41-B | 0.75 | |
| | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| 42-B | 0.50 | |
| | 1.00 | |
| | 0.75 | |
| | 1.50 | |
| 43-B | | 2.00 |
| | 0.75 | |
| | 0.25 | |
| | | 1.25 |
| | 2.00 | |
| 44-B | 5.50 | |
| | 3.00 | |
| 45-B | 1.25 | |
| | 0.25 | |
| | 0.75 | |

Table C10: Raw Data for Subject J, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | | 4.75 |
| | 0.50 | |
| | | 0.50 |
| 2-A | | 4.50 |
| | 1.00 | |
| | | 0.25 |
| 3-A | | 9.75 |
| 4-A | | 9.75 |
| 5-A | | 7.75 |
| 6-A | | 5.25 |
| | | 4.50 |
| 7-A | | 8.25 |
| | | 0.50 |
| 8-A | | 5.00 |
| | 0.50 | |
| | | 2.00 |
| | | 2.00 |
| 9-A | | 4.75 |
| | | 3.25 |
| | 0.75 | |
| | | 0.50 |
| 10-A | | 6.00 |
| | | 1.75 |
| | 0.50 | |
| | | 1.25 |
| 11-A | | 4.50 |
| | 0.25 | |
| | | 1.75 |
| | | 1.00 |
| 12-A | | 5.75 |
| | | 1.00 |
| 13-A | | 4.75 |
| | 0.50 | |
| | 1.00 | |
| | | 1.25 |
| | 1.25 | |
| | | 0.50 |
| 14-A | | 2.00 |
| | 0.75 | |
| | | 2.00 |
| | | 1.25 |
| | | 1.00 |
| | 0.50 | |
| | | 0.25 |
| 15-A | 0.25 | |
| | | 4.25 |
| | 1.00 | |
| | | 1.75 |
| | 1.00 | |
| | | 1.25 |

| Trial | Left | Right |
|---|---|---|
| 16-A | | 10.00 |
| 17-A | | 6.50 |
| | | 2.00 |
| | 0.50 | |
| | | 0.50 |
| 18-A | | 3.25 |
| | 0.75 | |
| | | 3.50 |
| | 1.00 | |
| | | 1.50 |
| 19-A | | 5.25 |
| | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 20-A | | 2.00 |
| | 1.00 | |
| | | 2.00 |
| | 1.00 | |
| | | 3.50 |
| 21-A | | 3.00 |
| | | 1.50 |
| 22-A | | 1.50 |
| | | 2.00 |
| | | 2.50 |
| | 0.25 | |
| | | 3.00 |
| 23-A | | 9.50 |
| | 0.50 | |
| 24-A | | 8.50 |
| | 0.75 | |
| | | 0.75 |
| 25-A | | 4.50 |
| | | 1.25 |
| | | 3.00 |
| 26-A | | 3.75 |
| | | 3.00 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |

| Trial | Left | Right |
|---|---|---|
| 27-A | | 1.25 |
| | | 1.50 |
| | 0.75 | |
| | | 2.50 |
| | | 0.50 |
| 28-A | | 0.75 |
| | 2.25 | |
| | | 1.25 |
| | | 2.50 |
| | 1.00 | |
| | | 1.50 |
| 29-A | 0.75 | |
| | | 5.75 |
| | 0.75 | |
| | | 2.25 |
| 30-A | | 8.00 |
| | | 1.75 |

Table C10 (cont'd): Subject J, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | | 3.25 |
| | 1.50 | |
| 32-A | | 4.50 |
| | 2.00 | |
| | | 1.75 |
| 33-A | | 0.50 |
| | 4.50 | |
| | | 2.50 |
| 34-A | | 4.00 |
| | 0.75 | |
| | | 2.75 |
| 35-A | 0.25 | |
| | | 5.75 |
| | 0.50 | |
| | | 0.50 |
| 36-A | 0.25 | |
| | | 3.75 |
| | 0.50 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.25 |
| | 1.00 | |
| | | 0.50 |
| 37-A | | 3.75 |
| | 1.00 | |
| | | 3.50 |
| | 0.25 | |
| 38-A | | 3.25 |
| | | 2.75 |
| | 0.75 | |
| | | 1.50 |
| 39-A | | 4.25 |
| | | 3.75 |
| | 1.00 | |
| 40-A | 1.50 | |
| | 2.25 | |
| | | 0.75 |
| | 0.75 | |
| 41-A | | 2.75 |
| | 1.75 | |
| | | 2.75 |
| | 0.50 | |
| 42-A | 1.75 | |
| | 1.25 | |
| | | 0.50 |
| | 1.00 | |
| | | 2.75 |

| Trial | Left | Right |
|---|---|---|
| 43-A | 0.50 | |
| | | 1.50 |
| | 0.50 | |
| | | 2.00 |
| | | 2.50 |
| 44-A | | 8,25 |
| | | 0.25 |
| | 0.25 | |
| 45-A | | 2.50 |
| | 1.25 | |
| | | 0.25 |
| | 0.50 | |
| | | 2.75 |
| 1-B | 2.50 | |
| | | 2.00 |
| | 1.25 | |
| | | 2.25 |
| 2-B | | 2.50 |
| | 2.25 | |
| | | 2.50 |
| | 0.25 | |
| | | 1.50 |
| 3-B | | 1.75 |
| | 0.75 | |
| | | 3.75 |
| | 1.50 | |
| 4-B | | 3.75 |
| | | 2.00 |
| | 0.50 | |
| | | 2.50 |
| | 0.75 | |
| 5-B | | 4.50 |
| | 0.25 | |
| | | 3.00 |
| | 1.75 | |
| 6-B | | 3.75 |
| | | 2.00 |
| | 0.50 | |
| | | 1.00 |
| | 1.75 | |
| 7-B | | 3.25 |
| | 0.75 | |
| | | 3.25 |
| | 1.00 | |
| | | 1.75 |

| Trial | Left | Right |
|---|---|---|
| 8-B | | 3.00 |
| | | 3.25 |
| 9-B | | 6.50 |
| 10-B | | 9.25 |
| 11-B | | 3.25 |
| | 4.25 | |
| 12-B | | 0.50 |
| | 4.75 | |
| | | 1.75 |
| | 2.25 | |
| 13-B | | 8.50 |
| 14-B | | 7.00 |
| | 0.75 | |
| | | 1.00 |
| | 1.00 | |
| 15-B | | 9.00 |
| | 1.00 | |

Table C10 (cont'd): Subject J, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | 0.50 | |
| | | 2.00 |
| | 2.25 | |
| | | 1.75 |
| 17-B | | 7.00 |
| | 0.75 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.25 |
| 18-B | 3.75 | |
| | | 4.00 |
| | 1.00 | |
| 19-B | | 4.75 |
| | 0.75 | |
| | | 3.75 |
| | 0.25 | |
| 20-B | | 3.75 |
| | 2.50 | |
| | | 0.50 |
| 21-B | | 1.50 |
| 22-B | 0.75 | |
| | | 5.50 |
| | 0.50 | |
| 23-B | | 2.00 |
| | 0.75 | |
| 24-B | | 3.00 |
| | | 2.25 |
| | 0.50 | |
| | | 0.75 |
| 25-B | 0.75 | |
| | | 1.00 |
| | | 0.50 |
| | 0.50 | |
| | | 3.50 |
| | 0.25 | |
| | | 1.75 |
| 26-B | 1.50 | |
| | | 6.00 |
| 27-B | | 2.50 |
| | 0.75 | |
| | 0.75 | |
| | | 1.25 |
| | 1.00 | |
| | | 0.50 |

| Trial | Left | Right |
|---|---|---|
| 28-B | | 2.25 |
| | 1.25 | |
| | | 4.50 |
| | 0.25 | |
| 29-B | 5.00 | |
| | 2.25 | |
| | | 1.25 |
| 30-B | | 1.00 |
| | 1.50 | |
| | | 1.75 |
| | 1.00 | |
| | | 0.75 |
| 31-B | | 0.25 |
| | | 1.00 |
| | 0.75 | |
| 32-B | | 1.00 |
| | 0.50 | |
| | 0.25 | |
| 33-B | | 0.25 |
| | 0.75 | |
| | | 1.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| 34-B | | 0.25 |
| | 0.50 | |
| | | 3.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| 35-B | | 1.50 |
| | | 1.25 |
| 36-B | 2.00 | |
| | 1.50 | |
| 37-B | | 1.00 |
| | 0.25 | |
| 38-B | 0.25 | |
| | 1.25 | |
| 39-B | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 2.00 |
| | 0.50 | |

| Trial | Left | Right |
|---|---|---|
| 40-B | 0.75 | |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| 41-B | 0.75 | |
| | 0.50 | |
| 42-B | 0.50 | |
| | | 2.25 |
| | 0.75 | |
| 43-B | 0.75 | |
| | | 1.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.50 |
| | | 1.50 |
| | | 0.75 |
| 44-B | 0.75 | |
| | 0.75 | |
| | 0.75 | |
| | 0.50 | |
| 45-B | | 0.50 |
| | 0.25 | |
| | 3.00 | |

Table C11: Raw Data for Subject K, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | | 3.50 |
| | 2.75 | |
| | | 1.50 |
| | 1.50 | |
| 2-A | | 0.50 |
| | 2.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| | | 1.25 |
| | 0.50 | |
| 3-A | | 3.00 |
| | 1.50 | |
| | | 1.25 |
| | 1.25 | |
| | | 1.00 |
| | 1.50 | |
| | | 0.50 |
| 4-A | | 0.50 |
| | 1.25 | |
| | | 0.75 |
| | 1.25 | |
| | 0.25 | |
| | | 1.25 |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| 5-A | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.75 |
| | 1.50 | |
| | | 1.25 |
| | 1.00 | |
| | | 1.25 |
| 6-A | | 4.75 |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 2.00 |

| Trial | Left | Right |
|---|---|---|
| 7-A | | 1.00 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.50 |
| | 0.25 | |
| | | 1.25 |
| | 0.25 | |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 8-A | | 3.50 |
| | | 3.50 |
| 9-A | | 1.00 |
| | | 1.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| 10-A | 0.50 | |
| | | 1.00 |
| | 1.50 | |
| | | 0.75 |
| | 4.50 | |
| 11-A | | 1.25 |
| | 5.50 | |
| | | 0.25 |
| | 0.75 | |
| | | 1.00 |
| | 1.25 | |
| 12-A | 1.25 | |
| | | 0.75 |
| | 4.75 | |
| | 0.75 | |
| | | 0.25 |
| | 0.75 | |

| Trial | Left | Right |
|---|---|---|
| 13-A | 1.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| 14-A | 0.50 | |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| | | 0.25 |
| | | 0.50 |
| | 1.25 | |
| 15-A | 2.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 4.25 |
| 16-A | | 0.75 |
| | 3.00 | |
| | 0.25 | |
| | | 1.25 |
| | | 0.25 |
| 17-A | 0.75 | |
| | | 0.50 |
| | 2.50 | |
| | | 0.25 |
| | 2.50 | |
| | | 0.25 |
| 18-A | | 1.00 |
| | 0.50 | |
| | 3.50 | |
| | 0.50 | |
| 19-A | 2.25 | |
| | | 0.25 |
| | 2.50 | |
| | 2.00 | |
| 20-A | 3.50 | |
| | 1.50 | |
| 21-A | 2.25 | |
| | | 0.75 |
| | 1.75 | |
| | | 0.50 |
| | 1.50 | |
| | | 0.50 |

Table C11 (cont'd): Subject K, Session 1, cont'd , and Session 2

| Trial | Left | Right |
|---|---|---|
| 22-A | | 0.50 |
| | 1.00 | |
| | 3.50 | |
| | 0.50 | |
| | | 0.75 |
| 23-A | 5.50 | |
| | 1.25 | |
| | | 0.50 |
| | 0.25 | |
| | 0.50 | |
| 24-A | 5.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.25 |
| | | 0.50 |
| 25-A | 5.00 | |
| | | 0.75 |
| | | 1.00 |
| 26-A | 1.00 | |
| | 2.00 | |
| | | 0.50 |
| | 0.75 | |
| 27-A | 1.75 | |
| | 2.75 | |
| 28-A | 0.50 | |
| | 0.50 | |
| | 1.25 | |
| | 4.50 | |
| 29-A | 2.75 | |
| | 0.25 | |
| | | 0.25 |
| 30-A | 1.75 | |
| | 1.25 | |
| | 2.25 | |
| | 0.50 | |

| Trial | Left | Right |
|---|---|---|
| Session 2 begins here | | |
| 31-A | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 3.50 |
| 32-A | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | | 1.50 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |
| 33-A | | 0.50 |
| | 0.75 | |
| | | 2.75 |
| | 0.25 | |
| | | 1.00 |
| | 0.25 | |
| | | 3.25 |
| 34-A | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 2.75 |
| | 0.50 | |
| | | 1.00 |
| 35-A | 0.25 | |
| | | 2.75 |
| | 0.25 | |
| | | 4.75 |

| Trial | Left | Right |
|---|---|---|
| 36-A | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 2.00 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 2.00 |
| | 0.50 | |
| | | 0.50 |
| 37-A | 7.50 | |
| | 2.25 | |
| 38-A | 1.75 | |
| | | 0.25 |
| | 4.00 | |
| | 4.00 | |
| 39-A | 0.75 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.25 |
| | 3.75 | |
| | 1.00 | |
| 40-A | 1.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 3.50 |
| | 0.50 | |
| | | 0.75 |
| | | 1.50 |
| 41-A | 1.00 | |
| | | 0.75 |
| | 0.25 | |
| | | 3.25 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 1.50 |
| 42-A | 0.50 | |
| | | 0.75 |
| | 3.50 | |
| | | 1.25 |
| | 4.00 | |
| 43-A | 7.00 | |
| | | 2.00 |
| | 0.25 | |
| | | 0.50 |
| | 0.25 | |

Table C11 (cont'd): Subject K, Session 2, cont'd, and Session 3

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 44-A | 4.75 | | 6-B | 1.50 | | Session 3 begins here | | |
| | | 0.75 | | | 2.00 | | | |
| | 3.50 | | | 0.75 | | 16-B | | 7.00 |
| | | 1.00 | | | 0.75 | 17-B | | 0.50 |
| 45-A | | 0.75 | | 2.25 | | | 0.25 | |
| | 0.50 | | 7-B | | 1.50 | | | 0.50 |
| | | 0.75 | | 6.00 | | | 0.50 | |
| | 3.50 | | | 0.50 | | | | 0.25 |
| | | 0.75 | | | 0.50 | | 0.25 | |
| | 3.50 | | | 0.25 | | | | 2.25 |
| | | 0.25 | 8-B | | 3.75 | | 0.25 | |
| 1-B | | 3.50 | | 1.00 | | | | 0.25 |
| | 1.25 | | | | 1.25 | | 0.25 | |
| | | 2.25 | | 1.25 | | | | 0.50 |
| | 0.50 | | | 2.50 | | | 0.25 | |
| | | 0.25 | | | 0.25 | 18-B | | 0.75 |
| | 0.75 | | 9-B | 1.25 | | | 0.50 | |
| | | 1.00 | | | 1.25 | | | 0.50 |
| 2-B | | 2.00 | | 1.75 | | | 0.75 | |
| | 1.00 | | | | 0.50 | | | 0.25 |
| | | 1.75 | | 1.50 | | | 0.25 | |
| | 0.50 | | | | 0.25 | | | 2.50 |
| | | 0.50 | | 2.50 | | | 0.50 | |
| | 0.50 | | 10-B | 5.00 | | | | 1.75 |
| | | 0.75 | 11-B | | 1.25 | 19-B | 0.25 | |
| | 0.75 | | | 4.00 | | | | 0.75 |
| | | 0.75 | | | 1.00 | | 0.50 | |
| | 0.75 | | 12-B | 3.00 | | | | 2.75 |
| 3-B | 1.00 | | 13-B | | 3.25 | | 0.50 | |
| | | 3.75 | | 2.25 | | | | 0.25 |
| | 1.00 | | | | 1.25 | | 0.25 | |
| | | 1.00 | | 0.75 | | | | 2.00 |
| | 0.50 | | | | 0.50 | | 0.25 | |
| | | 0.75 | | 1.00 | | | | 0.50 |
| | 1.25 | | | | 0.25 | 20-B | | 0.75 |
| | | 0.75 | 14-B | 3.25 | | | 2.50 | |
| 4-B | 1.00 | | | 0.25 | | | | 1.50 |
| | | 2.25 | | | 1.75 | | 0.50 | |
| | 0.50 | | | 0.25 | | | | 1.00 |
| | | 1.50 | 15-B | 10.00 | | | 0.25 | |
| | 1.75 | | | | | 21-B | | 0.25 |
| | | 2.50 | | | | | 0.50 | |
| | 0.25 | | | | | | | 0.50 |
| 5-B | 1.00 | | | | | | 0.50 | |
| | | 0.25 | | | | | | 4.00 |
| | 2.75 | | | | | | 0.25 | |
| | | 0.50 | | | | | | 2.25 |
| | 0.50 | | | | | | | |
| | | 0.50 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 2.75 | | | | | | | |

Table C11 (cont'd): Subject K, Session 3, cont'd

| Trial | Left | Right |
|---|---|---|
| 22-B | 0.50 | |
| | | 0.75 |
| | 3.50 | |
| | | 0.25 |
| | 3.75 | |
| 23-B | | 0.25 |
| | 0.50 | |
| | | 2.50 |
| | 0.25 | |
| | | 0.25 |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| 24-B | 0.50 | |
| | | 2.75 |
| | 0.25 | |
| | | 1.50 |
| | 2.00 | |
| 25-B | 3.50 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 1.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| 26-B | | 0.50 |
| | 1.25 | |
| | | 1.75 |
| | 4.75 | |
| 27-B | 0.25 | |
| | | 0.50 |
| | 8.25 | |
| | | 0.25 |
| | 0.50 | |
| 28-B | | 1.50 |
| | 1.75 | |
| | | 0.25 |
| | 3.75 | |
| | | 1.00 |
| 29-B | | 1.50 |
| | 1.25 | |
| | 0.50 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.25 |
| 30-B | 0.25 | |
| | | 0.25 |
| | 0.50 | |
| | | 0.50 |
| | 0.25 | |
| | | 2.00 |
| | 0.50 | |
| | | 0.50 |
| | 2.75 | |
| 31-B | 2.25 | |
| | 0.75 | |
| | | 1.75 |
| | 2.00 | |
| 32-B | | 4.00 |
| | 0.25 | |
| | 0.25 | |
| | | 2.25 |
| 33-B | 0.25 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.50 |
| | 4.25 | |
| | 0.75 | |
| | | 1.00 |
| 34-B | 0.25 | |
| | | 1.75 |
| | 1.50 | |
| | | 0.50 |
| | | 0.75 |
| | 3.25 | |
| 35-B | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 3.50 |
| 36-B | 0.50 | |
| | | 0.75 |
| | 7.25 | |
| 37-B | | 0.25 |
| | | 0.25 |
| | 8.00 | |
| 38-B | | 0.25 |
| | 0.25 | |
| | | 1.00 |
| 39-B | 2.75 | |
| | 1.75 | |
| | 1.50 | |
| 40-B | 0.50 | |
| | | 1.75 |
| | 0.25 | |
| 41-B | | 0.25 |
| | 0.25 | |
| | 4.25 | |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 42-B | 7.50 | |
| | | 1.00 |
| 43-B | | 0.25 |
| | 2.75 | |
| | | 0.75 |
| | 1.75 | |
| | | 0.50 |
| | 0.50 | |
| 44-B | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | | 0.25 |
| | | 0.50 |
| 45-B | | 0.75 |
| | 0.25 | |
| | | 2.00 |
| | 0.50 | |

Table C12: Raw Data for Subject L, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 0.75 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| 2-A | 3.50 | |
| | | 0.50 |
| | 2.25 | |
| | | 2.00 |
| 3-A | 1.00 | |
| | | 1.00 |
| | 1.25 | |
| | | 1.25 |
| | 0.75 | |
| | | 2.25 |
| | 0.50 | |
| | | 1.25 |
| 4-A | | 1.25 |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| 5-A | | 1.00 |
| | 1.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 3.50 |
| | 1.00 | |
| 6-A | 0.75 | |
| | | 0.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.50 |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |

| Trial | Left | Right |
|---|---|---|
| 7-A | 1.00 | |
| | | 0.25 |
| | 0.75 | |
| | 0.25 | |
| | | 0.50 |
| | 1.00 | |
| | | 2.25 |
| | 1.00 | |
| | | 0.50 |
| 8-A | 2.25 | |
| | | 2.75 |
| | 1.75 | |
| | | 1.00 |
| 9-A | 0.25 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | | 0.50 |
| | | 0.50 |
| | | 1.25 |
| | 0.25 | |
| | | 0.50 |
| | 0.75 | |
| 10-A | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | 2.25 | |
| 11-A | 1.75 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.75 |
| 12-A | | 7.25 |
| | 2.50 | |
| 13-A | 3.50 | |
| | | 1.50 |
| | 1.00 | |
| | | 0.25 |
| | 3.00 | |
| | | 0.25 |

| Trial | Left | Right |
|---|---|---|
| 14-A | 1.75 | |
| | | 0.75 |
| | | 1.75 |
| | 4.25 | |
| 15-A | | 0.25 |
| | 2.25 | |
| | | 0.25 |
| | 1.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 1.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| 16-A | 0.75 | |
| | | 4.50 |
| | | 1.75 |
| | 1.25 | |
| 17-A | 5.50 | |
| | | 0.50 |
| | | 0.25 |
| 18-A | | 0.75 |
| | 1.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | 2.00 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| 19-A | 1.00 | |
| | 0.75 | |
| | | 1.75 |
| | 1.75 | |
| | | 0.75 |
| 20-A | 0.50 | |
| | | 3.75 |
| | | 2.25 |
| 21-A | 2.00 | |
| | | 1.25 |
| | 1.75 | |
| | | 0.25 |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |

Table C12 (cont'd): Subject L, Session 1, cont'd

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 22-A | | 1.00 | | | | | | |
| | 3.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | | 0.25 | | | | | | |
| | 0.50 | | | | | | | |
| 23-A | | 0.50 | | | | | | |
| | 1.25 | | | | | | | |
| | | 0.75 | | | | | | |
| | | 0.75 | | | | | | |
| | 1.25 | | | | | | | |
| 24-A | | 4.75 | | | | | | |
| | 1.00 | | | | | | | |
| | | 2.50 | | | | | | |
| | 1.75 | | | | | | | |
| 25-A | 0.75 | | | | | | | |
| | | 0.75 | | | | | | |
| | 0.75 | | | | | | | |
| | | 1.50 | | | | | | |
| | 0.25 | | | | | | | |
| | | 1.00 | | | | | | |
| 26-A | | 0.50 | | | | | | |
| | 4.25 | | | | | | | |
| | 0.25 | | | | | | | |
| 27-A | 0.50 | | | | | | | |
| | | 0.50 | | | | | | |
| | 2.25 | | | | | | | |
| | | 1.00 | | | | | | |
| | | 0.75 | | | | | | |
| | | 0.50 | | | | | | |
| 28-A | | 1.00 | | | | | | |
| | | 0.50 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.25 | | | | | | |
| 29-A | | 1.00 | | | | | | |
| | 2.25 | | | | | | | |
| | | 2.25 | | | | | | |
| 30-A | | 3.00 | | | | | | |
| | 0.75 | | | | | | | |
| | | 1.50 | | | | | | |
| | 1.00 | | | | | | | |

Table C12 (cont'd): Subject L, Session 2

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 31-A | 1.00 | | 40-A | | 0.50 | 9-B | 0.50 | |
| | | 1.00 | | 1.25 | | | | 0.50 |
| | 1.75 | | | | 1.50 | | 0.50 | |
| | | 2.50 | | 2.00 | | | | 0.50 |
| | 0.75 | | 41-A | | 5.00 | 10-B | | 0.75 |
| | | 0.75 | | | 0.50 | | 1.00 | |
| | 0.25 | | | | 1.50 | | | 0.75 |
| | | 0.75 | 42-A | | 0.25 | 11-B | 0.75 | |
| 32-A | 3.00 | | | 1.00 | | | 0.75 | |
| | | 0.75 | | | 1.25 | | | 0.25 |
| | 2.00 | | 43-A | | 5.25 | | 0.75 | |
| | | 0.75 | 44-A | | 4.50 | | 1.00 | |
| | 1.75 | | | | 3.50 | 12-B | 1.50 | |
| | | 0.75 | 45-A | | 6.25 | | 1.50 | |
| | 0.75 | | | 0.25 | | 13-B | 0.75 | |
| 33-A | 3.00 | | | | 1.25 | 14-B | 1.75 | |
| | | 0.75 | 1-B | 2.75 | | | 2.00 | |
| | 0.50 | | | | 0.50 | 15-B | 4.25 | |
| | | 0.25 | | 0.50 | | | 1.25 | |
| | 2.25 | | | | 0.75 | | | 0.75 |
| | 0.50 | | | | 0.25 | | | |
| | | 0.50 | | 0.75 | | | | |
| | 0.50 | | | | 0.25 | | | |
| 34-A | 1.25 | | 2-B | 0.50 | | | | |
| | | 1.25 | | | 0.50 | | | |
| | 0.75 | | | 1.00 | | | | |
| | | 2.75 | | | 2.25 | | | |
| | 1.00 | | | 0.75 | | | | |
| | | 0.25 | 3-B | 0.75 | | | | |
| | 1.50 | | | | 0.50 | | | |
| | | 0.50 | | 0.25 | | | | |
| 35-A | | 6.75 | | | 0.75 | | | |
| | | 1.00 | | 0.50 | | | | |
| | 1.50 | | | | 2.25 | | | |
| 36-A | 0.25 | | | | 0.75 | | | |
| | | 1.75 | 4-B | 1.00 | | | | |
| | 0.75 | | | | 8.50 | | | |
| | | 7.25 | 5-B | 1.50 | | | | |
| 37-A | | 3.50 | | | 1.00 | | | |
| | | 4.50 | | 2.25 | | | | |
| | 1.50 | | | 1.25 | | | | |
| | | 0.50 | 6-B | 1.00 | | | | |
| 38-A | | 7.75 | | 2.00 | | | | |
| | 0.25 | | 7-B | 0.75 | | | | |
| | | 0.75 | | | 0.50 | | | |
| 39-A | 1.25 | | | 0.50 | | | | |
| | | 1.25 | | | 3.75 | | | |
| | | 0.50 | 8-B | 1.00 | | | | |
| | | 1.75 | | 0.75 | | | | |
| | 1.75 | | | 1.25 | | | | |

Table C12 (cont'd): Subject L, Session 3

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 16-B | 1.25 | | 29-B | | 1.00 | | | |
| | 5.25 | | | 4.00 | | | | |
| 17-B | 2.25 | | | | 4.50 | | | |
| | | 0.75 | | 0.50 | | | | |
| | 6.25 | | 30-B | 6.25 | | | | |
| 18-B | 8.00 | | | | 3.75 | | | |
| | | 2.00 | 31-B | 5.00 | | | | |
| 19-B | 2.25 | | | 0.50 | | | | |
| | | 0.50 | | 0.75 | | | | |
| | 1.50 | | 32-B | 3.75 | | | | |
| | | 0.25 | | | 1.25 | | | |
| | 1.00 | | | 1.00 | | | | |
| | | 0.25 | | | 1.25 | | | |
| | 0.50 | | | 2.50 | | | | |
| | | 1.25 | 33-B | 10.00 | | | | |
| | 1.25 | | 34-B | 10.00 | | | | |
| | | 1.00 | 35-B | | 1.50 | | | |
| | 0.25 | | | 5.00 | | | | |
| 20-B | 2.75 | | | | 1.75 | | | |
| | 1.50 | | 36-B | 10.00 | | | | |
| | | 0.50 | 37-B | 1.25 | | | | |
| | 1.75 | | | | 3.00 | | | |
| | 0.50 | | | 5.75 | | | | |
| 21-B | 0.25 | | 38-B | 8.75 | | | | |
| | | 9.75 | | 0.50 | | | | |
| 22-B | 1.25 | | 39-B | 6.00 | | | | |
| | 4.50 | | | 3.00 | | | | |
| | 0.50 | | | | 1.00 | | | |
| 23-B | 0.50 | | 40-B | 0.75 | | | | |
| | | 1.00 | | 1.00 | | | | |
| | 0.75 | | | | 5.25 | | | |
| | | 1.25 | | 1.00 | | | | |
| | 1.00 | | 41-B | 2.00 | | | | |
| | | 0.50 | | 7.75 | | | | |
| | 1.25 | | 42-B | 1.75 | | | | |
| | 0.25 | | | 5.75 | | | | |
| | | 0.50 | 43-B | 8.00 | | | | |
| | 0.25 | | | | 1.75 | | | |
| 24-B | 1.00 | | 44-B | | 9.75 | | | |
| | 2.25 | | 45-B | | 0.25 | | | |
| | | 6.00 | | 3.25 | | | | |
| 25-B | 10.00 | | | 1.50 | | | | |
| 26-B | 5.50 | | | | 3.50 | | | |
| 27-B | 8.75 | | | 1.25 | | | | |
| | 0.50 | | | | | | | |
| | | 0.25 | | | | | | |
| 28-B | 5.75 | | | | | | | |
| | 0.50 | | | | | | | |
| | 0.50 | | | | | | | |

Table C13: Raw Data for Subject M, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | | 1.25 | 19-A | 3.50 | | | | |
| | | 5.25 | | 0.50 | | | | |
| 2-A | | 9.25 | | | 1.25 | | | |
| 3-A | 8.50 | | | 1.75 | | | | |
| 4-A | | 9.00 | 20-A | 1.00 | | | | |
| 5-A | | 8.75 | | | 1.75 | | | |
| 6-A | | 1.25 | | | 1.50 | | | |
| | | 1.50 | | 2.50 | | | | |
| | | 4.25 | 21-A | | 8.00 | | | |
| 7-A | 4.75 | | 22-A | | 1.00 | | | |
| | | 2.75 | | | 3.00 | | | |
| 8-A | | 9.00 | 23-A | 2.25 | | | | |
| 9-A | | 5.75 | | | 3.25 | | | |
| | 2.25 | | 24-A | | 0.75 | | | |
| | 0.75 | | | | 1.25 | | | |
| 10-A | | 8.75 | | | 0.50 | | | |
| 11-A | | 6.50 | | 1.00 | | | | |
| 12-A | | 0.50 | | | 0.75 | | | |
| | 0.25 | | | 0.75 | | | | |
| | | 2.25 | | | 1.00 | | | |
| | 3.75 | | 25-A | | 1.50 | | | |
| | 0.25 | | | | 2.50 | | | |
| | | 0.50 | | 0.25 | | | | |
| 13-A | 6.75 | | | | 2.00 | | | |
| | | 2.00 | | 0.50 | | | | |
| 14-A | | 3.00 | 26-A | | 1.50 | | | |
| | | 4.00 | | 1.00 | | | | |
| | 0.75 | | | | 0.75 | | | |
| | | 0.25 | | 0.75 | | | | |
| 15-A | 5.50 | | | | 0.75 | | | |
| | | 0.25 | | | 1.25 | | | |
| | | 2.25 | 27-A | 4.25 | | | | |
| | 0.75 | | | | 1.00 | | | |
| | | 0.50 | | | 1.25 | | | |
| | 0.50 | | | 1.00 | | | | |
| 16-A | | 2.50 | 28-A | 1.50 | | | | |
| | | 1.50 | | | 3.75 | | | |
| | | 3.25 | | 1.75 | | | | |
| 17-A | 0.75 | | 29-A | | 6.00 | | | |
| | | 1.50 | | 2.25 | | | | |
| | 1.00 | | 30-A | | 4.00 | | | |
| | | 1.25 | | 0.50 | | | | |
| | | 2.75 | | 1.00 | | | | |
| 18-A | 0.25 | | | | 1.50 | | | |
| | | 1.25 | | 1.25 | | | | |
| | 3.75 | | | | | | | |
| | | 1.50 | | | | | | |

Table C13 (cont'd): Subject M, Session 2

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 31-A | | 8.50 | 8-B | | 6.50 | | | |
| 32-A | 6.75 | | | 3.50 | | | | |
| | 1.00 | | 9-B | | 2.50 | | | |
| 33-A | 0.50 | | | 1.00 | | | | |
| | 6.00 | | | | 5.50 | | | |
| 34-A | | 2.75 | 10-B | | 5.75 | | | |
| | 5.50 | | | 0.50 | | | | |
| | | 1.75 | | 0.75 | | | | |
| 35-A | 5.50 | | 11-B | | 3.50 | | | |
| 36-A | | 2.00 | | 0.50 | | | | |
| | 1.75 | | | 0.50 | | | | |
| | | 1.75 | | | 2.75 | | | |
| | 1.00 | | 12-B | | 2.50 | | | |
| | | 2.25 | | 1.50 | | | | |
| 37-A | 1.75 | | | | 4.25 | | | |
| | | 6.75 | 13-B | | 1.25 | | | |
| 38-A | 9.25 | | | 1.00 | | | | |
| 39-A | | 4.75 | | 0.75 | | | | |
| | 2.00 | | | | 1.50 | | | |
| | 1.00 | | | 0.75 | | | | |
| | | 1.25 | | 1.25 | | | | |
| 40-A | | 6.25 | 14-B | 1.25 | | | | |
| 41-A | 9.00 | | | 0.75 | | | | |
| 42-A | 1.25 | | | 3.50 | | | | |
| | | 5.00 | 15-B | 5.00 | | | | |
| | 2.00 | | | | 4.00 | | | |
| 43-A | | 8.75 | | | | | | |
| 44-A | 2.25 | | | | | | | |
| | | 4.00 | | | | | | |
| | 1.25 | | | | | | | |
| | | 1.25 | | | | | | |
| 45-A | | 9.50 | | | | | | |
| 1-B | | 5.50 | | | | | | |
| | | 1.75 | | | | | | |
| 2-B | | 9.50 | | | | | | |
| 3-B | | 9.50 | | | | | | |
| 4-B | | 7.50 | | | | | | |
| | 0.50 | | | | | | | |
| | | 1.75 | | | | | | |
| 5-B | | 2.00 | | | | | | |
| | 2.50 | | | | | | | |
| | 3.00 | | | | | | | |
| | 0.50 | | | | | | | |
| 6-B | 3.25 | | | | | | | |
| | | 5.00 | | | | | | |
| 7-B | 0.75 | | | | | | | |
| | | 7.25 | | | | | | |

Table C13 (cont'd): Subject M, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 5.75 |
| 17-B | 8.00 | |
| | | 1.25 |
| 18-B | 7.25 | |
| | | 2.25 |
| 19-B | | 0.75 |
| | 0.25 | |
| | | 2.25 |
| | 0.25 | |
| | 2.00 | |
| | | 0.50 |
| 20-B | 5.75 | |
| | 1.75 | |
| 21-B | 2.25 | |
| | 1.75 | |
| | 3.50 | |
| 22-B | 7.50 | |
| 23-B | | 2.50 |
| | 0.75 | |
| | | 1.25 |
| | 1.25 | |
| | 3.25 | |
| | | 1.00 |
| 24-B | 1.25 | |
| | 1.00 | |
| | | 1.75 |
| | 1.00 | |
| | | 1.50 |
| | 2.00 | |
| 25-B | 1.50 | |
| | 4.00 | |
| | 1.75 | |
| | 0.50 | |
| 26-B | 0.75 | |
| | 1.50 | |
| | 4.25 | |
| 27-B | 0.75 | |
| | | 1.00 |
| | 1.75 | |
| 28-B | | 1.25 |
| | 2.00 | |
| | | 0.25 |
| | 2.50 | |
| | 1.75 | |
| 29-B | 0.75 | |
| | | 1.25 |
| 30-B | 1.00 | |
| | 7.00 | |

| Trial | Left | Right |
|---|---|---|
| 31-B | | 1.00 |
| | 1.50 | |
| | 2.00 | |
| | | 3.25 |
| | 0.50 | |
| 32-B | 0.75 | |
| | 2.50 | |
| | 1.75 | |
| 33-B | 0.75 | |
| | | 2.00 |
| | 0.25 | |
| 34-B | | 1.75 |
| | 1.25 | |
| | 1.00 | |
| | 4.75 | |
| 35-B | | 1.00 |
| | 0.25 | |
| | | 2.00 |
| | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | 0.25 | |
| 36-B | 2.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.25 |
| | 1.00 | |
| | | 1.25 |
| | 1.25 | |
| 37-B | 3.50 | |
| | | 0.75 |
| | 1.75 | |
| | | 2.50 |
| | 1.25 | |
| 38-B | 3.75 | |
| | | 0.50 |
| | 1.50 | |
| | | 1.75 |
| | 1.75 | |
| 39-B | | 1.25 |
| | 6.75 | |
| | 1.00 | |
| 40-B | 1.25 | |
| | 0.75 | |
| | | 2.75 |
| | 1.75 | |
| | 2.50 | |

| Trial | Left | Right |
|---|---|---|
| 41-B | 0.75 | |
| | 7.75 | |
| 42-B | | 2.50 |
| | | 0.25 |
| | 1.25 | |
| | | 3.00 |
| | 1.50 | |
| | 0.50 | |
| 43-B | | 4.50 |
| | 0.50 | |
| | | 0.25 |
| | | 1.50 |
| | 1.00 | |
| 44-B | 10.00 | |
| 45-B | | 1.50 |
| | 6.50 | |

Table C14: Raw Data for Subject N, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | | 8.00 |
| 2-A | | 4.00 |
| | | 3.25 |
| | | 0.50 |
| 3-A | | 5.50 |
| | | 2.25 |
| 4-A | | 4.00 |
| | | 4.00 |
| | 1.00 | |
| 5-A | | 2.75 |
| | 1.00 | |
| | | 1.50 |
| 6-A | | 7.25 |
| | 0.50 | |
| | | 1.25 |
| 7-A | | 8.50 |
| 8-A | | 5.25 |
| | 1.25 | |
| | | 1.50 |
| | 1.00 | |
| 9-A | | 7.50 |
| | 2.00 | |
| 10-A | | 10.00 |
| 11-A | | 4.75 |
| | | 2.50 |
| 12-A | | 3.50 |
| | 0.50 | |
| 13-A | | 7.00 |
| | 1.75 | |
| | | 0.25 |
| 14-A | 2.00 | |
| | | 4.25 |
| | 0.75 | |
| | | 2.25 |
| 15-A | 3.25 | |
| | 1.00 | |
| 16-A | 6.00 | |
| 17-A | 2.25 | |
| 18-A | 1.00 | |
| | | 3.75 |
| | 1.00 | |
| 19-A | 4.00 | |
| | | 2.75 |
| | 0.75 | |
| 20-A | | 2.00 |
| | 0.25 | |
| 21-A | | 2.50 |
| | 1.50 | |
| | | 2.75 |
| 22-A | | 1.25 |
| | | 1.75 |
| 23-A | | 4.00 |
| | 1.50 | |
| | | 2.75 |
| 24-A | | 2.75 |
| | 1.50 | |
| | | 4.00 |
| 25-A | | 2.25 |
| | 0.50 | |
| | | 1.25 |
| 26-A | 2.00 | |
| | 2.00 | |
| | | 0.75 |
| | | 3.00 |
| 27-A | | 2.25 |
| | 1.50 | |
| | | 1.50 |
| 28-A | 2.25 | |
| | | 1.50 |
| | 0.25 | |
| 29-A | 4.75 | |
| | | 2.50 |
| 30-A | | 3.00 |
| | | 0.50 |
| | 1.00 | |
| | | 2.00 |
| | 0.25 | |

Table C14 (cont'd): Subject N, Session 2

| Trial | Left | Right |
| --- | --- | --- |
| 31-A | | 6.50 |
| | 0.50 | |
| 32-A | | 4.75 |
| | 3.00 | |
| 33-A | 0.75 | |
| | | 3.25 |
| 34-A | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| 35-A | 3.25 | |
| | | 0.50 |
| 36-A | | 10.00 |
| 37-A | | 2.00 |
| | 0.75 | |
| | | 1.00 |
| | | 2.00 |
| | 1.50 | |
| 38-A | 1.25 | |
| | | 1.25 |
| | | 3.75 |
| | | 1.25 |
| | 0.25 | |
| 39-A | 0.25 | |
| | | 0.25 |
| | | 2.00 |
| 40-A | | 2.50 |
| | 1.50 | |
| | 2.00 | |
| | | 0.75 |
| 41-A | | 3.50 |
| | | 0.75 |
| | | 1.25 |
| 42-A | | 1.75 |
| | | 2.00 |
| | | 0.75 |
| | 0.25 | |
| 43-A | | 4.25 |
| | 1.50 | |
| | | 2.25 |
| | | 0.75 |
| 44-A | | 2.00 |
| | | 0.25 |
| 45-A | | 3.50 |
| | | 1.25 |
| | | 1.25 |
| | 0.75 | |
| 1-B | 0.25 | |
| | | 6.00 |
| 2-B | | 9.50 |
| 3-B | | 5.00 |
| | | 3.75 |
| 4-B | | 4.00 |
| | 1.00 | |
| 5-B | | 8.00 |
| 6-B | | 5.75 |
| | 0.25 | |
| | | 3.50 |
| 7-B | | 10.00 |
| 8-B | | 8.00 |
| | 1.50 | |
| | | 0.50 |
| 9-B | | 9.25 |
| 10-B | | 8.25 |
| 11-B | | 5.50 |
| | | 3.25 |
| 12-B | | 2.50 |
| | | 3.75 |
| | 1.75 | |
| | | 1.50 |
| 13-B | | 7.75 |
| | | 2.00 |
| 14-B | | 9.50 |
| 15-B | | 5.75 |
| | | 2.25 |

Table C14 (cont'd): Subject N, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 3.50 |
| 17-B | | 1.50 |
| | 2.00 | |
| | | 1.25 |
| | 1.50 | |
| | | 1.50 |
| 18-B | | 3.25 |
| | 1.50 | |
| | | 1.50 |
| | 1.50 | |
| | | 2.25 |
| 19-B | | 5.00 |
| | 2.25 | |
| | | 2.50 |
| | 0.25 | |
| 20-B | 2.00 | |
| | | 6.00 |
| | 0.75 | |
| | | 0.75 |
| 21-B | 1.00 | |
| | | 4.50 |
| | 0.50 | |
| | 0.50 | |
| | | 3.25 |
| | 0.25 | |
| 22-B | | 4.25 |
| | 5.75 | |
| 23-B | | 5.00 |
| | 1.75 | |
| | | 3.25 |
| 24-B | | 6.75 |
| | 0.75 | |
| | 0.50 | |
| | | 2.00 |
| 25-B | | 1.75 |
| | 1.00 | |
| | | 3.50 |
| | 2.00 | |
| | | 1.75 |
| 26-B | | 2.00 |
| | 0.75 | |
| | | 2.25 |
| | 1.25 | |
| | | 1.50 |
| | 1.25 | |
| | | 1.00 |

| Trial | Left | Right |
|---|---|---|
| 27-B | | 1.50 |
| | 2.25 | |
| | | 3.50 |
| | 1.50 | |
| | | 1.25 |
| 28-B | | 3.25 |
| | 4.00 | |
| | | 2.75 |
| 29-B | 0.75 | |
| | | 1.75 |
| | 4.00 | |
| | | 1.50 |
| | 2.00 | |
| 30-B | | 3.25 |
| | 1.50 | |
| | | 1.75 |
| | 1.25 | |
| | | 1.50 |
| | 0.75 | |
| 31-B | | 2.00 |
| | 1.25 | |
| | | 2.25 |
| | 1.50 | |
| | 0.50 | |
| 32-B | 0.50 | |
| | | 1.75 |
| | 1.25 | |
| | | 4.00 |
| | 1.00 | |
| | | 1.50 |
| 33-B | | 2.75 |
| | 0.75 | |
| | 1.25 | |
| | | 2.00 |
| | 3.25 | |
| 34-B | | 2.50 |
| | 1.50 | |
| | 0.75 | |
| | | 3.00 |
| 35-B | | 4.25 |
| | 0.75 | |
| | | 0.75 |
| | | 3.50 |
| 36-B | 0.50 | |
| | | 2.50 |
| | 2.25 | |

| Trial | Left | Right |
|---|---|---|
| 37-B | 0.25 | |
| | | 2.00 |
| | 0.50 | |
| | 0.25 | |
| | | 2.25 |
| | | 0.75 |
| | | 1.25 |
| 38-B | | 1.00 |
| | 0.50 | |
| | 3.25 | |
| | | 1.75 |
| 39-B | | 2.75 |
| | 0.75 | |
| | | 2.50 |
| | 1.25 | |
| | 0.50 | |
| | | 1.25 |
| 40-B | | 1.00 |
| | 0.50 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.75 |
| | 0.75 | |
| 41-B | | 1.00 |
| | 1.50 | |
| | | 0.50 |
| | 2.25 | |
| | | 0.75 |
| | 1.25 | |
| 42-B | 0.25 | |
| | | 4.00 |
| | 2.00 | |
| | | 3.25 |
| 43-B | 0.25 | |
| | | 3.00 |
| | 0.25 | |
| | | 2.50 |
| | 0.25 | |
| 44-B | 0.75 | |
| | | 2.50 |
| | 0.25 | |
| | | 4.50 |
| 45-B | | 2.50 |
| | 0.25 | |
| | 0.75 | |
| | | 3.75 |
| | 0.25 | |

Table C15: Raw Data for Subject O, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | | 1.75 | 10-A | | 2.25 | 20-A | | 1.50 |
| | 1.75 | | | 0.25 | | | 0.25 | |
| | | 2.00 | | | 3.25 | | | 0.75 |
| 2-A | | 7.00 | | | 1.25 | | 0.25 | |
| | | 1.00 | | | 1.75 | | | 1.00 |
| 3-A | 2.00 | | 11-A | | 10.00 | | 0.25 | |
| | | 1.25 | 12-A | | 1.00 | | | 0.75 |
| | 1.00 | | | 0.50 | | | 0.25 | |
| | | 1.00 | | | 2.25 | | | 1.00 |
| | 0.50 | | | 1.00 | | | 0.50 | |
| | | 1.50 | | | 1.25 | | | 1.50 |
| | 0.50 | | | 0.25 | | 21-A | | 1.00 |
| | | 0.75 | | | 2.50 | | 1.00 | |
| 4-A | | 1.50 | | | 1.50 | | | 1.00 |
| | 1.25 | | 13-A | | 0.75 | | 0.25 | |
| | | 1.00 | 14-A | 1.25 | | | | 0.75 |
| | 0.50 | | | | 0.50 | | | 0.25 |
| | | 0.25 | | | 0.50 | | 0.50 | |
| | 0.50 | | | 0.75 | | | | 2.00 |
| | | 1.50 | | | 0.75 | | 0.50 | |
| 5-A | | 7.50 | | 0.25 | | 22-A | | 2.50 |
| | | 0.75 | | | 1.00 | 23-A | | 1.75 |
| 6-A | 0.50 | | | 0.25 | | | | 0.50 |
| | | 1.25 | | | 1.25 | | | 1.25 |
| | 1.25 | | 15-A | 0.00 | 0.00 | | 0.25 | |
| | | 0.75 | 16-A | | 1.50 | | | 2.00 |
| | 0.75 | | | 0.50 | | | | 0.75 |
| | | 1.50 | | | 1.50 | 24-A | | 10.00 |
| 7-A | | 0.75 | | | 1.00 | 25-A | | 3.75 |
| | 0.75 | | | | 0.50 | | | 0.75 |
| | | 1.75 | | 0.75 | | | 0.50 | |
| | 1.00 | | 17-A | | 0.50 | | | 0.75 |
| | 0.25 | | | | 1.25 | 26-A | | 1.00 |
| | | 0.75 | | | 1.00 | | 0.50 | |
| | | 0.50 | 18-A | | 2.50 | | | 0.75 |
| 8-A | | 1.25 | | | 4.00 | 27-A | | 0.75 |
| | 0.50 | | 19-A | | 4.25 | | | 0.50 |
| | | 0.75 | | | 0.25 | | | 0.25 |
| | 0.75 | | | 1.75 | | 28-A | | 2.25 |
| | | 0.50 | | | 1.00 | | 1.00 | |
| | 0.75 | | | | | | | 0.25 |
| | 0.50 | | | | | | 0.25 | |
| | | 0.75 | | | | | | 0.75 |
| | 0.25 | | | | | 29-A | | 0.75 |
| | | 0.75 | | | | | | 5.25 |
| 9-A | | 3.75 | | | | 30-A | | 6.25 |
| | | | | | | | | 1.00 |
| | | | | | | | 0.25 | |
| | | | | | | | | 0.25 |

Table C15 (cont'd): Subject O, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | | 8.50 |
| 32-A | 2.25 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| 33-A | | 0.50 |
| | 1.25 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| 34-A | | 0.75 |
| | 6.00 | |
| | | 0.50 |
| | 2.00 | |
| 35-A | 8.00 | |
| | 0.50 | |
| | | 0.25 |
| 36-A | 2.25 | |
| | | 0.50 |
| 37-A | | 0.50 |
| | 1.00 | |
| 38-A | 0.00 | 0.00 |
| 39-A | | 0.75 |
| | | 2.50 |
| 40-A | | 1.00 |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| 41-A | | 0.50 |
| | | 0.50 |
| 42-A | | 0.50 |
| | | 1.25 |
| | | 1.50 |
| 43-A | | 2.00 |
| | 1.50 | |
| | | 0.75 |
| | 0.50 | |
| 44-A | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | | 0.25 |
| 45-A | | 1.00 |
| | 0.50 | |
| | | 3.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 1-B | | 7.50 |
| | 2.25 | |
| 2-B | | 0.25 |
| | 1.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.50 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| 3-B | | 5.25 |
| | 0.75 | |
| | | 0.50 |
| | | 0.25 |
| 4-B | | 2.25 |
| | | 0.75 |
| | | 3.75 |
| 5-B | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | 7.50 | |
| 6-B | | 1.50 |
| | 0.50 | |
| 7-B | 0.00 | 0.00 |
| 8-B | | 1.00 |
| | | 4.50 |
| 9-B | | 1.50 |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| 10-B | 3.25 | |
| | | 0.50 |
| 11-B | 1.25 | |
| | | 0.25 |
| | | 2.00 |
| 12-B | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 2.00 | |
| 13-B | 9.50 | |
| 14-B | | 2.75 |
| | 5.50 | |
| 15-B | | 1.50 |
| | 2.50 | |
| | | 3.00 |

Table C15 (cont'd): Subject O, Session 3

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 16-B | | 0.75 | 30-B | | 0.25 | | | |
| | 1.50 | | | 1.00 | | | | |
| | | 0.50 | 31-B | | 0.25 | | | |
| | 0.75 | | | 0.75 | | | | |
| | | 0.50 | 32-B | 1.00 | | | | |
| | 0.25 | | 33-B | 0.75 | | | | |
| 17-B | 0.75 | | 34-B | 1.00 | | | | |
| | | 0.50 | | 0.75 | | | | |
| | 2.50 | | | | 0.25 | | | |
| | | 0.25 | 35-B | 0.75 | | | | |
| | 3.00 | | | 1.25 | | | | |
| | 0.25 | | 36-B | 3.25 | | | | |
| 18-B | | 0.25 | 37-B | 0.50 | | | | |
| | 0.75 | | | 0.25 | | | | |
| | | 0.25 | | | 2.00 | | | |
| | 1.50 | | | 0.25 | | | | |
| | | 0.25 | 38-B | 0.00 | 0.00 | | | |
| | 1.50 | | 39-B | | 0.25 | | | |
| | 1.75 | | | 0.25 | | | | |
| | 0.50 | | | | 0.25 | | | |
| 19-B | 7.50 | | 40-B | | 0.75 | | | |
| 20-B | 0.25 | | | 1.50 | | | | |
| | 0.50 | | 41-B | | 0.25 | | | |
| | 0.75 | | | 0.50 | | | | |
| 21-B | 0.25 | | 42-B | 0.50 | | | | |
| | | 0.25 | 43-B | 0.00 | 0.00 | | | |
| | 5.25 | | 44-B | 0.75 | | | | |
| 22-B | 3.00 | | | 3.75 | | | | |
| | 2.25 | | 45-B | 1.00 | | | | |
| 23-B | | 1.00 | | | | | | |
| | 2.25 | | | | | | | |
| | | 0.25 | | | | | | |
| | 0.50 | | | | | | | |
| | | 0.25 | | | | | | |
| | | 0.50 | | | | | | |
| | 0.75 | | | | | | | |
| 24-B | | 1.25 | | | | | | |
| | 0.25 | | | | | | | |
| | 5.25 | | | | | | | |
| | | 0.25 | | | | | | |
| 25-B | 2.75 | | | | | | | |
| 26-B | 0.25 | | | | | | | |
| 27-B | | 0.75 | | | | | | |
| | 2.50 | | | | | | | |
| 28-B | 1.50 | | | | | | | |
| 29-B | 2.25 | | | | | | | |
| | 1.50 | | | | | | | |
| | 0.75 | | | | | | | |

Table C16: Raw Data for Subject P, Session 1

| Trial | Left | Right |
|---|---|---|
| 1-A | 7.25 | |
| 2-A | 0.25 | |
| | | 1.25 |
| | 1.00 | |
| | | 1.00 |
| | 3.00 | |
| | | 0.25 |
| | 0.75 | |
| 3-A | 5.00 | |
| | 1.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.25 | |
| 4-A | 3.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 1.25 | |
| | | 0.50 |
| | 1.00 | |
| 5-A | 0.50 | |
| | | 2.00 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 3.00 |
| 6-A | 2.00 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.00 |
| | 0.75 | |
| 7-A | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.25 |
| | 0.50 | |
| | | 1.00 |
| 8-A | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 0.25 | |

| Trial | Left | Right |
|---|---|---|
| 9-A | | 0.25 |
| | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 1.25 |
| | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.50 |
| 10-A | 0.50 | |
| | | 2.50 |
| 11-A | 1.25 | |
| | | 2.25 |
| | 0.75 | |
| 12-A | | 2.00 |
| | 0.25 | |
| | | 1.25 |
| 13-A | 0.50 | |
| | | 3.00 |
| | | 2.75 |
| 14-A | 1.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.75 |
| 15-A | | 0.25 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.50 |
| 16-A | 0.50 | |
| | | 1.25 |
| | 0.75 | |
| | | 2.75 |
| | 0.75 | |
| | | 1.00 |
| 17-A | | 2.50 |
| | 0.50 | |
| | | 1.25 |
| 18-A | 1.25 | |
| | | 0.50 |
| | 1.50 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | | 0.75 |

| Trial | Left | Right |
|---|---|---|
| 19-A | 3.25 | |
| | | 1.00 |
| | | 2.75 |
| | 0.75 | |
| | | 0.25 |
| | 0.25 | |
| 20-A | | 5.75 |
| | | 0.50 |
| | 0.75 | |
| | | 1.25 |
| 21-A | | 0.25 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 0.75 | |
| 22-A | 2.75 | |
| | | 1.50 |
| | | 1.00 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| 23-A | | 0.75 |
| | 0.25 | |
| | | 0.50 |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| 24-A | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| 25-A | | 2.25 |
| | 1.00 | |
| 26-A | 2.75 | |
| | 0.50 | |
| | 1.50 | |

Table C16 (cont'd): Subject P, Session 1, cont'd, and Session 2

| Trial | Left | Right |
|---|---|---|
| 27-A | 2.25 | |
| | | 1.50 |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 28-A | 2.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 0.75 | |
| 29-A | 1.00 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.25 |
| | 0.75 | |
| 30-A | 1.75 | |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| Session 2 begins here | | |
| 31-A | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| 32-A | 0.25 | |
| | 3.75 | |
| 33-A | 1.00 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| | 1.25 | |
| 34-A | | 0.25 |
| | 1.25 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.25 |
| | 0.25 | |
| 35-A | 1.25 | |
| | | 0.50 |
| | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| 36-A | | 1.25 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 1.50 |
| 37-A | 4.75 | |
| 38-A | 1.00 | |
| | | 5.50 |
| | 1.00 | |
| 39-A | 1.50 | |
| | | 2.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| | 3.25 | |
| 40-A | 7.00 | |
| | | 0.50 |
| | 1.25 | |
| 41-A | 3.50 | |
| | | 1.00 |
| | 1.25 | |
| | | 1.25 |
| | 1.25 | |
| 42-A | 7.50 | |
| | 1.25 | |
| 43-A | | 1.25 |
| | 1.00 | |
| | | 1.75 |
| 44-A | 1.50 | |
| | 4.75 | |
| 45-A | 2.75 | |
| | 1.25 | |
| | 1.25 | |
| | 1.00 | |
| 1-B | 0.50 | |
| | | 5.00 |
| | 0.75 | |
| | | 0.25 |
| | 0.25 | |
| | | 1.25 |
| 2-B | 0.50 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.50 |
| | 0.25 | |
| 3-B | 0.25 | |
| | | 0.75 |
| | 1.00 | |
| | | 2.00 |
| | 0.75 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.25 |
| | 1.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 0.25 |

Table C16 (cont'd): Subject P, Session 2, cont'd

| Trial | Left | Right |
|---|---|---|
| 4-B | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.50 |
| | 1.00 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 0.50 | |
| 5-B | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 1.75 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.00 |
| 6-B | 2.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| | 2.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.25 |
| | | 1.00 |
| 7-B | 0.50 | |
| | | 4.00 |
| 8-B | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| | 1.00 | |
| | | 1.00 |
| | 1.25 | |
| | | 0.25 |
| | 1.00 | |
| 9-B | | 0.25 |
| | 0.50 | |
| | | 1.75 |
| | 0.50 | |
| | | 1.50 |
| | 0.75 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.25 |
| | 0.25 | |
| | | 1.50 |
| 10-B | | 0.50 |
| | 0.50 | |
| | | 1.25 |
| | 1.00 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.50 |
| | 1.25 | |
| 11-B | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 2.00 |
| | 1.25 | |
| | | 0.75 |
| | 1.25 | |
| 12-B | 0.75 | |
| | | 1.50 |
| | 1.00 | |
| | | 2.50 |
| | 0.50 | |
| | 0.50 | |
| | | 0.25 |
| 13-B | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| | | 1.00 |
| | | 0.50 |
| | 0.75 | |
| | | 2.75 |
| 14-B | 0.50 | |
| | | 1.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| | 0.75 | |
| 15-B | | 0.25 |
| | 0.75 | |
| | | 2.25 |
| | | 2.75 |

Table C16 (cont'd): Subject P, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 1.25 |
| | 3.50 | |
| | | 1.25 |
| | 2.50 | |
| 17-B | 2.50 | |
| | | 2.00 |
| | 1.50 | |
| | | 0.75 |
| 18-B | 1.00 | |
| | | 1.75 |
| | 1.25 | |
| | 1.00 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| 19-B | | 2.00 |
| | 1.75 | |
| | 2.00 | |
| | 1.50 | |
| 20-B | 1.00 | |
| | | 2.50 |
| | 1.00 | |
| | | 2.25 |
| | 2.00 | |
| 21-B | 2.00 | |
| | 1.50 | |
| | 1.25 | |
| | | 0.75 |
| | 3.00 | |
| 22-B | 0.25 | |
| | 0.50 | |
| | | 0.50 |
| | 1.00 | |
| | 0.50 | |
| 23-B | 0.25 | |
| | | 1.75 |
| | | 0.50 |
| | 0.25 | |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.25 |
| 24-B | 1.25 | |
| | | 1.50 |
| | 1.00 | |
| 25-B | 2.00 | |
| | 0.50 | |
| | | 0.25 |
| | 1.50 | |
| | | 1.00 |
| 26-B | | 1.25 |
| | | 0.25 |
| | 0.25 | |
| | | 0.50 |
| 27-B | 0.25 | |
| | | 0.50 |
| | | 0.25 |
| | 0.25 | |
| | | 0.75 |
| | 0.75 | |
| 28-B | 1.00 | |
| | | 0.50 |
| | 0.75 | |
| 29-B | 0.50 | |
| | | 0.50 |
| 30-B | 1.75 | |
| | 3.00 | |
| 31-B | 0.75 | |
| | 2.75 | |
| | 0.25 | |
| 32-B | 2.00 | |
| | | 1.75 |
| 33-B | 2.25 | |
| | 0.75 | |
| 34-B | 1.00 | |
| | | 0.50 |
| | | 0.50 |
| | | 0.75 |
| 35-B | | 1.25 |
| | | 0.25 |
| | | 0.50 |
| | 0.25 | |
| 36-B | 0.50 | |
| | | 0.25 |
| | 1.50 | |
| 37-B | 0.50 | |
| | | 0.50 |
| | | 0.50 |
| | | 0.25 |
| | | 2.25 |
| 38-B | 0.50 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.75 |
| 39-B | | 1.50 |
| | | 0.75 |
| | 0.50 | |
| | 0.25 | |
| | 0.25 | |
| 40-B | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| 41-B | 0.50 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | | 1.00 |
| | 0.75 | |
| 42-B | 1.25 | |
| | | 2.50 |
| | | 2.00 |
| 43-B | | 1.25 |
| | | 1.00 |
| | 1.00 | |
| 44-B | | 0.50 |
| | | 0.25 |
| | 0.75 | |
| | | 0.25 |
| | | 0.50 |
| | 0.75 | |
| 45-B | 1.00 | |
| | | 0.25 |
| | | 2.00 |
| | | 0.50 |
| | | 0.50 |
| | 0.50 | |

Table C17: Raw Data for Subject Q, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | | 9.00 | 19-A | | 0.25 | 23-A | | 9.75 |
| 2-A | | 8.75 | | 0.25 | | 24-A | 1.50 | |
| 3-A | | 9.25 | | | 0.25 | | | 1.00 |
| 4-A | | 9.50 | | 0.25 | | | 1.00 | |
| 5-A | | 9,25 | | | 0.50 | | | 0.75 |
| 6-A | | 9.75 | | 0.50 | | | 2.25 | |
| 7-A | | 0.25 | | | 1.50 | | | 2.50 |
| | | 8.75 | | 0.75 | | | 0.50 | |
| 8-A | | 9.25 | | | 0.50 | | | 0.50 |
| 9-A | | 9.25 | | 1.25 | | 25-A | 0.50 | |
| 10-A | | 10.00 | | | 0.50 | | | 0.50 |
| 11-A | | 10.00 | | 1.25 | | | 0.75 | |
| 12-A | | 3.50 | | | 0.50 | | | 1.25 |
| | 0.25 | | 20-A | | 0.50 | | 0.50 | |
| | | 5.00 | | 0.50 | | | | 0.75 |
| 13-A | | 3.75 | | | 1.25 | | 0.25 | |
| | | 3.50 | | 0.25 | | | | 1.50 |
| 14-A | | 3.50 | | | 1.25 | | 0.25 | |
| | | 4.75 | | 0.75 | | | | 1.25 |
| 15-A | | 9.00 | | | 2.50 | | 0.50 | |
| 16-A | | 2.25 | | 0.25 | | | | 0.50 |
| | 1.50 | | | | 0.50 | | 0.75 | |
| | | 3.50 | | 0.75 | | | | 0.25 |
| | 1.25 | | | | 0.25 | 26-A | | 10.00 |
| | | 0.25 | 21-A | 0.25 | | 27-A | | 1.25 |
| 17-A | | 1.75 | | | 0.75 | | 1.00 | |
| | 0.75 | | | 0.50 | | | | 0.75 |
| | | 3.25 | | | 1.25 | | 1.00 | |
| | 0.75 | | | 0.50 | | | | 5.75 |
| | | 2.50 | | | 1.00 | 28-A | | 1.00 |
| 18-A | 0.25 | | | 1.00 | | | 0.50 | |
| | | 1.00 | | | 1.25 | | | 6.00 |
| | 0.50 | | | 0.50 | | | 0.75 | |
| | | 1.75 | | | 1.25 | | | 1.00 |
| | 0.50 | | | 0.50 | | 29-A | | 0.25 |
| | | 1.50 | | | 0.75 | | 1.25 | |
| | 0.50 | | 22-A | 0.50 | | | | 3.75 |
| | | | | | 2.25 | | 0.50 | |
| | | | | 0.75 | | | | 0.25 |
| | | | | | 0.75 | | 3.25 | |
| | | | | 1.00 | | 30-A | 0.25 | |
| | | | | | 1.00 | | | 1.00 |
| | | | | 1.75 | | | 8.00 | |
| | | | | | 0.75 | | | |
| | | | | 0.50 | | | | |
| | | | | | 1.00 | | | |

Table C17 (cont'd): Subject Q, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | | 8.25 |
| 32-A | 0.25 | |
| | | 4.00 |
| | 2.00 | |
| | | 2.00 |
| | 1.50 | |
| 33-A | | 2.00 |
| | 1.25 | |
| | | 1.50 |
| | 0.75 | |
| | | 4.50 |
| 34-A | | 0.25 |
| | 1.25 | |
| | | 1.00 |
| | 1.00 | |
| | | 1.50 |
| | 1.50 | |
| | | 2.25 |
| | 1.00 | |
| | | 0.25 |
| 35-A | | 1.00 |
| | 6.00 | |
| | | 1.75 |
| | 0.50 | |
| | | 0.75 |
| 36-A | | 1.00 |
| | 2.25 | |
| | | 1.50 |
| | 2.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.00 |
| | 0.75 | |
| 37-A | | 0.25 |
| | 3.00 | |
| | | 0.75 |
| | 1.00 | |
| | | 0.50 |
| | 2.50 | |
| | | 1.00 |
| | 1.00 | |
| 38-A | | 0.75 |
| | 1.25 | |
| | | 1.00 |
| | 2.00 | |
| | | 1.00 |
| | 2.00 | |
| | | 0.75 |
| | 1.25 | |

| Trial | Left | Right |
|---|---|---|
| 39-A | | 1.25 |
| | 0.50 | |
| | | 2.25 |
| | 0.25 | |
| | | 1.75 |
| | | 2.75 |
| 40-A | 0.25 | |
| | | 2.00 |
| | 3.00 | |
| | | 1.00 |
| | 1.50 | |
| | | 1.25 |
| | 1.00 | |
| 41-A | | 1.50 |
| | 1.25 | |
| | | 2.25 |
| | 0.50 | |
| | | 4.25 |
| 42-A | | 3.00 |
| | | 7.00 |
| 43-A | | 3.00 |
| | | 7.00 |
| 44-A | | 2.50 |
| | | 2.25 |
| | | 3.25 |
| | 0.75 | |
| | | 1.00 |
| 45-A | | 6.25 |
| | | 1.50 |
| | 0.50 | |
| | | 1.25 |
| 1-B | | 1.75 |
| | 1.75 | |
| | | 1.50 |
| | 1.50 | |
| | | 1.00 |
| | 1.25 | |
| | | 0.75 |
| 2-B | 0.25 | |
| | | 1.25 |
| | | 0.25 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 1.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.50 | |

| Trial | Left | Right |
|---|---|---|
| 3-B | 0.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 1.00 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| 4-B | | 5.25 |
| | | 0.25 |
| | 2.00 | |
| | | 1.00 |
| 5-B | 0.25 | |
| | | 1.00 |
| | 0.50 | |
| | | 3.75 |
| | 1.00 | |
| | | 0.75 |
| | 1.50 | |
| | | 0.75 |
| 6-B | | 0.25 |
| | 1.00 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | | 1.50 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| 7-B | | 0.50 |
| | 0.25 | |
| | | 6.00 |
| | | 1.75 |
| 8-B | | 0.25 |
| | 2.50 | |
| | | 1.00 |
| | 1.25 | |
| | | 4.00 |
| 9-B | 0.25 | |
| | | 0.75 |
| | 1.75 | |
| | | 1.25 |
| | 0.75 | |
| | | 3.75 |
| | 0.75 | |

Table C17 (cont'd): Subject Q, Session 2, cont'd

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 10-B | | 6.00 | | | | | | |
| | 4.00 | | | | | | | |
| 11-B | | 0.75 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.50 | | | | | | |
| | 0.75 | | | | | | | |
| | | 0.50 | | | | | | |
| | 0.50 | | | | | | | |
| | | 5.25 | | | | | | |
| 12-B | 0.50 | | | | | | | |
| | | 0.75 | | | | | | |
| | 7.50 | | | | | | | |
| 13-B | | 5.75 | | | | | | |
| | | 2.25 | | | | | | |
| 14-B | | 4.75 | | | | | | |
| | 2.75 | | | | | | | |
| | | 1.25 | | | | | | |
| 15-B | | 9.50 | | | | | | |

Table C17 (cont'd): Subject P, Session 3

| Trial | Left | Right |
|---|---|---|
| 16-B | | 0.50 |
| | 1.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| 17-B | | 0.50 |
| | 1.50 | |
| | | 0.50 |
| | 1.00 | |
| | | 1.25 |
| | 1.75 | |
| | | 0.50 |
| | 1.25 | |
| 18-B | 1.75 | |
| | | 0.75 |
| | 2.00 | |
| | 3.25 | |
| | 0.50 | |
| 19-B | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.50 |
| | 4.00 | |
| | | 0.25 |
| | 0.75 | |
| | | 0.50 |
| 20-B | | 1.00 |
| | 0.50 | |
| | | 1.50 |
| | 1.00 | |
| | | 0.75 |
| | 2.50 | |
| | | 0.50 |
| 21-B | | 0.50 |
| | | 1.00 |
| | | 2.50 |
| | | 0.75 |
| | 0.25 | |
| | | 1.50 |
| | | 0.75 |
| 22-B | | 2.50 |
| | 0.75 | |
| | 1.00 | |
| | | 1.25 |
| | 2.50 | |
| | | 0.50 |
| 23-B | | 0.75 |
| | 1.25 | |
| | | 3.50 |
| | | 1.00 |
| | 0.50 | |
| | | 1.75 |
| 24-B | | 4.25 |
| | 1.25 | |
| | | 0.50 |
| | | 1.50 |
| 25-B | | 2.25 |
| | | 2.25 |
| 26-B | | 1.25 |
| | 0.50 | |
| | | 0.50 |
| | | 1.50 |
| 27-B | | 1.25 |
| | | 0.50 |
| 28-B | | 1.25 |
| | | 0.75 |
| | 2.50 | |
| | | 0.75 |
| 29-B | | 1.25 |
| | | 1.00 |
| | 3.00 | |
| | 0.50 | |
| | | 0.25 |
| 30-B | | 2.00 |
| | 1.75 | |
| | | 4.25 |
| | 0.25 | |
| 31-B | | 0.75 |
| | | 1.25 |
| 32-B | | 1.00 |
| | | 1.75 |
| 33-B | | 1.25 |
| | 2.00 | |
| | 0.25 | |
| | | 1.25 |
| | 0.50 | |
| | 0.75 | |
| 34-B | | 2.00 |
| | 1.25 | |
| | | 1.00 |
| | | 2.00 |
| | 1.00 | |
| 35-B | | 2.25 |
| | 0.50 | |
| | | 0.75 |
| | 1.25 | |
| | | 0.25 |
| | 0.50 | |
| 36-B | | 2.00 |
| | | 1.50 |
| | | 0.50 |
| | 1.00 | |
| | | 2.25 |
| 37-B | | 0.75 |
| | | 1.75 |
| 38-B | | 0.50 |
| | | 0.50 |
| | 0.50 | |
| | | 0.75 |
| | | 1.00 |
| 39-B | | 1.50 |
| | | 0.50 |
| | | 0.25 |
| | | 0.75 |
| 40-B | | 1.25 |
| | | 0.50 |
| | 0.75 | |
| | | 1.25 |
| | 1.00 | |
| | 0.25 | |
| | | 1.75 |
| 41-B | 4.00 | |
| | 1.75 | |
| | 1.25 | |
| | 0.50 | |
| 42-B | | 1.75 |
| | | 4.50 |
| 43-B | | 1.00 |
| | | 0.25 |
| | | 2.50 |
| | | 0.50 |
| 44-B | | 0.50 |
| | | 0.75 |
| | | 1.75 |
| | 0.75 | |
| | | 0.75 |
| 45-B | | 0.75 |
| | | 1.25 |
| | | 0.50 |

Table C18: Raw Data for Subject R, Session 1

| Trial | Left | Right | Trial | Left | Right | Trial | Left | Right |
|---|---|---|---|---|---|---|---|---|
| 1-A | 3.50 | | 24-A | 3.25 | | | | |
| | 4.00 | | | | 5.75 | | | |
| 2-A | 8.75 | | 25-A | | 2.25 | | | |
| 3-A | 8.00 | | | 1.00 | | | | |
| | | 2.00 | | | 1.25 | | | |
| 4-A | 0.75 | | 26-A | 0.75 | | | | |
| | 5.25 | | | | 2.25 | | | |
| 5-A | 8.50 | | | | 1.75 | | | |
| 6-A | 8.75 | | | 0.75 | | | | |
| 7-A | 8.25 | | | | 1.75 | | | |
| 8-A | 2.75 | | | 0.50 | | | | |
| | 0.25 | | 27-A | | 3.50 | | | |
| | 0.25 | | | 0.75 | | | | |
| 9-A | 10.00 | | | | 2.25 | | | |
| 10-A | 3.25 | | | 0.50 | | | | |
| | | 5.75 | | | 1.75 | | | |
| 11-A | 8.50 | | 28-A | 1.50 | | | | |
| 12-A | 3.75 | | | | 2.50 | | | |
| | | 4.50 | | | 1.75 | | | |
| 13-A | 5.00 | | | 0.50 | | | | |
| | | 4.00 | | | 2.00 | | | |
| 14-A | 3.75 | | | | 0.75 | | | |
| | | 5.25 | 29-A | | 3.50 | | | |
| 15-A | | 3.25 | 30-A | 0.75 | | | | |
| | 2.50 | | | | 2.00 | | | |
| | | 3.75 | | | | | | |
| 16-A | 2.75 | | | | | | | |
| | | 2.00 | | | | | | |
| | 1.75 | | | | | | | |
| | | 1.25 | | | | | | |
| 17-A | 1.00 | | | | | | | |
| | | 6.75 | | | | | | |
| | 0.25 | | | | | | | |
| 18-A | 1.75 | | | | | | | |
| | | 2.50 | | | | | | |
| | | 0.25 | | | | | | |
| | | 2.75 | | | | | | |
| 19-A | 4.00 | | | | | | | |
| | | 5.00 | | | | | | |
| 20-A | 1.75 | | | | | | | |
| | | 6.75 | | | | | | |
| 21-A | | 6.25 | | | | | | |
| | | 2.75 | | | | | | |
| 22-A | 9.25 | | | | | | | |
| 23-A | | 5.25 | | | | | | |
| | 1.25 | | | | | | | |
| | | 1.75 | | | | | | |
| | 0.50 | | | | | | | |

Table C18 (cont'd): Subject R, Session 2

| Trial | Left | Right |
|---|---|---|
| 31-A | 1.25 | |
| | | 1.50 |
| | 1.00 | |
| | | 1.00 |
| | 1.00 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| 32-A | 0.75 | |
| | | 1.00 |
| | 0.50 | |
| | | 0.50 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| 33-A | 0.75 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.50 |
| | 0.75 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| 34-A | 0.25 | |
| | | 2.00 |
| | 0.50 | |
| | | 2.50 |
| | 0.50 | |
| | | 1.00 |
| | 0.25 | |
| | | 1.25 |
| | 0.50 | |
| | | 0.25 |
| 35-A | 2.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.50 | |
| | | 0.75 |
| | 0.25 | |
| | | 0.25 |

| Trial | Left | Right |
|---|---|---|
| 36-A | 0.50 | |
| | | 2.00 |
| | 0.75 | |
| | | 0.50 |
| | 0.50 | |
| | | 1.00 |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| 37-A | 0.75 | |
| | | 2.00 |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.25 | |
| | | 1.25 |
| 38-A | | 2.00 |
| | | 0.75 |
| | 0.75 | |
| | | 0.25 |
| 39-A | 2.00 | |
| | | 4.25 |
| | | 1.00 |
| 40-A | | 3.00 |
| | | 0.25 |
| | 1.25 | |
| | | 3.75 |
| | 0.25 | |
| 41-A | 3.50 | |
| 42-A | 0.25 | |
| | | 1.25 |
| | 0.75 | |
| | 4.25 | |
| 43-A | 2.50 | |
| | | 0.50 |
| | 2.00 | |
| 44-A | 0.75 | |
| | | 0.50 |
| | 0.75 | |
| | | 1.00 |
| | 0.25 | |
| | | 0.75 |
| 45-A | 2.75 | |
| | 2.00 | |
| 1-B | | 2.75 |
| 2-B | 0.00 | 0.00 |
| 3-B | | 2.75 |
| 4-B | | 2.25 |
| | | 1.25 |

| Trial | Left | Right |
|---|---|---|
| 5-B | | 1.75 |
| | | 1.50 |
| | | 2.25 |
| 6-B | | 3.00 |
| | | 2.75 |
| | | 1.75 |
| 7-B | | 2.25 |
| 8-B | | 2.50 |
| | | 1.00 |
| | | 2.00 |
| 9-B | | 2.50 |
| | | 1.50 |
| | | 2.50 |
| 10-B | | 1.00 |
| | | 3.00 |
| | | 2.25 |

Table C18 (cont'd): Subject R, Session 3

| Trial | Left | Right |
|---|---|---|
| 11-B | 2.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.75 |
| | 2.50 | |
| | | 1.00 |
| 12-B | 1.50 | |
| | | 2.75 |
| | 0.50 | |
| | | 2.75 |
| | 0.50 | |
| | | 1.25 |
| 13-B | | 6.25 |
| 14-B | | 3.00 |
| | 0.50 | |
| | | 2.50 |
| | 0.25 | |
| 15-B | | 6.75 |
| | 1.50 | |
| | | 1.25 |
| 16-B | | 4.25 |
| | 0.25 | |
| | | 0.50 |
| | | 0.75 |
| | 0.25 | |
| | | 0.75 |
| | 0.75 | |
| | | 1.00 |
| 17-B | | 5.75 |
| | 0.50 | |
| | | 2.00 |
| | 1.75 | |
| 18-B | 3.75 | |
| | | 4.50 |
| 19-B | 2.25 | |
| | | 4.00 |
| | 0.75 | |
| | | 0.75 |
| | 1.50 | |
| 20-B | 6.00 | |
| | | 3.75 |
| 21-B | | 4.00 |
| | 2.25 | |
| | | 0.75 |
| | 2.50 | |
| 22-B | 3.25 | |
| | | 6.75 |

| Trial | Left | Right |
|---|---|---|
| 23-B | | 2.50 |
| | 0.25 | |
| | | 3.00 |
| | 0.75 | |
| | | 1.00 |
| | | 1.00 |
| 24-B | 1.75 | |
| | | 1.25 |
| | 0.50 | |
| 25-B | 1.00 | |
| | | 1.00 |
| | | 3.25 |
| | | 2.00 |
| | 0.25 | |
| | | 0.75 |
| 26-B | 1.25 | |
| | | 3.00 |
| | | 2.75 |
| 27-B | | 1.50 |
| | 1.50 | |
| | 0.25 | |
| | | 0.75 |
| | 0.25 | |
| | | 1.00 |
| | 0.75 | |
| | | 0.50 |
| | 2.50 | |
| 28-B | | 5.00 |
| | | 3.75 |
| 29-B | | 0.50 |
| | 0.75 | |
| | | 3.50 |
| | | 4.00 |
| 30-B | | 4.50 |
| | 0.75 | |
| | | 1.50 |
| 31-B | | 8.75 |
| 32-B | 0.50 | |
| | | 7.00 |
| 33-B | | 0.25 |
| | 1.50 | |
| | | 2.50 |
| | | 1.25 |
| | | 0.50 |
| 34-B | | 0.25 |
| | 1.00 | |
| | | 1.00 |
| | 2.75 | |
| | | 2.25 |

| Trial | Left | Right |
|---|---|---|
| 35-B | | 2.25 |
| | 0.75 | |
| | | 2.75 |
| | 0.25 | |
| | | 1.25 |
| 36-B | | 2.25 |
| | 0.25 | |
| 37-B | | 7.75 |
| | | 0.50 |
| 38-B | | 4.00 |
| 39-B | | 2.25 |
| | 1.25 | |
| | 1.25 | |
| 40-B | 1.25 | |
| | | 5.50 |
| | 3.00 | |
| 41-B | 1.75 | |
| | | 1.75 |
| | | 0.50 |
| | 0.25 | |
| | | 1.25 |
| | | 0.75 |
| | | 0.25 |
| 42-B | | 2.25 |
| | | 2.00 |
| | | 2.75 |
| | | 1.50 |
| 43-B | | 1.75 |
| | | 1.75 |
| 44-B | | 4.75 |
| 45-B | | 4.75 |
| | 0.50 | |
| | | 0.50 |

# APPENDIX D

## Individual Total Fixation Times, Corrected and Uncorrected

TABLE D1
Total Fixation Time

| Subjects[2] | Stimuli[1] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | IX | X |
| A | 35.00 | 44.00 | 54.25 | 46.00 | 43.50 | 30.25 | 36.75 | 33.50 | 33.00 | 30.25 |
| B | 74.50 | 69.25 | 44.50 | 52.25 | 44.50 | 56.25 | 57.00 | 41.25 | 57.75 | 36.00 |
| C | 76.00 | 79.25 | 56.25 | 51.00 | 50.50 | 49.50 | 45.00 | 60.00 | 58.00 | 49.00 |
| D | 54.50 | 59.25 | 48.25 | 51.75 | 52.50 | 49.00 | 50.75 | 45.50 | 47.75 | 38.25 |
| E | 73.50 | 73.50 | 68.75 | 79.25 | 60.75 | 68.75 | 71.00 | 29.25 | 74.00 | 43.00 |
| F | 68.75 | 69.50 | 75.00 | 49.00 | 69.00 | 67.00 | 68.25 | 45.50 | 79.25 | 55.00 |
| G | 86.00 | 72.50 | 125.25 | 91.00 | 80.25 | 50.50 | 79.25 | 44.00 | 76.50 | 92.00 |
| H | 81.25 | 58.25 | 66.00 | 45.00 | 71.75 | 67.50 | 68.00 | 71.25 | 52.25 | 31.75 |
| I | 69.50 | 64.00 | 77.75 | 66.00 | 56.75 | 45.75 | 70.75 | 45.25 | 80.25 | 91.50 |
| J | 68.00 | 57.25 | 75.00 | 72.00 | 66.25 | 68.25 | 76.50 | 62.00 | 56.00 | 55.25 |
| K | 65.25 | 79.25 | 74.50 | 71.75 | 79.00 | 56.75 | 73.00 | 59.50 | 74.25 | 47.50 |
| L | 85.75 | 60.75 | 73.25 | 64.75 | 64.00 | 80.25 | 74.75 | 41.75 | 64.25 | 57.50 |
| M | 69.75 | 54.25 | 94.75 | 75.50 | 78.50 | 68.50 | 87.50 | 40.75 | 62.75 | 67.25 |
| N | 81.50 | 57.75 | 91.25 | 60.75 | 72.25 | 54.50 | 73.50 | 31.25 | 79.75 | 75.00 |
| O | 57.50 | 50.75 | 43.50 | 37.00 | 35.50 | 60.75 | 42.00 | 18.00 | 40.75 | 40.65 |
| P | 73.00 | 44.75 | 55.50 | 54.00 | 52.50 | 60.00 | 45.00 | 47.25 | 42.25 | 46.00 |
| Q | 84.00 | 82.25 | 88.75 | 67.75 | 69.50 | 85.50 | 65.75 | 45.25 | 82.00 | 55.50 |
| R | 74.75 | 65.25 | 44.25 | 61.25 | 45.25 | 70.25 | 64.25 | 85.00 | 66.00 | 57.50 |
| Mean | 71.03 | 63.43 | 69.82 | 60.89 | 60.68 | 60.51 | 63.83 | 47.04 | 62.60 | 53.83 |
| S.D. | 12.58 | 11.39 | 21.37 | 13.88 | 13.64 | 13.17 | 14.41 | 15.88 | 15.18 | 18.08 |

1 Refer to Figure 6 for key to stimuli.
2 Refer to Table 1 for subject information.

TABLE D2
Corrected Total Fixation Time in Percentages

Stimuli[1]

| Subjects[2] | I | II | III | IV | V | VI | VII | VIII | IX | X |
|---|---|---|---|---|---|---|---|---|---|---|
| A | 0940 | 1284 | 1334 | 1128 | 1069 | 0742 | 1010 | 0840 | 0905 | 0682 |
| B | 1385 | 1238 | 0894 | 1003 | 0808 | 1091 | 0949 | 0773 | 1137 | 0647 |
| C | 1281 | 1405 | 1126 | 0908 | 0856 | 0865 | 0761 | 0956 | 0992 | 0886 |
| D | 1105 | 1110 | 0990 | 1155 | 0981 | 0938 | 1024 | 0906 | 0962 | 0777 |
| E | 1040 | 1277 | 0996 | 1361 | 0869 | 1253 | 0987 | 0529 | 1136 | 0571 |
| F | 1090 | 1046 | 1098 | 0799 | 1125 | 1028 | 1027 | 0681 | 1231 | 0764 |
| G | 1110 | 0971 | 1407 | 1147 | 1006 | 0623 | 1213 | 0645 | 0889 | 0972 |
| H | 1540 | 0935 | 1105 | 0800 | 1324 | 1021 | 1100 | 0995 | 0684 | 0465 |
| I | 1010 | 1100 | 1116 | 0956 | 0890 | 0681 | 1009 | 0716 | 1191 | 1331 |
| J | 1098 | 0933 | 1048 | 1033 | 0884 | 1022 | 1423 | 1001 | 1882 | 0696 |
| K | 1015 | 1080 | 1159 | 1095 | 1205 | 0787 | 1124 | 0781 | 1078 | 0690 |
| L | 1379 | 1037 | 0990 | 0913 | 0943 | 1096 | 1288 | 0678 | 0996 | 0802 |
| M | 1003 | 0959 | 1123 | 0974 | 1132 | 1010 | 1385 | 0662 | 0859 | 0808 |
| N | 1419 | 0927 | 1412 | 0787 | 0936 | 0790 | 1012 | 0373 | 1307 | 1039 |
| O | 1343 | 1490 | 0855 | 1087 | 1017 | 1338 | 0810 | 0700 | 0832 | 0747 |
| P | 1372 | 0930 | 1115 | 1029 | 1024 | 1204 | 0823 | 0879 | 0786 | 0868 |
| Q | 1133 | 1160 | 1272 | 0904 | 0931 | 1336 | 0810 | 0543 | 1066 | 0770 |
| R | 1074 | 0938 | 0721 | 0990 | 0704 | 1041 | 1064 | 1310 | 1149 | 0946 |
| Mean | 1185 | 1101 | 1098 | 1004 | 0984 | 0993 | 1046 | 0776 | 1001 | 1803 |
| S.D. | 0179 | 0174 | 0182 | 0146 | 0150 | 0231 | 0190 | 0215 | 0172 | 0193 |

1 Refer to Figure 6 for key to stimuli.
2 Refer to Table 1 for subject information.

# APPENDIX E

## Standard Weights and Standard Errors of Weights for each Subgroup for Multiple Regression Analyses

TABLE E1

Multiple Regression Results for Concentricity Subgroup

$X_1 - X_6$ with $Y_1$ R = .56

| | Standard Weights | Standard Error of Weights |
|---|---|---|
| $X_1$ | .4055 | .2127 |
| $X_2$ | .1972 | .1969 |
| $X_3$ | .0948 | .1392 |
| $X_4$ | -.1628 | .2127 |
| $X_5$ | -.1640 | .1969 |
| $X_6$ | .0054 | .1392 |

$X_1 - X_6$ with $Y_2$ R = .50

| | | |
|---|---|---|
| $X_1$ | -.3080 | .2535 |
| $X_2$ | -.2436 | .2347 |
| $X_3$ | -.0205 | .1660 |
| $X_4$ | .2218 | .2535 |
| $X_5$ | .1409 | .2347 |
| $X_6$ | -.0344 | .1660 |

TABLE E2

Multiple Regression Results for Curvilinearity Subgroup

$X_1 - X_6$ with $Y_1$ R = .44

| | Standard Weights | Standard Error of Weights |
|---|---|---|
| $X_1$ | .1169 | .2364 |
| $X_2$ | .2143 | .2189 |
| $X_3$ | .0998 | .1548 |
| $X_4$ | -.1422 | .2364 |
| $X_5$ | -.2829 | .2189 |
| $X_6$ | .0102 | .1548 |

$X_1 - X_6$ with $Y_2$ R = .44

| | | |
|---|---|---|
| $X_1$ | -.0799 | .2823 |
| $X_2$ | -.1783 | .2614 |
| $X_3$ | -.0032 | .1848 |
| $X_4$ | .1047 | .2823 |
| $X_5$ | .3615 | .2614 |
| $X_6$ | -.0423 | .1848 |

TABLE E3

Multiple Regression Results for Directions Subgroup

$X_1 - X_6$ with $Y_1$ R = .43

| | Standard Weights | Standard Error of Weights |
|---|---|---|
| $X_1$ | .0686 | .2355 |
| $X_2$ | .1109 | .2181 |
| $X_3$ | .2645 | .1542 |
| $X_4$ | -.0566 | .2355 |
| $X_5$ | .0205 | .2181 |
| $X_6$ | -.2447 | .1542 |

$X_1 - X_6$ with $Y_2$ R = .45

| | | |
|---|---|---|
| $X_1$ | -.0764 | .2129 |
| $X_2$ | -.2030 | .1971 |
| $X_3$ | -.1446 | .1394 |
| $X_4$ | .0402 | .2129 |
| $X_5$ | .1514 | .1971 |
| $X_6$ | .2752 | .1394 |

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