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(Lipsitt and

.Rovee- Collier 2001, Mesulam, 1985)

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(Barnett et al, 1992, Kopp, 1989)

(Perez, Newman and

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.(Kopp,1989)

(Bly, 1983)

(Slater, Morison,

.Matlock; Brown and Taylor, 1990)

(Bly, 1983, Chandler,

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.(Girive, 1992)

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.(Zeanah 2000, Minde, 2000)

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(Bergen, 1995)

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(Deinard, Gilbert, Dodds, and Egeland, 1981;
Lozoff, Brittenham, Viteri and Urrutia, 1980, Oski and
Fried and Honig, 1978)
Watkinson, 1980)

(Kaplan et al., 1991, Sameroff et al., 1982)

(Hozik, 1966)

(Girive, 1992)

(Hozik et al., 1966)

(Braungort et al.,

1992, Mathny, 1980, Mathny et al., 1974)

(Mathny, 1980)

(Grebler, 1997; Meisels, 1994)

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(Braungart, Plomin, DeFries, and Fulker; 1992,
Dilalla, Molfese, and Lovelace, 1993, Kaplan; Jacobson,
1991, Plomin and DeFries, 1985)

(Cardon and Fulker, 1991)

(Bathurst and Gottfried, 1987; Brin and Golden,
(Dilalla, 1970)
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Plomin and DeFries

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.and DeFries, 1985, Dniels et al., 1984, Roth et al., 1984)
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| *14.4 | 26.1 | 376.5 | 2/65 | 753 | | |
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| (1)*.1 | 26.1 | 22.4 | 2/65 | 44.7 | * | |
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| (1)*.063 | 27.3 | 1.75 | 2/65 | 1.72 | | |
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| *4.9 | 70 | 341.4 | 2/65 | 682.8 | | |
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| *10.1 | 66.9 | 673.3 | 2/83 | 1346.6 | |
| (1)* .32 | 66.9 | 89. | 2/83 | 89. | |
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| *11 | 44.5 | 478.3 | 2/83 | 956.5 | |
| (1)*1.2 | 44.5 | 53.9 | 2/83 | 53.9 | |
| (1)*.4 | 44.5 | 18.5 | 2/83 | 37 | * |
| *27.4 | 13.2 | 362.5 | 2/83 | 725 | |
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| *18.7 | 74.6 | 1396.5 | 2/83 | 2793.1 | |
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| (1)*.01 | 83.5 | 1.1 | 2/278 | 1.1 | |
| (1)*.31 | 83.5 | 25.9 | 2/278 | 51.7 | * |
| *25.5 | 64.9 | 1655.6 | 2/278 | 3311.3 | |
| (1)*.024 | 64.9 | 1.53 | 2/278 | 1.53 | |
| (1)*.35 | 64.9 | 22.9 | 2/278 | 45.8 | * |
| *26.8 | 22.5 | 602.3 | 2/278 | 1204.6 | |
| (1)*.003 | 22.5 | 06. | 2/278 | 06. | |
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| *25.9 | 330.4 | 8542.8 | 2/278 | 17085 | |
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| 16.4 | 140 | 93 | | |
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| 100 | 49 | 44 | 60 | 59 | 45-44 | 39 | 36 | 35 | 127 | 125 | 90 | 100 |
| 99 | 48 | 41 | 59 | 58 | 45-44 | 37 | 35 | 35 | 127 | 125 | 90 | 99 |
| 98 | 48 | 41 | 59 | 58 | 43 | 37 | 35 | 33 | 126 | 125 | 85 | 98 |
| 97 | 48 | 40 | 59 | 57 | 42 | 37 | 34 | 33 | 126 | 125 | 85 | 97 |
| 96 | 48 | 40 | 58 | 57 | 41 | 37 | 34 | 33 | 124 | 124 | 85 | 96 |
| 95 | 48 | 39 | 58 | 57 | 40 | 36 | 33 | 33 | 123 | 124 | 88 | 95 |
| 94 | 47 | 39 | 57 | 57 | 39 | 36 | 33 | 33 | 122 | 122 | 88 | 94 |
| 93 | 47 | 39 | 57 | 56 | 38 | 36 | 33 | 33 | 120 | 122 | 88 | 93 |
| 92 | 46 | 39 | 57 | 55 | 37 | 36 | 33 | 33 | 119 | 117 | 88 | 92 |
| 91 | 46 | 39 | 57 | 55 | 37 | 35 | 32 | 33 | 119 | 117 | 88 | 91 |
| 90 | 45 | 39 | 57 | 55 | 37 | 35 | 32 | 33 | 118 | 117 | 88 | 90 |
| 89 | 45 | 39 | 57 | 55 | 37 | 35 | 32 | 33 | 118 | 117 | 88 | 89 |
| 88 | 44 | 39 | 55 | 54 | 37 | 35 | 32 | 33 | 117 | 117 | 88 | 88 |
| 87 | 44 | 39 | 55 | 54 | 37 | 35 | 31 | 33 | 117 | 117 | 88 | 87 |
| 86 | 44 | 39 | 55 | 54 | 36 | 35 | 31 | 33 | 116 | 117 | 88 | 86 |
| 85 | 44 | 39 | 55 | 54 | 35 | 35 | 31 | 33 | 116 | 116 | 88 | 85 |
| 84 | 43 | 39 | 54 | 51 | 34 | 35 | 30 | 33 | 116 | 115 | 88 | 84 |
| 83 | 43 | 39 | 54 | 51 | 34 | 35 | 30 | 33 | 115 | 115 | 88 | 83 |
| 82 | 43 | 39 | 54 | 51 | 34 | 35 | 30 | 33 | 115 | 112 | 88 | 82 |
| 81 | 43 | 39 | 53 | 51 | 34 | 35 | 30 | 33 | 115 | 112 | 88 | 81 |
| 80 | 43 | 39 | 53 | 50 | 34 | 34 | 29 | 33 | 115 | 111 | 70 | 80 |

| | 42-13 | 12-6 | 42-13 | 12-6 | 5-1 | 42-13 | 12-6 | 5-1 | 42-13 | 12-6 | 5-1 | |
|----|-------|------|-------|------|-----|-------|------|-----|-------|------|-----|----|
| 79 | 43 | 39 | 53 | 50 | 34 | 34 | 29 | 33 | 114 | 111 | 70 | 79 |
| 78 | 42 | 39 | 52 | 49 | 34 | 34 | 29 | 33 | 112 | 111 | 69 | 78 |
| 77 | 42 | 38 | 52 | 49 | 34 | 34 | 29 | 33 | 112 | 111 | 69 | 77 |
| 76 | 42 | 38 | 52 | 49 | 33 | 34 | 29 | 33 | 112 | 110 | 65 | 76 |
| 75 | 41 | 38 | 52 | 48 | 33 | 34 | 29 | 33 | 112 | 110 | 65 | 75 |
| 74 | 41 | 38 | 52 | 48 | 33 | 33 | 29 | 33 | 112 | 110 | 65 | 74 |
| 73 | 41 | 37 | 52 | 48 | 33 | 33 | 29 | 33 | 111 | 110 | 65 | 73 |
| 72 | 41 | 37 | 51 | 48 | 33 | 33 | 29 | 33 | 110 | 110 | 63 | 72 |
| 71 | 40 | 37 | 51 | 48 | 33 | 33 | 29 | 33 | 109 | 110 | 63 | 71 |
| 70 | 40 | 37 | 51 | 48 | 33 | 33 | 29 | 33 | 107 | 108 | 62 | 70 |
| 69 | 40 | 37 | 51 | 48 | 33 | 33 | 29 | 29 | 107 | 108 | 62 | 69 |
| 68 | 40 | 37 | 51 | 48 | 32 | 33 | 29 | 29 | 107 | 108 | 61 | 68 |
| 67 | 40 | 37 | 51 | 48 | 32 | 33 | 29 | 29 | 107 | 108 | 61 | 67 |
| 66 | 40 | 35 | 51 | 48 | 32 | 33 | 28 | 29 | 107 | 108 | 60 | 66 |
| 65 | 40 | 35 | 51 | 48 | 32 | 33 | 28 | 29 | 107 | 107 | 60 | 65 |
| 64 | 40 | 35 | 50 | 48 | 32 | 33 | 28 | 29 | 106 | 107 | 60 | 64 |
| 63 | 40 | 35 | 50 | 48 | 32 | 32 | 28 | 29 | 106 | 106 | 60 | 63 |
| 62 | 39 | 34 | 49 | 47 | 31 | 32 | 28 | 29 | 105 | 106 | 60 | 62 |
| 61 | 39 | 34 | 49 | 47 | 31 | 32 | 28 | 29 | 105 | 104 | 60 | 61 |
| 60 | 38 | 34 | 48 | 47 | 31 | 32 | 27 | 29 | 105 | 104 | 60 | 60 |
| 59 | 38 | 32 | 48 | 47 | 31 | 32 | 27 | 28 | 105 | 104 | 60 | 59 |
| 58 | 38 | 32 | 47 | 47 | 31 | 32 | 27 | 28 | 105 | 101 | 60 | 58 |
| 57 | 38 | 32 | 47 | 47 | 31 | 32 | 27 | 28 | 104 | 101 | 60 | 57 |
| 56 | 38 | 32 | 46 | 47 | 31 | 31 | 27 | 28 | 103 | 101 | 59 | 56 |
| 55 | 38 | 32 | 46 | 46 | 31 | 31 | 27 | 28 | 103 | 101 | 59 | 55 |
| 54 | 37 | 32 | 46 | 46 | 30 | 31 | 27 | 27 | 101 | 101 | 59 | 54 |
| 53 | 37 | 32 | 46 | 46 | 30 | 31 | 27 | 27 | 101 | 101 | 59 | 53 |
| 52 | 37 | 32 | 45 | 45 | 30 | 31 | 27 | 27 | 99 | 100 | 59 | 52 |
| 51 | 37 | 32 | 45 | 45 | 30 | 31 | 26 | 27 | 99 | 100 | 59 | 51 |
| 50 | 37 | 32 | 45 | 45 | 30 | 31 | 26 | 26 | 99 | 100 | 59 | 50 |
| 49 | 36 | 32 | 45 | 45 | 30 | 31 | 26 | 26 | 98 | 100 | 59 | 49 |
| 48 | 36 | 32 | 45 | 45 | 30 | 30 | 26 | 26 | 98 | 100 | 59 | 48 |
| 47 | 36 | 30 | 44 | 45 | 29 | 30 | 26 | 26 | 97 | 99 | 59 | 47 |
| 46 | 36 | 30 | 44 | 45 | 29 | 30 | 26 | 25 | 96 | 99 | 58 | 46 |
| 45 | 35 | 29 | 44 | 44 | 29 | 30 | 26 | 25 | 96 | 98 | 58 | 45 |
| 44 | 35 | 29 | 44 | 44 | 29 | 30 | 26 | 24 | 96 | 98 | 57 | 44 |
| 43 | 35 | 29 | 44 | 44 | 29 | 30 | 26 | 24 | 96 | 98 | 57 | 43 |
| 42 | 35 | 29 | 44 | 44 | 29 | 30 | 25 | 24 | 95 | 98 | 57 | 42 |
| 41 | 35 | 28 | 44 | 44 | 28 | 29 | 25 | 24 | 93 | 98 | 57 | 41 |
| 40 | 35 | 28 | 43 | 44 | 28 | 29 | 25 | 24 | 93 | 96 | 57 | 40 |
| 39 | 35 | 28 | 43 | 44 | 28 | 29 | 25 | 24 | 93 | 96 | 57 | 39 |
| 38 | 35 | 28 | 43 | 43 | 28 | 29 | 25 | 23 | 91 | 96 | 57 | 38 |

| | 42-13 | 12-6 | 42-13 | 12-6 | 5-1 | 42-13 | 12-6 | 5-1 | 42-13 | 12-6 | 5-1 | |
|----|-------|------|-------|------|-----|-------|------|-----|-------|------|-----|----|
| 37 | 34 | 28 | 43 | 43 | 28 | 29 | 25 | 23 | 91 | 96 | 56 | 37 |
| 36 | 34 | 28 | 42 | 43 | 28 | 29 | 25 | 22 | 90 | 96 | 56 | 36 |
| 35 | 34 | 28 | 42 | 43 | 27 | 28 | 25 | 22 | 89 | 94 | 56 | 35 |
| 34 | 33 | 27 | 42 | 41 | 27 | 28 | 25 | 22 | 88 | 94 | 55 | 34 |
| 33 | 32 | 27 | 41 | 41 | 27 | 28 | 25 | 22 | 88 | 91 | 55 | 33 |
| 32 | 32 | 27 | 40 | 41 | 27 | 28 | 25 | 21 | 87 | 91 | 54 | 32 |
| 31 | 30 | 27 | 40 | 41 | 26 | 28 | 25 | 21 | 87 | 91 | 54 | 31 |
| 30 | 30 | 27 | 39 | 41 | 26 | 27 | 25 | 21 | 87 | 89 | 54 | 30 |
| 29 | 30 | 27 | 39 | 40 | 26 | 27 | 24 | 21 | 84 | 89 | 54 | 29 |
| 28 | 30 | 27 | 39 | 40 | 26 | 27 | 24 | 21 | 82 | 83 | 53 | 28 |
| 27 | 29 | 26 | 36 | 39 | 25 | 27 | 23 | 21 | 80 | 81 | 53 | 27 |
| 26 | 28 | 26 | 36 | 39 | 25 | 27 | 23 | 21 | 80 | 81 | 53 | 26 |
| 25 | 28 | 26 | 36 | 36 | 25 | 27 | 23 | 21 | 78 | 80 | 52 | 25 |
| 24 | 27 | 26 | 34 | 36 | 25 | 26 | 23 | 21 | 78 | 80 | 52 | 24 |
| 23 | 27 | 26 | 33 | 36 | 24 | 26 | 23 | 21 | 78 | 80 | 48 | 23 |
| 22 | 26 | 26 | 33 | 35 | 24 | 25 | 23 | 21 | 73 | 80 | 48 | 22 |
| 21 | 26 | 25 | 33 | 35 | 24 | 25 | 22 | 21 | 73 | 80 | 48 | 21 |
| 20 | 26 | 25 | 33 | 34 | 24 | 25 | 21 | 21 | 72 | 80 | 47 | 20 |
| 19 | 25 | 25 | 33 | 34 | 24 | 25 | 21 | 21 | 72 | 77 | 47 | 19 |
| 18 | 25 | 24 | 33 | 33 | 23 | 25 | 21 | 0 | 71 | 77 | 47 | 18 |
| 17 | 25 | 23 | 33 | 33 | 22 | 25 | 20 | 0 | 71 | 77 | 45 | 17 |
| 16 | 24 | 23 | 32 | 33 | 22 | 24 | 20 | 0 | 69 | 77 | 45 | 16 |
| 15 | 23 | 23 | 32 | 33 | 22 | 24 | 20 | 0 | 69 | 76 | 44 | 15 |
| 14 | 23 | 23 | 31 | 31 | 21 | 24 | 20 | 0 | 68 | 76 | 44 | 14 |
| 13 | 20 | 19 | 31 | 31 | 21 | 24 | 20 | 0 | 66 | 75 | 44 | 13 |
| 12 | 20 | 19 | 30 | 30 | 19 | 24 | 20 | 0 | 63 | 74 | 44 | 12 |
| 11 | 20 | 19 | 29 | 30 | 19 | 24 | 20 | 0 | 63 | 73 | 44 | 11 |
| 10 | 20 | 19 | 29 | 30 | 19 | 24 | 20 | 0 | 62 | 72 | 44 | 10 |
| 9 | 20 | 19 | 28 | 30 | 19 | 24 | 20 | 0 | 62 | 72 | 43 | 9 |
| 8 | 20 | 16 | 28 | 26 | 19 | 23 | 20 | 0 | 59 | 72 | 43 | 8 |
| 7 | 20 | 16 | 27 | 26 | 19 | 23 | 20 | 0 | 59 | 68 | 43 | 7 |
| 6 | 19 | 16 | 26 | 26 | 19 | 23 | 19 | 0 | 59 | 68 | 43 | 6 |
| 5 | 17 | 16 | 26 | 26 | 19 | 22 | 19 | 0 | 59 | 68 | 40 | 5 |
| 4 | 16 | 16 | 24 | 23 | 19 | 21 | 18 | 0 | 57 | 61 | 40 | 4 |
| 3 | 16 | 16 | 24 | 23 | 16 | 19 | 18 | 0 | 57 | 61 | 40 | 3 |
| 2 | 16 | 16 | 24 | 23 | 16 | 18 | 18 | 0 | 52 | 60 | 27 | 2 |
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Behavior Rating Scale for Children from Age One to 42 Months

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ABSTRACT

This study aimed at developing a behavior rating scale for children from age one to 42 months, as well as, deriving norms to be used in interpreting scores of cognitive and developmental scales at which the decision regarding a child's performance change from one classification to another. Also finding out psychometric properties of Jordanian version of behavior rating scale and used the scale to identify children behavior rating performance level from one to 42 months old.

After identifying behavior abilities (30) items were developed for the behavior rating scale which assess four factors included attention /arousal factor (1-5) months, the orientation/engagement factor (6-42 months), the motor quality factor (1-42) months and the emotional regulation factor (6-42 months).

Findings indicated that there was sufficient evidence of construct validity. Also reliability coefficients were calculated using cronbach alpha, test- retest method. The validity and reliability were acceptable.

Means and Standard Deviations of children performance were computed for the three group age. These means and standard deviations represent the performance level of the Jordanian children on the scale. The increments in children performances across age levels indicate progress in appropriate behavior.

Developmental norms were derived using the percentile method after examining the normality of children performance distribution on the scales and did the smoothing procedures. Decisions regarding cutoff scores was based on specific criteria.

Keywords: Child Development, Infant Behavior Development, Infant Development, Behavior Rating Scales, Bayley Scales, Early Intervention, Child Assessment, Early Childhood Assessment,

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