

**TABLE 1: Characteristics of children with and without mathematical difficulties at different addition performance levels.**

		Mean age in months	Mean standard score on British Abilities Scales Basic Number Skills Test (average is 100)	Mean scaled score on WISC Arithmetic test (average is 10)	Mean number of derived fact strategies used
Beginning Arithmetic	Children with mathematical difficulties (n = 52)	79.07 (5.71)	85.94 (11.05)	4.79 (1.94)	0.31 (0.55)
	Unselected children (n = 8)	76.4 (4.1)	82.0 (6.36)	3.88 (1.46)	0.4 (1.49)
	<b>Total (n = 60)</b>	<b>78.8 (5.6)</b>	<b>85.5 (10.66)</b>	<b>4.86 (1.89)</b>	<b>0.37 (0.74)</b>
Facts to 10	Children with mathematical difficulties (n = 119)	81.86 (6.69)	97.54 (9.79)	7.61 (2.82)	1.26 (1.15)
	Unselected children (n = 32)	77 (4.72)	106.07 (11.3)	8.97 (2.76)	1.5 (1.41)
	<b>Total (n = 151)</b>	<b>81.04 (6.64)</b>	<b>99.26 (10.63)</b>	<b>7.88 (2.85)</b>	<b>1.31 (1.21)</b>
FACTS TO 25	Children with mathematical difficulties (n = 32)	83.47 (6.08)	105.77 (9.72)	8.69 (2.74)	1.41 (1.24)
	Unselected children (n = 59)	83.5 (9.13)	110.85 (9.67)	10.29 (3.17)	2.25 (1.57)

	<b>Total (n = 91)</b>	<b>83.49 (7.83)</b>	<b>109 (9.94)</b>	<b>9.7 (2.99)</b>	<b>1.72 (1.45)</b>
2-DIGIT ADDITION (NO CARRYING)	Children with mathematical difficulties (n = 4)	86 (1.42)	96.5 (11.48)	5.75 (3.34)	2.75 (2.22)
	Unselected children (n = 40)	86.11 (7.64)	123.47 (9.61)	12.18 (3.21)	3.18 (1.63)
	<b>Total (n = 44)</b>	<b>86 (6.94)</b>	<b>120.63 (12.78)</b>	<b>11.5 (3.75)</b>	<b>3.14 (1.67)</b>
TOTAL	<b>Children with mathematical difficulties</b>	<b>81.26 (6.46)</b>	<b>95.56 (12.02)</b>	<b>6.93 (2.87)</b>	<b>1.07 (1.17)</b>
	<b>Unselected children</b>	<b>82.62 (11.56)</b>	<b>111.99 (13.82)</b>	<b>10.29 (3.59)</b>	<b>2.26 (1.69)</b>
TOTAL		81.66 (7.11)	13%		1.55 (1.52)

**TABLE 2: USE OF SPECIFIC DERIVED FACT STRATEGIES BY CHILDREN WITH MATHEMATICAL DIFFICULTIES AND OTHER CHILDREN**

	Children with mathematical difficulties (n = 204)	Children without mathematical difficulties (n = 135)	Significance of group difference (Fisher exact test)
Percentage using Identity	58%	75%	P < 0.01**
Percentage using Commutativity	27%	57%	P < 0.01**
Percentage using Addend+1	14%	47%	P < 0.01**
Percentage using Addend-1	7%	37%	P < 0.01**
Percentage using Inverse principle	2%	13%	P < 0.01**

**TABLE 3: USE OF SPECIFIC DERIVED FACT STRATEGIES BY CHILDREN AT DIFFERENT ADDITION LEVELS**

	Beginning Arithmetic (n = 58)	Facts to 10 (n = 141)	Facts to 25 (n = 89)	Addition (No Carrying) (n = 47)	Significance of group difference (Fisher exact test)
Percentage using Identity	25%	66%	77%	89%	P < 0.01**
Percentage using Commutativity	8%	34%	53%	70%	P < 0.01**
Percentage using Addend+1	2%	18%	40%	70%	P < 0.01**
Percentage using Addend-1	2%	10%	25%	66%	P < 0.01**
Percentage using Inverse principle	0%	6%	3%	26%	P < 0.01**