

Parenting and Children's Behavior Problems in Kagawa, Japan



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Background and Objective

The Japanese government encourages the community to detect children with developmental disorder such as ADHD to implement early intervention. Many children with behavior problems are suspected at kindergarten and 5-Year-Old-Check-up. Too many suspected children are identified and make their mothers worried, but are left without appropriate follow-up. Parenting style and relationship between a couple as well as developmental disorder can explain for behavior problems according to the previous studies, but how much? What is the odds ratio? Are there any other factors? These questions were investigated.

Methods

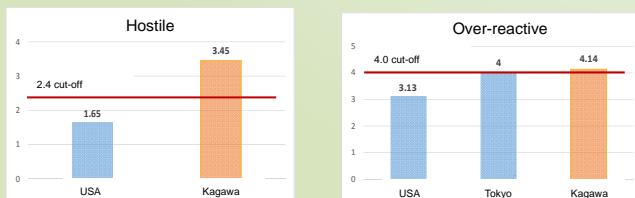
We distributed questionnaires to 3,515 parents who have children between the ages of two to five and attend public nursery schools in Kagawa, Japan. The research was done between February and March, 2015. The questionnaire included the New Brief Job Stress Questionnaire to evaluate the stress level of parents. The Parent Problem Checklist was partially used to evaluate relationships between parents. In addition, the Parenting Scale was included to evaluate parenting style and ECBI (Eyberg Child Behaviour Inventory) to investigate children's behaviour problems (CBP). 1,917 parents (55%) returned the questionnaire.

Results

Parents' Socioeconomic Background			Children's Problem			Factors of children's behavior problems (Logistic analysis)						
Age (n=1591)	Children's Behavior Problem		Behavior Problems (ECBI)	n=1597		Factors	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
20~24	7	18	25	17%	20~24	3.07 (0.93-9.60)	0.06					
25~29	44	180	224	14.1	25~29	1.22 (0.70-2.11)	0.48					
30~34	82	394	476	29.9	30~34	0.93 (0.59-1.49)	0.76					
35~39	90	454	544	34.2	35~39	1.10 (0.71-1.71)	0.68					
40~	49	272	321	20.2	40~	1						
Marital status (n=1592)	Children's Behavior Problem		Developmental disorder	n=1585		Marital status	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
Married	239	1178	1417	89%	Married	1						
Single	32	143	175	11%	Single	1.02 (0.54-1.87)	0.96					
Annual income (n=1546)	Children's Behavior Problem		Parenting Style	n=1527		Annual income	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
	~ 1.2 million yen	19		72	91				5.9	~ 1.2 million yen	1.39 (0.44-4.60)	0.58
	1.2~2.5 million	35		149	184				11.9	1.2~2.5 million	0.92 (0.35-2.70)	0.89
	2.5~5 million	110		546	656				42.4	2.5~5 million	0.93 (0.40-2.45)	0.87
	5~10 million	100		461	561				36.3	5~10 million	1.14 (0.50-3.00)	0.76
10 million ~	7	47	54	3.5	10 million ~	1						
Parenting support (n=1587)	Children's Behavior Problem		Hostile*	n=1527		Parenting support	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
Yes	247	1232	1479	93.2	Yes	1						
No	22	86	108	6.8	No	1.1 (0.57-1.98)	0.79					
Employed (n=1588)	Children's Behavior Problem		Over-reactive*	n=1527		Weekly working hours	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
Yes	245	1225	1470	92.6	Yes	1						
No	27	91	118	7.4	No	1.35 (0.76-2.50)	0.32					
Weekly working hours (n=1454)	Children's Behavior Problem		Lax*	n=1527		Mental stress	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
	~20H	20		129	149				10.3	~20H	1	
20~40H	121	634	755	51.9	20~40H	1.60 (0.87-3.03)	0.13					
40H~	101	449	550	37.8	40H~	1						
Mental stress (n=1535)*	Children's Behavior Problem		Yes	n=1527		Developmental disorder	OR (95%CI)	P value				
	Yes	No		Total (%)	Yes				No			
Yes	60	92	152	9.9	Yes	1.46 (0.80-2.81)	0.22					
No	202	1181	1383	90.1	No	1						

*X2 test = p<0.05

Average Comparison of Parenting Style: USA, Tokyo, Kagawa



Children's Behavior Problems and Couple Relationship (Student t-test)

CBPs	Average score of couple relationship (95%CI)	P value
Yes	4.28 (4.13-4.44)	
No	4.94 (4.88-5.01)	<0.0001

Couple relationship score : 1~7 points (7 is the best)

* 11% of mothers are single. 40% work more than 40 hours weekly. 10% have mental stress. 8% of families have a child diagnosed with a developmental disorder. Parenting support is available for more than 90% of families.

* Regarding parenting style, 70% of respondents indicated themselves as hostile (M=3.45 SD=1.42), 62% as over-reactive (M=4.15 SD=1.00), and 29.4% as lax (M=3.05 SD=0.78). CBP were clinically recognized at 17%.

* CPB were significantly associated with parents with younger age (OR 3.07), mental stress (OR 2.32) and parenting style such as hostile (OR 2.11), over-reactive (OR 1.86) and lax (OR 2.04) parenting and the couple relationship.

Conclusions

Children's behaviour problems are significantly associated with parental age, stress, dysfunctional parenting behaviours or bad relationships between parents. We need to focus on supporting parents to do appropriate parenting and consequently reduce the number of children suspected of developmental disorder.