#### Effects of the Amount of Time in Child Care on Children's Cognitive and Social Development

Nazariah Shar'ie Bt. Janon B.HSc and M.HSc in Psychology

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School of Psychology The University of Adelaide

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#### **Declaration**

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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# **Glossary of Abbreviations**

ABS	Australian Bureau of Statistics
ADS	Accreditation Decision Review Committee
AFDC	Aid to Family with Dependent Children
	American Public Health Association's and American
AFIIA &AAF	Academy of Paediatrics
AUSTLII	Australasian Legal Information Institute
BERR	Department for Business, Enterprise and Regulatory Reform
CCB	Child Care Benefits
CCC	Child Care Centres
CCDF	
CCTR	Child Care Development Fund Child Care Tax Rebate
CDCT CTC	Child and Dependent Care Tax Credit Child Tax Credit
DECS	Department of Education and Children Services
DPW	Numbers of day attend CCC in a week
DoCS	Department of Community Services
EITC	Earned Income Tax Credit
EPPE	The Effective Provision of Pre-School Education Project
FaCSIA	The Department of Families, Community Services and Indigenous
<b>F</b> 40	Affairs
FAO	Family Assistance Office
FDC	Family Day Care
FIDCR	Federal Interagency Day Care Requirements
FMLA	Family Medical Leave Act
HIMIE	Her Majesty's Inspectorate of Education
HPD	Numbers of hours spend in CCC in a day
HPW	Numbers of hours spend in CCC in a week
IPSP	Inclusion and Professional Support Program
ILO	International Labour Organisation
JETCCFA	Job Education and Training Child Care Fee Assistance
NAEYC	National Association for the Education of Young Children
NCAC	National Childcare Accreditation Council
NM	Numbers of Month have been enrolled in CCC
NNEB	Nursery Nurse Examination Board
OECD	Organization for Economic Co-operation and Development
OFSTED	Office for Standard in Education, Children's Services and Skills
OPSI	Office of Public Sector Information
ORCE	Observational Record of the Caregiving Environment
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act
QIAS	Quality Improvement and Accreditation System
SSBG	Social Service Block Grant
TANF	Temporary Assistance for Needy Families
TDI	Temporary Disability Insurance
TH	Total numbers of hours spend in CCC

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### **Dedication**

#### To my angels

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To my little angels, Alya (10 years old), Helmy (8 years old) and Harris (3 years old) who have inspired me to study children, brilliant little creatures. May this thesis become the beginning of my journey to assist parents in understanding children's development.

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#### Abstract

This thesis has four main goals: (1) to examine the association between different measures of time in childcare on children's cognitive and social development; (2) to investigate the influence of child-care-related variables (i.e., structural and process features of quality child care, caregivers' mental health status and job satisfaction) on child developmental outcomes; (3) to determine whether child care predicts developmental outcomes after controlling for the effects of family-background variables (e.g., family social environment, parental discipline practices and parental mental health status); and (4) to examine the moderating effect of family and other predictor variables on the relationship between the amount of time spent in child care and its effect on children's cognitive and social development. To achieve these goals, data were collected from 147 children between 3-4 years of age in Study I and 89 children aged 4-5 years in follow-up studies. These children were attending nationally accredited child care centres in South Australia, but in areas that differed socio-economically.

The first finding was that different measures of time in childcare were not equally related to child developmental outcomes. The number of day(s) in a week, amount of hour(s) in a day and in a week spent in childcare was negatively related to children's social behaviour, whereas the number of months children had spent in childcare was positively related to social development scores. A second finding was that the structural feature of childcare (group size) was significantly related to child developmental outcomes. A smaller group size (10-20 children) was found to have a greater significant positive effect than bigger group size (21-30 children) on child psychosocial behaviour. Another quality feature, a harsh style of caregiver interaction was associated with high scores in child conduct problems measure. A third finding was that higher levels of family conflict were associated with higher scores on the SDQ and ASBI subscales while higher levels of expressiveness in the family were associated with higher scores on the ASBI subscales. Further, higher scores on a measure of dysfunctional parental discipline practices were associated with lower scores in social competence measures in children.

Fourth, the nature of caregiver interactions with children (in particular, a harsher style of interaction) was found to moderate the effect of time spent in child care and its consequent impact on children's developmental outcomes. Specifically, it was found that: (1) children who spent long hours in daily care had higher caregiver assessed scores on the SDQ if the caregiver practised a harsher style of interaction; and (2) children who attended childcare many hours per week were rated by their caregivers as having lower prosocial scores if the child attended a centre where caregivers interacted more harshly with children,

Other results obtained from the analysis of interaction effects showed that family-related variables (i.e., family conflict, expressiveness, dysfunctional parenting discipline and lax parenting style) moderated the effect of time spent in child care on children's developmental outcomes. In particular, it was found that: (1) children who attended many days per week and who came from family environments characterised by higher levels of conflict were given lower ratings for prosocial behaviour; (2) children who spent more hours of child care in a week were rated low in peer problems measure when the family reported high social expressiveness; (3) children who spent more hours in a week in childcare were given higher ratings for prosocial behaviours if the children had been exposed to more dysfunctional parenting discipline practises at home (i.e., total score and lax parenting style).

These results are discussed in relation to studies in other countries on the effects that child care attendance has on child developmental outcomes. Consistent with findings in Sweden, the United Kingdom and the United States of America: (1) attending child care more hours in a week seem to have a negative effect on a child's social developmental outcomes even after child care and family characteristics are taken into account; (2) family characteristics remain a significant predictor of child development even when children spend most of their day time in child care; and (3) structural and process features of child care had significant predictive effects on children's development. In contrast to the findings from studies in these countries, this research showed that: (1) high numbers of months in child care positively affects child social development; (2) family variables (i.e., family conflict and dysfunctional parental discipline strategies) have both direct and indirect influences on child developmental outcomes; and (3) the effects of the amount of time in childcare vary as a function of caregiver interaction as well as family background variables. Further research is needed to understand all the mechanisms responsible for these convergent and divergent outcomes.