



**Growing Up
in Ireland**
National Longitudinal
Study of Children

Time Use Among Nine- Year Olds

James Williams



Background

- One school of thought feels children have too much time – Hofferth and Sandberg (2001)
- Another holds that children are overscheduled – shuffled from one activity to another (Lareau 2003)
- How children spend their time (on which activities) may impact on their physical, social, emotional and cognitive development
- Little is known in Ireland on how children spend their time or how it may affect their development and outcomes.
- Paper presents first look at time use among children using large scale national survey





Sample design

- Child cohort (at 9 years) – ***Growing Up in Ireland***
- 8,568 nine-year old children participating in the Growing Up in Ireland Project.
- Selected through the school system with the schools serving as the primary sampling units (PSU's).
- 910 schools from the national total of 3,200 primary schools were selected for inclusion.
- 82% response rate at the school level and 57% at the household level (i.e. eligible child selected within the school)



Filling out the diary

- ‘Light’ Time-use Diary left with the family on completion of their interview.
- Contained a total of 96 15-minute slots in a 24-hour period – from midnight on the diary day (00.00-00.15) to the end of that day (23.45-24.00)
 - E.g. from midnight on Monday 2nd July to 23:59 on Monday 2nd July
- Indicate one activity per 15-minute time slot from a list of 21 possibilities (sleeping, eating, school, reading, travelling)
- Example
 - 09:00 to 09:15 – Child eating (breakfast)
 - 09:15 to 09:30 – Child travelling (to school)



Data collection

- Diary filled out by family in their own time and returned by post
- Completed by PCG and/or Study Child on a designated diary day (e.g. next Monday after the interview, next Friday, etc)
 - to obtain even spread of weekday and week-end data.
- One postal reminder sent two weeks after the household interview.
- Current analysis based on 5,200 respondents – term time only. Excludes out of term holidays etc – Christmas, Halloween, mid-Term



Completion of diary

Who completed diary?

- 59% diaries completed by Study Child and PCG
- 41% diaries completed by Study Child only

When?

- 36% “now and again” during diary day
- 32% at end of diary day
- 21% day after diary day
- 10% later



Questions

- How do 9-year-olds spend their time during school term – especially on weekdays
- Does this differ according to socio-demographic characteristics?
 - Child's sex
 - Mother's education
 - Mother working outside the home
 - Family structure
 - Family income
 - Social Class



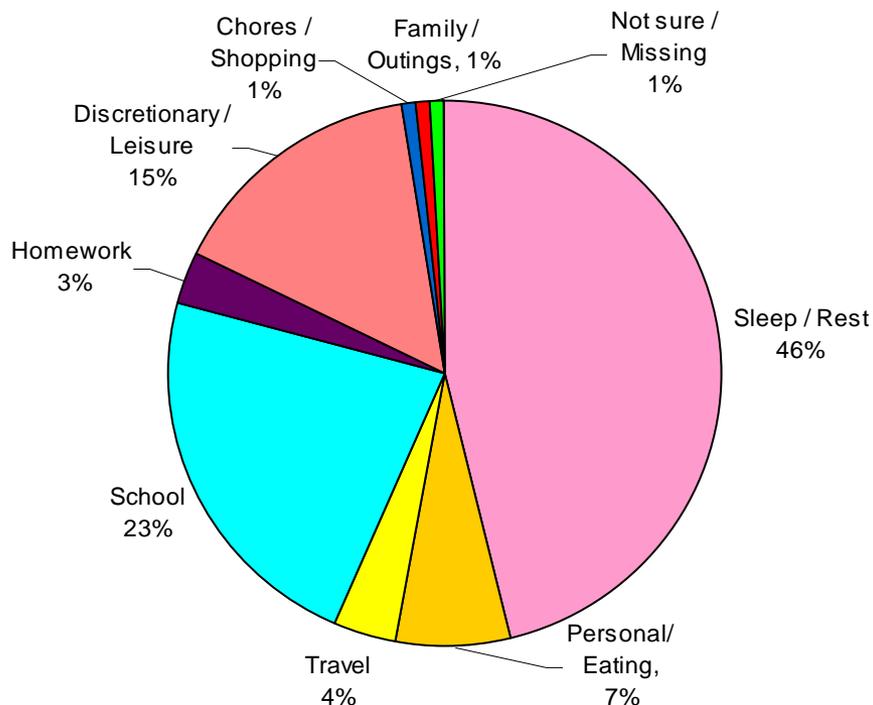
Eight categories of activities

1. **Sleeping / Rest of Relaxation** – incl. time out, doing nothing.
2. **Personal Care / Eating & Drinking** – incl. getting washed, dressed, showered, toilet.
3. **Travel** – incl. travelling to and from school and all other trips.
4. **School** – time spent in school.
5. **Homework** – time spent doing homework.
6. **Discretionary time / Leisure time** – incl. physical sports, board games, general play, TV etc.
7. **Household Chores / Shopping trip** – incl. grocery shopping, clothes etc.
8. **Family / Outings** – incl. visit to relative's home, family outing
9. **Missing / Not Sure**

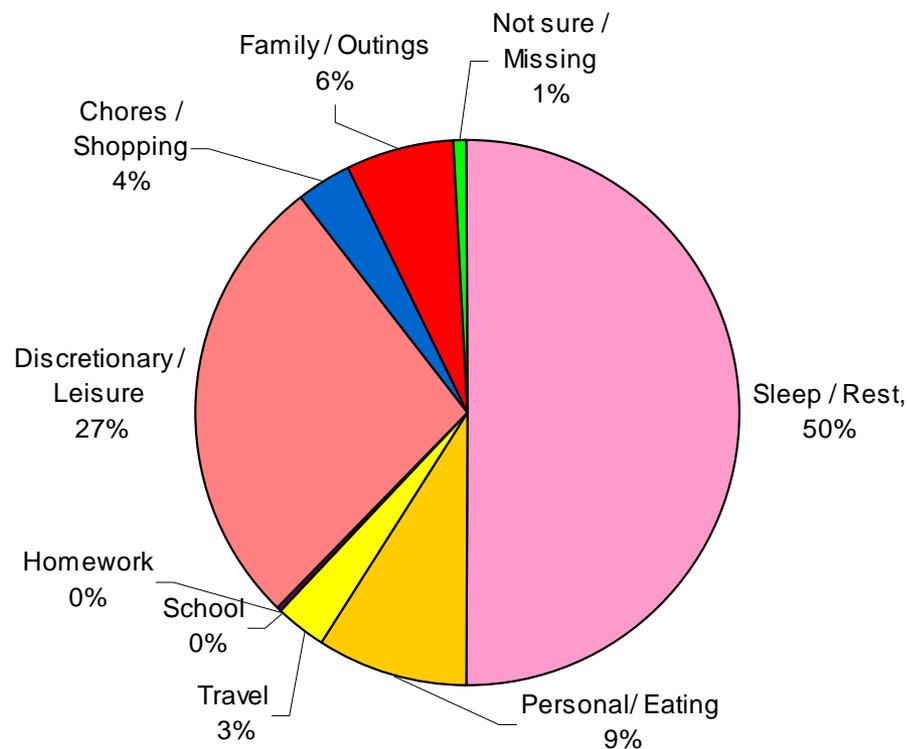


Time-use: Weekdays v Weekends

WEEKDAY



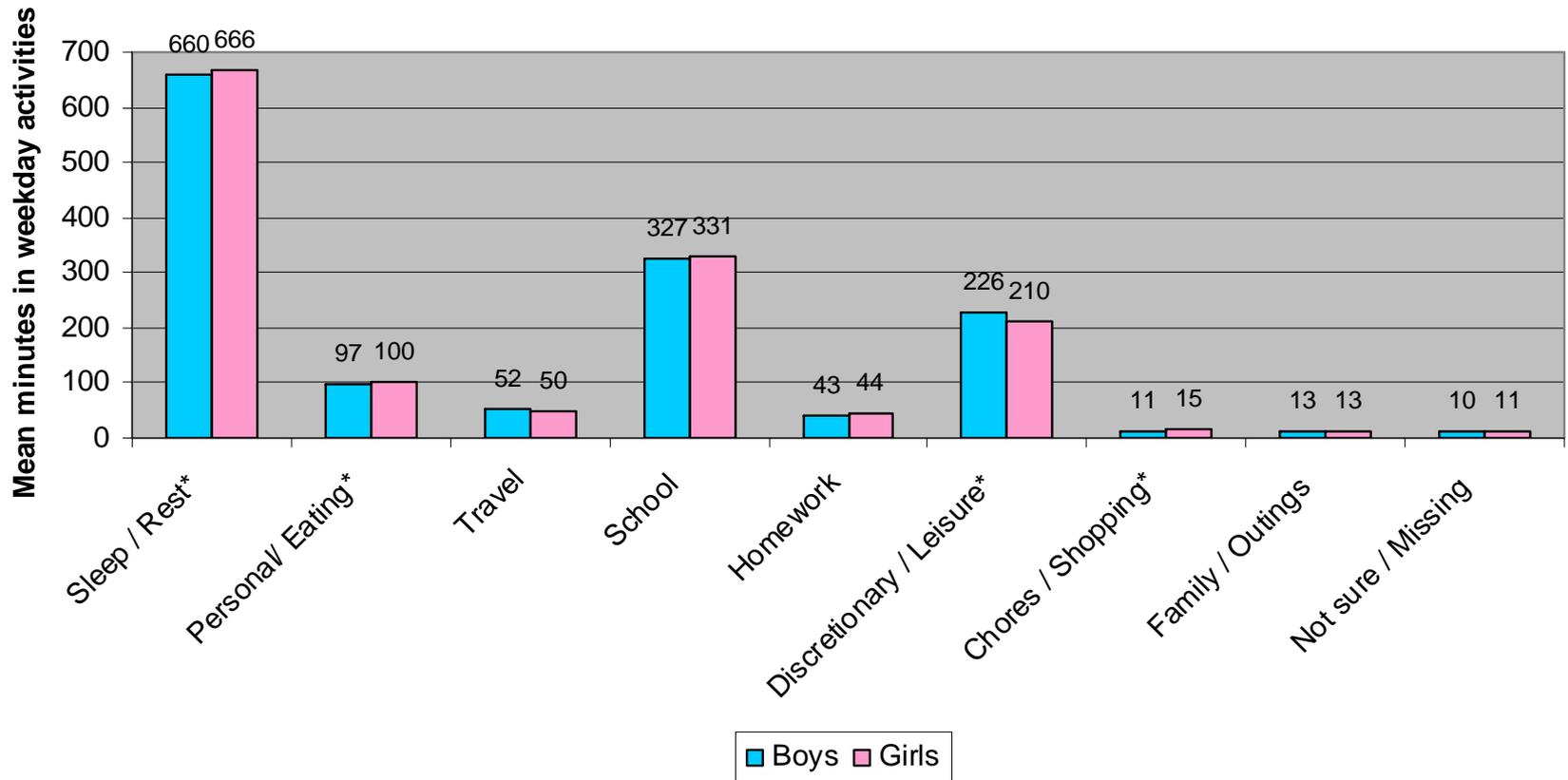
WEEKEND



Largely focus on weekdays only in remainder of presentation

Variations by gender

Mean minutes in weekday activities by child's gender

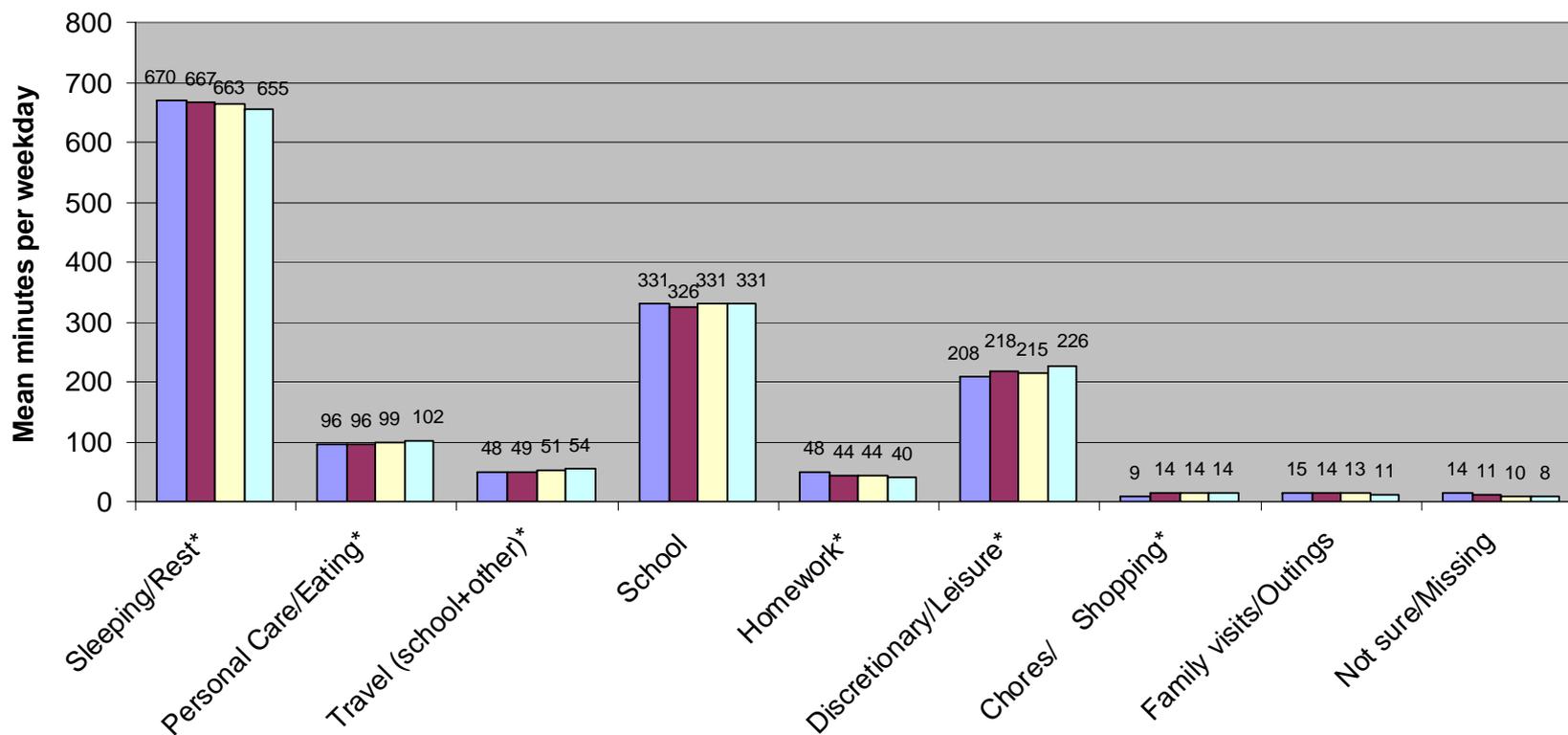


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Variations by mother's educational attainment

Mean minutes in weekday activities by highest level of maternal educational attainment



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Low sec or less High sec Non degree Degree

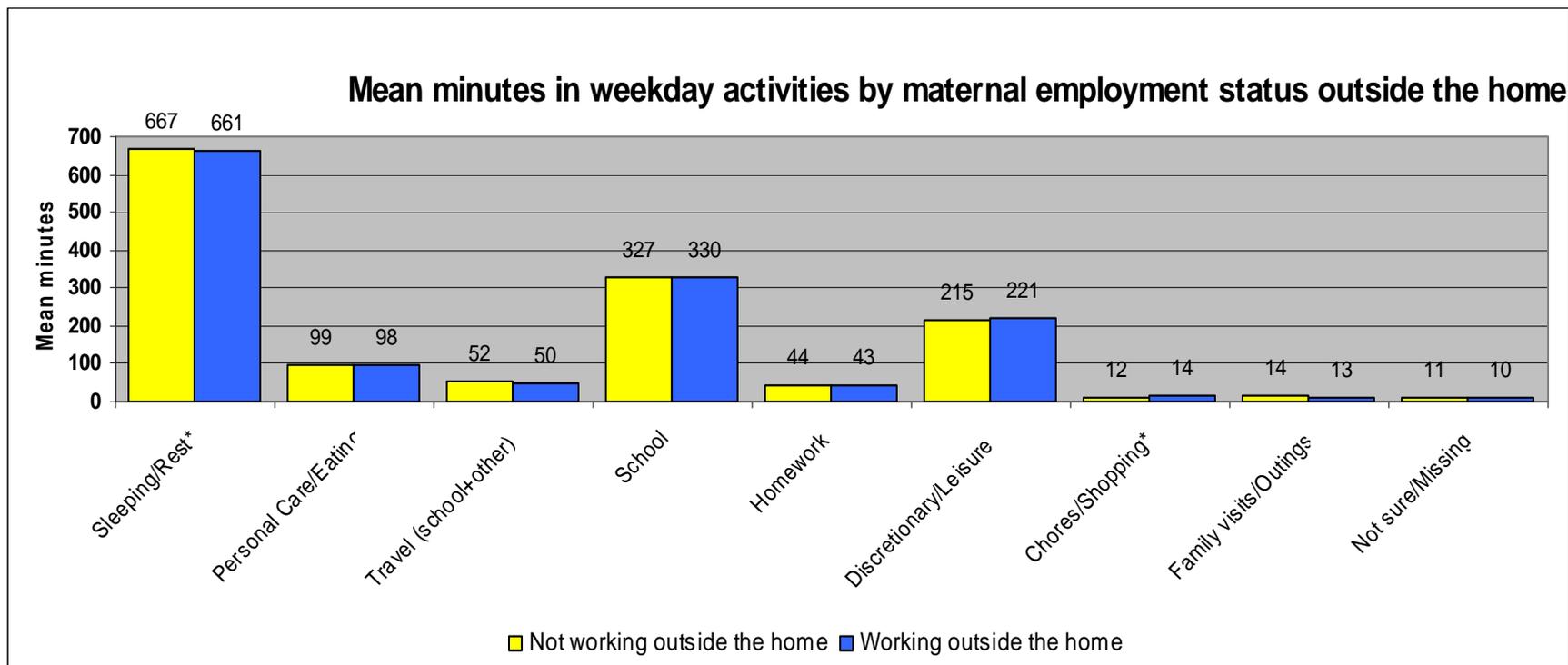


Variations by family type

- Single parent, 1 child
 - Single parent, 2+ children
 - Two parent, 1 child
 - Two parent, 2+ children
-
- At this level of aggregation no systematic, significant difference in activities between family types during week (or weekend).



Mother working outside the home



*p<.05



Maternal work outside the home

- Significant difference only in Sleeping / Rest on weekdays
 - less sleep for those who work outside home (approximately 6 minutes)
- Sleep difference reversed (and significant) at weekend
 - 10 minutes longer for children whose mother works outside the home

OLS equations – significant relationships

Child's Characteristics	Sleep/ Rest	Personal Care / Eating, Drinking	Travel (to school / other)	School	Homework	Discretionary / Leisure	Household Chores / Shopping	Family / Outings
<i>Child's Gender</i> (Ref. Male)								
Female	+	+				-	+	
<i>Family Income</i> Ref. Quintile 5 (high)								
Quintile 1 (low)		-						
Quintile 2								
Quintile 3	+							+
Quintile 4								
<i>Mother's education</i> Ref. Degree								
Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
Less than degree	+					-		
<i>Family Social Class</i> Ref. Semi skilled / Unskilled Manual								
Professional / Managerial	-		+		-			
Non Manual					-			
<i>Family Type</i> Ref. Two Parent, 2+ children								
Single Parent, 1 child	-							
Single Parent, 2+ children								
Two Parent, 1 child	-							
<i>Mother working outside home</i>		-	-					

OLS equations – significant relationships

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Family Income Ref. Quintile 5 (high)								
Quintile 1 (low)		-						
Quintile 2								
Quintile 3	+							+
Quintile 4								
Mother's education Ref. Degree								
Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
Less than degree	+					-		
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Professional / Managerial	-		+		-			
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Mother working outside home		-	-					

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<i>Family Income</i> Ref. Quintile 5 (high)								
Quintile 1 (low)		-						
Quintile 2								
Quintile 3	+							+
Quintile 4								
<i>Mother's education</i> Ref. Degree								
Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
Less than degree	+					-		
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Leaving Certificate	+	-	-					
Less than degree	+					-		
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Quintile 3	+							+
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Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
Less than degree	+					-		
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OLS equations – significant relationships

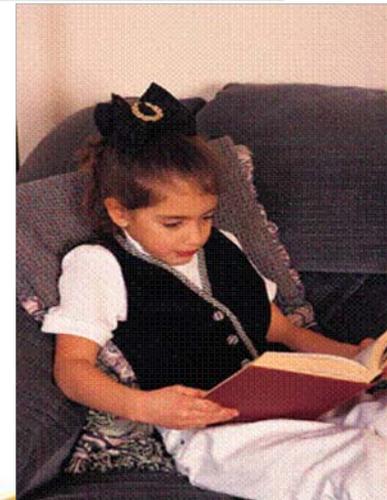
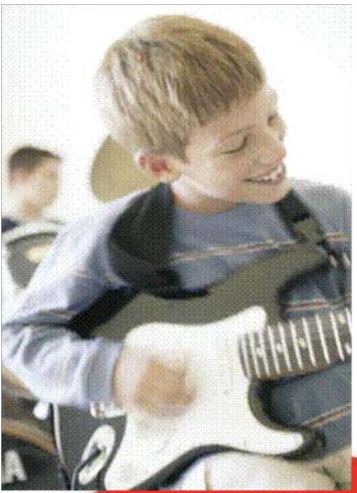
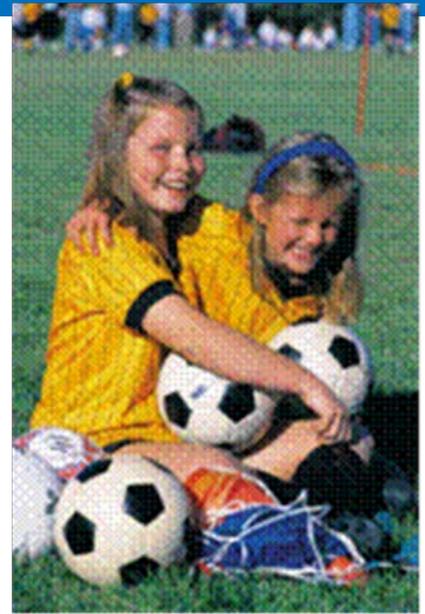
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Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
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Female	+	+				-	+	
<i>Family Income Ref. Quintile 5 (high)</i>								
Quintile 1 (low)		-						
Quintile 2								
Quintile 3	+							+
Quintile 4								
<i>Mother's education Ref. Degree</i>								
Lower secondary or less	+				+		-	
Leaving Certificate	+	-	-					
Less than degree	+					-		
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Non Manual					-			
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<i>Mother working outside home</i>		-	-					



Discretionary / Leisure Time





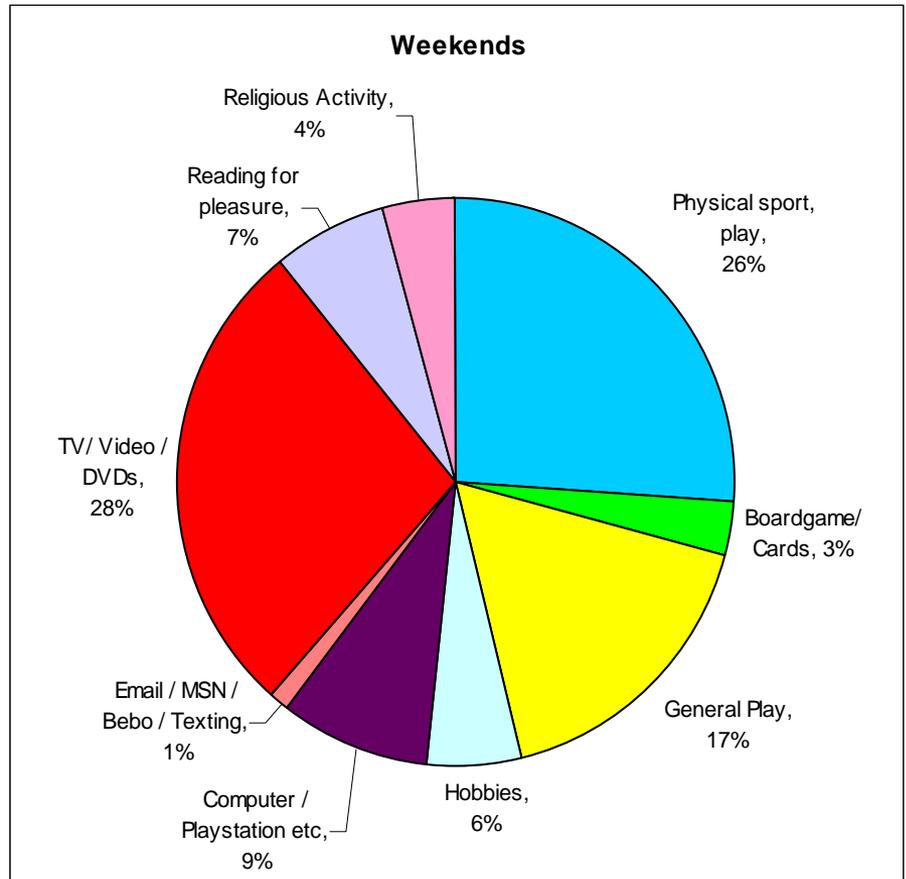
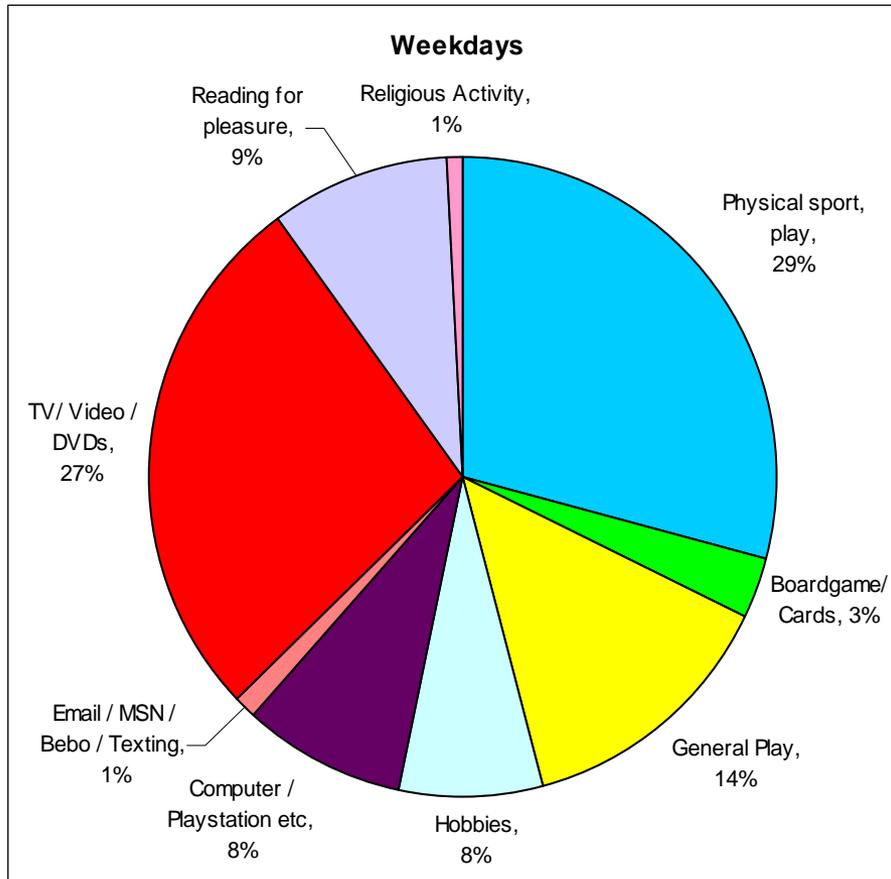
Discretionary / Leisure Time

- Discretionary / Leisure Time includes:
 - Physical sports, play, exercise
 - Playing board games, cards etc
 - General play, indoor and outdoor
 - Hobbies or other leisure
 - Computer / Internet / PlayStation / X-box – computer or computer games
 - Email / MSN / Bebo / Texting
 - TV, Videos, DVDs
 - Reading books, comics, magazines – for pleasure outside school & homework
 - Religious activity, incl. religious services, prayer.
- Discretionary/Leisure time is an area where children's individual choices are reflected to a greater degree.



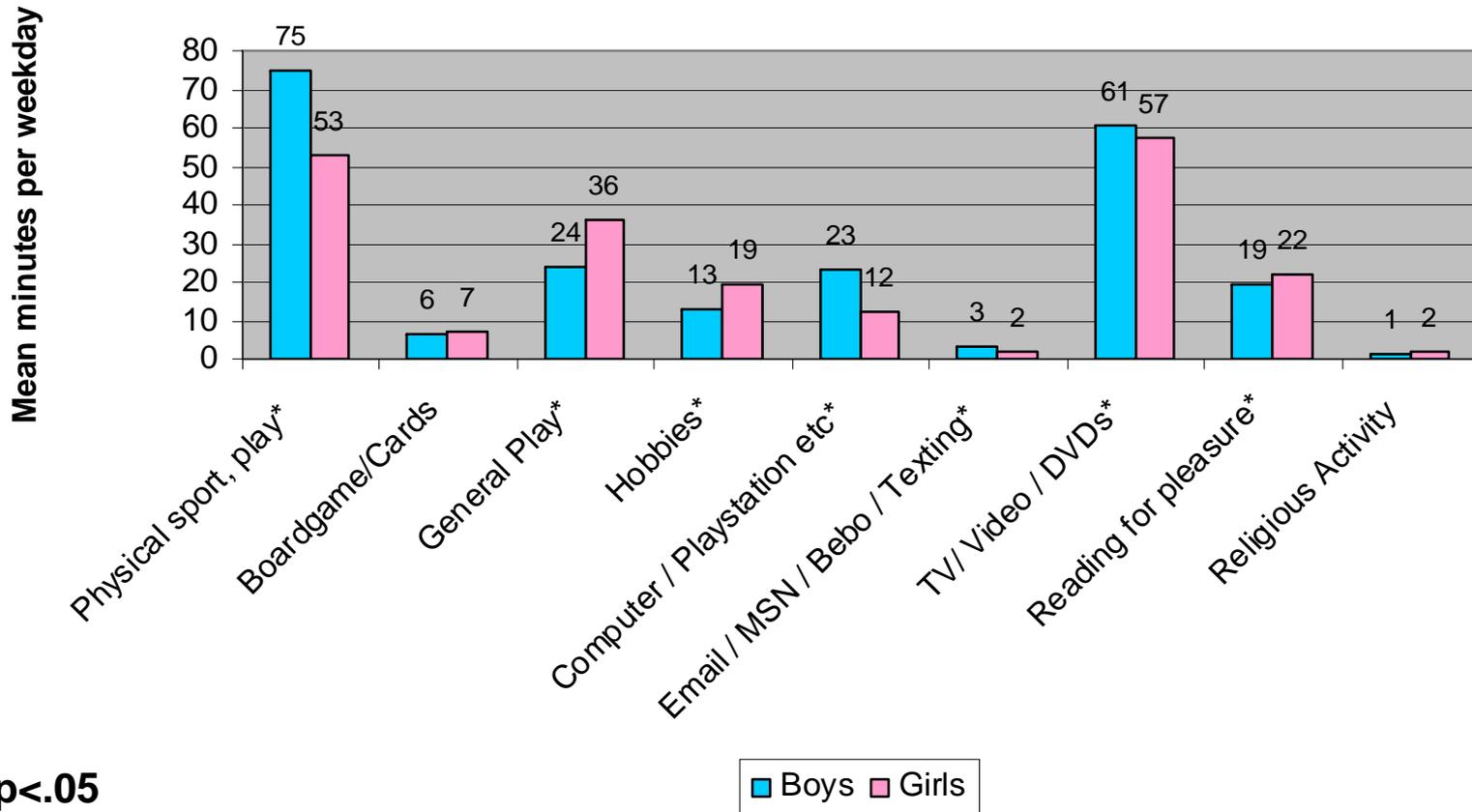
Use of discretionary/leisure time

- Discretionary / Leisure Time accounts for 15.2% of weekday and 27.2% of weekend activity



Variations by gender

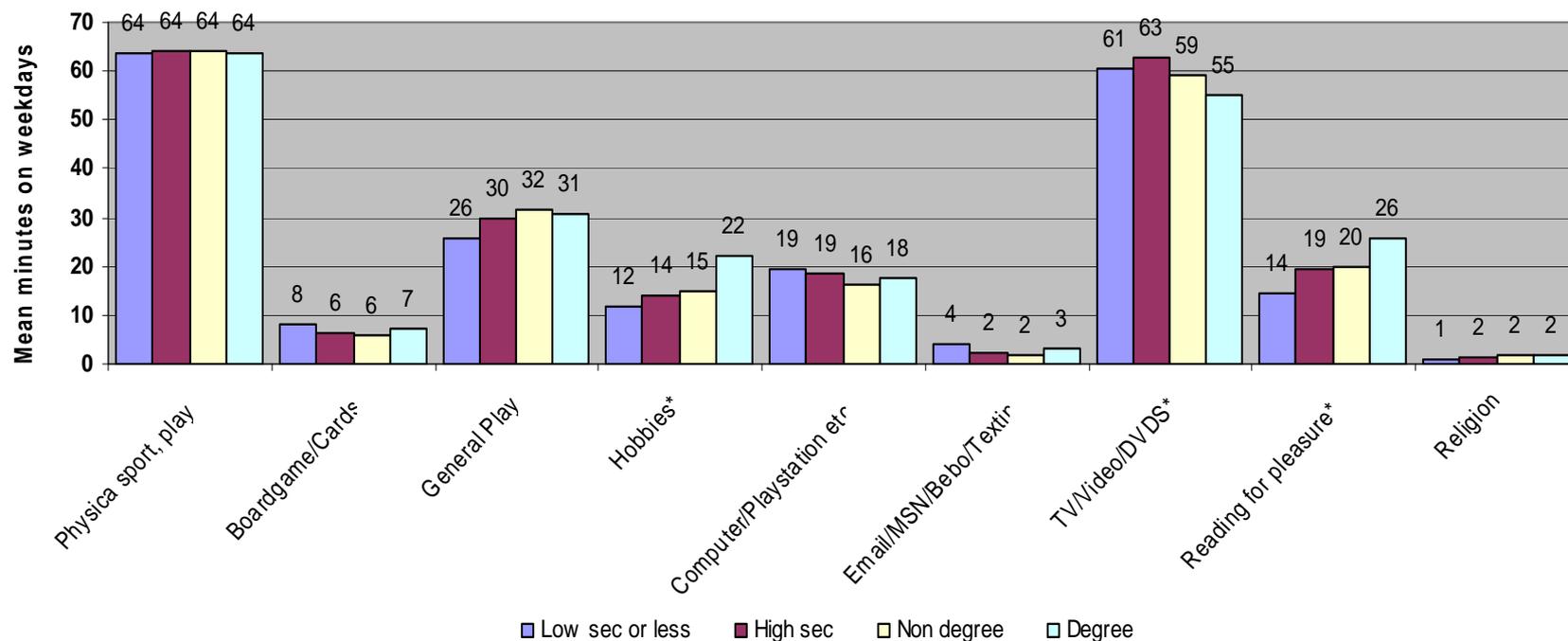
Mean minutes in discretionary/leisure activities for boys and girls on weekdays





Discretionary / Leisure Time – Variations by mother's educational attainment

Mean minutes in weekday discretionary/leisure pursuits
by maternal education

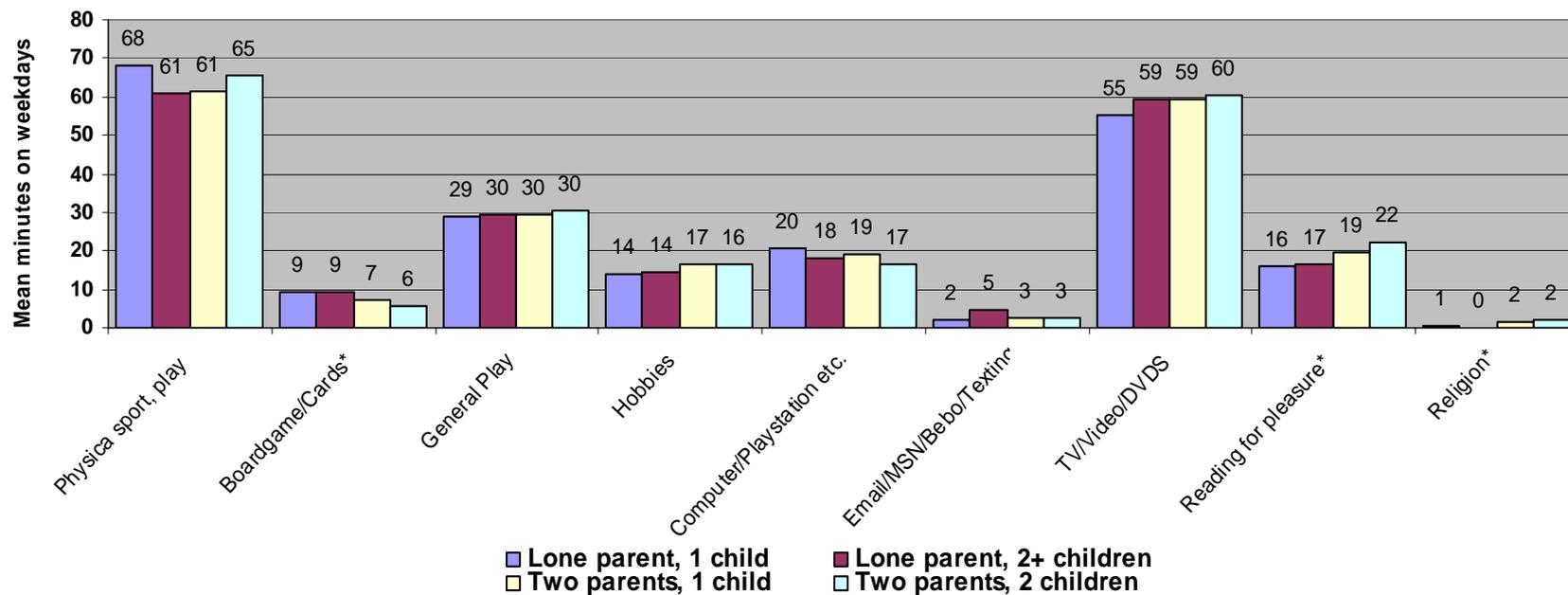


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Discretionary / Leisure Time – variations by family type

Mean minutes in weekday discretionary/leisure pursuits by family type

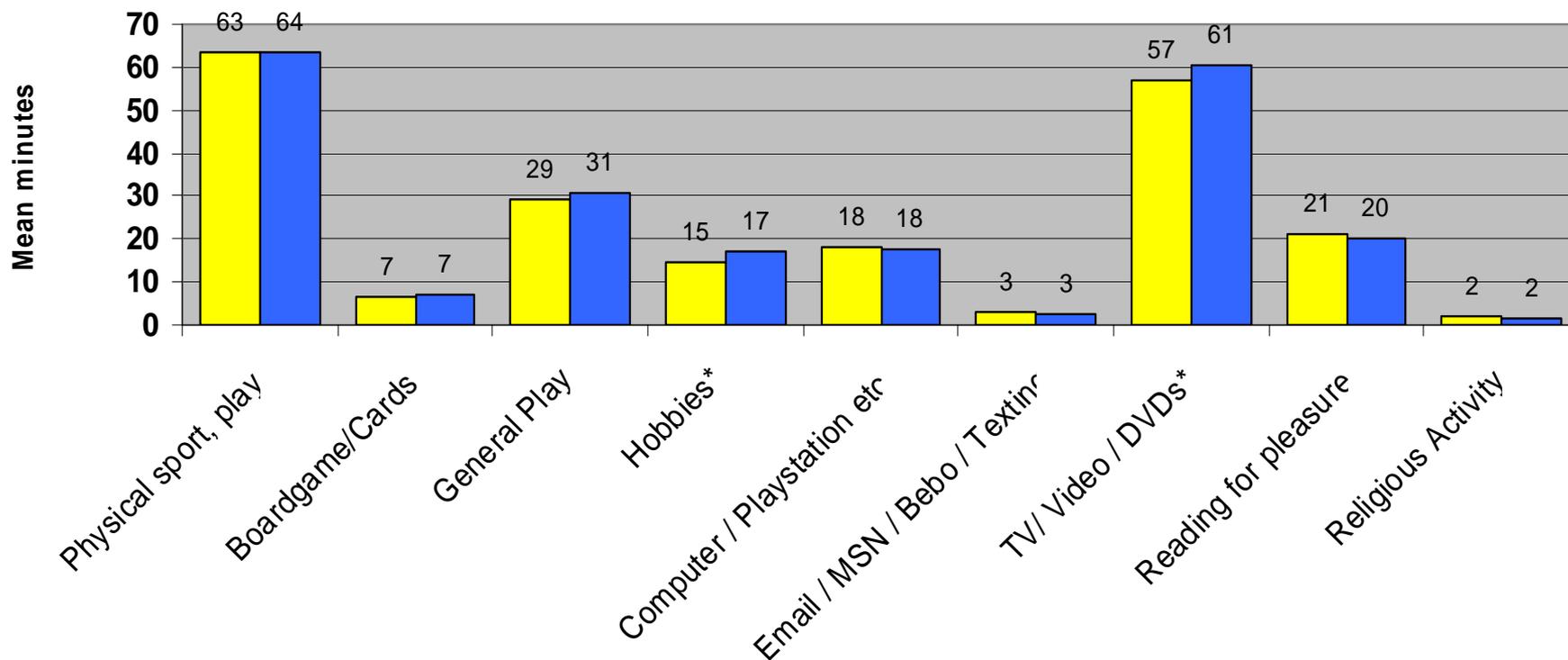


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Mother working outside the home

Mean minutes in discretionary/leisure pursuits by mother working outside the home



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■ Working Outside the home ■ Not working outside the home



General trends in discretionary/leisure time

- Highly gendered.
- Boys much more (and significantly) involved in physical activities, sports, computers, TV.
- Girls more involved in general play, hobbies and reading
- Little evidence of significant, systematic variation in discretionary time with family type.

OLS equations – significant relationships

Child's Characteristics	Physical sport	Board-game/cards	General play	Hobbies	Computer / Playstation etc.	Email/MSN/Bebo	TV/Videos/DVDs etc	Reading for pleasure	Religious Activities
<i>Child's Gender</i> (Ref. Male)									
Female	-		+	+	-	-	-	+	
<i>Family Income</i> Ref. Quintile 5 (high)									
Quintile 1 (low)	-					+			
Quintile 2	-								
Quintile 3	-								
Quintile 4									
<i>Mother's education</i> Ref. Degree									
Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
Less than degree				-				-	
<i>Family Social Class</i> Ref. Semi skilled / Unskilled Manual									
Professional / Managerial	+			+					
Non Manual	+								
<i>Family Type</i> Ref. Two Parent, 2+ children									
Single Parent, 1 child		+			+		-	-	-
Single Parent, 2+ children									-
Two Parent, 1 child					+			-	
<i>Mother working outside home</i>							+	-	

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Child's Characteristics	Physical sport	Board-game/cards	General play	Hobbies	Computer / Playstation etc.	Email/ MSN/ Bebo	TV/Video/ DVDs etc	Reading for pleasure	Religious Activities
<i>Child's Gender (Ref. Male)</i>									
Female	-		+	+	-	-	-	+	
<i>Family Income Ref. Quintile 5 (high)</i>									
Quintile 1 (low)	-					+			
Quintile 2	-								
Quintile 3	-								
Quintile 4									
<i>Mother's education Ref. Degree</i>									
Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
Less than degree				-				-	
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Single Parent, 1 child		+			+		-	-	-
Single Parent, 2+ children									-
Two Parent, 1 child					+			-	
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Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
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Quintile 3	-								
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Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
Less than degree				-				-	
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Quintile 1 (low)	-					+			
Quintile 2	-								
Quintile 3	-								
Quintile 4									
<i>Mother's education Ref. Degree</i>									
Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
Less than degree				-				-	
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Single Parent, 2+ children									-
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Quintile 1 (low)	-					+			
Quintile 2	-								
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Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
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Single Parent, 2+ children									-
Two Parent, 1 child					+			-	
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Female	-		+	+	-	-	-	+	
<i>Family Income Ref. Quintile 5 (high)</i>									
Quintile 1 (low)	-					+			
Quintile 2	-								
Quintile 3	-								
Quintile 4									
<i>Mother's education Ref. Degree</i>									
Lower secondary or less	+		-	-			+	-	
Leaving Certificate	+			-			+	-	
Less than degree				-				-	
<i>Family Social Class Ref. Semi skilled / Unskilled Manual</i>									
Professional / Managerial	+			+					
Non Manual	+								
<i>Family Type Ref. Two Parent, 2+ children</i>									
Single Parent, 1 child		+			+		-	-	-
Single Parent, 2+ children									-
Two Parent, 1 child					+			-	
<i>Mother working outside home</i>							+	-	



Summary

- **Weekday:**
 - 45% Sleep / Rest
 - 23% School
 - 7% Personal Care / Eating
 - 15% Discretionary / Leisure
- **Weekend –**
 - 50% Sleep / Rest
 - 9% Personal Care / Eating
 - 27% Discretionary / Leisure
- **Some gender differences in top level activities**
 - **Sleep / Rest** significant differences: but limited scale (5 mins)
 - **Personal/eating** significant : girls spend 3 minutes more than boys on weekdays
 - **Discretionary / Leisure Time** significant: boys 16 mins more than girls on weekdays (39 mins more at weekends)
 - **Chores / Shopping:** girls spend 4 mins more than boys (significant)



Summary

- **Some variations by mother's educational attainment**
- Children with graduate mothers record:
 - less time on Sleeping / Resting than others
 - more time on Personal Care / Eating (latter can largely be ascribed to variations in eating).
 - more time Travelling (to school and other)
 - more Discretionary / Leisure time (17 mins during the week).
- Children spend less time on homework during the week as level of mother's education increases
 - 40 mins for Graduates compared with 48 mins for those with Lower Secondary or less (significant).
- **Little systematic variation by Family Type**
- **Children whose mother works outside home:**
 - Sleep / Rest 6 mins less during the week (significant).
 - Spend 2 mins longer on chores / shopping during the week (significant)



Summary

Discretionary Time

- Overall, Discretionary / Leisure time accounts for 15% of 9-year-olds time during week and 27% at weekends.
 - weekdays – boys 15.7%, girls 14.6%
 - weekends – boys 28.6%, girls 25.9%
- Strong (and significant) gender differences in composition

Weekdays

- Boys spent 22 mins more on Physical sports and exercise
- 11 min more on Computer games/X-box/Play station and 4 mins more on TV/Videos/DVDs during the week
- Girls spent 12 mins more on general play and 6 mins more on hobbies.
- Girls spend 3 mins more on reading



Summary

Mother's education

- Children of graduate mothers spend more time on hobbies and reading and less on TV/Video/DVDs – 14 mins for child whose mother has lower secondary or less compared with 26 mins for those of graduate mothers.

Family status

- Boardgames played for significantly longer by children in lone parent families – also less reading for pleasure and time on religious activities

Mother working outside the home

- More time on TV/DVD/Videos

Next step is to examine relationship of time use to outcomes – educational, cognitive, emotional, behavioural and health.