

ADOLESCENTS' INVOLVEMENT IN STRUCTURED ACTIVITIES
AND PERCEPTIONS OF ROLE STRAIN

by

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Abstract

This study investigated the association between adolescents' involvement in structured activities and perceptions of role strain, and whether this relationship is moderated by age or the goodness of fit in decision making regarding involvement in structured activities ($N = 451$, 42% male, $n = 190$; female, 58% $n = 261$). The sample is comprised of students in grades 8 – 12 in a public school in a large western Canadian city (Mean age = 14.4, $SD = 1.4$). Hierarchical regression analyses, controlling for gender, revealed that most of the respondents are experiencing some degree of role strain, and that participation in structured activities is positively associated with their perceptions of role strain. On average, respondents engage in 3.5 to four hours of structured activities in a given 24-hour period. Age and decision making did not moderate the association between structured activities and role strain as expected. However, age was found to have a significant main effect on adolescents' perceptions of role strain. Contributions from this study assist in understanding how time spent in structured activities, while important for adolescent development, may be associated with role strain.

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DEDICATION

To my sister who has been there every step of the way

1 Introduction

1.1 Adolescents' Involvement in Structured Activities and Perceptions of Role Strain

Research indicates that western cultures believe time is finite, resulting in the perception of time scarcity (Marks, 1977). These perceptions are likely contributing to increases in time stress amongst Canadians over the past 10 years (Daly, 2000). Time stress appears to be associated with specific roles (domestic and occupation) for adults (Coverman, 1989). Typically, the outcomes of time stress are studied using a role framework to identify the impact of multiple roles on role strain and stress (Coverman, 1989; Hirsch & Rapkin, 1986). Although role strain is commonly studied in the context of adult work-family conflict (Hecht, 2001; Marks & MacDermid, 1996) it has yet to be examined from the perspective of adolescents. As a result of time stress, adolescents may also be faced with learning how to manage complex schedules (Daly, 1997). Therefore, the question of whether or not time use and scheduling is associated with role strain among adolescents needs to be addressed. The purpose of this study is to investigate the relationship between adolescents' activity scheduling and perceptions of role strain and whether age or the perception of involvement in decision making moderates this relationship.

1.2 Role Strain

Children and adolescents may experience negative consequences or "stress" from external influences (parental and educational expectations) and the need to achieve internal demands (i.e., fulfilling expectations) (Hackett & Lonborg, 1983). Bobo, Gilchrist, Elmer, Snow, and Schinke (1986) suggest that the stress experienced by children and adolescents may be better understood as a form of role strain. Unlike stress which tends to focus on unexpected or extraordinary events, strain "focuses on people engaged in ordinary -indeed required- pursuits" (Pearlin & Schooler, 1977, p. 3). Stress is typically identified by physiological responses of adaptation or change to a stressor (Selye, 1956) whereas, role strain manifests in aversive self-

evaluation, such as questioning of competence, negative self-appraisal and social distress (Kiecolt, 1994).

When individuals experience feelings of role strain (worry, anxiety and pressure from the self or others to perform) they seek to reduce these feelings through a process of “decision analysis” (Goode, 1960). A process in which role obligations are shifted to meet imposing demands may occur. As such, the amount of time and energy necessary to complete the role tasks is reallocated. This process may lead to a state of “over performing” (Goode, 1960) or putting too much effort into one set of role tasks at the expense of others. The cycle of role strain is perpetuated as the individual begins to feel high levels of strain in their concurrent roles. For example, adolescents have multiple roles (son/daughter, student, worker, friend, etc). Both parents and adolescents have conceptions of the expected tasks within the prescribed role of “student”. If adolescents’ grades do not meet the expectations of their parents or their own internal demands, more time and energy may be reallocated towards improving these grades. As a result, adolescents may “over perform” in the role of student at the expense of their other roles. As their grades increase the level of strain experienced by the role of student will decrease and a subsequent increase may occur in other roles in which pressure towards role obligations are unmet. According to Marks and MacDermid (1996), role strain occurs while navigating the numerous tasks and activities put forth by combinations of various roles. Therefore, role strain is not based on any one specific role, but emerges from the individuals’ entire role system.

Role strain results from the amount of conflict that occurs when “the absolute volume of tasks for a given role exceeds available time and energy” to perform those tasks (Reilly, 1982, p. 408). It is speculated that highly scheduled adolescents will experience role strain because of the conflict that occurs. Role conflict arises when an attempt to meet the demands (role tasks) within each role cannot be adequately met.

It is conceivable that adolescents' experience of role strain is affected by the level of choice regarding the roles that they undertake. Adolescents who perceive a lack of control surrounding role choice may experience greater conflict. Some of the roles adolescents assume may be stipulated by parental directives (e.g., role of piano student, baseball player, or babysitter) rather than by personal choice (Marks & MacDermid, 1996). Conflict can arise from the amount of time and energy needed to accomplish a set of role tasks. Thus, it is not necessarily the multiplicity of roles that adolescents engage in but rather the mental or physical stress produced by the demands of fulfilling the role tasks.

1.3 Adolescents' Involvement in Extracurricular Activities

Within the literature on adolescent time use, some inconsistencies exist as to what constitutes structured and unstructured activities. By definition involvement in a sports team is a structured activity, because of the formalized arrangement of the activity and the amount of parents' involvement in scheduling these activities. However, participation in these activities is often referred to as leisure. It is speculated that because sports activities engender a component of play or fun, the organizational structure of the activity may be overlooked. Nonetheless, involvement in team sports should not be confused with the discretionary choice of playing a game during leisure time activities. There appears to be less confusion surrounding extracurricular academic lessons, such as music, art, drama, or religious studies. These activities are considered non-leisure activities due to the structure of the learning environment. Regardless, if both types of activities are arranged through parental directive both activities can be considered as structured.

Structured activities are extracurricular activities (sports teams, dance classes, religious studies, or gymnastic clubs, etc.) and supplemental to educational studies (Larson, 2000). Structured activities are typically arranged through parental initiative but for the most part,

adolescents are willing participants (Larson, 2000). However, participation in structured activities is considered a non-discretionary use of time. The commonality amongst the various types of structured activities is the emphasis on structure, rules and goals. Unstructured activities (i.e., hanging out with friends, watching television, listening to music) contain a discretionary component. Hofferth and Sandberg (2001) indicate that as age increases the amount of discretionary time available for unstructured activities decreases. The age related increase in non-discretionary time can be directly attributed to the amount of time children and adolescents spend in school.

The amount of time adolescents spend in structured and unstructured activities is important in terms of developmental outcomes. Several positive outcomes have been identified for adolescents who are involved in structured activities. Adolescents learn independence, self-sufficiency, and social competence, resulting in psychologically dynamic adults (Larson, 2000) whereas; copious amounts of unstructured activities have been linked to both internalizing and externalizing behavior (Agnew, 1989; Larson, 2001). In contrast, Verma and Sharma (2003) found an increase in internalizing behaviors (i.e., depression and clinical problems) associated with an increase in structured activities. Therefore, it is assumed that a balance between time spent in structured activity and time spent in unstructured activity is necessary for optimal development.

Adolescents who are overly scheduled may exhibit a decreased sense of self-reliance and independence, and increased feeling of stress, and inadequacy (Rosenfeld & Wise, 2000) and time pressure (Mittingly & Sayer, 2006). The result is the perceptions of “time scarcity”, a deficit of physical energy to accomplish demands (Marks, 1977), and “time crunch”, when the demands of the activity outweigh the time available to meet the demands (Lochhead, 2006).

The relationship between time and time pressure has been linked to the type of activities engaged during both structured and unstructured activities. According to Mittingly and Sayer (2006), attitudes and beliefs surrounding leisure time have changed over the past 20 years to reflect a faster pace of life in western cultures. Furthermore, these authors suggest the philosophy of rest and relaxation has been replaced with the notion that leisure time should be “action packed”. In order to get the most value out of leisure time, planning or participating in unstructured activities requires coordination and organization (Mittingly & Sayer, 2006). Consequently unstructured activities begin to share the same characteristic of organization epitomized by structured activities. It is speculated that the emphasis on organization and achievement during both structured and unstructured activities may promote a sense of time urgency.

1.4 Adolescents' Involvement in Decision Making

The process of individuation is prominent during the period of adolescence (Holmbeck & Leake, 1999). During this period, a mismatch between parenting behaviors and adolescents' developmental needs can occur (Holmbeck, Paikoff, Brooks-Gunn, 1995). Most noticeable are discrepancies in authority of decision making regarding the self. The interplay between shifting authority in decision-making from parents to adolescents is constructed through differing perspectives of readiness. According to Bosma et al. (1993), parents use their expectations of development as a means of influencing their opinions of their adolescents' readiness to take on decision making tasks. A hierarchy of decision making contexts may exist in which parents are more willing to relinquish authority to adolescents than children. Parents may be more willing to permit decision making power over the personal domain. The personal domain encompasses discretion for preferences and choices regarding friends and clothing. Accordingly, as children age the personal domain expands beyond choices of friends and clothing to include some

decisions on activities (Smetana, 1999). However, a distinction has not been made as to whether or not this increased authority to make decisions on personal activities extends beyond leisure activities. Parents may perceive jurisdiction over structured activities because of the importance for future outcomes or because of the financial cost associated with these activities.

The skill of decision making is facilitated through direct experience and practice (Mann et al., 1989). Optimal development is believed to occur as parents begin to relinquish control allowing adolescents more autonomy in decisions regarding both the self and the family (DeRoma, Lassiter, & Davis, 2004; Jacobs, Bennett, & Flanagan, 1993). Taylor, Adelman, and Kaser-Boyd (1984) found that, on average, the period of middle adolescence is appropriate for autonomy in major personal decisions. These researchers also indicate an association between this developmental period and an increase in competence for making decisions. Smetana supports this idea by suggesting that early to mid-adolescence is when most youth feel competent to make decisions surrounding personal issues (2000; 2002). Whether or not the adolescent feels competent to make decisions, several developmental gaps may exist, which affects their actual ability to do so. Metacognitive functioning plays an important role in developing the ability to make decisions. However, in addition to cognitive capability adolescents require *experiential* opportunities, to make decisions (Jacobs & Klaczynski, 2002). Therefore, “a gap between adolescents’ competence and involvement in decision making” (Mann et al., 1989, p. 273) may also be present. These developmental gaps may reflect a clash between the adolescents’ desire to make decisions and their developmental ability to make decisions on personal issues. As such, a goodness of fit model (Lerner, 1985; Eccles, Buchanan, Flanagan, Fuligni, Midgley & Yee, 1991) is a useful in identifying how development is either hindered or facilitated by parents’ abilities to recognize the changing needs of their adolescents.

From a goodness of fit standpoint, the developmental gaps that exist between the adolescents' desire and ability to make decisions, reflects a poor stage environment fit. A poor fit equates to a lack of congruence between adolescents' chronologic age "stage" and the developmental demands of the environment and experiences. The resulting developmental mismatch can have negative consequences for adolescents. When congruency exists between adolescents' chronologic age "stage" of development and the developmental demands of the environment and experiences, the fit is considered to be good (Eccles et al. ,1993) and the developmental outcomes are considered positive for adolescents.

Researchers (Juang, Lerner, McKinney & von Eye, 1999) have begun to examine the "goodness of fit" between parental expectations and achievements of the adolescents in educational and socio-emotional domains. There are several benefits to using a framework that incorporates the notion of goodness of fit. This type of framework allows researchers to reflect upon age-related abilities of adolescents in the context of the parent-adolescent relationship. Bosma et al. (1993, p, 278) suggests "an age-graded context" facilitates an understanding of adolescents' burgeoning need for independence in decision making. Furthermore, compatibility between the opportunity to make decisions and an ability to make decisions is necessary for development (Hunt, 1975). Therefore, a "goodness of fit model" permits an interpretation of how adolescents evaluate the relationship between their personal expectations of self-development and their parents' expectations as it relates to decision-making about daily activities and schedules. Eccles et al. (1991) have suggested that a mismatch between what the adolescent wants and what their parents want for them often results in a poor fit. Because the goodness of fit model is based upon a maturational framework, optimal development is based upon expansion of increased individuality, allowing for autonomy in decision making.

With age, “parent only” decisions, common during childhood, give way to “youth only” decisions during later adolescence (Dornbusch, Ritter, Mont-Reynaud, & Chen, 1990). Research on decision making indicates that developmentally synchronized age-related processes and shifting authority in decision making are advantageous. Parents who recognize the importance of age-graded self-governance typically permit adolescents to make independent decisions within the personal domain (Smetana, Campione-Barr, & Daddis, 2004). The perception of legitimacy of decision making is salient to adolescent development and this current study. Also important to the current study is the frequency of decision making perceive their parents allow. Regardless of the agreement between parents and adolescents as to who makes the most decisions, adolescents who perceive their parents as making decisions for them without their input may experience feelings of lack of control and lack of control is a key component of role strain. Lack of control is a key component of role strain because adolescents’ may experience a deficit of choice surrounding the roles in which they engage. Role strain theory suggests that when personal control over role tasks is believed to be limited, an increase in role strain may arise (Fenzel, 1989).

1.5 The Present Study

In summary, role strain may occur during adolescence as a function of daily activity scheduling. It has been suggested that as the lives of adolescents begin to reflect rigid patterns of time use, stress may be experienced in the form of role strain (Barnett, 2002). Additionally, adolescents who perceive their parents as having too much control (poor fit) over decisions on daily structured activities may also experience role strain (Juang et al., 1999). Whether or not role strain is inevitable and unavoidable, as suggested by Goode (1960), is debatable. However, the way in which role strain is managed by adolescents may depend upon individual difference (Marks, 1977). One primary difference may be related to age. With age, individuals may be

provided with increasing opportunity to practice managing the various roles in their life. Therefore, age may be an important moderator in the ability to handle multiple structured activities.

This investigation examines the relationship between structured activities and adolescents' perceptions of role strain. Also examined is the amount of perceived control adolescents have in making decisions related to daily scheduling of structured activities and whether or not these relationships are influenced by their chronological age. As such, this study seeks to answer the following questions: (1) Does the amount of participation in structured activities influence adolescents' perception of role strain? (2) Are adolescents' perceptions of role strain exacerbated by their perceived lack of involvement and their parents over involvement in the decision-making process surrounding structured activities? (3) Does the age of the adolescent moderate associations between the amount of participation in structured activities and role strain? and (4) do age and goodness of fit of decision making combine to moderate the relationship between involvement in structured activities and perceptions of role strain?

Guided by empirical and theoretical literature, the following four hypotheses will be tested:

- H1. Involvement/participation in structured activities is positively associated with adolescents' perceived role strain.
- H2. The relationship between involvement in structured activities and perceived role strain is moderated by the context of parent-adolescent decision making. When parent-adolescent decision making is congruent, the association between adolescents' involvement in structured activity and perceptions of role strain is weaker than if there is a lack of congruence.
- H3. The relationship between involvement in structured activities and perceived role strain is moderated by the age of the adolescent. As age of the adolescent increases the

relationship between involvement in structured activities and perceived role strain is weaker.

- H4. This study will also attempt to address whether the moderating effect of decision making on adolescents' involvement in structured activities and perceptions of role strain is dependent upon the chronological age of the adolescent, such that younger adolescents are likely to experience less role strain as a function of poor fit in decision making than older adolescents.

2 Method

2.1 Participants

The sample was comprised of students ($N = 451$) in grades 8 – 12 in a public school in a large western Canadian city. Respondents' age ranged from 12 to 18 years (Mean age = 14.4, $SD = 1.4$). Forty two percent of the respondents' were male ($n = 190$) and 58% were female ($n = 261$). The respondents varied in ethnicity, with 58.1% being Caucasian/European ($n = 262$), 29.3%, East Asian ($n = 132$) and 4.4% other ($n = 82$) comprised of African ($n = 5$), South Asian ($n = 4$), South East Asian ($n = 9$), First Nations ($n = 14$), and Latino/Hispanic ($n = 5$). Twenty respondents did not indicate their ethnicity (4.4%).

Respondents were asked to indicate their family living situation. Three hundred and thirty-one (72%) respondents live in intact families (e.g. married or common-law parents), the most prevalent family configuration within the sample. Seventy respondents live with their mother only (15%), and nine live with their father only (2%). The remaining 11% of respondents live in various family configurations, including living with divorced parents equally ($n = 9$; 2%), living with other relatives ($n = 5$; 1%), living with mom and her partner ($n = 20$; 4%), and living with dad and his partner ($n = 20$; 4%).

2.2 Procedures

The data analyzed in this study are from Wave 2 of a five-year cohort sequential study on Adolescents Student Life. Respondents provided data on their perceptions of role strain, daily activities outside of school hours, current age, and their desired level of involvement in decisions regarding themselves. With the cooperation and consent of the School Board, school administration, and parents, consent forms (see Appendix A) were distributed by the school administration to students during the first week of school. Parents/guardians were asked to return written consent or non-consent for their child(ren)'s participation prior to administration of the survey. An incentive of a pizza party for the three homeroom classes with the highest response rate was used to encourage students to return consent forms regardless of parents/guardians' approval or refusal for their children to participate in the study. Seven hundred and seventy-two consent forms were returned (585 with consent and 187 without consent) for an overall response rate of 65%.

Data collection was conducted via an online survey in a school computer lab. Trained researchers administered the survey to the students during a regularly scheduled social studies class (one-hour and 20 minute class period). Students with parental permission to participate in the survey were informed of the voluntary nature of the study and how their identities would be protected prior to commencement of the survey. Completion of the survey indicated students' assent to participate in the research. Students who participated in the survey did not miss instructional time and students who did not participate were provided the same time as a study block.

Upon completion of the data collection, survey data was downloaded from the school's computer server to The University of British Columbia where access was restricted to the primary researcher and research assistants.

2.3 Measures

2.3.1 Demographic Information

Information on adolescents' gender, who adolescents live with, and cultural background were gathered in order to describe the sample (see Appendix B).

2.3.2 Role Overload Scale

A revised version of the Role Overload Scale (Reilly, 1982) was used to assess respondents' perceptions of role strain. The original 13-item scale was designed to determine working wives perceptions of role strain and family expectations. For the purpose of this study, eight items were removed because they were too specific to working wives (I seem to have more commitments to overcome than some of the other wives I know). The five items (see Appendix C) included in this study address role strain from a more general perspective. Using a 5-point Likert type scale (e.g. 1 = Definitely not like me; 3 = Somewhat like me; 5 = Definitely like me) respondents were asked to rate five statements (e.g. "much of the time I feel I have more work to do than I can handle"). An index score (of 1 to 5) was created for each respondent by taking the mean of the five items. The index scores are normally distributed (skew = .03, kurtosis = -.21) and have a Cronbach's alpha of (.76).

2.3.3 Adolescent's Self-Reported Time Use and Activity Measure

A measure of time use was created to gain information on how adolescents use their time during a 24 hour period (see Appendix D). A day of the week (Monday, Tuesday, Wednesday or Thursday) was randomly assigned to each respondent by the computer program. Because Friday is a half day of school for students, it was left out of the random day assignment to avoid the need to administer varied timetables. Respondents were asked to fill out a time table beginning at mid-night of their assigned day, and following one-hour time increments until the commencement of school at 8:45 am. The timetable resumed after school at 3:15 pm and

continued in one-hour increments until midnight. Respondents were asked to fill in the activity they typically engage in (e.g., sleeping, eating, homework/studying, and extra curricular activities).

Each activity was coded into one of four categories (see Appendix E): structured activities, unstructured activities, personal activities, and sleep. Structured activities are any activity that has a central component of learning, instruction, coaching or skill acquisition as the primary focus (e.g., music, sports, academic lessons, prayers/religious studies, work, homework, studying, etc). Unstructured activities are, in essence, the opposite of structured activities. The emphasis is not on learning but leisure time (e.g., watching t.v., video games, chatting, hanging out with friends, etc). Personal activities are behaviors focused on self-care (e.g., bathing, eating). The category of sleeping only included time spent asleep, and did not include preparing for bed or reading in bed.

A person unfamiliar with the purpose of this study was trained to employ the coding system according to the coding manual (see Appendix F). Reliability of the coding was assessed by randomly selecting 20% of the cases and having the independent coder code the activities. Inter-rater agreement was $\kappa = .96$. A kappa of .70 or higher reflects a good reliability, as suggested by Bakeman and Gottman (1986).

Based on the methodology from a similar study (see Hofferth & Sandberg, 1991), time use was converted to a proportion of the day. Because there are differences in the amount of time respondents' sleep, the amount of non-sleep hours in a day varies. Therefore, converting the activity segments into proportions allows for equal comparison of involvement in structured activities.

The 24 hours were broken into activity segments. For example, the normal school day consists of 6.5 hours, or 27% of the day. If a respondent reports sleeping 9-hours during the

night, then approximately 37.5% of the total day's hours are spent sleeping. The remaining 8.5 hours, or 35.5% of the day's total are categorized into structured activities, unstructured activities and personal activities. For the purpose of this study only the proportion of time involved in structured activity was used in the data analysis. The distribution of scores for the percentage of time involved in structured activities is normal (skew = .36, kurtosis = -.28)

2.3.4 Age

Respondents were asked to report their current age in years, and their birth date. The age in years is used for all analyses (see Appendix B).

2.3.5 Decision Making Scale

Taken from Juang, Lerner, McKinney and von Eye (1999) the decision making scale measures the goodness of fit between adolescents' desire to make decisions and the amount of input into decisions they perceive their parents' allow was measured using two pairs of items (see Appendix G). The first index of decision making is comprised of one item assessing adolescents' desired level of control during decision making ("in general, how do you think you and your parents ought to arrive at decisions that concern you?"). The second item assesses adolescents' perceived level of actual control ("in general, how do you and your parents arrive at decisions that concern you?"). Using a 5-point Likert type scale, responses ranged from 1 = my parents tell me what to do to 5 = my parents let me decide what to do. For the current sample, a significant correlation between these two items was found ($r = .51, p < .01$).

The second index of decision making measured is comprised of one item assessing the frequency of adolescents' involvement in decision making ("how often do you take part in family decisions that concern you?"). The second item assesses the adolescents' desired level of involvement in decisions concerning them ("how often do you think you ought to take part in

family decisions that concern you?”). Responses for the two items ranged from 1 = never to 5 = always. A significant correlation between these two items was found ($r = .72, p < .001$).

Two separate discrepancy scores (one for each decision making index) were created for each respondent by subtracting the respondents' perceived level of parental control from their desired level of control. For example, if a respondent answers “5 = always” to “how often do you think you ought to take part in family decisions that concern you?” and “2 = sometimes” to “how often do you take part in family decisions that concern you?” the discrepancy score is calculated as $5 - 2 = 3$. Scores above and below zero indicate a “poor fit” whereas scores equal to zero indicate a “good fit” as there is (zero) no discrepancy.

There are three possible response scenarios for the first decision making index. Two poor-fit scenarios include a score indicating that respondents' desired level of control for decision making is higher than their perceived level of control, or a score indicating that respondents' desired level of control of decision making is lower than their perceived level of control. One good fit scenario includes the respondents' perceived level of control for decision making matching their desired level of control.

The three possible response scenarios were dummy coded. Two separate variables were created to focus on the two types of poor fit. First, poor fit with less control than desired was coded 1, with all other cases coded as 0. This variable was labeled “ought to have more control”. Second, cases with poor fit due to more control in decision making than was desired were coded 1, with all other cases coded as 0. This variable was labeled “ought to have less control”. This process was repeated for the second index of decision making.

Three response scenarios were also possible for the second decision making index. Two poor-fit scenarios include a score indicating the respondents' desire to be more involved in family decisions concerning them or a score indicating the respondents' desire to be less

involved in family decision involving them, and one good fit scenario indicating the respondents' perceived level of involvement in decision making matching their desired level of involvement. Two separate variables were created for the two types of poor fit. First, poor fit with less involvement than desired was coded 1, with all other cases coded as 0. This variable was labeled "desire to be more involved". Second, cases with poor fit due to more involvement than was desired were coded 1, with all other cases coded as 0. This variable was labeled "desire to be less involved". In total four dummy variables were created, two for each index to capture both a good-fit and poor-fit scores. The scores for each dummy variable are skewed: desire to have more control, skew = -3.2, kurtosis = 8.2; ought to have less control, skew = 3.2, kurtosis 15.5; should be more involved, skew = -4.2, kurtosis = 15.5, and should be less involved, skew = 4.2, kurtosis = 8.2.

3 Results

3.1 Preliminary Analysis

Preliminary analyses were conducted to determine what proportion of the day respondents spend in structured activities. Figure 3.1 represents the percentage distribution of activities during non-sleep, non-school hours of the day. On average, respondents spent 3.5 to 4 hours (34%) of their non-sleep, non-school hours engaged in structured activities.

Mean scores, standard deviations, and intercorrelations for each of the measures used in this study are presented in Table 3.1. Because there is only a moderate correlation between involvement in structured activities and perceptions of role strain, a test of a quadratic relationship was conducted using structured activities as the independent variable and the role strain index as the dependent variable (see Table 3.2). Figure 3.2 illustrates both the curvilinear [$F(2,446) = 4.45, p = .012$] and linear models [$F(1,447) = 5.78, p = .017$]. As the figure illustrates, when the proportion of time involved in structured activities is over 50% of non-

school/non-sleep time, respondents' perceptions of role strain increase, although the beta is not statistically significant.

Figure 3.1

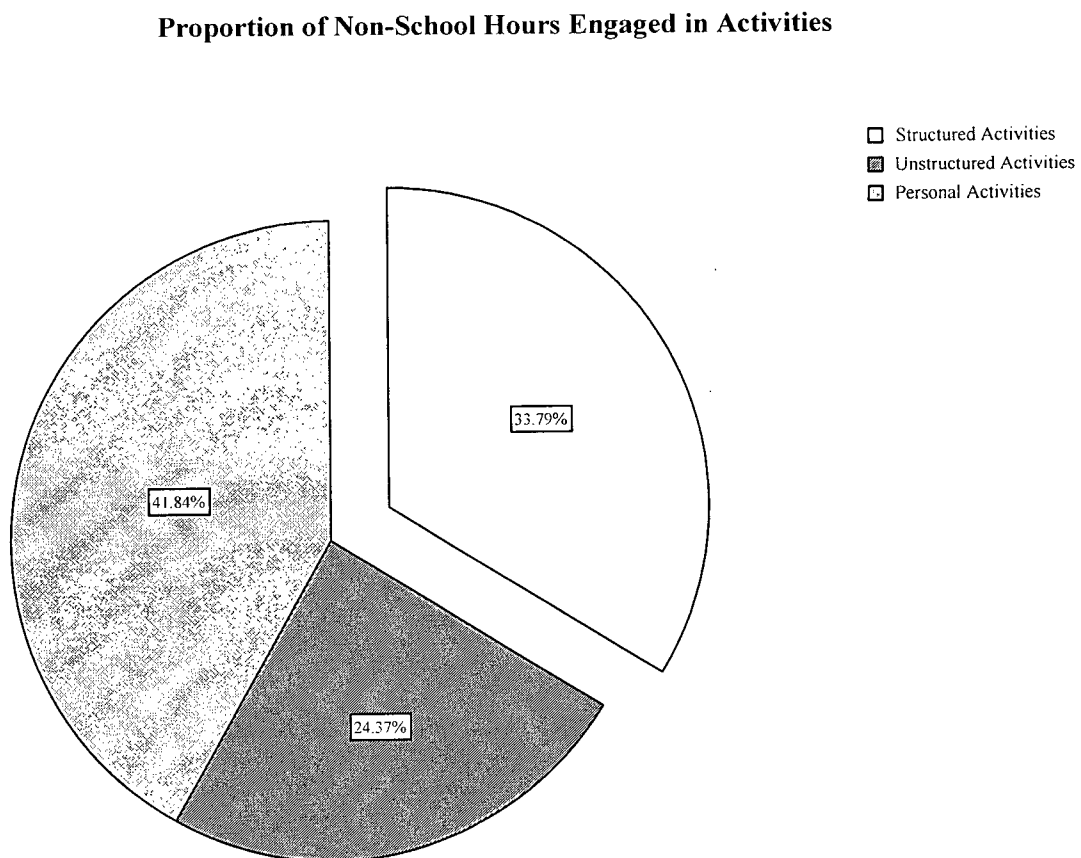


Table 3.1

Means, Standard Deviations, and Intercorrelations between Sex, Age, Proportion of Time in Structured Activities, and Perceptions of Role Strain and Decision Making (n= 451)

Variable	Mean	SD	Sex	Age	Structured Activities	Role Strain	Decision Making		
							Desire More Control	Desire Less Control	Desire More Involvement
Sex	.58	.95							
Age	14.43	1.40	-.02						
Structured Activities	.34	.17	-.00	.21**					
Role Strain	3.00	.81	.17	.16**	.11*				
Desire to Have More Control	-	.27	-.03	-.03	-.06	-.02			
Desire to Have Less Control	-	.27	.03	.03	.06	.02	-.10*		
Desire More Involvement	-	.22	.14**	-.04	-.04	.01	.10*	-.10*	
Desire Less Involvement	-	.22	-.14**	.04	.04	-.01	-.10*	.10*	-1.00**

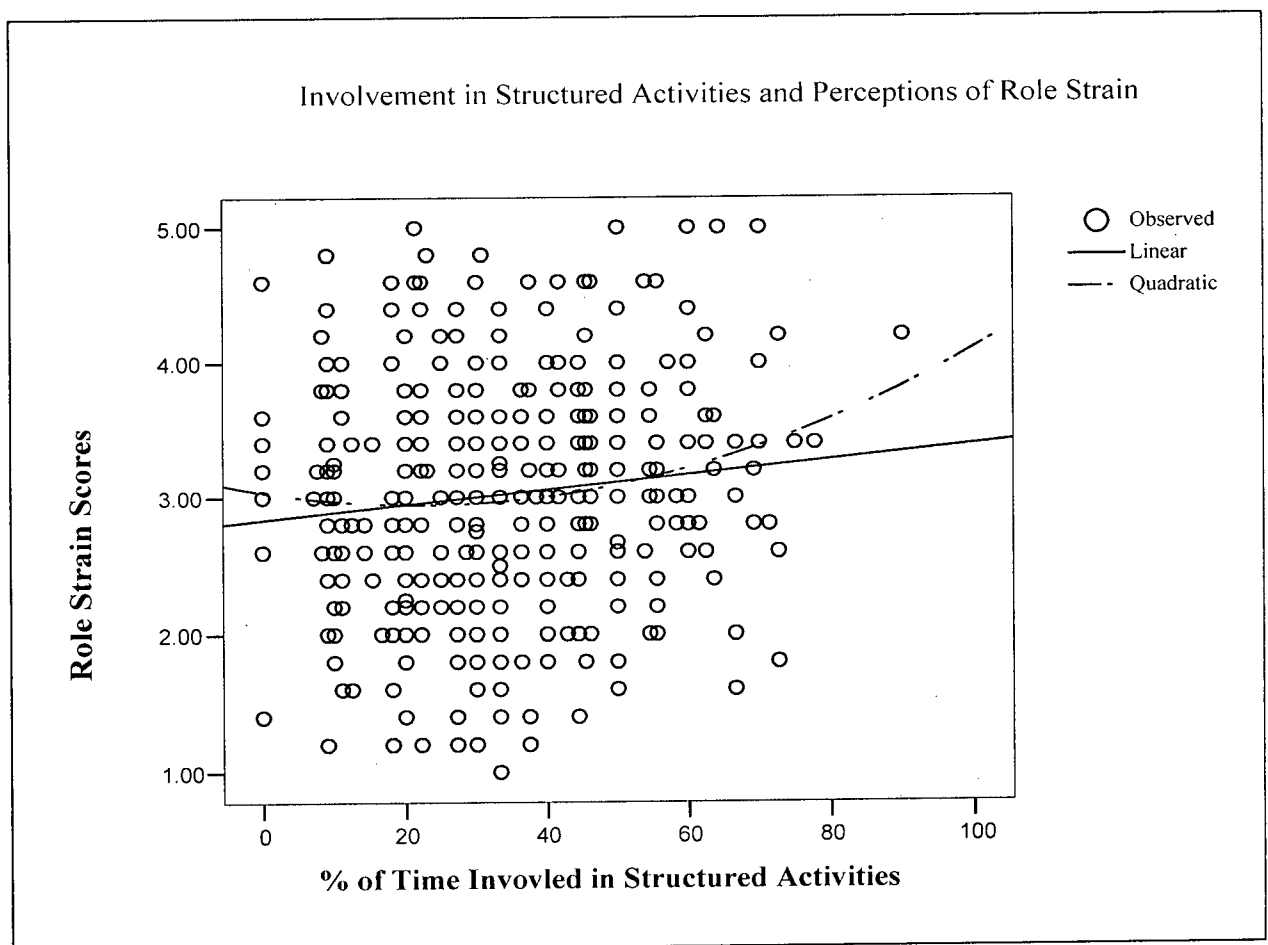
Note. Sex was coded as 0 = male, and 1 = female

* $p < .05$, ** $p < .01$.

Table 3.2

Curve Estimation Regression Predicting Perception of Role Strain and Involvement in Structured Activities (n = 441)

	R^2	B	$SE\ B$	β	p
Structured Activities	.01	-.85	.83	-.18	.304
Structured Activities Squared	.02	1.90	1.00	.30	.079

Figure 3.2

There is a strong correlation between the decision making dummy variables (see Table 3.1). This may be due to most respondents reporting a good-fit in decision making (a score of zero) with only a small proportion of the sample reporting a poor-fit (above or below zero).

Therefore, to rule out the possibility of multicollinearity, the decision making variables were entered into separate regressions in the primary analyses of this study: desire to be less involved in decision making ($n=430$); desire to be more involved in decision making ($n=430$); desire to be more involved in family decisions regarding the self ($n=425$), and desire to be less involved in family decisions regarding the self ($n=425$).

3.2 Primary Analysis

Hierarchical ordinary least squares (OLS) regressions were used to assess the relationship between adolescents' involvement in structured activities and perceptions of role strain. Additionally, the moderating effects of age of the adolescent and decision making with parents were examined. Involvements in structured activities, age, and role strain variables (but not dummied variables) were grand mean centered to prepare for regressions. According to Aiken and West, (1991), grand mean centering helps protect against multicollinearity of first order and interaction variables. The following variables were included in each regression: gender was entered as a control variable on the first step; structured activities, age, and one of four decision making variables were entered on the second step; two-way interactions (structured activities x decision making and age x decision making) were entered on the third step; and a three-way interaction (structured activity x age x decision making) was entered on the fourth step.

A step down process was used to simplify the final equations for each regression. This means that tables included in this study are presented at the highest step terms indicating the contribution of the independent variable on the dependent variable were significant. Since there were no significant interactions present, further probing of these variables was not necessary.

The first regression (see Table 3.3) included the decision making variable of desire to be more involved in decision making. The model was significant on the second step [$F(3, 417) = 4.18, p = .006$] but not on subsequent steps. The relationship between involvement in structured

activities and perceptions of role strain was in the hypothesized direction but not significant, Interestingly, although age was hypothesized to moderate the relationship between adolescents' involvement in structured activities and perceptions of role strain, age was found to have a direct effect on perceptions of role strain.

Table 3.3

Hierarchical Regression Predicting Role Strain from Involvement in Structured Activities and Desire to be More Involved in Decision Making and Age (n = 430)

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Sex	.01	.04	.01	.768
Step 2				
Sex	.01	.04	.02	.722
Age	.08	.03	.13*	.008
Structured activities	.41	.24	.08	.088
Desire to be more involved	-.04	.15	-.01	.793

Note. $R^2 = .000$ for Step 1, $\Delta R^2 = .029$ for Step 2.

The second regression included the decision making variable of desire to be less involved in decision making. This model was also significant on the second step [$F(3, 417) = 4.18, p = .006$] but not on subsequent steps (see Table 3.4). As in the previous regression, one main effect was found. The results indicate that both involvement in structured activities and age are positively associated with perceptions of role strain but structured activities is not statistically significant. No significant interactions were found.

Table 3.4

Hierarchical Regression Predicting Role Strain from Involvement in Structured Activities and Desire to be Less Involved in Decision Making and Age (n = 430)

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Sex	.01	.04	.01	.793
Step 2				
Sex	.01	.04	.02	.722
Age	.08	.03	.13*	.008
Structured activities	.41	.22	.08	.088
Desire to be less involved	.04	.15	.01	.793

Note. $R^2 = .000$ for Step 1, $\Delta R^2 = .029$ for Step 2.

The third regression (see Table 3.5) included the decision making variable of desire to be less involved in family decisions concerning the self. This model was also significant on the second step [$F(4, 412) = 4.57, p = .004$]. The results indicated that both involvement in structured activities and age have positive main effects on perceptions of role strain and no significant interactions are present.

Table 3.5

Hierarchical Regression Predicting Role Strain from Involvement in Structured Activities and Desire to be Less Involved in Family Decision Making Regarding the Self and Age (n = 425)

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Sex	.01	.04	.01	.785
Step 2				
Sex	.01	.04	.01	.779
Age	.07	.03	.13*	.010
Structured activities	.50	.24	.10*	.042
Desire for less involvement	-.10	.19	-.03	.588

Note. $R^2 = .000$ for Step 1, $\Delta R^2 = .032$ for Step 2.

The final regression included the decision making variable desire to be more involved in family decisions concerning the self (see Table 3.6). Main effects of age and structured activities were found on the second step [$F(4, 412) = 4.57, p = .004$]. Interaction terms were not statistically significant.

Table 3.6

Hierarchical Regression Predicting Role Strain from Involvement in Structured Activities and Desire to be More Involved in Family Decision Making Regarding the Self and Age (n = 425)

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Step 1				
Sex	.01	.04	.01	.785
Step 2				
Sex	.011	.041	.014	.779
Age	.07	.03	.13*	.010
Structured activities	.50	.24	.10*	.042
Desire for more involvement	.10	.19	.03	.588

Note. $R^2 = .000$ for Step 1, $\Delta R^2 = .032$ for Step 2.

4 Discussion

Adolescents' time use and scheduling has been a topic of particular interest for the past two decades (Larson, 2001). One of the prominent themes in time use literature is the importance of adolescents' involvement in structured activities for positive development. Research indicates that involvement in structured activities outside of school hours is positively associated with academic achievement and self-development (Dunn et al., 2003; Larson & Seepersad, 2003; Silbereisen, 2003). However, within the literature on adolescents' time use there is a growing body of evidence that suggests a positive relationship exists between the amount of time adolescents spent in structured activities and internalizing behaviors, such as depression (Verma & Sharma, 2003). This study investigated the association between adolescents' involvement in structured activities and perceptions of role strain and whether or not this relationship is moderated by age or involvement in decisions regarding the self.

Preliminary analyses revealed that on average respondents engage in 3.5 to 4 hours of structured activities in a given 24-hour period. Although not all hypotheses were supported, two important findings emerged. First, adolescents' participation in structured activities is positively associated with their perceptions of role strain. Second, age does not moderate the relationship between involvement in structured activities and perceptions of role strain; rather age is directly related to adolescents' perceptions of role strain.

The results indicate that most respondents are experiencing some degree of role strain (recall the mean score is at the mid-point of a 5-point scale). However when respondents' indicate that 50% or more of their non-sleep and non-school hours are spent in structured activities, perceptions of role strain tend to increase. Therefore, it is not structured activities alone that contribute to role strain, but the amount of involvement in structured activities beyond a critical point. This finding supports the literature which suggests a balance must occur between too and too little time spent involved in structured activities (Silbereisen, 2003). Being able to identify a critical point in future research will be beneficial to understanding role strain during the period of adolescence. This knowledge will be useful in determining when too much involvement in structured activities may become detrimental for adolescent development.

There are, however, some limitations that lend caution to conclusions about the findings of this study. Current literature suggests that as adolescents age, time spent in an unstructured activity is replaced by time spent in structured activities (Larson & Seepersad, 2003). This study hypothesized that the relationship between involvement in structured activities and perceptions of role strain is moderated by the age of the adolescent. On the contrary, age does not moderate the relationship but has a direct effect upon role strain. In all four regressions age is positively significantly associated with role strain. Therefore, there remains a question of spuriousness related to age that must be addressed.

At this point, it cannot be determined if age is an independent variable affecting role strain, or if age is a proxy for some other developmental or academic change experienced by the respondents, which is affecting their perceptions of role strain. Several opportunities within this province open up to adolescents between the ages of 15 and 16, including the ability to work for pay. Previous findings suggest that with age the number of roles increase, such as work for pay (Desmarias & Curtis, 1999; Eccles & Barber, 1999; Larson & Verma, 1999), and it plausible that with the responsibility of more roles and demands to meet the role tasks, comes more role strain. Additionally, when respondents enter into grade 10, around the age of 15 or 16, one of the biggest changes to occur academically is the instatement of compulsory provincial examinations. Furthermore, as adolescents enter the final three years of high school (grades 10, 11 and 12) emphasis is placed on university and occupational preparation. During these years, educational demands require adolescents to contend with "complex material" requiring more physical time, but also greater cognitive comprehension (Larson & Verma, 2003). Logically, distress experienced during adolescence is often attributed to academic stress (de Bruyn, 2005). Respondents' may perceive greater role strain during adolescence, however; it may be better related to changes in their academic work load, rather than being a factor of age per se.

As with age, decision making was hypothesized to moderate the relationship between involvement in structured activities and perceptions of roles. The results of this study do not support this hypothesis. A poor distribution of scores on the decision making variables is problematic because it diminishes the moderating potential of this variable. On average, the respondents reported a good fit between their desire to be involved in decisions and a good fit between what they perceive their parents to allow regarding decision making. Because most of the respondents indicate a good fit, it becomes difficult to find statistical significance for the

moderating effect of decision making on involvement in structured activities and perceptions of role strain.

Deciphering who makes the decisions regarding involvement in structured activities may be a more complicated process than originally anticipated. It is possible that deciding what structured activities adolescents are involved in is part of a cooperative negotiation process between parents and adolescents over a period of time. According to Gauvain and Perez (2005), families engage in a co-construction of decisions for future activities. The method by which parents and adolescents come to decide on involvement in structured activities may resemble a dialectic process rather than overt control by the parent. According to Rogoff (1995), both parents and adolescent contribute to this process; parents facilitate development by engaging adolescents in activities that are somewhat beyond their current level of competence. As such, the amount of involvement adolescents have in decision making is expected to increase as both their skill and experience in make decisions also increases. This cooperative negotiation process, between parents and adolescents, represents a good fit which may help to explain why decision making does not moderate the relationship between structured activities and role strain.

Although the cross-sectional design of this study was useful in determining an association between adolescents' involvement in structured activities and their perceptions of role strain, a longitudinal design may be able to provide further information on changes that occur over time. A longitudinal study may be able to address the problem of spuriousness related to age. With age, consideration must be given to the educational efficacy of the respondent. Those who do well in school may not perceive as much role strain as those who do not. Students who feel they have the capacity to cope with added demands of provincial academic examinations may not express the same effects of strain as those who tend to be more anxious or lack examination experience. A recommendation for future research is to consider the time of the year in which

the survey is conducted. It may prove beneficial to survey students at various times during the school year, including pre and post provincial academic examination. By collecting data throughout the school year, fluctuations in role strain may become more apparent.

Alternatively, adolescents may experience role strain as a result of changes in both the quantity and quality of their roles. Future research should consider the possibility of changing role system throughout the school year. This would also provide an opportunity to assess the perception of intensity of the role demands in addition to changes that may occur in the scheduling of structured activities throughout the school year. If roles or role demands fluctuate, differing levels of role strain may be perceived. These changing levels may be a result of the quantity of the roles in which adolescents are engaging such as an increase in responsibility undertaken by special projects (Marks & MacDermid, 1996). For example, adolescents may be accustomed to their role as music student, however, as the annual fundraiser or Christmas concert approaches, an increase in role strain may be perceived as the tasks within that given role also increase. This resonates back to Reilly's (1982) original research which implicates the quality of the role enactment as connected to perceptions of role strain. Bearing in mind that Reilly suggests potential role problems arise as the available time and energy to perform the tasks exceeds what the adolescent perceives to be available to them. At certain times of the academic year, adolescents may perceive role strain because they feel overwhelmed by the role tasks at that given point. Therefore what may be occurring is a culmination of daily hassles which may require different coping skills necessary to fulfill the role demands. Adolescents who have acquired these skills may perceive less role strain.

Research on daily hassles (Bobo et al., 1986) indicates adolescents experience stress from negotiating the various roles in which they partake. It has also been suggested that measuring the cumulative effect of daily hassles is one way of assessing role strain for adolescents. Measuring

daily hassles was not undertaken in this study, however it is recommended for future research. The findings from the current study indicate most respondents are experiencing role strain. When the amount of time spent in structured activities approaches 50% or more of the non-sleep, non-school hours available in a day, perceptions of role strain tend to increase. Although this finding makes a significant contribution to the current literature, it does not explain why students who spend less than 50% of their non-sleep, non-school hours in structured activities are also experiencing role strain. Therefore, future research needs to consider not only the quality of roles, but also quality of roles and the implications of daily hassles on adolescents' perceptions of role strain.

An open-ended measure of time use was created to gain information on what adolescent's do during a specified 24-hour period. Respondents were randomly assigned one 24-hour period from Monday to Thursday. Friday's are half of an instructional day would have required a separate measure, therefore it was not included. Weekends were also left out of the random daily assignment for the time use table. In hindsight this is now a limitation of the study, because weekends may actually be a time when students experience greater amounts of role strain. Research on role theory suggests that role stress may actually increase on weekends in an attempt to catch up on role tasks that may have been neglected during the week (O'Laughlin & Bischoff, 2005). Paradoxically, weekends may provide more free time to engage in more structured activities because attendance at school is not required. This is also problematic from a role theory perspective. If adolescents perceive a lack of choice and/or control in how their weekend days are organized then perceptions of role strain would also be greater (Duxbury, Higgins, & Lee, 1994). Recommendations for future research would include an opportunity for respondents to report on both weekdays and weekends.

Despite the above limitations, the presents study makes several important contributions to the body of literature on adolescent development, role strain and time use. This time use study is the first of its kind to survey Canadian adolescents between the ages of 12 to 18. Although research on time use has been conducted in Canada (Daly, 1997; 2000), data was collected via Statistics Canada and does not include respondents under the age of 15, nor does it include adolescents' perceptions of role strain. The data obtained in this study provides valuable information on a typical school day for Canadian adolescents. This study highlights the importance of understanding that there is a critical level of involvement in structured activities that is beneficial to adolescents. Both parents and educators may want to take note that adolescents' subjective evaluation of role strain is important to their development. Findings from this study underscore the importance of pursuing further research on role stain as a phenomenon experienced by adolescents.

References

- Agnew, R., & Peterson, D. (1989). Leisure and delinquency. *Social Problems*, 36, 332-350.
- Bakeman, R. & Gottman, J.M. (1986). Observing interaction: An introduction to sequential analysis. Cambridge England: Cambridge University Press.
- Barnett, R. (2002). Role stress/strain and work-family, a sloan work and family encyclopedia entry. Retrieved May 13, 2006:
http://wfnetwork.bc.edu/encyclopedia_entry.php?id=255&area=All
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Beatty, S.E., & Talpade, S. (1994). Adolescent influence in family decision making: A replication with extension. *Journal of Consumer Research*, 21, 332-341.
- Bobo, J.K., Gilchrist, L.D., Elmer, J.F., Snow, W.H., & Schinke, S.P. (1986). Hassles, role strain and peer relations in young adolescents. *Journal of Early Adolescence*, 6, 339-352.
- Bosma, H.A., Jackson, S.E., Zijsling, D.H., Cicognani, B.Z.E., Xerri, M.L., Honess, T.M., & Charmain, L. (1996). Who has the final say? Decisions on adolescent behavior within the family. *Journal of Adolescence*, 19, 277-291.
- Centre on Children and Families (2006). *Child well-being index (CWI)*. The Brookings center on children and families in cooperation with the foundation for child development at Duke University. Retrieved April 24, 2006:
<http://www.brookings.edu/es/research/projects/child/default.htm>
- Coleman, J.S. (1988). Social capital in the creation of human capital. *Sociology*, 94, 95-120.
- Coverman, S. (1989). Role overload, role conflict, and stress: Addressing consequences of multiple role demands. *Social Forces*, 67, 965-982.

- Daly, K. J. (1996), *Families & time: Keeping pace in a hurried culture*. Thousand Oaks, CA: Sage.
- Daly, K.J. (2000). It keeps getting faster: Changing patterns of time in families. *The Vanier Institute of the Family*.
- de Bruyn, E.H. (2005). Role strain engagement and academic achievement in early adolescence. *Educational Studies*, 31, 15-27.
- DeRoma, V.M., Lassiter, K.S., Davis, V.A. (2004). Adolescent involvement in discipline decision making. *Behavior Modification*, 28, 420-437.
- Dornbusch, S.M., Ritter, P.L., Mont-Reynaud, R., & Chen, Z.Y. (1990). Family decision making and academic performance in a diverse high school population. *Journal of Adolescent Research*, 2, 143-160.
- Dunn, J.S., Kinney, K.A., & Hofferth, S.L. (2003). Parental ideologies and children's after-school activities. *The American Behavioral Scientist*, 46, 1359-1386.
- Duxbury, L., Higgins, L., & Lee, C. (1994). Work-family conflict: A comparison of gender, family type and perceived control. *Journal of Family Issues*, 15, 449-466.
- Elkind, D. (1988). The dynamics of hurrying: Parents. In D. Elkind (2nd ed.) *The hurried child: Growing up to fast to soon*. Don Mills, ON: Addison-Wesley Publishing Company, Inc.
- Eccles, J.S., Miller Buchanan, C., Flanagan, C., Fuligni, A., Midgley, C., & Yee, D. (1991). Control versus autonomy during early adolescence. *Journal of Social Issues*, 47, 53-68.
- Eccles, J.S., Midgley, C., Wigfield, A., Miller Buchanan, C., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, 48, 90-101.

- Fenzel, M.L. (1989). Role strain in early adolescence: A model for investigating school transition stress. *Journal of Early Adolescence*, 9, 13-33.
- Goode, William, J. (1960). A theory of role strain. *American Sociological Review*, 25, 483-496.
- Gertsen, J.C., Langer, T.S., Eisenberg, J.C., & Simcha-Fagan, O. (1977). An evaluation of the etiologic role of stressful life-change events in psychological disorders. *Journal of Health and Social Behavior*, 18, 228-244.
- Hackett, G., & Lonborg, S. (1983). Models of stress. In E.M. Altmaier (Ed.) *New directions for student services*. San Francisco: Jossey-Bass.
- Hecht, L.M. (2001). Role conflict and role overload: different concepts, different consequences. *Sociological Inquiry*, 71, 111-121.
- Hirsch, B.J., & Rapkin, B.D. (1986). Multiple roles, social networks, and women's well-being. *Journal of Personality and Social Psychology*, 51, 1237-1247.
- Hofferth, S.L., & Sandberg, J.F. (2001). How American children spend their time. *Journal of Marriage and Family*, 63, 295-308.
- Holmbeck, G.N., & Leake, C. (1999). Separation-individuation and psychological adjustment in late adolescence. *Journal of Youth and Adolescence*, 28, 563-581.
- Holmbeck, G.N., Paikoff, R.L., & Brooks-Gunn, J. (1995). Parenting adolescents. In Marc H. Bornstein (Ed.), *Handbook of Parenting: Volume 1 Children and Parenting*. New Jersey: Lawrence Erlbaum Associates.
- Hunt, D.E. (1975). Person-environment interactions: A challenge found wanting before it was tried. *Review of Educational Research*, 45, 209-230.
- Jacobs, J.E., Bennett, M.A., & Flanagan, C. (1993). Decision making in one-parent and two-parent families: Influence and information selection. *Journal of Early Adolescence*, 13, 245-266.

- Jacobs, J.E., & Klaczynski (2002). The development of judgment and decision making during childhood and adolescence. *Current Directions in Psychological Science*, 11, 145-149.
- Juang, L.P., Lerner, J.V., McKinney, J.P., & von Eye, A. (1999). The goodness of fit in autonomy timetable expectations between Asian-American late adolescents and their parents. *International Journal of Behavioral Development*, 23, 1023-1048.
- Kaufman, C.F., Lane, P.M., & Lindquist, J.D. (1991). Exploring more than 24 hours a day: A preliminary investigation of polychronic time use. *The Journal of Consumer Research*, 18, 392-401.
- Kiecolt, J.K. (1994). Stress and the decision to change oneself: A theoretical model. *Social Psychology Quarterly*, 57, 49-63.
- Kinney, D.A., Dunn, J.S., & Hofferth, S.L. (2004, March). Family strategies for managing the time crunch. Retrieved November 2005, from http://www.popcenter.umd.edu/people/hofferth_sandra/papers/Riveriewrevised2refmar04/doc.
- Larson, R.W. (1989a). Beeping children and adolescents: A method of studying time use and daily experiences. *Journal of Youth and Adolescence*, 18, 511-530.
- Larson, R.W. (1994). Youth organizations, hobbies, and sports as developmental contexts. In R.K. Silbereisen & Todt, E. (Eds.) *Adolescence in context*. New York: Springer-Verlag.
- Larson, R.W. (2000). Toward a psychology of positive youth development. *American Psychologist*, 55, 170-183.
- Larson, R.W. (2001). How U.S. children and adolescents spend their time: What it does (and doesn't) tell us about their development. *Current Directions in Psychological Sciences*, 10, 160-164.

- Larson, R.W., & Seepersad, S. (2003). Adolescents' leisure time in the United States: Partying, sports, and the American experiment. *New Directions for Child and Adolescent Development*, 99, 53-64.
- Larson, R.W., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and development opportunities. *Psychological Bulletin*, 125, 701-736.
- Lerner, R.M. (1985). Adolescent maturational changes and psychosocial development: A dynamic interactional perspective. *Journal of Youth and Adolescence*, 14, 355-372.
- Lewis, E.C., Siegel, J.M., & Lewis, M. (1984). Feeling bad: Exploring sources of distress among pre-adolescent children. *American Journal of Public Health*, 74, 117-122.
- Lochhead, C. (2006). Who has time for children? *Transition Magazine*, 30, 1-18. Retrieved April 2006, from the Vanier Institute of the Family:
www.vifamily.ca/library/transition/304/304.html.
- Mann, L., Harmoni, R., & Power, C. (1989). Adolescent decision-making: The development of competence. *Journal of Adolescence*, 12, 265-278.
- Marks, S.R. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, 42, 921-936.
- Marks, S.R., & MacDermid, S.M. (1996). Multiple roles and the self: A theory of role balance. *Journal of Marriage and the Family*, 58, 417-432.
- Mattingly, M.J., & Sayer, L.C. (2006). Under pressure: Gender differences in relationship between free time and feeling rushed. *Journal of Marriage and Family*, 68, 205-221.
- Pearlan, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.
- O'Laughlin, E.M., & Bischoff, L.G. (2005). Balancing parenthood and academic: Work/family stress as influenced by gender and tenure status. *Journal of Family Issues*, 26, 79-106.

- Pettit, G.S., Laird, R.D., Dodge, K.A., Bates, J.E., & Criss, M.M. (2001). Antecedents and behavior-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development*, 72, 583-598.
- Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior*, 19, 2-21.
- Read, K.H. (1945). Parents' expressed attitudes and children's behavior. *Journal of Consulting Psychology*, 9, 95-100.
- Reilly, M.D. (1982). Working wives and convenience consumption. *The Journal of Consumer Research*, 8, 407-418.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory, appropriation, guided participation and apprenticeship. In J.V. Wertsch, P. del Rio, and A. Alvarez (Eds.) *Sociocultural studies of the mind*. Cambridge, England: Cambridge University Press, 139-164.
- Rosenfeld, A., & Wise, N. (2000). *The over-scheduled child: Avoiding the hyper-parenting trap*. NY: St. Martin's Press.
- Rosenman, R. H., Friedman, M., Straus, R., Wurm, M., Kositchek, R., Hahn, W., & Werthessen, N. T. (1964). A predictive study of coronary heart disease. *JAMA: The Journal of the American Medical Association*, 189, 15-22.
- Roy, K. M., Tubbs, C.Y., & Burton, L. M. (2004). Don't have no time: Daily rhythms and the organization of time for lower-income families. *Family Relations*, 53, 168-178.
- Selyer, H. (1956). *The stress of life*. NY: McGraw-Hill.
- Silbereisen, R.K., & Todt, E. (1994). Adolescence a matter of context. In R.K. Silbereisen & Todt, E. (Eds.) *Adolescence in context*. New York: Springer-Verlag.

- Smetana, J.G. (1999). The role of parents in moral development: A social domain analysis. *Journal of Moral Education*, 28, 311-321.
- Smetana, J. G. (2000). Middle-class african american adolescents' and parents' conceptions of parental authority in and parenting practices: A longitudinal investigation. *Child Development*, 71, 1672-1686.
- Smetana, J.G., Campione-Barr, N., & Daddis, C. (2004). Longitudinal development of family decision making: Defining health behavioral autonomy for middle-class African American adolescents. *Child Development*, 75, 1418-1343.
- Smetana, J.G., & Daddis, C. (2002). Domain specific antecedents of parental psychological control and monitoring: The role of parenting beliefs and practice. *Child Development*, 73, 563-580.
- Snow, W.H., Gilchrist, L., Schilling, R.F., Schinke, S.P., & Kelso, C. (1986). Preparing students for junior high school. *Journal of Early Adolescence*, 6, 127-137.
- Statistics Canada (2001). General social survey: Community profiles. Retrieved April 28, 2006 from:
<http://www12.statcan.ca/english/profile01/CP01/Details/Page.cfm?Lang=E&Geol&CSD>
- Taylor, L., Adelman, H.S., & Kaser-Boyd, N. (1984). Aspects of competence-performance distinction: Educational, psychological and measurement issues. *Journal of Curriculum Studies*, 19, 409-424.
- Undheim, A., & Sund, A. (2005). School factors and the emergence of depressive symptoms among young Norwegian adolescents. *European Child & Adolescent Psychiatry*, 14, 446-453.
- Verma, S., & Sharma, D. (2003). Cultural continuity amid social change: Adolescents' use of free time in India. *New Directions for Child and Adolescent Development*, 99, 37-51.

Appendix A

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**Lord Byng Student Life Survey
Parental Informed Consent Form**

Principal Investigator: Dr. Sheila Marshall
Social Work and Family Studies
(604) 822-5672

Co-Investigators: Grant Charles, Lisa Catto, Carla Haber, Alice Balter, & Derek Wun
Social Work and Family Studies
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Dear Parent,

We are writing to request permission for your son or your daughter to participate in a research project that is being conducting at Lord Byng School. This project is a collaborative project between Lord Byng Secondary School and researchers from the School of Social Work & Family Studies at the University of British Columbia. Part of this study is being conducted to fulfill the thesis requirements for a Master of Arts degree for Lisa Catto and Derek Wun under the direction of Dr. Sheila Marshall.

The overall purpose of the study is to attempt to understand whether the dress code and other programs over the school year are related to students' perceptions of safety and well-being and their day-to-day decision making. The goal for embarking on the study, as established by Lord Byng Secondary School is:

- To improve levels of social responsibility in all students at Lord Byng in order to foster a positive school climate which stimulates student learning.

The objectives are:

- To reduce the amount of theft, vandalism, and graffiti by strengthening the bond between school and student.
- To create awareness, through education and modeling positive language to build a safe and caring learning community.
- Promote respectful and responsible attitudes and safe behaviours around sexuality including body image, sexual expression, and sexual orientation.
- To strengthen student to student relationships.

The research study will examine how students make important decisions about what to wear to school, how to act with same sex and opposite sex friends, scheduling and sleep. Additionally, the research project will track students' feelings of safety and well-being at school. The information that we will acquire from this study will be useful for the educators at Lord Byng, counsellors, and parents of adolescents.

We write this letter to invite your adolescent child to participate in this study. Participation is completely voluntary. You may refuse to allow your child to participate without any consequences. Whether your child participates or not will have no affect on his or her marks or grades.

Involvement in this study includes filling out a questionnaire at the beginning of the school year. In the next 3 years (2006, 2007, 2008), students will have an opportunity to continue participating in the study. Convenient times will be arranged with teachers to ensure that core curricula are not affected. The questionnaires will take about 1 hour to complete. The questionnaires will not be linked to students' names, nor will students write their names on the questionnaires. Students who do not participate will be engaged in self-assigned tasks related to their school work (e.g., finishing homework, reading) while the others complete the questionnaires.

Participants can refuse to answer any question, and may withdraw from the study at any time. To maintain privacy, your child's name will not be recorded at any time.

There are no known risks associated with being involved in this study. In the unlikely event that your child feels uncomfortable as a result of the questions, he or she will be provided with the opportunity to speak to a counsellor.

All information collected for this research will be kept in a locked filing cabinet on the UBC Point Grey campus. No names or other identifying information will appear in any reports of the completed study. Only the research team will have access to the data.

All students who return a consent form will be included in the pizza party draw. The classes returning the largest proportion of consent forms (regardless of whether or not they participate in the survey) will be eligible to win a pizza party that will take place during a lunch hour at school.

If you have any questions or desire further information with respect to this study, you may contact Dr. Sheila Marshall or one of her associates at (604) 822-5670. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

Thank you for your time and consideration of this request. **Please sign the consent form on the following page and return it with your son or daughter to the school.**

Sincerely,

Sheila Marshall

Consent:

Your child's participation in this study is entirely voluntary and you may refuse to participate or withdraw your child from the study at any time without penalty.

Your signature below indicates that you have received a copy of this consent form for your own records.

Please indicate whether you consent for your son/daughter to participate in the study with you by checking the appropriate box below:

- ☐ YES, I consent to my child's participation in this study.
☐ NO, I do not consent to my child's participation in this study.

Child's legal given name (please print): _____

Child's call name (please print): _____

Child's home room number: _____

Child's student number: _____

Parent Name (please print): _____

Parent Signature

Date

Please return this form to the school.

Appendix B

Demographic Information

Tell us about yourself:

Are you male or female? (select)

- ☐ Male
- ☐ Female

What is your age? _____ (years)

Were you born in Canada? (select)

- ☐ Yes
- ☐ No

What is your cultural background? (check all that apply):

- ☐ First Nations/Native
- ☐ Caucasian/European
- ☐ Latino/Hispanic
- ☐ African
- ☐ South Asian (e.g. India, Pakistan, Sri Lanka)
- ☐ East Asian (e.g. China, Japan, Korea)
- ☐ South East Asian (e.g. Philippines, Indonesia, Thailand)

Who do you live with most or all of the time? (check one)

- ☐ I live with both my parents, who are married to each other and/or living together.
- ☐ I live with homestay parents. (All questions about parents in this survey should be answered about your homestay parents).
- ☐ I live with one of my parents only, most of the time.
I live mostly with (select one):
 - ☐ Mom

- ☐ Dad
- ☐ I live with my mom and her partner (a person married to or living with my mom).
My mom's partner is (select one):
 - ☐ Male
 - ☐ Female
- ☐ I live with my dad and his partner (a person married to or living with my mom).
My dad's partner is (select one):
 - ☐ Male
 - ☐ Female
- ☐ I do not live with my parents. I live with another family member.
Who? _____
- ☐ I live in a situation different from any of the ones listed.
Describe it: _____

Appendix C

Role Overload Scale (Reilly, 1982)

(1 = Definitely not like me; 3 = Somewhat like me; 5 = Definitely like me)

1. I can't ever seem to get caught up on the things I need to do.
2. There are times when I cannot meet everyone's expectations.
3. Sometimes I feel as if there are not enough hours in the day.
4. I just can't find the energy in me to do all the things expected of me.
5. Much of the time I feel I have more work to do than I can handle.

Appendix D

Daily Time Use Schedule

Activities

For a typical school day please indicate your activities and who you are with.

For example, activities could be eating, sleeping, playing with a game system. Write the activity in the space and add the people who are usually with your (for example, by yourself, friends, parent).

Some ideas:

Music/art/drama lessons

Volunteering

Housework (babysitting a sibling, etc)

Eating

TV

Talking or hanging out with friends

Team sports

Academic lessons

Work for pay

Homework/studying

Computer

Playing with a game system

EXAMPLE:

Time of day	Activity	With Whom
3:15 pm – 4:00 pm	Soccer practice	School team
7:00 pm – 8:00 pm	Watching TV	Alone
10:00 pm – 6:00 pm	Sleeping	Alone

Your Schedule for a typical _____

Time of day	Activity	With Whom
Nighttime 12:00 am – 1:00 am		
Nighttime 1:00 am – 2:00 am		
Nighttime 2:00 am – 3:00 am		
Nighttime 3:00 am – 4:00 am		
Nighttime 4:00 am – 5:00 am		
Nighttime 5:00 am – 6:00 am		
Daytime 6:00 am – 7:00 am		
Daytime 7:00 am – 8:00 am		
Daytime 8:00 am – 8:45 am		

School Hours		
Daytime 3:15 pm – 4:00 pm		
Daytime 4:00 pm – 5:00 pm		
Daytime 5:00 pm – 6:00 pm		
Daytime 6:00 pm – 7:00 pm		
Daytime 7:00 am – 8:00 pm		
Nighttime 8:00 pm – 9:00 pm		
Nighttime 9:00pm – 10:00 pm		
Nighttime 10:00 pm – 11:00 pm		
Nighttime 11:00 pm – 12:00 am		

Appendix E

Coding Instructions for Adolescent Time Use Measure

The time table is broken into one-hour increments represented by each cell in SPSS. Each activity provided by the respondent must be evaluated as to whether it is a:

1. Sleep
2. Structured activity (SA)
3. Unstructured activity (USA)
4. Personal activity (PA)

For each cell it must be determined what activity the respondent is engaged in and the appropriate coding number assigned.

Sample: This is what the time table looks like before it is coded.

6:00am to 7:00am	7:00am to 8:00am	3:15pm to 4:00 pm	4:00pm to 5:00 pm
Sleeping with my dog	Waking up	Leaving school with friends	Hanging out
Sleep	Getting ready for school	Band practice	More band
Sleeping	Strings	Going to tutoring	Watching tv

This is what the time table looks like after coding.

6:00am to 7:00am	7:00am to 8:00am	3:15pm to 4:00 pm	4:00pm to 5:00 pm
1	4	3	3
1	4	2	2
1	2	4	3

1 = Sleeping – this is anytime where the main activity is sleeping:

- Sleeping
- Asleep
- Nap/napping

It is NOT

- Getting ready for bed (this is a personal activity)
- In bed (this is a personal activity)
- Reading in Bed (this is unstructured time)

2 = Structured Activities are any activity that has component of education, learning, skills or knowledge acquisition, such as:

- Sports clubs or teams
- Church/prayers/religious studies
- Homework/studying
- Music lessons

- Tutoring
- Work for pay
- Drama/art lessons
- Chores

3 = Unstructured Activities are any activity that has a leisure component to it

- Hanging out with friends
- Hanging out with family/family outing
- Watching tv
- Playing sports for leisure (typically with friends) pick up hoops, bike riding, etc
- Reading
- Computer use, MSN, chatting, games
- Listening or playing music for enjoyment

4 = Personal Activities are any activity that has a component of self-care

- Hygiene (bathing, showering, etc)
- Getting ready for school, bed, work, etc
- Traveling time (going to and from work, school, lessons, etc)
- Eating

Many respondents have listed more than one activity in a time block, for example between 5 and 6pm they are: eating, watching tv and doing homework. The focus of this study is on structured activities therefore, if an activity that is considered to be a "2" structured activity is present in the list of activities given by the respondent it should be coded as a "2".

99 = Answers that don't make any sense or data is missing:

If the respondents did not answer, left the time block empty, or put an answer that seems ridiculous, (i.e., robbing a bank, saving the world as a super hero) it is considered an invalid response and is not useful and must be coded as a "99".

Appendix F

Decision Making Scale (Juang, Lerner, McKinney and von Eye, 1999)

(1 = My parents tell me what to do; 3 = My parents and I decide; 5 = My parents let me decide)

1. In general, how do you and your parents arrive at decisions that concern you?
2. In general, how do you think you and your parents *ought* to arrive at decisions concerning you?
3. How often do you take part in family decisions that concern you?
4. How often do you think you *ought* to take part in family decisions that concern you?