A Worksite Parenting Program: A Feasibility Study

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ABSTRACT

A WORKSITE PARENTING PROGRAM: A FEASIBILITY STUDY

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This study involved two phases. The objective of the first phase was to explore the need for and preferred delivery mode of a workplace parenting program. The objective of the second phase was to test the feasibility and acceptability of delivering a pre-existing parenting program to parents in their workplace. We first conducted interviews with employers. Results showed that a workplace parenting program is of interest to employers and resulted in suggestions for program structure. We then adapted a pre-existing program incorporating employer suggestions to create Parents Working Together (PWT). The program was tested using a pre/post uncontrolled feasibility trial. The main finding from the feasibility trial was that PWT was feasible and acceptable to employees. PWT may also be effective in changing parent and child weight-related behaviours, easing parent stress and improving work-life balance. A full scale trial is needed to determine the effectiveness of this approach.
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List of Abbreviations

BMI = body mass index
CDC = Centre for Disease Control
CI = confidence interval
EAP = employee assistance programs
HDL = high density lipoprotein
HR = human resources
HRM = human resources management
IOTF = International Obesity Task Force
LDL = low density lipoprotein
NETSCC = National Institute for Health Research Evaluation, Trials and Studies Coordination Centre
NutriSTEP = Nutrition Screen Tool for Every Preschooler
OR = odds ratio
PTT = Parents and Tots Together
PWT = Parents Working Together
SD = standard deviation
TPHT = Talking Parents, Healthy Teens
TV = television
WHO = World Health Organization
WPTP = Workplace Triple P
INTRODUCTION

The etiology of childhood obesity is multifaceted, however focusing prevention efforts on a child’s parents has the potential to be successful given that parents play a crucial role in the development of childhood obesity. They are responsible for the environment in which children are raised; as well, through specific feeding practices, role-modeling and general parenting styles, parents help shape their children’s healthful behaviours (Han, Lawlor, & Kimm, 2010). Parent-focused interventions that involve whole family lifestyle modifications, with change in parenting skills and weight-related behaviours as desired outcomes are a potentially effective approach to tackling childhood obesity (West, Sanders, Cleghorn, & Davies, 2010).

Traditionally, such parenting programs have been run in community settings. Despite successes, attendance and attrition remain challenges of community based programming (Forehand, Middlebrook, Rogers & Steffe, 1983; Mytton, Ingram, Manns, & Thomas, 2014).

Co-occurring with the childhood obesity epidemic is a change in workplace demographics. Families are increasingly dual-earners (i.e. both parents work outside the home) and the demands of balancing working and family life are causing stress, struggles with work-life balance (Marshall, 2009) and compromised workplace performance (Martin & Sanders, 2003). Employers may have a unique opportunity through worksite wellness programming (under which parenting falls) to ease challenges with work-life balance, see improvements in employee performance and decrease organizational costs; however few worksites have adopted on-site parenting programs (Martin & Sanders, 2003) as supportive tools to help employees manage issues with work-life balance. Given the barriers to participation in community-based parenting programs discussed previously, exploring the worksite as a potential venue in which to deliver
parenting programs is a potentially effective and novel way to reach parents while concurrently providing benefit to employers.

To date, no worksite parenting program has been found in the literature that provides employees with general parenting skills and child weight-related messaging. This study aims to fill that gap by adapting and delivering a pre-existing parenting program (Parents and Tots Together) that has been successfully run in community settings (Haines et al., 2012), to be delivered to parents in their workplace. This study has two objectives: 1) to determine employers’ perceptions of the need and preferred delivery mode for a parenting program within the workplace setting and, 2) to determine the feasibility and acceptability of delivering Parents and Tots Together (PTT), a parenting program that includes parenting and weight-related messaging, in the workplace setting. In order to meet these objectives, a two phase study was conducted. Phase one consisted of a formative assessment involving semi-structured qualitative interviews with employers to gather the information needed to inform the adaptation of PTT to be suitable for delivery in the workplace. Following program adaptation, phase two involved a feasibility trial of PTT in the workplace setting. We hypothesized that employers would perceive a need for a parenting program within workplace settings. We also hypothesized that PTT would be feasible for implementation in a workplace setting and acceptable to employees.

The results of this study will contribute to the body of literature on obesity prevention by exploring a novel setting – the workplace, as a potentially effective venue to reach parents of young children. These results may also be of interest to employers as investing in parenting programs held in the workplace may be effective in easing working parents’ stress and issues with work-life balance, thereby improving their performance at work.
The following section will present the existing literature as it relates to the topic, including: the prevalence and consequences of childhood obesity, the unique role parents play in the development of childhood obesity, existing community-based obesity prevention parenting programs, as well as a discussion of the growing proportion of dual-income families and how this makes holding obesity prevention parenting programs in the workplace a potentially effective setting to target working families.
2.0 LITERATURE SEARCH

2.1 Childhood Obesity

Childhood obesity has now reached a level considered to be epidemic and it continues to rise in the majority of developed countries as well as many developing countries (Reilly, 2005). The following section will go into further detail regarding the prevalence, classification and consequences (both health-related and economic) of childhood obesity, as well as a discussion of the preschool years as a critical time for intervention in the prevention of childhood obesity.

2.1.1 Prevalence

Obesity is a global problem from which even the youngest children are not exempt. The worldwide prevalence of overweight and obesity in children under five years old was 6.7% in 2010 (95% CI: 5.6%-7.7%) (de Onis, Blossner, & Borghi, 2010). This represents an increase of 60% relative to the worldwide prevalence of 4.2% (95% CI: 3.2%-5.2%) in 1990 (de Onis, Blossner, & Borghi, 2010). This alarming increase in childhood overweight and obesity is not expected to stop, with projections forecasting a prevalence of 9.1% (95% CI: 7.3%-10.9%) in 2020 (de Onis, Blossner, & Borghi, 2010). North American data confirms the magnitude of the obesity epidemic closer to home. Data from the 2007-2008 National Health and Nutrition Examination Survey (NHANES) shows that 16.9% (95% CI, 14.1%-19.6%) of children aged 2-19 years in the United States (U.S.) are obese and an additional 14.8% of U.S. children are overweight (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). Canadian data reveal the same trend. The 2009- 2011 Canadian Health Measures Survey (CHMS) indicates that 19.8% (95% CI 16.6%-23.4%) of Canadian children ages 5-17 years are overweight and an additional 11.7% (95% CI 9.9%-13.7%) are obese (Roberts, Shields, de Groh, Aziz, & Gilbert 2012).
2.1.2 Classification

Age and sex specific body mass index (BMI) (weight/height$^2$) is the recommended criteria for assessing overweight and obesity in children (Lau et al., 2007). Three sets of reference points are available for interpreting BMI in children – the U.S. Centre for Disease Control and Prevention’s (CDC) growth references, the World Health Organization’s (WHO) growth standards and the International Obesity Task Force’s (IOTF) growth references (Kuczmarski et al., 2000; WHO Multicentre Growth Reference Study Group, 2006; Cole, Bellizzi, Flegal, & Dietz, 2000). Data for the CDC’s references were derived from physical measurements taken from a racially diverse population of both formula-fed and breastfed infants in the U.S. as part of five nationally representative surveys completed between 1963 and 1994 (Kuczmarski et al., 2000). The CDC growth references classify children as overweight when BMI > 85th percentile and obese when BMI ≥ 95th percentile (Kuczmarski et al., 2000). The WHO growth standards represent how children should grow when raised under optimal conditions – including being exclusively or predominantly breastfed for four months with introduction of complementary foods at six months and continued breastfeeding until at least twelve months of age (WHO Multicentre Growth Reference Study Group, 2006). Data were collected as part of the WHO Multicentre Growth Reference Study from six countries (Brazil, Ghana, India, Oman, Norway, and the United States) (WHO Multicentre Growth Reference Study Group, 2006). Children are classified using either centile lines or the BMI-for-age z-score. Overweight is defined as BMI > 84th percentile or BMI z-score between one and two standard deviations (SD) above the mean and obesity is defined as BMI > 97th percentile or z-score more than two SDs above the mean (Dietitians of Canada, 2008). Finally, the IOTF developed a third set of growth references with the aim of international comparison of obesity rates (Cole, Bellizzi,
Flegal, & Dietz, 2000). BMI data for children were collected from six nationally representative cross sectional surveys from Brazil, Great Britain, Hong Kong, the Netherlands, Singapore and the United States and children were classified as overweight and obese with a BMI ≥ 91st percentile and ≥ 99th percentile respectively (Cole, Bellizzi, Flegal, & Dietz, 2000).

There are inconsistencies regarding the recommendations of which growth references to use when interpreting BMI data in Canadian children (Dietitians of Canada, 2008; Lau et al., 2007). Variations exist between the three sets of growth references leading to discrepancies in the classification of childhood overweight and obesity (Dietitians of Canada, 2008). At a population level, both the CDC and the IOTF growth references tend to under-classify overweight and obesity relative to the WHO growth standards (Dietitians of Canada, 2008; Reilly et al., 2000). Inconsistent prevalence estimates due to variances in growth references make it difficult to accurately define the magnitude of the obesity epidemic (Twells & Newhook, 2011; Ells et al., 2005). As an example, in 2009 to 2011, the WHO growth standards classified 32.8% of 5-11 year olds as overweight or obese, compared to only 22.6% being classified as overweight or obese using the IOTF cut points (Roberts, Shields, de Groh, Aziz, & Gilbert 2012). Regardless of the reference used, the prevalence of overweight/obesity in children is concerning.

2.1.3 Consequences

2.1.3.1 Health-Related Consequences

The health-related consequences of childhood obesity can be divided into short-term and long-term consequences.
2.1.3.1.1 Short-term Health-Related Consequences

A systematic review by Reilly et al. (2003) found that many cardiovascular risk factors are reported in the literature to be related to overweight and obesity in children, including: hypertension, dyslipidemia, abnormalities in left ventricular mass and/or function, abnormalities in endothelial function, and hyperinsulinemia/insulin resistance. These are the same cardiovascular risk factors that are associated with obesity in adulthood (Reilly et al., 2003). A cross-sectional analysis of children aged 5-17 years (mean age 11.9 years) enrolled in the Bogalusa Heart Study found that compared to normal weight children, overweight children were 2.4 (95% CI 2.0-3.0) times more likely to have high total cholesterol, 3.0 (95% CI 2.4-3.6) times more likely to have high LDL cholesterol, 7.1 (95% CI 5.8-8.6) times more likely to have high triglycerides, and 12.6 (95% CI 10.0-16.0) times more likely to have high insulin levels. (Freedman, Dietz, Srinivasan, & Berenson, 1999) Additionally, there was the tendency for these cardiovascular risk factors to cluster among overweight children in this cohort. The odds ratio of having two or three cardiovascular risk factors were 9.7 and 43.5, respectively (Freedman, Dietz, Srinivasan, & Berenson, 1999). Reilly et al., (2003) also found evidence in the literature of an association between childhood obesity and asthma, type 1 diabetes, low grade systemic inflammation, and abnormalities in foot structure. In addition to physical complications, this systematic review reports that overweight or obese children are at increased risk for psychological problems compared to their normal weight peers, with girls being more at risk than boys (Reilly et al., 2003). Low self-esteem and behavioural problems are particularly common (Reilly et al., 2003).

A more recent review by Pulgaron (2013) included studies published from 2002-2012 with the aim of building upon the findings by Reilly et al. (2003) and found the most commonly
cited adverse health effects associated with childhood obesity to be metabolic risk factors. All
thirty-five studies included in the review found at least one metabolic risk factor to be more
likely in overweight and obese children compared to children of a healthy weight (Pulgaron,
2013). High blood pressure was the most common metabolic risk factor in the literature. Others
included: large waist circumference, high triglycerides, elevated blood sugar, and low HDL
cholesterol (Pulgaron, 2013). This review also provides support that childhood obesity is
associated with asthma, with a majority of the literature reporting this link. However, the
findings by Pulgaron (2013) are less convincing than those by Reilly et al. (2003) in regards to
the link between psychological problems and childhood obesity. Higher rates of internalizing and
externalizing disorders were reported in some, but not all studies reviewed (Pulgaron, 2013).
Many studies also stated a link between overweight children and sleep quality, length, and the
presence of obstructive sleep apnea (Pulgaron, 2013).

2.1.3.1.2 Long-term Health Consequences

It is well established that childhood overweight and obesity persists into adulthood and is
associated with a host of comorbidities in later life (Singh, Mulder, Twisk, van Mechelen, &
Chinapaw, 2008; Reilly et al., 2003). A systematic review by Singh, Mulder, Twisk, van
Mechelen, & Chinapaw (2008) cites that overweight children are at least twice as likely to
become overweight adults and a second systematic review by Reilly et al. (2003) finds that 40-
70% of obese children will become obese adults. A longitudinal study by Freedman, Khan,
Dietz, Srinivasan, & Berenson (2001) found as many as 77% of obese children (BMI ≥ 95th
percentile) remained obese as adults (BMI ≥ 30kg/m²). There is also evidence to support the
conclusion that childhood obesity increases cardiovascular disease risk in adulthood, however it
is unclear how much of this risk is related to obesity in childhood and how much is mediated by
the continued obesity as an adult (Reilly et al., 2003). Regardless, there is sufficient evidence to conclude that childhood obesity sets the foundation for obesity related cardiovascular morbidity and death in adulthood (Reilly et al., 2003).

Additionally, childhood overweight and obesity increases the risk for premature death in general (Reilly et al., 2003). A cohort study of Dutch men revealed that a BMI $>25$ kg/m$^2$ at age eighteen was associated with an increased risk of mortality at twenty years follow-up (Hoffmans, Kromhout, & de Lezeenee Coulander, 1988). During the entire thirty-two years of follow-up the risk ratio of mortality was 1.14 for a BMI between 25.00 and 25.99 kg/m$^2$ and increased further to 1.95 when BMI was $\geq 26$ kg/m$^2$ (Hoffmans, Kromhout, & de Lezeenee Coulander, 1988).

Studies have also examined the effect of childhood obesity on social and economic status. A retrospective cohort study by Sargent and Blanchflower (1994) found that adults who had been obese at sixteen years old had significantly fewer years of school and that obese females (regardless of whether they remained obese as adults or not), but not males had significantly lower earnings than their never obese counterparts. A retrospective study using American data from the National Longitudinal Survey of Labour Market Experience of Youth Cohort found that men and women who were overweight at 16-24 years old were less likely to be married (women: 20% less likely; 95% CI 13-27%, $p<0.001$; men: 11% less likely; 95% CI 3-18%, $p=0.005$) and that women who had been overweight between the ages of 16-24 had completed fewer years of school (0.3 years less; 95% CI 0.1-0.6, $p=0.009$), had lower household income ($6710$ less/year; 95% CI $3942$-$9478$, $p<0.001$), and had higher rates of household poverty (10% higher; 95% CI 4-16%, $p<0.001$) compared to those who were not overweight? (Gortmaker, Must, Perrin, Sobol, & Dietz, 1993).
2.1.3.2 Economic Consequences

A review by Trasande and Elbel (2012) reporting on the direct costs and expenditures associated with child overweight and obesity found evidence that overweight and obese children accrue more healthcare costs than their normal weight counterparts. Not all studies found that the increase in healthcare utilization begins in the early years, however there was support that overweight and obese children as young as 5 years old use more healthcare dollars than normal weight children (Transande & Elbel, 2012; Hampl, Carroll, Simon, & Sharma, 2007). A study by Trasande (2010) attempted to quantify the direct healthcare costs that the cohort of overweight and obese U.S. children that were 12 years old in 2005 would incur over their lifetime. This study found that as children, this cohort was expected to incur approximately $2.77 billion dollars in direct medical costs and as adults, this cohort would require an additional $3.47 billion in medical expenses, for a total of $6.42 billion dollars over their lifetime (Trasande, 2010). It is important to note that this study took into account only direct healthcare costs attributable to obesity and not indirect costs to both the individual and their employer such as reduced income, loss of productivity, and absenteeism (Transande & Elbel, 2012; Transande, 2010). It is therefore likely that the total costs attributable to childhood obesity are much larger than those projected by Trasande (2010). A more recent study by Finkelstein, Graham & Malhotra (2014) estimated the incremental lifetime medical costs of an obese child relative to a normal weight child who maintains normal weight throughout adulthood to be $19,000; and again this study did not include any indirect costs associated with childhood obesity.

It is evident that childhood obesity places a burden on the individual in terms of physical and psychological comorbidities amassed over the course of a lifetime as well as places a burden on society with the increase in healthcare utilization. Given the host of adverse consequences, it
is clear that prevention is a key component of the childhood obesity epidemic and that research must progress with this aim in mind (Ells et al., 2005).

2.1.4 Preschool Years Are a Critical Time for Intervention

2.1.4.1 Adiposity Rebound

Research efforts continue to highlight “critical periods” of growth in children and adolescents that present both challenges and opportunities for obesity prevention because these growth periods are associated with changes in adiposity accrual and/or changes in obesogenic behaviour (Han, Lawlor, & Kim, 2010). One such “critical period” is termed the adiposity rebound (Han, Lawlor, & Kim, 2010). The normal weight trajectory for an infant involves an initial period of rapid increase in adiposity during the first year of life (Rolland-Cachera et al., 1984). This adiposity lessens over the next couple of years and eventually stabilizes (Rolland-Cachera et al., 1984). The adiposity rebound is a second period of rapid growth in which a child’s BMI increases after the previous plateau (Rolland-Cachera et al., 1984). A seminal study by Rowland-Cachera et al. (1984) showed that an earlier rebound (before 5.5 years old) was associated with higher adiposity at 16 years old than a later rebound (after 7 years old). This relationship was observed regardless of adiposity at 1 year old (Rolland-Cachera et al., 1984). It may, therefore, be that the preschool age is a time of “programming” of future obesity (Reilly, 2008).

2.1.4.2 Learned Habits Carry On into Adulthood

There is some debate in the literature as to whether the adiposity rebound is truly a “critical period” of growth (Reilly, 2008; Cole, 2004). Regardless of whether the adiposity rebound is a “critical period” that “programs” young children for future fatness; in their early
years, children have the potential to develop unhealthy habits that will be maintained (Han, Lawlor, & Kim, 2010). A longitudinal survey of Australian families, assessed every 3 years, showed that intake of total fat, saturated fat and total energy tended to be significantly correlated for children as they aged from nine to eighteen years old (Burker, Beilin, & Dunbar, 2001) indicating that dietary habits learned in the early years persist into adulthood. Additionally, findings by Janz, Dawson and Mahoney (2000) showed that sedentary behaviour and physical activity in young children (mean age 10.8 years for boys and 10.3 years for girls) tracked over the 5 year follow-up period of the study.

Much research examining obesity treatment and prevention has been done on school aged children, less so on preschool aged children (Ells et al., 2005). However, given the prevalence of overweight/obesity, the health-related and economic consequences of obesity and the potential for habit formation, preschool aged children are prime candidates for obesity prevention interventions.

2.2 Etiology and Parental Influence on Childhood Obesity

The etiology of childhood obesity is multifaceted (Han, Lawlor, and Kimm, 2010) It is beyond the scope of this manuscript to discuss each putative risk factor in detail, however a detailed discussion of parental influence on childhood obesity is warranted as parents influence genetic and environmental factors that may play a critical role in the development of childhood obesity. Parents’ use of specific feeding practices and role modelling of eating behaviours, as well as general parenting styles may all contribute to the risk of obesity in children. The following section will explore these parenting characteristics in further detail and highlight their potential link to childhood obesity.
2.2.1 Genetics and the Home Environment

Multiple studies have shown obesity to be one of the most heritable traits, with estimates that genetics account for 45-75% of the variability in BMI (Farooqi & O’Rahilly, 2007). Some of the most convincing evidence involves studies of twins raised apart (Farooqi & O’Rahilly, 2007). In a study comparing monozygotic twins raised together and monozygotic twins raised apart, Price and Gottesman (1991) found that the correlation for BMI was 0.61 and 0.75 for twins raised apart and together, respectively. These correlations did not differ significantly from one another indicating that genes play a substantial role in adiposity (Price & Gottesman, 1991). A second study looking at fraternal and identical twins reared together and apart found similar variability in BMI. The intrapair correlation coefficients for BMI for twins reared apart were 0.70 for men and 0.66 for women (Stunkard, Harris, Pedersen, & McClearn, 1990).

However, the correlation coefficients less than 1.0 demonstrate that genetics alone is not sufficient to explain the development of obesity (Price & Gottesman, 1991; Stunkard, Harris, Pedersen, & McClearn, 1990). An obesity phenotype is a result of a complex interplay between genetic predisposition and an obesogenic environment (low physical activity, high availability of energy dense foods) (Rosenblaum & Leibel, 1998). It appears as though genes influence susceptibility towards obesity and that it is the environment that mediates whether or not the individual becomes obese (Rosenblaum & Leibel, 1998). It is, therefore, crucial to explore potentially mutable environmental and behavioural factors which contribute to childhood obesity.

Children’s food preferences are an important determinant of their food intake (Birch & Fisher, 1998). Animal studies have demonstrated that exposure to a variety of flavours early in life can increase acceptance of new flavours later on (Capretta, Petersik, & Steward, 1975) and it
appears that this holds true in children (Birch & Fisher, 1998). Infants and children are predisposed to reject new food (Birch & Fisher, 1998). It can take up to ten exposures for a young child to begin to accept and consume a new food (Birch & Fisher, 1998). Thus, children develop a preference to foods that are familiar to them; that is those that are available and present in their environment (Birch & Fisher, 1998). Given that parents are responsible for the food environment available to their young children, parents have an important role in shaping healthful or unhealthful eating behaviours (Birch & Fisher, 1998). Oliveria et al. (1992) found a significant (p<0.05) correlation between parent and child intake of all nutrients except for sodium and potassium. Odds ratio estimates for intake of total fat, saturated fat, and cholesterol indicated that a child is 2.8 (95% CI 1.3-6.1) times more likely to have a high intake of fat, 5.5 (95% CI 2.6-11.8) times more likely to have a high intake of saturated fat, and 6.3 (95% CI 2.8-14.0) times more likely to have a high intake of cholesterol when both parents consumed a diet high in that nutrient as compared to children where neither parent consumed a diet high in that nutrient (Oliveria et al., 1992).

2.2.2 Parental Feeding Practices

Parents shape their child’s environment in a number of ways: they provide food that may or may not be healthful and they can provide opportunities for physical activity (Birch & Fisher, 1998). Parents also have a role in shaping the environment by the way they interact with their children in the context of eating (Birch & Fisher, 1998). Children are naturally able to regulate their food intake, however controlling parental feeding practices can override this natural ability (Birch & Fisher, 1998). Johnson and Birch (1994) found that mothers who exerted more controlling feeding practices (encouraged children to eat only at mealtimes rather than when hungry, encouraged children to finish all the food on their plate) had children (aged 2-4 years)
who were less able to compensate for calories consumed as a liquid preload prior to their meal (r = 0.65). Additionally, those children who were least able to compensate were those with a higher fat mass (Johnson & Birch, 1994). These findings suggest that the best environment to foster a child’s ability to self-regulate their food intake is one in which the parents provide healthy options but allow the child to determine whether and how much to eat.

Parental restriction of certain foods and encouragement of others can also influence children’s eating habits (Birch & Fisher, 1998). It is often “good” foods that are encouraged and “bad” foods that are restricted or used as a reward (Birch & Fisher, 1998). In so doing, parents are likely well intentioned, however restriction/encouragement of certain foods may have the opposite effect of that intended by parents (Birch & Johnson, 1998). Parents may create a dislike for the food that is encouraged and increase the preference for those foods that are restricted (Birch & Fisher, 1998). Fisher and Birch (2000) found that parental restriction of palatable snack foods increased their daughters’ (aged between 4.6-6.4 years) intakes of these foods in an unrestricted environment and in the absence of hunger. However, findings in the area of food restriction are not clear cut. In a study including both sons and daughters, Fisher and Birch (1999) found that maternal restriction of snack foods was only associated with an increased intake of these snack foods in an unrestricted setting in girls. No relationship was found between maternal restriction and boys’ intakes (Fisher & Birch, 1999).

2.2.3 Modelling

Children are social beings and mealtime is an opportunity for socialization (Birch & Fisher, 1998). Companionship during meals, whether children eat with their parents, siblings, or both has been found to be associated with an increased intake of the basic food groups (r = 0.14,
p ≤ 0.05) in preschool aged children (2-5 years old) (Stanek, Abbott, & Cramer, 1990). Additionally, those eating with young children serve as models who can have influential effects on a child’s food selection (Birch & Fisher, 1998). Parents serve as primary role models for their children. Tibbs et al. (2001) found that children of parents who modeled more healthful eating patterns had a lower intake of dietary fat (r = 0.30, p < 0.001) and a higher intake of fruits and vegetables (r = 0.18, p < 0.001). A systematic review by Pearson, Biddle and Gorely (2008) confirms this positive association between parental modeling and fruit and vegetable intake in children.

When the role model is seen as a similar or as a powerful figure, the effect on the food choices in young children can be quite marked (Birch & Fisher, 1998). In a study examining peer influence on preschoolers’ vegetable choices, Birch (1980) found that by day 4 of observation, a significant number of children chose and consumed their non-preferred over their preferred vegetable when exposed to peers eating the non-preferred vegetable.

2.2.4 General Parenting Style

Parenting styles, originally developed by Baumrind (1966), consist of specific behaviours and practices used by parents that shape a child’s development. Macoby and Martin (1983) built upon Baumrind’s original authoritarian-authoritative-permissive typology by establishing two dimensions of parenting: demandingness and responsiveness. Demandingness refers to a parent’s willingness to socialize their child into the family and the wider society by setting expectations for maturity, and providing structure and discipline in response to disobedience (Darling & Steinberg, 1993). Responsiveness refers to parents being attuned and supportive of their child’s specific needs as well as providing warmth and compassion (Darling & Steinberg, 1993). From
these two dimensions of parenting emerge four distinct parenting styles (Darling & Steinberg, 1993). Authoritative parents are characterized by both high demandingness and high responsiveness (Darling & Steinberg, 1993). These parents have reasonable expectations for their child that are well communicated; they foster individuality in their children and provide warmth (Vollmer & Mobley, 2013). Authoritarian parents are high in demandingness, but low in responsiveness (Darling & Steinberg, 1993). They have high expectations without regards for their child’s abilities, exhibit controlling behaviours, and do not demonstrate caring behaviours (Vollmer & Mobley, 2013). Permissive or indulgent parents (low demandingness, high responsiveness) (Darling & Steinberg, 1993) do not place strict rules on their children, but are respectful and affectionate towards them (Vollmer & Mobley, 2013). Finally, neglectful or uninvolved parents are low in both demandingness and responsiveness (Darling & Steinberg, 1993). They do not place demands, use little or no discipline and are oblivious to their child’s needs (Vollmer & Mobley, 2013).

The body of research examining the relationship between parenting styles and obesity risk in children and adolescents is growing. The authoritative style of parenting has been the most commonly associated with healthful behaviours including increased fruit and vegetable intake, lower intake of sugar sweetened beverages, higher levels of physical activity, and lower risk of child overweight (Vollmer & Mobley, 2013; Stang & Loth, 2011; Berge, 2009). A study of adolescents (mean age 16.5 years) found that those who self-reported their parents to use an authoritative parenting style had higher intakes of fruit, a more positive attitude towards fruit consumption, and more social support from their parents in regards towards eating fruit (Kremers, Brug, de Vries, & Engels, 2003). Additionally Rhee at al. (2006) found that children with a mother who utilized an authoritative parenting style were least likely to be overweight in
the first grade. Those with an authoritarian style mother were 4.88 (95% CI 2.15-11.10, p<0.001) times more likely to be overweight compared to children with an authoritative mother and those with either permissive or neglectful mothers were over 2 times more likely to be overweight (permissive: OR 2.84, 95% CI 1.10-7.35, p = 0.03; neglectful: OR 2.67, 95% CI 1.12-6.38, p = 0.03) when compared to those with an authoritative mother (Rhee et al., 2006).

Parents play a crucial role in the development of childhood obesity. They are responsible for the environment in which children are raised; as well, through specific feeding practices, role-modeling and general parenting styles parents help shape their children’s healthful behaviours. Given the central role that parents play, it is essential to target parents in any childhood obesity prevention intervention (Han, Lawlor, & Kimm, 2010).

2.3 Parental Involvement in Childhood Obesity Prevention and Treatment

Parental involvement in childhood obesity prevention efforts is well established in the literature as a crucial aspect for a successful intervention. A meta-analysis by Young, Northern, Lister, Drummond & O’Brien (2007) found that familial involvement in behavioural obesity treatment interventions produced large and reliable effects on reducing child overweight compared to other interventions, and that these effects were maintained over follow-up periods lasting months. As highlighted previously, parents are in control of the feeding environment of young children and thus, involving parents in prevention programs may be effective for a number of reasons, including provision of healthful foods, appropriate portion size, modelling of eating behaviours, and use of positive feeding practices (Young, Northern, Lister, Drummond & O’Brien, 2007).
It may be that targeting parents exclusively in interventions, rather than involving children either alone or with their parents is the best way to approach obesity prevention in children. A study by Golan, Weizman, Apter & Fainaru (1998) sought to compare the effects of child-only (child as the agent of change) versus parent-only (parent as the agent of change) participation in a childhood obesity treatment intervention. In order to participate, children had to be between the ages of 6-11 years old and obese (>20% of recommended weight-for-age, weight-for-height and weight-for-sex) (Golan, Weizman, Apter & Fainaru, 1998). It was found that children in both groups experienced a significant decrease in percent classified as overweight, however children of those in the parent-only group had a significantly higher reduction in percent overweight than did children in the child-only group immediately following the 12 month intervention (14.6% vs. 8.1%; p < 0.03) (Golan, Weizman, Apter & Fainaru, 1998) as well as at 7 years follow-up (Golan & Crow, 2004). Additionally, Golan, Weizman, Apter & Fainaru (1998) found that adherence to the intervention was better and dropout rates were lower for participants in the parent-only group. Moving away from a child-focused intervention that involves dietary prescription and children as the agents of change towards more parent-focused interventions that involve whole family lifestyle modifications, with change in parenting skills and weight-related behaviours as desired outcomes is likely a more effective approach to tackling childhood obesity (West, Sanders, Cleghorn, & Davies, 2010). Parents’ role in childhood obesity then becomes the central focus of intervention efforts and the emphasis is on changing the environment to one that promotes healthful lifestyles (West, Sanders, Cleghorn, & Davies, 2010). Given that the whole family is responsible for behaviour change, it may make these interventions more sustainable for the overweight/obese child (West, Sanders, Cleghorn, & Davies, 2010; Golan, Weizman, Apter & Fainaru, 1998). Additionally, a parent-only approach is
more cost-effective as there is no need to provide childcare or run a concurrent child program (O’Brien, McDonald & Haines, 2013; West, Sanders, Cleghorn, & Davies, 2010; Golan, Kaufman, Sharar, 2006) and there may be reduced risk of adverse effects on children (e.g. dieting behaviours, and preoccupation with food and weight) (Golan, Kaufman, Sharar, 2006).

2.3.1 Community-based Parenting Programs Targeting Childhood Obesity Prevention and Treatment

Obesity prevention and treatment programs for parents of young children have been held in a variety of settings, including but not limited to schools, nurseries, and primary care. The most recent Cochrane review of childhood obesity prevention found only six studies published on preschool aged children (<6 years old) and found that these studies were primarily conducted in nursery/child care settings (Waters et al., 2011). Based on sub-group analysis of studies, this review concluded that programming held outside educational settings, for example home-based studies or those conducted in a healthcare setting, are more effective for children in this age group and that this may be due to increased parental engagement (Waters et al., 2011).

Community settings (i.e. settings that are already familiar/may already serve parents and young children – e.g. Community Health Centres, Early Years Centres) provide another potentially accessible and effective venue, outside of the educational setting, for holding parenting programs. There are a number of examples of effective community-based programs designed to help parents modify the behaviours of the family and adopt healthy parenting practices to achieve more healthful weights in their children. Likely the most studied general parenting program is the Positive Parenting Program (Triple P) (Wilson et al., 2012) and Triple P has been adapted to include a specialty module for parents of children who are overweight (Lifestyle Triple P) (Sanders, n.d.). Lifestyle Triple P focuses on three topics: nutrition, physical
activity and positive parenting with the aim of teaching parents to use effective parenting as a means to promote healthful behaviours for their family (West & Sanders, 2010). Two randomized controlled trials have been done to evaluate the effectiveness of Lifestyle Triple P with mixed results. West, Sanders, Cleghorn & Davies (2010) utilized a randomized controlled trial with two conditions (intervention and waitlist control) and invited families with children (4-11 years old) who were either overweight or obese to participate in the study. The twelve week intervention involved nine 90-minute group sessions and three 20-minute telephone sessions. As well, each family received a workbook consisting of content summary and between session homework (West, Sanders, Cleghorn, & Davies, 2010).

Immediately post-intervention, there were significant improvements in child body size (primary outcome) for families in the intervention condition (West, Sanders, Cleghorn, & Davies, 2010). Children whose parents were in the intervention had a decrease in mean BMI z-score of 0.11 (West, Sanders, Cleghorn, & Davies, 2010). Additionally, improvements were seen in the secondary outcomes (fewer weight-related problem behaviours, a decrease in ineffective parenting and an increase in parenting self-efficacy) for families in the intervention condition (West, Sanders, Cleghorn, & Davies, 2010). A one year post-intervention follow-up revealed that all the improvements in secondary outcomes were maintained and that there were further reductions in child body size (a further decrease of 0.08 in mean BMI z-score) for children of families in the intervention (West, Sanders, Cleghorn, & Davies, 2010). Additionally, the intervention was well received among participants. All parents who completed the satisfaction survey reported that the quality of the intervention was good to excellent and most reported that it met their and their child’s needs (West, Sanders, Cleghorn, & Davies, 2010).
Following the success found by West, Sanders, Cleghorn & Davies (2010), Gerards et al. (2014) sought to examine the effectiveness of Lifestyle Triple P in the Netherlands using a parallel-group randomized controlled trial. Parents with overweight or obese children between the ages of four to eight years old were enrolled in the study (Gerards et al., 2014). The 14-week intervention involved ten 90 minute group sessions and four 15-30 minute individual telephone calls while those in the control condition received two educational handouts (one regarding healthy nutrition and physical activity and one on positive parenting) as well as a knowledge based quiz and tailored advice via the Internet (Gerards et al., 2014). Contrary to the findings by West, Sanders, Cleghorn & Davies (2010), the evaluation found no significant differences between body size as assessed by BMI z-score, waist circumference and skinfold thickness (primary outcome) of children of parents in the intervention compared to children of those in the control group (Gerards et al., 2014). There were, however, short term (immediately post-intervention) intervention effects on reducing soft drink consumption among children as well as increasing certain parental behaviours (responsibility for child’s physical activity, encouragement of children eating a variety of foods, and perceived efficacy and satisfaction with parenting) and long term (12 months post-baseline) intervention effects on decreasing child’s screen time and increasing outdoor play (Gerards et al., 2014).

Other community based parenting programs have shown some positive results in improving child overweight. Golley, Magarey, Baur, Steinbeck & Daniels (2007) found that parenting skills training plus intensive lifestyle education delivered to parents of overweight children aged six to nine years old reduced child BMI z-score by 9% versus only ~5% decrease in BMI z-score for children whose parents received parenting skills training alone or were wait-listed for the intervention. In the PEACH (Parenting Eating and Activity for Child Health) study,
Magarey et al. (2011) found a 10% relative weight loss (including both reductions in BMI z-score and waist circumference) in overweight, prepubertal children (aged 5.0-9.9 years) of parents who attended either a healthy lifestyle education program alone or a healthy lifestyle education plus parenting skills program. However, this intervention did not include a control group (Magarey et al., 2011) therefore it cannot be known whether healthy lifestyle education alone or in combination with a parenting skills program is more effective than no intervention at all.

Both the above interventions involved in-person group education sessions for parents (Golley, Magarey, Baur, Steinbeck & Daniels, 2007; Magarey et al., 2011). While a less intensive parent-led intervention (the KAN-DO study) involving eight monthly mailing kits, follow-up phone calls and only one in-person group session found improvements in mothers’ feeding practices (decrease in emotional feeding and using food as a reward) and maternal intake (increased fruit and vegetable intake and decreased intake of sweetened beverages) as well as positive changes to the home environment (less dinners/snacks eaten in front of the TV), the six month intervention was unable to achieve significant improvements in child weight (children aged 2-5 years old) (Ostbye et al., 2012). It may be that in order to realize significant improvements in child weight, an intervention involving in-person group sessions is the most effective format to deliver healthful lifestyle education.

2.3.2 Barriers to Community Programs

High rates of attrition and low attendance in community based parenting programs are not uncommon. Gerards et al. (2014) found that 30% of families did not attend a single session, in the KAN-DO study, only 46% of participants attended the in-person group session (Ostbye et al., 2012), and the rate of attrition seen by West, Sanders, Cleghorn and Davies (2010) from
baseline to immediately post-intervention was 13.9% and from post-intervention to the one year follow-up mark was 34.6% (West, Sanders, Cleghorn, & Davies, 2010). While attrition throughout the duration of the intervention was fairly low, the dropout rate by the time of follow-up is concerning. A review of the literature reported overall drop-out rates from parenting programs on a variety of topics to be 28% (Forehand, Middlebrook, Rogers & Steffe, 1983). A qualitative systematic review by Mytton, Ingram, Manns & Thomas (2014) examining key facilitators and barriers to program engagement and completion as identified by participants in parenting programs found that it is often factors unrelated to the content of the program, but rather factors related to program logistics that have the largest impact on attendance and retention. The accessibility and convenience of a program are key (Mytton, Ingram, Manns, & Thomas, 2014). Both the time and location of a program impact participant attendance (Mytton, Ingram, Manns, & Thomas, 2014). As well, participant constraints can greatly limit the ability to attend parenting programs (e.g. finding childcare and the frequency and timing of sessions which did not fit with the family’s schedule) (Mytton, Ingram, Manns, & Thomas, 2014). Parents reported that they enjoyed the group experience of parenting programs, and the opportunity to meet and engage with others in similar situations, however programs needed to be run at a convenient time and place and offer co-located childcare to maximize attendance (Mytton, Ingram, Manns, & Thomas, 2014).

In an attempt to eliminate the barrier of finding childcare, one study examined the effectiveness of running a concurrent child’s program parallel to the parent’s program (O’Brien, McDonald & Haines, 2013). The novel child’s program proved successful and overall program attendance was high, with all sixteen families completing the program and eleven families attending six or more (out of nine) sessions (O’Brien, McDonald & Haines, 2013). Process
surveys indicated that 100% of parents were either very satisfied or satisfied with the children’s program and qualitative data from interviews highlighted that the children’s program even became a catalyst for program attendance in one case (O’Brien, McDonald & Haines, 2013). Despite the success of running a concurrent child’s program on parent retention, this strategy to increase attendance is not without its drawbacks. Running a child’s program alongside a parenting program can be costly. In this study, the child’s program included a weekly activity, snack, and incentive, and required staff to run the program; all of which adds to the cost of an intervention (O’Brien, McDonald & Haines, 2013).

2.4 Dual Income Families
2.4.1 Demographic Trends

According to Statistics Canada, demographic trends are changing and dual income families are now the majority of Canadian families - that is, families where both parents work outside the home (Marshall, 2009). As of 2008, three quarters of couples with dependent children were dual-earners; up from just over one third in 1976 (Marshall, 2009). The increase of women participating in the workforce has led to an increase in men participating in home life (e.g. helping with housework, helping to raise children) (Marshall, 2006). From 1986 to 2005 the percentage of women reporting taking part in primary care of the children (e.g. making lunches, helping with homework, driving to school) remained unchanged at 90%, however the percentage of men reporting taking part in primary care increased from 57% to 73% in this same time period (Marshall, 2006).

In addition to a shift in the composition of the workforce with increasing female presence, there has also been an increase in the length of the average workday for both men and women ages 25-54 including both paid and unpaid activities (Marshall, 2006). The amount of
time spent on paid work and unpaid household jobs has risen from 8.2 hours to 8.8 hours per day in the past two decades (Marshall, 2006). This increase comes primarily from an increase in paid work (Marshall, 2006). Men’s paid work increased from an average of 6.1 hours to 6.3 hours per day from 1986 to 2005 while women’s paid work increased from an average of 3.3 hours to 4.4 hours per day between 1986 and 2005 (Marshall, 2006). It has now become the norm for both parents to work outside of the home and the hours that these parents are working are becoming increasingly long. There is even a sizeable proportion of dual-earner families (1 in 4 dual-earner families) where couples work more than 80 hours per week combined (Marshall, 2009).

2.4.2 Work-Life Balance, Stress and Spillover

Balancing work life and family life is a struggle for working parents (Marshall, 2006; Marshall, 2009). As many as 24% of men and 38% of women in dual-earner families with preschool-aged children report feeling severe time-crunch stress (Marshall, 2009). The proportion of dual-earner parents currently facing time-crunch stress is similar to that seen in dual-earner families in 1992 and in 1998 (Marshall, 2009). It follows then that the severity of time stress is holding steady, however the number of employees dealing with this stress is on the rise given the increase in the number of dual-earner families in recent years (Marshall, 2009). This time stress is directly associated with dissatisfaction with work-life balance (Marshall, 2009). This discontent with work-life balance is prompting some employees to desire alternative working hours. When asked about their preferred working hours, 13% of men and 16% of women reported that they would prefer fewer hours of work for less pay (Marshall, 2009). This number jumped to 20% of women when the women had dependent children at home (Marshall, 2009). For men with preschool-aged children, the opposite was true - 19% of these fathers reported preferring more working hours with more pay (Marshall, 2009). This highlights the
reality that for many families with children, it is not possible to work fewer hours, and that for many families, in order to provide financial stability for the household, it may even be necessary to take on more hours of paid work (Marshall, 2009).

The stress of managing work-life balance can cause spillover in both the employees’ home (work-to-family problems) and working (family-to-work problems) lives (Marshall, 2006). There is a bi-directional relationship between family-to-work and work-to-family conflict (Frone, Yardley & Markel, 1997). It appears as though when the obligations of one role (e.g. parent) interfere with the obligations of a second role (e.g. employee), performance of the second role suffers (Frone, Yardley & Markel, 1997). There is evidence to suggest that work-related stress leads to marital dysfunction (Barling & MacEwan, 1992) and ineffective parenting practices (Repetti & Wood, 1997). In a study examining mother-preschooler dyads, it was found that mothers were more withdrawn from their child on days when the mothers reported a higher level of work stress (e.g. heavy workload, stressful interactions with supervisors and coworkers) (Repetti & Wood, 1997).

Conversely, family stress can effect work performance. Often the effect of the family on work is negative (Crouter, 1984). In interviews with researchers, employees described family as an “inhibiting influence” that impacted their mood in the workplace, their ability to travel for work, and to work longer hours/additional shifts (Crouter, 1984). Additionally, the negative spillover of one employee’s family-to-work problems was reported to have a ripple effect whereby co-workers of the affected employee felt the negative effects of the spillover (Crouter, 1984). Family-to-work conflict has been shown to be associated with employee withdrawal behaviours (Hammer, Bauer & Grandey, 2003; MacEwan & Barling, 1994). Hammer, Bauer & Grandey (2003) found that conflicts at home can translate into interruptions at work for both
husbands and wives and for husbands can also lead to absenteeism. Although interruptions are a mild form of employee withdrawal, it is common for mild withdrawal behaviours to escalate into more severe forms of workplace withdrawal (e.g. turnover) (Hammer, Bauer & Grandey, 2003). It is in the best interest of employers to focus on helping employees manage work-life balance issues as there can be a huge cost to workplaces in terms of days lost, replacement and retraining and overall decreased productivity in the workplace (Martin & Sanders, 2003).

2.5 Workplace Wellness

The increasing demands of working life have prompted Human Resources (HR) professionals to focus programming on wellness. The following section will go into further detail about the unique opportunities available to employers to maximize employee and organizational outcomes through the use of supportive HR practices and worksite wellness programming.

2.5.1 Human Resources Management

As the length of the average workday continues to grow (Marshall, 2006), employees are spending an increasing number of their waking hours at work (Baicker, Cutler & Song, 2010) and the task of effectively managing these employees is of central importance. Managing people while at work has evolved from simply a responsibility of all managers to a distinct and separate discipline of its own, referred to as Human Resources Management (HRM), or simply Human Resources (HR) (Martin, 2009). Differing views on the function of HRM make arriving at a single definition challenging. The conflicting outcomes perspective of HRM posits that HR has little concern for employee well-being and is wholly concerned with organizational performance (Van De Voorde, Paauwe & Van Veldhoven, 2012). It is argued that organizational performance and employee well-being are distinct goals and require different HR practices to be achieved.
HRM is therefore responsible for recruitment, training, motivating and managing employees only to the extent that it maximizes their utility to the company (Martin, 2009). A second perspective on HRM is that of mutual gains (Van De Voorde, Paauwe & Van Veldhoven, 2012). This more common view of HRM takes an optimistic look on management and argues that HRM can have positive outcomes for both employee well-being and organizational performance (Van De Voorde, Paauwe & Van Veldhoven, 2012). HR practices, rather than being entirely focused on organizational success, are intended to build ability and motivation in employees through programs such as workplace wellness, as well as provide them with the opportunity to perform (Boxall & Purcell, 2008).

2.5.2 Workplace Wellness Programming

The initiation of worksite wellness programming is one example of a supportive strategy that employers can use to provide for their employees while at the same time seeing organizational benefits. In an era of rising healthcare costs where employees are spending an increasing proportion of their day in the workplace, worksite based wellness programming is a natural investment to address the need for prevention of chronic disease (Baicker, Cutler & Song, 2010). While employees are the primary beneficiaries of this type of programming, employers may also accrue the benefits (Baicker, Cutler & Song, 2010). Of particular interest to employers is the possibility of wellness programming to help contain healthcare costs while at the same time boosting employee morale and productivity and reducing absenteeism and employee turnover (U.S. Department of Health and Human Services, 1992; Baicker, Cutler & Song, 2010).

Employers are beginning to see the benefit of health and wellness programming. In 2008, a survey of U.S. employers revealed that 77% of employers offered formal wellness programs,
up slightly from 2007; and of those employers who did not currently offer programs, over half reported planning to add them (Capps & Harkey, 2008). Employers are also increasingly providing their employees with incentives to participate in wellness initiatives with 71% of companies with formal wellness programs offering participation incentives in 2008, up from 62% in 2007 (Capps & Harkey, 2008). Research documenting the effectiveness of wellness programming has found a positive return on investment for employers (Baicker, Cutler & Song, 2010). The Citibank’s health management program, initiated in 1994, had cost savings between $4.56 and $4.73 for every dollar spent on the comprehensive program (Ozminkowski et al., 1999) and a recent meta-analysis by Baicker, Cutler and Song (2010) found that medical costs fall approximately $3.27 for every dollar spent on wellness programs, and absentee day costs fall by approximately $2.73 for every dollar spent. These estimates are significant in justifying the potential gains for employers in implementing wellness programming for their employees.

Many companies recognize that employee wellness is central to their organizational success and have adopted Employee Assistance Programs (EAPs) to facilitate the provision of appropriate mental and emotional health services to their employees (Employee Assistance Society of North America, 2009; Society for Human Resources Management, 2009). As of 2009, 75% of U.S. employers had EAPs (Society for Human Resources Management, 2009). EAP presence in Canadian workplaces is similar to that seen in the U.S. In Ontario, between 1989 and 2003, the proportion of organizations with EAPs more than doubled from 28% to 67% (Macdonald et al., 2007). More large organizations (88% of companies with 500 or more employees) offered EAP services than did smaller firms (66% of companies with 1-99 employees) (Society for Human Resources Management, 2009), and again this trend is similar in Canada (Macdonald et al., 2007). A review of the literature found that all studies included that
conducted outcome evaluations of EAPs reported financial benefits as well as positive employee and program outcomes (Csiernik, 2011). Using a quasi-experimental design, Eischen, Grossmeier & Gold (2005) evaluated the return on investment of the integration of EAP and wellness at Fairview Health Services. Financially, since program launch in 2001 to 2003, there were over $340 in medical cost savings per employee, $188 per employee in worker’s compensation savings, and $230 per employee in savings due to absenteeism (Eischen, Grossmeier & Gold, 2005). Johnson & Johnson’s Health and Wellness program demonstrated decreases in expenditures related to outpatient and doctors’ office visits, mental health visits, and inpatient hospital days, with only slight increases in emergency department expenditures per employee per year (Ozminkowski et al., 2002). Cumulatively, this resulted in total savings of $224.66 per employee per year (Ozminkowski et al., 2002). Moving away from the financial gains, employee well-being can also improve with EAP usage (Selvik, Stephenson, Plaza, & Sugden, 2004). EAP usage at Federal Occupational Health resulted in a 73% reduction in employees’ self-reported emotional problems, a 66% decrease in problems of physical health that affected employees’ ability to work, a 74% reduction in relational problems with friends, family or co-workers, a 31% reduction in self-reported poor health status, and a 10% improvement in global functioning within the 45 to 60 days from case opening to case closing with an EAP counsellor (Selvik, Stephenson, Plaza, & Sugden, 2004).

2.6 Workplace Parenting Programs

Despite the success with worksite wellness initiatives, programming held in the workplace has traditionally been limited in scope to topics related to physical and mental health of the employee (Employee Assistance Society of North America, 2009; Society for Human Resources Management, 2009; Bellingham & Pelletier, 1995). Few worksites have adopted on-
site parenting programs (Martin & Sanders, 2003) as supportive tools to help employees manage issues with work-life balance. Given the barriers to participation in community-based parenting programs discussed previously, exploring the worksite as a potential venue in which to deliver parenting programs focused on the prevention and treatment of childhood obesity is important.

2.6.1 Benefits to Employees and Researchers

Having a parenting program held at the workplace is convenient for parents, increases the reach and can help reduce barriers to attendance (Sanders, Stallman & McHale, 2011; Martin & Sanders, 2003; Schuster et al., 2001) which may increase attendance and decrease attrition. If coworkers attend the program together, there may be additional incentive to continue to attend sessions, and easy access to one another within the worksite could assist in the establishment of a supportive network that may facilitate the behaviour change taught throughout the program (Schuster et al., 2001). Additionally, holding a program in the workplace, with the understood endorsement of the employer can make a parenting program seem more acceptable to employees, especially if the topic is a highly sensitive behaviour (e.g. adolescent sexual activity or drug use) (Schuster et al., 2001). Finally, parenting programs held at a workplace are logistically convenient for researchers and feasible to run due to the supportive infrastructure (e.g. conference rooms, white boards, projectors) available in most organizational settings (Schuster et al., 2001).

2.6.2 Benefits to Employers

As mentioned previously, a stressful family/home life can produce negative spillover which impacts on work performance and employee productivity (Crouter, 1984). However, when employees view their home life in a positive light, there is the potential for positive spillover to
occur (Kirchmeyer, 1992; Crouter, 1984). A study examining positive spillover from non-work domains into work as reported by alumni from a business school at a Western Canadian university on a self-administered questionnaire found that although there was both negative and positive spillover from non-work activities (including recreational, community and parenting) into their work lives, the net result was positive (Kirchmeyer, 1992). The three kinds of non-work domains impacted the alumni’s work performance in different ways. It was reported by the alumni who were parents that parenting had the ability to buffer against work problems and provided unique rewards not experienced in other areas of working and/or non-working life (Kirchmeyer, 1992). Parenting was also said to help develop transferable self-management skills including time management and patience (Kirchmeyer, 1992) which may provide resiliency on the job. It follows then that if employers can help facilitate a positive home life, they may reap benefits above and beyond simply eliminating negative spillover - they may achieve some level of positive spillover and be able to capitalize on the benefits realized. A parenting program, offered by the employer may be an effective way to decrease negative spillover and achieve positive spillover.

2.6.3 Worksite Parenting Programs

Too few workplace parenting programs have been implemented and adequately evaluated (Schuster et al., 2001; Martin & Sanders, 2003, Sanders, Stallman, & McHale, 2011) to determine whether this is an effective setting to deliver parent training that could help in the treatment and prevention of childhood obesity. However, the small number of workplace parenting programs on a variety of topics discussed in the literature have shown promising results, indicating that this is a venue worth exploring.
2.6.3.1 General Parenting

Worksite-based parenting programs have been held on the topic of general parenting with some success. Some of the earliest work is by Anderson & Fox (1990) who conducted a small study of a program offered to parents of children ages 1-5 who were employees of a university. The program consisted of four 1-hour sessions held over the lunch hour where parents were taught about child problem behaviour and discipline and were encouraged to use STAR (stop, think, ask, respond) parenting (Anderson & Fox, 1990). Minimal evaluation of the program was done and consisted primarily of process measures (Anderson & Fox, 1990). Results indicate that program attendance was good and that all those who completed the survey rated the program as either good or excellent and 78.3% reported wanting additional parent training (Anderson & Fox, 1990).

The much studied Triple P has been implemented and evaluated in a workplace setting (Martin & Sanders, 2003; Sanders, Stallman, & McHale, 2011). Using a randomized group design with two conditions (Workplace Triple P (WPTP) and a waitlist control), Martin & Sanders (2003) sought to examine the effectiveness of WPTP on parent and child, as well as workplace variables. This is the first study found in the literature to include metrics relating to work performance as part of the evaluation (Martin & Sanders, 2003). WPTP involved four 2-hour group sessions as well as four 15-30 minute individual telephone calls with the program facilitator (no mention of the time of program delivery) with a focus on core positive parenting and child management strategies (Martin & Sanders, 2003). Participants were working parents (working at least 20 hours per week) of children aged 2-9 with behavioural problems in the clinical range of intensity (Martin & Sanders, 2003). Drop-out rates were low with 83% of parents completing the eight week program (Martin & Sanders, 2003). Immediately post-
intervention, those in the intervention group reported fewer and less intense child problem behaviours as well as a lower level of dysfunctional parenting (Martin & Sanders, 2003). However, work-related variables showed less promising results with only self-reported confidence in dealing with work situations having significantly improved from baseline (Martin & Sanders, 2003). Four months following WPTP, all improvements seen immediately post-intervention were maintained and additionally, work-related stress was significantly decreased (Martin & Sanders, 2003).

Building on the findings by Martin & Sanders (2003), Sanders, Stallman & McHale (2011) sought to evaluate WPTP with the addition of new intervention components related to work stress and emotional regulation. The program structure and components were identical to those described by Martin & Sanders (2003) with a work-family balance coping skills component added to include specific strategies surrounding key transition times (e.g. getting ready for work, arriving home from work) (Sanders, Stallman & McHale, 2011). To be eligible to participate, parents had to have a child between the ages of 1-16, be working at least part-time and report difficulties with managing work-life balance (Sanders, Stallman & McHale, 2011). The program was held at times identified as convenient by each organization and included lunchtimes, afternoons, or at the end of the workday (Sanders, Stallman & McHale, 2011). Results showed that there were short and long-term improvements in parental distress and dysfunctional parenting, however effects on child behaviours only became significant at twelve months follow-up (Sanders, Stallman & McHale, 2011). Of the workplace metrics, workplace self-efficacy was improved at post-intervention and remained significantly improved at twelve months follow-up (Sanders, Stallman & McHale, 2011).
Taken together, the findings by Martin & Sanders (2003) and Sanders, Stallman & McHale (2011) show that the delivery of a workplace general parenting program can be effective at both changing parenting and child behaviours as well as improving workplace efficacy and decreasing work-related stress (Martin & Sanders, 2003; Sanders, Stallman, & McHale, 2011).

2.6.3.2 Topic Specific Parenting Programs

Other workplace parenting programs have been more focused in their educational content. The Parenting Partnership is a workplace parenting program designed to educate parents as well as modify some of the risk and protective factors for substance abuse (Felner et al., 1994). This program involved a more intensive format with twenty-four 1-hour sessions twice per week for twelve weeks with separate content designed for parents of children aged 0-6, 6-12 and 13-18 (Felner et al., 1994). The Parenting Partnership was delivered to parents in their worksite over their lunch hour (Felner et al., 1994). This program saw drop-out rates of 16%, however of those who did not drop out, participants attended an average of 74% of sessions (Felner et al., 1994). Evaluation of the program indicated that for those “high dose” parents who attended more than 80% of sessions, there were improvements in parental substance abuse knowledge and attitudes, child problem behaviour and parent stress (Felner et al., 1994). For “low dose” parents, changes in the above measures were either non-significant or did not persist at follow-up (Felner et al., 1994).

On the topic of adolescent sexual health, researchers have developed Talking Parents, Healthy Teens (TPHT), a program designed to help parents with adolescent children learn skills to facilitate communication with their children regarding sex and reduce risky adolescent sexual behaviours (Eastman, Corona & Schuster, 2006). TPHT consists of eight weekly 1-hour group sessions delivered to parents with children in grades 6 through 10 (approximately 11-16 years
old) over their lunch hour, with a focus on skill building and the opportunity for practice, including an individual videotaped role-playing session between participants and facilitator, as well as weekly take-home activities (Eastman, Corona & Schuster, 2006). Evaluation of the program using a randomized controlled trial design with randomization at the individual level revealed the success of the program (Schuster et al., 2008). Attendance was good with median attendance of seven sessions out of eight sessions (Schuster et al., 2008). TPHT was successful at improving communication between parents and their teens, including increasing the number of parents who taught their adolescent child about condom use (actual adolescent behaviour was not measured) (Schuster et al., 2008). The strength of this evaluation protocol is the randomized control design, however it cannot be ignored that randomization on the individual level opens up the possibility for diffusion of intervention material to the control participants; and at one week post-intervention, 20% of control parents reported talking with intervention parents about the program content or seeing/reading program materials (Schuster et al., 2008).

Building upon the learnings from TPHT, a program (Let’s Talk!) was adapted from TPHT to be culturally appropriate for delivery in a South African setting with the goal of examining whether a worksite-based program could improve parent-child communication about HIV and sexual health (Bogart et al., 2013). A randomized pilot test was conducted with two intervention and two waitlist control groups with randomization at the individual level (Bogart et al., 2013). Let’s Talk! consisted of five weekly 2-hour sessions for parents of children aged 11-15 with material primarily conveyed orally and little written material, to accommodate low literacy rates among participants (Bogart et al., 2013). Unlike TPHT, parent participants in Let’s Talk! were excused from work to participate in the program (Bogart et al., 2013). Process evaluation revealed that fidelity to the program was high in both intervention groups (97% and
89% of topics covered in the two intervention groups) (Bogart et al., 2013). In terms of dose received, 73% of participants attended four or five sessions; as well, there was a high degree of participant satisfaction with the program with nearly all (91%) comments from parents being positive (Bogart et al., 2013). Outcome evaluation showed that Let’s Talk! was successful at increasing the comfort and communication surrounding sex-related discussions for parents and their adolescent children (Bogart et al., 2013). Additionally, the program led to greater condom-use self-efficacy for parents in the intervention group (adolescent condom use behaviour was not measured) (Bogart et al., 2013).

Evaluation of the Parenting Partnership, TPHT and Let’s Talk! suggest that it is not only general parenting programs that can be successfully implemented in a workplace setting, but that a parenting program on a specific topic can be well received, well attended and achieve desired outcomes. A workplace parenting program that blends general parenting education with healthy child weight-related messaging has yet to be explored and represents a novel approach to addressing child overweight/obesity.

2.7 Formative Assessment

Prior to the development of a novel program, conducting a formative assessment can help to maximize the success of an intervention. The goal of a formative assessment is to gather information about the population of interest and the context or setting in which the intervention will take place (Gittelsohn et al., 1999). Formative assessment can help researchers identify behaviours of concern, understand the determinants of the behaviour, identify resources available, and form partnerships with important stakeholders (Gittelsohn et al., 1999). This information is then used to help answer questions related to intervention design (Gittelsohn et al.,
1999). Often qualitative methods are used in conducting a formative assessment, including in-depth interviews, focus groups, and direct observation (Gittelsohn et al., 1999). A qualitative approach, where participants are allowed to communicate ideas in their own words can allow for new, unexpected and previously unthought-of perceptions to emerge which may directly influence the success or failure of a program (Gittelsohn et al., 1999).

2.8 Feasibility Studies
2.8.1 Definition

The National Institute for Health Research Evaluation, Trials and Studies Coordination Centre (NETSCC) defines feasibility studies as “pieces of research done before a main study” with the goal of “estimate[ing] important parameters that are needed to design the main study” (NETSCC, 2014a). Examples of such important parameters include: standard deviation of the outcome measure, willingness of the participants to be randomised, follow-up rates, response rates to questionnaires, and time required for data collection and analysis (NETSCC, 2014a). The NETSCC distinguishes between feasibility studies and pilot studies, the latter defined as “a smaller version of the main study used to test whether the components of the main study can all work together” (NETSCC, 2014b). For example, a pilot study has as a goal to ensure that recruitment, randomisation, treatment, and follow-up assessments are successful (NETSCC, 2014b).

Although similar, a critical distinction between feasibility studies and pilot studies according the NETSCC, is that feasibility studies do not have hypothesis testing as an objective (Leon, Davis, & Kraemer, 2011; Arain, Campbell, Cooper, & Lancaster, 2010) whereas pilot studies include an evaluation of the primary outcome measure (NETSCC, 2014b). Feasibility studies have as objectives solely to test the appropriateness of an intervention and identify
elements of the research protocol that need modification to guide researchers as to how these changes may occur (Bowen et al., 2009). Given the similarities in the definitions, the terms feasibility study and pilot study are often used interchangeably in the literature (Leon, Davis, & Kraemer, 2011; Thabane et al., 2010) and correspond to the NETSCC’s definition of feasibility study. That is, a study carried out prior to the main study with the aim of determining the feasibility of elements of the research protocol with no evaluation of the outcome objectives (NETSCC, 2014a; Leon, Davis, & Kraemer, 2011; Thabane et al., 2010; Stevens, Taber, Murray, & Ward, 2007). There are two primary reasons that feasibility studies do not evaluate outcome objectives – there is minimal knowledge regarding the methods of the intervention and secondly, feasibility studies are not adequately powered (Leon, Davis, & Kraemer, 2011).

2.8.2 Why Do a Feasibility Study?

A feasibility study is a critical step in ensuring the success of a final intervention. It allows modification to the intervention prior to advancing to a larger study and can signal to researchers that an intervention is not feasible and not worth pursuing with a larger sample (Leon, Davis, & Kraemer, 2011; Thabane et al., 2010; Bowen et al., 2009). In this way, feasibility trials ensure that only those interventions worth exploring advance (Bowen et al., 2009). That being said, the success of a feasibility study does not guarantee the success of a full-scale trial (Van Teijlingen, 2002). Rather, feasibility studies are a necessary exploration of a novel intervention that serves to inform the research protocol and increase the likelihood of success (Leon, Davis, & Kraemer, 2011).
3.0 RATIONALE AND RESEARCH OBJECTIVES

3.1 Rationale

The etiology of childhood obesity is multifaceted, however focusing prevention efforts on a child’s parents has the potential to be successful given that parents play a crucial role in the development of childhood obesity. They are responsible for the environment in which children are raised; as well, through specific feeding practices, role-modeling and general parenting styles, parents help shape their children’s healthful behaviours (Han, Lawlor, & Kimm, 2010). Parent-focused interventions that involve whole family lifestyle modifications, with change in parenting skills and weight-related behaviours as desired outcomes are a potentially effective approach to tackling childhood obesity (West, Sanders, Cleghorn, & Davies, 2010). Traditionally, such parenting programs have been run in community settings. Despite successes, attendance and attrition remain challenges of community based programming (Forehand, Middlebrook, Rogers & Steffe, 1983; Mytton, Ingram, Manns, & Thomas, 2014).

Co-occurring with the childhood obesity epidemic is a change in workplace demographics. Families are increasingly dual-earners (i.e. both parents work outside the home) and the demands of balancing working and family life is causing stress, struggles with work-life balance (Marshall, 2009) and compromised workplace performance (Martin & Sanders, 2003). Employers may have a unique opportunity through worksite wellness programming (under which parenting falls) to ease challenges with work-life balance, see improvements in employee performance and decrease organizational costs; however few worksites have adopted on-site parenting programs (Martin & Sanders, 2003) as supportive tools to help employees manage issues with work-life balance. Given the barriers to participation in community-based parenting programs discussed previously, exploring the worksite as a potential venue in which to deliver
parenting programs is a potentially effective and novel way to reach parents while concurrently providing benefit to employers.

To date, no worksite parenting program has been found in the literature that provides employees with general parenting skills and child weight-related messaging. This study aims to fill that gap by adapting and delivering a pre-existing parenting program (Parents and Tots Together) that has been successfully run in community settings (Haines et al., 2012), to be delivered to parents in their workplace.

3.2 Research Objectives

This study had two research objectives:

1. To determine employers’ perceptions of the need for and preferred delivery mode for a parenting program within the workplace setting;
2. To determine the feasibility and acceptability of delivering Parents and Tots Together (PTT), a parenting program that includes parenting and weight-related messaging, in the workplace setting.

In order to meet the objectives of this study a two-phase study was conducted. Phase one consisted of a formative assessment involving semi-structured qualitative interviews with employers to gather the information needed to inform the adaptation of PTT to be suitable for delivery in the workplace. Semi-structured qualitative interviews were selected as the most appropriate method of data collection as interviews allow researchers to gain an in-depth understanding of the research topic as experienced by the interviewees (Neuman & Robson, 2012). Additionally, individual one-on-one interviews were a more practical approach to data collection than focus groups, as getting a sufficient number of employers together at the same
time and location was not feasible. Following program adaptation, phase two involved a feasibility trial of PTT in the workplace setting – going forward, this workplace parenting program will be referred to as Parents Working Together (PWT).

3.3 Hypotheses

We hypothesized that employers would perceive a need for a parenting program within workplace settings. We also hypothesized that delivering PTT within the workplace setting would be feasible for implementation and acceptable to employees.

4.0 FORMATIVE ASSESSMENT WITH EMPLOYERS
4.1 Methods for Formative Assessment
4.1.1 Participants & Recruitment

Purposive sampling was used to identify specific participants (Neuman, 2007a). Employers from a variety of workplaces who were existing contacts of members of the research team, involved in employee wellness/wellness programming in their organization were the targeted participants for this phase of the study. Our participants were not true employers at their companies in the sense that they were not direct supervisors/responsible for the hiring and firing of the employees. They were, rather, employers’ designates. For the ease of terminology, our participants will simply be referred to as employers, despite the acknowledged difference. Employers were able to provide insight into the need for/interest in a parenting program delivered in the workplace, as well some of the logistical aspects of how PTT could be successfully adapted for delivery in a workplace setting. Employers were recruited via email. In addition to a scripted email (Appendix A) they were sent a document providing more information and outlining the rationale for conducting such a study (Appendix B).
4.1.2 Interview Guide

The interview guide was developed by the research team to include questions relating to a) employees’ current struggles with work-life balance and the perceived need for a program such as PTT in the workplace, b) logistical aspects of how a parenting program could be run to be successfully delivered in the workplace, and c) workplace metrics to be added to the evaluation protocol that would be of interest to employers (Appendix C – drafted version of the interview guide). Despite having an interview guide, the interview process was flexible in nature such that the guide was adapted to include new prompts or questions as the interviews occurred. Additionally, throughout the interview process, the interviewer remained attuned to any difficulties that participants had in understanding questions and the interview guide was revised and re-worded as needed.

4.1.3 Analysis

Drawing on Braun & Clarke’s (2006) six phase process, thematic analysis was used to analyze the data. A deductive or directive approach was used whereby the questions in the interview guide served as the framework for devising the initial codes (Vaismoradi, Turunen & Bondas, 2013; Hsieh & Shannon, 2005). Interviews were transcribed and read over to ensure familiarity with the data (phase 1). Initial codes were generated drawing on the interview guide for structure (phase 2) and sorted into potential themes (phase 3). Any data that did not seem to fit within the codes generated from the interview guide were coded separately and new themes were allowed to emerge. A second researcher was brought in to independently review the transcripts and organize the data into the potential themes that were generated in phase 3. Despite having a list of potential themes, the second reader was made aware that if there were codes
which did not fit into the themes she was able to create new themes as required. Together, both researchers reviewed the themes to ensure that data items within one theme fit well, but were distinct from other identified themes (phase 4). Together, the researchers defined and named the themes (phase 5). Finally a report (see Appendix D) was generated summarizing the findings from the qualitative interviews as well as selecting the quotes that best illustrated the emergent themes to be used for member checking (phase 6).

4.1.4 Ensuring Rigour

In addition to the flexibility in regards to revising the interview guide and the coding schema described above, other strategies that were used to ensure rigour are described in the following sections.

4.1.4.1 Credibility and Confirmability

To ensure a good fit between what was said by interview participants and what was interpreted by the researchers, several strategies were used. Before beginning the analysis, the researchers were reflexive and acknowledged biases that may have influenced their interpretation of the findings (e.g. the research team acknowledged that they were invested in the project and believed that a parenting program held in the workplace would be an ideal location to hold PWT) and attempted to remain neutral while analyzing the data (Liamputtong, 2013). Data triangulation, in which multiple quotations from the data were used to confirm emerging themes, as well as peer review (by the second researcher) ensured the existence and sufficiency of identified themes (Liamputtong, 2013). Finally, member checking was used once the summary report was generated to confirm the accuracy of the findings (Liamputtong, 2013). The summary report was provided to participating employers via email to determine the accuracy of the
researchers’ interpretation of the data. All interview participants responded to the emailed summary with no major edits required.

4.1.4.2 Dependability

To ensure that the research process was logical and replicable, a clear description of the methods was kept (Liamputtong, 2013) including any additional prompts or questions added to the interview guide.

4.2 Results from Formative Assessment

Participants: The eleven employers interviewed represented eight different organizations. These organizations included: an academic setting, two hospital settings, a gym, a bank, a manufacturing plant, a City department, and an HR personnel with experience in multiple workplaces. Of the eleven employers, all eleven were female, eight were HR personnel and three were occupational health nurses.

Themes: Seven main themes were identified; five of the themes were predetermined by the interview guide (work-life balance issues, existing or past program strategies used by employers, suggested program logistics and strategies, barriers to program implementation and ways to address them, and suggested program evaluation) while two themes emerged throughout the discussions with participants (interest in a workplace parenting program and suggestions for marketing the program). While some of the results seemed to be very organizationally dependent (suggested program logistics and strategies), there were commonalities between interviews and theoretical saturation was reached as after the nine interviews there was no new data coming forth. The following sections will further describe findings related to each theme.
4.2.1 Work-Life Balance Issues Exist for Employees and Are Important

In response to broad questions about employees’ struggles with work-life balance (e.g. ‘Can you tell me about any challenges or struggles you are aware of with respect to how employees, specifically those with young children, in your workplace are managing work-life balance, and how this is impacting both employees and your organization?’), universally, employers stated that they saw issues with work-life balance as a significant problem for their employees. As one employer stated:

*Employees will report to you that that’s probably their number 1 struggle when it comes to working is finding...striking that right balance between their work life and their family life.* [P001]

Many employers felt that employees’ struggles with work-life balance have been increasing in recent years with increases in work volume and performance expectations in the workplace as central features. This was seen as leading to significant stress and mental health issues for employees, and employers are seeing this impacting on workplace performance (i.e. presenteeism, absenteeism, decreases in engagement scores, and increases in benefits costs):

*I think stress, you know, is certainly on the rise. We see it in our claims costs, we hear about it on the news, read it in the newspaper, you know mental health obviously being a huge issue right now that all the workplaces are tackling. And a lot of the mental health and issues in work are things related to balance and workload.* [P010]

In addition to affecting workplace performance, the stress resulting from struggles with work-life balance is taking its toll on the personal lives of employees. Employers describe their employees as “not having that downtime that they need,” always being in a “rush […] trying to fit everything in.” [P001]
Employers recognize the importance of helping their employees achieve work-life balance primarily due to the understood financial link between employee struggles with work-life balance and workplace performance, but employers also are interested in general support for their employees and “want to keep them [employees] happy.” [P009].

4.2.2 Existing or Past Program Strategies Used by Employers

When asked about existing or previous programs employers have used to support employee wellness, the majority of employers stated they currently have initiatives to try to support employee wellness, however none currently offer onsite parenting support programs. Only one employer felt that their organization could do more in term of wellness: “We’re behind in wellness. We clearly are.” [P004]. Employers are currently using a number of strategies to address employees’ work-life balance issues (e.g. a supportive culture, flexible work hours/shfits, modified return to work policies, workshops, lunch-and-learns) with the most common being referral to EAP services.

And we’ve got a really good EFA program, Employee Family Assistance program. So through that, they have parenting help, they have marital counseling, they have addictions, they have financial. Whatever an employee may need, it’s there. [P006]

Although many organizations offer wellness programming to support their employees, existing strategies are not without their problems. Two employers identified that even when supportive policies and programs are in place, whether they are implemented is up to the individual manager’s discretion:

The thing is with all of these, everything is at a manager’s discretion, right? So the organization can have a policy in place, but whether the manager believes in that policy or feels like they can implement it in their work environment. So you’re going to have differences across the organization in terms of what’s
available, which is something that was identified and needed to be addressed, right? [P010]

4.2.3 Suggested Program Logistics and Strategies

Of all identified themes, the suggested program logistics and strategies varied the most by interview (i.e., were very workplace specific) and differed based on the type of organization, the geographical location of the organization, and the age of the work force. Some general findings regarding logistics included the following:

4.2.3.1 Program Length

Some employers felt that the current 9-week program length was too long to be successfully implemented in a workplace setting. This finding was especially evident in a healthcare setting where employers stressed: “Time, the time is the big thing…I just find that with the healthcare right now, it’s so busy, just with patients and that.” [P006], as well as in other settings where employees work shift-work: “If you’re in a workplace with varying shifts, it may be difficult to get people in during a particular time.” [P011]. Suggestions for program adaptation ranged from shortening the program to 4-6 weeks to combining sessions into 3 half day workshops:

So it would truly be effective if you got the company’s commitment to do 4 sessions or, you know, 3 half day sessions, then people are going to be more committed to come to the whole thing. [P008]

There were, however, other employers who felt that the 9-week format could be successful in a workplace setting. These employers were not specific regarding the type of organization that could support a 9-week program, however one employer commented that shortening the program might actually reduce the program’s effectiveness at achieving behaviour change:
There’s a significant time before behaviour change will take place. It’s not going to happen overnight [P010]

4.2.3.2 Session Length

All but one employer felt that the current hour-long sessions were too long to be held in a workplace. Employers suggested sessions ranging from 30-45 minutes in length. The one employer who stated that hour-long sessions could be successful also insisted on the important caveat that for the hour-long format to work, employers would have to be given “some statistics to show what the return would be on that time spent.” [P008].

4.2.3.3 Program Location and Format

When asked, most employers felt that holding a program in the workplace was the ideal location: “It’s on-site, it’s accessible, I’m already here” [P004]. One employer felt that holding a program onsite had the added bonus of understood employer endorsement:

*There’s a level of trust that comes with it. And all these programs, sometimes just an employer endorsing it is enough for people to go “oh OK, this is good. If they, my HR manager and GM support this, it must be meaningful.” [P004]*

Regarding program format, sessions held over the lunch hour, in a lunch-and-learn format was the most commonly recommended format. When probed about whether to offer PWT online or as a combination of in-person and online sessions, results were mixed. Some employers suggested it could increase the success of the program and an approximately equal number felt that an online program would not be as effective as in-person sessions. The benefits to an online program raised by the employers included: the flexibility to do the program at any time of day and the development of an online “community of practice” [P011], while the drawbacks of online included: lack of engagement with online programming including the risk of participants not doing the work, and loss of the sense of social support:
I’m a frustrated mother, the last thing I’m doing in my moment of madness is sitting at a computer googling how to deal with my kid who’s screaming and yelling at me in the grocery store. I’m, you know…that’s the reality though, right? Versus I’m in a class and I think the return on investment is, I see I’m not alone. [P004]

4.2.4 Barriers to Program Implementation and Ways to Address Them

When asked about the potential barriers (e.g. ‘Can you think of challenges/barriers that should be considered when implementing this program? Is there anything we can do to address these challenges?’), employers identified three principal barriers that may arise in implementing a workplace parenting program: poorly attended sessions, stigma associated with attending a parenting program, and time and other competing priorities.

Employers felt that in their experience, lunch-and-learns tend to be poorly attended. The most commonly suggested way to maximize attendance at a program such as this was to offer incentives to attend: “What draws them in is prizes, it sounds so shallow but it’s true, prizes and food. And the hope is by having those, you get the people in there and you hope somebody walks away with [something].” [P009]. Another common suggestion to ensure continued participation was to put a small fee on the program: “OK so I always say, when you’ve got skin in the game you’re more likely to participate, right?” [P010].

In order to reduce the stigma that may be associated with attending a parenting program held in the workplace, employers suggested marketing the program in a positive way (e.g. a “healthy families” program).

Finally, for addressing the most difficult barrier, that of time and other competing priorities, employers suggested a couple of strategies: showing the relevance to employees and employers so that a parenting program becomes a priority and having structured and focused sessions that are clearly communicated to participants:
Everybody thinks they’ve discovered the next way to do something better and I think we’ve really complicated what’s very basic, right? So I think structured, focused sessions are the biggest bang for your buck. [P004]

4.2.5 Suggested Program Evaluation

When asked about program evaluation (e.g. ‘As part of the PWT evaluation, we typically measure participant satisfaction with the program, as well as how the program has enhanced their parenting skills and health behaviours. What other outcome measures would you be interested in having evaluated as part of PWT?’), all employers felt that doing an evaluation was important and almost all employers mentioned employee engagement scores as being a relevant metric to measure. However, while some employers stated that an evaluation protocol showing the return on investment was essential:

Anything that…I believe, anything that can be drawn to the bottom line of that company. So anything that the CFO will listen to and believe in. So if it’s reduced sick days, if it’s reduced turnover for people with young children [P008]

Other employers were less interested in the financial return, but rather in establishing trust with their employees:

What makes our programs successful, is the trust we build with our clients. So if that type of...if a parenting type of program was, say, sponsored or put through us, I wouldn’t want the feeling from anyone in the program be that we’re looking at the impact...that we’re looking at “oh you let Mary go to these sessions and she still missed 10 days.” So I’d be concerned about making that connection [P009]

And some were more interested in employee satisfaction with the program and seeing improvement in behaviours taught throughout the program:

Were the skills that they had when they left the training different than the skills they had when they started and did they increase in the direction that you wanted them to and then measure them 6 months later and are they
implementing those skills and when they implement them, is it helping them? [P006]

4.2.6 There is Interest in a Workplace Parenting Program

Overall, when asked about their interest in a workplace parenting program as a supportive tool to ease the stress of work-life balance, most employers were very supportive of such an initiative:

So I’d have to back up a lot to really just talk about how I see the value of something like this for employees. Because I think employees are looking for that and I think employers are getting pushed more and more to provide the support to that. [P002]

Because, certainly, if it’s something I can do to assist the employees in improving their lifestyle or their work-life home and balance or their...just themselves, so they feel better, and it’s 30 minutes of free time on a volunteer basis and I’m just providing the room, why wouldn’t I? There’s no better scenario than that as an employer, as far as I’m concerned, right? [P004]

One employer went as far as to suggest that a worksite parenting program was “something that would be worth piloting.” [P004].

4.2.7 Suggestions for Marketing the Program

4.2.7.1 Marketing to Employees

When asked about how a worksite parenting program could be marketed to increase employee buy-in, employers primarily focused on positive messaging. The suggestion to market the program as a “healthy families” program has been discussed previously as a strategy to eliminate the stigma potentially associated with attending a parenting program. Another employer suggested focusing on the fact that parenting struggles are a normal part of raising a child:

It would be more focused so that it would be like, you know what, this is a normal challenge, or this is a normal feeling. People want to know that, you
know, when their kid acts up and they freak out at them and yell once, that other people experience that and that it doesn’t make them an awful parent. I don’t know if that’s helpful or not? So marketing it around, you’re not alone, let us help you. [P009]

4.2.7.2 Marketing to Employers

In terms of maximizing employer buy-in, another suggestion made was to stress that this program could be a solution to struggles currently faced by employers. If a case can be made that the program could ease existing problems, then getting employer commitment is more likely:

I think that the managers and the supervisors would be most interested in supporting something like this for their employee if it is going to remedy a difficult situation that they’re already having. [P003]

One employer suggested capitalizing on the new legislation emerging around accommodation for family issues in the workplace to market the program to employers:

I see from a compliance perspective too. So accommodation, under human rights, is starting to be very prevalent... And there’s a lot of case law around that that employers need to pay attention to. And they are related to childcare and elder care. [P002]

4.3 Key Lessons Learned from Formative Assessment & Implications for Program Adaptation

Findings from the employer interviews provided a number of key implications in moving forward with adapting a pre-existing community-based parenting program to be delivered in the workplace setting (Table 4.1).
**Table 4.1**

**Overall findings from the formative assessment with employers**

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are currently struggling with work-life balance issues and a worksite parenting program is worth piloting in a workplace setting.</td>
</tr>
<tr>
<td>Deliver program in a lunch-and-learn format, however shorten sessions to 30 minutes in length.</td>
</tr>
<tr>
<td>Create positive messaging to market the program to employees.</td>
</tr>
<tr>
<td>Create structured and focused sessions that are clearly communicated to employees.</td>
</tr>
<tr>
<td>Expand the evaluation protocol to include measures of work-life balance and employee engagement.</td>
</tr>
</tbody>
</table>

First, participants identified that employees are struggling with work-life balance and a worksite parenting program, such as PWT, is of interest to help ease employee stress. Therefore it was worth moving forward with program adaptation.

Second, participants identified that holding a parenting program in the workplace is ideal for working parents due to the convenience and implied endorsement of their employer. The results suggest that using a traditional lunch-and-learn format was the best way to structure PWT as this is a format that is widely used and already familiar to employees. Further probing to explore potential interest in an online format yielded some negative results, therefore, online programming was not worth pursuing further with this sample. However in order for a workplace parenting program to be successful, certain logistical aspects must be met - in particular session length. Employees get a fixed lunch (usually between 30 minutes to 1 hour) therefore, as suggested by employers, it is critical that sessions be no longer than 30-45 minutes (depending on the length of lunches at the specific worksite). There appears to be greater flexibility in the number of sessions that could be held in the workplace and that keeping a longer program may in fact lead to greater success in achieving desired outcomes. Due to the logistics of the workplace identified as the pilot site for PWT, sessions were condensed to 30 minutes in length to fit into the employees’ lunch time and the program was shortened to 7 weeks in length (further details of
the process of adaptation as well as the identified workplace are described in the following section). Seven weeks was seen as an acceptable duration to the pilot site.

Third, employers suggested that there are a number of potential barriers to attending a parenting program held in the workplace (poorly attended sessions, stigma associated with attending a parenting program, and time and other competing priorities) and they had suggestions for increasing employee buy-in and maximizing attendance, including: positive marketing of the program and structured focused sessions that are clearly communicated to employees so that employees are aware of what is involved in the program prior to signing up. As such, in communicating the program to employees, positive messaging was used as well as a clear outline regarding the sessions’ contents.

Fourth, the results suggest that an evaluation of the program is a critical component in order to get organizational support for PWT. If employers are to support a workplace program they are interested in seeing workplace-related outcomes achieved by their employees. To capitalize on employer enthusiasm, the evaluation protocol for PWT was expanded to include measures of work-life balance and employee engagement.

5.0 FEASIBILITY TRIAL OF PWT
5.1 Methods for Feasibility Trial of PWT
5.1.1 Program Adaptation

PTT is an obesity prevention intervention aimed at parents of children ages 2-5 years. It consists of 9, 1.5 hour group sessions lead by a trained facilitator using videotaped vignettes as well as discussion questions to stimulate conversation amongst participants (Haines et al., 2012). Each week consists of one primary parenting topic and one primary weight-related topic (see Table 5.1 for PTT program overview) (Haines et al., 2012).
Table 5.1
Overview of general parenting and weight-related topics addressed in the Parents and Tots Together intervention

<table>
<thead>
<tr>
<th>Session</th>
<th>General parenting topic addressed</th>
<th>Weight-related topic addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child–centered time</td>
<td>Being physically active with your child</td>
</tr>
<tr>
<td>2</td>
<td>Importance of family routines</td>
<td>Sleep: Creating a bedtime routine</td>
</tr>
<tr>
<td>3</td>
<td>Using praise and rewards</td>
<td>Alternatives to using food as rewards</td>
</tr>
<tr>
<td>4</td>
<td>Setting limits</td>
<td>TV: Setting limits on TV</td>
</tr>
<tr>
<td>5</td>
<td>Threats and consequences</td>
<td>When not to use threats: Identifying your child’s hunger and satiety cues</td>
</tr>
<tr>
<td>6</td>
<td>Using ignore and distract strategies</td>
<td>Ignore and provide alternatives: Reducing intake of sugar-sweetened beverages</td>
</tr>
<tr>
<td>7</td>
<td>Stress management</td>
<td>Indoor and outdoor family-based physical activities</td>
</tr>
<tr>
<td>8</td>
<td>Problem solving skills with adults</td>
<td>Problem solving with partners and other caregivers about child’s health behaviours</td>
</tr>
<tr>
<td>9</td>
<td>Putting it all together</td>
<td>Putting it all together: Weight-related behaviours</td>
</tr>
</tbody>
</table>

As discussed above, for successful delivery in the workplace, the program was shortened to 7, 30 minute sessions. It was also decided that PWT should be made available to employees with children ages 2-7 years, rather than 2-5 years to allow for a larger pool of employees to recruit from as well as to increase generalizability to other workplaces that may have a smaller number of employees from which to draw. To maintain the overarching goal of obesity prevention, all content related to health behaviours was included in PWT and in order to shorten the program the focus of program adaptation was on condensing the parenting-related material. For example in session 4 which focused on limit setting as the parenting topic, only unclear commands, question commands and clear commands were included in PWT and negative commands, begging commands and critical commands were excluded. Additionally, in order to keep sessions to 30 minutes in length, in some instances not all the video vignettes were shown and only a brief narration related to a topic was included. As part of the rationale for delivering a parenting program in the workplace was to help alleviate stress at home that may influence job
performance, content related to work-life balance was added to session 7 (Session 7: Managing Your Stress).

PTT includes weekly assignments for parents to complete (e.g. spend at least 15 minutes every day in child-centered time) to increase self-efficacy. For PWT, these weekly assignments were replaced with a goal setting assignment each week (e.g. parents were encouraged to set their own parenting goal(s) and health behaviour goal(s) for the week – see Appendix E for handout) to align with the principles of motivational interviewing for achieving behaviour change (Miller & Rollnick, 2002). Participants were also sent home each week with a handout summarizing the important points from the session to serve as a reminder for participants as well as to help communicate the program messages to a spouse/other caregivers for the child.

The proposed changes for adapting PTT to become PWT were reviewed by the other members of the research team (JH, KW, KR) which included one of the PTT program facilitators who was able to offer insight into the topics that PTT participants had particularly enjoyed/identified with in the past. Feedback was incorporated to arrive at the final version of PWT (see Table 5.2 for an overview of program adaptation).

<table>
<thead>
<tr>
<th>Session</th>
<th>General parenting topic addressed</th>
<th>Weight-related topic addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child–centered time</td>
<td>Being physically active with your child</td>
</tr>
<tr>
<td>2</td>
<td>Importance of family routines</td>
<td>Sleep: Creating a bedtime routine</td>
</tr>
<tr>
<td>3</td>
<td>Using praise and rewards</td>
<td>Reducing intake of sugar sweetened beverages</td>
</tr>
<tr>
<td>4</td>
<td>Setting limits</td>
<td>TV: Setting limits on TV</td>
</tr>
<tr>
<td>5</td>
<td>Threats and consequences &amp; Using ignore and distract strategies</td>
<td>When not to use threats: Identifying your child’s hunger and satiety cues &amp; Alternatives to food as reward</td>
</tr>
<tr>
<td>6</td>
<td>Problem solving with adults</td>
<td>Problem solving with partners and other caregivers about child’s health behaviours</td>
</tr>
<tr>
<td>7</td>
<td>Stress management/Work-Life balance</td>
<td>Using physical activity to help manage stress</td>
</tr>
</tbody>
</table>
5.1.2 Pilot Site

During the formative assessment stage of the study, an employer interested in running a feasibility trial of PWT was identified. The company is a large manufacturing company located in Guelph, Ontario. Employees of the plant work shift work and the plant is primarily composed of male employees (81% male, 19% female). A pre/post uncontrolled trial of PWT was delivered from January-March 2015 by a member of the research team (LW) who was accompanied by a research assistant (APD).

5.1.3 Eligibility and Recruitment

PWT participants were eligible to participate if they were 1) over the age of 18 years, 2) had a child(ren) between the ages of 2-7 years, 3) working the day shift at the workplace holding the feasibility trial, and 4) were literate in English. In order to recruit participants, the HR department did an initial screen to determine those employees that met the eligibility criteria. All eligible employees were sent an invitation letter from HR inviting them to attend an onsite information session about PWT held at the same time and location as when the program was to be held.

5.1.4 Procedures

At the information session, interested participants were re-screened to confirm eligibility and consent forms were signed. Baseline questionnaires were distributed at the information session and participants were asked to bring them to program session 1 the following week where they were provided with a 10$ gift card as a thank you for completing the survey. The program ran for 7 consecutive weeks over the lunch hour and lunch was provided to participants. Post-intervention surveys were distributed at the end of the final session (session 7) and the
program facilitator (LW) returned the following week to collect the completed surveys and provide participants with a second 10$ gift card as compensation.

5.1.5 Process Evaluation

Given that this was a feasibility trial, program evaluation focused on process measures. To assess feasibility of the study reach, dose and fidelity were measured. To assess acceptability, attrition over the study period was measured as well as participant and employer satisfaction with the program (see Table 5.3).

<table>
<thead>
<tr>
<th>Table 5.3</th>
<th>Overview of process evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Content Measured</td>
</tr>
<tr>
<td>Feasibility</td>
<td>Reach</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Dose</td>
<td>Exposure to intervention</td>
</tr>
<tr>
<td>Fidelity</td>
<td>Delivery of content as</td>
</tr>
<tr>
<td></td>
<td>specified by intervention</td>
</tr>
<tr>
<td>Acceptability</td>
<td>Satisfaction</td>
</tr>
<tr>
<td></td>
<td>Attrition</td>
</tr>
</tbody>
</table>

Completed by:³ Program facilitator/Research Assistant,⁴ Participants,⁵ HR personnel

Additionally, employee engagement was measured using a single 5 point Likert item on the final process survey: “How much do you agree with the following statement: Participating in
this program helped relieve stress at home that allowed me to perform better at work?”

5.1.6 Impact Evaluation
5.1.6.1 General Parenting

Parenting Self-Efficacy: Twenty-two items from the Toddler Care Questionnaire (TCQ) were used to assess parenting self-efficacy (Gross & Rocissano, 1988). The 37-item scale, originally developed to assess maternal confidence in dealing with their toddler’s behaviours draws on Bandura’s theory of self-efficacy (Gross & Rocissano, 1988). The measure uses a 5-point Likert scale to assess parents’ self-reported confidence in managing aspects of their toddlers’ routines and behaviours (Gross & Rocissano, 1988). The TCQ has demonstrated reliability and stability over time with a Cronbach alpha of 0.95 and test-retest reliability of 0.87 (Gross & Rocissano, 1988). The significant negative correlation of the TCQ with measures of maternal depression (r = -0.31, p<0.03) provides support for the validity of the measure (Gross & Rocissano, 1988).

General Parenting Strategies: General parenting was assessed using 15 items from the Parenting Questionnaire (PQ) (McCabe, Clark & Barnett, 1999). The PQ includes three subscales (demandingness α = 0.84, warmth α = 0.90 and corporal punishment α = 0.63) and parents use a 5-point Likert scale of frequency or descriptiveness to respond to items in the PQ (McCabe, Clark & Barnett, 1999). Items from demandingness and warmth subscales as well as a third subscale – follow through on discipline (derived from a subset of items from the demandingness subscale) (Gross et al., 2009) were included in the evaluation.

General Stress: General stress was measured using a parent stressor index that assessed stressors from four domains: physical health, mental health, financial strain and family status (Parks et al., 2012). Only the physical health and mental health subscales were used. Additionally parent
perceived stress was assessed using a single item from the 2006 Community Health Database: “Using a scale from 1 to 10, where 1 means ‘no stress’ and 10 means ‘an extreme amount of stress,’ – how much stress would you say you have experienced in the last year?” (Parks et al., 2012).

5.1.6.2 Parent Weight-Related Behaviours

*Parental Feeding Practices:* Items from the Child Feeding Questionnaire (CFQ) were used to assess parental use of *restriction* and *pressure to eat* (Birch et al., 2001). The CFQ was designed to measure parents’ perceptions and concerns as well as attitudes and practices towards child-feeding and is suitable for use in a research setting with children aged 2-11 years (Birch et al., 2001). The CFQ includes an 8-item restriction subscale (of which 3 items were used) measuring the extent to which parents restrict their child’s access to foods ($\alpha = 0.73$) and a 4-item pressure to eat subscale (of which 3 items were used) measuring parents’ tendency to pressure their children to eat additional food ($\alpha = 0.73$) (Birch et al., 2001). Both subscales are assessed using a 5 point Likert scale (Birch et al., 2001). A single item from the CFQ was used to assess use of *food as reward*.

*Parent Sugar-Sweetened Beverage Intake:* Parents’ intake of sugar-sweetened beverages was assessed using items from the semi-quantitative food frequency questionnaire developed for the Nurses’ Health Study II (Willett et al., 1985). This measure has been previously validated against diet records (Willett et al., 1985).

*Parent Television Viewing:* Parents’ screen time was assessed using a single item previously used in a prospective cohort study of postpartum women (Oken, Taveras, Popoola, Rich-Edwards & Gillman, 2007). Parents were asked to report on the average number of hours per day
of TV/videos/DVDs watched in the past month. The question was asked for weekdays and weekends separately.

*Parent Sleep Duration:* Parent sleep duration was assessed using two items – parents were asked to report what time they go to bed and what time they wake up on a normal day. Parents were asked to report separately for weekdays and weekends.

5.1.6.3 Child Behaviours

*Child Sugar-Sweetened Beverage Intake:* Items taken from the previously validated Harvard Service Food Frequency Questionnaire (HFFQ) were used to assess children’s intake of sugar-sweetened beverages (including intake of juices, fruit drinks, flavoured milks and pop) (Blum et al., 1999).

*Child Television Viewing:* Child screen time was assessed by having parents report on the number of hours per day (1 hour or less, 2, 3 or 4 hours, or 5 or more hours) that their child spends watching TV/videos/DVDs/videos on the computer in the past month. Parents were asked about weekdays and weekends separately.

*Television in the Bedroom Where the Child Sleeps:* A single item was used to assess whether there is a TV in the room where the child usually sleeps (Weicha, Sobol, Peterson & Gortmaker, 2001).

*Child Sleep Duration:* Using a 2-item measure, parents were asked to report their child’s sleep and wake times on a normal weekday and weekend and average sleep duration was calculated.

*Child Physical Activity:* 2-items were used to assess child physical activity. Parents were asked to report on the length of time per day their child spends engaging in active play, defined as
activities such as running, jumping and climbing (response options ranging from 0 minutes to 2 or more hours per day) (Arredondo et al., 2006). Parents were also asked to report on the average length of time their child spends playing outdoors. Parents were asked to report both measures for weekdays and weekends separately. Outdoor play as measured by parent recall has been found to be significantly correlated ($r = 0.20$, $p=0.003$) to a direct measure of outdoor play from an accelerometer in preschool-aged children (Burdette, Whitaker & Daniels, 2004).

5.1.6.4 Child Nutritional Risk

The Nutrition Screen Tool for Every Preschooler (NutriSTEP) was used to assess children’s overall nutritional risk (Randall Simpson, Keller, Rysdale & Beyers, 2008). This parent administered screen tool has been previously demonstrated to have criterion validity and test-retest reliability (Randall Simpson, Keller, Rysdale & Beyers, 2008).

5.1.6.5 Work-Life Balance

Carlson, Kacmar & William’s (2000) Work-Family Conflict Scale (WFCS) was used to assess work-life balance (Carlson, Kacmar & William, 2000). The WFCS is an 18-item scale with 9 items assessing conflict due to work interfering with family (WIF) and 9 items assessing conflict due to family interfering with work (FIW) (Carlson, Kacmar & William, 2000). Internal consistency has been previously demonstrated with coefficient alphas ranging from 0.78 to 0.87 for the subscales (Carlson, Kacmar & William, 2000). Discriminant validity was also demonstrated using confirmatory factor analysis (Carlson, Kacmar & William, 2000).
5.1.7 Data Analysis

5.1.7.1 Process Data

Using SPSS Version 22, frequencies were calculated from the participant process surveys. Additionally LW reviewed answers to open ended questions to determine specific feedback from parents.

5.1.7.2 Impact Data

All measures were taken at baseline and immediately post-intervention. Using SPSS Version 22, paired samples t-tests were used to examine the change in outcome variables pre- and post-intervention.

5.2 Results from Feasibility Trial

From the HR screening of employees, 40 employees met eligibility criteria for the study and were delivered an invitation letter for the information session. Seven eligible employees attended the information session and all 7 signed up for the program and were provided with baseline surveys at that time. The program facilitator was contacted via email by HR and informed that 2 additional participants were interested in PWT and they were emailed baseline surveys. All 9 employees returned completed baseline surveys to the program facilitator at session 1. One additional employee attended session 1 and was interested in joining the program for a total of 10 participants enrolled in the study. He was provided with a baseline survey at session 1, which he completed and returned the following week. After session 2, one participant was unable to continue with the program due to a busy work schedule, leaving a total of 9 participants completing the program (22.5% of eligible employees) (see Figure 5.1 for a study flow diagram). The protocol for collecting post-intervention evaluation surveys proved equally
successful as all 9 participants returned for a final meeting the week after program completion with their completed post-intervention evaluations.

**Figure 5.1. Study Flow Diagram**

5.2.1 Study Sample

Demographics for all parent participants are presented in Table 5.4. As mentioned in the above section, a total of 9 participants completed the program. Five (55.6%) were fathers and 4 (44.4%) were mothers. The majority of the participants were married (66.7%) and the others were single (22.2%) or divorced (11.1%). Just over half of participants self-identified as White (55.6%) and the others identified themselves as Black (11.1%), Chinese (11.1%), Latin American (11.1%) and Southeast Asian (11.1%). There was a broad range of salaries among participants with 44.4% earning between $20,000-$59,999, 33.3% earning between $60,000-$99,999 and 22.2% earning $100,000 or more. Results showed that this sample obtained a fairly
low level of education, where 55.6% of participants had obtained a high school diploma, 11.1% had only completed some high school, 11.1% had completed some college or technical school and only 22.2% was a college or university graduate. Most participants (66.7%) worked as laborers for the plant (including welding and assembling machinery) and the remaining 33.3% worked in a supervisory capacity. The majority of participants were born outside of Canada (66.7%); most moved to Canada in the mid-late 1980’s with only one participant moving to Canada in 1998.
<table>
<thead>
<tr>
<th>Table 5.4</th>
<th>Parent Demographic Characteristics</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relation to Child</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>4 (44.4%)</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>5 (55.6%)</td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>6 (66.7%)</td>
<td></td>
</tr>
<tr>
<td>Single, never married</td>
<td>2 (22.2%)</td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>5 (55.6%)</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>Latin American</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>Southeast Asian</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Household Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,000- $59,999</td>
<td>4 (44.4%)</td>
<td></td>
</tr>
<tr>
<td>$60,000-$99,999</td>
<td>3 (33.3%)</td>
<td></td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>2 (22.2%)</td>
<td></td>
</tr>
<tr>
<td><strong>Education Obtained</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some High School</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>Graduated High School</td>
<td>5 (55.6%)</td>
<td></td>
</tr>
<tr>
<td>Some College or Technical School</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>College Graduate</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td>University Graduate</td>
<td>1 (11.1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Job Category</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laborer</td>
<td>6 (66.7%)</td>
<td></td>
</tr>
<tr>
<td>Supervisory Role</td>
<td>3 (33.3%)</td>
<td></td>
</tr>
<tr>
<td><strong>Born in Canada</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>6 (66.7%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3 (33.3%)</td>
<td></td>
</tr>
</tbody>
</table>

5.2.2 Process Evaluation

Of the 9 parents who participated in the program, 89% of participants attended 5 or more sessions with 44% attending all 7 sessions. All parents returned their post-intervention evaluation surveys, however some questions were left unanswered leading to some missing data. 100% of participants were either “satisfied” or “very satisfied” with the program and 100% of those who
responded to the question (7/9 participants) reported that they would recommend the program to a co-worker. Sixty seven percent of participants felt that the concerns that made them want to attend the program in the first place were better satisfied and 78% reported feeling either a little more or much more confident in handling their child’s behaviour at home (see Table 5.5 for results related to perceived parents’ confidence).

Table 5.5
Confidence in:

<table>
<thead>
<tr>
<th></th>
<th>About the same as before N (%)</th>
<th>A little more confident N (%)</th>
<th>Much more confident N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing your child’s behavior at home</td>
<td>2 (22.2)</td>
<td>6 (66.7)</td>
<td>1 (11.1)</td>
</tr>
<tr>
<td>Knowing when your child is full</td>
<td>5 (55.6)</td>
<td>1 (11.1)</td>
<td>3 (33.3)</td>
</tr>
<tr>
<td>Limiting your child’s sugary beverage intake</td>
<td>3 (33.3)</td>
<td>4 (44.4)</td>
<td>2 (22.2)</td>
</tr>
<tr>
<td>Helping your child engage in physical activity</td>
<td>5 (55.6)</td>
<td>3 (33.3)</td>
<td>1 (11.1)</td>
</tr>
<tr>
<td>Limiting your child’s screen time</td>
<td>4 (44.4)</td>
<td>2 (22.2)</td>
<td>3 (33.3)</td>
</tr>
<tr>
<td>Following a bedtime routine with your child</td>
<td>5 (55.6)</td>
<td>1 (11.1)</td>
<td>3 (33.3)</td>
</tr>
</tbody>
</table>

Of those who answered the question (7 of 9 participants), no participants felt that participating in the intervention relieved stress at home that helped them perform better in the workplace. Of those who answered the question (7 of 9 participants), 71% felt that the program sessions were too short with suggestions of ideal program length ranging from 45 minutes to 1 hour, with a specific focus on including more time for discussion.

When asked, “What would you say is the main reason you decided to join this program?” parents were most interested in learning “helpful hints or ideas” around parenting. One parent
reported joining to help with the specific problem of “figure[ing] out how to get my boy to try new foods” while others were interested in general tips that “could teach you something you might have a problem dealing with at home.” Another commonly reported reason for signing up for the program had to do with assessing existing skills as a parents: “to see if I’m a good father.” When asked, “Why you would or wouldn’t recommend this program to a co-worker?” the responses were similar to the preceding question with regards to learning new tips and strategies. One participant felt that the social support gained through participation in the program was a primary reason she would recommend the program:

I would recommend this program to my co-worker primarily because it’s nice to hear from people who are in the same type of situations as I am in. There were some resourceful tools to deal with many daily struggles and it was nice to meet other co-workers with kids.

Another participant cited that some of the tangible benefits like having lunch provided was “nice” and this may have been a catalyst to weekly attendance.

The participants did not offer many suggestions for ways to improve on the program. One reiterated the need for longer sessions and another suggested using real life situations instead of the scripted video vignettes to relay the information. Participants did not report disliking any of the sessions and their favorite sessions included: spending child centered time, sleep routines, child feeding strategies, and limit setting/discipline.

In terms of fidelity of the intervention, all content outlined in the PWT program manual was delivered in the sessions, however often discussion time was cut short in order to ensure all material was covered within the 30 minute session. Additionally, all handouts were delivered to participants during the sessions as planned in the program manual and when a participant had to
miss a program session the program leader (LW) provided the handouts via email. It was noted though that after participants had left the sessions the goal setting handout was frequently left behind.

5.2.3 Impact Evaluation

See Table 5.6 for the results from the paired t-tests.
Table 5.6  
Paired t-tests

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Baseline mean(SD)</th>
<th>Post Intervention mean(SD)</th>
<th>Change</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parenting Self-Efficacy</td>
<td>73.1(5.4)</td>
<td>77.7(7.0)</td>
<td>4.6</td>
<td>(-1.5;10.7)</td>
<td>0.12</td>
</tr>
<tr>
<td>Range of possible scores: 22-88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Parenting Strategies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of possible scores: 1-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warmth</td>
<td>3.7(0.5)</td>
<td>3.9(0.4)</td>
<td>0.2</td>
<td>(-0.1;0.5)</td>
<td>0.19</td>
</tr>
<tr>
<td>Demandingness</td>
<td>2.6(0.6)</td>
<td>2.2(0.7)</td>
<td>-0.4</td>
<td>(-0.9;0.2)</td>
<td>0.14</td>
</tr>
<tr>
<td>Follow Through with Discipline</td>
<td>2.4(0.7)</td>
<td>2.4(0.8)</td>
<td>-0.1</td>
<td>(-0.5;0.4)</td>
<td>0.73</td>
</tr>
<tr>
<td>General Stress</td>
<td>0.3(0.5)</td>
<td>0.0(0.0)</td>
<td>-0.3</td>
<td>(-0.6;0.1)</td>
<td>0.17</td>
</tr>
<tr>
<td>Range of possible scores: 0-3</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Self-reported Stress</td>
<td>7.1(2.7)</td>
<td>5.7(3.2)</td>
<td>-1.4</td>
<td>(-4.2;1.4)</td>
<td>0.28</td>
</tr>
<tr>
<td>Range of possible scores: 1-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeding Behaviours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of possible scores: 1-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food as Reward</td>
<td>2.3(0.5)</td>
<td>2.4(0.5)</td>
<td>0.1</td>
<td>(-0.2;0.4)</td>
<td>0.35</td>
</tr>
<tr>
<td>Food Restriction</td>
<td>2.7(0.6)</td>
<td>3.0(0.5)</td>
<td>0.3</td>
<td>(0.7;0.5)</td>
<td>0.02</td>
</tr>
<tr>
<td>Pressure to Eat</td>
<td>2.6(0.5)</td>
<td>2.4(0.7)</td>
<td>-0.2</td>
<td>(-0.7;0.3)</td>
<td>0.37</td>
</tr>
<tr>
<td>Work-Family Conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of possible scores: 1-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Interferes with Family</td>
<td>2.4(0.5)</td>
<td>2.3(1.3)</td>
<td>-0.1</td>
<td>(-1.3;1.1)</td>
<td>0.86</td>
</tr>
<tr>
<td>Family Interferes with Work</td>
<td>2.4(0.3)</td>
<td>1.8(1.2)</td>
<td>-0.6</td>
<td>(-1.6;0.3)</td>
<td>0.16</td>
</tr>
<tr>
<td>Sugar Sweetened Beverage Intake</td>
<td>1.0(1.1)</td>
<td>0.7(0.4)</td>
<td>-0.4</td>
<td>(-1.4;0.6)</td>
<td>0.41</td>
</tr>
<tr>
<td>(servings/day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Duration (hours/day)</td>
<td>2.3(1.0)</td>
<td>2.1(0.8)</td>
<td>-0.1</td>
<td>(-0.8;0.5)</td>
<td>0.67</td>
</tr>
<tr>
<td>Sleep Duration (hours/day)</td>
<td>7.5(0.7)</td>
<td>7.4(1.2)</td>
<td>-0.1</td>
<td>(-0.8;0.7)</td>
<td>0.84</td>
</tr>
<tr>
<td>Child Outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar Sweetened Beverage Intake</td>
<td>1.3(1.4)</td>
<td>1.0(0.9)</td>
<td>-0.3</td>
<td>(-1.6, 1.0)</td>
<td>0.60</td>
</tr>
<tr>
<td>(servings/day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV Duration (hours/day)</td>
<td>2.3(0.8)</td>
<td>2.2(0.7)</td>
<td>-0.1</td>
<td>(-0.3;0.2)</td>
<td>0.43</td>
</tr>
<tr>
<td>Sleep Duration (hours/day)</td>
<td>10.8(0.5)</td>
<td>11.0(0.6)</td>
<td>0.2</td>
<td>(-0.1;0.5)</td>
<td>0.15</td>
</tr>
</tbody>
</table>
### 5.2.3.1 Parent Outcomes

Parents’ self-reported parenting self-efficacy increased from baseline to post-intervention (parenting self-efficacy score at baseline = 73.14, post-intervention = 77.71, p = 0.117). General parenting strategies remained relatively unchanged among the parents from baseline to post-intervention. Parents’ self-reported stress decreased from baseline to post-intervention (self-reported stress at baseline = 7.1, post-intervention = 5.7, p = 0.28). In terms of feeding behaviours, using food as reward and food restriction increased from baseline to post-intervention and the change in food restriction score reached significance (food as reward score at baseline = 2.25, post-intervention = 2.38, p = 0.351; food restriction score at baseline = 2.67, post-intervention = 2.95, p = 0.017) while pressure to eat decreased from baseline to post-intervention (pressure to eat score at baseline = 2.58, post-intervention = 2.38, p = 0.371).

Parents reported a decrease in both work interfering with family and family interfering with work from baseline to post-intervention. Although neither reached significance, the change in family interfering with work was of a greater magnitude than work interfering with family, as would be expected (work interferes with family score at baseline = 2.42, post-intervention = 2.32, p = 0.857; family interferes with work score at baseline = 2.41, post-intervention = 1.76, p = 0.157).

<table>
<thead>
<tr>
<th>Active Play (minutes/day)</th>
<th>84.1(33.0)</th>
<th>89.8(27.4)</th>
<th>5.7</th>
<th>(-18.2;29.5)</th>
<th>0.60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor Play (minutes/day)</td>
<td>83.6(39.7)</td>
<td>92.5(35.1)</td>
<td>8.9</td>
<td>(-27.0;44.8)</td>
<td>0.55</td>
</tr>
</tbody>
</table>
5.2.3.2 Parent Weight Related Outcomes

Parents reported fewer servings of sugar sweetened beverages per day from baseline to post-intervention (servings/day at baseline = 1.03, post-intervention = 0.66, p = 0.411) as well as a decrease in time spent watching TV (hours/day spent watching at baseline = 2.26, post-intervention = 2.13, p = 0.666). Parents’ self-reported sleep duration remained relatively unchanged from baseline to post-intervention.

5.2.3.3 Child Outcomes

None of the child outcomes reached significance, however all measured behavioural outcomes trended in the desired direction. Parents reported that their children consumed fewer servings of sugar sweetened beverages at post-intervention than at baseline (servings/day at baseline = 1.27, post-intervention = 0.97, p = 0.601), and watched fewer hours of TV (hours/day spent watching at baseline = 2.32, post-intervention = 2.23, p = 0.426). Parents also reported an increase in child sleep duration from baseline to post-intervention (hours/day spent asleep at baseline = 10.83, post-intervention = 11.03, p = 0.154) as well as an increase in child physical activity in terms of both active play and outdoor play (minutes/day spend in active play at baseline = 84.08, post-intervention = 89.76, p = 0.598; minutes/day spend in outdoor play at baseline = 83.57, post-intervention = 92.50, p = 0.550).

Mean child NutriSTEP scores increased slightly from baseline to post-intervention (NutriSTEP score at baseline = 18.25, post-intervention = 19.25, p = 0.604), however this did not change the risk score interpretation; both the baseline and post-intervention mean scores would be defined as low nutritional risk. At baseline 66.7% of children were categorized as low risk and post-intervention, 75% were categorized as low risk.
6.0 DISCUSSION

Obesity prevention efforts focused on a child’s parents have the potential to be successful given that parents are responsible for the environment in which children are raised; as well, through specific feeding practices, role-modeling and general parenting styles, parents help shape their children’s healthful behaviours (Han, Lawlor, & Kimm, 2010). Parenting programs addressing such concerns have traditionally been run in community-based settings and less is known about whether holding this type of programming in a workplace may be a more effective way to reach parents of young children. This study aimed to fill that gap by first conducting a formative assessment with employers to determine the need for and preferred delivery mode of a workplace parenting program and second, adapting and delivering a pre-existing parenting program (Parents and Tots Together) that has been successfully run in community settings (Haines et al., 2012), to parents in their workplace. To our knowledge, this was the first worksite parenting program that provided employees with general parenting skills and child weight-related messaging.

6.1 Main Findings from PWT – Formative Assessment

The main finding from the formative assessment was that it was worth moving forward with adapting Parents and Tots Together (PTT) to be delivered in the workplace as employers saw this workplace parenting program (Parents Working Together – PWT) as a potentially successful way to help ease employee stress with work-life balance. In addition to expressing general support for a workplace parenting program, employers also identified some key recommendations and logistical considerations that would maximize the success of the intervention; these included: keeping the number of sessions offered to the minimum required,
holding PWT sessions in the workplace during workday hours, using a traditional lunch and learn format, shortening program sessions to fit into the employees’ allotted lunch break. Taking these learnings, PWT sessions were condensed to 30 minutes in length to fit into the employees’ lunch time and the program was shortened to 7 weeks in length. Employers also suggested that there were a number of potential barriers to attending a parenting program held in the workplace, specifically stigma associated with attending a parenting program, and time and other competing priorities. They provided suggestions for increasing employee buy-in and maximizing attendance, including: positive marketing of the program (i.e. healthy families program rather than parenting program), structured focused sessions, and clearly communicating expectations to employees so that employees are aware of what is involved in the program prior to signing up.

The final key learning from the formative assessment was that an evaluation of the program is a critical component in order to get organizational support for PWT. Participants identified that to gain employer support for the program the evaluation should include an assessment of workplace-related outcomes. Thus, to capitalize on employer enthusiasm, the evaluation protocol for PWT was expanded to include measures of work-life balance and employee engagement.

Previous formative work with employers has found a similar level of enthusiasm from employers for workplace parenting programs (Eastman et al., 2005). In their qualitative study prior to developing Talking Parents, Healthy Teens (a parenting intervention geared at helping parents discuss sexual health with their adolescent children), Eastman and colleagues (2005) interviewed 7 employers responsible for health promotion/family life programs at their workplace. The workplaces ranged in size from 125 to 4000 employees and the employers were contacted via letters and phone calls (Eastman et al., 2005). Eastman and colleagues found that, similar to our results, employers are eager to provide a program to their employees that could
ease stress and potentially increase productivity (Eastman et al., 2005). These results support our finding that measures of workplace performance or productivity would be important in a workplace intervention. Similar to our findings, Eastman et al. (2005) also found that poorly attended sessions due to competing priorities as well as concerns about confidentiality were potential barriers to conducting a workplace parenting intervention. An additional barrier identified by Eastman and colleagues (2005), which was not identified during our formative assessment was that cost was also a barrier to implementing a workplace parenting program and that such a program would need to demonstrate financial returns on investment to be supported in the workplace. Employers interviewed in our formative assessment did, however, raise the similar issue that in order for a worksite program to be successful and supported by management, there would need to be data to support the return on investment both financially and in terms of employee satisfaction.

6.2 PWT Feasibility Trial – Feasibility and Acceptability

The main finding from the delivery of PWT, a workplace parenting program that includes both general parenting skills and child weight-related messaging was that it was both feasible and acceptable to employees of a large manufacturing company in Guelph, Ontario. Attendance rates were high with 89% attending most of the sessions offered. The PWT was also well received by parents and 100% of participants stated they would recommend the program to co-workers. Despite good attendance and a high level of participant satisfaction there were suggestions for improvement of the program including allowing more time for discussion and lengthening sessions.
6.3 Comparison to the feasibility trial of PTT

The following section will compare the results of the feasibility trial of PWT with the feasibility trial of PTT (the program from which PWT was adapted).

The feasibility trial of PTT was run in Boston MA, USA in 2009 at a Community Health Centre (CHC). Unlike the feasibility trial of PWT, two sessions were run – the first ran March-May of 2009 and the second July-September 2009 (Haines et al., 2012). Given that two sessions were run, PTT’s feasibility trial had 16 participants compared to PWT’s 9 participants. The most striking differences between the feasibility trials of PTT and PWT are related to participant demographics and attendance rates. PWT was successful in recruiting more fathers to the program (55.6% fathers in PWT; 12% fathers in PTT). This is likely a product of the demographic characteristics of the workplace from which recruitment took place, however this provides evidence that fathers are interested in learning about parenting and health behaviours for their children and that a parenting program can be successful at engaging fathers. The participants of the feasibility trials of both PTT and PWT were similar in marital status (approximately two thirds of participants were married), however a larger portion of the PWT participants self-identified as White (55.6% in PWT; 13% in PTT). The remaining 44.4% of participants in PWT came from a diversity of ethnic backgrounds (Black, Chinese, Latin American, and Southeast Asian) whereas most participants in PTT were Hispanic/Latina (50%) or Black (38%). The discrepancy in ethnic distribution is reflective of the different geographical locations in which the two trials were held. There was also likely a larger range of total household income for participants in PWT than in PTT. Total household income was not reported for the participants of PTT, however the CHC in which recruitment took place served primarily low-income families.
In the feasibility trial of PTT, nearly 70% of parents attended 6 or more of the 9 sessions. This attendance rate is relatively high compared to other community-based parenting programs. In the Chicago Parenting Program (CPP), the program which informed the development of PTT, only 45% attended 6 or more of the 11 sessions (Gross et al., 2009). These attendance rates are reflective of the majority of community-based parenting programs (Mytton, Ingram, Manns & Thomas, 2014). The attendance rate for PWT was even better than PTT with 89% attending 5 or more of the 7 sessions and 44% attending all 7 sessions. These results suggest that when parenting programs are brought to parents at their workplace they may be more likely to attend program sessions regularly than in community-based settings where they need to travel to the program and where child care is required for families.

The acceptability results from the feasibility trials of PTT and PWT were similar with 100% of participants in both programs reporting that they were either satisfied or very satisfied with the program. Participants in both PTT and PWT reported increased confidence in managing their children’s behaviour at home as well as increased confidence in supporting healthful eating habits in their children. This indicates that both programs were found to be acceptable to participants suggesting that a program that addresses children’s weight-related behaviours and general parenting skills is of interest to parents of young children.

6.4 Comparison to Other Workplace Parenting Programs

The following section will compare the findings from PWT with other workplace parenting programs in four areas: gender distribution, education and job class, attendance and attrition, and program structure.
Gender Distribution: When comparing PWT to other programs delivered to parents in their workplace, a larger proportion of male participants participated in PWT. Only 27.6% of Workplace Triple P’s (WPTP; a general parenting intervention) participants were male (Sanders, Stallman & McHale, 2011), 28% of participants in Talking Parents, Healthy Teens (a sexual health parenting intervention) were male (Schuster et al., 2008), and 35% of those participating in The Parenting Partnership (a substance abuse parenting intervention) were male (Felner et al., 1994). Only Let’s Talk! (an HIV prevention parenting program) had a comparable percentage of male participants to PWT (64% male participants in Let’s Talk; 55.6% male participants in PWT) (Bogart et al., 2013). As with PWT, this gender distribution may be largely due to the types of workplaces targeted. Participants in Let’s Talk! were recruited from 5 City departments (Solid Waste, Roads and Stormwater, Municipal Libraries, Electricity Maintenance, and Parks and Recreation) which likely consist of a large proportion of male employees.

PWT is novel in that it successfully engaged fathers by targeting a male dominated workplace. Parenting programs are most often attended primarily by mothers (Haines et al., 2012; Sanders, Stallman & McHale, 2011; West, Sanders, Cleghorn, & Davies, 2010; Gross et al., 2009; Schuster et al., 2008), however this feasibility trial of PWT indicates fathers also appear to be interested in these topics. Fathers may also feel more comfortable participating in these programs if other fathers are also participating.

Engaging more fathers in childhood obesity prevention research is a critical research objective as fathers play an important role in the development of childhood overweight/obese in their children. A study using data from the Australian Longitudinal Study of Children found that when fathers were overweight or obese and the mothers were of a healthy weight there
were increased odds of overweight (OR = 4.18, 95% CI (1.01-17.33) or obesity (OR = 14.88, 95% CI (2.61-84.77) in the child (Freeman et al., 2012). This same association was not found when it was the mother that was overweight or obese and the father was of a normal weight (Freeman et al., 2012). As well, by adopting specific parenting styles (permissive and disengaged) fathers can increase the odds of their child being in a higher BMI category (Wake, Nicholson, Hardy & Smith, 2007). Fathers also have a role in influencing their children’s intake of both healthful and unhealthful foods. Healthy Dads, Healthy Kids (an intervention to help fathers achieve their own healthy weight goals as well as influence healthy lifestyles in their children) found an association between fathers’ intake and the intakes of their children for fruit, potato chips, cookies and fruit juice (Hall et al., 2011) indicating that fathers play a role in the adoption of both nutritious and less nutritious food choice in their children. Taken together, these findings showcase the unique role that fathers have in childhood obesity prevention and highlight the need to find ways to successfully engage fathers in this type of programming.

Education and Job Class: Most other studies examining workplace parenting programs have included participants with higher levels of education than those in PWT. Ninety percent of participants in Martin & Sanders’s (2003) trial of WPTP had tertiary level of education and were primarily staff at a university in Australia and 61.8% of those participating in Sanders, Stallman & McHale’s (2011) WPTP intervention had a university education and were working in the Department of Public Works, tourism, at a university, or at a hospital. The positive results from the process evaluation of PWT demonstrate the universality of parenting content. Regardless of education level or job class, these results suggest that parents are interested in learning about parenting techniques as well as ways to promote healthful behaviours among their children and employees in all types of workplaces may benefit from such programming.
Attendance and Attrition: Similar to the findings from the feasibility trial of PWT, other workplace parenting programs have had good attendance and low rates of attrition. Talking Parents, Healthy Teens had a median attendance of 7 out of 8 sessions (Schuster et al., 2008), 73% of participants in Let’s Talk! attended 4-5 out of 5 sessions (Bogart et al., 2013) and Felner and colleagues (1994) only saw a 16% drop out during the program and among those that completed the Parenting Partnership, participants attended an average of 74% of the sessions. PWT contributes to the body of literature supporting workplaces as a potentially effective location to engage parents in interventions in order to maximize parent attendance.

Program Structure: Similarly to PWT, other worksite parenting programs have found success with lunch time sessions held in the workplace (Anderson & Fox, 1990; Felner et al., 1994; Schuster et al., 2008); however these other lunch time program sessions were all 1 hour in duration as compared to PWT’s 30 minutes. As identified by PWT participants 1 hour sessions would be an ideal length to allow for adequate discussion time in addition to covering the intended content. For other workplace parenting programs not held over the lunch hour, the length and timing of sessions was very workplace dependent. Sanders, Stallman & McHale’s (2011) iteration of WPTP consisted of 4-2 hour group sessions held at a time identified as convenient by the particular workplace (including lunchtimes, afternoons or after working hours). Let’s Talk! also comprised of weekly 2 hour sessions over 5 weeks (Bogart et al., 2013). There was no mention of when these sessions took place, however Let’s Talk! focused on messaging about sexual health, therefore parents were excused from work to participate as this is standard for South Africa’s HIV prevention programming for employees (Bogart et al., 2013). In terms of the total duration of the program, PWT is comparable to previous workplace parenting programs. Parenting programs held at work have ranged from 4 weekly sessions
(Anderson & Fox, 1990) to 24 sessions delivered bi-weekly over 12 weeks (Felner et al., 1994), with the average being 7-8 weeks. Talking Parent, Health Teens consisted of 8 weekly sessions and WPTP included 4 weekly sessions followed by 4 individual telephone consultations for a total program duration of 8 weeks (Martin & Sanders, 2003; Sanders, Stallman & McHale, 2011). While it seems that lunch hour sessions can be quite successful in attracting employees to participate in workplace parenting programs it is also important to be mindful of the individual worksite and take into consideration the timing that is most appropriate for the setting. In terms of total program length, there appears to be more flexibility in the number of sessions that a workplace will allow and this may be related to the level of employer engagement in offering the particular worksite program.

6.5 PWT Feasibility Trial– Impact Evaluation

Results from our pre-post analysis, provide preliminary results to suggest PWT may be effective in changing both parent and child health behaviours. Although not statistically significant, compared to baseline, parents reported watching less television and drinking fewer daily servings of sugar sweetened beverages and reported that their children watched less television, drank fewer servings of sugar sweetened beverages, slept more and got more minutes of physical activity (both active play and outdoor play). Parents’ self-reported level of stress decreased from baseline to post-intervention. The wording of the item measuring self-reported general stress is not ideal in that parents are asked to reflect on their level of stress “in the past year.” However, given that there was a marked decrease in self-reported stress it is possible that parents were thinking of recent stress and PWT may have helped address some of the home stressors in the participants’ lives. Both dimensions of work-family conflict (work interferes with family and family interferes with work) also changed in the desired direction.
The degree of change for family interferes with work was larger indicating that PWT may have been more effective at relieving family stress that spills over into the workplace. General parenting strategies changed non-significantly in the desired direction from pre- to post-intervention. Interestingly, two of our measured feeding behaviours (using food as reward and food restriction) changed in the unwanted direction. This provides some evidence that the content of our program was too heavily centred on weight-related behaviour content and that perhaps in condensing our program to 7, 30 minute sessions we cut down too much on the parenting content for our messages to be clearly delivered to our participants.

6.6 Comparison to Other Parenting Programs

The following section will compare PWT’s impact results from impact results from other parenting program; both those held in workplaces and those in community settings.

Held in the workplace: Like PWT, both iterations of WPTP were successful in achieving desired changes in both work-related and parenting-related outcome measures in their participants. Using a randomized group design with two conditions – WPTP and waitlist control, Martin and Sanders (2003) saw an increased confidence in dealing with work-related situations from pre- to post-intervention for participants in the intervention group compared to control as well as an increased confidence in dealing with their child’s behaviour compared to control. Using the same study design as Sanders and colleagues (2003), Sanders, Stallman and McHale’s (2011) iteration of WPTP found a significant increase in work satisfaction, workplace self-efficacy and commitment to union as well as improvements in parenting stress and anxiety from baseline to post-intervention in the WPTP group as compared to control. WPTP teaches working parents work-life balance as well as positive parenting skills (Martin & Sanders, 2003; Sanders, Stallman
In this way WPTP is similar to PWT, however PWT also includes messaging around health-related behaviours in an effort at child obesity prevention. Because no other workplace parenting programs also address health-related behaviours, we cannot directly compare our health-related outcomes to other workplace programs. However, in the next section, we compare our parenting and weight-related findings to other community-based programs that address both general parenting and weight-related behaviours among families with young children.

Held in community settings: PWT’s finding of increased parenting self-efficacy has also been found in community-based childhood obesity prevention programs. A randomized control trial of Lifestyle Triple P (a parenting program held in the community geared at parents of overweight children to improve general parenting and promote healthful behaviours within the family) found that for parents in the intervention condition self-reported confidence in parenting increased immediately post-intervention and was sustained at 1 year follow-up (West, Sanders, Cleghorn, & Davies, 2010).

With regards to improving weight-related behaviours, a randomized control trial of Lifestyle Triple P run in the Netherlands found short term (immediately post-intervention) intervention effects on reducing soft drink consumption among children and long term (12 months post-baseline) intervention effects on decreasing child’s screen time and increasing outdoor play (Gerards et al., 2014). These results are similar to the non-significant changes we saw in the PWT feasibility trial in reduced screen time and an increase in children’s active play. These results suggest that an integrated approach of addressing general parenting and weight-related behaviours may be effective in improving parenting self-efficacy and some children’s weight-related behaviors.
Previous community-based obesity prevention programming has, however, been more successful than PWT in affecting desired change in parent feeding behaviours. The KAN-DO study (involving eight monthly mailing kits, follow-up phone calls and one in-person group session) saw improvements in mothers’ feeding practices - decrease in emotional feeding and using food as a reward (Ostbye et al., 2012). A larger emphasis on the parent feeding content in PWT may strengthen the program for future iterations.

6.7 Strengths

The primary strength of this study is that PWT was informed by a thorough formative assessment. Formative assessments increase the likelihood of success of a novel intervention by gaining ideas and feedback directly from key stakeholders (Gittelsohn et al., 1999). In addition to determining the most acceptable delivery method for the worksite parenting program, through interviews with employers, the researchers were able to promote PWT and engage an employer interested in piloting the program.

A second key strength is that this study was run in what could be considered as a difficult workplace to engage. The pilot site is a manufacturing company with primarily male employees and when PWT was proposed to the management there was concern that it would be challenging to recruit participants from a male dominated workforce. However, recruitment proved quite easy, the majority of PWT’s participants were male, and attrition was low and satisfaction high. This provides evidence that men are interested in attending parenting programs and that male dominated workplaces may be an ideal setting in which to engage fathers.

Another strength to this study is that unlike other similar studies that have included employees with a higher level of education (Sanders, Stallman & McHale, 2011; Martin &
Sanders, 2003), the participants recruited for PWT had a relatively low level of education. Only 22.2% of participants were a graduate of either a college or university. This provides further support that workplace parenting programs can be successful in engaging families with lower levels of education and potentially lower income.

6.8 Limitations

This study is not without some limitations. First, given that this was a feasibility trial there was a small sample size of only 9 participants and as such results should be interpreted with this small sample size in mind. A small sample size was expected for this study as the primary objective was to determine the feasibility and acceptability of delivering a workplace parenting program, as well as refining the intervention protocols/intervention materials, not testing of outcome measures. There was inadequate power to have testing of outcome measures as a primary objective. There was also no control group so it is unknown whether any changes seen in the outcome measures are due to participation in PWT or factors external to the program. Additionally, only one workplace was included in this trial so it cannot be known if the results of PWT’s feasibility trial are generalizable to other worksites. A future full-scale trial of this program should include a variety of worksites to determine whether a variety of employees find the intervention acceptable.

In addition, no data were collected on children’s heights and weights, therefore it is unclear whether PWT can be effective in reducing excess weight gain in children. Given that the primary objective was not outcome evaluation as stated above, measuring children’s heights and weight was excluded from the measurement protocol. As the overarching goal of the PWT program is prevention of childhood obesity, it would be important to assess change in child BMI
following the intervention in future trials. A protocol for collecting child heights and weights should be considered in future iterations of the program. PTT included a concurrent child program, which made collecting child heights and weights convenient. PWT was run in a workplace where the children were not present, therefore thought will be required to determine the best way to collect child height and weight. Home visits, in which a member of the research team visits a participants’ home with a scale and stadiometer, is a technique that has been used in the past for data collection. Another option could be to host a parent and child activity outside of working hours where families could attend, enjoy an activity together and members of the research team would be present to collect child height and weight. Additionally, all data that was collected in this study was self-report. It could therefore be influenced by bias and recall error by parents. Future trials should also try and include other objective measures in their evaluation.

Finally, there is no long-term follow-up with PWT participants so it is unknown whether the changes seen immediately post-intervention were sustained. This would be an important measure to include in larger scale trials of PWT as thought could then be put into whether there is a need for additional maintenance elements after the conclusion of the program sessions (e.g. reminder emails, group activities).

6.9 Lessons Learnt While Implementing the Study
6.9.1 What Worked

The following section will discuss successful elements in this feasibility trial of PWT including: support from the pilot site’s HR team, our protocol for distributing and collecting baseline and post-intervention evaluation surveys, and providing employees with lunch.
Support from the company’s HR team: From the beginning of the implementation of PWT the HR personnel at the pilot site were very helpful. This proved to be critical in successfully running the study. The invitation letter distributed to eligible employees by HR was successful in recruiting interested participants to the program. Additionally the HR team ensured that there was an appropriate space to hold the program and that the equipment necessary to deliver the program content (i.e. laptop and projector) was available each week. Without the support of the HR team PWT would not have been feasible to implement.

Protocol for distributing and collecting baseline and post-intervention evaluation surveys: In the previous trials of PTT, participants were invited to an initial introductory session (2 hours in length) where they were provided with a meal, given information about the program, enrolled in the study including signing consent forms and were given time to complete the baseline survey. As the employees’ lunch was only 30 minutes in this trial of PWT, it was not feasible to have employees complete their surveys during the session and there was concern among the research team about the best way to distribute and collect the evaluation surveys. In retrospect, the protocol developed for PWT proved to be quite successful. The program leader (LW) sent out an email two days prior to the session as a reminder to participants to bring their completed surveys and a $10 gift card was provided upon receiving the completed survey. All participants returned their baseline surveys (distributed at the information session) at session 1 and returned their post-intervention surveys (distributed at session 7 - the final session) the following week when the program leader (LW) returned to collect them.

Providing lunch: As anticipated, given the results from the formative interviews with employers, participants were very grateful that lunch was provided to them and this may have even acted as an additional motivator to attend each week.
6.9.2 Challenges

As expected, there were challenges encountered in the trial of PWT with the primary one being the length of sessions and time for discussion.

Length of program sessions and time for discussion: As the program sessions were cut down from an hour and a half to 30 minutes they were very full of content with little time for discussion. Throughout the program participants made comments that sessions seemed rushed and that they would enjoy more time for group discussion. This was especially evident in the latter half of the program as the participants became more comfortable sharing with one another. The process results reflected this sentiment as 71% of participants that responded to the question indicated that sessions were too short. For future iterations of PWT thought should be put into ways in which to include more time for discussion. One option for increasing discussion would be to incorporate an online component to the program. There could be a monitored online discussion board where participants could post their own thoughts, comments, and questions as well as respond to others’ posts. This discussion board would need to be monitored by the program leader to answer questions and ensure no misinformation was communicated. Another potential use of an online component would be to have the program content posted online so that participants could review the material and watch the video vignettes at home and the in-person sessions could be used for discussion. The latter option may be less successful as employers interviewed in the formative stage of this research suggested that an online component might not be successful as there can be a lack of engagement with online programming including the risk of participants not doing the work.
6.10 Next Steps

This research provides important formative results regarding elements to include in a successful workplace parenting program. It also provides important insight into the feasibility and acceptability of a workplace parenting program at one large manufacturing company in Guelph, Ontario. The next step is to conduct a larger trial of PWT including a larger sample size and multiple workplaces to test the effectiveness of PWT and determine its generalizability to other worksites. The specific focus of a future trial should examine what the optimal number of program sessions is. PTT was decreased from 9 sessions to 7 sessions (in addition to session length being cut from an hour and a half to 30 minutes) for PWT with a specific focus on decreasing the parenting related content and emphasizing the weight related messaging. Change was seen in the desired direction amongst participants and their children for the health behaviours from baseline to post-intervention, however there was only slight changes seen in general parenting strategies and changes in the unwanted direction for food restriction and using food as reward. It may be that the parenting related messaging was cut back too much and the dose was insufficient to see substantial change in the desired direction. The feasibility trial of PTT, which included more of a focus on parenting topics than did PWT, found that parents reported using food as reward less frequently at post-intervention than at baseline and also found that parents were less likely to report restricting their children’s food intake at post-intervention than at baseline (Haines et al., 2012) – results directly opposite of ours. One option for increasing dose would be to increase the number of program sessions. Participants are often hesitant to sign up for a program of long duration, however once enrolled in the program, parents seem eager to continue attending sessions. PWT could be presented to workplaces as blocks of session with core and optional blocks (i.e. an initial block of 7 core sessions and an optional block of added
sessions if participants are interested). This may help with program uptake and allow additional content on both parenting and weight-related content.

Another consideration for a future trial of PWT is how to include more opportunity for discussion into the program. Feedback from participants suggested that program sessions were too short and specifically that there was not enough time for discussion. As suggested previously, one option for increasing discussion would be to incorporate an online component to the program – either an online discussion board for participants to engage in discussion with other participants online, or to use the online component to post session content so that in-person sessions could be reserved solely for discussion.

6.11 Implications for Practice

This research has implications for future obesity prevention programs as well as parenting programs. Workplaces should be considered as effective settings to hold interventions as they are convenient for parents and there is the potential to maximize attendance and minimize the rate of attrition, which are common problems with community-based parenting programs (Forehand, Middlebrook, Rogers & Steffe, 1983; Mytton, Ingram, Manns, & Thomas, 2014). Additionally, researchers need to consider traditionally male dominated workplaces as potential settings to engage fathers in their interventions. Fathers play an important role in achieving healthy weights in their children and this study provides evidence that fathers are interested in learning about parenting and health behaviours for their children.

7.0 CONCLUSION

In summary, this study explored employers’ perceptions of the potential need and preferred delivery mode for a parenting program held in a workplace setting, and examined the
feasibility and acceptability of delivering a pre-existing parenting program (PTT) in a workplace setting. The formative assessment found that employers’ perceived value for such a program for their employees and provided suggestions that helped guide the adaptation of PTT to fit within the constraints of a workplace. The feasibility trial of PWT showed that a workplace parenting program was both feasible and acceptable to employees of a large manufacturing firm in Guelph, Ontario. PWT had high rates of attendance and participants reported being satisfied with the program and that they would recommend it to a co-worker. Additionally, the results from the feasibility trial suggest that PWT may be effective in changing both parent and child health behaviours in the desired direction - parents reported watching less television and drinking fewer daily servings of sugar sweetened beverages and reported that their children watched less television, drank fewer servings of sugar sweetened beverages, slept more and got more minutes of physical activity (both active play and outdoor play). Of interest to employers, self-reported work-life balance improved in participants with both measures of work interfering with family and family interfering with work improving. This study provides evidence that workplaces, which are currently underutilized as settings for parenting programs, may be a potentially effective setting for interventions that can benefit both the participants and their employers. The results of this study will help inform future trials of PWT and will provide the groundwork upon which future research exploring parenting programs and obesity prevention can build.
8.0 REFERENCES


Arain, M., Campbell, M., Cooper, C., & Lancaster, G. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology, 10*(1), 67.


Appendix A: Email to Employers
Subject: Using a Parenting Program to Enhance Employee Engagement: An Invitation to Provide your Input

As we all know, employees nowadays often struggle to keep up with the demands of both their working and non-working lives, and this has been shown through research to have considerable impact on employers. There is now a considerable body of research that documents the positive effect that employee well-being has on key organizational metrics such as absenteeism, employee engagement and workplace performance. The good news is there is something that employers and employees can do about this. We have attached a document outlining these issues in more detail.

One of the key issues affecting employees is balancing parenting and work responsibilities. Parenting support programs have been shown to ease the stress of balancing work and family obligations while enhancing employee performance and ultimately reducing costs to employers, yet few workplaces have implemented such programs. The University of Guelph currently operates a parenting program, designed to improve general parenting skills, promote healthy eating and enhance parent-child routines. The program targets parents of young children (ages 2-7). It is currently a community based intervention delivered to parents and their children, but can be adapted to a workplace setting.

With a view to enhancing employee engagement and organizational performance, researchers at the University of Guelph (Jess Haines, Donna Lero, and Laura Wilson) as well as Allan Smofsky from Smosky Strategic Planning are conducting a study to explore interest in and feasibility of implementing this parenting program in a workplace setting. We are interested in obtaining employer views in this regard, and are planning to conduct a series of employer focus groups in early 2014, with a view to making any necessary adaptations for a workplace setting and potentially piloting the program in selected workplaces in the fall. We are aiming to have 4-6 employers in each focus group. If it is not feasible to recruit that many employers at one time we may hold individual interviews instead. The results of the focus groups (and interviews should they be necessary) will be assessed, and will then be made available to participants.

We may also seek to conduct some employee focus groups, to be determined following the employer sessions.

We would welcome your organization’s participation, and would only need an hour or so of your time. Please let us know whether you would be willing to participate in this exercise.

Thank you in advance for your time and consideration.
Appendix B: One page rationale for a workplace parenting program

Research has shown that employers that offer workplace wellness programs can improve their employees’ self-reported well-being (1). As a consequence of improved well-being, there can be an improvement in workplace performance (1). This improvement in performance can translate into cost savings for the employer, with studies finding a decrease in absentee day costs of $2.73 for every dollar spent on wellness programs (2).

According to Statistics Canada, demographic trends are changing and dual income families are now the majority of Canadian families. As of 2008, three quarters of couples with dependent children were dual-earners (3). The combined demands of parenting and working mean that parents are stressed for time. As many as 24% of men and 38% of women in these families report a severe “time crunch” and as the severity of time stress increases, satisfaction with work-life balance decreases (3). Time stress can also lead to adverse health effects, absenteeism, burnout, and high rates of turnover in employees. This all equates to a loss of revenue for employers due to days lost, replacement and retraining costs, and lower productivity (4).

Parenting support programs have been shown to ease the stress of balancing work and family obligations while enhancing employee performance and ultimately reducing costs to employers (5), yet few workplaces have implemented such programs as supportive tools to help improve work-life balance of their employees and enhance employee engagement. Evaluation of a general parenting program (Triple P: Positive Parenting Program), delivered in workplaces found that employees who participated in the program reported:

- fewer and less intense problematic child behaviours;
- lower levels of dysfunctional parenting;
- more confidence in dealing with their child’s problem behaviours; and
- higher confidence in dealing with work situations, improved work satisfaction, and a decrease in work stress (4, 5).

These outcomes show that implementation of a successful general parenting program has the potential to benefit employees and their children, as well as employers.

Based on the above data, we are conducting a study to explore interest in and the feasibility of implementing a similar parenting program in Canadian workplaces. Parents Working Together (PWT) is a program designed to improve general parenting skills, promote healthy eating, and enhance parent-child routines. The program targets parents of young children (ages 2-7). It is currently a community based intervention delivered to parents and their children, but can be adapted to a workplace setting with the goals of improving parenting practices, reducing the stress of balancing work and family life, and improving employee engagement and performance.

We plan to conduct employer and employee focus groups in early 2014, and would welcome your organization’s participation. The results of the focus groups will be assessed, and will then be made available to participants. During the spring/summer of 2014 we will make any program adaptations needed for different workplace settings, and plan to pilot the revised program in a select number of workplaces in Fall 2014.

Appendix C: Interview Guide

Hello and welcome, my name is _______________ and I will be leading our interview today. Researchers at the University of Guelph are interested in learning more about your opinions regarding the implementation of a parenting program in the workplace with the dual aim of improving parenting skills/the health of the family as well as aiding employees with work-life balance to improve performance in the workplace.

We currently operate a parenting program in community settings that is designed to improve general parenting skills, promote healthy eating, and enhance parent-child routines. This program has been highly successful with respect to enhancing parenting skills and parents’ self confidence in their roles. We are considering adapting this program to run in workplaces, and are in need of your insight to help us better understand the business case and logistical aspects of offering a program in workplaces like yours. The proposed name for the workplace program is Parents Working Together (PWT). The program would be aimed at improving general parenting skills while at the same time promoting healthy eating and activity among parents and their children.

We’d like to know whether you would see value in implementing a program such as PWT in your organization and if so, how it could be run to ensure successful delivery to your employees. In addition, we would like to know what outcome measures we could collect that would be important to you.

We appreciate you joining us today to help us understand employers’ interests and concerns. I am not the expert in what we are going to talk about today - you are, so I want to hear about your thoughts, opinions, and feelings and different ideas are welcome and encouraged. My role is to guide the discussion, which means that I will be asking you questions and listening to your answers. If you have any questions on the topics that we talk about, please feel free to ask them.

We will be recording the interview today so that we will be able to accurately report on what you tell us. Your thoughts and comments will remain confidential. It is important that you do the same thing and do not share anything that is said by anyone in this group with anyone outside of this group. Any publications or reports that we produce based on these results will not specifically identify any participants in this group. Instead, you would simply be described as a “interview participant.” It is important to know that the interview process is essentially a public process and you should not saying anything here today that you would not be comfortable being made public. If at any point during today’s discussion you would like to stop participating there will be no repercussions. However, it is important to be aware that given that this is a group
discussion it will not be possible to remove your individual data should you choose to stop participating. It will not affect your relationship with the University of Guelph in any way.

OK let’s begin. Maybe we can go around the room and introduce ourselves.

1. Please tell us your name, where you work for and your role in your workplace?

As I mentioned earlier we are interested in running a parenting program (PWT) in the workplace to help employees with young children as well as provide benefit to their employers in terms of improved employee performance.

2. To start, can you tell me about any challenges or struggles you are aware of with respect to how employees, specifically those with young children, in your workplace are managing work-life balance, and how this is impacting both employees and your organization. Are you seeing any change in employee work-life balance issues generally (increase/decrease)?

3. Can you tell me about some programs/strategies that you currently use or have used successfully in the past to address these issues? What were your goals/objectives and are you achieving the intended results?

4. Can you tell me about some program elements/strategies you might suggest be included in PWT to help address these issues with employees?

An important part of achieving the desired results from PWT is to ensure that it is delivered in a way that will best meet the needs of the employees. This is where you as employers can offer great insight into the best structure for a workplace parenting program to ensure successful delivery. Currently, the program is designed to run once per week over a 9-week period, with sessions lasting 1 hour each.

5. Do you feel a 9-week format would be acceptable to employees?

5 a) Do you feel that one-hour sessions would work for both employees and the organization? If not, what would be an ideal length for each session?

5 b) We envision PWT sessions being held at the workplace. Do you foresee any issues/have any concerns in this regard? Is there a good location at your workplaces in which sessions could be held?

5 c) When would be the best time of day to have the program run?

6. Can you think of challenges/barriers that should be considered when implementing this program? Is there anything we can do to address these challenges?
Since we’re also very committed to ensuring that you as employers-as well as your employees-see benefits to implementing PWT we are particularly interested in your opinions on the evaluation of the PWT program.

7. As part of the PWT evaluation, we typically measure participant satisfaction with the program, as well as how the program has enhanced their parenting skills and health behaviours. What other outcome measures would you be interested in having evaluated as part of PWT? For example:
   - Employee well–being, engagement and/or performance indicators
   - Absenteeism/presenteeism

That is all of the questions I have for you. If you have any additional questions or comments about the program, I’d be happy to hear them now.

Thank you very much for taking the time to speak with me today. We plan to use your comments and suggestions to create a program that we feel will benefit both employees and employers while at the same time helping parents to raise happier and healthier kids.
Appendix D: Summary of Results for Member Checking

Employees nowadays often struggle to keep up with the demands of both their working and non-working lives, and this has been shown through research to have considerable impact on key organizational metrics such as absenteeism, employee engagement and workplace performance. Researchers at the University of Guelph are interested in improving employee well-being by improving the stress of balancing work and family life for working parents. We are conducting a study to explore interest in and feasibility of implementing a parenting program in a workplace setting. Over the Spring/Summer of 2014 we held a series of interviews with employers (including yourself) who have a role in employee wellness.

After meeting with eleven employers from nine different organizations located in Southwestern and Central Ontario to discuss the feasibility and logistical aspects of adapting an existing community-based parenting program to be delivered in a workplace setting, the following results emerged:

1. Universally, employers stated that they saw issues with work-life balance as a significant problem for their employees. Many employers felt that employees’ struggles with work-life balance have been increasing in recent years with increases in work volume and performance expectations in the workplace as central features. This was seen as leading to significant stress and mental health issues for employees, and employers are seeing this impacting on workplace performance (i.e. presenteeism, absenteeism, decreases in engagement scores, and increases in benefits costs).

2. Employers are currently using a number of strategies to address employees’ work-life balance issues (e.g. a supportive culture, flexible work hours/shifts, modified return to work policies, workshops, lunch-and-learns) with the most common being referral to EAP services.

3. When asked about their interest in a workplace parenting program as a supportive tool to ease the stress of work-life balance, most employers were supportive of such an initiative and one employer suggested that it was worth piloting.

4. Suggestions concerning the logistical aspects of implementing a workplace parenting program to ensure successful delivery were very workplace specific and differed based on the type of organization, the geographical location of the organization, and the age of the work force. Some general findings regarding logistics included the following:
   a. The majority of employers felt that the current 9-week format of the program was too long and not feasible in a work environment. Suggestions ranged from shortening the program to 4-6 weeks to combining sessions into 3 half day workshops.
   b. Employers also said that hour long sessions would not be feasible in the workplace. Sessions of 30-45 minutes would be more likely to be successful.
   c. Holding such a program in the workplace was said to be the ideal location by some employers as a strategy to maximize employee turnout. Sessions, held over the lunch hour, in a lunch-and-learn format was the most commonly recommended program structure.
   d. Results were mixed on whether an online format could be successful. Some employers suggested it could increase the success of the program and an approximately equal number felt that an online program would not be as effective as in-person sessions.

5. Some of the potential barriers identified by employers included poorly attended sessions, stigma associated with attending a parenting program, time and other competing priorities. Some suggestions to address these barriers included: providing food at lunch time sessions and even putting a small fee associated with the program to maximize attendance, marketing the program in a very positive way (e.g. a “healthy families” program) to avoid negative stigma, and show the relevance to employees and employers so that a parenting program becomes a priority.
6. When asked about program evaluation, all employers felt that doing an evaluation was important and almost all employers mentioned employee engagement scores as being a relevant metric to measure. However, while some employers stated that an evaluation protocol showing the return on investment was essential, others were less interested in the financial return and more interested in employee satisfaction with the program and seeing improvement in behaviours taught throughout the program.
Appendix E: Goal Setting Handout

Goal Setting

Set two (or more) goals for this week – one parenting goal and one health behaviour goal. And remember to set SMART goals (Specific, Measurable, Achievable, Realistic, Timely)

My parenting goal(s) for this week is...

____________________________________________________________________

____________________________________________________________________

My health behaviour goal(s) for this week is...

____________________________________________________________________

____________________________________________________________________
Appendix F: University of Guelph Research Ethics Approval for the Formative Assessment with Employers

**APPROVAL PERIOD:** February 18, 2014  
**EXPIRY DATE:** February 18, 2015  
**REB:** G  
**REB NUMBER:** 13DC032  
**TYPE OF REVIEW:** Delegated Type 1  
**PRINCIPAL INVESTIGATOR:** Haines, Jessica (jhaines@uoguelph.ca)  
**DEPARTMENT:** Family Relations & Applied Nutrition  
**SPONSOR(S):**  
**TITLE OF PROJECT:** A Worksite Parenting Program: A Feasibility Study

The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human participants in the above-named research project and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement, 2nd Edition.

The REB requires that researchers:

- Adhere to the protocol as last reviewed and approved by the REB.  
- Receive approval from the REB for any modifications before they can be implemented.  
- Report any change in the source of funding.  
- Report unexpected events or incidental findings to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants, and the continuation of the protocol.  
- Are responsible for ascertaining and complying with all applicable legal and regulatory requirements with respect to consent and the protection of privacy of participants in the jurisdiction of the research project.

The Principal Investigator must:

- Ensure that the ethical guidelines and approvals of facilities or institutions involved in the research are obtained and filed with the REB prior to the initiation of any research protocols.  
- Submit a Status Report to the REB upon completion of the project. If the research is a multi-year project, a status report must be submitted annually prior
to the expiry date. Failure to submit an annual status report will lead to your study being suspended and potentially terminated.

The approval for this protocol terminates on the **EXPIRY DATE**, or the term of your appointment or employment at the University of Guelph whichever comes first.

Signature: 

Date: August 25, 2015

L. Kuczynski  
Chair, Research Ethic Board-General
Appendix G: University of Guelph Research Ethics Approval for the Feasibility Trial

RESEARCH ETHICS BOARDS
Certification of Ethical Acceptability of Research Involving Human Participants

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<td>Haines, Jessica (<a href="mailto:haines@uoguelph.ca">haines@uoguelph.ca</a>)</td>
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<td>DEPARTMENT:</td>
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<td>Pilot Study of a family-based obesity prevention intervention in the Canadian context</td>
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CHANGES:

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The members of the University of Guelph Research Ethics Board have examined the protocol which describes the participation of the human participants in the above-named research project and considers the procedure, as described by the applicant, to conform to the University’s ethical standards and the Tri-Council Policy Statement, 2nd Edition.

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- Report any change in the source of funding.
- Report unexpected events or incidental findings to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants, and the continuation of the protocol.
- Are responsible for ascertaining and complying with all applicable legal and regulatory requirements with respect to consent and the protection of privacy of participants in the jurisdiction of the research project.
The Principal investigator must:

- Ensure that the ethical guidelines and approvals of facilities or institutions involved in the research are obtained and filed with the REB prior to the initiation of any research protocols.
- Submit a Status Report to the REB upon completion of the project. If the research is a multi-year project, a status report must be submitted annually prior to the expiry date. Failure to submit an annual status report will lead to your study being suspended and potentially terminated.

The approval for this protocol terminates on the EXPIRY DATE, or the term of your appointment or employment at the University of Guelph whichever comes first.

Signature: ___________________________  Date: January 6, 2015

L. Kuszynski
Chair, Research Ethics Board General
Appendix H: Outcome Evaluation Survey

Thank you so much for your willingness to participate in this study.

Please note:

- This survey will take approximately 20 minutes to complete.
- Please answer each question as best as you can.
- There are no right and wrong answers.
- Your answers will be kept completely confidential. We use a study identification number instead of your name on all of our forms.

If you have any questions, please feel free to email Laura Wilson at lwilso13@uoguelph.ca

Thank you for taking the time to complete this survey.

When answering the questions, think about your child who is between the age of 2 and 7. If you have more than one child in this age, please provide the name of the child about whom you are answering the survey questions:

1. Child’s name: ___________________
2. Child’s birthdate: (dd/mm/year) _____/_____/_________
3. Is this child a

   □ 1. Male or
   □ 2. Female?

The next questions are about your child’s behaviour.

4. For each item below, please let us know how true the statement is for your child. The possible answers are Not True, Somewhat True, or Definitely True. It would help us if you answered all items as best you can even if you are not absolutely certain.
Your child often loses his/her temper

Somewhat True

Definitely True

Generally well behaved, usually does what adults request

Often fights with other children or bullies them

Often argumentative with adults

Can be spiteful to others (having or showing a desire to harm someone)

The next questions are about parenting

5. Parents have different ideas about how to raise children. We’d like to learn more about your style of parenting. Please tell us how often you do the following things with your child.

How often do you do the following things?

I praise my child

I enjoy spending time with my child

When I set a limit on my child, he or she can talk me into letting him or her off easier than I had intended

My child convinces me to change my mind after I have already said “no” to him or her

I punish my child by sending him or her to bed by himself or herself for awhile (such as a “time-out”)

I threaten punishment but do not end up punishing my child
## How often do you do the following things?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>I reward my child for good behavior (such as using a “sticker chart” or giving him or her extra privileges)</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>H</td>
<td>I spend time reading to my child</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>I</td>
<td>I spend time playing with my child</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>J</td>
<td>I raise my voice with my child</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>K</td>
<td>There are times when I just don’t have the energy to make my child behave as he or she should</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>L</td>
<td>I give my child too many chances when he or she misbehaves</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>M</td>
<td>Even when my mind is made up, my child can change my opinion</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>N</td>
<td>I get angry with my child</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
<tr>
<td>O</td>
<td>I get upset when my child whines or complains</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
<td><img src="#" alt="4" /></td>
</tr>
</tbody>
</table>

## The next questions are about how confident you feel about parenting.

6. The following questions ask you to think about how confident you are when doing many of the things that parents often do with their young children. Being confident about something means that you think you can handle a situation very well.

<table>
<thead>
<tr>
<th></th>
<th>Not at all confident</th>
<th>A little bit confident</th>
<th>Confident</th>
<th>Very Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Knowing how your children’s eating “likes” and “dislikes” change as your child gets older</td>
<td><img src="#" alt="1" /></td>
<td><img src="#" alt="2" /></td>
<td><img src="#" alt="3" /></td>
</tr>
<tr>
<td></td>
<td>How confident are you about...</td>
<td>Not at all confident</td>
<td>A little bit confident</td>
<td>Confident</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------</td>
<td>----------------------</td>
<td>------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>B</td>
<td>Knowing your child’s daily sleep schedule</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>C</td>
<td>Knowing what foods your child will and won’t eat</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>D</td>
<td>Getting your child interested in activities you both enjoy</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>E</td>
<td>Showing affection to your child, such as hugging or kissing your child</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>F</td>
<td>Getting your child to be interested in new things</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>G</td>
<td>Helping your child play with other children</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>H</td>
<td>Stopping your child’s behaviour when it is becoming destructive, such as tearing books or breaking things</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>I</td>
<td>Stopping your child’s behaviour when it looks like he or she is doing something dangerous, such as playing with matches or electric outlets</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>J</td>
<td>Knowing which types of discipline will work with your child</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>K</td>
<td>Knowing what to do when your child has a temper tantrum (“falls out”)</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>L</td>
<td>Getting your child to bed without a struggle</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>M</td>
<td>Keeping your child’s bedtime about the same time each night</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>N</td>
<td>Knowing when rules can be “bent” or changed and when they should not be</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>O</td>
<td>Getting back to “friendly terms” with your child soon after a problem behavior has ended</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>P</td>
<td>Knowing whether you are “spoiling” your child</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
<tr>
<td>Q</td>
<td>Dealing with your child’s behaviour when he or she is aggressive with other children, such as hitting,</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
</tr>
</tbody>
</table>
How confident are you about...

<table>
<thead>
<tr>
<th></th>
<th>Not at all confident</th>
<th>A little bit confident</th>
<th>Confident</th>
<th>Very Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>biting, or pushing other children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Limiting your child’s intake of soda, juice, or other sweetened drinks</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>S Figuring out when your child has eaten enough</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>T Finding opportunities for your child to be physically active</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>U Figuring out when your child is full</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>V Being active with your child</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>

7. Please choose the response that best represents your current situation.

A. Would you say your health, in general, is:
   - ☐ 0 Excellent/good
   - ☐ 1 Fair/poor

B. Do you have a health problem or condition that requires medical treatment or hospitalization on a regular basis?
   - ☐ 0 No
   - ☐ 1 Yes

C. Have you ever been diagnosed with any mental health condition, including clinical depression, anxiety disorder, or bipolar disorder?
   - ☐ 0 No
   - ☐ 1 Yes

D. Employment:
   - ☐ 0 Employed
1. Unemployed

E. Health Insurance:

- 0: Insurance
- 1: No insurance

F. Poverty Status:

- 0: Above 200% federal poverty level
- 1: Below 200% poverty level

G. Family Structure:

- 0: Partnered (married or living with partner)
- 1: Single parent (never married, divorced, widowed, or separated)

H. Using a scale from 1 to 10, where 1 means ‘no stress’ and 10 means ‘an extreme amount of stress’ – how much stress would you say you have experienced in the last year? Please circle one.

1 2 3 4 5 6 7 8 9 10

The next few questions are about your child’s eating habits. For these next questions, think about your child’s usual behaviour over the past month.

8. In an average week, how often did your child drink each of the following beverages?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once per week</th>
<th>2 – 4 times per week</th>
<th>Once per day</th>
<th>2 – 4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flavored milk such as chocolate milk</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never</td>
<td>Once per week</td>
<td>2 – 4 times per week</td>
<td>Once per day</td>
<td>2 – 4 times per day</td>
</tr>
<tr>
<td>---</td>
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<td>---------------</td>
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<td>-------------</td>
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</tr>
<tr>
<td>B.</td>
<td>100% juice (no sugar added)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>Fruit Drinks (Hi-C, Kool-Aid, lemonade, sports drink)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>Soda (not sugar-free)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td>Sugar-free soda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. **My child usually eats grain products:**
   Examples are bread, bagel, bun, cereal, pasta, rice, roti and tortillas.
   - [ ] 0 More than 5 times a day
   - [ ] 1 4 to 5 times a day
   - [ ] 2 2 to 3 times a day
   - [ ] 4 Less than 2 times a day

10. **My child usually eats milk products:**
    Examples are white or chocolate milk, cheese, yogurt, milk puddings or milk substitutes, such as fortified soy beverages.
    - [ ] 0 More than 3 times a day
    - [ ] 1 3 times a day
    - [ ] 2 2 times a day
    - [ ] 4 Once a day or less

11. **My child usually eats fruit:**
    - [ ] 0 More than 3 times a day
    - [ ] 1 3 times a day
    - [ ] 2 2 times a day
    - [ ] 3 Once a day
    - [ ] 4 Not at all
12. My child usually eats vegetables:

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>More than 2 times a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2 times a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Once a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. My child usually eats meat, fish, poultry or alternatives:

Alternatives can be eggs, peanut butter, tofu, nuts or dried beans, peas and lentils

<p>| | | | | |</p>
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<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>More than 2 times a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2 times a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Once a day</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>A few times a week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. My child usually eats “fast food”:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>4 or more times a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2 to 3 times a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Once a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>A few times a month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Once or less a month</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. I have difficulty buying food to feed my child because food is expensive:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>Most of the time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sometimes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rarely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. My child has problems chewing, swallowing, gagging or choking when eating:

<p>| | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Most of the time</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sometimes</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rarely</td>
<td></td>
</tr>
</tbody>
</table>
17. My child is not hungry at mealtimes because he/she drinks all day:
   □ 0  Never
   □ 4  Most of the time
   □ 2  Sometimes
   □ 1  Rarely
   □ 0  Never

18. My child usually eats:
   □ 4  Less than 2 times a day
   □ 3  2 times a day
   □ 1  3 to 4 times a day
   □ 0  5 times a day
   □ 2  More than 5 times a day

19. I let my child decide how much to eat:
   □ 0  Always
   □ 1  Most of the time
   □ 2  Sometimes
   □ 3  Rarely
   □ 4  Never

20. My child eats meals while watching TV:
   □ 4  Always
   □ 3  Most of the time
   □ 2  Sometimes
   □ 1  Rarely
   □ 0  Never

21. My child usually takes supplements:
   Examples are multivitamins, iron drops, cod liver oil.
   □ 4  Always
   □ 3  Most of the time
22. My child:
   ■ 4 Needs more physical activity
   ■ 0 Gets enough physical activity

23. My child usually watches TV, uses the computer, and plays video games:
   ■ 4 5 or more hours a day
   ■ 3 4 hours a day
   ■ 2 3 hours a day
   ■ 1 2 hours a day
   ■ 0 1 hour or less a day

24. I am comfortable with how my child is growing:
   ■ 0 Yes
   ■ 4 No

25. My child:
   ■ 4 Should weigh more
   ■ 0 Is about the right weight
   ■ 2 Should weigh less

26. Are you worried that your child will become overweight as he/she is growing up?
   ■ 1 Yes
   ■ 2 No

27. How many days a week did your child sit down with other members of his or her family to
   eat dinner or supper?
   ■ 1 Every day of the week
   ■ 2 Most days, that is, 4-6 days a week
   ■ 3 A few days, that is 1-3 days a week
   ■ 4 Never or rarely, that is, less than 1 day per week

28. Please indicate how much you agree or disagree with each of the following statements.
The next few questions are about your child’s activity, sleep and TV time. Again, when answering these questions, think about your child’s usual behaviour over the past month.

29. Is there a television in the room where your child usually sleeps?
   - 1 Yes
   - 2 No

30. How many hours per day (either in your home or elsewhere) did your child spend watching TV, videos or DVDs, or watching videos on the computer? (Please tell us for weekdays & for weekend days.)

   30a) Weekdays (Mon – Fri)  30b) Weekend days (Sat, Sun)
31. How much time per day is your child involved in active play (such as running, jumping, climbing)? (Please tell us for weekdays & for weekend days.)

<table>
<thead>
<tr>
<th></th>
<th>Weekdays (Mon – Fri)</th>
<th></th>
<th>Weekend days (Sat, Sun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 min</td>
<td>1</td>
<td>0 min</td>
</tr>
<tr>
<td>2</td>
<td>1 to 15 minutes a day</td>
<td>2</td>
<td>1 to 15 minutes a day</td>
</tr>
<tr>
<td>3</td>
<td>16 to 30 minutes a day</td>
<td>3</td>
<td>16 to 30 minutes a day</td>
</tr>
<tr>
<td>4</td>
<td>31 minutes to &lt;1 hour a day</td>
<td>4</td>
<td>31 minutes to &lt;1 hour a day</td>
</tr>
<tr>
<td>5</td>
<td>1 hour to &lt; 2 hours a day</td>
<td>5</td>
<td>1 hour to &lt; 2 hours a day</td>
</tr>
<tr>
<td>6</td>
<td>2 hours or more a day</td>
<td>6</td>
<td>2 hours or more a day</td>
</tr>
</tbody>
</table>

32. On an average weekday, how much time does your child spend playing outdoors?
   ___ HOURS AND ___ __ MINUTES PER DAY PER WEEKDAY

33. On an average weekend day, how much time does your child spend playing outdoors?
   ___ ___ HOURS AND ___ ___ MINUTES PER DAY PER WEEKEND DAY

34. What time does your child usually go to bed? (answer separately for weekdays and for weekend days)
   a) ____ ____ : ____ ____ PM on a weekday
b) ____ ____ : ____ ____  ☐ PM on a weekend day

35. What time does your child usually wake up? (answer separately for weekdays and for weekend days)
   a) ____ ____ : ____ ____  ☐ AM on a weekday
   b) ____ ____ : ____ ____  ☐ AM on a weekend day

36. How often does your child…

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Have a calming nighttime routine?</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>b. Use his/her bed for things other than sleep, like playing, watching TV, or video games?</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>c. Have a problem with sleepiness during the day?</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>d. Fall asleep while watching television?</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>e. Sleep with you</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>

The next questions are about your activities and behaviours. For these next questions, think about your usual behaviour over the past month.

37. In an average week, how often did you drink each of the beverages listed?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once per week</th>
<th>2 – 4 times per week</th>
<th>Once per day</th>
<th>2 – 4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Flavored milk such as chocolate milk</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
<td>☐ 6</td>
</tr>
<tr>
<td>B. 100% juice (no sugar)</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
<td>☐ 6</td>
</tr>
</tbody>
</table>
### Questionnaire on Eating Habits

#### Fruit Drinks (Hi-C, Kool-Aid, lemonade, sports drinks)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never per week</th>
<th>Once per week</th>
<th>2 – 4 times per week</th>
<th>Once per day</th>
<th>2 – 4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Soda (not sugar-free)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never per week</th>
<th>Once per week</th>
<th>2 – 4 times per week</th>
<th>Once per day</th>
<th>2 – 4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Sugar-free soda

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Never per week</th>
<th>Once per week</th>
<th>2 – 4 times per week</th>
<th>Once per day</th>
<th>2 – 4 times per day</th>
<th>5 or more times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

38. **In the past month, on average, how often did you eat something from a fast food restaurant like a pizza place, McDonald’s, Burger King, Taco Bell?** Please include breakfast, lunch, and dinner.

- 1 Never/less than once per month
- 2 1 – 3 times per month
- 3 Once per week
- 4 2 – 4 times per week
- 5 5 – 6 times per week
- 6 Once per day or more

39. **In the past month, on average, how many hours per day do you spend watching TV, videos or DVDs?** *(Please tell us for weekdays & for weekend days.)*

#### Watching TV

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Weekdays (Mon – Fri)</th>
<th>Weekend days (Sat, Sun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1 hour or less a day</td>
<td>1 hour or less a day</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2 hours a day</td>
<td>2 hours a day</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3 hours a day</td>
<td>3 hours a day</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4 hours a day</td>
<td>4 hours a day</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5 or more hours a day</td>
<td>5 or more hours a day</td>
<td></td>
</tr>
</tbody>
</table>

---

131
40. What time do **YOU** usually go to bed? (answer separately for **weekdays** and for **weekend days**)
   a) _____ : _____  AM or PM on a **weekday**
   b) _____ : _____  AM or PM on a **weekend day**

41. What time do **YOU** usually wake up? (answer separately for **weekdays** and for **weekend days**)
   a) _____ : _____  AM on a **weekday**
   b) _____ : _____  AM on a **weekend day**

The next questions are about **your** work-life balance.

42. Please indicate how much you agree or disagree with each of the following statements.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>My work keeps from my family activities more than I would like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>The time I must devote to my job keeps me from participating equally in household responsibilities and activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>I have to miss family activities due to the amount of time I must spend on work responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>D</td>
<td>The time I spend on family responsibilities often interferes with my work responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>I have to miss work activities due to the amount of time I must spend on family responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>G</td>
<td>When I get home from work I am often too frazzled to participate in family activities/responsibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>I am often so emotionally drained when I get home from work that it prevents me from contributing to my family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I</td>
<td>Due to all the pressures at work, sometimes when I come home I am too stressed to do the things I enjoy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>J</td>
<td>Due to stress at home, I am often preoccupied with family matters at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Below are some questions about you and your family.

43. How you are related to your child?
   - 1. Mother
   - 2. Stepmother
   - 3. Foster Mother
   - 4. Father
   - 5. Stepmother
   - 6. Foster Father
   - 7. Grandmother
   - 8. Grandfather
   - 9. Other (Please specify): __________________________

44. Which of the following best describes your current marital status?
   - 1. Married
1. Not married, but living with partner
2. Single, never married
3. Divorced
4. Separated
5. Widowed

45. What is the highest grade or degree you completed in school?
   1. 8th grade or less
   2. Some High School
   3. High School Graduate
   4. Some College or Technical School
   5. College Graduate
   6. Some University
   7. University Graduate
   8. Postgraduate Training or Degree

46. What is the highest grade or degree your partner or spouse has completed in school?
   1. 8th grade or less
   2. Some High School
   3. High School Graduate
   4. Some College or Technical School
   5. College Graduate
   6. Some University
   7. University Graduate
   8. Postgraduate Training or Degree

47. What is your total household income?
   1. Less than $10,000
   2. $10,000 to $19,999
   3. $20,000 to $29,999
   4. $30,000 to $39,999
   5. $40,000 to $49,999
   6. $50,000 to $59,999
48. People living in Canada come from many different cultural and racial backgrounds. Are you (Please select all that apply):

- White
- Black
- Chinese
- South Asian (ex. East Indian, Pakistani, Sri Lankan, etc.)
- Filipino
- Latin American
- Southeast Asian (ex. Vietnamese, Cambodian, Malaysian, Laotian, etc.)
- Arab
- West Indian (ex. Iranian, Afghan, etc.)
- Japanese
- Korean
- Aboriginal Peoples of North America
- Other, please specify: ______________________
- Prefer not to answer

49. Were you born in Canada?

- Yes
- No

50. In what year did you first come to Canada? _________

- Not Applicable

51. How tall are you? A best guess is okay!

___ ___ Feet ___ ___ Inches OR ___ ___ Meters

52. How much do you weigh now? A best guess is okay!
__ __ __ Pounds OR __ __ __ Kilograms

53. Are you currently pregnant?

☐ 1. Yes
☐ 2. No
☐ 3. NOT APPLICABLE (MALE RESPONDENT)

This is the end of the survey.

Thank you!!
Appendix I: Process Evaluation Survey

Please circle the answer that best describes how you feel about the workplace healthy families program overall. Your answers will help us improve the program for other parents. Your answers are strictly confidential.

1. Overall, how satisfied are you with this program?

☐ 1 Very dissatisfied  ☐ 2 Dissatisfied  ☐ 3 Satisfied  ☐ 4 Very Satisfied

2. The concerns that made me first want to come to this parent program are now:

☐ 1 Worse  ☐ 2 The same  ☐ 3 Better satisfied  ☐ 4 Much better satisfied

3. Compared to when you started the parent program, how confident are you about managing your child’s behavior at home?

☐ 1 Less confident than before  ☐ 2 About the same as before  ☐ 3 A little more confident  ☐ 4 Much more confident

4. Compared to when you started the parent program, how confident are you about:

a. Knowing when your child is full?

☐ 1 Less confident than before  ☐ 2 About the same as before  ☐ 3 A little more confident  ☐ 4 Much more confident

b. Limiting your child’s sugary beverage intake?

☐ 1 Less confident than before  ☐ 2 About the same as before  ☐ 3 A little more confident  ☐ 4 Much more confident

c. Helping your child engage in regular physical activity (at least 1 hour/day)?

☐ 1 Less confident than before  ☐ 2 About the same as before  ☐ 3 A little more confident  ☐ 4 Much more confident

d. Limiting your child’s screen time to 1-2 hours/day?

☐ 1 Less confident than before  ☐ 2 About the same as before  ☐ 3 A little more confident  ☐ 4 Much more confident

e. Following a bedtime routine with your child?

☐ 1 Less confident than  ☐ 2 About the same  ☐ 3 A little more  ☐ 4 Much more confident
6. How much do you agree with the following statement: Participating in this program helped relieve stress at home that allowed me to perform better at work?

☐ 1 Strongly disagree  ☐ 2 Disagree  ☐ 3 Neither agree nor disagree  ☐ 4 Agree  ☐ 5 Strongly agree

7. How many sessions did you attend?

☐ 1 1-2 sessions  ☐ 2 3-4 sessions  ☐ 3 5-6 sessions  ☐ 4 7 sessions

8. How helpful was the goal setting assignment each week?

☐ 1 Not at all helpful  ☐ 2 A little helpful  ☐ 3 Very helpful

9. Overall, how useful were the videotaped examples that we used in this parent program?

☐ 1 Not at all useful  ☐ 2 A little useful  ☐ 3 Very useful

10. What did you think of the length of the sessions?

☐ 1 Too long  ☐ 2 A good length  ☐ 3 Too short

11. If you found the length of the sessions either too long or too short, what would you suggest as an ideal session length?

12. Overall, would you recommend this program to a co-worker?

☐ 1 Would not recommend  ☐ 2 Recommend  ☐ 3 Highly recommend

Please tell us why you would or why you wouldn’t recommend this program to a co-worker:
13. What would you say is the **main reason** you decided to join this program?

14. What could we do to **improve** this program?

15. In the table below are the topics that we covered in this program. Circle the topics you liked best:

<table>
<thead>
<tr>
<th>Week</th>
<th>Parenting Topic</th>
<th>Health Behaviour Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spending child centered time</td>
<td>Physical activity</td>
</tr>
<tr>
<td>2</td>
<td>The importance of family routines</td>
<td>Sleep: creating a bedtime routine</td>
</tr>
<tr>
<td>3</td>
<td>Using praise, encouragement and rewards</td>
<td>Limiting sugary drinks</td>
</tr>
<tr>
<td>4</td>
<td>Setting and following through on limits</td>
<td>TV: setting limits and alternatives to TV</td>
</tr>
<tr>
<td>5</td>
<td>Establishing consequences and discipline</td>
<td>Feeding your child</td>
</tr>
<tr>
<td>6</td>
<td>Problem solving</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Stress management</td>
<td>Work-life balance and using physical activity to help manage stress</td>
</tr>
</tbody>
</table>

16. Were there any topics that you found not useful?

**Thank you!**