## Université de Montréal

# Evaluating the Impact of the *How-to* Parenting Program on Preschoolers and Their Parents: A Pilot Study

Par

Jessica Corbeil

Département de psychologie, Faculté des arts et des sciences

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sous la direction de Mireille Joussemet

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## Cet essai doctoral intitulé

# Evaluating the Impact of the *How-to* Parenting Program on Preschoolers and Their Parents: A Pilot Study

Présenté par

## Jessica Corbeil

A été évalué par un jury composé des personnes suivantes

**Tania Lecomte** 

Président-rapporteur

**Mireille Joussemet** 

Directeur de recherche

**Sophie Bergeron** 

Membre du jury

#### Résumé

Cette étude pilote a évalué l'efficacité de l'atelier pour parents *How-to* à améliorer le soutien à l'autonomie et la prise de perspective des parents, ainsi qu'à diminuer les problèmes de santé mentale des enfants d'âge préscolaire et à augmenter leurs compétences socio-émotives. Après avoir mesuré les niveaux de base, nous avons assigné au hasard 26 parents d'enfants de 3 à 4 ans à l'atelier *How-to* de 6 semaines en ligne, ou à un groupe témoin actif. Parmi eux, 20 parents ont complété la deuxième collecte de données deux semaines après la fin des ateliers. Comparativement à la condition de contrôle, l'atelier *How-to* a entraîné une augmentation plus importante des qualités parentales et des compétences socio-émotionnelles de l'enfant ainsi qu'une diminution plus importante des problèmes de santé mentale de l'enfant. Ces différences n'étaient pas statistiquement significatives, mais de petite à grande tailles. Cette étude suggère que cet atelier parental mettant l'accent sur le soutien à l'autonomie représente une option intéressante pour améliorer à la fois les pratiques parentales et la santé mentale d'enfants d'âge préscolaire.

*Mots-clés* : parentalité, soutien à l'autonomie, enfants d'âge préscolaire, santé mentale, étude pilote, atelier pour parents *How-to*.

#### Abstract

This pilot study assessed the efficacy of the *How-to* parenting program in improving parents' autonomy support and perspective-taking, as well as in decreasing preschoolers' mental health problems and increasing their socio-emotional competencies. After collecting baseline measures, we randomly assigned 26 parents of 3- to 4-years-olds to the 6-week *How-to* parenting program offered online, or to an active control group. Among them, 20 parents completed the second data collection two weeks after program delivery. Compared to the control condition, the *How-to* parenting program led to greater increases in parenting measures and child socio-emotional competencies and to greater decreases in child mental health problems. These differences were not significant, but small to large in size. This study suggests that this parenting program emphasizing autonomy support may be a worthwhile option to foster parenting practices and preschoolers' mental health.

*Keywords*: parenting, autonomy support, preschoolers, mental health, pilot study, How-to parenting program.

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## Evaluating the Impact of the *How-to* Parenting Program on Preschoolers and Their Parents: A Pilot Study

During the preschool years, the prevalence of mental health problems is estimated at 20% among children aged 1 to 7 years, with half experiencing severe symptoms (Egger & Angold, 2006; Vasileva et al., 2021), and the rate of diagnosis is substantially increasing (Atladottir et al., 2015). Further, studies suggest these prevalence rates can be underestimations considering that subclinical symptoms, which cause distress and are often precursors to disorders (Shankman et al., 2009), are not always considered (Flett & Hewitt, 2013). Mental health problems can be divided into externalizing (under-controlled or dysregulated behaviours as well as negative emotions directed towards the external environment) and internalizing (over-controlled self-regulation or rigid behaviours as well as negative emotions directed towards the internal environment) problems (Achenbach, 1998). Evidence suggests that such problems, originating as early as the first two years of life, often persist and evolve across the life span (Briggs-Gowan et al., 2006).

In contrast, social competence and emotional strengths are critical elements for the healthy development of preschoolers. Social competence manifests itself in the ability to use prosocial strategies in transactions with others (Odom et al., 2008). Emotional strengths pertain to the knowledge, regulation, and expression of emotions (Denham et al., 2003). The presence of socio-emotional skills in preschoolers participates in many positive life outcomes involved in well-being such as education, employment, and mental health (Jones et al., 2015). Furthermore, these skills act as a protective factor with the potential to counteract the negative effects of life adversities (e.g., Domitrovich, et al., 2017; Powell et al., 2007).

The absence of mental health problems and the development of socio-emotional strengths early in life lay the foundation for favorable lifelong adaptation. Considering that early mental health problems are not transient, and that socio-emotional skills acquisition is a key protective factor during early childhood, the need to focus on early prevention is highlighted.

Among environmental factors, parenting quality has repeatedly been shown to act as a major determinant of children's mental health (e.g., Masten & Shaffer, 2006; Yap & Jorm, 2015). Considering the important role parents play in contributing to their children's development and the considerable amount of time they spend with them, especially in early childhood, early parenting programs have become increasingly popular to decrease young children's mental health problems and support their socio-emotional development (Jeong et al. 2021). Furthermore, children are particularly sensitive to early experiences and there exist strong theoretical arguments in support of early interventions. Indeed, the period of early development, from birth to about five years of age, is filled with enormous changes and is characterized by a high degree of plasticity in the organization of the brain (Wachs et al., 2014). Parenting programs can have major effects at that time as children are responsive to intervention in the early years, although consistency remains necessary (Andersen, 2003; Landry et al., 2008). In fact, intervening during early childhood leads to worthwhile results by reducing the impact of emerging difficulties and preventing them from becoming entrenched mental health problems (Sparling & Meunier, 2019).

A meta-analysis by Kaminski et al. (2008) examined the effects of the components of 77 parenting programs aimed at improving behaviors and adjustment in children aged 0 to 7 to determine which ones were related to more successful child outcomes. Of all the assessed components, the ones that were most predictive of larger effect sizes were consistency, positive

parent-child interactions, and emotional communication (the latter referring to active listening, reflecting emotions children are feeling). Interestingly, these three components map on perfectly with findings from basic parenting research. The authoritative style, as opposed to the authoritarian and the permissive styles, (Baumrind, 1967, 1971) has consistently been found to be associated with better child adjustment (Paulussen-Hoogeboom et al., 2008; Pinquart, 2017). When this style was unpacked by Gray & Steinberg (1999), they showed that the component of psychological autonomy granting (i.e., autonomy support, akin to emotional communication) also contributed to enhancing child psychosocial development, in addition to the components of control (i.e., structure, akin to consistency) and warmth (i.e., caring involvement, akin to positive parent-child interactions).

As opposed to controlling parenting, parental autonomy support refers to the consideration of and respect for children's own subjective experiences (e.g., thoughts, preferences, emotions) notwithstanding one's own needs and feelings and the active support of their volitional functioning (Grolnick et al., 1997; Ryan et al., 2015). Accordingly, parents support their child's autonomy by being empathetic as well as providing opportunities for initiative-taking and explaining rationales of requests (Grolnick & Ryan, 1989; Koestner et al., 1984). According to Grolnick (2009), these key dimensions are facilitative because they satisfy autonomy, one of the three universal and basic psychological needs posited by Self-Determination Theory (Deci & Ryan, 1985; 2000, Ryan & Deci, 2017). Additionally, in their meta-analysis, Vasquez et al. (2016) documented that parental autonomy support was positively associated with academic achievement, autonomous motivation, psychological health, and perceived competence. Though most studies have been conducted with school-aged children and adolescents, a recent systematic review (Joussemet & Mageau, 2022) found 27 studies conducted

with parents of infants, toddlers, and preschoolers and reported various cognitive and socioemotional benefits.

Moreover, perspective taking has been conceptualized as facilitating autonomy-supportive behaviors (Mageau et al., 2016). When parents actively support their child's autonomy, they need to put effort towards understanding their child's experience, perspective, and feelings before responding in a way that takes them into account (Joussemet & Grolnick, 2022). Few studies have looked at the impact of perspective taking on young children's development, but those that have seem to find positive associations (e.g., Upshaw et al., 2015), and to our knowledge, the impact of parenting programs on parental perspective taking has not been studied yet.

Although the literature suggests that parenting programs which foster parental autonomy support and perspective taking should be favoured in promoting child mental health, to date, established interventions targeting preschoolers do not seem to include this parental skill. In fact, the emphasis is mostly on structure (e.g., *Triple P—Positive Parenting Program*, Sanders et al., 2002; *Incredible Years*, Webster-Stratton). However, to our knowledge, there is one existing program, *How to Talk So Kids Will Listen (How-to* program herein; Faber & Mazlish, 2010) based on the book *How to Talk So Kids Will Listen & Listen So Kids Will Talk* (Faber & Mazlish, 1980), that truly addresses all three components of the optimal authoritative parenting style.

## Prior Assessment of the *How-to* Parenting Program

The *How-to* program was found to yield positive results in parents and their school-aged children. Indeed, a pre-post study demonstrated that this program is associated with improvements in parenting quality, including parental autonomy support, and in child mental health (Joussemet et al., 2014). Next, results of a recent randomized controlled trial with 293

parents of school-aged children suggest that parents who were offered the *How-to* program significantly improved on autonomy support, compared to parents assigned to a wait-list (Mageau et al., 2022).

Interestingly, a new version of the *How-to* program material, adapted for early childhood, has recently been published. *How to Talk So Little Kids Will Listen: A survival guide to life with children* (Faber & King, 2017), targeting parents of 2- to 7-year-olds, encompasses the same general principals as the earlier book, but provides relevant examples for parents of preschoolers. Considering the promising results found with school-aged children, assessing the impact of the *How-to* program on preschoolers and their parents seems to be an indispensable next step.

## **Present Study**

The purposes of the present pilot study were to assess the efficacy of the *How-to* program in improving parents' autonomy support and perspective-taking, as well as in decreasing preschoolers' mental health problems and increasing their socio-emotional competencies. To do so, we conducted a controlled superiority trial comparing the *How-to* program to a widely implemented one in family resource centers. Endorsed and funded by the government of Canada, the *Nobody's Perfect* parenting program has the same format, but differs in content as it does not teach specific parenting skills. Rather, it aims to promote social support between parents, develop their general problem-solving skills, and increase their knowledge of early childhood.

We hypothesized that parents of preschoolers assigned to the experimental condition (*How-to* program) would show greater improvement in autonomy support and perspective taking compared to parents assigned to the active control condition (*Nobody's Perfect* program) who would also show improvements, but to a lesser extent. We also expected that preschoolers of parents assigned to the *How-to* program condition would show greater decreases in externalizing

and internalizing problems, as well as greater increases in socio-emotional strengths compared to children of parents assigned to the *Nobody's Perfect* program, who would show less improvements. Lastly, focusing on the *How-to* program, we expected that the number of skills parents reported putting into practice at home (i.e., implementation) would be positively correlated with the expected improvements described above (i.e., parent's autonomy support and perspective taking, as well as children's mental health problems and socio-emotional skills).

#### Method

## **Participants**

Recruitment was facilitated by a non-profit organization representing many family resource centers in the province of Quebec, Canada. These centers offer various services to support and empower parents as well as improve children's development. E-mails describing the study were sent to these centers' principals, who were asked to share e-flyers to their parent users. Adopting a universal prevention approach, participation in the project was offered to all parent users, and principals were asked not to target specific parents. The sole inclusion criteria were to be the parent of at least one child of 3 or 4 years of age at the beginning of the study and to be able to communicate in French.

At T1, a total of 26 interested parent from 13 different family resource centers (n = 1 to 5 participant(s)/center completed baseline measures. Among them, 20 parents (76.92% of the original sample) completed the second data collection (T2; see Table 1 for socio-demographic information by condition). Participants who dropped out were different than participants who completed the T2 questionnaire on only two variables. Indeed, all variables were assessed for comparability between participants only answering T1 and those answering T1 and T2 questionnaires. For categorical variables, chi-square tests revealed there were more single

parents among participants who only answered the T1 questionnaire. Regarding continuous variables, t-tests indicated that parents only answering the T1 questionnaire had a lower income.

As the present study's goal is to assess the programs' impact, it will focus on the subsample of participants providing information at both time points. The vast majority (90.0%) of these 20 participating parents were mothers, as only 10.0% were fathers. When two parents from the same family expressed interest in participating together (n = 5 families), they were allowed to do so, but only one parent per couple took part in the study by completing its questionnaires. Participants were on average 34.25 years old (SD = 5.05). Most (65%) had two children, 25% had three or more, and 10% had one child. Targeted children were 11 boys (55%) and 9 girls (45%), and their mean age was 3.92 years old (SD = 0.79). Most parents selfidentified as Caucasian (85%) and the rest as Latino (15%). Regarding marital status, all were married or in a common-law relationship. Parents varied in their highest education level attained: 5% completed high school, 50% completed general or vocational college, and 45% had a university degree (M = 17.15 years of education, SD = 2.87). Participating families also lived in different economic conditions. Most (40%) reported an annual familial income above CA\$105,000 before taxes, whereas 25% reported an income ranging between CA\$75,000 and CA\$105,000, 20% reported an income ranging between CA\$ 45,000 and CA\$75,000, and 15% reported an income bellow CA\$ 45,000. Finally, 55% of parents had participated in at least one parenting program before.

#### Procedure

Parents interested in participating gave their informed consent after attending an information session online. They were then invited to complete an online questionnaire the same

evening (T1, April 2021), with assistance if needed (one parent accepted to have a research assistant read questions aloud).

To avoid contamination between conditions, family centers (rather than parents) were randomly assigned into either the *How-to* program (n = 11 parents at T1) or the *Nobody's Perfect* program (n = 15 parents at T1). Group facilitators' and parents' availabilities were constraints also considered when assigning family centers to parenting groups. Block randomisation using a random number generator was used. Two groups of no more than eight parents were created within each condition. Both parents and facilitators (except one who also had the coordinator role) were blind to the hypotheses<sup>1</sup>.

Each week during the program, participants were asked to fill out a short survey online, monitoring the extent to which they tried putting what was covered into practice. Two weeks after program delivery was over, parents were invited to fill-out a second questionnaire (T2, June 2021). All participants were compensated for their time, receiving \$20 after each completed questionnaire.

The parenting programs consisted of six 2-hour weekly sessions. All four groups were delivered in French, by two trained facilitators, who each co-facilitated only one group. The eight facilitators were women who had experience working with parents and children. The highest level of completed education level for seven of them was a bachelor's degree and one

<sup>&</sup>lt;sup>1</sup> After randomly assigning a number to each family center, they were ranked in ascending order. Beginning with the first family center on the list, if all parents could attend Group 1, the center was assigned to it. If not, their center was assigned to the next group they could all attend. This was done for each family center, until groups were full. If assigning a family center to a group entailed exceeding eight participants per group (counting participating partners), the center was assigned to the next possible group.

had a general college degree. All programs were led by remotely via web-conference (i.e., on Zoom).

The *Nobody's Perfect* parenting program facilitators had access to training and support materials (see: <a href="www.phac-aspc.gc.ca/hp-ps/dca-dea/parent/nobody-person/index-eng.php">www.phac-aspc.gc.ca/hp-ps/dca-dea/parent/nobody-person/index-eng.php</a>). Parents assigned to this condition received a kit by mail containing five booklets covering the program themes, as well as a poster which described the milestones of a child's development from birth to five years of age. After the first introductory session, five core topics guide the subsequent discussions and activities which are adapted according to parent's needs and desires. The program's main topics are child behavior (e.g., collaboration and common behavioral issues), the body (e.g., health and disease), intellectual and emotional development (e.g., learning and play), parents (e.g., their own needs, help and resources), and safety (e.g., injury). Given that sessions are based on participants' expressed goals, there is inevitable variation in covered material between groups.

The *How-to* program facilitators followed the manualized group program kit (Faber & Mazlish, 2010). They were also provided slides crafted by the first author to replace cards that would have been distributed during in person exercises. Parents received by mail a participant workbook based on the original *How to talk so kids will listen & listen so kids will talk* book (Faber & Mazlish, 1980) as well as a copy of the book *How to talk so little kids will listen: A survival guide to life with children* (Faber & King, 2017). A different topic is addressed during each of the six sessions, encompassing a total of 30 skills. The program's main themes and skills are summarized in Table 3. Practicing skills is an integral part of the *How-to* program and is strongly encouraged. Therefore, throughout the six weeks, participants were also assigned readings and asked to practice as many of the skills learned that week, if opportunities arose.

#### Material

Parents completed a questionnaire assessing, among other variables, their own autonomy support and perspective taking, as well as their child's symptoms and socio-emotional strengths. For parents who had more than one child in that age range, they were asked to choose a "targeted" (i.e., participating) child throughout the study. The same questionnaire was completed at two time-points: a baseline, two weeks pre-intervention (T1) and two weeks post-intervention (T2). Finally, every week, parents assessed their own skill implementation.

## Socio-demographics

Parents provided socio-demographic information at the end of the T1 questionnaire. This included parents' age, gender, birth country, ethnicity, marital status, highest level of education, familial annual income before taxes, number of children in the household, as well as the targeted child's age and sex.

#### Autonomy Support

The Parent Attitude Scale (PAS; Gurland & Grolnick, 2005) asks parents to rate 10 items on a 7-point Likert scale ranging from  $1 = \text{``Not at all in agreement''}}$  to 7 = ``Very strongly agree". It was used to measure parents' beliefs about autonomy support and psychological control when parenting children (e.g., "I find that listening to what my child has to say helps me reach a better decision"). The PAS has been found to be reliable ( $\alpha = .72$ ; Gurland & Grolnick, 2005). In the present study, the French version (Andreadakis et al., 2019) was used, and the internal consistency was acceptable ( $\alpha_{T1-T2} = .58/.65$ ), supporting the reliability of this instrument.

## Perspective Taking

The Interpersonal Reactivity Index (IRI; Davis, 1980) asks parents to rate 28 items on a 5-point Likert scale ranging from 1 = "Does not describe me well" to 5 = "Describes me very well". The Perspective Taking subscale, comprising 7 items, was used to measure parents' tendency to adopt the psychological point of view of their child (e.g., "I try to look at my child's side of a disagreement before I make a decision"). This subscale has been found to be reliable ( $\alpha$  = .75-.78; test-retest r = .61-.62; Davis, 1980). In the present study, back-translation to French was used, and the internal consistency of the French version was excellent ( $\alpha$ <sub>T1-T2</sub> = .86/.89), supporting the reliability of this instrument.

## Mental Health Problems

The Child Behaviour Checklist for ages 1.5 to 5 years old (CBCL/1.5–5; Achenbach & Rescorla, 2000) asks parents to rate 99 problem behaviors on a 2-point Likert scale ranging from 0 = "Not true" to 2 = "Very true or Often true". It was used to measure child internalizing (e.g., "Clings to adults or too dependent") and externalizing problems (e.g., "Destroys things belonging to his/her family or other children"). The CBCL/1.5–5 has been found to be reliable ( $\alpha = .89$  and test-retest r = .90 for the Internalizing subscale;  $\alpha = .92$  and test-retest r = .87 for the Externalizing subscale; Achenbach & Rescorla, 2000). In the present study, the French version was used, and most internal consistency scores were good ( $\alpha_{T1-T2} = .73/.66$  for internalizing symptoms;  $\alpha_{T1-T2} = .71/.86$  for externalizing ones), supporting the reliability of this instrument.

## Socio-emotional Strengths

The Devereux Early Childhood Assessment Clinical Form (DECA-C; LeBuffe & Naglieri, 2012) asks parents to rate their child on a 7-point Likert scale ranging from 1 = "Almost Never" to 7 = "Almost always". The Protective subscale, comprising 27 items, was used to measure child

social and emotional competences (i.e., initiative, self-regulation, and trust; e.g., "Try or ask to try new things or activities"). This subscale has been found to be reliable ( $\alpha$  = .67-.91; test-retest r = .74) and valid (LeBuffe & Naglieri, 2012). In the present study, back-translation to French was used, and the internal consistency was acceptable ( $\alpha$ <sub>T1-T2</sub> = .64/.63), supporting the reliability of this instrument.

## Implementation of the How-to Parenting Program Skills

Five days after each session, parents assigned to the *How-to* program were invited to fillout a short checklist designed to monitor their implementation of new skills at home (e.g., "Please indicate if you have practiced these skills since the last session"). The three to six skills taught the previous session were presented and parents were asked to indicate, for each of them, if they had tried to put into practice at least once since the last session (e.g., "I listened to my child in silence and with attention"). The sum, ranging from 0 to 30, was used to assess general skill implementation. Parents in the *Nobody's Perfect* program also filled-out a similar checklist monitoring the skills learned in their program, but this data will not be analyzed in the present study.

#### **Analyses**

As preliminary analyses, we screened continuous data for normality, extreme scores, and reliability. To detect baseline differences between conditions, we compared T1 levels using chi-square tests for categorical variables and independent samples t-tests for continuous ones.

Next, using linear regressions, each outcome variable at T2 was regressed on its T1 level. This allowed us to control for errors at T1 thereby reducing the risk of certain biases (e.g., regression towards the mean bias). These residual scores, representing change from T1 to T2, were saved and served as dependent variables in the primary analyses and in the secondary,

correlational analyses, to improve statistical power. Greater increases of standardized residuals in autonomy support, perspective taking, and socio-emotional strengths and greater decreases of standardized residuals in mental health problems represent greater *improvements* from T1 to T2 as they indicate the extent to which T2 scores are higher (or lower) than what could be expected from baseline levels.

As primary analyses, we conducted independent samples t-tests to compare, across conditions, standardized residuals of parents' autonomy support and perspective taking as well as preschoolers' externalizing problems, internalizing problems, and socio-emotional strengths. As supplemental analyses, to measure the extent to which change occurred over time (T2 vs. T1 levels) within each condition, we conducted repeated measures t-tests. Finally, we assessed whether skills implementation by participants of the *How-to* condition was associated with improvements, correlating skill implementation with standardized residuals of the main variables.

Given the small sample size of this study, we focused on effect size estimates to interpret results, rather than *p* values (Sullivan & Feinn, 2012). Moreover, although we investigated statistical equivalency between the two conditions, the small sample size precluded controlling for any socio-demographic variables not equally distributed across conditions.

#### Results

## **Preliminary Results**

A total of 20 parents (76.92% of the original sample), 9 out of 11 in the *How-to* condition (81.81%) and 11 out of 15 in the *Nobody's Perfect* condition (73.33%), completed the second data collection (T2). Before conducting analyses, statistical assumptions were reviewed.

Screening of variable distributions revealed normal distributions, with skewness and kurtosis

values being acceptable  $(\pm 1)$  for all variables. Correlations among T1 variables are presented in Table 2.

#### Randomization Success

All variables were assessed for comparability across conditions at T1. For categorical variables, chi-square tests revealed there were more fathers and more partner participation in the *How-to* condition than in the *Nobody's Perfect* condition ( $\chi^2$  [1, N = 20] = 2.72, p = .01;  $\chi^2$  [1, N = 20] = 8.15, p = .004, respectively). Regarding continuous variables, t-tests indicated that none of the T1 measures differed across conditions (all ps > .10).

## **Primary Results**

A series of independent-samples t-test were conducted to compare conditions on parent's residualized scores on autonomy support and perspective taking, as well as on children's residualized scores on externalizing problems, internalizing problems, and socio-emotional strengths. One should keep in mind that, due to the small sample size, some effects may result from sampling error.

Regarding parents' autonomy support, parents assigned to the *How-to* condition tended to show higher T2 scores than those assigned to the *Nobody's Perfect* condition, controlling for their T1 levels ( $M_{\text{residuals}} = .26$ , SD = 1.15 vs.  $M_{\text{residuals}} = -.21$ , SD = .79, respectively). The effect size of this difference between condition was small (d = .49) and did not reach statistical significance; t(18) = -1.09, p = .14.

Similarly, regarding parents' perspective taking, parents assigned to the *How-to* condition tended to show higher T2 scores than those who were assigned to the *Nobody's Perfect* condition, controlling for their T1 levels ( $M_{\text{residuals}} = .28$ , SD = .84 vs.  $M_{\text{residuals}} = -.23$ , SD = 1.05,

respectively). The size of this effect was medium (d = .54), despite not being significant; t(18) = -1.20, p = .69.

Next, in terms of preschoolers' mental health problems, children of parents assigned to the *How-to* condition were rated as showing lower T2 externalizing problems than those whose parents were assigned to the *Nobody's Perfect* condition ( $M_{\text{residuals}} = -.42$ , SD = .90 vs.  $M_{\text{residuals}} = .35$ , SD = .93, respectively), controlling for their T1 levels. The size of this effect was large (d = .85), despite not being significant; t(18) = 1.88, p = .92. With regards to preschoolers' internalizing problems, children of parents assigned to the *How-to* condition were rated as showing lower T2 scores than those whose parents were assigned to the *Nobody's Perfect* condition ( $M_{\text{residuals}} = -.32$ , SD = .65 vs.  $M_{\text{residuals}} = .27$ , SD = 1.14, respectively), controlling for their T1 levels. The effect size was medium (d = .62), despite not being statistically significant; t(18) = 1.38, p = .16. Finally, regarding preschoolers' socio-emotional strengths, children of parents assigned to the *How-to* condition were rated as showing higher T2 scores than those whose parents were assigned to the *Nobody's Perfect* condition ( $M_{\text{residuals}} = .13$ , SD = 1.18 vs.  $M_{\text{residuals}} = -.11$ , SD = .81, respectively), controlling for their T1 levels. The effect size was small (d = .24) and not statistically significant; t(18) = -.54, p = .46.

## **Secondary Results**

We conducted a series of paired-samples t-tests within each condition to compare T2 vs. T1 levels of each dependent variable. Regarding autonomy support, within the *How-to* condition, T2 was higher than T1 ( $M_{TI} = 5.07$ , SD = .49;  $M_{T2} = 5.46$ , SD = .56), t(8) = -1.72, p = .06, and the size of this change was medium (d = .57). There was also an increase in autonomy support from T1 to T2 ( $M_{TI} = 5.14$ , SD = .85;  $M_{T2} = 5.26$ , SD = .85) within the *Nobody's Perfect* condition, t(10) = -.98, p = .17, which was of small size (d = .30).

Similarly, regarding perspective taking, within the *How-to* condition, T2 levels were higher than T1 levels ( $M_{TI} = 3.50$ , SD = 1.35;  $M_{T2} = 4.53$ , SD = 1.22), t(8) = -3.34, p = .005, and the size of this change was large (d = 1.11). There was also an increase in perspective taking from T1 to T2 ( $M_{TI} = 4.02$ , SD = 1.33;  $M_{T2} = 4.34$ , SD = 1.33) within the *Nobody's Perfect* condition, t(10) = -.93, p = .19, which was of small size (d = .28).

Regarding child mental health, within the *How-to* condition, T2 levels of externalizing problems were lower than T1 levels ( $M_{TI}$  = .88, SD = .32;  $M_{T2}$  = .59, SD = .35), t(8) = 4.56, p = .001, and the size of this change was large (d = 1.52). There was also a decrease in externalizing problems from T1 to T2 ( $M_{TI}$  = .79, SD = .33;  $M_{T2}$  = .71, SD = .28) within the *Nobody's Perfect* condition, t(10) = 1.02, p = .17, which was of small size (d = .31).

Similarly, regarding internalizing problems, within the *How-to* condition, T2 levels were lower than T1 levels ( $M_{Tl}$  = .42, SD = .29;  $M_{T2}$  = .31, SD = .19), t(8) = 2.12, p = .03, and the size of this change was medium (d = .71). There was also a decrease in internalizing problems from T1 to T2 ( $M_{Tl}$  = .40, SD = .25;  $M_{T2}$  = .39, SD = .19) within the *Nobody's Perfect* condition, t(10) = .12, p = .45, which was of small size (d = .04).

As for child socio-emotional strengths, within the *How-to* condition, T2 levels were higher than T1 levels ( $M_{TI} = 4.55$ , SD = .40;  $M_{T2} = 4.97$ , SD = .63; t(8) = -2.59, p = .02) and the size of this change was large (d = .86). There was also an increase in socio-emotional strengths from T1 to T2 ( $M_{TI} = 4.68$ , SD = .71;  $M_{T2} = 4.89$ , SD = .38) within the *Nobody's Perfect* condition, t(10) = -.95, p = .18, which was of small size (d = .29).

Finally, we computed Pearson product-moment correlations within the *How-to* condition (n = 9) to assess how the number of *How-to* skills parents reported putting in practice related to improvements in the study's dependent variables. First, there was a positive correlation between

the number of How-to skills put in practice and parents' autonomy support's progress, seen as an increase (r = .37, p = .32) as well as with their progress in perspective taking (r = .58, p = .10). The former correlation was small in size, while the latter one was of moderate size. There was also a small, positive correlation between How-to skills' implementation and preschoolers' socio-emotional progress (r = .31, p = .43). Regarding child symptoms, there was a negative correlation between the number of How-to skills put in practice and progress, seen as a decrease in preschoolers' externalizing problems (r = -.10, p = .79) as well as their internalizing problems (r = -.73, p = .03). The former link was small in size, while the latter one was large.

#### Discussion

We conducted a controlled superiority pilot study comparing the *How-to* parenting program to an active control condition (the *Nobody's Perfect* parenting program) to assess its efficacy in improving parenting and preschoolers' mental health. In this pilot study, we examined parent ratings from pre- to post-intervention. Our results suggest that although progress was observed in both conditions, parents assigned to the *How-to* program tended to have greater increases in autonomy support and perspective taking compared to those who were offered the *Nobody's Perfect* program. Additionally, children of parents assigned to the *How-to* program were perceived as showing greater decreases in externalizing and internalizing problems, as well as greater increases in socio-emotional strengths than those who were offered the *Nobody's Perfect* program. Differences between conditions varied from small (autonomy support and socio-emotional strengths), to medium (perspective taking and internalized problems), to large (externalized problems) in size. A closer look within each condition revealed that while all parent and child T1 to T2 improvements found in the *Nobody's Perfect* condition were small in magnitude, the ones within the *How-to* intervention were medium (autonomy

support and internalizing problems) to large (perspective taking, externalizing problems, and socio-emotional strengths) in size.

The results of the present study contribute to the literature on parenting programs in several ways. To begin, our results suggest that autonomy support and perspective taking are parenting skills that can be taught to parents in a short amount of time and that the *How-to* parenting program seems to be superior to the commonly delivered *Nobody's Perfect* one at translating these skills. Although these results were not statistically significant among this small sample, perhaps statistically significant improvements would have been detected within a larger sample size with sufficient statistical power. Moreover, after parents participated in the programs, they perceived their preschoolers tended to display less mental health problems and better socio-emotional competencies. Again, these improvements took place in a short period of time.

Sandler et al. (2011) suggest that one way parenting programs are effective in improving child mental health is by altering parenting skills. Our results are in line with this idea, although future studies with sufficient participants and time points could test this mediational model and ascertain that the *How-to* program helps improve parental skills which in turn fosters better child mental health.

In the present study, the preschoolers of parents who were offered the *How-to* program improved to a greater extent than the preschoolers of parents offered the treatment as usual program. This is consistent with previous literature that suggests that autonomy-supportive parenting is facilitative (Grolnick, 2009) because it satisfies the need for autonomy, one of the three universal and basic psychological needs posited by Self-Determination Theory (Deci & Ryan, 1985, 2000; Ryan & Deci, 2017). Indeed, when caregivers demonstrate autonomy support

and perspective taking, their children experience less mental health problems (e.g., Sirois et al. 2022) and report higher well-being (e.g., Vasquez et al., 2016).

Finally, our findings indicate that the more parents reported putting *How-to* skills in practice, the more they reported autonomy support, perspective taking, and child socio-emotional strengths, and the less they reported child mental health problems at T2, compared to what could be expected from their initial scores. In other words, the more parents in the *How-to* program put skills in practice, the more they themselves and their preschoolers benefited from this program. An article by Dane & Schneider (1998) highlights that exposure, the extent to which participants are exposed to an intervention (Carroll et al., 2007), is among the key aspects of program implementation. It seems that parents continuing to practice *How-to* skills between the program's sessions exposed their children to a different parenting style to a greater extent and continued to integrate these skills in their day-to-day life. Our findings underscore the benefits of practicing skills of the *How-to* program at home. In future studies, other implementation indicators (e.g., attendance, readings, delivery's fidelity; Dane & Schneider, 1998) could also be examined in relation to the program's efficacy (Lafontaine et al., submitted).

### **Strengths and Limitations**

This pilot study was motivated by the desire to assess the potential benefits of the *How-to* parenting program, a popular yet understudied parenting program, for preschoolers and their parents. Compared to the previous studies assessing this parenting program, we explored different parameters and improved certain aspects. For example, we recruited parents of preschool children using an experimental design (vs. recruiting parents of grade school children using either a pre-post design (Joussemet et al., 2014) or a waitlist control group (Joussemet et al., 2018; Mageau et al., 2022)).

In accordance with this goal, this study's strengths include that it was the first *How-to* trial using an active control group, namely the *Nobody's Perfect*. Furthermore, compared to previous assessments of the *How-to* program, the present trial was conducted with parents of younger and more vulnerable families, as they were recruited in family resource centers. Additionally, assessment of preschoolers' mental health went beyond measures of problems by also encompassing socio-emotional strengths. Finally, other interesting findings include that improvements took place with as little as six two-hour sessions even though they were held online. This is in line with previous research that finds online parenting programs to be efficacious (e.g., Spencer et al., 2020).

In addition to these strengths, limitations can be noted. First, the small sample size entails a lack of statistical power, potential sampling error, and confounding variables that could not be controlled for. For example, the *How-to* comprised more fathers and couples, two factors that may have influenced the presented results. Although the aim of this pilot study was to explore whether changes in the expected direction (i.e., improvements of parenting skills and child mental health) occurred, the presence of confounding variables diminish the confidence in results' interpretation and generalization and should be controlled for in future studies. Second, attrition was high with 23% of participants not completing T2. Third, 40% of T1 participants reported an annual familial income above CA\$105,000 before taxes and attrition increased the proportion of wealthier families. It is uncertain whether lower vs. higher-income families would respond differently to these parenting programs. It would be important, in future studies, to use more strategies to retain families experiencing greater adversity (e.g., offering childcare during the sessions if done in person or lending computers if done in web-conference) and to assess whether SES moderates programs' impact. A fourth limit is that only self-reported measures

were included in this study, which increases the risk of social desirability impacting results. Additionally, solely parents responded to the questionnaire which introduces the possibility of illusory correlations due to the common method variance (Podsakoff et al. 2003). In the future, observational data could complement the information collected through questionnaires.

## **Implications and Concluding Remarks**

In conclusion, when comparing the *How-to* parenting program to *Nobody's Perfect*, a parenting program endorsed by the government of Canada and commonly used in family centers across Quebec, our results show the former program yielded larger improvements of parenting skills and preschooler mental health in our sample of 20 participants. Still, it is important to mention that the *Nobody's Perfect* parenting program's impact was not trivial. Meanwhile, the robustness of the *How-to* parenting program may come from its focus on a teaching autonomy support and perspective taking, essential components of optimal parenting, throughout all its sessions (Joussemet et al., 2014). Besides the rapid benefits both for parents and their preschoolers, another positive element of this program is its simple online delivery, fostering accessibility. If the promising results reported in this preliminary evaluation are replicated, the *How-to* program could be disseminated online widely and efficiently to families living in both urban and rural areas.

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 Table 1

 Demographic Characteristics of Participants

Donant Characteristics	Experimental Condition	Control Condition n (%)		
Parent Characteristics	n (%)			
Gender				
Mother	7 (77.8%)	11 (100%)		
Father	2 (22.2%)	-		
Ethnicity				
Caucasian	9 (100%)	8 (72.2%)		
Latino	-	3 (27.3%)		
Marital status				
Married/Common-law	9 (100%)	11 (100%)		
Highest educational level				
High school	-	1 (9.1%)		
General and vocational college	6 (66.6%)	4 (36.4%)		
University	3 (33.3%)	6 (54.6%)		
Annual income (CA\$)				
< 45,000	1 (11.1%)	2 (18.2%)		
45,000-75,000	2 (22.2%)	2 (18.2%)		
75,000-105,000	1 (11.1%)	4 (36.4%)		
> 105,000	5 (55.6%)	3 (27.3%)		
Number of children				
1	1 (11.1%)	1 (9.1%)		
2	6 (66.7%)	7 (63.6%)		
≥ 3	2 (22.2%)	3 (27.3%)		
Previous participation in a	4 (44.4%)	7 (63.6%)		
parenting program <sup>a</sup>				

*Note.* N = 20 (n = 9 for the experimental condition and n = 11 for the active control condition).

<sup>&</sup>lt;sup>a</sup> Reflects the number and percentage of participants answering "yes" to this question.

Table 2

Correlations among T1 Variables

Variable	2	3	4	5	6	7	8	9	10	11	12
1. Parent gender <sup>a</sup>	0.63**	-0.14	0.29	0.07	-0.03	0.16	-0.01	-0.30	-0.07	0.12	-0.07
2. Parent age		0.26	0.01	-0.14	-0.28	0.25	0.16	-0.10	-0.24	-0.02	0.07
3. Parent years of	-		0.15	-0.10	0.12	0.27	0.20	0.10	0.01	0.12	0.17
education			0.15	-0.10	0.12	-0.27	0.30	0.18	-0.01	-0.13	-0.17
4. Parent annual income				-0.09	0.14	0.28	0.35	0.12	-0.05	0.02	0.00
5. Number of children					0.30	0.26	0.27	0.12	0.32	0.25	-0.01
6. Child sex <sup>b</sup>						0.08	-0.05	-0.15	0.26	0.28	-0.17
7. Child age							0.20	-0.14	0.08	0.40*	0.06
8. Autonomy support								0.58**	0.10	-0.06	0.08
9. Perspective taking									0.06	-0.12	0.18
10. Externalizing problems										0.48*	-0.49*
11. Internalizing problems										-	-0.38*
12. Socio-emotional											
strengths											

*Notes.* n = 20; \* indicates p < .05 (1-tailed) and \*\* indicates p < .01 (1-tailed).

<sup>&</sup>lt;sup>a</sup> 1 = mother, father = 2; <sup>b</sup> 1 = girl, boy = 2.

Table 3
Skills Taught in the How-to Parenting Program

Sessions	Skills	Examples
Session 1: Helping	- Listen to him/her with full attention;	Look at the child when s/he speaks.
children deal with their		
feelings		
	- Acknowledge with a word, and/or a	"Oh"; "Hm"
	sound;	
	- Try to name the child's feeling;	"That can feel scary"
	- Give him/her what s/he desires in	"I wish I could make a snack appear for
	fantasy.	you right now"
Session 2: Engaging	- Describe what the problem is;	"There are boots in the middle of the
cooperation		hallway"
	- Provide some more information;	"It's hard to walk when boots are
		blocking the way and wetting the floor"
	- Remind the child with just one word;	"Kids, the boots"
	- Express your own feelings without	"I feel irritated when I come back home
	attacking the child's character;	and can't walk in the hallway"
	- Write a note.	"Please bring us back on our rack"
		(signed: your boots)
Session 3: Alternatives to	- Express own feelings without	"I don't like to see food residues on the
punishments	attacking the child's character;	couch"
	- State your expectation;	"I expect eating to take place in the
		kitchen"
	- Show him/her how to make amends;	"This couch needs to be cleaned. Here's
		a wet sponge with some soap on it"
	- Give him/her two options;	"You can either eat your snack in the
		kitchen before watching TV or watch TV
		without a snack"
	- Take action if needed;	After giving options (see above), take
		away the snack.
	- Problem-solve with child.	Acknowledge child's feelings; Express
		yours; Brainstorm (write child's ideas
		and your own); Select one idea, Plan and
		implement it.

Session 4: Encouraging	- Let him/her decide;	"Do you want the blue or the red shirt?"
autonomy		
	- Respect the child's struggle;	"Pouring milk in a glass can be tricky,
		sometimes it helps to use a wide glass"
	- Limit the number of your questions;	Let child talk about his/her day when
		s/he wants to.
	- Don't rush to answer his/her	"Interesting, why do you think kids lose
	questions;	their teeth?"
	- Promote some outside resources;	"I wonder what the dentist would say"
	- Don't take away the child's hope.	"An astronaut! What an interesting
		career."
Session 5: Descriptive	- Describe the child's behavior or	"I see toys on their shelf"
praise	accomplishment;	
	- Describe own feelings;	"It feels good to sit on the couch easily"
	- Summarize the child's behavior with	"That's what I call organization"
	a noun.	
Session 6: Freeing children	- Notice counter role behavior from the	Example: the "sore loser". "You shook
from playing roles	child;	the winner's hand"
	- Provide him/her with counter role	"Let's play a game of"
	opportunities;	
	- Let the child overhear positive	"Suzie congratulated me when"
	comments;	
	- Model appropriate behavior;	"Congratulations for winning this
		game!"
	- Recall one of the child's counter role	"I remember when you congratulated me
	behavior in the past;	for winning at"
	- If s/he reverts to an old role, state	"I expect you to congratulate the winner
	your feeling and expectation.	after a match"