

Parent Training Procedures in Mental Health Field: A Systematic Literature Review

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ABSTRACT – We sought to answer which procedures have been used to train parents within the mental health field, how often the behavior skills training (BST), as well as its components, is used, and how effective such procedures are. In order to do so, a systematic literature review, using the Education Collection ProQuest database, was conducted. The search terms used were “behavior skills training”, “parents”, and its correlates in Portuguese. Papers published between 2010 and 2019 were analyzed, focusing on parent training procedures and their effects. Among the 28 analyzed papers, 4 of them used BST. The remaining studies used some of its components. Twenty-four studies were effective on changing parent behavior. Issues that still require more empirical investigation are discussed.

KEYWORDS: parents, behavior skills training, BST, systematic literature review.

Procedimentos de Treino de Pais no Âmbito da Saúde Mental: Uma Revisão Sistemática da Literatura

RESUMO – Buscou-se responder quais procedimentos têm sido utilizados para treinar pais no âmbito da saúde mental, qual a frequência do uso do treinamento de habilidades comportamentais e seus componentes, e qual a efetividade de tais procedimentos. Foi conduzida uma revisão sistemática utilizando-se a base Education Collection ProQuest. Termos de busca foram “behavior skills training” (BST) e “parents” e seus correlatos em português. Artigos publicados entre 2010 e 2019 foram analisados, com ênfase nos procedimentos de treino de pais e seus efeitos. Dentre os 28 artigos analisados, 4 usaram o BST. Os outros estudos usaram algum de seus componentes. Vinte e quatro estudos foram efetivos para mudar o comportamento dos pais. Discutem-se questões que ainda necessitam mais investigação empírica.

PALAVRAS-CHAVE: pais, treinamento de habilidades comportamentais, BST, revisão sistemática da literatura.

Parents have an undeniable influence over several aspects of the development of their children, including emotional and motor ones, as well as cognition, socialization, language, self-care, and academic performance (e.g., Fabiano et al., 2012). Research has shown that children who go through family instability and coercive parenting practices over their early years of life present an increased risk for emotional and behavioral difficulties (Bolsoni-Silva & Loureiro, 2020; Lobo et al., 2011).

Despite the parental influence on the child development, in fact, many parents have not played their co-responsibility roles, due to different reasons (Wagner et al., 2005). An example of such reasons comes from the interaction between work and family: many hours or negative experiences at work reduce, both, the amount and quality of interactions between parents and their children (Hartung & Hahlweg, 2011). Another example, perhaps even originated in the first one, includes, but is not limited to, outsourcing the care service

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to grandparents, school, or therapies (Wagner et al., 2017). The non-occupation of the parental role can cause issues that are commonly classified as psychological ones for the child, such as emotional, interpersonal and conduct issues, for instance (Fatori et al., 2018). In many cases, children's behavior problems added to the distance between parents and children might evolve in a way that will require support of a mental health professional.

In the context of this study, Behavior Analysis was the theoretical framework, driving the analyses and discussions. Moreover, a comprehensive definition to mental health was used, according to the World Health Organization (2021): "mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community."

In Brazil, it is estimated that 13% of the population of children and teenagers presents some mental health issue; maybe the affected population is even larger, if we consider mental health beyond the diseases and disorders described in medical textbooks. This means that about 7 million children need specialized mental health services (UNICEF, 2020). Even though the difference between social classes has narrowed over the past few years and, along with it, access to health assistance has increased (Landmann-Szwarcwald & Macinko, 2016; Victora et al., 2011), there are still many barriers for this access (Oliveira et al., 2019).

Parent training and/or guidance can help in the provision of mental health services and, at the same time, enhance the chance of generalization of treatment effects (Eshel et al., 2006; Sanders & Glynn, 1981). Such generalizations may be seen towards cognitive and psychosocial development (Eshel et al., 2006), as well as specific effects, such as generalization to new people, behaviors and settings described as targets to this generalization (e.g., Sanders & James, 1983; Yuan et al., 2018).

Parent training commonly has the goal to teach how to use positive parenting practices, which include, but are not limited to, being consistent in the way of raising the children; being attentive to and verbalizing positive aspects of the children; increasing sensitivity to the children's communication; properly monitoring behaviors and troubleshooting (Letarte et al., 2010). As parents learn and apply new parenting skills, they use less severe discipline, such as physical punishment and yelling, and start to use more praise and encouragement, perform a strategic monitoring on what needs to be fixed and improve their perception over the child's behavior (Letarte et al., 2010).

According to Bearss, Burrell et al. (2015), parent training/guidance can be divided into four categories: care coordination, psychoeducation, parent-mediated interventions and mediated interventions for maladaptive behaviors. The two first ones comprise programs that aim to provide indirect benefit to the child, supporting parents as caregivers and increasing their knowledge. As for the parent-mediated

interventions and mediated interventions for maladaptive behaviors, the parents become the main agents of change and the child gets a direct benefit out of the treatment. It is noteworthy that the differences between the outcomes of mediated interventions and of psychoeducation are not significant yet. Therefore, benefit-cost ratios must be studied carefully (Bearss, Johnson et al., 2015).

Within a behavior-analytic approach, the behavior skills training (BST) has proven effective when the goal is to have the parents mediating the intervention (Schaefer & Andzik, 2021). In this training, four teaching strategies are used: instruction, modeling, rehearsal (role play) and feedback (Loughrey et al., 2014). This training format has already been used to teach different skills to parents whose children had different diagnoses (Schaefer & Andzik, 2021). Despite the demonstrations of its effectiveness in teaching parents, there is little systematized evidence around BST in literature. Next, we describe two literature reviews that overlap with the present study.

O'Neill (2020) performed a scoping review focused on different strategies of Applied Behavior Analysis to train parents of children with Autism Spectrum Disorder (ASD) who presented challenging behaviors. The author used the guidelines proposed by the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews* (PRISMA-ScR) to define his parameters and report his findings. The studies analyzed by him involved parents of children with ASD, as well as interventions based in Applied Behavior Analysis (ABA) that had multiple components and whose ultimate goal was to reduce challenging behaviors in these children. The study presents general data regarding the scientific merit of the analyzed studies and points out that more studies are needed for empirical support to be demonstrated with respect to different parent trainings based in ABA for reducing challenging behaviors in children with ASD. In the context of this manuscript, in addition to not having been published in a peer-reviewed journal yet, the study of O'Neill is quite specific when it comes to the population and dependent variables of the analyzed sample, not enabling a direct generalization of the findings to parent training in general.

Schaefer and Andzik (2021) performed the first systematic review published in a peer-reviewed journal regarding the BST as an evidence-based practice for parent training (author's statement). The authors used criteria of *What Works Clearinghouse* (WWC). They claim that the BST has been used to train several skills for parents, and that the results are effective, with such demonstration coming from single-subject experimental designs. They also state that parents of children with ASD and intellectual disability make up great part of the studies sample. The authors did not investigate procedures that only used components of the BST for parent training.

As for the Brazilian literature, Zalula and Haydu (2012) reviewed publications in the *Journal of Applied Behavior*

Analysis (JABA), heading from two very general criteria: the analyzed studies needed to be empirical (there was no greater definition on what “empirical” would be) and related to parent capacitation (there was no greater definition on “parent capacitation”). Thirty-one studies were selected and categorized according to several variables, such as experimental designs, population by diagnosis of parents and children, intervention setting and types of procedure. There was no mention to the BST (or correlates in Portuguese).

Empirical studies and literature reviews have demonstrated that the parent training is a tool that might enhance the access and provide support for the generalization of outcomes of mental health treatments to different target behaviors and with different populations. The knowledge about parent training procedures that have been used, as well as about their effectiveness, has to be constantly updated and made available in many languages, in order to assure their dissemination. Literature reviews regarding the BST and its components are quite recent and result from very specific research questions and analysis

criteria, as described above. More specification on how often to use BST and its components, as well as a more detailed analysis of the experimental designs used, with specific criteria to analyze effectiveness, was not found. Therefore, this type of study is still needed.

With this context in mind, this study aimed to check the procedures that have been used to train parents on issues related to mental health. Given the frequent discussions and the use of BST, we also sought to answer the question about the frequency of use of BST and its components among the studies found. Moreover, we examine the experimental designs that have been used to assess parent training and how effective this training is, heading from specific criteria to evaluate data. It is noteworthy that we chose to carry out the research in a database that included journals published in Portuguese in an attempt to map the national literature about the subject. Finally, it is important to say that this study did not intend to evaluate the effectiveness of parent training with respect to the behavior and mental health of the children.

METHOD

This systematic literature review was divided into three phases, adapted from DiGennaro-Reed et al. (2012) and The Writing Center, University of North Carolina at Chapel Hill (2018). The analyses were performed following a behavior-analytic basis. Figure 1 provides the flowchart with the steps

illustrated in a summarized format and the number of papers that were identified, included or excluded in each phase of the research process.

In Phase 1, the research question and the search terms were determined, as well as and in which parts of the papers

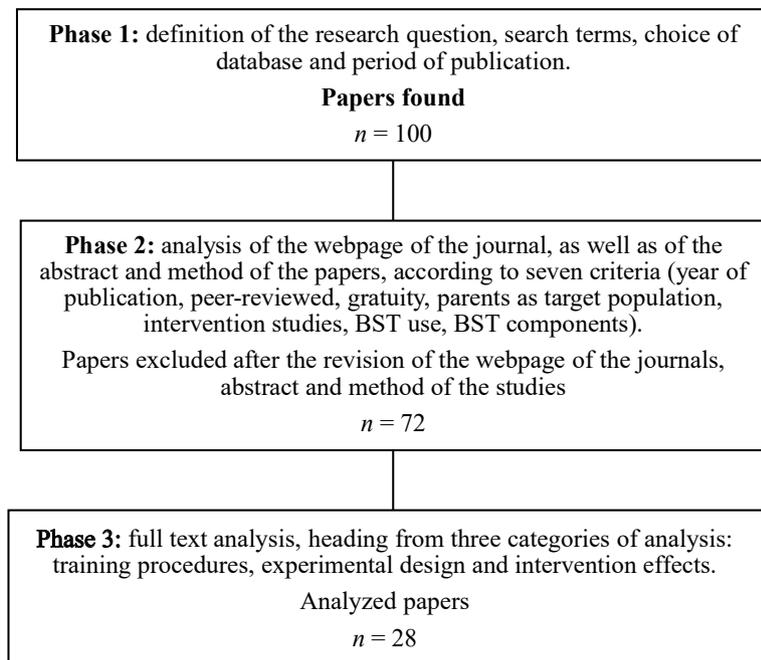


Figure 1. Illustrative flowchart regarding the steps of the review and the number of papers identified, included and excluded per research phase.

such terms would be searched. The database to be searched and the period of publication of the studies to be reviewed were also chosen. Due to its accessibility and coverage, it was decided to use *Education Collection ProQuest*, available in *Periódicos CAPES*. It was defined that the search would cover the years between 2010 and 2019. The search terms were “behavior skills training” and “parents”, and “*treino de habilidades comportamentais*” and “*pais*” (in Portuguese), always in the abstract tab. Such search was filtered so that only academic journals were included. As described in the results, 100 inputs were found in this search.

In Phase 2, the journal webpage, the abstract and the method of every paper were analyzed according to the following criteria: (a) year of original publication between 2010 and 2019 (some papers are published online after their original publication); (b) published in peer-reviewed scientific journal; (c) paper made available online for free and in full; (d) at least one of the participants of the study being a parent; (e) empirical and intervention studies (independent variable manipulation to change parents’ behavior); (f) used the technical term BST; (g) used BST or its elements without using it as a specific technical term. The papers whose answer to items A, B, C, D and E was “no” were excluded. For the other two items (f, g), the answers could be “yes” or “no”, as long as one of them was “yes”. In order to increase data reliability, for the 10 first abstracts, the two reviewers performed the analysis independently and compared them (interobserver agreement – IOA). For the analyses that did not achieve an agreement of 100%, the criteria were reoperationalized and a new analysis was made, until 100% agreement was reached. Once this criterion was achieved, only one of the reviewers analyzed the other papers ($N=90$). The second reviewer analyzed about 20% of these papers to calculate agreement ($N=21$), chosen by sortition. For the items of the papers to which the main reviewer pointed out lack of information for the analysis, the second reviewer analyzed them and the items were discussed until an agreement regarding the analysis was achieved.

In Phase 3, the papers were analyzed again, heading from their full reading, looking at three categories. In order to increase data reliability when analyzing the three categories, for the first 5 papers, the two reviewers performed the analysis independently and compared them (IOA). For the analyses that did not get to 100%, the criteria were reoperationalized and a new analysis was made, until 100% agreement was reached. Once this criterion was achieved, only one of the reviewers analyzed the other papers ($N=23$). The second reviewer analyzed about 30% of these papers to calculate agreement ($N=8$), chosen by sortition.

The analysis of Category 1 of Phase 3 was conducted based on teaching procedures, following the definitions of the Behavior Analyst Certification Board (BACB), *Task List (4th ed.)* (BACB, 2014). Despite the fact that its denominations might cause the reader to understand that some of these teaching procedures are basic principles, according to the

task list, all of them are procedures. More specifically, in the context of this study, “reinforcers”, “schedules of reinforcement”, etc., were used as procedures, as described in the Section I of the task list, *Basic Behavior-Analytic Skills*, item D, *Fundamental Elements of Behavior Change*, in the BACB document.

In an attempt to reduce the number of categories listed in the original document (BACB, 2014), the procedures that could be grouped into more general categories were clustered (e.g., procedures such as DRO, DRA, DRI, and fixed-interval schedules of reinforcement were grouped into “use of reinforcers” and “schedules of reinforcement”). We got to 29 analysis subcategories coming from the BACB document, and two others were created: the first one (Category 30) to classify procedures that were not described in sufficient details to be analyzed; and the second one (Category 31) for procedures that did not fit into categories 1 to 29. The 31 procedure subcategories were: 1) Use of reinforcers and schedules of reinforcement (also based in time and covering differential reinforcement); 2) Use of prompts and prompt fading; 3) Use of modeling and imitation training; 4) Use of shaping; 5) Use of chaining; 6) Use of discrete-trial training (DTT) and free-operant arrangements; 7) Use of verbal operant training; 8) Use of punishment and schedules of punishment; 9) Use of extinction; 10) Use of combinations of reinforcement, punishment and extinction; 11) Use of interventions based on manipulation of antecedents, such as motivating operations and discriminative stimuli; 12) Use of discrimination training; 13) Use of instructions and rules; 14) Use of group contingencies; 15) Use of equivalence procedures; 16) Use of the matching law; 17) Use of high-probability request sequences; 18) Use of the Premack principle; 19) Use of pairing procedures to establish new conditioned reinforcers and punishers; 20) Use of errorless learning procedures; 21) Use of matching-to-sample; 22) Use of self-management strategies; 23) Use of token economies and other conditioned reinforcement systems; 24) Use of direct instruction; 25) Use of precision teaching; 26) Use of personalized systems of instruction (PSI); 27) Use of incidental teaching; 28) Use of functional communication training (FCT); 29) Use of augmentative communication systems; 30) Procedures not described in sufficient details to be analyzed; and 31) Other procedures.

More explicitly talking about the subcategories 30 and 31: in the 30 one, study procedures that were not described in sufficient details to be clustered within the other categories were classified. In the subcategory 31, procedures that were described in sufficient details to be classified, but did not fit into the categories derived from the *BACB Fourth Edition Task List*, were classified. For instance, feedback; discussion; use of guidebooks; rehearsals (including role play with confederates); vignettes; questions to ensure that the handbook was read; feedback through video conference; videos; reminders; and brochures were not part of the

procedures described in the *Fourth Edition Task List* and so, were placed within Category 31.

In Category 2 of Phase 3, the experimental design was described: the single-subject one (or intrasubject), the group one or a mixture of both (mixed method of research design). In order for it to be considered as a single-subject experimental design, the criteria were: (a) that the procedures were implemented based on the performance of each individual; (b) that the main tool to analyze results was the visual analysis; and (c) that the results were represented and described with respect to each participant. The criteria for classification as a group design were: (a) that the procedure was identically implemented to every participant of a certain group, regardless of their performance; (b) that statistical methods were the main form of analysis; and (c) that the results were presented with respect to the group. When the studies were composed of criteria belonging to both experimental designs, they were considered to be a mixture of the two types of design.

In Category 3 of Phase 3, the effects of the interventions (training) over the parents' target behaviors were analyzed. The responses to this category were: (a) yes, the target behavior was changed after the intervention was introduced, or (b) no, the target behavior did not change after the intervention was introduced. Specific criteria to the single-subject and group designs were established.

For single-subject designs, the following were analyzed: (a) overall stability in data; (b) the trend of the data at the baseline; (c) whether the baseline was at 0% or 100%; and (d) whether there were orthogonal changes in the level and trend *after the intervention was reversed back to the baseline*. More specifically about stability: a high variability demonstrates lack of control over the variables that influence the target

behavior. Only the studies that fulfilled the following criteria were classified as having data stability: 85%, at least, of all data items at the baseline would have to be within 15% (up or down) of the median for all data items in that phase (Lobo et al., 2017). When there were even number of data points, the two ones that made up the median would be added and divided by 2. Although any percentage of zero is zero, when the median was zero, we would accept variations that represented up to 15% of change in performance. As for the trend, it was assessed only at the baseline, according to the following classifications: last point trending in the direction of the desired change (acceleration); last point trending in the opposite direction of the desired change (deceleration); last point creating a horizontal line with the previous one (zero acceleration). If the baseline trend was in the desired direction of behavior change, the target behavior would not be considered to have changed.

Besides the 4 subcategories described above, for single-subject experimental designs, two other questions were answered: Are results displayed in a graphical format that shows repeated measures for a single case over time (for instance, behavior or participant)?; Do the results manifest changes in the dependent variable when the independent variable is manipulated by the experimenter in three different points over time, or in three phase repetitions? For alternating treatments, there must be four repetitions of the alternating sequence. For a changing criterion design, the baseline should be added to three intervention phases (criteria adapted from Dueñas et al., 2018; Steinbrenner et al., 2020).

As for the group experimental designs, the question that was answered was: Does the research report positive effects that are statistically significant for at least one of the dependent variables described in the results?

RESULTS

Phase 1

In Phase 1, 100 papers were found from the search terms “behavior skills training” and “parents”. No paper was found with the terms “treino em habilidades comportamentais” and “pais” (in Portuguese). It is noteworthy that only peer-reviewed academic journals were included.

Phase 2

In Phase 2, the webpage of each one of the journals in which the studies were published was analyzed, and the abstract and methods adopted by the papers were read, according to the criteria described in the *Method* section. This analysis led to only 28 remaining studies, as presented in Table 1. The 28 papers were empirical and interventional,

published from 2010 to 2019, and their abstracts contained the terms “behavior skills training” and “parents”. All of these papers are available online, for free and in full.

Among the 28 papers, only 4 of them used the technical term “behavior skills training” or “BST”: Dogan et al. (2017), Loughrey et al. (2014), Seiverling et al. (2012) and Subramaniam et al. (2017). In spite of such results, the other 24 papers used BST components. For instance, Elder et al. (2011) study used written and verbal instructions; Letarte et al. (2010) used role play and feedback; and Strauss et al. (2012) used modeling. Detailed results concerning the procedures used in each study are described next, in Phase 3.

Still in Phase 2, after the training to evaluate agreement between the observers, described in the *Method* section, the IOA between them for the 20% of papers analyzed was calculated. The average for such measure was of 97.7% (variation between 88% and 100%).

Table 1
Results derived from the analysis of the three categories of Phase 3.

Authors and year	1 - Procedures	2 – Designs		3 – Effects
		Single-subject	Group	Yes
Bagner and Graziano (2013)	instructions, others		X	X
Coatsworth et al. (2015)	instructions, others		X	X
Combes et al. (2012)	modeling, instructions, others		X	
Dogan et al. (2017)	modeling, instructions, self-management, others	X		X
Elder et al. (2011)	modeling, instructions, others	X	X	
Fabiano et al. (2012)	instructions, others		X	X
Fava et al. (2011)	modeling, instructions, others		X	X
Frankel et al. (2010)	instructions, others		X	X
Gershy et al. (2017)	instructions, others		X	X
Glazemakers and Deboutte (2013)	modeling, instructions, others		X	X
Godwin et al. (2016)	modeling, instructions, others		X	
Hamad et al. (2010)	modeling, instructions, others		X	
Hartung and Hahlweg (2011)	modeling		X	X
Landa et al. (2011)	modeling, instructions, others		X	X
Lau et al. (2011)	modeling, instructions, others		X	X
Leijten et al. (2012)	modeling, instructions, others		X	X
Letarte et al. (2010)	modeling, instructions, others		X	X
Loughrey et al. (2014)	modeling, instructions, others	X		X
McGilloway et al. (2012)	modeling, instructions, others		X	X
Oveisi et al. (2010)	modeling, instructions, others		X	X
Pfiffner et al. (2013)	modeling, instructions, others		X	X
Poslawsky et al. (2015)	modeling, others		X	X
Ros et al. (2017)	modeling, instructions		X	X
Seiverling et al. (2012)	modeling, instructions, others	X		X
Stefan e Miclea (2014)	instructions		X	X
Strauss et al. (2012)	modeling, instructions, others		X	X
Subramaniam et al. (2017)	modeling, instructions, others	X		X
Tonge et al. (2014)	modeling, instructions, others		X	X

Note. Studies not mentioned in Category 3 (effects) are those whose data did not demonstrate effects over the target behavior, according to the criteria hereby described.

Phase 3

In Phase 3, the 28 papers were fully read, and the questions regarding the three categories described in the *Method* section were answered. Category 1 referred to the procedures used for parent training; Category 2 was about the experimental design of each study; and Category 3 covered the effects of the intervention over the target behavior(s) of the study.

With respect to the analysis in Category 1, the following data were found concerning the procedures used to parent training: 26 papers used instructions and rules (subcategory 13). Overall, for this procedure, the instructors described the target behavior(s) and how parents should act in each condition. Twenty-two papers used modeling and imitation training (subcategory 3). In this procedure, the instructor

demonstrated the desired target behavior and then, the parents engaged in behaviors similar to the model. Such modeling could be done live or by video. One paper used self-management strategies (subcategory 22). In here, the parents were taught to identify events taking place in the environment, to display certain behaviors when such events took place and to assess whether they performed these behaviors correctly or not (Dogan et al., 2017). The parents checked the handbook and took notes on the steps they had performed accurately. If they made a mistake in the note-taking, the instructor guided them to do it right, and no other feedback was provided. Twenty-five studies used other procedures (subcategory 31). Among them, 12 used feedback (Bagner & Graziano, 2013; Combes et al., 2012; Dogan et al., 2017; Elder et al., 2011; Fabiano et

al., 2012; Glazemakers & Deboutte, 2013; Godwin et al., 2016; Leijten et al., 2012; Oveisi et al., 2010; Poslawsky et al., 2015; Seiverling et al., 2012; Strauss et al., 2012); 5 studies used discussion (Glazemakers & Deboutte, 2013; Lau et al., 2011; Leijten et al., 2012; Poslawsky et al., 2015; Strauss et al., 2012); 3 of them used handbooks (Coatsworth et al., 2015; Glazemakers & Deboutte, 2013; Lau et al., 2011); 3 studies used rehearsals, including role plays with confederates (Dogan et al., 2017; Subramaniam et al., 2017; Tonge et al., 2014); 1 study used vignettes (Dogan et al., 2017); 1 of them used questions to make sure the handbook was read (Subramaniam et al., 2017); 1 study used follow-up with video conference (Subramaniam et al., 2017); 1 study used videos (Fava et al., 2011); 1 paper used reminders (Fava et al., 2011); and 1 used brochures (Frankel et al., 2010).

As for the analysis in Category 2, the experimental design that was most found was the group one (23 papers

in total). Five papers with single-subject experimental design were found, also known as intrasubject: Dogan et al. (2017), Loughrey et al. (2014), Seiverling et al. (2012) and Subramaniam et al. (2017). A paper gathering the two experimental designs (mixed method of research design) was found: Elder et al. (2011).

Finally, in Category 3, regarding the effects of the procedures over the parents' target behavior(s), significant effects were observed, according to the criteria described in the *Method* section, in 24 of the 28 papers. In 4 papers (Combes et al., 2012; Elder et al., 2011; Godwin et al., 2016; Hamad et al., 2010), it was not possible to attest a significant change in behavior, due to the lack of data or to data that disclosed absence of significance.

The 28 papers were published in 25 different journals (two papers in the *Child Abuse & Neglect: The International Journal*; two in *JABA*; and two in *Behavior Modification*). The other 19 papers were published in a dispersed format.

DISCUSSION

The main goal of this study was to reveal which procedures have been used to train parents within the mental health field, and how often the behavior skills training (BST) and its components are used in such studies, as well as its effectiveness.

With respect to the procedures used, among the papers classified as effective – according to Category 3 (Phase 3) – only 4 studies used the term “behavior skills training” or “BST”. Six papers used all components of BST, even though such technical term was not used to describe their procedures (Elder et al., 2011; Glazemakers & Deboutte, 2013; Godwin et al., 2016; Leijten et al., 2012; McGilloway et al., 2012; Oveisi et al., 2010; Strauss et al., 2012). Twenty-two studies, among the effective ones, used instructions and rules, and the instructions varied from written instructions to brochures and verbal ones. Modeling was used in 18 effective papers. The rehearsal (or role play) was used in two of them and, the feedback, in 13 studies out of the effective ones. Nonetheless, instructions and modeling were part of the four studies that did not present effectiveness.

These data suggest the need for further research to assess the effectiveness of each BST component, given that some of its components led to changes in parents' behaviors, but literature does not yet describe precisely which components are the most effective ones and, even more important, under what conditions. For instance, the study presented by Ward-Horner and Sturmey (2012) described the components feedback and modeling as being effective. On the other hand, Feldman et al. (1989) claim that feedback and modeling are more effective than verbal instruction. Krumhus and Malott (1980) analyzed some components of BST and stated that verbal instructions presented little effect (from 2% to 12%), and that modeling and feedback were more effective (42%

and 72%, respectively) towards the target behavior(s) of their study. Upcoming studies need to carry on the investigation on the role played by each instructional component, perhaps correlating pre-existing behavioral repertoires in the parents with each one of these components.

Even though there is no space for a discussion on why instructions and modeling have been the components that appeared the most, in the study conducted by Zalula and Haydu (2012), instructions were part of 30 out of 36 analyzed studies. In addition to being easy to implement, the authors argue that one reason why this procedure might be widely used is that it enables for complex contingencies to be learned with no need of having direct contact with them. Modeling was not a procedure category in this study. O'Neill (2020) described instruction and modeling as “the nature of parent training” and, although they did not discuss the reason for it, the data show the prevalence of these two procedures: out of 26 studies, 24 used instructions and 19 of them used modeling. It is noteworthy that the use of instruction frequency and modeling in this study is similar to the ones found by Zalula and Haydu and O'Neill.

Moreover, when it comes to the effects of the analyzed procedures, in 24 of the 28 papers that were selected, it was found an effect of the independent variable over the dependent variable. This is an interesting data, since it demonstrates the possible effectiveness of different procedures for parent training. These data endorse the ones found in literature that state that parent training is one path to expand the access to and/or the effects of psychoeducational and mental health interventions, in general (Eshel et al., 2006). Among the studies analyzed, many of them have looked at dependent variables as a change for parenting practices (Letarte et al., 2010), parental depression (Duch & Rodriguez, 2011) and

parental stress (Hartung & Hahlweg, 2011). Significant changes have been found in these measures, which stand for the possible benefits of parents' active participation in the treatment of their children.

Such data also endorse, tangentially, the ones presented by Schaefer and Andzik (2021), that certify that BST is an effective tool for parent training that might be used to teach different parenting practices to different populations. We say "tangentially" since this study does not present an exclusive analysis of the studies that used BST explicitly, given that its goal was to look at procedures for parent training in general, different from Schaefer and Andzik (2021).

A limitation of the study hereby presented is that we did not divide the analyzes by diagnosis, different from Schaefer and Andzik (2021) and Zalula and Haydu (2012). Further research might analyze, in a more detailed way, the relationship between the procedures used and their effectiveness for specific populations. In this case, the effect of parent training over children's behavior should be a central variable of analysis. Mapping in more details the populations that benefit from different psychoeducational parent training and guidelines could guide study with different populations, enlarging the generality (external validation) of the interventions.

It is important to highlight that many factors can affect the success of parent training programs, no matter the goal for such training. Socioeconomic disadvantages (e.g. poverty, low educational level), family structure (families with just one of the parents, conflicts between the parents), maternal risk factors (being part of minority and stress) and parenting styles are some of the factors that have been investigated (Bagner & Graziano, 2013; Bolsoni-Silva & Loureiro, 2020) and described as relevant for the adherence and success of such trainings. Among them, maternal stress and other mental health issues, low socioeconomic level and harmful parenting practices are the variables that seem to be closely related to failure and

low adherence in parent training (Bagner & Graziano, 2013; Reyno & McGrath, 2006).

According to our searches, no paper was published in Portuguese. This data points out the need for carrying out and publishing research for producing evidence, in Portuguese, about the use of BST with parents that have the goal to investigate cultural variables that might have influence over the success and adherence to trainings.

As described in the *Results* section, most of the papers were published in different journals, with no concentration of studies in a given journal. Such dispersion may make access to information difficult. Systematic reviews that gather information about the subject may help professionals and researchers (Sella et al., 2013).

This study presents other limitations, such as not presenting a description and analysis of target behaviors in parent training. Perhaps upcoming studies may contribute to literature by analyzing what the target behaviors of each training are.

As highlighted above, another limitation of this paper is that the studies were not separated by the specific diagnosis of children and/or parents. Although Behavior Analysis theorists consider the diagnosis of mental disorders and disabilities to be less important for the intervention process, given that the focus of this theoretical framework refers to initiating and sustaining conditions of target behaviors (Banaco et al., 2010), there are specific behavioral and biological symptoms in some syndromes and disorders that are usually important targets for interventions, especially in multi/interdisciplinary teams. In the future, an analysis of studies by diagnosis might support, more specifically, researches and the professional practice of people who work with certain populations. Specifically, when it comes to parent training, studies show that the presence of diagnoses of disabilities and developmental delays decrease the likelihood of adherence and success of parent training (Bagner & Graziano, 2013). Therefore, such diagnoses may be relevant variables.

CLOSING REMARKS

Overall, this study has contributed to literature by systematizing information about analysis variables concerning BST with parents. Furthermore, it does so both in English and in Portuguese, language in which review studies that bring up BST and its components for parent training were not found. It is noteworthy that all analyzed papers are available online, for free and in full, which enables the readers to have access to such studies.

Several limitations of the study were presented in the *Discussion* section. Among them, we highlight the absence of an analysis (a) about target behaviors in parents and (b) the effects of interventions over children's behavior. Moreover, it was discussed that tracing the relationship

between the nosological diagnosis and each procedure could help professionals that work in specific areas. Such issues may be investigated in further studies.

It is important to highlight the need for intervention studies that analyze the effectiveness of each BST component, specifically for parent training, with special attention to instructions and modeling, given to frequency to which such components arise, both in effective and ineffective studies.

It is also noteworthy that, within a behavior-analytic approach, the research that heads from a refutation of hypotheses is not common. According to this theoretical-methodological framework, statistical methods might lead to analysis bias. In addition, commonly, statistically significant

data do not present clinical significance to the participants involved (Baer, 1997; Holth, 2021; Sidman, 1960). Due to these issues, hypotheses are not discussed in this study.

Despite the limitations of this study, systematic literature reviews are important for professionals and researchers of

the field, by identifying studies, systematically analyzing them and summarizing data in a way that the readers can use such information to make decisions that increase the likelihood for results to be more and more significant for the populations served.

REFERENCES

- Baer, D. M. (1977). "Perhaps it would be better not to know everything". *Journal of Applied Behavior Analysis*, 10(1), 167-172. <https://doi.org/10.1901/jaba.1977.10-167>
- Bagner, D. M., & Graziano, P. A. (2013). Barriers to success in parent training for young children with developmental delay: The role of cumulative risk. *Behavior Modification*, 37(3), 356-377. <https://doi.org/10.1177/0145445512465307>
- Banaco, R. A., Zamignani, D. R., & Meyer, S. B. (2010). Função do comportamento e do DSM: Terapeutas analítico-comportamentais discutem a Psicopatologia [Functions of behavior and DSM: Analytic-behavioral therapists discuss psychopathology]. In E. Z. Tourinho, & S. V. Luna (Eds.), *Análise do comportamento: Investigações históricas, conceituais e aplicadas* (pp. 175-191). Editora Roca.
- Bearss, K., Burrell, T. L., Stewart, L., & Scahill, L. (2015). Parent training in Autism Spectrum Disorder: What's in a name? *Clinical Child and Family Psychology Review*, 18(2), 170-182. <https://doi.org/10.1007/s10567-015-0179-5>
- Bearss, K., Johnson, C., Smith, T., Lecavalier, L., Swiezy, N., Aman, M., McAdam, D. B., Butter, E., Stillitano, C., Minshawi, N., Sukhodolsky, D. G., Mruzek, D. W., Turner, K., Neal, T., Hallett, V., Mulick, J. A., Green, B., Handen, B., Deng, Y., ... Scahill, L. (2015). Effect of parent training vs parent education on behavioral problems in children with Autism Spectrum Disorder: A randomized clinical trial. *Journal of the American Medical Association*, 313(15), 1524-1533. <https://doi.org/10.1001/jama.2015.3150>
- Behavior Analyst Certification Board. (2014). *BCBA Task List* (4th. Ed.). BCBA. <https://www.bacb.com/wp-content/uploads/2020/05/BCBA-BCaBA-task-list-fourth-edition-english.pdf>
- Bolsoni-Silva, A. T., & Loureiro, S. R. (2020). Behavioral problems and their relationship to maternal depression, marital relationships, social skills and parenting. *Psicologia: Reflexão e Crítica*, 33(22), 1-13. <https://doi.org/10.1186/s41155-020-00160-x>
- Coatsworth, J. D., Duncan, L. G., Nix, R. L., Greenberg, M. T., Gayles, J. G., Bamberger, K. T., Berrena, E., & Demi, M. A. (2015). Integrating mindfulness with parent training: Effects of the Mindfulness-Enhanced Strengthening Families Program. *Developmental Psychology*, 51(1), 26-35. <https://doi.org/10.1037/a0038212>
- Combes, L., Allen, D. M., & Foxcroft, D. (2012). An exploratory pilot study of the Strengthening Families Programme 10-14 (UK). *Journal Drugs: Education, Prevention and Policy*, 19(5), 387-396. <https://doi.org/10.3109/09687637.2012.658889>
- DiGennaro-Reed, F. D., Hirst, J. M., & Hyman, S. R. (2012). Assessment and treatment of stereotypic behavior in children with autism and other developmental disabilities: A thirty year review. *Research in Autism Spectrum Disorders*, 6(1), 422-430. <https://doi.org/10.1016/j.rasd.2011.07.003>
- Dogan, R. K., King, M. L., Fischetti, A. T., Lake, C. M., Mathews, T. L., & Warzak, W. J. (2017). Parent-implemented behavioral skills training of social skills. *Journal of Applied Behavior Analysis*, 50(4), 805-818. <https://doi.org/10.1002/jaba.411>
- Duch, H., & Rodriguez, C. (2011). Strengthening families in Head Start: The impact of a parent education programme on the emotional well-being of Latino families. *Journal Early Child Development and Care*, 181(6), 733-748. <https://doi.org/10.1080/03004430.2010.485314>
- Dueñas, A., Bak, M.Y.S., & Plavnick, J. (2018). Práticas baseadas em evidência e Análise do Comportamento Aplicada [Evidence based practices and applied behavior analysis]. Em A. C. Sella, & D. M. Ribeiro (Orgs.), *Análise do Comportamento Aplicada ao Transtorno do Espectro Autista* (1st. ed., pp. 83-102). Appris.
- Elder, J. H., Donaldson, S.O., Kairalla, J., Valcante, G., Bendixen, R., Ferdig, R., Self, E., Walker, J., Palau, C., & Serrano, M. (2011). In-home training for fathers of children with autism: A follow up study and evaluation of four individual training components. *Journal of Child and Family Studies*, 20(1), 263-271. <https://doi.org/10.1007/s10826-010-9387-2>
- Eshel, N., Daelmans, B., Mello, M. C., & Martines, J. (2006). Responsive parenting: Interventions and outcomes. *Bulletin of the World Health Organization*, 84(12), 991-998. <https://doi.org/10.2471/blt.06.030163>
- Fabiano, G. A., Pelham, W. E., Cunningham, C. E., Yu, J., Gangloff, B., Buck, M., Linke, S., Gormley, M., & Gera, S. (2012). A waitlist-controlled trial of behavioral parent training for fathers of children with ADHD. *Journal of Clinical Child and Adolescent Psychology*, 41(3), 337-345. <https://doi.org/10.1080/15374416.2012.654464>
- Fatori, D., Brentani, A., Grisi, S. J. F. E., Miguel, E. C., & Graeff-Martins, A. S. (2018). Prevalência de problemas de saúde mental na infância na atenção primária [Childhood mental health problems in primary care]. *Ciência & Saúde Coletiva*, 23(9), 3013-3020. <https://doi.org/10.1590/1413-81232018239.25332016>
- Fava, L., Strauss, K., Valeri, G., D'Elia, L., Arima, S., & Vicari, S. (2011). The effectiveness of a cross-setting complementary staff- and parent-mediated early intensive behavioral intervention for young children with ASD. *Research in Autism Spectrum Disorders*, 5(4), 1479-1492. <https://doi.org/10.1016/j.rasd.2011.02.009>
- Feldman, M. A., Case, L., Rincover, A., Towns, F., & Betel, J. (1989). Parent education project III: Increasing affection and responsiveness in developmentally handicapped mothers: Component analysis, generalization, and effects on child language. *Journal of Applied Behavior Analysis*, 22(2), 211-222. <https://doi.org/10.1901/jaba.1989.22-211>
- Frankel, F., Myatt, R., Sugar, C., Whitham, C., Gorospe, C. M., & Laugeson, E. (2010). A randomized controlled study of parent-assisted children's friendship training with children having Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 40(7), 827-842. <https://doi.org/10.1007/s10803-009-0932-z>
- Gershly, N., Meehan, K. B., Omer, H., Papouchis, N., & Sapir, I. S. (2017). Randomized clinical trial of mindfulness skills augmentation in parent training. *Child Youth Care Forum*, 46(1), 783-803. <https://doi.org/10.1007/s10566-017-9411-4>
- Glazemakers, I., & Deboutte, D. (2013). Modifying the 'Positive Parenting Program' for parents with intellectual disabilities. *Journal of Intellectual Disability Research*, 57(7), 616-626. <https://doi.org/10.1111/j.1365-2788.2012.01566.x>

- Godwin, A. J., Rupley, W. H., Capraro, R. M., & Capraro, M. M. (2016). Reading and mathematics bound together: Creating a home environment for preschool learning. *Journal of Education and Learning*, 5(1), 44-59. <http://dx.doi.org/10.5539/jel.v5n1p44>
- Hamad, C. D., Serna, R. W., Morrison, L., & Fleming, R. (2010). Extending the reach of early intervention training for practitioners: A preliminary investigation of an online curriculum for teaching behavioral intervention knowledge in Autism to families and service providers. *Infants and Young Children*, 23(3), 195-208. <https://doi.org/10.1097/iy.0b013e3181e32d5e>
- Hartung, D., & Hahlweg, K. (2011). Stress reduction at the work-family interface: Positive parenting and self-efficacy as mechanisms of change in Workplace Triple P. *Behavior Modification*, 35(1), 54-77. <https://doi.org/10.1177/0145445510390931>
- Holth, P. (2021). A retrospective 60-year review of Murray Sidman's Tactics of Scientific Research and some of its influence on behavior analysis. *Journal of the Experimental Analysis of Behavior*, 115(1), 86-101. <https://doi.org/10.1002/jeab.645>
- Krumhus, K. M., & Malott, R. W. (1980). The effects of modeling and immediate and delayed feedback in staff training. *Journal of Organizational Behavior Management*, 2(4), 279-293. <https://doi.org/10.1300/J075v02n04>
- Landa, R. J., Holman, K. C., O'Neill, A. H., & Stuart, E. A. (2011). Intervention targeting development of socially synchronous engagement in toddlers with Autism Spectrum Disorder: A randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 52(1), 13-21. <https://doi.org/10.1111/j.1469-7610.2010.02288.x>
- Landmann-Szwarcwald, C., & Macinko, J. (2016). A panorama of health inequalities in Brazil. *International Journal for Equity in Health*, 15(1), 1-3. <https://doi.org/10.1186/s12939-016-0462-1>
- Lau, A. S., Fung, J. J., Ho, L. Y., Liu, L. L., & Gudino, O. G. (2011). Parent training with high-risk immigrant Chinese families: A pilot group randomized trial yielding practice-based evidence. *Behavior Therapy*, 42(3), 413-426. <https://doi.org/10.1016/j.beth.2010.11.001>
- Leijten, P., Overbeek, G., Janssens, J. M.A.M. (2012). Effectiveness of a parent training program in (pre)adolescence: Evidence from a randomized controlled trial. *Journal of Adolescence*, 35(4), 833-842. <https://doi.org/10.1016/j.adolescence.2011.11.009>
- Letarte, M. J., Normandeau, S., & Allard, J. (2010). Effectiveness of a parent training program "Incredible Years" in a child protection service. *Child Abuse & Neglect*, 34(4), 253-261. <https://doi.org/10.1016/j.chiabu.2009.06.003>
- Lobo, B. O. M., Flach, K., & Andretta, I. (2011). Treinamento de pais na terapia cognitivo-comportamental para crianças com transtornos externalizantes [Parent training in cognitive-behavioral therapy for children with externalizing disorders]. *Psicologia em Pesquisa*, 5(2), 126-134. <https://periodicos.ufjf.br/index.php/psicologiaempesquisa/article/view/23596>
- Lobo, M. A., Moeyaert, M., Cunha, A. B., & Babik, I. (2017). Single-case design, analysis, and quality assessment for intervention research. *Journal of Neurologic Physical Therapy*, 41(3), 187-197. <https://doi.org/10.1097/NPT.0000000000000187>
- Loughrey, T. O., Contreras, B. P., Majdalany, L. M., Rudy, N., Sinn, S., Teague, P., Marshall, G., McGreevy, P., & Harvey, A. C. (2014). Caregivers as interventionists and trainers: Teaching mands to children with developmental disabilities. *The Analysis of Verbal Behavior*, 30(2), 128-140. <https://doi.org/10.1007/s40616-014-0005-z>
- McGilloway, S., Mhaille, G. N., Bywater, T., Furlong, M., Leckey, Y., Kelly, P., Comiskey, C., & Donnelly, M. (2012). A parenting intervention for childhood behavioral problems: A randomized controlled trial in disadvantaged community-based settings. *Journal of Consulting and Clinical Psychology*, 80(1), 116-127. <https://doi.org/10.1037/a0026304>
- O'Neill, P. (2020). *Parent training in multicomponent behavioural interventions to reduce challenging behaviours in children with ASD: A scoping review* [Master's Dissertation, Faculty of Social Sciences, Brock University]. Brock University Digital Repository. <http://hdl.handle.net/10464/15004>
- Oliveira, R. A. D., Duarte, C. M. R., Pávao, A. L. B., & Viacava, F. (2019). Barreiras de acesso aos serviços em cinco regiões de saúde do Brasil: Percepção de gestores e profissionais do Sistema Único de Saúde [Barriers in access to services in five Health Regions of Brazil: Perceptions of policymakers and professionals in the Brazilian Unified National Health System]. *Cadernos de Saúde Pública*, 35(11), 1-13. <https://doi.org/10.1590/0102-311x00120718>
- Oveisi, S., Ardabili, H. E., Dadds, M. R., Majdzadeh, R., Mohammadkhani, P., Rad, J. A., & Shahriar, Z. (2010). Primary prevention of parent-child conflict and abuse in Iranian mothers: A randomized-controlled trial. *Child Abuse & Neglect*, 34(3), 206-213. <https://doi.org/10.1016/j.chiabu.2009.05.008>
- Pfiffner, L. J., Villodas, M., Kaiser, N., Rooney, M., & McBurnett, K. (2013). Educational outcomes of a collaborative school-home behavioral intervention for ADHD. *School Psychology Quarterly*, 28(1), 25-36. <https://doi.org/10.1037/spq0000016>
- Poslawsky, I. E., Naber, F. B., Bakermans-Kranenburg, M. J., van Daalen, E., van Engeland, H., & van IJzendoorn, M. H. (2015). Video-feedback Intervention to promote positive Parenting adapted to Autism (VIPP-AUTI): A randomized controlled trial. *Autism*, 19(5), 588-603. <https://doi.org/10.1177/1362361314537124>
- Reyno, S. M., & McGrath, P. J. (2006). Predictors of parent training efficacy for child externalizing behavior problems—a meta-analytic review. *Journal of Child Psychology and Psychiatry*, 47(1), 99-111. <http://doi.org/10.1111/j.1469-7610.2005.01544.x>
- Ros, R., Graziano, P. A., & Hart, K. C. (2017). Parental homework completion and treatment knowledge during group parent-child interaction therapy. *Journal of Early Intervention*, 39(4), 299-320. <https://doi.org/10.1177/1053815117718491>
- Sanders, M. R., & Glynn, T. (1981). Training parents in behavioral self-management: An analysis of generalization and maintenance. *Journal of Applied Behavior Analysis*, 14(3), 223-237. <https://doi.org/10.1901/jaba.1981.14-223>
- Sanders, M. R., & James, J. E. (1983). The modification of parent behavior: A review of generalization and maintenance. *Behavior Modification*, 7(1), 3-27. <https://doi.org/10.1177/01454455830071001>
- Schaefer, J. M., & Andzik, N. R. (2021). Evaluating behavioral skills training as an evidence-based practice when training parents to intervene with their children. *Behavior Modification*, 45(6), 887-910. Advance online publication. <https://doi.org/10.1177/0145445520923996>
- Seiverling, L., Williams, K., Sturmey, P., & Hart, S. (2012). Effects of behavioral skills training on parental treatment of children's food selectivity. *Journal of Applied Behavior Analysis*, 45(1), 197-203. <https://doi.org/10.1901/jaba.2012.45-197>
- Sella, A. C., Chiodelli, T., & Mendes, C. A. (2013). Uma revisão sistemática de comportamentos pré-linguísticos e primeiros comportamentos linguísticos em crianças cegas congênitas [A systematic review of pre-linguistic and early linguistic behaviors in children with congenital blindness]. *Revista Brasileira de Educação Especial*, 19(3), 465-480. <https://doi.org/10.1590/S1413-65382013000300011>
- Sidman, M. (1960). *Tactics of scientific research: Evaluating experimental data in psychology*. Authors Cooperative, Inc., Publishers.

- Stefan, C. A., & Miclea, M. (2014). Effectiveness of the social-emotional prevention program as a function of children's baseline risk status. *European Early Childhood Education Research Journal*, 22(1), 14-44. <https://doi.org/10.1080/1350293X.2013.865359>
- Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with Autism Spectrum Disorder*. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team. <https://ncaep.fpg.unc.edu/sites/ncaep.fpg.unc.edu/files/imce/documents/EBP%20Report%202020.pdf>
- Strauss, K., Vicari, S., Valeri, G., D'Elia, L., Arima, S., & Fava, L. (2012). Parent inclusion in early intensive behavioral intervention: The influence of parental stress, parent treatment fidelity and parent-mediated generalization of behavior targets on child outcomes. *Research in Developmental Disabilities*, 33(2), 688-703. <https://doi.org/10.1016/j.ridd.2011.11.008>
- Subramaniam, S., Brunson, L. Y., Cook, J. E., Larson, N. A., Poe, S. G., & Peter, C. C. S. (2017). Maintenance of parent-implemented discrete-trial instruction during videoconferencing. *Journal of Behavioral Education*, 26(1), 1-26. <https://doi.org/10.1007/s10864-016-9258-z>
- The Writing Center, University of North Carolina at Chapel Hill. (2020). *Applied behavioral analysis: How to write a literature review*. Regis College. <https://libguides.regiscollege.edu/c.php?g=920226&p=6631181>
- Tonge, B., Brereton, A., Kiomall, M., Mackinnon, A., & Rinehart, N. J. (2014). A randomised group comparison controlled trial of 'preschoolers with autism': A parent education and skills training intervention for young children with autistic disorder. *Autism*, 18(2), 166-177. <https://doi.org/10.1177/1362361312458186>
- UNICEF. (2020). *Situação das crianças e dos adolescentes no Brasil [Children and adolescents situation in Brazil]*. <https://www.unicef.org/brazil/situacao-das-criancas-e-dos-adolescentes-no-brasil>
- Victora, C. G., Aquino, E. M., do Carmo Leal, M., Monteiro, C. A., Barros, F. C., & Szwarewald, C. L. (2011). Maternal and child health in Brazil: Progress and challenges. *Lancet*, 377(9780), 1863-1876. [https://doi.org/10.1016/S0140-6736\(11\)601384](https://doi.org/10.1016/S0140-6736(11)601384)
- Wagner, A., Predebon, J., Mosmann, C., & Verza, F. (2005). Compartilhar tarefas? Papéis e funções de pai e mãe na família contemporânea [Sharing tasks: parent's roles and functions in contemporary family]. *Psicologia: Teoria e Pesquisa*, 21(2), 181-186. <https://doi.org/10.1590/S0102-37722005000200008>
- Wagner, L. C., Vieira, G. P., & Maciel, V. E. M. (2017). A terceirização dos cuidados infantis: Um fenômeno histórico [Outsourcing child care: a historical phenomenon]. *Revista de Educação do Cogeime*, 26(51), 77-92. <https://www.metodista.br/revistas/revistas-cogeime/index.php/COGEIME/article/view/723>
- Ward-Horner, J., & Sturmey, P. (2012). Component analysis of behavior skills training in functional analysis. *Behavioral Interventions*, 27(2), 75-92. <https://doi.org/10.1002/bin.1339>
- World Health Organization. (2021). *Mental health: A state of well-being*. WHO.
- Yuan, L., Lee, G. T., & Kimmel, B. (2018). Effects of a center-based parent training package on parents' accuracy of generalized program implementations at home. *Child & Family Behavior Therapy*, 40(3), 233-249. <https://doi.org/10.1080/07317107.2018.1506661>
- Zalula, R., & Haydu, V. B. (2012). Análise aplicada do comportamento e capacitação de pais: Revisão dos de artigos publicados pelo Journal of Applied Behavior Analysis [Applied behavior analysis and training for parents: A review of articles published in the Journal of Applied Behavior Analysis]. *Acta Comportamental*, 20(1), 87-107. Disponível em: <https://www.redalyc.org/pdf/2745/274523556007.pdf>