

Original Article

Working Conditions of Support Services Professionals in School Integration Programs in Chile: A Mixed Methods Study

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ABSTRACT

In the context of educational inclusion, Chile stands out as one of the first countries to formalize the work of speech therapists, psychologists, physical therapists, and occupational therapists within school settings, known as Support Services Professionals. This research analyzes the perceptions of these professionals regarding their working conditions in School Integration Programs (PIE) in Chile. A sequential, exploratory, and mixed-methods approach was used. Interviews were carried out (N=52) and a questionnaire was administered (N=474) using the Respondent Driven Sampling (RDS) method. The interviews were analyzed using a thematic approach, while descriptive statistics were used to analyze quantitative results. The results reveal that formalizing the working conditions of Support Services Professionals contributes to their retention in schools. However, the lack of adequate working spaces, the restriction and standardization of time allocated for intervention, and insufficient resources negatively impact educational practice and contribute to burnout. The tensions highlighted by the professionals underscore the urgency of investigating the management of resources allocated to the development of PIEs. This research is pioneering in its subject matter and provides, for the first time in the country, a detailed description of the working conditions of Support Services Professionals. It also demonstrates the implementation of a non-conventional sampling method, which could be of interest to researchers addressing hard-to-reach populations or those without an established sampling frame. The findings invite policymakers, researchers, and civil society to reflect on the working conditions in schools and to assess the efficiency with which resources are utilized in the country's PIEs.

Keywords:

Working Conditions; Support Services Professionals; School Integration Program; Inclusion; Educational Policy; Respondent-Driven Sampling

Condiciones laborales de profesionales asistentes de la educación que se desempeñan en Programas de Integración Escolar en Chile: Un estudio de métodos mixtos

RESUMEN

En el contexto de la inclusión educativa, Chile destaca como uno de los primeros países en formalizar la labor de fonoaudiólogos, psicólogos, kinesiólogos y terapeutas ocupacionales dentro del ámbito escolar a quienes se les conoce como profesionales asistentes de la educación. Esta investigación analiza las percepciones de estos profesionales sobre las condiciones laborales para desempeñarse en escuelas con Programas de Integración Escolar (PIE) en Chile. Se empleó un enfoque metodológico mixto exploratorio secuencial. Se realizaron entrevistas (N=52) y se administró un cuestionario (N=474) utilizando el método de muestreo "Respondent Driven Sampling" (RDS). Las entrevistas se analizaron con un enfoque temático, mientras que los resultados cuantitativos se analizaron mediante estadísticas descriptivas. Los resultados revelan que la formalización de las condiciones laborales de los profesionales asistentes contribuye a su retención en las escuelas. Sin embargo, la carencia de espacios de trabajo adecuados, la restricción y la estandarización del tiempo asignado para intervenir, así como la insuficiencia de recursos son factores que afectan la práctica educativa y desgasta a los profesionales. Las tensiones mencionadas por los profesionales evidencian la urgencia de investigar la gestión de recursos destinados al desarrollo de los PIE. Esta investigación es pionera en la temática y proporciona, por primera vez en el país, una descripción de las condiciones laborales en las que se desempeñan los profesionales asistentes. Además, ofrece la implementación de un método de muestreo no convencional, el cual podría resultar de interés para investigadores que abordan poblaciones de difícil acceso o para las cuales no existe un marco muestral establecido. Los hallazgos invitan a actores políticos, investigadores y sociedad civil a reflexionar sobre las condiciones laborales en las escuelas y evaluar la eficiencia con la que se utilizan los recursos en los PIE del país.

Palabras clave:

Condiciones Laborales; Profesionales Asistentes; Programa de Integración Escolar; Inclusión; Política Educativa; Respondent Driven Sampling

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INTRODUCTION

The inclusive approach is a global tendency aimed at increasing access, retention, progress, opportunities, and participation in the regular educational curriculum for all students, especially those with Special Educational Needs (SEN) (Ainscow, 2020). Currently, Chile, the Netherlands, and the United Kingdom have formalized the incorporation of health and social science professionals into schools to support teachers and facilitate the academic progress of all students who require it (UNESCO, 2020, p. 337). In Chile, a set of education policies incorporate speech-language therapists, psychologists, physiotherapists, and occupational therapists into public and subsidized schools through School Integration Programs (PIE for its Spanish Acronym, *Programa de Integración Escolar*). These professionals are known in the country as *Profesionales Asistentes de la Educación* (PAE, for the purpose of this paper called Support Services Professionals) (Ministerio de Educación [MINEDUC], 2016). PIE is an educational strategy that allocates resources to schools to provide specific support for students with SEN to promote an appropriate educational journey (MINEDUC, 2016).

In Chile, a PAE is a professional with a health or social sciences degree, who graduated from a program eight or more semesters long at a higher education institution (Castro et al., 2014; MINEDUC, 2019). Their role is to support the educational journey of students with SEN in regular schools (Holz, 2017; MINEDUC, 2019); this role is defined by education policy through three regulations (Exceptional Decree 83, *Aprueba Criterios Y Orientaciones De Adecuación Curricular Para Estudiantes Con Necesidades Educativas Especiales De Educación Parvularia Y Educación Básica*, 2015; Decree nº 170, 2009; MINEDUC, 2019). Firstly, Decree 170, promulgated in 2009, establishes which professionals are responsible for the assessment and diagnosis of students with SEN. It also promotes economic resources, and determines the hiring of specialized human resources, the support time each PAE must provide, and the provision of specific didactic resources for the care of students with SEN (Decree nº 170, 2009). On its part, Decree 83 was approved in 2015, indicating the criteria and guidelines for curricular adaptation for students in early childhood and primary education with SEN. This decree stipulates that diversification strategies in education must respond to the diversity of students, based on the principles of Universal Design for Learning (UDL), which must be implemented by educational teams (Exempt Decree 83. *Aprueba Criterios Y Orientaciones De Adecuación Curricular Para Estudiantes Con Necesidades Educativas Especiales De Educación Parvularia Y Educación Básica*, 2015). Finally, in 2019, technical guidelines were published, defining the

specific role of each professional. This regulation defines a role for assessment, support, and collaboration that professionals must have in schools (MINEDUC, 2019). Speech-language therapists support teachers by helping students develop communication skills that enhance their learning. Psychologists implement strategies to reduce learning and adaptation difficulties in students. Physiotherapists support students with neuromotor functions related to school learning. Occupational therapists support processes and basic skills for learning, as well as adaptations in school (MINEDUC, 2019, pp. 27-31).

The set of educational policies is complemented by Law 21.109, which defines the statute for support services professionals, formalizing their working conditions in schools. Currently, PAEs can have a work contract, legal holidays, the right to paid sick leave, and personal days (Holz, 2019; Ley 21109. *Establece un estatuto de los asistentes de la educación*, 2018). The policies seek to provide a formal setting for PAEs in schools. However, there is currently limited knowledge about the perception that PAEs have regarding these working conditions. For this research, working conditions are understood as stable employment, a contract, having a physical space to perform their duties, and adequate resource management to facilitate the worker's functions (Gobierno de Chile et al., 2011, p. 14).

International evidence widely addresses the tensions teachers face due to adverse working conditions. Factors such as high student-to-teacher ratios, low salaries, and excessive administrative work are influencing teacher desertion rates globally (Madigan & Kim, 2021; Nyamubi, 2017; Toropova et al., 2021). In Latin America, studies indicate that the presence of policies that ensure a good climate and working conditions would lead to better retention and greater job satisfaction among teachers (Martínez-Garrido, 2017; Tomás et al., 2019). Some studies carried out in Chile suggest that work overload is one of the factors influencing teacher job dissatisfaction and could predict burnout (Cabezas et al., 2017; Malander, 2016).

The available evidence on PAEs is still scarce. In the United States, evidence suggests that the lack of working conditions that promote better job satisfaction is one of the factors affecting the retention of speech-language therapists and educational psychologists in schools (Marante et al., 2023; Young et al., 2021). Studies conducted in England, Switzerland, the United States (Campbell et al., 2016; Pfeiffer et al., 2019) and Latin America (Dinamarca-Aravena, 2022; González-Fernández et al., 2022) on speech-language therapists, psychologists, and occupational therapists have indicated that a lack of time affects their practice and collaboration with teachers. Furthermore,

research carried out in Africa and England with physiotherapists and occupational therapists indicates that factors such as excessive administrative work and the absence of a formal contract affect their performance in education (Boccio et al., 2016; Kaelin et al., 2019; Suc et al., 2017).

This lack of data is a global issue, and is particularly noticeable in Chile, where it hinders the design of effective strategies to improve the working conditions of PAEs and thus promote their retention in schools (UNESCO, 2020). Therefore, understanding how support services professionals perceive their working conditions in PIEs will promote the creation of reflective spaces in their current context. This is especially relevant considering the various strategies currently being implemented to improve inclusive education in schools. It also contributes to reverting the learning gap caused by the COVID-19 pandemic, a situation where the support of PAEs is crucial. The results of this research may be of significant interest to various political stakeholders, state institutions, and public sector agents involved in the development, management, monitoring, and evaluation of educational policies. Similarly, professional associations and universities could benefit greatly from the information obtained. This will contribute to understanding the working conditions of PAEs and how they influence their professional performance. Thus, this knowledge can support the proper development and implementation of current educational policies. Additionally, it is expected that the findings will be relevant for countries in the process of formalizing the participation of non-teaching professionals in schools to promote the development of inclusive education.

Considering the above, the guiding question of this research is: What is the perception of support services professionals of the working conditions in PIEs in Chile? The objective is to analyze PAEs' perceptions of the working conditions in schools with PIE in Chile.

METHOD

A sequential exploratory mixed-methods study was conducted in two phases (Creswell, 2009) to deeply explore a topic that has been scarcely studied. Figure 1 shows the methodological design.

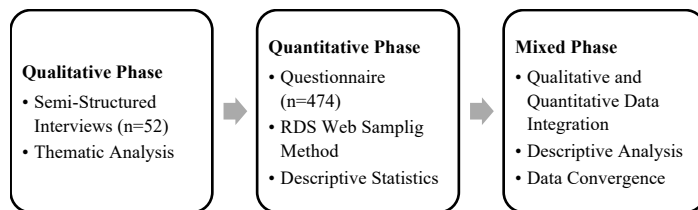


Figure 1. Methodological outline.

Qualitative Phase

The study began by conducting semi-structured interviews with 52 PAEs distributed across Chile, from Arica to Punta Arenas, organized by macro zones (*Agencia Nacional de Investigación y Desarrollo* [ANID], 2024), to include perceptions from various regions of the country. Table 1 shows the distribution of professionals by macrozone.

Table 1. Distribution of professionals by macrozone.

Professional/ Zone	North	Center	Center -South	South	Austral	Total
SLT	3	11	1	2	1	18
Psychologist	1	2	5	3	2	13
Physiotherapist	1	3	4	1	1	10
OT	0	7	1	3	0	11
Total						52

Instrument

The interview protocol included questions related to general information about each participant (type of professional, work experience, university, workplace) and a set of questions related to their working conditions, such as work schedule, type of contract, characteristics of the workspace, and didactic resources, among others. The protocol was reviewed by two researchers who are experts in qualitative research. They made changes to the order of the questions and suggested rephrasing some questions to enhance coherence. Then, the instrument was piloted with 8 PAEs (2 from each specialty), adapting the vocabulary of some questions to each professional's job. The duration of the protocol was also tested.

Sampling Method

Chain sampling was used to contact professionals who met the following inclusion criteria: (a) being a PAE (speech-language therapist, psychologist, physiotherapist, or occupational therapist), (b) working in PIE, and (c) being available for an online interview. The interviews were conducted individually, lasting approximately one hour each, between September 2020 and March 2021. Each participant was sent an email informing them of the research objective and the interview methodology. Additionally, an informed consent form was attached. Once the participant returned the signed consent form, the researcher coordinated the date and time of the interview with them. The interview was conducted online via video call due to the COVID-19 pandemic, using the Zoom videoconferencing platform. Participants were informed beforehand about its use and were told that only the audio of the interview would be recorded. Given the exploratory nature of the research, Flick's (2013) criteria were followed to determine the final sample size, which was flexible and iterative, observing the theoretical saturation provided by the professionals.

Data Analysis

The interviews were audio-recorded and transcribed verbatim. Subsequently, the information was organized according to the themes found in the protocol. Once the themes were grouped, a mixed coding process was conducted based on Creswell's (2009) guidelines for mixed-methods studies, while Braun and Clarke's (2013) were used for thematic analysis. The software Atlas.Ti version 9 was used. Then, a codebook was created and reviewed by two experts in qualitative research who agreed on the coding performed. Table 2 shows the themes and associated codes.

Quantitative Phase

The quantitative phase was then carried out using a non-probabilistic sampling method called respondent-driven sampling (RDS). Following the tradition of mixed methods (Creswell, 2009), the purpose of this stage was to analyze the convergence or divergence of the information obtained in the interviews through the inclusion of a larger number of participants.

Table 2. Themes and codes.

Dimension	Themes	Codes
Role of PAEs	Description of the Professional	Characterization of the Professional
	Working Conditions	Work Tensions

Instrument

The questionnaire was administered online due to the COVID-19 health emergency. It contained 34 self-completed questions. The same questions from the interview protocol were used, and the response options were created after analyzing the interviews. For example, the question related to resources in the interview was: "Could you tell me if the resources you have for your practice are sufficient and why?" In the questionnaire, the question was rephrased as a statement: "The didactic resources I have are sufficient to perform my work." The response options were structured as a 5-point Likert scale ("Strongly Agree" to "Strongly Disagree"). The questionnaire was reviewed by three academic survey experts and then piloted with 12 PAEs with experience in education. The pilot made it possible to review aspects like coherence and relevance of the questions, response time, questionnaire interface, and its application from different devices (tablet, phone, computer, etc.). The survey was administered through Google Forms.

Sampling Method

This research used the web-based Respondent-Driven Sampling method (WebRDS). RDS is used to trace hidden populations that lack a sampling frame, such as drug users, sex workers, etc. (Heckathorn, 1997; Heckathorn et al., 2002). Additionally, it allows for the estimation of the theoretical population by tracking the recruitment of each participant and generating estimators based on the size of each participant's social network (Heckathorn, 1997; Johnston, 2015). PAEs are a hard-to-reach population because MINEDUC does not provide contact information for these professionals due to privacy regulations (*Sobre protección de la vida privada*, 1999). Therefore, this study applied the RDS method according to the report suggested by the STROBE Reporting Guide for RDS (White et al., 2015). Sampling begins with the recruitment of seed informants, who in the first phase provide information about the social network of the study population (Wejnert & Heckathorn, 2008). It also requires incentives to motivate informants to recruit others. To determine

these incentives, recommendations from Wejnert & Heckathorn (2008) were followed.

Nine seed informants were selected from the group that participated in the qualitative phase. The selection criteria were: (a) having participated in the interview and (b) having an average professional social network of 15 professionals.

Each participant was contacted via email, inviting them to the second part of the study. Those who agreed were sent a unique and non-transferable code (from 1 to 9) to identify them, and a link to the questionnaire. Each participant was required to access the questionnaire with their name, institutional email, and access code, which was only provided via email. Before completing the questionnaire, the informant was required to sign an informed

consent. The questions were designed to be answerable only by a PAE, and blank responses were not permitted. Once the participants completed the questionnaire, the researcher sent them an email thanking them for their participation and provided a link to the incentive, which consisted of a digital site containing downloadable information relevant to the work of PAEs in education. Additionally, each seed informant was given three more codes to assign to their recruits. For example, seed informant 2 had codes 21, 22, and 23, and the contact with code 21 had codes 211, 212, and 213. This procedure was repeated with all the participants, generating a network structure that included 474 professionals.

Figure 2 shows one of the chains formed from a seed.

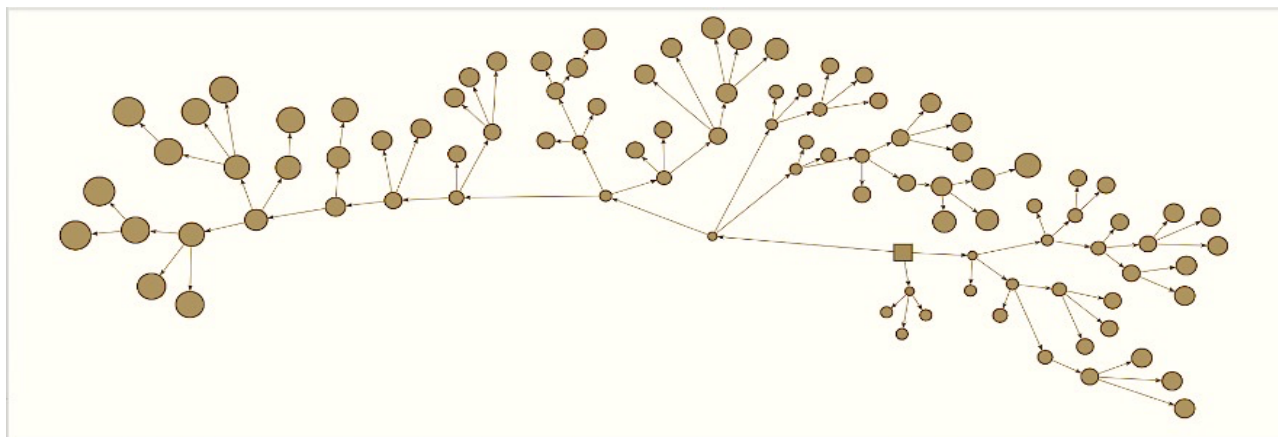


Figure 2. Contact network derived from a seed informant. The figure illustrates a network of contacts originating from a seed. The square shape represents the seed, while each circle denotes a recruited participant who, in turn, recruited additional individuals.

The recruitment outcomes met the assumption of reciprocity (Wejnert & Heckathorn, 2008), as none of the recruits reported receiving an invitation from an unknown individual. The tracking of contact chains was conducted manually by the researcher to avoid self-recruitment or the involvement of individuals not related to the study. To determine the size of the social-professional network, participants were asked a series of questions ranging from general to specific, enabling them to report the size of their network, including individuals with whom they had been in contact over the past three months. For example: "Indicate how many individuals you know who are similar to you professionally. Of these, how many have you talked to (via telephone, text message, or email) in the past three months? Of the number you indicated, how many do you know personally?" The mean size of participants' social networks was 13 professionals, with a minimum value of 1 and a maximum of 100.

Sample Estimation

For sample size estimation, Heckathorn's (1997) parameters were followed: $n = Z^2 P(1 - P)/d^2$ where n is the sample size, Z is the confidence level (95%), P is the estimated prevalence by profession (50%), and d is the effect size (2). The effect size is understood as the ratio between the variance of a parameter obtained from a sample chosen through simple random sampling and the same parameter from a sample selected through non-random sampling (Johnston et al., 2013). With a margin of error of 0.035%, the sample size for this study was calculated to be 408 participants, with at least 6 contact ripples to ensure sample stability and seed independence, thereby reducing any non-random selection bias (Salganik & Heckathorn, 2004). Specifically, the study successfully recruited 474 professionals distributed across Chile in 11 contact ripples. Seed informants 1

and 7 were the most productive, recruiting 97 and 90 participants with a depth of 10 and 11 ripples, respectively. Figure 3 illustrates the recruitment ripples and the number of recruits in each one. Figure 4 depicts the productivity of the seed informants.

Data Analysis

The questionnaire was administered between July and October 2021. A total of 992 codes were created, and the response number was 474 (48%), which is consistent with other studies using Respondent-Driven Sampling (RDS) that conducted surveys over the phone, where the response rate was 40% (Agans et al., 2021; Middleton et al., 2022). Proportions, weighted medians, and 95% confidence intervals (descriptive statistics) were calculated using Stata version 16 with the RDS and RDS_network commands developed by Schonlau & Liebau (2012). These programs made it possible to estimate average size, equilibrium, network homophily, and sampling weights to compute the population parameters of the sample. In this context, "equilibrium" refers to the convergence and stability of sample estimators, which should be similar to the sample proportions. "Average degree" denotes the number of direct contacts of a participant. "Homophily" is a statistic that estimates the extent to which participants tend to recruit peers or others. Additionally, "Volz-Heckathorn prop" is an estimator created by Heckathorn (1997). Table 3 presents the RDS estimates for this research.

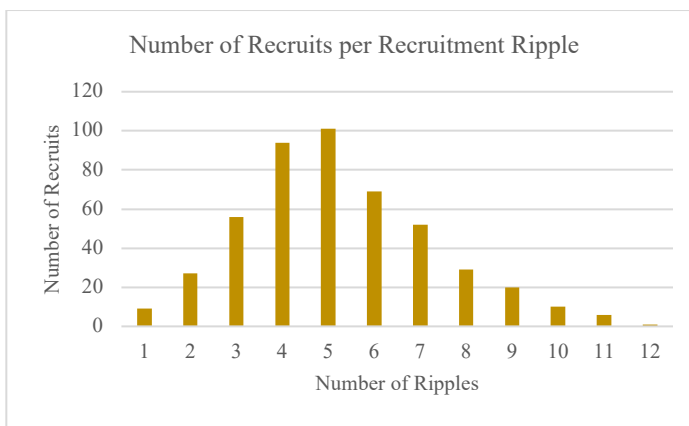


Figure 3. Number of recruits per recruitment ripple.

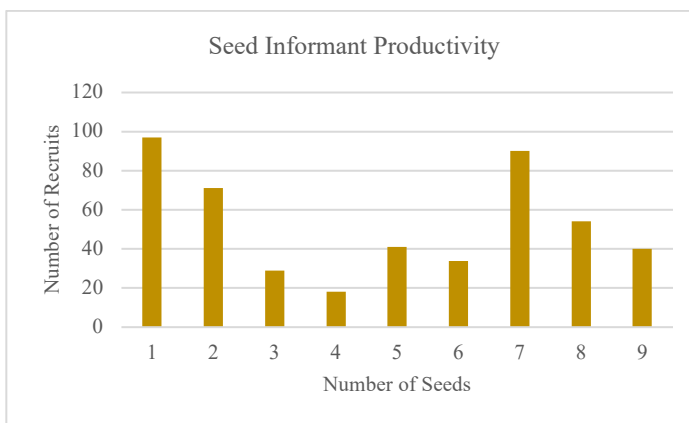


Figure 4. Number of recruits per seed informant.

Table 3. RDS estimators.

Recruitment Count	Speech-Language Therapist	Psychologist	Physiotherapist	Occupational Therapist
Categories	1	2	3	4
Sample Size	250	129	23	72
Recruits	246	127	21	71
Seeds	4	2	2	1
Sample Ratio	.527	.272	.048	.151
Equilibrium	.518	.288	.043	.149
Average Degree	14.65	9.97	12.38	12.78
Homophily	.276	.085	-.010	.178
Population Ratio	.440	.354	.044	.160
Volz Heckathorn prop	.451	.337	.046	.165

RDS facilitates univariate analysis by estimating a variable as weighted, which is used to calculate weighted sample ratios based on the size of the social network (Heckathorn, 1997). In this case, the variable "professional" serves as the weight, allowing for sample calculations by weighting each participant according to their profession. Table 4 displays the number of participants in the quantitative phase.

Table 4. Number of participants in the quantitative phase.

Professionals	Quantitative Method (*RDS)
Speech-Language Therapist	208
Psychologist	170
Physiotherapist	19
Occupational Therapist	77
Total	474

Descriptive analyses were conducted to explore the perceptions of the support services professionals (PAE) regarding the working conditions within the school integration programs (PIE).

Ethical Implications

This study is part of a broader research examining "the role of support services professionals and inclusive educational policy in

Chile." It has been approved by the Scientific Ethical Committee of Universidad Mayor. Audio recordings, interview transcripts, and questionnaire responses are stored on an encrypted digital site accessible only to the researcher.

RESULTS

Characterization of Professionals

In both the interviews and the questionnaire, questions addressed the type of professional, the type of school they work in, the type of university from which they graduated, and their accumulated years of experience in the educational field. Table 5 presents the sociodemographic characterization of the respondents.

The results reveal similar patterns across both samples. In both cases, there were more women than men participating (67% women in the interviews and 79% in the questionnaire). Approximately 71% of the interviewees and 73% of the survey respondents reported working in public schools. About 64% of the interviewees and 65% of the survey respondents graduated from a private university. The average work experience is 5 years for 50% of the PAEs who participated in the interviews and for 64% of those who completed the questionnaire. These data provide an initial insight into the sociodemographic composition of PAEs working in PIE across Chile.

Table 5. Sociodemographic characterization of the interviewees.

Type of Professional		Qualitative Method									Quantitative Method										
		Speech-Language Therapist		Psychologist		Physiotherapist		Occupational Therapist		Total		Speech-Language Therapist		Psychologist		Physiotherapist		Occupational Therapist		Total	
Variable	Category	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Sex	Woman	13	72	9	69	5	50	8	73	35	67	161	78	137	81	7	37	64	83	369	79
	Man	5	28	4	31	5	50	3	27	17	33	47	22	30	17	12	63	13	17	101	21
	Total	18	100	13	100	10	100	11	100	52	100	208	100	167	98	19	100	77	100	470	100
Type of School	Public	13	72	11	100	7	70	7	64	38	73	135	65	125	74	18	95	59	77	337	71
	Subsidized	5	28	0	0	3	30	4	36	14	27	73	35	45	26	1	5	18	23	137	29
	Total	18	100	11	100	10	100	11	100	52	100	208	100	170	100	19	100	77	100	474	100
Type of University	Public	9	50	2	15	0	0	4	36	15	29	80	38	68	40	3	16	15	19	166	35
	Private	9	50	11	85	10	100	7	64	37	71	128	62	102	60	16	84	62	81	308	65
	Total	18	100	13	100	10	100	11	100	52	100	208	100	170	100	19	100	77	100	474	100
Professional Experience	≤ 5 years	6	33	8	62	3	30	9	82	26	50	125	60	104	61	13	68	61	79	303	64
	6 to 10 years	10	56	3	23	5	50	1	9	19	37	62	30	48	28	5	26	11	14	126	27
	≥ 11 years	2	11	2	15	2	20	1	9	7	13	21	10	18	11	1	6	5	7	45	9
	Total	18	100	13	100	10	100	11	100	52	100	208	100	170	100	19	100	77	100	474	100

Perceptions of PAEs Regarding Working Conditions

Interviewees were asked about formal working conditions, including contract type, working hours, and remuneration. The responses indicate that formal working conditions are homogeneous. Most respondents reported having permanent contracts, enjoying legal holidays and personal days, working 33 or more hours per week, and receiving an average gross hourly rate between 16,000 and 22,000 Chilean pesos (CLP), before legal deductions. PAEs noted that these conditions provide job stability that is difficult to find elsewhere: "One of the advantages of working in education is that you find working conditions that are not available in a healthcare facility (e.g., for a physiotherapist)."

The questionnaire included similar questions, presented as statements. The response options were developed based on the interview analysis. For instance, participants were asked, "Indicate the type of contract," with options including permanent, fixed-term, and invoiced. Results from these queries are shown in Table 6.

The questionnaire data aligns with the information obtained from the interviews. Specifically, 68% of professionals have permanent contracts, 50% work 40 to 45 hours per week, and 60% earn an hourly rate between 16,000 and 22,000 CLP, excluding social security deductions.

Table 6. Formal work conditions of the professionals.

Variable	Type of Professional Category	Speech-Language Therapist		Psychologist		Physiotherapist		Occupational Therapist		Total	
		N	%	N	%	N	%	N	%	N	%
Indicate your type of contract	Permanent	148	71	98	58	17	89	58	75	321	68
	Fixed-Term	53	26	66	39	2	11	19	25	140	30
	Invoiced	7	3	6	3	0	0	0	0	13	2
	Total	208	100	170	100	19	100	77	100	474	100
Work Day	≤ 9 hours	2	1	1	1	0	0	0	0	3	1
	10 to 19 hours	26	13	12	7	1	5	8	10	47	10
	20 to 29 hours	33	16	25	15	10	53	9	12	77	16
	30 to 39 hours	52	25	26	15	1	5	28	36	107	23
	40 to 45 hours	95	45	106	62	7	37	32	42	240	50
	Total	208	100	170	100	19	100	77	100	474	100
Hourly Rate	≤ CLP\$15,000	14	7	19	11	4	21	18	23	55	12
	Between CLP\$16,000 and 22,000	110	53	121	71	11	58	41	54	283	60
	Between CLP\$23,000 and 30,000	68	33	29	17	4	21	18	23	119	25
	CLP\$31,000 or more	16	7	1	1	0	0	0	0	17	3
	Total	208	100	170	100	19	100	77	100	474	100

Emerging Tensions from Working Conditions

Shared Workspaces, Far from the Classroom

Speech-language therapists (SLT) and psychologists report that sharing workspaces hinders their educational practice: “It is challenging to work with students because they are easily distracted due to the constant presence of other professionals. My intervention does not have the effect I desire, and it exhausts me (speech-language therapist).” For occupational therapists and physiotherapists, the transport of students with mobility issues and materials is a factor that affects educational practice, especially when the workspace is distant from the classroom: “The resource room is far away, and it is complex to move students; a lot of time is lost, and it is tiring (occupational therapist).”

Limited and Standardized Time Resources

Most interviewees reported supporting more students than their contract specifies. This issue is pervasive among all professionals

due to the presence of students whose special educational needs (SEN) are not covered by Decree 170 (e.g., students with stuttering, speech sound disorders, motor difficulties, or emotional issues). These PAEs refer to such students as “informal students.” They are referred by classroom teachers who ask PAEs to support them to minimize barriers affecting their educational trajectory: “I have at least 20 students with SEN who are not part of the PIE program; I still support them because they need it. So, time is insufficient (occupational therapist).”

Administrative work is another common issue among the interviewees. Speech-language therapists, in particular, frequently mentioned the lack of time to manage the excessive administrative workload associated with their role: “There is a lot of paperwork that is sometimes very repetitive and leaves me no time to work with the students (SLT).”

The allocated time for addressing the students’ diverse needs is another tension reported by all interviewees. This issue pertains to the standardized approach of the policy, which assigns the same

amount of time for all students regardless of their diverse needs. According to the interviewees, this situation prevents progress among students: “The policy is flawed because it does not recognize that some students require more time to make progress (psychologist).”

Insufficient or Inadequate Didactic Resources

Regarding the resources provided by the PIE program, PAEs experience various tensions related to their quality, quantity, and

suitability. Most interviewees indicated that the resources provided by PIE for their work are insufficient: “I buy my own materials because there are none available at the school, and even when requested, they do not arrive (SLT).” It was also common for interviewees to report that the resources are inadequate, particularly for adolescent students with SEN: “It is difficult to work with adolescent populations when the available materials are not suitable for them (psychologist).” The questionnaire included similar questions, and the results are presented in Table 7.

Table 7. Perception of PAEs about the tensions related to their working conditions.

Question	Type of Professional	Category	Speech-Language Therapist		Psychologist		Physiotherapist		Occupational Therapist		Total	
			N	%	N	%	N	%	N	%	N	%
The workspace is adequate for performing my role as a PAE		Strongly Agree + Agree	98	47	94	55	6	32	38	49	236	50
		Do not Agree or Disagree	36	17	22	13	8	42	11	14	77	16
		Strongly Disagree + Disagree	74	36	54	32	5	26	28	37	161	34
		Total	208	100	170	100	19	100	77	100	474	100
The time allocation for performing my duties is adequate		Strongly Agree + Agree	144	69	112	66	8	42	50	65	314	66
		Do not Agree or Disagree	35	17	38	22	2	11	20	26	95	20
		Strongly Disagree + Disagree	29	14	20	12	9	47	7	9	65	14
		Total	208	100	170	100	19	100	77	100	474	100
Administrative work is excessive and affects my educational practice as a PAE		Strongly Agree + Agree	151	73	118	69	14	74	58	75	341	72
		Do not Agree or Disagree	31	15	27	16	3	16	13	17	74	16
		Strongly Disagree + Disagree	26	12	25	15	2	10	6	8	59	12
		Total	208	100	170	100	19	100	77	100	474	100
The available didactic resources are sufficient and appropriate for carrying out my educational practice as a PAE		Strongly Agree + Agree	55	26	49	29	5	26	19	25	128	27
		Do not Agree or Disagree	37	18	28	16	1	5	12	15	78	16
		Strongly Disagree + Disagree	116	56	93	55	13	69	46	60	268	57
		Total	208	100	170	100	19	100	77	100	474	100

The results obtained from the questionnaires align with the responses from the interviews. It is observed that 50% of the respondents perceive their office or workspace as inadequate for performing their duties. Additionally, 66% feel that the allocated time is insufficient to carry out all their responsibilities. Furthermore, 72% believe that the administrative work is

excessive and impacts their performance. Lastly, 57% of the PAEs perceive that the available didactic resources are neither adequate nor sufficient for their educational practice.

DISCUSSION

This research examines the perceptions of Support Services Professionals (PAEs) about their work conditions in schools with School Integration Programs (PIE) in Chile. The results provide a comprehensive overview of the sociodemographic characteristics of the surveyed PAEs. The majority of participants were women, worked in public schools, graduated from private universities, and had five years of work experience in schools with PIE. Regarding working conditions, the study reveals that the existence of a policy formalizing this aspect (such as formal contracts and benefits associated with legal holidays, sick leave, and administrative leave) promotes a perception of job stability, which supports the retention of PAEs in schools. These findings are consistent with studies conducted on educational speech-language therapists in the United States, which identify three key factors contributing to professional retention: the presence of a contract, market-competitive remuneration, and clearly defined functions (Amir et al., 2021; Ewen et al., 2021).

The findings also highlight that PAEs perceive several barriers to their professional performance which result in subsequent burnout, including shared or remote workspaces, limited and standardized time, and inadequate didactic resources. These issues are consistent with research indicating that inadequate working conditions hinder professional development and threaten the retention of these professionals in schools. For example, Boccio et al. (2016) warn about the shortage of educational psychologists in U.S. schools due to the lack of formalized employment, causing job uncertainty and instability. Campbell et al. (2016) note that educational SLTs in Canada lack adequate collaborative workspaces, while Glover et al. (2015) report that insufficient resources affect the educational practice of speech-language therapists in Australia. Suc et al. (2017) observe that limited time allocated to occupational therapists in England influences their performance, and Manamela et al. (2021) find that inadequate role definitions and time shortages impact the educational practices of physiotherapists in South Africa. In Latin America, Quintero-Urbe and Montoya-Otalvaro (2018) indicate that poor working conditions for speech-language therapists in Colombia affect their practice in schools. Additionally, research on SLTs in Chile highlights that insufficient time hinders their ability to perform adequately (Dinamarca-Aravena, 2022; González-Fernández et al., 2022). Salinas-Cerda et al. (2022) found that educational psychologists in Chile engage in additional tasks, working more time than contracted, eventually leading to burnout.

Furthermore, the results of this study reveal a lack of hours allocated for the educational support that these professionals must provide, suggesting a need for more PAEs in schools. Therefore, it is crucial to delve deeper into the educational practices these professionals perform and assess whether the time and resources allocated by policy are sufficient. The evidence suggests that further research is urgently needed to explore how schools with PIE manage resources provided by the state through school subsidies, as it appears that the allocated amounts may not be sufficient to meet the needs of the schools.

It is important to note that these professionals perceive that formal working conditions contribute to their retention in schools, recognizing that they would not find similar conditions elsewhere. This shows that the formal conditions of PAEs in schools positively contribute to their sense of belonging, which serves as a positive example for countries where support professionals are incorporated on an iterative basis. However, despite the positive aspects of Law 21.109, the evidence from this research indicates that there are still facets that need further study. Although not the focus of this research, some interviews revealed professional burnout that might be affecting the interventions PAEs carry out in schools. Evidence shows that work-related stress among speech-language therapists and psychologists in the U.S. affects their retention in schools, jeopardizing the educational trajectories of students with SEN (Amir et al., 2021; Marante et al., 2023; Schilling et al., 2018).

Future research should delve deeper into the described barriers, as the evidence obtained could support structural changes to improve the working conditions of PAEs.

CONCLUSIONS

The findings of this research confirm that the set of regulations in Chile allows Support Services Professionals (PAEs) to remain in schools. However, there are several factors affecting the effective implementation of these professionals' practices. These factors appear to be consistent regardless of the type of school in which the professional works and may explain the work-related burnout experienced by PAEs.

The findings also provide a foundation for promoting further research on this topic, particularly concerning resource management and policy changes related to the diagnoses that are formally included in PIEs, as well as the support times allocated to professionals.

The convergence of sociodemographic characteristics and PAEs' perceptions in both qualitative and quantitative components may help identify a professional profile in education that requires further research.

It is expected that these findings will be of interest to countries that are in the process of formalizing the involvement of professionals in educational settings. The evidence obtained from the work performed in inclusive classrooms emphasizes the need for a greater understanding of these professions, as the characteristics of students with SEN make their presence increasingly essential in schools.

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REFERENCES

- Agans, R. P., Zeng, D., Shook-Sa, B. E., Boynton, M. H., Brewer, N. T., Sutfin, E. L., Goldstein, A. O., Noar, S. M., Vallejos, Q., Queen, T. L., Bowling, J. M., & Ribisl, K. M. (2021). Using Social Networks to Supplement RDD Telephone Surveys to Oversample Hard-to-Reach Populations: A New RDD+RDS Approach. *Sociological Methodology*, 51(2), 270–289. <https://doi.org/10.1177/00811750211003922>
- Agencia Nacional de Investigación y Desarrollo [ANID]. (2024, marzo 12). *¿Cómo se distribuyen las regiones en cada macrozona?* Agencia Nacional de Investigación y Desarrollo. <https://ayuda.anid.cl/hc/es/articles/360048562731-9-C%C3%B3mo-se-distribuyen-las-regiones-en-cada-macrozona>
- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Amir, R., Jones, S. E., Frankel, D., & Fritzsche, J. (2021). Job Satisfaction of School-Based Speech-Language Pathologists in New York State as a Function of Workplace Features. *Perspectives of the ASHA Special Interest Groups*, 6(2), 470–484. https://doi.org/10.1044/2020_PERSP-20-00196
- Boccio, D. E., Weisz, G., & Lefkowitz, R. (2016). Administrative pressure to practice unethically and burnout within the profession of school psychology. *Psychology in the Schools*, 53(6), 659–672. <https://doi.org/10.1002/pits.21931>
- Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*. SAGE Publications.
- Cabezas, V., Medeiros, M. P., Inostroza, D., Gómez, C., & Loyola, V. (2017). Organización del tiempo docente y su relación con la satisfacción laboral: Evidencia para el caso chileno. *Education Policy Analysis Archives*, 25, 64–64. <https://doi.org/10.14507/epaa.25.2451>
- Campbell, W., Selkirk, E., & Gaines, R. (2016). *Speech-language pathologists' role in inclusive education: A survey of clinicians' perceptions of universal design for learning*. 40(2), 121–132. https://www.researchgate.net/publication/306187598_Speech-language_pathologists'_role_in_inclusive_education_A_survey_of_clinicians'_perceptions_of_universal_design_for_learning
- Castro, L., Cifuentes, P., & Holz, M. (2014). *Marco Legal de los Asistentes de la Educación* (Asesoría Técnica Parlamentaria 1843–3904; pp. 1–12). Biblioteca del Congreso Nacional. https://obtienearchivo.bcn.cl/obtienearchivo?id=repositorio/10221/20738/5/BCN_Marco%20Legal%20de%20los%20Asistentes%20de%20la%20Educacion_Agosto%202014.pdf
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.
- Decreto 83 Excento. Aprueba Criterios Y Orientaciones De Adecuación Curricular Para Estudiantes Con Necesidades Educativas Especiales De Educación Parvularia Y Educación Básica, 83 (2015). <https://www.bcn.cl/leychile>
- Decreto 170. Fija Normas para determinar los alumnos con Necesidades Educativas Especiales que serán beneficiarios de las subvenciones para Educación Especial, 170 § Artículo 98 (2009). <https://www.bcn.cl/leychile>
- Dinamarca-Aravena, K. (2022). Política educativa y asignación del tiempo para la práctica fonoaudiológica: Experiencia de fonoaudiólogos/as con más de 20 años de ejercicio laboral en contextos educativos. *Revista Chilena de Fonoaudiología*, 21(1), Article 1. <https://doi.org/10.5354/0719-4692.2022.64070>
- Ewen, C., Jenkins, H., Jackson, C., Jutley-Neilson, J., & Galvin, J. (2021). Well-being, job satisfaction, stress and burnout in speech-language pathologists: A review. *International Journal of Speech-Language Pathology*, 23(2), 180–190. <https://doi.org/10.1080/17549507.2020.1758210>
- Flick, U. (2013). *The SAGE Handbook of Qualitative Data Analysis*. SAGE.
- Glover, A., McCormack, J., & Smith-Tamaray, M. (2015). Collaboration between teachers and speech and language therapists: Services for primary school children with speech, language and communication needs. *Child Language Teaching and Therapy*, 31(3), 363–382. <https://doi.org/10.1177/0265659015603779>
- Gobierno de Chile, Ministerio de Salud [MINSAL], Dirección del Trabajo, & ISL Instituto de Seguridad Laboral. (2011). *Primera encuesta nacional de empeño, trabajo, salud, calidad de vida de los trabajadores y trabajadoras en Chile* (pp. 1–162) [Informe Interinstitucional]. Gobierno de Chile. https://www.observatoriorli.com/docs/CHILE/ENCUESTA_NACIONAL_TRABAJO_Chile.pdf
- González-Fernández, D., Iturra Herrera, C., & Hernández González, O. (2022). Trabajo colaborativo entre maestros y logopedas: Una revisión acerca de las barreras y de su estructura subyacente. *Revista de Investigación Educativa*, 40(1), Article 1. <https://doi.org/10.6018/rie.444821>
- Heckathorn, D. D. (1997). Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations*. *Social Problems*, 44(2), 174–199. <https://doi.org/10.2307/3096941>
- Heckathorn, D. D., Semaan, S., Broadhead, R. S., & Hughes, J. J. (2002). Extensions of Respondent-Driven Sampling: A New Approach to the Study of Injection Drug Users Aged 18–25. *AIDS and Behavior*, 6(1), 55–67.

<https://doi.org/10.1023/A:1014528612685>

Holz, M. (2017). *Distribución de los Asistentes de la Educación del sector municipal, por nivel educativo alcanzado y género* (pp. 1–7) [Asesoría Técnica Parlamentaria]. Biblioteca del Congreso Nacional de Chile. https://obtienearchivo.bcn.cl/obtienearchivo?id=repositorio/10221/24927/1/BCN_asistentes_por_nivel_educativo_final.pdf

Holz, M. (2019). *Beneficios para Asistentes de la Educación. Transición hacia la nueva educación pública* (Asesoría Técnica Parlamentaria 118026; pp. 1–8). https://obtienearchivo.bcn.cl/obtienearchivo?id=repositorio/10221/26826/2/BCN_beneficios_asistentes_de_la_educacion_Final.pdf

Johnston, L. (2015). *Introduction to Respondent Driven Sampling-Manual*. <https://doi.org/10.13140/RG.2.1.3319.6889>

Johnston, L., Chen, Y.-H., Silva-Santisteban, A., & Raymond, H. F. (2013). An Empirical Examination of Respondent Driven Sampling Design Effects Among HIV Risk Groups from Studies Conducted Around the World. *AIDS and Behavior*, 17(6), 2202–2210. <https://doi.org/10.1007/s10461-012-0394-8>

Kaelin, V. C., Ray-Kaesler, S., Moiola, S., Kocher Stalder, C., Santinelli, L., Echsel, A., & Schulze, C. (2019). Occupational Therapy Practice in Mainstream Schools: Results from an Online Survey in Switzerland. *Occupational Therapy International*, 2019, e3647397. <https://doi.org/10.1155/2019/3647397>

Ley 21109. Establece un estatuto de los asistentes de la educación (2018). <https://www.bcn.cl/leychile>

Madigan, D. J., & Kim, L. E. (2021). Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teaching and Teacher Education*, 105, 103425. <https://doi.org/10.1016/j.tate.2021.103425>

Malander, N. M. (2016). Síndrome de Burnout y Satisfacción Laboral en Docentes de Nivel Secundario. *Ciencia & Trabajo*, 18(57), 177–182. <https://doi.org/10.4067/S0718-24492016000300177>

Manamela, M. C., Eksteen, C. A., Mtshali, B., & Olurunju, S. A. S. (2021). South African physiotherapists' perspectives on the competencies needed to work in special schools for learners with special needs. *South African Journal of Physiotherapy*, 77(1), Article 1. <https://doi.org/10.4102/sajp.v77i1.1571>

Marante, L., Hall, -Mills Shannon, & Farquharson, K. (2023). School-Based Speech-Language Pathologists' Stress and Burnout: A Cross-Sectional Survey at the Height of the COVID-19 Pandemic. *Language, Speech, and Hearing Services in Schools*, 54(2), 456–471. https://doi.org/10.1044/2022_LSHSS-22-00047

Martínez-Garrido, C. (2017). La incidencia del liderazgo y el clima escolar en la satisfacción laboral de los docentes en América Latina. *Education Policy Analysis Archives*, 25, 80–80. <https://doi.org/10.14507/epaa.25.2851>

Middleton, D., Drabble, L. A., Krug, D., Karriker-Jaffe, K. J., Mericle, A. A., Hughes, T. L., Iachan, R., & Trocki, K. F. (2022). Challenges of Virtual RDS for Recruitment of Sexual Minority Women for a Behavioral Health Study. *Journal of Survey Statistics and Methodology*, 10(2), 466–488. <https://doi.org/10.1093/jssam/smb039>

Ministerio de Educación [MINEDUC]. (2016). *Programa de Integración Escolar PIE. Ley de Inclusión 20.845. Manual de apoyo a la Inclusión Escolar en el marco de la Reforma Educacional* (pp. 1–44). Ministerio de Educación. <https://especial.mineduc.cl/wp-content/uploads/sites/31/2017/12/Manual-PIE.pdf>

Ministerio de Educación [MINEDUC]. (2019). *Profesionales Asistentes de la Educación. Orientaciones acerca de su rol y funciones en programas de integración escolar (PIE)*. <https://especial.mineduc.cl/wp-content/uploads/sites/31/2020/01/Profesionales-asistentes-de-la-educacion-002.pdf>

Nyamubi, G. J. (2017). Determinants of Secondary School Teachers' Job Satisfaction in Tanzania. *Education Research International*, 2017, e7282614. <https://doi.org/10.1155/2017/7282614>

Pfeiffer, D. L., Pavelko, S. L., Hahs, -Vaughn Debbie L., & Dudding, C. C. (2019). A National Survey of Speech-Language Pathologists' Engagement in Interprofessional Collaborative Practice in Schools: Identifying Predictive Factors and Barriers to Implementation. *Language, Speech, and Hearing Services in Schools*, 50(4), 639–655. https://doi.org/10.1044/2019_LSHSS-18-0100

Quintero-Urbe, J., & Montoya-Otalvaro, J. (2018). Percepciones de un grupo de fonodólogos Colombianos sobre su rol profesional en la educación inclusiva. *Revista Colombiana de Rehabilitación*, 17(1), 38–45. <https://doi.org/10.30788/RevColReh.v17.n1.2018.301>

Salganik, M. J., & Heckathorn, D. D. (2004). Sampling and Estimation in Hidden Populations Using Respondent-Driven Sampling. *Sociological Methodology*, 34(1), 193–240. <https://doi.org/10.1111/j.0081-1750.2004.00152.x>

Salinas-Cerda, J. P., Villablanca, A. E., Sandoval, J. A., & Ossa, C. J. (2022). Caracterización laboral de psicólogos noveles en educación de la región del Biobío, Chile. *UCMaule*, 62, Article 62. <https://doi.org/10.29035/ucmaule.62.79>

Schilling, E. J., Randolph, M., & Boan-Lenzo, C. (2018). Job Burnout in School Psychology: How Big Is the Problem? *Contemporary School Psychology*, 22(3), 324–331. <https://doi.org/10.1007/s40688-017-0138-x>

Schonlau, M., & Liebau, E. (2012). Respondent-Driven Sampling. *The Stata Journal*, 12(1), 72–93. <https://doi.org/10.1177/1536867X1201200106>

Sobre protección de la vida privada, Pub. L. No. 19628 (1999). <https://www.bcn.cl/leychile/navegar?idNorma=141599>

Suc, L., Bukovec, B., & Karpljuk, D. (2017). The role of inter-professional collaboration in developing inclusive education: Experiences of teachers and occupational therapists in Slovenia. *International Journal of Inclusive Education*, 21(9), 938–955. <https://doi.org/10.1080/13603116.2017.1325073>

Tomás, J. M., Santos, S. de los, & Fernández, I. (2019). Satisfacción Laboral en el Docente Dominicano: Antecedentes Laborales. *Revista Colombiana de Psicología*, 28(2), Article 2. <https://doi.org/10.15446/rcp.v28n2.71675>

Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97. <https://doi.org/10.1080/00131911.2019.1705247>

UNESCO. (2020). *Informe de seguimiento de la educación en el mundo: Inclusión y educación*. UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000374817>

Wejnert, C., & Heckathorn, D. D. (2008). Web-based network sampling: Efficiency and efficacy of respondent-driven sampling for online research. *Sociological Methods & Research*, 37(1), 105–134. <https://doi.org/10.1177/0049124108318333>

White, R. G., Hakim, A. J., Salganik, M. J., Spiller, M. W., Johnston, L. G., Kerr, L., Kendall, C., Drake, A., Wilson, D., Orroth, K., Egger, M., & Hladik, W. (2015).

Strengthening the Reporting of Observational Studies in Epidemiology for respondent-driven sampling studies: “STROBE-RDS” statement. *Journal of Clinical Epidemiology*, 68(12), 1463–1471. <https://doi.org/10.1016/j.jclinepi.2015.04.002>

Young, E. L., Moulton, S. E., Julian, A., Smith, A., & Butler, R. (2021). Retention and job satisfaction of school psychologists. *Psychology in the Schools*, 58(3), 585–600. <https://doi.org/10.1002/pits.22465>