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Characteristics and language-responsiveness of early childhood educators' affective-speech inside the classroom

Características y capacidad de respuesta lingüística del habla afectiva de los educadores de párvulos al interior de la sala de clases

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Abstract

Increasing attention is being given to early childhood educators' verbal abilities due to its well-recognized role in teaching and learning by means of a plurality of meanings that are transmitted through them to children. Nevertheless, moderate interest has been devoted to the study of these abilities when addressing the affective domain in early childhood educators' interactions with children. Therefore, this study identifies qualitative nodes of characteristic uses, meanings, and phrasings produced by these professionals and associated to the affective domain, to then access the degree of expertise in such communicational interactions with preschool children. Through a mixed cross-sectional design, twenty early childhood educators provided a large number of continuous audio-recordings while working in regular educational environments, to identify sentences that, by their phrasings, recall an affective connotation. The findings suggest 8 differential nodes of affective connotations: Positive emotions v/s Negative emotions; Teaching v/s Learning processes; Expression, distinguish, sharing and/or inhibition of emotions; Emotions before, during, and after behavior; Calls for attention, warnings, reprehension and praise; Touching and the body; Increasing, decreasing and normalizing language; and, educators' own emotions. The degree of linguistic expertise was identified by experts and a blind sequential procedure, showing early childhood educators' affective-speech is mostly limited to noticing children's emotional experiences. The scope of these findings is briefly discussed taking into consideration future studies as well as its contributions to early childhood educators' formative processes.

Resumen

Cada vez más atención se está entregando a las habilidades lingüísticas de los educadores de párvulos debido a su reconocido rol en la enseñanza y el aprendizaje, por medio de una pluralidad de contenidos que son transmitidos a los párvulos. No obstante, un moderado interés se ha dedicado al estudio de estas habilidades cuando están asociadas al dominio afectivo en la interacción entre los párvulos y sus educadoras. Por lo tanto, este estudio identifica nodos del uso característico, significados y fraseos producidos por estos profesionales y asociados el dominio afectivo, para luego acceder a su grado de experticia en las interacciones comunicacionales con los niños y niñas en edad preescolar. A través de un diseño transversal mixto, veinte educadoras de párvulos proporcionaron un alto número de grabaciones mientras se desempañan en su ambiente regular de trabajo, para identificar fraseos que evocan y/o poseen una connotación afectiva. Los hallazgos sugieren 8 nodos diferenciales con connotación afectiva: Emociones positivas v/s Emociones negativas; Procesos de enseñanza v/s Procesos de aprendizaje; Expresión, distinción, intercambio y/o inhibición de las emociones; Emociones antes, durante y después del comportamiento; Llamados de atención, advertencias, reproches y elogios; Tocar y el cuerpo; Maximización, minimización y normalización lingüística; y las propias emociones de las educadoras de párvulos. La experticia lingüística fue identificada por jueces-expertos mediante un procedimiento secuencial no-ciego, que muestra el habla afectiva de las educadoras de párvulos se limita principalmente a notar las experiencias emocionales de

los párvulos. Se discute brevemente el alcance de estos hallazgos, considerando futuros estudios así como su contribución a los procesos formativos de las educadoras de párvulos en educación superior.

Keywords
Linguistic competence, early childhood education, preschool children, teachers' competencies, educational quality, language instruction, emotions, literacy workers (ERIC Thesaurus).

Palabras clave
Competencia lingüística educación de la primera infancia, niños de preescolar, competencias docentes, calidad de la educación, enseñanza de lenguas, emociones, trabajadores de la alfabetización (ERIC Tesauros).

1. Introduction

Teaching is an intense interpersonal profession that requires a complex set of cognitive and socio-emotional skills, and language is one of the main means to deliver it to students. Five decades of well-documented research highlights the role of teacher's language on learning and student's psychosocial development (Kalinowski et al., 2020), from which various characteristic features have been recognized. One of them embraces its academic properties, characterized by a more complex syntax, precise vocabulary, greater words number, more sophisticated sentences, and a larger lexical variety (Schleppegrell, 2004). Recent studies have moved toward describing disciplinary language in the early childhood classroom (Dickinson et al., 2014), mostly showing that early childhood educators' (hereinafter ECEs) verbal competencies are an important factor to be associated to a variety of children's learning outcomes. In other words, their ability to contingently give a verbal response has a deep influence on children behavior. For instance, such influence is portrayed in a meta-analytic study that summarize research on ECEs' verbal competence and quality literacy-focused practices, broadly supporting children language development (Markussen-Brown et al., 2017). ECEs' verbal responsiveness to children has a crucial role in their teaching efficacy (Justice et al., 2018), and studies that approach children language development advocate for the relevant role of educators' complex syntax as a source of linguistic information for new word learners (Farrow et al., 2020). Similarly, posing questions during shared reading forecast children's expressive, receptive, and pragmatic language skills (Muhinyi & Rowe, 2019), and/or playful and verbally explicit interactions with children predict greater language ability and expressive language already from 12 months of age (Cuellar & Farkas, 2018). Specific cognitive abilities are as well stimulated by ECEs' verbal competence and teaching ability, such as print concept, letter naming, and/or phonological abilities, indicating greater levels of ECEs' knowledge are associated to more desirable classroom language and literacy practices (Ciesielski & Creaghead, 2020). All these examples are a good reflection of their role in children learning by the use of disciplinary language as an essential professional competence.

Despite the manifold research on teachers' language, ECEs verbal competence had been approached by far more formal linguistic aspects, than through noncognitive ones. Thus, searching for evidence has to undertake an indirect approach to identify studies that, from their methodological scope, reach the affective dimension. For instance, it is argued that ECEs instructional ability is consistently associated to their professional qualifications, as well as with a large specter of influence on children behavior (Hu et al., 2017). Evidence in this regard suggests preschoolers adapt their exploratory strategies to the task structure verbally given by their ECEs (Ruggeri et al., 2019), and accordingly, questions asked about other's emotions may involve later prosocial behavior (Brownell et al., 2012). Likewise, ECEs' affective minimalizing linguistic behavior, a kind that purposefully distances ECEs from child's current emotions, discourages the child to express them, identifying its detrimental influence on social and emotional competence development (King & La Paro, 2018).

The specific state of affairs in Latin-American countries is not far from what is currently known about ECEs linguistic competency, but with a lesser number of available studies which makes this topic an attractive research line to follow. Exemplary studies that can be highlighted show formal linguistic variables had been equally examined, as for instance, quantity, syntactic complexity and lexical diversity of ECEs' speech to children (Pizarro et al., 2019). Also, children have greater opportunities for verbally interacting with ECEs in activities that include dancing, and imply fewer verbal commands to address children (Strasser et al., 2018), and on the contrary, in ECEs' reads-aloud and the expansion of the number of words, complexity and lexical diversity that they use and children learn (Rosemberg, 2013, as cited in Pizzaro et al., 2019). The above research line offers interesting evidence to follow on the characteristics and modulatory effect of ECEs' language on children's learning processes and behavioral outcomes.

1.1. Teacher language-responsiveness framework

As well as teacher language cannot be simply reduced to a communicative function for just thinking and knowledge acquisition, a broader perspective has to be thought-out in sight of the noncognitive elements of verbal communication in teacher-students' interactions. A solid base for these statements is found in a number of theoretical models that had reached a more integrated perspective on the understanding of cognitions and emotions as both part of one neurocognitive and affective system, to mention a couple of them: the cognitive-motivational theories as presented by Reisenzein (2019), or most specifically to this article, the Crick and Dodge's model of social cognitive and emotion processes to children's social competence (Lemerise & Arsenio, 2000). Therefore, verbal competencies that address an affective matter can be equally understood as embedded in both domains, or following what is suggested by Hinojosa and co-researches (2019), language and emotions can be understood as: "(…) a complex set of semantic features in a distributed sensory, motor, language, and affective networks in the brain (…)" (p.1).

A theoretical model that describes teachers' verbal competency and rest on above theoretical wider background is the one proposed by Prediger (2019b), and the language-responsiveness framework. It advises for conceptualizing content-specific's study subjects and teachers verbal response by considering those verbal competencies, that help to cope with students' situational learning demands in real or simulated classroom situations. This framework unveils a useful methodological approach for capturing students' learning pathways (Prediger & Zindel, 2017), from where an interplay of teachers' underlying cognitive abilities, pedagogical strategies, and personal preferences that aims to gradually enact students' verbal abilities in a given learning topic. Although some authors have emphasized unravelling teachers' language-sensitivity is a complex endeavor that requires the consideration of research results from both domain: learning and teaching (Hajer & Norén, 2017), this can be tried by a progressive modulation of teachers' verbal response under the notion that the more speakers engage in a dialogue, the more that moves away from a noticeable event to more complex and explicit meanings. This is achieved according to five core abilities in order of increasing involvedness and cognitive complexity (Prediger, 2019a – Table 1).

Tabla 1
Teachers' language-responsiveness framework. Based on Prediger (2019a).

Teachers' abilities	Definitions
Noticing	Recognition of students' learning needs and language resources in their utterances and written products.
Demanding	Efforts in asking for explaining or initiating student talk in a cognitively and discursively rich learning situation.
Supporting	Efforts in asking from students to fulfil demands slightly above their current proficiency level.
Developing	Pedagogical interventions aim to develop students' skill to a longer-term perspective.
Identifying	Demands to notice and support student's attentional focus on crucial rather than peripherical demands.

This theoretical framework serves as a tool to describe with a degree of precision the kind of approximation teachers show when verbally addressing children's learning demands. Thus, it could be also of help in inquiring into ECEs' linguistic strategies to access such demands when connoting affective related issues.

2. Study context

According to the Subsecretaria de Educación Parvularia [SEP] - Undersecretary of Preschool Education, the regions where this study was undertaken (Atacama and Antofagasta, northern regions of Chile), had, until august of 2020 a number of 1,588 ECEs working in establishments which are government dependent, yet another considerable number in private centres with official state recognition. In recent years various documents have tried to guarantee quality educational standards, within which a number of technical-pedagogical recommendations have been set down that imply professional competencies to be developed by ECEs – such as the use of disciplinary language (SEP, 2019). Along that, the newest Chilean curricular guidelines for early childhood education (SEP, 2018), a recent document that sets up the core elements in curriculum design, explicitly expresses the relevance of the affective domain, through the consideration of dimensions such as personal development, identity, and autonomy developing, all dimensions that require from these professionals an adequate and effective verbal approximation to children.

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The well-recognized role of ECEs professional's verbal competencies and the need of alignment with above-mentioned educational policies, prompted the researchers' interest to expand a prior study on a quantitative characterization of ECEs socio-affective words production (Lería Dulčić et al., in press). The present research was conceived then to explore from the same data-base, the affective domain through the recognition of ECEs' recursive qualitative contents and characteristic verbal referencing and phrasings, along the degree of expertise when addressing those contents. Although cited studies throughout this article well-accept the influence of teachers' language on children's learning, giving many hints about the influence of ECEs' language on their teaching quality and children's learning outcomes, it does not clarify yet which linguistic strategies are predominantly used, particularly when using affective connoted language. Therefore, this study aims to fill this gap and become a contribution to the understanding of the intersection between ECEs' affective-speech and the verbal competencies that are implied in addressing children with affective signifying content. Moreover, there are no available studies that had specifically scrutinized this topic in Latin-American countries, a point from which this study starts.

3. Research questions

Two research questions are posed to address the above-mentioned inquiry: (1) Do cross-semantic spoken regularities in ECEs daily inside-classroom activities arise, that are susceptible to be differentially classified as groups of affective-speech by its contents, meanings, phrasing, and connotations? (2) Can the emerged groups be understood as reflecting differential degrees of affective-speech' language-responsiveness?

4. Method

4.1. Design

A cross-sectional and associative mixed design was selected to examine qualitative information in mutual consideration of quantitative data from a priori selected categories. This was conducted by following a sequential explanatory approach in which quantitative results inform the qualitative method, then qualitative findings are mobilized back to interpret quantitative results according to an associative logic (Pluye & Hong, 2014). This strengthens the explanatory possibilities of both methodologies, offering an empirical structure in which to pose the qualitative data.

4.2. Participants

A number of 20 research subjects was selected by convenience depending on the availability to the researchers (all ECEs, female; $\overline{X}$=28.6 years old; age range 21–40); from 14 different educational institutions of two nearby cities in northern Chile. All participants were Spanish native speakers, and completed four years bachelor's degree in initial education, actually work in the locations where this study was conducted, and have more than one year of professional experience.

4.3. Instruments and information gathering

Continuous audio-recordings of daily ECEs educational activities within the classroom were collected, during five to seven work-days in the time period of three to four weeks, following the suggestions given by Cunningham and co-researches (2019), about the advantages of this kind of measurement. ECEs teaching groups go from 24 to 60 months from three different educational levels. The data were processed by:

- LIWC2015 v1.6 (Pennebaker Conglomerates, Inc.); a psycholinguistic digital tool for text analysis that sorts specific words into certain linguistic, grammatical, and psychological categories, which results in an individual's profile of each text referring to the proportion in percentages of each categorical property within the text. It's internal reliability ranges between .52 and .07, depending on how it is computed (Pennebaker et al., 2015). For this study a Spanish dictionary' add-on was utilized (LIWC_2007).
- SPSS v26.0 (IBM Corp., NY, USA) for statistical analysis.
- Atlas.ti v9.1 (Scientific Software Development, GmbH); for qualitative analysis (tracking sentences and creating nodes).
- Live Transcribe Application for Android (Google and Gallaudet University) for transferring audio to text.

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4.4. Data under scrutiny

As presented above, quantitative data refers to the number of words from seven preselected categories extracted from authors' prior data-base according to LIWC2015: Affect; Positive Emotions; Negative Emotions; Anxiety; Sadness; Anger; and Pleasure. Words belonging to these categories helped to look after sentences across the source transcriptions that suggest a clear affective connotation. Although all these categories are to some extent self-explanatory, they can be further checked out in Pennebaker and co-researches (2015).

Qualitative data came from above-detected sentences that, from a structural perspective, must fulfil some distinctive criteria to form a category of meaning: (a) to be constituted by one or more of the preselected words; and (b) to explicitly suggest any of the conditions stated by Fontaine and co-researches (2013), about an emotional response: an appraisal component that may trigger it; a distinguishing tendency toward action; facial movements and voice qualities; physiological reactions; and/or a subjective component.

4.5. Procedure and analysis

A few steps were undertaken to collect and analyse both kind of data, quantitative and qualitative:

- The quantitative data was obtained by the selection of words from preselected affective categories from an aforementioned authors' data-base. A limited number of words was separated to later serve as "trackers" for sentences that may have an affective connotation, following a criterion of highest frequency, and a sample size that roughly represents 1% of words total. After removing homonyms, repetitions, and non-relevancies, 81 emotion-related words resulted to move forward into the analysis. These words were marked to tag all sentences within the source-transcriptions.

- The qualitative data gathering was subsequently conducted in two steps: (1) by taking out from the source-transcriptions whole sentences that carry emotions-related words from previous listing, and that by their semantic features and vocative function are explicitly associated to an affective component or phrasing. Following that, these sentences were categorised into groups that synthetically signify these affective elements in ECEs-children verbal interactions. This was done by the researches according to an axial coding procedure as proposed by Grounded Theory, and the specific guidelines given by Charmaz (2006): "(…) naming each word, line, or segment of data followed by a focused, selective phase that uses the most significant or frequent initial codes to sort, synthesize, integrate, and organize large amounts of data (…)" (p. 46) (Table 2). And, (2) by categorizing these groups into a more general meta-grouping (nodes), following a conclusive-mixed analysis as indicated by Guelmes and Nieto (2015); through corroborating prior selections or analytical units (words, sentences, and groups); checking contradictions and repetitions; and then capturing the implicational relationships within the given theoretical framework, all done by a criterion of unanimity.

- The mixed analysis includes a valuation of the nodes by three independent experts according to the five core abilities of teacher language-responsiveness framework proposed by Prediger (2019a), which represent the degree of these nodes as embodying a progressively ECEs linguistic ability to verbally respond in teaching/learning situations with an affective connotation and/or phrasing. Two meetings were held where the experts shared criteria, inspected data, and located emerged nodes into one core linguistic ability from above-mentioned model.

4.6. Ethical concerns

A presentation letter and initial meetings were held to explain the study purpose, anonymity, audio storage, and afterward deletion. In some cases, the permission of recording was granted by an agreement for scientific research with the main author's institution. Signed consents were collected.

5. Findings

This section firstly exposes the quantitative results from which the qualitative information was built up to give a context to the qualitative data, and then list the emerging nodes associated to the affective domain. Secondly, the identification of teachers' predominant skills according to Prediger's model is presented.

5.1. Lexical densities from preselected affective categories

The total number of collected words from our original study was 308.277 ($\bar{X}$=15.413,85; SD=8.455,38); through 190 hours of effective audio-recording, and an average of 9,6 hours per participant. For this present study, a subtotal of 6049 words was extracted to work with, corresponding to the sum of words from seven preselected affective semantics categories from LIWC2015. Some descriptive statistics for this original data were: *Affect* ($\bar{X}$=3.6(.63); t=25.55; p≤.00); *Positive emotions* ($\bar{X}$=2.94(.54); t=24; p≤.00); *Negative emotions* ($\bar{X}$=.65(.32); t=8.83; p≤.00); *Anger* ($\bar{X}$=.24(.19); t=5.55; p≤.00); *Anxiety* ($\bar{X}$=.14(.09); t=6.85; p≤.00); *Sadness* ($\bar{X}$=14(.08); t=7.38; p≤.00); and, *Pleasure* ($\bar{X}$=1.35(.43); t=13.96; p≤.00). The list of selected words from these categories is extensive, but can be briefly exemplified by words like watch-out, ready, well-done, attention, damage, and hug.

5.2. Affective-speech's cross-semantic regularities

A large number of sentences came into sight that allude to a distinguishable affective connotation across participants' speech, from where it was possible to re-classify them into a second and then a third higher order of associativity. This results in 8 categories or nodes that simultaneously reflect general and particular features in ECEs affective-speech, described below in table 2. The coding process was conducted from/to: Words → Sentences → Groups of sentences by contents' similarity → Nodes or meta-categories (Table 2). The first two steps were done by LIWC2015, and the last two ones by the experts.

Tabla 2
Sequential codding of affective-speech nodes' building

Affective semantic categories	Words (1)	First-phase coding (2)	Second-phase coding (3)	Nodes (4)
Affect	2315	7429	30	
Positive emotion	1374	6384	21	
Negative emotion	813	1389	16	
Anxiety	219	407	11	8
Anger	283	514	16	
Sadness	180	586	16	
Pleasure	865	3783	21	
Σ	6049	20492	131	

(1) Sum of words for each affective preselected category. (2) Number of times selected words were located within the text, and from which some sentences were extracted and then grouped. (3) Number of inbuilt groups of affective connoting sentences. (4) Final meta-grouping after criteria of relevance and unanimity.

A brief referential description is presented in table 3 to depict the nodes' main characteristics.

Tabla 3
Nodes of ECEs' affective-speech

Nodes	Focus on
Positive v/s negative features	Positive verbal nuances in phrasings that encourage, support and/or reinforce children (e.g.: morning greetings; noticing achievements; and/or enhancing the expression of affect). Also, focus posed on calling, sometimes alarming children to be aware of preventing dangerous situations, bad behavior, fight situations, outbursts, and rude language. Affective-speech oriented to decrease children's behaviors, for example: repeatedly ask to sit down; be silent; order bestrewed material; keep at the proper thematic corners; be patient; not to behave impulsively or in a hard-set way. Affective-speech oriented to notice children's inner state and discomfort (e.g.: flu, cough, stomachache, fever, among others).

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Table 3 continued

Teaching v/s learning features	Affective-speech enriches teaching/learning dynamics by emotionally giving "color" to an educative goal, as observable in story-telling that evokes experiential vivid images (e.g.: fables when a main character is portrayed; colors selected by an emotional intention (pink-red for love or black for sadness); and/or talking about significative social activities like Mother's Day; Child's day; Christmas; and so forth. ECEs' communicational interactions are also strongly focused on social engagements and proper behavior to later be generalized to a rule held by everyone.
Speech connoting the expression, distinguishing, sharing and/or inhibition of emotions	Affective-speech encourages children through questions, instructions, and/or insinuations to express and share emotions, mainly in situations where a learning dynamic requires such verbal manifestations, as for example in: playing; morning welcoming; and/or singing.
Speech connoting emotions before, during, and after behavior	Affective-speech connotes or predicts children's emotions, functionally linking an antecedent and/or a consequence of their behaviors for punctuating its relational and emotional implications (e.g.: hitting another child or being hit; crying for a non-apparent reason and asking about possible causations and outcomes of such behavior; or estimating an emotion as being exaggerated).
Speech connoting calls for attention, warnings, reprehension, and praise	Affective-speech focused on redirecting unwilling behavior into a more desirable educative goal (e.g.: warning; connoting rules-breaking; calling for order; reminding of previous rule; and/or just explaining a new task to do). ECEs' speech reprehends or approves children's behavior as a directional pedagogical tool to teach a more appropriate behavior, reinforce children's behavior, delay rewards, and then redirect their attention to a contingent new goal (e.g.: admonitions associated to transgressing a rule or exposing an individual achievement).
Speech connoting touching and the body	Affective-speech focused on the body, bodily functions, and sensorial-perceptual experiences around at least three dimensions: promoting affective interactions through touching (e.g.: showing care to others, hugging, and/or solacing); facilitating behaviors associated to the body (e.g.: hygiene, proper sitting, and clothing); and teaching about and/or through body parts.
Speech connoting increasing, decreasing and normalizing language	Affective-speech intended to modulate children's experiences after a situation happened, usually emotionally charged to them, as in: diminishing children's anxiety in front of incidents like strikes, falls or injuries, suggesting - for example - an injury is not so bad or an animal is not so fierce; normalizing complaints, shame or urgencies (e.g.: explaining an emotion is normal under certain circumstances); or making bigger verbal utterances to praise a success or avoid a danger (e.g.: praising small successes).
ECEs own emotions	Lack of sentences that explicitly refer to ECEs personal affective issues with a few exemptions (e.g.: disliking a children disruptive behavior, expressing tiredness or a critical view of weekly administration).

5.3. ECEs affective-speech's degree of responsiveness

We were interested in exploring the pedagogical expertise that is implied in such language use and phrasings by checking ECEs progressive ability to verbally "tune" with children learning demands in their educative interactions with a recognizable affective implication. This was conducted through a blind inter-raters' procedure, three experts, and the five abilities from teacher language responsiveness' framework (Prediger, 2019a). Each node has a constitutive number of groups (table 1) and a large number of in-built sentences, that were pinpointed by the raters according to their affective connotation, and without limits. The node "ECEs own emotions" was not included due to a possible theoretical contradiction with the model, and its orientation to address children learning demands, but not to describe adults' auto-referencing linguistic behavior.

Spearman coefficient for rater 1 and rater 2 shows the strongest correlation (r =.94 at $p \leq .00$); while left associations were less significative. Krippendorff 's *alpha* was applied to check overall agreement, having in mind it demands a score of α=.6 to make tentative conclusions (Hayes & Krippendorff, 2007). Nonetheless, medium to very low scores were observed, suggesting the necessity of checking once again raters' punctuations through another well-known agreement's coefficient (Fleiss-kappa), but this time separated by skills. Table 4 exposes the results for both coefficients.

Tabla 4
Reliability coefficients' scores

	Krippendorff 's α *	Fleiss-kappa (k)				
		Overall k **	k by dimensions	Conditional probability	Lower 95% CI	Upper 95% CI
Noticing			.8	.9	.00	.38	1.23
Demanding			.53	.66	.01	.1	.96
Supporting	.56	.54	.22	.33	.3	-.2	.65
Developing			-.05	.00	.81	-.47	.37
Identifying			-.00	.00	1	-.00	-.00

*p. $\leq$ .05. **p. $\leq$ .00.

Above-results highlight *Noticing* as the single ability above the minimum requirement for significance in assessing the reliability of agreement between raters.

6. Discussion

We detected a large number of cross-semantic regularities in ECEs speech that allowed us to positively answer the first research question. This leads to the final recognition of 8 general nodes of affective-related speech, through associations of convergence and divergence within a certain degree of feasibility that the a priori affective semantic categories made possible. These nodes can be also understood as a network of communicational paths that could serve as "anchor points" for the further exploration of ECEs' affective-speech. Although in some cases sentences were scattered all across the transcriptions, making difficult to pinpoint them out into a hierarchy of predominance, a few characteristics can be marked out by their relevance for ECEs pedagogical work.

The highest number of sentences was clearly related to positive nuances, which mirrors a well-known ECEs communicational style that may be understood as a desirable professional ability, that purposely enriches children's learning environment mostly drenched into positive experiences, stimulating their cognitive exploration, group cohesion, feelings of safety, and – generally speaking – well-being. This can be contextualized under the suggestions given by Decker-Woodrow (2018), which claims that greater emotional support, classroom management abilities, and quality interactions are characteristics of efficacious facilitators in prekindergarten environments. Another relevant observation highlights the characteristic ECES temporal use of emotion-related words before or after a meaningful educative situation occurs, as for example in a quick verbal intervention after a child's fall, which suggests some ideas about the effect of this kind of linguistic punctuation on children socio-affective learning. More specifically, phoneme awareness is the strongest predictor of reading development (Melby-Lervåg, 2012), confirmed also by newer studies and meta-analytic reviews (e.g.: D'Alessio et al., 2019; Duncan, 2018). Thus, ECEs use of affective close-related morphemes or simple affective-connoting words may provide to children access to a wider semantic and syntactic information by means of expanding children vocabulary and conscious accessibility to their use. This also follows the observations presented by Ren and coresearchers (2016), on how learning of grammatical morphemes might be associated with emotion regulation among bilingual preschoolers, and the role of child language to express their needs with words rather than with emotions. In this vein, studies shown that toddlers' and preschoolers' language skills are positively associated with self-regulation of emotions such as anger and frustration (Roben et al., 2013). Furthermore, the relatively high use of words regarding the body aligns with the well-accepted importance of embodied-words in ECEs pedagogical work, as argued by Cekaite and Bergnehr (2018). Also, the node addressing the specific use of language when increasing, decreasing and normalizing a child's verbal utterance may give some insights on ECEs coping skills when dealing with children situational and pressing demands, which may likewise inspire new research following the line proposed by King and La Paro's work (2018). Additionally, we were particularly interested in higher order emotion-referencing such as love, compassion, empathy, and teaching values, thus, such sentences were traced back to the source-transcriptions to get any hint for further exploration. Two of the ECEs who participated in this study belong to a Cristian school, and most referred words belong to them by expressing spiritual topics that connote verbal references in third person plural over first and second person singular. This could give an exemplary hint on ECEs' own emotions and personal experiences (node 8), when sharing a common socio-cultural framework with children and the significance of working with them. Besides that, compassion and forgiveness are emotions of a higher order that imply more complex cognitive processes, and little is known on ECEs compassionate behavior and their ability to teach it to children, as recently argued by Vuorinen and co-researches (2020).

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Despite these confirmatory findings, in our judgment the second research question was only partially accepted due to the low observed agreement between experts. We consider these identified values may simultaneously respond to the multi-layered nature of gathered information and low case number, but also to the quality of expert judgments. However, we decided not to reject the experts that reached the lowest observed nominal correlations. Nonetheless, we recommend future studies include at least five expert-raters to ensure a good reliability score in case of such possible rejections. Moving ahead into this discussion, the relative predominance of Noticing and – up to a certain degree – Demanding, may suggest an alignment that responds to the progressive complexity that underlies what Prediger's theoretical model proposes, and may be strongly related to other theoretical proposals that argue in favor of progressive and escalated models of competencies development, such as is - for example - proposed by Marzano and Kendall (2008), widely addressed in competence-based education. Our findings suggest that most ECEs affective-talk relies on noticing or spotting children's affective issues and classroom contingencies alongside the educative daily flow. Although, other verbal abilities are weakly recognized by our experts, this may be likewise aligned again to a developmental progressive factor to be considered when working with preschool children (Copple & Bredekamp, 2009), but also to the spectrum of competencies that ECEs who participated in this study may have, and could develop. Due to it exploratory nature, the future exploration of this specific finding demands an expanded methodological approach that could otherwise recall specific characteristics of the instructional language, that may give ECEs' the ability to develop each dimension of the five core's abilities of the language-responsiveness framework taken into consideration in our study.

Some limitations can be highlighted to improve future studies within this research line. ECEs' speech was short, fast spoken, and many times expressed in a "volatile" manner, depending on very changeable class contingencies, which could be addressed in future studies. In our concern, this is an attractive research line to follow due to the role of quality instructions in pedagogical work, as recently emphasized by Brown and coresearchers (2020). Also, future studies necessarily must incorporate children's speech, giving these exploratory findings a more overall scope, and similarly adding the correlation with teachers' affective talk in primary school. Moreover, words that were used for detecting the qualitative nodes were approached from a general linguistic background provided by the software, which gave us the opportunity to situate our findings in a wider and linguistic standardized framework, but also alerts us to further consider the specific disciplinary, socio-cultural and idiosyncratic linguistic context in which our ECEs work.

7. Conclusion

This study was designed to empirically identify ECEs common phrasings that refer upon different degrees, to an affective content or meaning from which was possible to address the extent of their professional competence when answering to children learning demands that require or imply and affective connotation. We were able to tentatively acknowledge many distinguishable nodes of ECEs' affective-speech, and identify one predominant linguistic approximation or verbal strategy to children learning demands. Despite of the fact that by the methodological scope of this study it is not possible to characterize these findings as a generalizable use of ECEs affective-speech, they give some preliminary insights into an attractive direction worth following. Thus, this study' contribute to moving forward the study of the gradation of ECEs' verbal competencies or coping-verbal strategies with children and specially suggest some contents to stress when follow affective-related contents in their communications interaction with children. This may also help to guide curricular policies in higher education on pivotal dimensions for ECEs' professional development, especially regarding the relevance of the affective factors in ECE's professional speech. Further studies in this regard could expand their research topics to close-related lines such as, for example, ECEs' technical vocabulary growth; appropriate lexical choices; suitable meanings usage; and/or developmentally proper sense-making to teach associated to the affective domain.

We hope these findings will invigorate this research line in order to foster ECEs' language proficiency and strengthen their formative experience and professional efficacy.

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Transference

The findings provided contribute to a program for socio-affective competences acquisition, aimed to students of early childhood education from the University of Atacama, northern Chile (Lería Dulčić et al., 2019).

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