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Scientific articles

Validez de contenido del Cuestionario sobre estilos de manejo de conflictos agresivos y asertivos (CEMCAA)

Content validity of the Aggressive and Assertive Conflict Management Styles Questionnaire (CEMCAA)

Validade de conteúdo do Questionário sobre Estilos Agressivos e Assertivos de Gestão de Conflitos (CEMCAA)

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Resumen

El Cuestionario sobre estilos de manejo de conflictos agresivos y asertivos (CEMCAA) es un instrumento diseñado para informar acerca de diez estilos de manejo de conflictos interpersonales en estudiantes universitarios de pregrado: dominante, complaciente, evitativo, transigente e integrativo, cada uno en sus modalidades agresiva y asertiva. Aunque cuenta con una sólida base teórica y metodológica en su diseño, no se han presentado estudios que expongan evidencias de su validez psicométrica. En ese marco, esta investigación tuvo como objetivo evaluar la validez de contenido del CEMCAA por criterio de jueces. Participaron 13 jueces expertos, quienes evaluaron cada uno de los 60 reactivos del CEMCAA en tres aspectos: claridad, coherencia y relevancia. Para valorar el grado de acuerdo entre los jueces, se utilizó el coeficiente de validez V de Aiken complementado con el uso de intervalos de confianza al 95%. Se seleccionaron solamente aquellos reactivos que

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presentaran valores de V superiores a .70 y que, al mismo tiempo, obtuvieran el límite inferior del intervalo de confianza de .50 o mayor en los tres aspectos mencionados. Los hallazgos indican que la mayoría de los reactivos cumplió con los criterios estipulados, a excepción de 11 ítems, los cuales se recomienda remover o reformular en futuras versiones de la prueba. Se concluye que el CEMCAA cuenta con evidencias de validez de contenido para ser aplicado con muestras de estudiantes universitarios de pregrado, exceptuando los ítems señalados, por lo que se recomienda proseguir con el estudio de sus propiedades psicométricas en futuros trabajos.

Palabras clave: coeficiente V de Aiken, estudiantes universitarios, juicio de expertos.

Abstract

The CEMCAA is an instrument designed to inform on ten styles of interpersonal conflict management in undergraduate university students: dominant, accommodating, avoidant, compromising and integrative, each one in its aggressive and assertive modalities. Although it has a solid theoretical and methodological basis in its design, no studies have been presented that provide evidence of its psychometric validity. Within this framework, this research aimed to evaluate the content validity of the CEMCAA by judges' criteria. Thirteen expert judges participated and evaluated each of the 60 CEMCAA items in three aspects: clarity, coherence and relevance. To assess the degree of agreement between the judges, the Aiken V validity coefficient was used, complemented by the use of 95% confidence intervals. Only those items that presented V values greater than .70 and that, at the same time, obtained the lower limit of the confidence interval of .50 or greater in the three aspects mentioned were selected. Results: The findings indicate that most of the items met the stipulated criteria, except for 11 items which are recommended to be removed or reformulated in future versions of the test. It is concluded that the CEMCAA has evidence of content validity to be applied to samples of undergraduate university students, except for the items indicated, so it is recommended to continue with the study of its psychometric properties in future works.

Keywords: Aiken's V coefficient, university students, expert judgment.

Resumo

O Questionário de Estilos de Gestão de Conflitos Agressivos e Assertivos (CEMCAA) é um instrumento elaborado para relatar dez estilos de gestão de conflitos interpessoais em estudantes universitários de graduação: dominante, acomodativo, evitativo, comprometedor e integrativo, cada um em suas modalidades. Embora possua sólida base teórica e metodológica em seu desenho, não foram apresentados estudos que apresentem evidências de sua validade psicométrica. Neste contexto, esta pesquisa teve como objetivo avaliar a validade de conteúdo do CEMCAA pelos critérios dos juízes. Participaram 13 juízes especialistas, que avaliaram cada um dos 60 itens do CEMCAA em três aspectos: clareza, coerência e relevância. Para avaliar o grau de concordância entre os juízes foi utilizado o coeficiente de validade V de Aiken, complementado pela utilização de intervalos de confiança de 95%. Foram selecionados apenas aqueles itens que apresentaram valores de V superiores a 0,70 e que, ao mesmo tempo, obtiveram o limite inferior do intervalo de confiança de 0,50 ou superior nos três aspectos mencionados. Os resultados indicam que a maioria dos itens atendeu aos critérios estipulados, com exceção de 11 itens, que são recomendados para serem removidos ou reformulados em versões futuras do teste. Conclui-se que o CEMCAA possui evidências de validade de conteúdo para ser aplicado com amostras de estudantes universitários de graduação, exceto para os itens indicados, por isso recomenda-se continuar o estudo de suas propriedades psicométricas em trabalhos futuros.

Palavras-chave: Coeficiente V de Aiken, estudantes universitários, perícia.

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Introduction

Interpersonal conflict management styles have been conceptualized as the different ways in which people tend to behave when facing disagreements that occur in their daily lives (Luna, 2022). The study of these styles is of great interest today, as shown by recent literature reviews (Caputo *et al.*, 2019; González and Molero, 2022). Some of the possible causes of their relevance for the present moment could be the following.

Firstly, it is increasingly common to find among specialists the assumption that disagreements are an inherent part of social life and can become something positive if addressed appropriately (Moreno, 2023; Talavera-Salas *et al.*, 2021).

Secondly, from various educational perspectives today, the importance of promoting the development of skills for the positive management of everyday disagreements has been highlighted, as can be seen in recent literature on school coexistence (Fierro-Evans and Carbajal-Padilla, 2019), the formation of civic skills (Arce, 2019), socio-emotional education (Sanmartín and Tapia, 2023) and education for peace (Jares, 2012; Santamaría-Cárdaba, 2019), among other educational perspectives.

In the case of the university student population, this also coincides with new educational trends aimed at training professionals who possess not only skills in their fields of specialization, but also strong interpersonal skills (Pegalajar, 2018), in addition to being one of the elements to promote a culture of peace from a comprehensive approach (Chávez and Norzagaray, 2021; Rivera and Matute, 2023).

Currently, different instruments have been developed at an international level to investigate interpersonal conflict management styles. Some of the further known are the *Conflict Management Message Style Instrument* (CMMS) (Ross & DeWine, 1988), the *Rahim's Organizational Conflict Inventory-II* (ROCI-II) (Rahim, 1983) and the *Thomas-Kilmann Conflict Management of Differences* (MODE) (Thomas & Kilmann, 1974). Although these instruments have been widely used, they have a significant restriction: none of them distinguish between the assertive and aggressive modalities in which the aforementioned styles can be expressed. However, this is very important today given the great relevance of differentiating constructive or productive conflicts from destructive ones, as will be explained later. Due to the above, Luna (2020) proposed to design a new instrument that would take this distinction into account, creating the *Questionnaire on Aggressive and Assertive Conflict Management Styles* (CEMCAA).

Luna (2020) presented the bases and design of the CEMCAA; however, the author did not present information on its psychometric validity. In this context, the present study proposed to make a first approximation in this regard, setting as its objective to evaluate the content validity of the CEMCAA through judges' criteria.

The CEMCAA questionnaire is initially based on the Dual Concern Model on interpersonal conflict management styles, although it incorporates important modifications to it, as will be explained below.

The Dual Concern Model was initially proposed by Blake and Mouton (1964, 1970). Since then, different variants of it have been proposed, some of which contemplate three styles of conflict management (Ross & De Wine, 1988), others four styles (Rubin *et al.*,

1994) and five others (Blake & Mouton, 1970; Rahim, 1983; Thomas & Kilmann, 1974), the latter being the most comprehensive taxonomy. Reference will be made to the latter below, since the CEMCAA was based on it.

The Dual Concern Model states that the behavior that a human being adopts to manage an interpersonal conflict can be described by the interaction of two dimensions of interest: a) the concern that the person assigns to the results that the conflict will have for him/herself, and b) the interest that the individual has in the effects that the interaction will have on the counterparty, or on the relationship that he/she maintains with him/her. From the combination of both dimensions each of the following styles arise: a) dominant: a high concern for one's own results is mixed with a low interest in those of the opponent, the individual tends to impose his/her interest on the other party; b) accommodating: a high concern for the effects that the conflict would have on the person with whom he/she interacts is combined with a low importance assigned to the results for himself/herself, here the subject is inclined to satisfy the demands of the other person; c) avoidant: the subject perceives little interest in the results that the conflict could generate both for him/herself and for the other individual, he/she tends to avoid the conflictual interaction; d) compromising: the agent has an intermediate interest both for himself and for the counterpart involved in the disagreement, he chooses to seek an agreement through reciprocal concessions; e) integrative: there is a high concern for the results that the disagreement will have for both parties, the person prefers to look for ways to integrate both interests into a mutually beneficial solution.

Although the Dual Concern Model is currently a very useful theoretical tool, it is worth mentioning that it does not distinguish between assertive and aggressive styles. However, making this distinction is very relevant and pertinent today, since both from different academic disciplines and research areas, as well as in popular literature and in popular culture, there is an increasingly broad consensus in recognizing that disagreements do not necessarily lead to violence, since humans have also developed strategies to resolve them peacefully (Paris, 2009).

In the educational field, recently, the distinction between conflict and violence has gained greater weight due to the positive approach that has been given to the concept of *coexistence*, understood as the promotion of peaceful practices. Such a perspective is based on the *Delors Report*, which proposes Learning to Live Together as one of the four pillars of education (Leyton-Leyton 2020). In this framework, it has been pointed out that the study of peaceful coexistence, on the one hand, and research on violence, on the other, require

different conceptual apparatuses (Fierro-Evans and Carbajal-Padilla, 2019). In this framework, Luna, Nava Preciado and Valencia Aguirre (2021) have proposed conceiving conflict from a double approach: static and dynamic. In the static approach, it is understood as a situation of interaction; in the dynamic approach, as a process of interaction. The static perspective is used to analyze situations where two or more parties believe that their respective claims are irreconcilable at a given moment. From a dynamic perspective, the management of this situation can take two possible paths: through cooperative dialogue or reasoned discussion (constructive conflict), or through verbal or physical aggression (destructive conflict).

In line with all of the above, and in particular with this distinction between constructive and destructive conflict, Luna (2020) proposed to differentiate between assertive styles oriented towards constructive management and coexistence, and aggressive styles oriented towards destructive management and violence. In general terms, a human being would have an aggressive conflict management style if he or she has a propensity to act in a way that implies not respecting or caring for other people. Examples of these behaviors include blaming, threatening, ridiculing, pressuring, demanding, offending, or using force. An assertive style, on the other hand, implies that the agent addresses the problem in a way that conveys respect and consideration for other people. Examples of such actions include proposing, asking, requesting, inviting, trying to convince, seeking to persuade, among other things, regardless of the objective being pursued.

According to this approach, each conflict management style (integrative, compromising, avoidant, accommodating, dominant) would have an aggressive and an assertive modality. For example, an individual who had an aggressive dominant style would be inclined to impose his own interests on others by using various types of aggression, such as insults and threats. On the contrary, a subject with an assertive dominant style would also strive to ensure his own benefit, while maintaining a courteous and even friendly behavior towards his counterpart. These same two modalities would apply to the other styles.

Based on this theoretical model, the CEMCAA was composed of two scales: one for assertive styles, and another for aggressive styles. Each of them was made up of five subscales (dominant, accommodating, avoidant, compromising, and integrative). Six items were originally written for each of the 10 subscales mentioned, with a total of 60 items. The complete instrument can be consulted in Luna's appendix (2020). Within this framework, the

present study aimed to evaluate the content validity of the CEMCAA by judges' criteria, as a first contribution to the study of the psychometric properties of this questionnaire.

The validity of a psychometric test refers to the degree to which evidence and theory support the intended interpretation of the test scores for the intended use. In this case, the aim would be to determine to what extent the scores obtained from the application of the CEMCAA could be validly interpreted as interpersonal conflict management styles. It is important to note that, strictly speaking, validity does not refer to the instrument itself, but to the interpretation of the scores obtained with the use of the instrument (Aragón, 2011).

Although it is common to talk about different types of validity, in a strict sense it is more accurate to refer to them as types of validity evidence according to the *Standards for Educational and Psychological Testing*: evidence based on the content of the test, the response process, the internal structure, and the relationships with other variables (American Educational Research Association *et al.*, 2014). Traditionally, they are referred to as content validity, construct validity, and criterion validity. The present work, as mentioned, is focused on the content validity of the CEMCAA.

Content validity can be defined as “the degree to which the items that make up the test are a representative sample of the content domain it measures” (Escrura, 1988, p. 105), or, put another way, it consists of “how adequate is the sampling that a test makes of the universe of possible behaviors, according to what it is intended to measure” (Escobar-Pérez and Cuervo-Martínez, 2008, p. 28). According to Merino-Soto (2023), content validity is a condition for other evidence of validity, since “the characteristics of the content of the construct are created a priori, linking professional experience, the rationality of the researcher in the construct of interest and the relevant literature of this” (p. 2). The assessment of content validity is usually carried out through the expert judgment technique, which is currently recognized as the main strategy for its estimation. Expert judgment is defined as “an informed opinion of people with experience in the subject, who are recognized by others as qualified experts in this area, and who can provide information, evidence, judgments and assessments” (Escobar-Pérez and Cuervo-Martínez, 2008, p. 29).

Materials and method

Type of study

This is an instrumental type of research, since its purpose is to evaluate the properties of a new measurement instrument (Ato *et al.*, 2013); in this case, the content validity according to judges' criteria, of the CEMCAA questionnaire.

Participants

For the selection of the judges participating in this study, the criteria of academic training, academic and professional experience, availability and impartiality were taken into account (Escobar-Pérez and Cuervo-Martínez, 2008). The CEMCAA is an instrument that was designed to be applied to undergraduate university students, therefore, as inclusion criteria it was considered that the judges had academic experience as teachers at that level, a master's or doctoral degree, and had had previous experience in the evaluation of psychometric instruments, although the latter was not an essential requirement, but only desirable.

Within the framework of the above, 13 expert judges participated in the present research, nine of whom had a doctorate degree, three with a master's degree, and one doctoral student. The experts were one doctor in Education, one in Philosophy, two in Social Sciences, four in Psychology, and one in Health Sciences. Of the experts with a master's degree, one was in Educational Psychology, and the other two did not specify. The doctoral student was in Social Sciences. Nine stated that they had had previous experience in evaluating psychometric instruments. All of them stated that they interacted with young undergraduate students as teachers and as advisors or tutors, five also as managers and one as a consultant.

Instrument

An evaluation instrument for the CEMCAA was developed to be answered by expert judges, following the guidelines suggested by the specialized literature (Escobar-Pérez and Cuervo-Martínez, 2008). This instrument was created to be answered *online*, using Google Forms. The form was composed of the following sections: I. Presentation, in which they were informed of the objective of the study, as well as the nature and importance of their participation. II. Information about the CEMCAA, in which the information related to the theoretical framework and design of the instrument was detailed. III. Information about the

expert profile, which included questions regarding their academic training, teaching and professional experience, publications, previous experience in evaluating psychometric instruments, and experience interacting with undergraduate students. IV. A section for each of the 10 subscales of the instrument, to evaluate the items. V. A final open section for comments and observations.

The theoretical model on which the CEMCAA is based was briefly presented to the judges in the second section of the evaluation instrument. In addition, the definition of each style was presented together with its corresponding items, in each of the sections of the fourth part. To respond, the judges were asked to read each of these definitions and then evaluate the corresponding items. Thus, the judges had to evaluate each of the 60 items of the CEMCAA (six for each style) in three aspects: a) Clarity, the item is easily understood; b) Coherence, the item effectively corresponds to the definition of the construct that it is supposedly measuring; and c) Relevance: the item is essential, it must be included in the CEMCAA questionnaire. The response format was polytomous with four levels: 1.- Does not meet the criterion, 2.- Low level, 3.- Moderate level, and 4.- High level.

Procedure

The invitation to participate was sent by email to the selected experts. Through this means, they were informed about the objective of the study, and about the nature and importance of their participation in the evaluation of the CEMCAA instrument. They were told that, if they accepted, their participation would be completely voluntary and anonymous and only some general data about their academic and professional profile would be requested for statistical purposes. The *link* to access the evaluation instrument was attached to the aforementioned email. The instrument was answered by the participating experts during the months of January and February 2021.

Statistical analysis

To assess the degree of agreement between the judges, the Aiken V validity coefficient (Aiken, 1980; Escurra, 1988) was used, complemented by the use of 95% confidence intervals (Merino and Livia, 2009; Penfield & Giacobbi, 2004).

Aiken's V coefficient indicates the degree of agreement of the judges about the extent to which the item conforms to the criterion evaluated in each case (clarity, coherence and relevance). It is usually treated as a proportion with natural limits at 0 and 1; a closer

proximity to 1 indicates greater content validity (Merino-Soto, 2023). Currently, it is also recommended to consider this value jointly with the calculation of confidence intervals, in order to achieve greater precision, since it has been observed that the V coefficient could be influenced by sampling error. Although some authors recommend 0.70 as a cut-off point for the lower limit of the confidence interval (Caycho, 2018; Domínguez-Lara, 2016), others consider a value of 0.50 as acceptable, especially in the initial phases of item construction (Merino and Livia, 2009).

According to the above, in this study only those items that obtained V values higher than 0.70 and that, at the same time, presented a lower limit of the confidence interval of 0.50 or higher in all the aspects mentioned (clarity, coherence and relevance) simultaneously were considered valid. Confidence intervals of 95% were used, calculated according to the proposal of Penfield and Giacobbi (2004), in accordance with what various authors recommend (Caycho, 2018; Domínguez-Lara, 2016; Merino and Livia, 2009).

Processing of participants' responses and statistical calculations were performed using Microsoft Excel 365.

Ethical aspects

In carrying out this study, the participation of the experts was completely voluntary and anonymous, in order to guarantee impartiality. They were asked to answer only some general data relevant to establishing their academic and professional profile, in particular about their academic training, teaching and professional experience, publications, previous experience in evaluating psychometric instruments, and experience interacting with undergraduate students. They were told that no particular data that would allow them to be identified would be shared in the research reports, and that only the general, academic and professional profile of the experts who participated in the study would be disclosed.

Results

Table 1 presents the results of the judges' evaluation of the items from the five assertive style subscales. As can be seen, all the items from the compromising and integrative assertive styles obtained favorable evidence in all the aspects evaluated, as well as most of the items from the other subscales. However, the items that did not meet the stipulated

requirements were: 1, 11 and 21 in the assertive dominant style, 12, 22 and 42 in the assertive accommodating style, and 33 in the assertive avoidant style.

Table 1. Content validity by judges' criteria of the assertive styles subscales

Subscale/No. of item	Criterion	M	SD	V	L	U	Interpretation
Assertive dominant style							
1	Clarity	3.38	0.65	0.79	0.64	0.89	Valid
	Coherence	3.08	0.86	0.69	0.54	0.81	Not valid
	Relevance	3.08	0.86	0.69	0.54	0.81	Not valid
11	Clarity	3.23	0.83	0.74	0.59	0.85	Valid
	Coherence	2.92	0.76	0.64	0.48	0.77	Not valid
	Relevance	2.38	1.04	0.46	0.32	0.61	Not valid
21	Clarity	2.69	1.18	0.56	0.41	0.71	Not valid
	Coherence	2.54	1.05	0.51	0.36	0.66	Not valid
	Relevance	2.15	0.99	0.38	0.25	0.54	Not valid
31	Clarity	3.31	1.11	0.77	0.62	0.87	Valid
	Coherence	3.54	0.78	0.85	0.70	0.93	Valid
	Relevance	3.54	0.66	0.85	0.70	0.93	Valid
41	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.77	0.44	0.92	0.80	0.97	Valid
51	Clarity	3.77	0.44	0.92	0.80	0.97	Valid
	Coherence	3.54	0.66	0.85	0.70	0.93	Valid
	Relevance	3.62	0.65	0.87	0.73	0.94	Valid
Assertive accommodating style							
2	Clarity	3.77	0.60	0.92	0.80	0.97	Valid
	Coherence	3.77	0.60	0.92	0.80	0.97	Valid
	Relevance	3.69	0.85	0.90	0.76	0.96	Valid
12	Clarity	3.15	1.07	0.72	0.56	0.83	Valid
	Coherence	3.15	0.99	0.72	0.56	0.83	Valid
	Relevance	3.08	0.86	0.69	0.54	0.81	Not valid
22	Clarity	3.15	1.28	0.72	0.56	0.83	Valid
	Coherence	3.15	0.99	0.72	0.56	0.83	Valid
	Relevance	3.00	1.00	0.67	0.51	0.79	Not valid
32	Clarity	3.46	0.66	0.82	0.67	0.91	Valid
	Coherence	3.38	0.51	0.79	0.64	0.89	Valid
	Relevance	3.23	0.60	0.74	0.59	0.85	Valid
42	Clarity	3.54	0.97	0.85	0.70	0.93	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.08	0.95	0.69	0.54	0.81	Not valid
52	Clarity	3.54	0.78	0.85	0.70	0.93	Valid
	Coherence	3.38	0.77	0.79	0.64	0.89	Valid

	Relevance	3.38	0.77	0.79	0.64	0.89	Valid
Assertive avoidant style							
3	Clarity	3.85	0.38	0.95	0.83	0.99	Valid
	Coherence	3.77	0.44	0.92	0.80	0.97	Valid
	Relevance	3.69	0.85	0.90	0.76	0.96	Valid
13	Clarity	3.69	0.48	0.90	0.76	0.96	Valid
	Coherence	3.54	0.66	0.85	0.70	0.93	Valid
	Relevance	3.62	0.65	0.87	0.73	0.94	Valid
23	Clarity	3.31	0.75	0.77	0.62	0.87	Valid
	Coherence	3.23	0.93	0.74	0.59	0.85	Valid
	Relevance	3.23	0.93	0.74	0.59	0.85	Valid
33	Clarity	3.23	0.93	0.74	0.59	0.85	Valid
	Coherence	3.08	0.86	0.69	0.54	0.81	Not valid
	Relevance	3.31	0.85	0.77	0.62	0.87	Valid
43	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.46	0.66	0.82	0.67	0.91	Valid
	Relevance	3.38	0.77	0.79	0.64	0.89	Valid
53	Clarity	3.31	0.85	0.77	0.62	0.87	Valid
	Coherence	3.15	0.90	0.72	0.56	0.83	Valid
	Relevance	3.23	0.83	0.74	0.59	0.85	Valid
Assertive compromising Style							
4	Clarity	3.85	0.55	0.95	0.83	0.99	Valid
	Coherence	3.77	0.83	0.92	0.80	0.97	Valid
	Relevance	3.77	0.83	0.92	0.80	0.97	Valid
14	Clarity	3.38	0.65	0.79	0.64	0.89	Valid
	Coherence	3.31	0.63	0.77	0.62	0.87	Valid
	Relevance	3.15	0.99	0.72	0.56	0.83	Valid
24	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.62	0.65	0.87	0.73	0.94	Valid
34	Clarity	3.23	1.09	0.74	0.59	0.85	Valid
	Coherence	3.38	0.77	0.79	0.64	0.89	Valid
	Relevance	3.15	0.90	0.72	0.56	0.83	Valid
44	Clarity	3.46	0.66	0.82	0.67	0.91	Valid
	Coherence	3.31	0.85	0.77	0.62	0.87	Valid
	Relevance	3.54	0.66	0.85	0.70	0.93	Valid
54	Clarity	3.54	0.66	0.85	0.70	0.93	Valid
	Coherence	3.77	0.60	0.92	0.80	0.97	Valid
	Relevance	3.54	0.66	0.85	0.70	0.93	Valid
Assertive integrative style							
5	Clarity	3.85	0.38	0.95	0.83	0.99	Valid
	Coherence	3.92	0.28	0.97	0.87	1.00	Valid
	Relevance	3.92	0.28	0.97	0.87	1.00	Valid

15	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.54	0.66	0.85	0.70	0.93	Valid
	Relevance	3.69	0.63	0.90	0.76	0.96	Valid
25	Clarity	3.31	0.75	0.77	0.62	0.87	Valid
	Coherence	3.46	0.78	0.82	0.67	0.91	Valid
	Relevance	3.15	0.90	0.72	0.56	0.83	Valid
35	Clarity	3.69	0.63	0.90	0.76	0.96	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.69	0.48	0.90	0.76	0.96	Valid
45	Clarity	3.46	0.52	0.82	0.67	0.91	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.46	0.66	0.82	0.67	0.91	Valid
55	Clarity	3.77	0.44	0.92	0.80	0.97	Valid
	Coherence	3.85	0.38	0.95	0.83	0.99	Valid
	Relevance	3.62	0.51	0.87	0.73	0.94	Valid

Note. $N = 13$ expert judges. $V =$ Aiken coefficient. $L =$ lower limit of the confidence interval. $U =$ upper limit of the confidence interval. Confidence intervals at 95%. The wording of the items can be consulted in Luna (2020).

Source: own elaboration.

Below is the result of the judges' assessment of the items of the five subscales of aggressive styles, in the Table 2. As can be seen, all the items of the dominant and avoidant aggressive styles obtained favorable evidence in all the aspects evaluated, as well as most of the items of the other subscales. However, the items that did not meet the stipulated requirements were: 47 in the aggressive accommodating style, 29 in the aggressive compromising style, and items 10 and 20 of the aggressive integrative style.

Table 2. Content validity by judges' criteria of the aggressive styles subscales

Subscale / No. of item	Criterion	M	SD	V	L	U	Interpretation
Aggressive dominant style							
6	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.69	0.63	0.90	0.76	0.96	Valid
	Relevance	3.23	1.01	0.74	0.59	0.85	Valid
16	Clarity	3.77	0.44	0.92	0.80	0.97	Valid
	Coherence	3.69	0.63	0.90	0.76	0.96	Valid
	Relevance	3.54	0.66	0.85	0.70	0.93	Valid
26	Clarity	3.77	0.44	0.92	0.80	0.97	Valid
	Coherence	3.62	0.87	0.87	0.73	0.94	Valid
	Relevance	3.46	0.66	0.82	0.67	0.91	Valid
36	Clarity	3.77	0.60	0.92	0.80	0.97	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.46	0.66	0.82	0.67	0.91	Valid
46	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.54	0.78	0.85	0.70	0.93	Valid
	Relevance	3.31	1.11	0.77	0.62	0.87	Valid
56	Clarity	3.85	0.55	0.95	0.83	0.99	Valid
	Coherence	3.85	0.55	0.95	0.83	0.99	Valid
	Relevance	3.77	0.60	0.92	0.80	0.97	Valid
Aggressive accommodating style							
7	Clarity	3.62	0.51	0.87	0.73	0.94	Valid
	Coherence	3.46	0.66	0.82	0.67	0.91	Valid
	Relevance	3.31	0.85	0.77	0.62	0.87	Valid
17	Clarity	3.54	0.66	0.85	0.70	0.93	Valid
	Coherence	3.31	0.63	0.77	0.62	0.87	Valid
	Relevance	3.23	0.73	0.74	0.59	0.85	Valid
27	Clarity	3.62	0.87	0.87	0.73	0.94	Valid
	Coherence	3.62	0.87	0.87	0.73	0.94	Valid
	Relevance	3.38	0.96	0.79	0.64	0.89	Valid
37	Clarity	3.46	0.66	0.82	0.67	0.91	Valid
	Coherence	3.46	0.52	0.82	0.67	0.91	Valid
	Relevance	3.46	0.52	0.82	0.67	0.91	Valid
47	Clarity	3.31	0.85	0.77	0.62	0.87	Valid
	Coherence	3.15	0.80	0.72	0.56	0.83	Valid
	Relevance	2.77	1.01	0.59	0.43	0.73	Not valid
57	Clarity	3.69	0.48	0.90	0.76	0.96	Valid
	Coherence	3.62	0.51	0.87	0.73	0.94	Valid
	Relevance	3.38	0.96	0.79	0.64	0.89	Valid

Aggressive avoidant style							
8	Clarity	3.46	0.78	0.82	0.67	0.91	Valid
	Coherence	3.31	0.75	0.77	0.62	0.87	Valid
	Relevance	3.31	0.63	0.77	0.62	0.87	Valid
18	Clarity	3.69	0.48	0.90	0.76	0.96	Valid
	Coherence	3.31	0.75	0.77	0.62	0.87	Valid
	Relevance	3.38	0.77	0.79	0.64	0.89	Valid
28	Clarity	3.54	0.66	0.85	0.70	0.93	Valid
	Coherence	3.62	0.65	0.87	0.73	0.94	Valid
	Relevance	3.62	0.65	0.87	0.73	0.94	Valid
38	Clarity	3.38	0.87	0.79	0.64	0.89	Valid
	Coherence	3.38	0.87	0.79	0.64	0.89	Valid
	Relevance	3.46	0.66	0.82	0.67	0.91	Valid
48	Clarity	3.77	0.44	0.92	0.80	0.97	Valid
	Coherence	3.54	0.52	0.85	0.70	0.93	Valid
	Relevance	3.31	0.75	0.77	0.62	0.87	Valid
58	Clarity	3.62	0.65	0.87	0.73	0.94	Valid
	Coherence	3.54	0.66	0.85	0.70	0.93	Valid
	Relevance	3.31	0.85	0.77	0.62	0.87	Valid
Aggressive Compromising Style							
9	Clarity	3.46	0.66	0.82	0.67	0.91	Valid
	Coherence	3.38	0.77	0.79	0.64	0.89	Valid
	Relevance	3.31	0.75	0.77	0.62	0.87	Valid
19	Clarity	3.38	0.87	0.79	0.64	0.89	Valid
	Coherence	3.23	0.83	0.74	0.59	0.85	Valid
	Relevance	3.31	0.85	0.77	0.62	0.87	Valid
29	Clarity	3.31	0.95	0.77	0.62	0.87	Valid
	Coherence	3.31	1.11	0.77	0.62	0.87	Valid
	Relevance	3.00	1.00	0.67	0.51	0.79	Not valid
39	Clarity	3.46	0.78	0.82	0.67	0.91	Valid
	Coherence	3.38	0.96	0.79	0.64	0.89	Valid
	Relevance	3.54	0.78	0.85	0.70	0.93	Valid
49	Clarity	3.38	0.77	0.79	0.64	0.89	Valid
	Coherence	3.46	0.66	0.82	0.67	0.91	Valid
	Relevance	3.23	0.83	0.74	0.59	0.85	Valid
59	Clarity	3.46	0.97	0.82	0.67	0.91	Valid
	Coherence	3.54	0.78	0.85	0.70	0.93	Valid
	Relevance	3.38	0.87	0.79	0.64	0.89	Valid
Aggressive integrative style							
10	Clarity	3.15	0.99	0.72	0.56	0.83	Valid
	Coherence	3.08	1.04	0.69	0.54	0.81	Not valid
	Relevance	3.08	1.04	0.69	0.54	0.81	Not valid

20	Clarity	3.23	0.73	0.74	0.59	0.85	Valid
	Coherence	3.00	1.00	0.67	0.51	0.79	Not valid
	Relevance	3.00	1.00	0.67	0.51	0.79	Not valid
30	Clarity	3.38	0.77	0.79	0.64	0.89	Valid
	Coherence	3.23	1.09	0.74	0.59	0.85	Valid
	Relevance	3.31	0.85	0.77	0.62	0.87	Valid
40	Clarity	3.54	0.52	0.85	0.70	0.93	Valid
	Coherence	3.62	0.51	0.87	0.73	0.94	Valid
	Relevance	3.46	0.52	0.82	0.67	0.91	Valid
50	Clarity	3.38	0.65	0.79	0.64	0.89	Valid
	Coherence	3.23	0.83	0.74	0.59	0.85	Valid
	Relevance	3.15	0.99	0.72	0.56	0.83	Valid
60	Clarity	3.46	0.66	0.82	0.67	0.91	Valid
	Coherence	3.31	0.85	0.77	0.62	0.87	Valid
	Relevance	3.31	0.75	0.77	0.62	0.87	Valid

Note. $N = 13$ expert judges. $V =$ Aiken coefficient. $L =$ lower limit of the confidence interval. $U =$ upper limit of the confidence interval. Confidence intervals at 95%. The wording of the items can be consulted in Luna (2020).

Source: own elaboration.

Discussion

As noted, the objective of the present study was to evaluate the content validity of the CEMCAA, using the judges' criterion technique. As could be observed, a total of 49 of the 60 items evaluated met the stipulated criteria, which constitutes evidence in favor of their validity in terms of clarity, coherence and relevance. The eleven items that presented problems in one or some of the criteria were 1, 10, 11, 12, 20, 21, 22, 29, 33, 42 and 47. The reader is reminded that the wording of these items can be consulted in the appendix of Luna's article (2020).

According to the definition corresponding to the assertive dominant style, this occurs when the person tends to affirm his or her position before others using actions such as suggesting, asking, requesting, inviting, trying to persuade or trying to convince, which demonstrate respect and consideration for other people (Luna, 2020). In the subscale corresponding to this style, it is observed that the worst evaluated items in the present study seem to move away from this definition of the construct: 21 refers to pleading, 11 to begging, and 1 to asking for a favor. In contrast, it is seen that the three remaining items do fit this definition more clearly since they refer to the actions of politely requesting, trying to convince and trying to persuade.

As for item 33, which belongs to the assertive avoidant style, it obtained acceptable values in both clarity and relevance, and although it had a V value of less than 0.70 in coherence, this score was very close to it (0.69). It is likely that this item was considered less relevant than the others that make up this subscale, especially considering that its wording is very similar to that of item 13, which seems to make it redundant.

In the case of the aggressive integrative style, the worst evaluated items were 10 and 20, which obtained V scores less than 0.70 although close to it in the aspects of relevance and coherence. According to the theoretical definition, this style occurs when the person tends to look for alternative solutions of mutual benefit, but using behaviors that imply a lack of consideration and respect towards the counterpart (Luna, 2020). Among the modes of aggressive behavior, ridiculing, claiming, demanding, insulting, pressuring, blaming, threatening, forcing, offending, among others, are mentioned. Therefore, when reviewing the wording of both items in Luna's article (2020), it can be seen that both 10 and 20 seem to fit the aforementioned definition. In this framework, it is possible that the judges considered these items less relevant in a relative way, that is, compared to the other four items that make up the scale, although not absolutely.

Finally, the rest of the items that presented problems (12, 22, 29, 42 and 47) did so only in the relevance criterion, although not in clarity or coherence, which indicates that although the judges thought that they responded to their respective construct and were easily understood, they are not essential to be included in the CEMCAA questionnaire.

Among the limitations of this work, it is worth mentioning what Merino-Soto (2023) pointed out, in the sense that it would be advisable to design comparative studies on content validity, which allow comparing groups of judges with different characteristics in order to consider whether their evaluations of the items change depending on variables such as their status, expertise, or their knowledge, which remains as a recommendation for future studies.

Conclusion

In accordance with all the above, the present study provides evidence in favor of supporting the content validity of the CEMCAA, in particular, of 49 of the 60 items evaluated based on their coherence, clarity and relevance. With respect to the eleven items that presented problems in one or more of the criteria, it is recommended that they be removed or eliminated in future versions of the instrument. In conclusion, the CEMCAA can be considered a valid tool in its content to be applied in works with samples of undergraduate university students, except for the items indicated.

Future lines of research

Content validity covers only one aspect of the evidence that must support the validity of a psychometric instrument. In addition, research must be conducted to examine the validity of the construct and criterion, as well as reliability, which is why it is recommended that these properties of the CEMCAA be analyzed in future works. It is also recommended that further studies be conducted on content validity, but using comparative designs as indicated above, in order to generate evidence that could be compared with the present findings.

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