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DEVELOPMENT AND VALIDATION OF THE COMMUNAL AND AGENTIC WORKPLACE CLIMATE SCALE

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Abstract
Objectives: This study aims to define and assess communal and agentic workplace climates (AWC), 2 pivotal dimensions perceived by employees within organizational contexts. Communal workplace climate highlights employees' well-being, while AWC emphasizes productivity-related aspects. **Material and Methods:** To enhance comprehension, the *Communal and Agentic Workplace Climate Scale* (CAWCS) was created and validated through a series of studies. The research involved 4008 employees from diverse positions and organizations across Poland. Initially, a pool of 20 items was designed to reflect these dimensions, with exploratory factor analysis identifying a robust set of 12 items. **Results:** Confirmatory factor analysis substantiated the 2-factor structure of CAWCS. Reliability analyses indicated good internal consistency, supported by correlation analyses linking scale scores with diverse attitudinal and behavioral constructs. **Conclusions:** This validation confirms the validity of CAWCS and highlights the significant associations between employees' perceptions of these dimensions and their workplace experiences and behaviors. Int J Occup Med Environ Health. 2024;37(3)

Key words:
organizational climate, job attitudes, psychometric validation, communal workplace climate, agentic workplace climate, the Big Two

INTRODUCTION

The differentiation between people-oriented and results-oriented practices within organizations is evident in various concepts, including leadership styles, classifications of organizational cultures, and related domains. This research aims to utilize the "Big Two" framework [1] to encapsulate communal and agentic workplace climates (AWCs) – the primary dimensions perceived by employees concerning the organization and working conditions. Subsequently, the authors explored the relationship between these 2 dimensions of workplace climate and employees' attitudes and behaviors.

The concept of communal and AWC was introduced to delineate specific work environments focused on values related to people and outcomes. Communal workplace climate (CWC) underscores managerial priorities centered on employees' well-being, while AWC highlights priorities associated with employee productivity. Observable organizational practices, including evaluation criteria, promotion structures, job expectations, and decision-making processes, reflect both dimensions of workplace climate. The CWC encompasses employees' perceptions regarding policies and practices nurturing interpersonal relationships and fostering a sense of community within

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their team. Conversely, AWC refers to employees' perceptions of policies and practices aimed at optimizing efficiency and productivity.

Despite previous research that has independently examined these dimensions, such as studies focusing on relational climate [2], there is currently no instrument measuring how employees simultaneously perceive the workplace in both communal and agentic aspects while assessing workplace climate. The primary objective of this study is to develop and psychometrically validate the *Communal and Agentic Workplace Climate Scale* (CAWCS) – a novel tool designed to evaluate the work environment as perceived by employees. The introduction of this scale aims to advance the comprehension of workplace climates by considering both communal and agentic aspects and their relationship with employee experiences and behaviors.

Workplace climate can be assessed at both the individual level and the organizational level. Psychological climate refers to how a person perceives their work environment's psychological effect on their well-being [3]. It reflects the subjective experiences of employees within the workplace and entails micro-level features that can vary among individuals and situations. Psychological climate involves employees' perceptions of their work environment, encompassing aspects such as job demands, social support, and relationships with colleagues and supervisors. If employees within a specific work group share similar perceptions regarding this impact, their collective views can be combined to characterize the organizational climate [4]. This macro-level construct comprises stable features like leadership style, communication patterns, and organizational structure, enduring over time. While various theoretical perspectives exist on distinguishing between the two, the differentiation often revolves around their scope and level of analysis.

Researchers, over the past decades, have pinpointed several critical factors contributing to a positive workplace climate, including leadership styles and communication patterns [5]. Examining these elements in-depth enables organizations to better understand how to foster a more positive and productive work atmosphere. The way employees perceive the workplace climate significantly influences their well-being, job satisfaction, and overall productive and counterproductive behaviors [6,7]. Numerous dimensions within the work environment, such as role clarity, management style, and organizational support, are considered in evaluating organizational climate [8].

As previously indicated, workplace climate can be analyzed along agentic and communal dimensions. Agency and communion, alternatively termed under various labels [9], stand as 2 fundamental dimensions of social cognition extensively studied in psychology. These dimensions encapsulate the fundamental ways individuals perceive themselves and engage within social settings [1]. Moreover, social groups can also be perceived through the lens of agency (competence) and communion (warmth) [10]. Agency signifies how a group is perceived in terms of power, dominance, and assertiveness. Groups high in agency are commonly viewed as competitive, individualistic, and goal-oriented. Conversely, communion refers to the perception of a group as warm, supportive, and cooperative, reflecting interdependence and concern for others' welfare. Viewing a group as high in agency and low in communion often evokes negative stereotypes associated with wealth, power, and selfishness. Conversely, perceiving a group as high in communion and low in agency is linked to positive stereotypes, reflecting care and support [10].

In the domain of work and organizational psychology, these dimensions are evident in various models outlining work environments and leadership behaviors within organizations. Fiedler's contingency model [11] is one such framework that describes task-oriented and relationship-oriented leadership styles, significantly impacting workplace climate and employee attitudes and behaviors [12,13]. Task-oriented leaders have a strong focus

on task completion, while relationship-oriented leaders prioritize interpersonal connections.

Performance orientation and relational orientation are also critical cultural dimensions in studying organizational culture and are part of the GLOBE cultural framework [14]. These dimensions reflect an organization's emphasis on valuing and rewarding performance and achievement (performance orientation) or prioritizing positive relationships with stakeholders (relational orientation). Highly performance-oriented organizations often set ambitious goals, prioritize competition, recognize outstanding results, and emphasize individual accountability. While fostering high motivation, productivity, and a competitive edge, overemphasis on performance may lead to stress, burnout, and ethical lapses. This focus may also overshadow vital aspects like employee well-being and ethical conduct. On the contrary, highly relational-oriented organizations engage stakeholders, encourage open communication, empower employees to make decisions, and nurture a positive work culture. This emphasis fosters employee attachment, loyalty, and engagement, but could potentially overlook competitiveness and efficiency, being resource-intensive.

Communal and agentic orientations align with Cameron and Quinn's Organizational Culture Assessment Instrument (OCAI) framework [15]. Communal orientation resonates with clan culture, emphasizing interpersonal relationships and internal coherence. Conversely, agentic orientation characterizes market culture, emphasizing performance outcomes and a results-driven approach.

Previous studies suggest that relational climate, conceptually associated with CWC, correlates positively with procedural justice, perceived organizational support, and affective organizational commitment [2]. Conversely, an extreme AWC may lead to adverse consequences for attitudes and behaviors within an organization. For instance, Berdahl et al. [16] introduced the concept of masculinity contest culture, characterized by dominance, avoidance of vulnerability, and promoting ruthless competition. This culture, conceptually linked to an agentic organizational climate, correlates with detrimental outcomes like toxic leadership, dominant coworker behaviors, burnout, turnover intentions, and reduced personal well-being [16].

The investigation of workplace climate is a critical aspect of organizational research, with particular emphasis on understanding the impact of communal and agentic attributes within the organizational context. In response to this, the authors developed CAWCS to assess individuals' perceptions of these dimensions in their respective organizations. The aim of the current research reported in this article was to develop and psychometrically validate the CAWCS. To achieve this goal, a series of studies (including pilot study) were conducted, involving a total of 4008 employees holding various positions and employed in diverse organizations across Poland.

MATERIAL AND METHODS

Procedure

The validation research plan encompassed a pilot study utilizing the initial 20-item version of the CAWCS, followed by 6 studies employing the final 12-item version of the CAWCS. The summary of the validation study plan includes Table 1. As can be observed, the aim of the pilot study was to conduct an exploratory factor analysis (EFA), perform a preliminary assessment of the psychometric properties of the items, and develop the final version of the scale. Samples from S1 to S6 (N = 3672) were collected to perform confirmatory factor analysis (CFA), estimate the psychometric properties of the CAWCS, and gather evidence of its validity based on scale-criterion relationships.

Participants

Pilot study

A total of 485 employees were surveyed, comprising 304 females and 181 males. The majority held secondary education qualifications (N = 223), followed by graduate or post-

Table 1. Validation study plan, characteristics, and purpose of data collection across 7 studies involving a worker cohort (N = 4008) from various organizations and industries, conducted in May 2021 (pilot study) and May 2022 – April 2023 (samples S1–S6) in Poland

Variable	Sample						
	pilot study (N = 485)	S1 (N = 574)	S2 (N = 664)	S3 (N = 183)	S4 (N = 129)	S5 (N = 68)	S6 (N = 2039)
Characteristic							
sample homogeneity	heterogeneous	heterogeneous	heterogeneous	heterogeneous	heterogeneous	homogeneous (IT industry)	heterogeneous
exploratory factor analysis	yes	–	–	–	–	–	–
item analysis	yes (initial)	yes	yes	yes	yes	yes	yes
reliability analysis	yes (initial)	yes	yes	yes	yes	yes	yes
confirmatory factor analysis	–	yes	yes	yes	yes	yes	yes
Purpose of a data collection							
gathering evidence of validity based on scale-criterion relationships	–	affective attitude towards the organization[a]; employee silence[b]; work engagement and job burnout[c]	role ambiguity and role overload[d]; productive behaviors[e]	overall job satisfaction[f], turnover intention[g]	overall job satisfaction[f]	turnover intention[g]	productive behaviors[e]
demographic and employment questions	yes	yes	yes	yes	yes	yes	yes

S1–S6 – sample numbers collected in subsequent studies.
[a] *Positive and Negative Organizational Attitudes Scale* [18]; [b] *Four Forms of Employee Silence Scale* [22,23]; [c] *Oldenburg Burnout Inventory* [25]; [d] *Organizational Role Stressors Index* [17]; [e] Three 4-items scales: *Task-oriented engagement*, *Organizational citizenship behaviors directed to individuals*, *Organizational citizenship behaviors directed to the organizatio*n [21]; [f] *Overall Job Satisfaction Scale* [27]; [g] *Turnover Intention Scale* [28].

graduate degrees (N = 169), and undergraduate degrees (N = 93). The participants were employed in organizations of various sizes, including 138 from large organizations, 100 from medium-sized organizations, 151 from small organizations, and 96 from micro-sized organizations. Their job roles encompassed diverse fields, with 100 in production or technical roles, 172 in sales or customer service, 111 in office jobs, and 102 in social services. Among the respondents, 94 held managerial positions, while the rest were divided into entry-level positions (N = 207) and specialized roles (N = 184). The age of the participants ranged 20–60 years (mean [M] ± standard deviation [SD] 33.50±11.23 years), with an average overall tenure of M±SD 11.74±10.33 years), and an average tenure in their current position of M±SD 6.58±7.84 years).

Validation studies

For conducting main psychometric analyses (item analysis, CFA, and reliability analysis) of the final 12-item version of the CAWCS, a merged dataset from samples S1 to S6 was utilized. Table 2 provides a description of the combined sample (total sample) as well as its breakdown based on the organization's size. As evident from Table 2, the sample exhibits diversity concerning gender (although predominantly female), age, job positions, and work areas.

Table 2. Composition of the sample from data collection across 6 studies involving a worker cohort (N = 3672) from various organizations and industries, conducted from May 2022 to April 2023 (samples S1–S6) in Poland

Variable	Participants (N = 3672)				
	in micro organization (N = 741)	in small organization (N = 912)	in medium organization (N = 831)	in large organization (N = 1188)	in all organizations
Age [years] (M±SD)	32.34±12.57	33.21±12.20	36.34±12.02	34.02±11.53	34.00±12.10
Seniority [years] (M±SD)					
total	11.48±10.81	12.10±10.87	14.39±10.92	12.73±10.50	12.70±10.79
in the current position	5.95±7.02	6.59±7.79	7.34±8.27	5.83±7.33	6.39±7.63
Gender [n (%)]					
male	219 (29.6)	292 (32.0)	267 (32.1)	501 (42.2)	1279 (34.8)
female	517 (69.8)	618 (67.8)	560 (67.4)	683 (57.5)	2378 (64.8)
non-binary	5 (0.7)	2 (0.2)	4 (0.5)	4 (0.3)	15 (0.4)
Education [n (%)]					
secondary or vocational	469 (63.3)	443 (48.6)	323 (38.9)	457 (38.5)	1692 (46.1)
undergraduate	112 (15.1)	145 (15.9)	121 (14.6)	234 (19.7)	612 (16.7)
graduate or postgraduate	160 (21.6)	324 (35.5)	387 (46.6)	497 (41.8)	1368 (37.3)
Job position [n (%)]					
managerial	177 (23.9)	133 (14.6)	138 (16.6)	201 (16.9)	649 (17.7)
non-managerial	564 (76.1)	779 (85.4)	693 (83.4)	987 (83.1)	3023 (82.3)
Work area [n (%)]					
office work	93 (12.6)	171 (18.8)	204 (24.5)	291 (24.5)	759 (20.7)
production or technology	109 (14.7)	118 (12.9)	149 (17.9)	340 (28.6)	716 (19.5)
sales and customer service	431 (58.2)	383 (42.0)	237 (28.5)	366 (30.8)	1417 (38.6)
social services (education, healthcare or uniformed)	108 (14.6)	240 (26.3)	241 (29.0)	191 (16.1)	780 (21.2)

Measures

In all validation studies (S1–S6), the CWC and AWC were assessed using the CAWCS. The tool consists of 12 items (6 for each dimension) describing practices, habits, and principles prevailing in the organization related to either communal (e.g., "In my organization, loyalty and trust are most highly valued") or agentic (e.g., "In my organization only the achievement of goals is recognized") workplace climate. The content of all items is provided in Table 3. Participants are required to respond to each statement on a 5-point Likert scale, where 1 indicates "strongly disagree" and 5 indicates "strongly agree". Additionally, a series of other variables were assessed using the tools listed in Table 1. This section provides a brief description of the construction of these measures.

Organizational stressors

The 15 items from the *Organizational Role Stressors Index* developed by Jurek [17] was employed to evaluate 2 categories of organizational stressors: role ambiguity (e.g., "lack of clarity on how to perform my work") and role overload (e.g., "too many tasks in a given time").

Table 3. Descriptive statistics, normality indices, factor loadings, and item-total correlations for *Communal and Agentic Workplace Climate Scale* items from data collected across 6 studies involving a worker cohort (N = 3672) from various organizations and industries, conducted from May 2022 to April 2023 (samples S1–S6) in Poland

Item	Score		Skewness	Kurtosis	λ	θ	r.drop
	M	SD					
In my organization the focus is on results and job performance	3.85	1.04	–0.65	–0.18	0.59	0.65	0.51
My organization promotes strong, decisive, and results-oriented managers	3.17	1.21	–0.15	–0.89	0.64	0.59	0.55
In my organization a lot is expected from its employees	3.73	1.01	–0.50	–0.32	0.52	0.73	0.45
In my organization the predominant drive for action is to win	3.11	1.22	–0.06	–0.92	0.68	0.54	0.58
In my organization only the achievement of goals is recognized	3.78	1.03	–0.63	–0.18	0.60	0.65	0.52
In my organization the measure of success is to beat competitors and secure the market leadership position	3.14	1.32	–0.15	–1.11	0.62	0.62	0.53
In my organization, concern for people and building relationships are the most highly valued attributes	3.43	1.20	–0.30	–0.86	0.73	0.47	0.67
My organization promotes managers who care for and support employees	3.21	1.18	–0.20	–0.82	0.69	0.53	0.63
Maintaining harmonious relationships among employees is most highly valued in my organization	3.65	1.11	–0.57	–0.42	0.72	0.48	0.66
In my organization, loyalty and trust are most highly valued	3.41	1.18	–0.34	–0.80	0.76	0.43	0.69
In my organization, the involvement of the employees in the internal affairs of the organization is highly appreciated	3.60	1.12	–0.55	–0.48	0.68	0.54	0.62
In my organization the measure of success is to develop and engage employees	3.49	1.15	–0.43	–0.63	0.72	0.48	0.66

λ – standardized loading estimate (confirmatory factor analysis); r.drop – item whole correlation for this item against the scale without this item;
θ – standardized residual estimate (confirmatory factor analysis).
Covariance between factors – 0.06 ($p < 0.01$).
The first 6 items make up the *Agentic Workplace Climate* (AWC) subscale, the rest 6 items – the *Communal Workplace Climate* (CWC) subscale.

The participants rated the frequency of experiencing each of the workplace situations on a 5-point scale (ranging from 1 – never to 5 – always – every day).

Positive and negative affective attitudes toward the organization

To measure positive affective organizational attitude and negative affective organizational attitude, the *Positive and Negative Organizational Attitudes Scale* [18] was utilized, comprising 14 items (7 items for each subscale). Participants respond to each statement indicating the degree of agreement using a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Productive behaviors

Three 4-item scales were used to assess the employees' productive behaviors. The first scale comprises items adapted from Saks [19], which capture behaviors indicative of task-oriented engagement (e.g., "Sometimes I am so into my job that I lose track of time"). The second and third scales include items adapted from Lee and Allen [20], targeting behaviors associated with organizational citizenship behaviors (OCBs) directed towards individuals (e.g., "willingly give your time to help others who have work-related problems") and OCBs directed towards the organization (e.g., "take action to protect the organization from potential

problems"), respectively [21]. Participants rated all items using a 5-point Likert-like scale (ranging from 1 – strongly disagree to 5 – strongly agree).

Employee silence

To measure the 4 motives of employee silence in the organization, the Polish version of the *Four Forms of Employee Silence Scale* [22,23] was employed. The scale consists of 12 items (3 items for each subscale) assessing acquiescent, quiescent, prosocial, and opportunistic silence. Participants respond to each statement using a 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

Work engagement and job burnout

Work engagement and job burnout were measured using the Polish version of the *Oldenburg Burnout Inventory* (OLBI) [24,25]. To assess work engagement, 2 subscales were employed, which originally constituted the reverse-scored subscales of burnout. However, research findings indicate that they represent a distinct factor of engagement rather than the reverse aspect of burnout [26]. Job burnout was measured using remaining 2 subscales of burnout from the OLBI.

Overall job satisfaction

To assess overall job satisfaction, a measure developed by Cammann et al. [27] as part of the Michigan *Organizational Assessment Questionnaire* (OAQ) was utilized. This measure employs 3 items to capture an employee's subjective response to their job and organization, providing a global indication of worker satisfaction with their job. Responses are obtained using a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree).

Turnover intention

To assess the intention to leave the organization, the authors utilized a scale consisting of 3 statements derived from a questionnaire developed by Mobley et al. [28] in studies involving hospital employees. Participants rated the provided statements on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score in this section of the survey indicates a higher likelihood that an individual intends to leave the organization.

Ethics

The study followed the ethical guidelines outlined by the American Psychological Association. It involved non-clinical surveys, exclusively using self-assessment measures without any experimental procedures or manipulation. Participation was entirely voluntary, with participants having the option to withdraw at any point without facing adverse consequences. Clear instructions were provided to ensure confidentiality and clarify the study's objectives. Participants were explicitly informed and gave informed consent before commencing the study. They were also assured of the option to contact researchers with any concerns or objections.

Statistics

Statistical analyses in the process of developing and validating CAWCS included EFA, item analysis, CFA, reliability analysis, as well as correlation analysis to gather evidence of validity based on scale-criterion relationships.

Exploratory Factor Analysis

Exploratory factor analysis was conducted using data from the Pilot Study, employing the initial 20-item version of CAWCS. The EFA aimed to uncover the inherent factor structure within the scale items and identify patterns of item grouping. The EFA resulted in selecting a subset of 12 items that demonstrated the most robust loading on 2 factors: AWC and CWC.

Item analysis

Item analysis included computing descriptive statistics (M, SD, skewness, and kurtosis), as well as item-total corre-

lations. In accordance with Curran et al. [29] recommendations, the normality of each item was assessed based on skewness and kurtosis values. Skewness and kurtosis values >2 was considered problematic in the analyses. Furthermore, following Cureton's [30] suggestion, item-total correlations were evaluated using the r.cor method, which corrects for item overlap by subtracting the item variance and then replacing it with the best estimate of common variance.

Confirmatory Factor Analysis

Using data collected from studies S1 to S6, CFA was conducted to demonstrate that the 2-factor factor structure of the CAWCS fits the data better than the alternative 1-factor structure. Based on the results of the item analysis, maximum likelihood (ML) estimation was used to fit the model to the data. The model was then evaluated using commonly used fit criteria, with the comparative fit index (CFI) >0.90 and the root mean square error of approximation (RMSEA) <0.08 [31].

Reliability analysis

Reliability was evaluated by computing both Cronbach's α [32] and McDonald's ω [33] for each of the subscales (≥0.80 for good reliability, ≥0.70 for acceptable reliability) [34].

Correlation analysis

The validity of CAWCS was assessed through analysis involving correlation coefficients between the scale scores and measurements of other variables obtained in subsequent studies. This process aimed to examine the relationships between CAWCS scores and various constructs measured in different study phases.

RESULTS

Scale development

To construct the initial version of CAWCS, a literature review was conducted to identify relevant dimensions of organizational climate. Drawing from the conceptual framework of communal and agentic orientations, a pool of 20 items was generated to measure respondents' perceived emphasis on communal and agentic aspects of their work environment. The initial version of the CAWCS comprised 2 distinct subscales: the CWC (e.g., "In my organization, the most important are caring for people and good relationships") and AWC (e.g., "In my organization, the most important are the results and the best performance"). Each subscale was initially composed of 10 items that reflect either communal or agentic attributes within the organizational context. Participants rate their agreement with each statement using a 5-point Likert-type scale (1 – strongly disagree, 5 – strongly agree).

The items in the CAWCS were initially derived and inspired by select items from Cameron and Quinn's OCAI [15]. Specifically, the development of the CAWCS drew inspiration from 2 distinct cultural dimensions within the OCAI framework: the clan culture and the market culture. The items pertaining to the communality climate in the CAWCS were predominantly influenced by people-oriented values characteristic of the clan culture. On the other hand, the agency climate items in the CAWCS were primarily inspired by achievements- and results-oriented values typical of the market culture. Drawing on these cultural dimensions, the CAWCS offers a comprehensive and nuanced approach to assessing workplace climate, capturing both communal and agentic attributes that play pivotal roles in shaping employees' perceptions and behaviors within their respective organizations.

Exploratory factor analysis

The EFA revealed a distinct 2-factor structure for the instrument, with factor 1 representing CWC and factor 2 representing AWC. Descriptive statistics (M, SD, skewness, and kurtosis) for the 20 original items and the results of EFA (factor loadings) computed based on data

Table 4. Descriptive statistics and exploratory factor analysis results for the original 20 items of *Communal and Agentic Workplace Climate Scale* – based on data collected in the pilot study involving a worker cohort (N = 485) from various organizations and industries, conducted in May 2021 in Poland

Item[a]	Score		Skewness	Kurtosis	Factor loading		Decision
	M	SD			factor 1	factor 2	
1 (1). In my organization the focus is on results and job performance	4.04	0.98	–0.78	0.00	0.09	0.49	accepted
2 (2). In my organization, concern for people and building relationships are the most highly valued attributes	3.42	1.18	–0.20	–0.96	0.69	–0.17	accepted
3 (–). In my organization, there is a search for highly ambitious and achievement-oriented employees.	3.53	1.12	–0.35	–0.72	0.47	0.41	removed: cross-loading
4 (–). In my organization, there is a search for employees oriented towards collaboration	3.91	1.00	–0.77	–0.03	0.59	0.14	removed: due to the removal of item No. 3
5 (3). My organization promotes strong, decisive, and results-oriented managers	3.23	1.20	–0.20	–0.87	0.14	0.63	accepted
6 (4). My organization promotes managers who care for and support employees	3.26	1.16	–0.17	–0.90	0.67	0.13	accepted
7 (5). In my organization a lot is expected from its employees	3.85	1.00	–0.61	–0.22	0.10	0.44	accepted
8 (6). Maintaining harmonious relationships among employees is most highly valued in my organization	3.64	1.08	–0.45	–0.58	0.71	–0.08	accepted
9 (–). In my organization, individual, ambitious initiatives are valued	3.43	1.16	–0.28	–0.84	0.64	0.12	removed: due to the removal of item No. 10
10 (–). In my organization, efforts are made to ensure that everyone participates in achieving goals	3.60	1.09	–0.49	–0.48	0.60	0.19	removed: inconsistency of content with the assigned factor
11 (–). In my organization, individual contributions of employees are highly valued	3.14	1.09	–0.04	–0.64	0.49	0.12	removed: due to the removal of item No. 12
12 (–). In my organization, achievements of entire teams are valued more than those of individual persons	3.42	1.09	–0.42	–0.44	0.27	0.22	removed: low loading
13 (7). In my organization the predominant drive for action is to win	3.21	1.18	–0.13	–0.92	0.06	0.62	accepted
14 (8). In my organization, loyalty and trust are most highly valued	3.40	1.16	–0.25	–0.85	0.68	–0.13	accepted
15 (9). In my organization only the achievement of goals is recognized	3.41	1.08	–0.27	–0.71	–0.18	0.61	accepted
16 (10). In my organization, the involvement of the employees in the internal affairs of the organization is highly appreciated	3.45	1.06	–0.35	–0.59	0.66	0.05	accepted
17 (11). In my organization the measure of success is to beat competitors and secure the market leadership position	3.39	1.26	–0.40	–0.89	–0.10	0.64	accepted

Table 4. Descriptive statistics and exploratory factor analysis results for the original 20 items of *Communal and Agentic Workplace Climate Scale* – based on data collected in the pilot study involving a worker cohort (N = 485) from various organizations and industries, conducted in May 2021 in Poland – cont.

Item[a]	Score		Skewness	Kurtosis	Factor loading		Decision
	M	SD			factor 1	factor 2	
18 (12). In my organization the measure of success is to develop and engage employees	3.39	1.11	–0.35	–0.66	0.70	0.10	accepted
19 (–). In my organization, compensation and benefits are strongly linked to individual achievements	2.98	1.36	–0.03	–1.20	0.35	0.25	removed: low loading
20 (–). In my organization, stable employment is ensured	3.79	1.10	–0.68	–0.29	0.37	–0.03	removed: low loading

Standardized loadings based upon correlation matrix using varimax rotation.
[a] Item number original and final.

collected in the pilot study are presented in Table 4. Based on the results of these analyses, particularly the EFA, 12 items were selected that demonstrated the most robust loading on 2 factors: AWC and CWC, comprising the final version of the tool. Each factor explained a significant portion of the variance in the responses (59% cumulative proportion explained). Factor loadings of the final items indicated strong associations between specific items and their respective factors (>0.40), with minimal cross-loading between factors, suggesting good discriminant validity.

Item analysis

The results of the item analysis for the CAWCS items are presented in Table 3. The table provides descriptive statistics, normality indices, factor loadings, and item-total correlations for each item. Descriptive statistics, such as the M and SD, offer insights into the item's distribution within the sample. The skewness and kurtosis values indicate that there are no significant deviations from normality. Moreover, the factor loadings and item-total correlations demonstrate that the CAWCS items effectively contribute to the underlying factors and are in line with the intended dimensions. These findings support the validity of the scale in assessing the communal and agentic aspects of workplace climate as perceived by employees.

Confirmatory factor analysis

The results of the CFA indicate a good fit of the 2-factor CAWCS model to the data. The fit indices of the model are: $\chi^2(df) = 1029\ (53)$, CFI = 0.93 and RMSEA = 0.071 (90% CI: 0.067–0.075). Factor loadings are significant and high for all items, confirming that individual items effectively measure their respective constructs. For AWC, they range 0.52–0.68, and for CWC, 0.68–0.76 (Table 3). Furthermore, the superiority of the 2-factor model, which reflects the theoretical assumptions, over the 1-factor model ($\chi^2[df] = 5634\ [54]$, CFI = 0.61, RMSEA = 0.168) supports the validity of the CAWCS based on factor structure.

Reliability analysis

The results of the reliability analysis based on internal consistency coefficients showed that for the AWC subscale, Cronbach's α was 0.78 and McDonald's ω was 0.81. As for the CWC subscale, Cronbach's α was 0.86, and McDonald's ω was 0.89. These findings indicate good internal consistency and reliability for both subscales, suggesting that the items within each subscale are consistent in measuring their respective constructs.

Table 5. Descriptive statistics, internal consitency coefficients, and corelations with agentic and communal workplace climate subscale for variable examined in the validation studies involving a worker cohort (N = 3672) from various organizations and industries, conducted from May 2022 to April 2023 (samples S1–S6) in Poland

Variable	Participants [n]	Score		Cronbach's α	Pearson's r	
		M	SD		agentic workplace climate	communal workplace climate
Agentic workplace climate	3672	3.46	0.79	0.78	–	
Communal workplace climate	3672	3.47	0.89	0.86	0.05**	–
Role overload	664	2.99	0.80	0.82	0.38**	–0.25**
Role ambiguity	664	2.58	0.97	0.90	0.24**	–0.41**
Positive affective attitude towards the organization	574	3.08	0.99	0.93	–0.05	0.55**
Negative affective attitude towards the organization	574	2.38	0.95	0.90	0.17**	–0.35**
Task-oriented engagement	2703	3.57	0.88	0.83	0.23**	0.18**
Organizational citizenship behaviors directed to individuals	2703	3.84	0.81	0.85	0.07**	0.24**
Organizational citizenship behaviors directed to the organization	2703	3.45	0.92	0.77	0.11**	0.36**
Quiescent silence	574	3.59	1.69	0.83	0.18**	–0.18**
Acquiescent silence	574	3.47	1.76	0.84	0.21**	–0.38**
Opportunistic silence	574	3.03	1.44	0.74	0.11	–0.17**
Prosocial silence	574	4.01	1.59	0.83	0.04	–0.03
Work engagement	574	3.31	0.72	0.81	0.03	0.50**
Job burnout	574	3.07	0.90	0.87	0.24**	–0.31**
Overall job satisfaction	312	3.97	0.90	0.87	–0.11*	0.63**
Turnover intention	251	2.69	1.19	0.76	0.15**	–0.45**

* $p < 0.05$; ** $p < 0.01$.

Validity

Table 5 contains information on descriptive statistics, internal consistency coefficients, and correlations with AWC and CWC subscales for variables examined in the validation studies. The table provides a comprehensive overview of the relationship between the CAWCS and other variables, shedding light on its construct validity. As can be seen, AWC is marginally (though statistically significantly) positively correlated with role ambiguity, negative affective attitude towards the organization, quiescent silence, acquiescent silence, job burnout, and turnover intention (undesirable employee attitudes and behaviors), but also with task-oriented engagement and organizational citizenship behaviors (desirable productive behaviors). There was also a moderate positive correlation between AWC and role overload, indicating negative implications of AWC.

Stronger correlations were observed for the relationships between CWC and other examined variables. Communal workplace climate is strongly positively correlated with positive affective attitude towards the organization, work engagement, and overall job satisfaction; moderately positively correlates with organizational citizenship behaviors directed towards the organization. Lastly, and no less importantly, CWC is negatively associated

with role ambiguity, negative affective attitude towards the organization, acquiescent silence, job burnout, and turnover intention, indicating unambiguously positive implications of CWC.

DISCUSSION

Contributions

The primary contribution of this series of studies lies in establishing a comprehensive conceptual and operational framework for agentic and CWCs. Building upon these definitions, the authors developed and validated the CAWCS scale. The authors' approach aligned with the standard procedures for scale validation, as per the guidelines in the *Standards for Educational and Psychological Testing* [35], ensuring empirical evidence of reliability and validity. Additionally, the study has contributed significantly to the initial development of a nomological network by examining potential antecedents and consequences linked with both communal and AWCs. The findings reveal crucial insights into how these climates distinctly impact employee attitudes and behaviors, underscoring their significance within organizational settings. It is evident from the authors' analysis that both communal (CWC) and agentic (AWC) workplace climates play substantial roles in shaping employee attitudes and behaviors. However, the results highlight that CWC demonstrates a notably stronger association with organizational behaviors compared to the AWC.

Agentic workplace climate shows marginal positive correlations with various undesirable employee attitudes and behaviors, including role ambiguity, negative affective attitude towards the organization, quiescent silence, acquiescent silence, job burnout, and turnover intention. Conversely, CWC displays more robust and consistent associations. Communal workplace climate exhibits strong positive correlations with positive affective attitude towards the organization, work engagement, and overall job satisfaction. Furthermore, it moderately correlates with desirable behaviors like organizational citizenship behaviors directed towards the organization. Importantly, CWC negatively associates with negative affective attitude towards the organization, role ambiguity, acquiescent silence, job burnout, and turnover intention, signifying predominantly positive implications of CWC on employee attitudes and behaviors.

These findings are in line with earlier research indicating a positive correlation between relational climate, akin to CWC, and positive job attitudes [2]. Conversely, a manifestation of AWC links with detrimental outcomes, including toxic leadership, dominant coworker behaviors, burnout, turnover intentions, and decreased personal well-being [16]. These findings are also consistent with the latest results of the labor market study in Poland conducted by ManpowerGroup [36]. The report highlights an ongoing generational shift in workplace expectations, emphasizing the need for workplaces to reinforce diversity, equality, integration, and a sense of belonging. Moreover, the data indicates that individuals of all ages and genders are currently seeking employers who prioritize supporting employees' mental health and promote a healthy work-life balance. Conversely, what employees are no longer accepting are employer expectations that they should do everything in their power, including working after hours, on weekends, or even holidays, to meet goals or deadlines.

In summary, the results emphasize the substantial and more pronounced influence of CWC on fostering positive employee attitudes and behaviors compared to the AWC. This underlines the importance of nurturing communal aspects within organizational settings, paving the way for a better understanding of how workplace climates impact employee experiences and behaviors.

Limitations

While the authors' study's outcomes are promising, several limitations warrant acknowledgment. Firstly, the cross-

sectional design restricts the authors' ability to establish causal relationships between hypothesized factors and theoretical constructs. Employing longitudinal designs would provide a more comprehensive understanding of the relationships within the nomological network regarding agentic and CWCs. Longitudinal research would enable not only to disentangle antecedents from consequences empirically but also to comprehend the emergence and fluctuations of agentic and CWCs over time.

Secondly, the data collection occurred solely at the individual level, capturing more of a psychological rather than an organizational climate. To comprehensively elucidate the roles of agentic and CWCs, multilevel research encompassing employees nested within teams and teams within organizations is essential.

Lastly, the study was conducted within a single country, while the significance of agentic and CWCs may be influenced by cultural context (e.g., observed country's collectivism-individualism). Therefore, cross-cultural investigations exploring the relationship between agentic and CWCs and employee attitudes and behaviors are highly desirable.

Practical implications

Given the strong psychometric properties of the CAWCS, the authors are convinced that this tool can effectively serve researchers and practitioners alike in assessing the 2 fundamental dimensions of workplace climate. One notable advantage of this novel tool is its brevity, rendering it especially suitable for longitudinal studies aimed at continuous monitoring of organizational climate. Moreover, its reliability and validity ensure consistent and insightful evaluations over time, offering valuable insights into organizational dynamics and trends.

In the realm of HRM practice, the CAWCS holds potential to guide decision-making processes concerning organizational interventions aimed at bolstering both communal and agentic aspects of the workplace environment. Its succinct design enables seamless integration into various HR practices, including the creation of motivating work environments through employee-organization fit assessments, optimization of team dynamics, and enhancement of performance management systems.

Additionally, the CAWCS can serve as a diagnostic tool for identifying areas of strength and areas for improvement within an organization's climate, thus aiding in targeted interventions to foster a positive and productive workplace culture.

Overall, the versatility and reliability of the CAWCS position it as a valuable asset for both research endeavors and HRM practices. By contributing to the ongoing enhancement of organizational effectiveness and employee well-being, it plays a pivotal role in fostering positive organizational change and sustainable growth.

CONCLUSIONS

The outcomes from the validation studies strongly affirm the reliability and validity of the CAWCS. Both the communal and agentic facets of workplace climate, as perceived by employees, exhibit noteworthy correlations with various attitudinal and behavioral variables. Overall, the CWC is closely associated with favorable employee attitudes toward work and the organization, whereas the AWC is linked to negative job attitudes, although the correlation is weak. These findings underscore the significance of CAWCS in comprehensively capturing and elucidating the diverse facets of workplace climate and their effects on employee experiences and behaviors.

Author contributions

Research concept: Paweł Jurek

Research methodology: Paweł Jurek

Collecting material: Paweł Jurek, Michał Olech

Statistical analysis: Paweł Jurek, Michał Olech

Interpretation of results: Paweł Jurek, Michał Olech

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