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*Artículo de Investigación*

# Psychometric Validation and Adaptation of the Humor Climate Questionnaire (HCQ) in Organizational Settings

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## ABSTRACT

Humor plays a vital role in workplace dynamics, influencing employee satisfaction, team cohesion, stress reduction, and creativity. This study aimed to validate the Humor Climate Questionnaire (HCQ) within a diverse organizational context, examining its applicability and reliability across various employment types, sectors, and demographic variables. A total of 300 participants from different sectors—including education, healthcare, finance, and food services—completed the HCQ and the Workplace Boredom Scale (WBS). Exploratory and confirmatory factor analyses supported the HCQ's four-factor structure: Positive Humor, Negative Humor, Outgroup Humor, and Supervisor Support, with moderate to high internal consistency. A bifactor model demonstrated better fit but revealed limited support for a global humor climate score, reinforcing the multidimensional nature of the instrument. Descriptive comparisons indicated variability in humor climate perceptions across employment status, job type, generation, and sector. Positive Humor was associated with higher job satisfaction and team cohesion, while Negative Humor correlated with increased workplace boredom and potential interpersonal tension. Outgroup Humor, while sometimes fostering bonding, often reflected dissatisfaction with organizational policies. Supervisor Support emerged as a protective factor in reducing boredom. These findings highlight the dual nature of humor in the workplace and underscore the importance of fostering positive humor climates to enhance well-being, communication, and productivity. This study offers practical implications for organizations seeking to harness humor strategically and calls for future research to refine the HCQ, assess measurement invariance, and explore humor's evolving role in organizational life.

# Validación psicométrica y adaptación del Humor Climate Questionnaire (HCQ) en contextos organizacionales

**Palabras Clave:**

Clima de Humor, Dinámica Laboral, HCQ, Estructura Interna, Validez, Confiabilidad, Comportamiento Organizacional

## RESUMEN

El humor desempeña un papel fundamental en la dinámica laboral, influyendo en la satisfacción de los empleados, la cohesión del equipo, la reducción del estrés y la creatividad. Este estudio tuvo como objetivo validar el Cuestionario de Clima del Humor (HCQ) en un contexto organizacional diverso, examinando su aplicabilidad y fiabilidad en distintos tipos de empleo, sectores y variables demográficas. Un total de 300 participantes de diversos sectores, incluyendo educación, salud, finanzas y servicios de alimentos, completaron el HCQ y la Escala de Aburrimiento Laboral (WBS). Los análisis factoriales exploratorios y confirmatorios respaldaron la estructura de cuatro factores del HCQ: Humor Positivo, Humor Negativo, Humor hacia Exogrupos y Apoyo del Supervisor, con una consistencia interna de moderada a alta. Un modelo bifactor mostró un mejor ajuste, pero reveló un apoyo limitado para un puntaje global, reforzando la naturaleza multidimensional del instrumento. Las comparaciones descriptivas indicaron variabilidad en las percepciones del clima del humor según tipo de empleo, generación y sector. El Humor Positivo se asoció con una mayor satisfacción laboral y cohesión de equipo, mientras que el Humor Negativo se vinculó a mayores niveles de aburrimiento laboral y tensiones interpersonales. El Humor hacia Exogrupos, aunque en ocasiones fomentaba la unión, reflejaba insatisfacción con las políticas organizacionales. El Apoyo del Supervisor se destacó como un factor protector ante el aburrimiento. Estos hallazgos subrayan la naturaleza dual del humor en el entorno laboral y la importancia de fomentar climas de humor positivos para mejorar el bienestar, la comunicación y la productividad. El estudio ofrece implicaciones prácticas para organizaciones interesadas en aprovechar el humor de manera estratégica y plantea la necesidad de investigaciones futuras para refinar el HCQ, evaluar la invarianza y explorar el papel evolutivo del humor en la vida organizacional.

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## Introduction

Humor is a multifaceted and pervasive aspect of human interaction that plays a crucial role in social bonding, communication, and overall well-being. In the workplace, humor can significantly influence organizational dynamics, impacting everything from employee satisfaction (Holmes, 2006, 2000) and team cohesion (Martin & Ford, 2018; Yang, Cai & Tu, 2021) to stress reduction (Avtgis & Taber, 2006; Lefcourt et al., 1995) and creativity (Ghayas & Malik, 2013; Laboy-Rodríguez & Nuñez-Maldonado, 2018). The study of humor in organizational settings has garnered increasing attention as researchers strive to understand its complex effects and develop tools to measure and manage its presence effectively.

Numerous studies have sought to quantify humor, leading to the development of various instruments aimed at capturing its multifaceted nature (Booth-Butterfield, Booth-Butterfield & Wanzer, 2007; Martin et al., 2003; Yang, Cai & Tu, 2021). The Humor Climate Questionnaire (HCQ), introduced by Cann and colleagues, is one such instrument designed to assess the overall humor climate specifically within an organization (Cann, Watson, & Bridgewater, 2014). This tool distinguishes between different types of humor, allowing for a more nuanced understanding of how humor operates within work environments.

Existing research has highlighted the impact of humor, both in and outside the workplace. Affiliative humor, which promotes group cohesion and reduces interpersonal tensions, has been linked to higher job satisfaction and improved team performance (Cann et al., 2014). Self-enhancing humor, which involves maintaining a humorous outlook even in the face of stress, is associated with better psychological well-being and lower levels of burnout (Yang, Cai & Tu, 2021). However, not all humor is beneficial; aggressive humor can create hostile work environments and undermine relationships (Trif & Fodor, 2019), while self-defeating humor can harm an individual's self-esteem and mental health (Cann et al., 2010; Cann & Etzel, 2008).

Martin's model of humor styles provides a comprehensive framework for understanding these variations. According to Martin et al. (2003), humor can be categorized into four styles: affiliative, self-enhancing, aggressive, and self-defeating. This model underscores the importance of distinguishing between positive and negative forms of humor when evaluating its impact on organizational outcomes. The HCQ incorporates this approach, assessing both positive and negative humor to offer a balanced view of the humor climate (Cann et al., 2014).

More recent scholarship has expanded our understanding of how humor functions in organizations. Positive humor has been linked not only to satisfaction and stress relief but also to enhanced creativity and psychological safety (Romero & Cruthirds, 2006; Chinying Lang & Lee, 2010). Conversely, negative humor, including aggressive and self-defeating humor, has been associated with emotional exhaustion, turnover intentions, and deteriorating team trust (Trif & Fodor, 2019; Ford et al., 2014). Humor targeting external entities, such as management or policies (outgroup humor), may serve to strengthen in-group cohesion but can simultaneously foster cynicism or resistance to organizational goals (Blanchard et al., 2014).

Supervisor attitudes towards humor play a crucial role in shaping the humor climate. Supportive supervisors can encourage positive humor, while strict or unsupportive leaders may foster an environment where negative or outgroup humor predominates (Romero & Cruthirds, 2006; Yam & Wen, 2021). This supervisory dimension interacts with the other humor dimensions by either reinforcing or mitigating the presence of different humor types. A positive supervisor stance may amplify the benefits of affiliative and self-enhancing humor, while discouraging aggressive or exclusionary humor.

Individual differences, such as personality traits and affective styles, also shape how humor is perceived and used (Ford et al., 2014; Morreall, 2009). People with positive affective styles are more likely to use adaptive humor, while those with avoidance-oriented dispositions may engage in more harmful humor styles. Thus, both organizational context and individual dispositions must be considered when examining humor climate.

The four dimensions of the HCQ—Positive Humor, Negative Humor, Outgroup Humor, and Supervisor Support—interact dynamically. For example, a supportive supervisor may encourage positive humor while deterring negative humor, indirectly shaping team dynamics. Likewise, the presence of outgroup humor may reflect coping strategies in environments where supervisor support is low. Understanding these interactions provides insight into the nuanced ways humor influences organizational life.

High scores on the HCQ dimensions indicate stronger perceptions of the corresponding humor type within the workplace. For instance, a high score in Positive Humor reflects frequent use of uplifting,

team-building humor, while a high score in Negative Humor suggests the presence of demeaning or harmful humor behaviors. Similarly, high Outgroup Humor scores point to the common use of humor targeting external figures or policies, and high Supervisor Support scores denote environments where humor is encouraged or accepted by leadership. Conversely, low scores in these dimensions imply the absence or minimal presence of these humor types.

In this context, the current study aims to further validate the HCQ by examining its application in diverse organizational settings. By exploring the relationships between humor climate and various organizational variables, this research seeks to enhance our understanding of how humor influences workplace dynamics and contributes to overall organizational effectiveness (Cann et al., 2014).

## Current goals

The primary objective of this study is to evaluate the applicability and reliability of the Humor Climate Questionnaire (HCQ) within a diverse population. This involves translating and adapting the HCQ to fit our sample, which includes employees, consultants, and volunteers working in various sectors and under different employment conditions (full-time vs. part-time). By doing so, we aim to test whether the factor structure and associations identified by Cann et al. (2014) hold true in this broader context.
Specifically, our goals are:

(a) Translation and adaptation: To accurately translate and adapt the HCQ for use in a diverse sample, ensuring cultural and contextual relevance.
(b) Factor verification: To confirm the four-factor structure of the HCQ (Positive Humor, Negative Humor, Outgroup Humor, Supervisor Support) within our sample.
(c) Exploration of new variables: To investigate how new variables, including employment type (full-time vs. part-time) and sector, influence the perception and impact of humor in the workplace.
(d) Demographic considerations: To analyze the effects of demographic variables such as age and gender on humor climate and its outcomes, providing a more comprehensive understanding of humor in diverse organizational settings.

By achieving these goals, this study aims to validate the HCQ in new contexts and offer deeper insights into how humor functions in a wide range of work environments. This will help organizations leverage the benefits of humor while addressing potential challenges, ultimately enhancing workplace well-being and productivity.

## Method

### *Participants*

A total of 300 participants were recruited for this study, representing a diverse workforce from various sectors. The sample included employees (83%), consultants (10.33%), volunteers (2%), and other forms of employment such as gig workers (4.66%). Participants ranged in age from 20 to 65 years, with a mean age of 30.32 years (SD = 12.50). The gender distribution was relatively balanced, with 53% female and 47% male. This diversity in employment type and demographics provided a comprehensive overview of how humor climate is perceived across different work contexts.

Participants also worked in sectors such as education (20%), healthcare (25%), finance (15%), and food services (10%). Employment statuses included 47.83% full-time, 50.50% part-time, and the remaining in other forms of employment.

### *Instruments*

**Humor Climate Questionnaire (HCQ).** The Humor Climate Questionnaire (HCQ), originally developed by Cann et al. (2014), was used to measure the humor climate in the workplace. It consists of 16 items rated on a 7-point Likert scale ranging from 1 (Totally disagree) to 7 (Totally agree). The HCQ also consists of items designed to assess four dimensions of humor:

(a) Positive Humor (PH): Humor that supports and strengthens relationships.
(b) Negative Humor (NH): Humor that devalues or intimidates others.
(c) Outgroup Humor (OH): Humor directed towards external "enemies" such as management.
(d) Supervisor Support (SS): Perception of the supervisor's support for the use of humor.

The HCQ has demonstrated high internal reliability with Cronbach's alpha coefficients for each dimension ranging from .81 to .89. The translation process involved forward and backward translation by bilingual experts to ensure cultural and contextual relevance. Items were reviewed for clarity and appropriateness, and minor modifications were made

to fit the specific work environments of the target sample.

**Workplace Boredom Scale.** In addition to the HCQ, the study included a measure of boredom at work to explore its relationship with the humor climate dimensions. The Workplace Boredom Scale (WBS), originally known as the Escala de Aburrimiento Laboral developed by Martínez-Lugo and Rodríguez-Montalbán (2017), was used. The WBS consists of 8 items rated on a 6-point Likert scale ranging from 0 (Strongly disagree) to 6 (Strongly agree). This scale was designed to assess the extent to which employees feel bored and disengaged in their work tasks. Higher scores on the WBS indicate greater levels of boredom. The WBS has demonstrated strong psychometric properties. It has a unifactorial structure that explains 72% of the variance and shows high internal consistency, with a Cronbach's alpha of .95 and a composite reliability of .96. The scale also exhibits good convergent validity with the Dutch Boredom Scale (DUBS), with a Pearson correlation coefficient of .81, and discriminant validity with the Utrecht Work Engagement Scale (UWES-9), showing a negative correlation of -.73. These properties suggest that the WBS is a reliable and valid instrument for measuring boredom in the workplace.

This measure was included to examine whether the presence of humor in the workplace can mitigate feelings of boredom and to identify any potential interactions between humor climate and boredom at work. Based on prior research, it was expected that higher levels of Positive Humor and Supervisor Support would be associated with lower levels of workplace boredom, as these humor dimensions promote engagement, social connection, and psychological well-being (Romero & Cruthirds, 2006; Chinying Lang & Lee, 2010). In contrast, higher levels of Negative Humor and Outgroup Humor were expected to correlate with higher levels of boredom, as these humor styles may reflect or exacerbate disengagement, cynicism, and workplace dissatisfaction (Ford et al., 2014; Trif & Fodor, 2019).

### *Procedure*

The study was conducted entirely online. Participants, consisting of students from the Faculty of Social Sciences at the University of Puerto Rico, Río Piedras, as well as their family members and friends, were provided with a link to the survey. The survey included sociodemographic questions, the Humor Climate Questionnaire (HCQ), and the Workplace Boredom Scale (WBS). As the data were collected through self-reports, there was a potential for common-method variance. To mitigate this, several strategies recommended by Podsakoff, MacKenzie, and Podsakoff (2012) were employed.

**Translation and Cultural Adaptation of the HCQ.** The original HCQ, developed in English by Cann et al. (2014), was translated into Spanish following a rigorous process of linguistic and cultural adaptation. First, two independent bilingual translators produced separate Spanish versions of the instrument. These translations were then reviewed and synthesized into a single consensual version by a third expert with knowledge in organizational psychology and cross-cultural research.

To ensure cultural relevance and linguistic clarity for the Puerto Rican context, a panel of three subject matter experts examined the translated items, focusing on the appropriateness of humor-related expressions, idiomatic language, and workplace terminology. Particular attention was paid to maintaining the conceptual equivalence of key constructs such as “humor climate,” “supervisor support,” and expressions of negative humor, which may carry different connotations across cultural settings.

Next, a back-translation into English was performed by an independent bilingual translator unfamiliar with the original scale. This back-translated version was compared to the original HCQ to confirm semantic equivalence and to identify any discrepancies or cultural mismatches.

Finally, a pilot test with 10 participants from the target population was conducted to evaluate item clarity, relevance, and comprehensibility. Feedback from this pilot study led to minor adjustments in wording to ensure accessibility and alignment with Puerto Rican Spanish. This process contributed to the linguistic and cultural validity of the Spanish HCQ and helped ensure that items would be interpreted as intended by respondents.

**Data Collection and Ethical Considerations.** Data collection occurred at two different points in time. Participants completed the HCQ and the sociodemographic questions in the first session, which took approximately 15 minutes, and the Workplace Boredom Scale (WBS) in the second session, which took a maximum of 10 minutes. This temporal separation helped reduce the likelihood of common-method bias affecting the results.

Informed consent was obtained from all participants before they began the survey. Participation was voluntary, and confidentiality was assured. The study was approved by the Institutional Review Board (IRB) of the University of Puerto Rico,

Río Piedras Campus (Approval Number: #2324-049). Data were stored securely and analyzed to verify the factor structure of the HCQ and to explore the relationships between humor climate dimensions and boredom at work.

## Results

### *Factor structure of the Humor Climate Questionnaire (HCQ)*

**Exploratory Factor Analysis (EFA).** An exploratory factor analysis (EFA) was conducted using principal axis factoring with varimax rotation to examine the underlying structure of the Humor Climate Questionnaire (HCQ). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .82, indicating good adequacy. The MSA for each item ranged from .70 to .91. Bartlett's test of sphericity was significant, $\chi^2(120) = 2629.83$, $p < .001$, suggesting that the correlations between items were sufficiently large for factor analysis.

The EFA revealed four factors with eigenvalues greater than 1, which together explained 62.4% of the total variance. The factor loadings for each item are presented in Table 1. The factors identified were identical to the original English version of the HCQ: Positive Humor (PH), Negative Humor (NH), Outgroup Humor (OH), and Supervisor Support (SS). Cross-loadings were minimal, with all items loading more strongly on their intended factors than on alternative factors. This supports the distinctiveness of the four-factor structure.

**Confirmatory Factor Analysis (CFA) and Model Comparison.** A confirmatory factor analysis (CFA) was conducted using the lavaan package in R (version 4.4.2) to verify the four-factor structure identified in the EFA. The initial four-factor model showed a less than optimal fit: $\chi^2(104) = 445.59$, $p < .001$, RMSEA = .106 (90% CI [.090, .122]), CFI = .87, SRMR = .183. A unidimensional model in which all items loaded on a single factor demonstrated poor fit: $\chi^2(104) = 1465.51$, $p < .001$, CFI = .460, RMSEA = .213, SRMR = .182.

To further explore the factor structure, a bifactor model was tested, including a general Humor Climate factor along with four specific factors: Positive Humor, Negative Humor, Outgroup Humor, and Supervisor Support. During estimation, one item from the Negative Humor subscale ("A menudo, mis compañeros(as) de trabajo usan el humor para menospreciarse unos(as) a otros(as)") was removed due to estimation problems, including negative residual variance and lack of model identification. The final bifactor model, conducted on 15 items, demonstrated acceptable fit: $\chi^2(88) = 178.43$, $p < .001$, CFI = .984, RMSEA = .063 (90% CI [.050, .076]), SRMR = .064.

However, bifactor statistical indices revealed that the general factor accounted for only a limited portion of the reliable variance (ECV = 0.316, OmegaH = 0.128), while the specific factors showed stronger reliability (OmegaHS ranging from 0.185 to 0.673) and replicability (H indices from 0.728 to 0.885). The Item Explained Common Variance (IECV) analysis showed that only two items ("A menudo, si alguien comete un error, éste(a) es ridiculizado(a) por algunos miembros del grupo" and "A menudo, el humor es utilizado para intimidar a algunos miembros del grupo") exceeded the .85 threshold for essential unidimensionality. These findings confirm that the HCQ is best conceptualized and applied as a multidimensional measure, rather than through a single global humor climate score. This interpretation aligns with best practices that emphasize the need to complement global model fit with bifactor-specific indices such as ECV, omega coefficients, and PUC to avoid misleading conclusions about dimensionality (Rodriguez, Reise, & Haviland, 2016). As highlighted by Bonifay, Lane, and Reise (2015), models that superficially appear to fit well may overstate the relevance of a general factor unless complementary indices are carefully considered.

### *Descriptive Statistics, Validity, and Reliability*

Descriptive statistics for the HCQ dimensions, including means, standard deviations, Cronbach's alpha coefficients, and relationships with the Workplace Boredom Scale (WBS), are presented in Table 2. The reliability analysis showed good internal consistency for each of the HCQ dimensions, with Cronbach's alpha coefficients ranging from .713 to .913. In line with the bifactor analysis, the use of an overall HCQ total score is not recommended, as it does not adequately reflect the multidimensional nature of the instrument. Instead, the findings support the interpretation and use of dimension-specific scores. Validity analyses indicated meaningful relationships between the HCQ dimensions and workplace boredom, providing preliminary evidence of convergent and discriminant validity at the dimension level.

### *Measurement Invariance*

Measurement invariance across employment status groups (full-time vs. part-time) was assessed using multi-group CFA models testing for configural,

metric, and scalar invariance following Cheung & Rensvold (2002) and Putnick & Bornstein (2016). The configural model showed acceptable fit, $\chi^2(208) = 642.32$, $p < .001$, CFI = .92, RMSEA = .082. The metric model yielded $\chi^2(220) = 680.25$, $p < .001$, CFI = .91, RMSEA = .081, with a ΔCFI of .01. The scalar model showed $\chi^2(232) = 725.38$, $p < .001$, CFI = .90, RMSEA = .081, with a ΔCFI of .01.

Table 1

Humor Climate Questionnaire- Spanish version- items and factor loadings

| Loading | Factors and items |
|---|---|
| | *Positive humor* (eigenvalue = 2.38, variance explained = 14.9%) |
| .610 | A menudo, el humor se utiliza para motivar y apoyar a mis compañeros(as) de trabajo. |
| .642 | El humor es algo que todos(as) disfrutamos compartir en el trabajo. |
| .880 | A menudo, el humor de mis compañeros(as) de trabajo me anima. |
| .862 | El humor que utilizan mis compañeros(as) de trabajo hace que las tareas sean más agradables. |
| | *Negative humor* (eigenvalue = 2.34, variance explained = 14.6%) |
| .451 | A menudo, el humor utilizado por mis compañeros(as) de trabajo podría hacer sentir mal a alguien del grupo. |
| .621 | A menudo, si alguien comete un error, éste(a) es ridiculizado(a) por algunos miembros del grupo. |
| .772 | A menudo, el humor es utilizado para intimidar a algunos miembros del grupo. |
| .860 | A menudo, mis compañeros(as) de trabajo usan el humor para menospreciarse unos(as) a otros(as). |
| | *Outgroup humor* (eigenvalue = 2.92, variance explained = 18.3%) |
| .772 | A menudo, mis compañeros(as) de trabajo hacen chistes sobre 'la gerencia'. |
| .799 | A menudo, mis compañeros(as) de trabajo usan las políticas de la gerencia como punto común para chistes o ridiculización. |
| .788 | Disfrutamos reírnos juntos(as) de las políticas de la gerencia con las que no estamos de acuerdo. |
| .862 | Los chistes sobre las reglas de la empresa son comunes en mi grupo de trabajo. |
| | *Supervisor support* (eigenvalue = 2.34, variance explained = 14.6%) |
| .630 | Mi supervisor(a) cree que el humor distrae de realizar el trabajo. (r) |
| .704 | Intentar usar humor en el trabajo podría causar problemas con nuestro(a) supervisor(a). (r) |
| .708 | Mi supervisor(a) espera un ambiente de seriedad en el trabajo. (r) |
| .873 | Mi supervisor(a) piensa que el trabajo no es lugar para hacer chistes. (r) |

*Note*. As per Cann et al. (2014), when administering the Humor Climate Questionnaire, the items would be randomly ordered. Items followed by (r) are reverse scored.

These results suggest partial measurement invariance across employment status. However, given the multidimensional nature of the HCQ and the lack of support for a general factor, any group comparisons should be conducted and interpreted based on the specific dimensions of the HCQ, not on a global score. Future research should examine invariance at the dimension level across other sociodemographic groups.

### *Group Comparisons*

Exploratory group comparisons were conducted to examine differences in perceptions of humor climate across various demographic and employment-related groups, including job type, employment status, generation, and market sector. Given the multidimensional nature of the Humor Climate Questionnaire (HCQ) and the lack of support for a

global humor climate score, these analyses focused exclusively on the four distinct HCQ dimensions: Positive Humor (PH), Negative Humor (NH), Outgroup Humor (OH), and Supervisor Support (SS).

The results, presented in Table 3, display descriptive statistics—mean scores and standard deviations—for each HCQ dimension across the different subgroups. This comprehensive comparison highlights variability in humor climate perceptions within organizational and demographic contexts. For example, participants in professional services and the government sector reported higher levels of Positive Humor and Supervisor Support, while individuals in gig services and the nonprofit sector exhibited lower scores across most dimensions. Generational comparisons revealed that Generation Z participants reported higher Positive Humor and Supervisor Support, whereas Baby Boomers showed elevated levels of Outgroup Humor.

While these patterns offer valuable insights into how humor is perceived across groups, it is essential to emphasize that the findings are exploratory and descriptive. Given the partial support for measurement invariance and the multidimensional structure of the HCQ, these comparisons should be interpreted with caution. Future studies with larger and more diverse samples are recommended to assess these potential differences more robustly through formal statistical testing.

## Discussion

This study aimed to validate the Humor Climate Questionnaire (HCQ) within a diverse organizational context, examining its applicability and reliability across various employment types, sectors, and demographic variables. Our findings provide nuanced insights into the role of humor in the workplace, underscoring both its benefits and potential drawbacks.

### *Validation of the HCQ*

The exploratory and confirmatory factor analyses supported the four-factor structure of the HCQ, consistent with the original validation by Cann et al. (2014). These factors—Positive Humor, Negative Humor, Outgroup Humor, and Supervisor Support—demonstrated moderate to high internal consistency, indicating the HCQ's robustness in measuring humor climate across diverse settings. The bifactor model results further suggest that while a global humor climate factor may exist, the specific dimensions provide distinct and meaningful contributions to understanding workplace humor dynamics.

### *The Role of Humor in Workplace Dynamics*

The results align with existing literature on the multifaceted nature of humor in organizational settings (Martin, 2007; Romero & Cruthirds, 2006). Positive Humor (PH) was moderately prevalent across our sample, with scores suggesting that supportive and relationship-building humor is common in many workplaces. This form of humor has been linked to greater job satisfaction, creativity, and team cohesion. Negative Humor (NH), though less frequent, exhibited significant positive associations with workplace boredom, reinforcing concerns that aggressive or demeaning humor undermines interpersonal relationships and can contribute to disengagement (Trif & Fodor, 2019). Outgroup Humor (OH), typically directed toward external targets like management or policies, may serve as a coping mechanism that fosters in-group cohesion but also reflects dissatisfaction or cynicism, aligning with findings by Holmes (2002).

Supervisor Support (SS) emerged as a critical factor. Higher perceptions of humor-friendly supervisors were associated with lower levels of workplace boredom, echoing previous research highlighting the protective role of supportive leadership in fostering psychological safety and reducing stress (Yam & Wen, 2021).

### *Measurement Invariance and Caution in Group Comparisons*

While the study explored differences in HCQ scores across employment status, generations, and sectors, these comparisons are presented cautiously. Measurement invariance testing across employment status showed partial support, but invariance for other sociodemographic variables was not established. As recommended by Cheung and Rensvold (2002) and Putnick and Bornstein (2016), comparisons across groups without confirmed invariance should be interpreted with caution. Thus, findings related to demographic or sectoral differences remain exploratory and highlight the need for further investigation with larger samples and formal invariance testing.

### *Implications for Practice*

The findings carry important practical implications for organizational development. Fostering a positive humor climate can contribute to enhanced employee satisfaction, reduced boredom,

and improved team dynamics. Organizations should consider incorporating humor-awareness and positive humor strategies into leadership development and team-building initiatives.

However, attention must be paid to the nature of humor being promoted. Encouraging humor that excludes, demeans, or ridicules others can have harmful effects on morale, engagement, and psychological well-being. Supervisors and organizational leaders play a pivotal role in modeling and endorsing constructive humor styles that align with organizational values and promote inclusivity.

Table 2

Descriptive statistics, reliability, and intercorrelations for Workplace Boredom Scale and HCQ Dimensions

| Dimension | M | SD | α | PH | NH | OH | SS |
|---|---|---|---|---|---|---|---|
| HCQ | | | | | | | |
| Positive Humor (PH) | 22.11 | 5.22 | .835 | — | -.333 | -.327 | .108 |
| Negative Humor (NH) | 9.08 | 4.36 | .713 | | — | .476 | -.182 |
| Outgroup Humor (OH) | 15.39 | 7.74 | .913 | | | — | .039 |
| Supervisor Support (SS) | 17.22 | 6.57 | .841 | | | | — |
| Workplace Boredom (WBS) | 18.16 | 13.65 | — | -.294 | .431 | .464 | -.024 |

Table 3

Comparative analysis of Humor Climate Questionnaire' scores across different groups

| Groups | PH_ Mean | PH_SD | NH_ Mean | NH_SD | OH_ Mean | OH_SD | SS_ Mean | SS_SD | N |
|---|---|---|---|---|---|---|---|---|---|
| Job Type | | | | | | | | | |
| Employee | 17.1 | 6.62 | 9.28 | 4.38 | 15.9 | 7.64 | 22.1 | 5.25 | 249 |
| Gig Services (e.g., Uber, Airbnb) | 13 | | 9 | | 4 | | 16 | | 1 |
| Professional Services/Consulting | 17.9 | 6.95 | 8.29 | 3.92 | 13.7 | 8.18 | 23.1 | 4.53 | 31 |
| Volunteer | 17.7 | 4.97 | 7.17 | 4.07 | 10.8 | 4.96 | 21.7 | 5.39 | 6 |
| Other | 17.7 | 6.05 | 8.08 | 5.24 | 12.6 | 8.13 | 20.7 | 6.07 | 13 |
| Employment Status | | | | | | | | | |
| Full-time | 16.3 | 6.24 | 8.85 | 4.28 | 15.1 | 7.43 | 21.6 | 5.79 | 143 |
| Part-time | 17.9 | 6.79 | 9.38 | 4.47 | 15.8 | 8 | 22.6 | 4.63 | 151 |
| Other | 19.8 | 6.42 | 6.6 | 3.21 | 6.25 | 1.5 | 22.8 | 3.7 | 5 |
| Generation | | | | | | | | | |
| Baby Boomers | 17.5 | 4.46 | 8.82 | 3.09 | 16.8 | 7.55 | 18.9 | 7.87 | 11 |
| Generation X | 17.3 | 6.25 | 7.96 | 4.09 | 13 | 6.68 | 21.7 | 4.88 | 56 |
| Millennials | 16.7 | 7.29 | 9.33 | 5.02 | 16.4 | 7.91 | 20.9 | 6.85 | 54 |
| Generation Z | 17.4 | 6.63 | 9.36 | 4.3 | 15.8 | 7.91 | 22.8 | 4.42 | 177 |
| Market sector | | | | | | | | | |
| Food | 15.4 | 7.79 | 12.8 | 5.09 | 20.9 | 7.27 | 22.3 | 4.56 | 42 |
| Communications | 20 | 5.1 | 6.67 | 2.58 | 9.17 | 5.34 | 24.3 | 4.32 | 6 |
| Education | 18.8 | 5.22 | 7.17 | 3.51 | 14.5 | 8.31 | 22.1 | 5.93 | 48 |
| Finance | 14.7 | 5.52 | 10.3 | 5.48 | 12.3 | 6.63 | 20.5 | 5.84 | 10 |
| Government | 21.2 | 3.78 | 8.81 | 4.31 | 13.9 | 5.77 | 20.8 | 5.23 | 16 |
| Retail | 17.1 | 6.27 | 8.93 | 4.31 | 15.9 | 7.44 | 23.3 | 4.47 | 60 |
| Nonprofit | 14.8 | 3.83 | 9 | 4.3 | 14.6 | 6.07 | 20.4 | 1.52 | 5 |
| Health | 15.8 | 7.2 | 7.6 | 2.8 | 14.4 | 7 | 21.4 | 5.55 | 30 |
| Other | 17.3 | 6.92 | 9.01 | 3.81 | 14.2 | 7.65 | 21.8 | 5.57 | 83 |

*Note*. N = 300. Table 3 presents descriptive statistics (means and standard deviations) for each dimension of the Humor Climate Questionnaire (HCQ)—Positive Humor (PH), Negative Humor (NH), Outgroup Humor (OH), and Supervisor Support (SS)—across various groups categorized by job type, employment status, generation, and market sector. These comparisons are exploratory and based on dimension-specific scores, as the use of a global HCQ score is not supported by the bifactor analysis. Interpretations should be made cautiously in light of the multidimensional structure of the scale.

### *Limitations*

Several limitations of this study should be acknowledged. First, although the EFA supported the four-factor structure, the CFA results indicated less than optimal fit, suggesting the need for further refinement of the measurement model. Second, the removal of one item from the Negative Humor dimension highlights potential issues with the stability of this subscale that warrant closer examination. Third, measurement invariance was only partially supported for employment status and was not established for other sociodemographic variables such as generation or sector, limiting the ability to draw definitive conclusions about group differences. Fourth, the cross-sectional design of this study restricts any claims about the causal effects of humor climate on organizational outcomes.

### *Directions for Future Research*

Future research should continue to examine the psychometric properties of the HCQ, particularly through the use of larger and more diverse samples. Further testing for measurement invariance across additional demographic variables is essential to ensure the validity of group comparisons. Researchers should also consider exploring alternative measurement models, including bifactor and hierarchical structures, to better capture the complexity of humor in organizational settings. Consistent with recommendations by Flores-Kanter et al. (2018), future research should apply both conceptual and statistical criteria when evaluating bifactor models, particularly when deciding on the utility of global scores versus specific dimensions. Additionally, longitudinal studies could provide valuable insights into how humor climate evolves over time and how it influences key organizational outcomes such as employee engagement, retention, and psychological well-being. Finally, qualitative studies could complement these findings by exploring employees' lived experiences of humor in the workplace, offering a richer understanding of the context-specific nature of humor climate.

## Conclusion

This study underscores the significant role that humor plays in workplace dynamics, demonstrating its multifaceted effects on employee satisfaction, team cohesion, and overall well-being. By validating the Humor Climate Questionnaire (HCQ) in diverse organizational settings, we have shown that this tool is effective in capturing the nuances of humor within different work environments.

The exploratory factor analysis (EFA) supported the original four-factor structure of the HCQ; however, the confirmatory factor analysis (CFA) revealed a less than optimal model fit, suggesting that while the theoretical structure holds, the empirical representation requires further refinement. The bifactor model provided better fit, but its results also confirmed that the HCQ functions best as a multidimensional measure rather than through a single global score. Despite this limitation, the HCQ dimensions yielded meaningful insights. Positive Humor was associated with enhanced job satisfaction and team performance, while Negative Humor was linked to increased workplace boredom and potential interpersonal tensions. Outgroup Humor, while sometimes serving as a bonding mechanism, often reflected dissatisfaction with organizational policies or leadership.

Ultimately, humor is not merely a workplace accessory—it is a powerful social force that can shape how individuals connect, collaborate, and thrive within their organizations. By deepening our understanding of humor climate, we take an important step toward building workplaces that are not only more productive, but also more inclusive, humane, and resilient.

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**Consentimiento Informado:** Las personas participantes completaron el consentimiento informado de forma virtual.