

Measurement and Evaluation in Counseling and Development



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/uecd20

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To cite this article: Edith Gonzalez, Katharine R. Sperandio, Patrick R. Mullen & Victor E. Tuazon (2021) Development and Initial Testing of the Multidimensional Cultural Humility Scale, Measurement and Evaluation in Counseling and Development, 54:1, 56-70, DOI: 10.1080/07481756.2020.1745648

To link to this article: https://doi.org/10.1080/07481756.2020.1745648

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ASSESSMENT, DEVELOPMENT, AND VALIDATION



Development and Initial Testing of the Multidimensional Cultural Humility Scale

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ABSTRACT

This study describes the development and initial testing of the Multidimensional Cultural Humility Scale (MCHS), a counselor-report scale to measure a counselor's cultural humility, with a sample of 861 participants. Exploratory factor analysis, confirmatory factor analysis, and internal reliability coefficients revealed evidence for the convergent and discriminant validity and internal reliability of scores on the scale.

KEYWORDS

Cultural humility; scale development; exploratory factor analysis; confirmatory factor analysis

Cultural humility has been introduced to the counseling field as a therapeutic stance set to promote positive outcomes in counseling (Hook et al., 2013). The exploration of cultural humility in the counseling relationship often includes comparing this concept to that of multicultural competence (Hook et al., 2013; Owen et al., 2011). While multicultural competencies focus on the counselor's acquisition of knowledge and skills, cultural humility refers to the counselor's way of being with a client (Owen, 2013; Owen et al., 2011). Counselors with high levels of cultural humility refuse the assumption that they hold competence for working with clients from all cultural backgrounds (Hook et al., 2013); therefore, culturally humble counselors reject an expert stance and work collaboratively with clients to obtain a deeper understanding of their cultural lens and background (Owen et al., 2016). Adopting a culturally humble stance when working with diverse clients has been correlated with positive outcomes, including a positive therapeutic relationship between counselor and client (Hook et al., 2013).

Adopting a multicultural approach when servicing clients is critical as delineated by the American Counseling Association (ACA)'s Code of Ethics (2014) and the 2016 Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards. One of the core professional values of ACA's Code of Ethics (2014) is to honor diversity and embrace "a multicultural approach in support of the worth, dignity, potential, and uniqueness of people within their social and cultural context" (p. 3). Considering a client's multicultural context is further implemented on the various aspects of counseling, including confidentiality and privacy (B.1.a), professional context (C.2.a), assessment (E.8), supervision (F.2.b), and counselor education (F.7.c; American Counseling Association, 2014). A counselor using a cultural humility lens will collaboratively work with the client in the therapeutic relationship (Owen et al., 2016), thus gaining deeper understanding of the client's social and cultural context. The 2016 CACREP standards further emphasize the importance of training counselors to work with diverse populations by noting social and cultural diversity as one of the common core areas for CACREP institution to

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have. Particularly, counselor educators in CACREP programs are required to discuss the "effects of power and privilege for counselors and clients" (CACREP, 2015, F2.e). A cultural humility stance aligns with the concept of power differentials between counselor and client; counselors adopting a cultural humility approach works toward flattening all power differentials between them and their clients (Foronda et al., 2016).

In response to the promise of cultural humility in counseling, Hook et al. (2013) developed a cultural humility scale in which clients evaluate their counselors' level of cultural humility. The scale demonstrates a positive correlation between cultural humility and a strong working alliance between counselor and client. In order to add to the literature and research on cultural humility, the purpose of this study was to develop and examine the psychometric properties of scores on a counselor-report cultural humility scale.

Cultural Humility

Tervalon and Murray-Garcia (1998) introduced the concept of cultural humility in the medical and nursing fields, which has since been applied to different fields. Cultural humility was defined as, "the ability to maintain an interpersonal stance that is other-oriented (or open to the other) in relation to aspects of cultural identity that are most important to the client" (Hook et al., 2013, p. 354) and is a quality learned through different experiences. Tinkler and Tinkler (2016) identified that critical pedagogical and teaching practices (i.e., critical service learning) improve an individual's level of cultural humility and can be implemented into the classroom. Still, the acquisition of cultural humility is a lifelong learning process that involves a commitment to self-evaluation and critique, and continuously working to address power imbalances that exist within the helping professional-client dynamic (Tervalon & Murray-Garcia, 1998). Cultural humility is established by demonstrating a less controlling and authoritative style when working with clients or patients as the helping professional releases the role of the expert. The lifelong learning process, which involves a combination of self-reflection and commitment, decreases the likelihood for helping professionals to engage in stereotyping behavior. Cultural humility calls for an awareness of one's personal values and beliefs and reflection of diverse cultures to allow the practitioner to better understand others (Yeager & Bauer-Wu, 2013).

In contrast to multicultural competence, cultural humility has no designated endpoint. It is instead a way of being with clients (Foronda et al., 2016) and advocates for one to strive for the highest level of learning (i.e., the transformation of perspective and way of life; Mezirow, 1991). The way of being within the concept of cultural humility is synonymous with person-centered therapy's core condition of unconditional positive regard (Owen et al., 2016). While multicultural competency highlights the importance of the counselor's acquisition of knowledge and skills for the purpose of working with culturally diverse individuals, cultural humility puts an emphasis on the absence of the assumption of knowledge or expertise on the subject of cultural diversity (Owen, 2013; Owen et al., 2011).

Five Components of Cultural Humility

Foronda et al. (2016) performed a concept analysis to identify the components outlining the construct of cultural humility. Through an intensive exploration of the current literature on cultural humility, the authors identified five dimensions that represent the essence of the concept: (a) openness, (b) self-awareness, (c) egoless, (d) supportive interactions, and (e) self-reflection and critique. For an individual to achieve genuine openness when working with an individual, one must maintain an actively open mind and be open to interactions. Such openness, which is a requisite for the presence of cultural humility, reflects the simple ability to explore new ideas with others and to be open to their beliefs, values, and diverse worldviews (Hook et al., 2013).

Self-awareness encompasses a proficiency in being aware of one's own strengths, limitations, values, beliefs, behaviors, and appearance to others and how these factors impact one's interactions with others (Foronda et al., 2016). Egoless refers to a counselor's ability to maintain a stance of humility while acknowledging the true worth of others. A culturally humble, egoless counselor will work to flatten all power differentials as deemed appropriate, depending on the client's cultural worldview. Supportive interactions are defined as positive interactional exchanges between humans. Finally, the self-reflection and critique attribute is marked by a critical process of reflecting how one's personal thoughts, feelings, and behaviors can have an impact on interactional processes with others. Along with the five dimensions outlined above, Foronda et al. defined the consequences of cultural humility as mutual empowerment, partnerships, respect, optimal care, and lifelong learning.

Therapeutic Outcomes

Research has shown that cultural humility increases positive therapeutic outcomes in counseling (Owen et al., 2016). In particular, researchers have found through multiple studies that the client's perception of the counselor's cultural humility strengthened working alliances and predicted positive counseling outcomes (e.g., Hook et al., 2013; Owen et al., 2014). Counselors with high levels of cultural humility develop a safe, trusting rapport with clients by adopting an other-awareness stance whilst in session, consequently strengthening the working alliance with their clients (Hook et al., 2013). Counselors who are perceived to have high levels of cultural humility are also seen to be more engaged in sessions. Clients who had counselors who took the time to engage in cultural discussions had improved treatment outcomes (Owen et al., 2016). In addition to improving working alliances and therapeutic outcomes, clients' perception of their counselor as culturally humble was associated with clients' perception of their counselor's multicultural competence.

Cultural humility is identified as an important characteristic for effectively working with diverse clients (Owen et al., 2016). For example, counselors with high levels of cultural humility commit fewer racial microaggressions (Hook et al., 2016). Microaggressions are defined as "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group" (Sue et al., 2007, p. 273). Counselors who adopt a stance of cultural humility in their sessions are less likely to miss opportunities related to the diverse backgrounds of their clients (Hook et al., 2013). Sensitivity to cultural differences positively impacts the therapeutic relationship between counselors and culturally diverse clients (Hook et al., 2016). Yet, counselors perceived by their clients to have high levels of cultural humility who commit racial microaggressions against those clients were able to repair relationships more easily than counselors perceived to have low levels of cultural humility. Microaggressions negatively affect how clients see their counselors (Davis et al., 2016), but a strong alliance can buffer how clients perceive microaggressions so that they do not significantly negatively affect therapeutic outcomes (e.g., Constantine, 2007; Owen et al., 2010, 2011).

Cultural Humility Scale

Despite the importance of cultural humility, there are limited measures. The Cultural Humility Scale (CHS) measures a counselor's level of cultural humility from the *client's* point-of-view (Hook et al., 2013). The CHS is a 12-item measure consisting of two factors: (a) positive other-oriented characteristics and (b) negative characteristics reflecting superiority and making assumptions. The items of the CHS are rated on a 6-point Likert scale ranging from strongly disagree to strongly agree. The scale consists of two parts. First, the participants are asked to identify the one aspect of their cultural background that is most central to how they define themselves as



individuals. The second part consists of participants answering the 12 items, which are aimed to evaluate their counselor's cultural humility. To date, there are no counselor-report measures that self-evaluate a clinician's cultural humility. A counselor-report measure on this construct may be useful for research or supervision as it can be paired with the CHS or other measures (e.g., Counselor Competency Scale; Lambie et al., 2018).

Development of the Multidimensional Cultural Humility Scale

We developed the MCHS to further the research and literature on cultural humility. The existing CHS examines a counselor's cultural humility based on the client's perspective. Given the positive outcomes of cultural humility in counseling, a counselor-report scale may be of use to measure clinicians' perceived cultural humility as a way to better understand their self-awareness. To create the MCHS measure, we followed recommended instrument development procedures (DeVellis, 2017; Lambie et al., 2017) for item creation and content development. Specifically, we performed the following steps: (a) identified what to measure, (b) created an item pool for each content area, (c) determined the type of scale measurement, (d) had the items and scale reviewed by an expert panel, and (e) included validation items.

Prior to creating the scale, we consulted literature on cultural humility to define and develop an item pool for the MCHS. We created a table of specifications using the five dimensions of cultural humility Foronda et al. (2016) identified. The five dimensions of the MCHS include: (a) openness, (b) self-awareness, (c) ego-less, (d) supportive interactions, and (e) self-reflection and critique. Then, we created an appropriate number of items to represent each of these five domains, which resulted in 49 total items. During the item development process, we collectively wrote out the items with attention to best practices (Lambie et al., 2017) and then we reviewed the items independently. Next, we decided on a 6-point Likert scale where 1 represents strongly disagree, 2 represents disagree, 3 represents slightly disagree, 4 represents slightly agree, 5 represents agree, and 6 represents strongly agree. This scale format we decided upon based on guidance from relevant literature (DeVellis, 2017). Subsequently, the measure was sent to an expert review panel that consisted of three peer reviewers, four external reviewers, and four expert reviewers to evaluate the scale and items. We incorporated reviewer feedback individually and in a sequential process so that each panelist reviewed the newest version of the scale, and we took detailed notes to monitor these changes. After integrating feedback from the entire expert panel, the MCHS consisted of 57 items. In our last step, we embedded two validation items (e.g., "If you are reading this item, please select strongly disagree."). These validation items screened for inattentive participants and were not used for data analyses.

In the next steps, we examined the psychometric properties of scores on the MCHS with a developmentally and contextually appropriate sample. The sample consisted of helping professionals who were actively working with diverse clientele at the time of the scale administration. The sample of this study closely represented the national sample of counselors (Data USA, 2018). For example, in both samples, there are more female counselors compared to male counselors. Additionally, the most common race or ethnicity in both samples is White. The examination process included administering the scale, evaluating items through statistical analysis, and optimizing scale length (DeVellis, 2017). In addition, we administered a measure of self-awareness and social desirability to examine convergent and discriminant validity respectively (Swank & Mullen, 2017). Self-awareness is considered one of the five elements of cultural humility and relevant to this construct (Foronda et al., 2016); thus, it was used as a measure of convergent validity. Additionally, social desirability is a trait that has no theoretical relevance with cultural humility and it is undesirable that the scale relates to this construct, which makes social desirability a useful comparison for discriminant validity. To accomplish these aims, we facilitated a research study with a sample of practicing counselors for whom we administered and evaluated the scale. Specifically,

Table 1. Participants' Demographic Characteristics.

Demographic Characteristics	
	M (SD)
Age	49 (13.32)
Post-Graduate Experience (years)	14.48 (11.28)
	n (%)
Gender	
Female	685 (80.0%)
Male	159 (18.4%)
Race/Ethnicity	
White	553 (64.2%)
Hispanic/Latino	142 (16.5%)
Black/African American	82 (9.5%)
Multiracial	28 (3.3%)
Asian	10 (1.2%)
American Indian/Alaska Native	5 (0.6%)
Other	39 (4.5%)
Type of Employment	
Private Practice	246 (28.6%)
Outpatient	229 (26.6%)
Residential	47 (5.5%)
K-12 School	45 (5.2%)
University Faculty	31 (3.6%)
Intensive in-home	24 (2.8%)
Acute Psychiatric	17 (2.0%)
College Counseling Center	15 (1.7%)
Other	200 (23.2%)
Discipline	
Licensed Professional Counselor	309 (35.9%)
Social Work	292 (33.9%)
Clinical Psychology	112 (13.0%)
Marriage and Family Therapist	66 (7.7%)
School Counseling	12 (1.4%)
Other	69 (8.0%)

Note. N = 861.

the following questions were used in our study to examine the psychometrics properties of the MCHS:

- 1. What is the factor structure of MCHS a counselor-report scale to measure cultural humility?
- 2. What are the internal reliabilities of subscales in MCHS?
- 3. Does MCHS demonstrate good convergent validity with Situation Self-Awareness Scale (SSA; Govern & Marsch, 2001)?
- 4. Does MCHS demonstrate good discriminant validity with the Marlowe-Crowne Social Desirability Scale-Form C (MCSDS-FC; Reynolds, 1982)?

Method

Participants and Procedure

Table 1 displays the demographics of the participants in this study. Prior to the start of this study, we received approval from our Institutional Review Board. To acquire a sample of practicing counselors, we downloaded a publicly available database of helping professionals in a southern state in the United States. After accessing the list of helping professionals, we applied simple random sampling strategies for the entire list using a random number generator and identified 10,000 participants to invite to the study. Next, we sent a series of three emails to the sample using tailored design method (Dillman et al., 2014) for survey research. Interested participants



Table 2. Multidimensional Cultural Humility Scale.

Dimension	ltems			
Openness	I am comfortable asking my clients about their cultural experience. (1)			
	I seek to learn more about my clients' cultural background. (2)			
	I believe that learning about my clients' cultural background will allow me to better help my clients. (4)			
Self-Awareness	I seek feedback from my supervisors when working with diverse clients. (11)			
	I incorporate feedback I receive from colleagues and supervisors when I am faced with problems regarding cultural interactions with clients. (13)			
	I am known by colleagues to seek consultation when working with diverse clients. (14)			
Ego-less	I ask my clients about their cultural perspective on topics discussed in session. (12)			
	I ask my clients to describe the problem based on their cultural background. (27)			
	I ask my clients how they cope with problems in their culture. (28)			
Supportive Interactions	I wait for others to ask about my biases for me to discuss them. (Reverse coded) (42)			
	I do not necessarily need to resolve cultural conflicts with my client in counseling. (Reverse coded) (43)			
	I believe the resolution of cultural conflict in counseling is the clients' responsibility. (Reverse coded) (44)			
Self-Reflection and Critique	I enjoy learning from my weaknesses. (49)			
	I value feedback that improves my clinical skills. (50)			
	I evaluate my biases. (59)			

completed the study on a Qualtrics (2013) survey management website. Costello and Osborne (2005) recommend a 20:1 participant-per-item ratio when collecting a sample. Therefore, our team sent our study to 10,000 participants in order to gain the recommended ratio. Of this sample, 169 participants' email address did not work, resulting in a total of 9,831 individuals contacted and a total of 1,028 completed surveys (10.45% response rate). After screening participants for missing cases and answers to the two validation items, 167 participants were removed. The final response rate for this study was 8.76% (n = 861) and a final participant-per-item ratio was 7:1 for the initial 57-item scale (excluding validation items), a moderately strong ratio (Costello & Osborne, 2005), therefore meeting the minimum amount of data to conduct factor analysis.

Measures

Multidimensional Cultural Humility Scale (MCHS)

The MCHS is a 57-item counselor-report scale of cultural humility among counselors or other helping professions. Items were developed based on Foronda et al.'s (2016) five dimensions of cultural humility: openness, self-awareness, ego-less, supportive interactions, and self-reflection and critique. Original items for openness included, "I am interested in learning more about my client's culture" and "I am open to seeking things from the client's perspective." Items constructed for self-awareness included, "I readily admit when I am wrong" and "I recognize missed opportunities to discuss my client's cultural background." The dimension for ego-less consisted of items such as, "I feel confident in the cultural knowledge I already have" and "I rely on my knowledge of the client's culture." Original items for supportive interactions included, "I selfdisclose about my cultural influences" and "I think it's important to make clients feel supported." The self-reflection and critique dimension consisted of items such as, "I seek consultation with colleagues" and "I check-in with clients for feedback." Items are rated on a six-point Likert scale, ranging from strongly disagree to strongly agree. Higher scores represent greater levels of cultural humility. The reliability of scores on the MCHS is described as a part of the results section. The final items for the MCHS are indicated in Table 2.

Situational Self-Awareness Scale (SSAS)

The SSAS (Govern & Marsch, 2001) is a nine-item scale that measures self-perceptions of self-awareness. The SSAS contains three factors (i.e. public self-awareness, private self-awareness, and awareness of immediate surroundings). Each item is rated in a 7-point Likert-type scale, ranging from strongly disagree to strongly agree. Some items included, "Right now, I am conscious of my inner feelings" and "Right now, I am concerned about what other people think of me." Higher scores represent greater levels of self-awareness. The SSAS has demonstrated discriminant and convergent validity in previous research validity (Carver & Glass, 1976; Turner et al., 1978). In prior research, the Cronbach's alpha were .82 for public, .70 for private, and .72 for immediate surroundings selfawareness (Govern & Marsch, 2001). In the current study, Cronbach's alpha were .72 for public selfawareness, .73 for private self-awareness, and .75 for awareness of immediate surroundings.

Marlowe-Crowne Social Desirability Scale-Short Form (MCSDS)

The short form of the MCSDS-FC (Reynolds, 1982) is a 13-item scale that measures social desirability on a forced choice true-false response format. The MCDS-FC item scoring is based on a 1 (items that are socially desirable) to 0 (items that are not socially desirable) range. Some items included, "I don't find it particularly difficult to get along with loud mouthed, obnoxious people" and "I am always courteous, even to people who are disagreeable." Total scores on the assessment ranged from 0 to 13. Higher MCSDS-FC scores represent a greater degree of socially desirable responding. The average score for the MCSDS-FC was 5.67. Internal consistency for the MCSDS-FC was .76. Reynolds (1982) reported that the MCDS demonstrated concurrent validity by examining correlations with the standard version and the Edwards Social Desirability (Edwards, 1957). The MCSDS-FC short form was utilized to ensure that responses to the survey were not influenced by social desirability bias. The current sample had a Cronbach's alpha of .78 for scores on the MCSDC-FC.

Data Screening and Analysis

We screened the data for missing cases and removed participants who did not complete the study, which resulted in the removal of 95 cases from consideration. Participants with unanswered items on the scales were considered as an incomplete case. Next, we examined two validation items included in the MCHS, which identified 72 participants who we removed from consideration because they did not appropriately answer these items. This resulted in 861 responses analyzed in this study. We evaluated the skewness and kurtosis values and histograms for the individual items, and we examined multivariable normality by assessing a probability-probability plot. These screenings of normality indicated the presence of univariate and multivariate non-normal data.

In our subsequent step, we randomly split the sample in half $(n_1 = 430, n_2 = 431)$ using SPSS (Version 24.0). Then, we performed an exploratory factor analysis (EFA) to explore the dimensionality of the MCHS with the first sample ($n_1 = 430$). The presence of non-normal data led to our decision to apply principal axis factoring with an oblique rotation (promax with Kaiser normalization) because we anticipated the factors within the scale would be correlated (Costello & Osborne, 2005; Watson, 2017). Following the EFA, we examined the internal consistency reliability by calculating Cronbach's alpha coefficient. After identifying an initial factorial structure in the EFA, we performed a confirmatory factor analysis (CFA) with the second sample $(n_2 = 431)$ in an attempt to cross-validate the findings from the EFA. We employed several recommended fit indices during the CFA (Kline, 2011; Schumacker & Lomax, 2010), including: (a) confirmatory fit index (CFI; values above .95 represent good fit), (b) Tucker-Lewis Index (TLI; values close to .90 or .95 represent good fit), (c) root mean square error of approximation (RMSEA; values below .08 indicate adequate fit), and (d) relative or normed chi-square (χ^2 /df, values below 3.0 indicate fit). In addition, we used the Bollen-Stine bootstrap p values in addition to a maximum likelihood estimation technique because of the non-normal data. Finally, because of the presence of nonnormal data, we used Spearman's rho correlations to examine the relationships between scores on the MCHS and scores on the SASS and MCSDS to develop evidence of construct validity.

Results

Exploratory Factor Analysis

An EFA was applied to the first sample that included a total of 430 participants who completed the MCHS using IBM SPSS Statistics (version 24). The EFA was employed to examine the dimensionality of the MCHS by examining the factor loadings. Within the EFA, we explored the number of factors generated by the data, how each item loaded on the factors, and the percentage of variance explained by each factor. We examined the Bartlett's test statistic and found that it produced a significant value ($\gamma^2 = 14,125.41, p < .001$) and the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy produced .91. These initial analyses indicated the sample was appropriate for the EFA. We applied a principal axis factor extraction methodology with an oblique rotation (promax) with the 57 item MCHS to examine the number of factors to retain. Initially, the EFA identified a 14-factor solution that accounted for 56% of the shared variance and had an eigenvalue of 1 or higher (Kaisers Rule). An inspection of the scree plot did not support these results due to no distinct break between factors 14 and 15. We performed parallel analysis using the syntax provided by O'Connor (2000) with 100 random datasets. A comparison of eigenvalues indicated that the crossing point lies between factor 14 and 15. Thus, we concluded that 14 factors was the most accurate number to be extracted from the initial data.

In the successive analyses, we examined evidence for the validity of items and factors, and to increase parsimony and establish adequate representation of constructs (Costello & Osborne, 2005; Watson, 2017). To evaluate items and factors, we examined: (a) item commonalities (retaining items over .40), (b) factor loadings (retaining items over .32), (c) number of items per factor (retained factors with at least three items), (d) measurement sampling accuracy (MSA) for each item (retain items with a value of .5 or greater), and (e) examined cross loading (removed items with a value of .32 or higher on more than 1 factor; Costello & Osborne, 2005; Hair et al., 2006). Also, we developed the MCHS to be a concise yet expansive scale; thus, we sought to minimize the number of items.

An examination of the extracted commonalities, factor loadings, and cross loading variables resulted in the removal of 45 items from the initial scale. During the evaluation process, 21 items were removed due to low commonalities, 19 items were removed due to insufficient factor loading, and five items were removed due to cross-loading. Then, we systematically re-loaded each item that was previously removed to examine potential items to retain, a process that resulted in including three additional items. The revised version of the MCHS produced good KMO measure

Table 3.	Exploratory	Factor	Analysis	Results	for	the	MCHS.
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			Factors			Ext.
Item Number	1	2	3	4	5	Comm
Item 1	0.65	-0.03	0.00	-0.02	0.02	0.40
Item 2	0.98	-0.03	-0.02	-0.04	-0.06	0.85
Item 4	0.50	0.00	0.06	0.09	0.06	0.37
Item 11	-0.08	0.82	-0.05	-0.02	-0.03	0.58
item 12	0.14	0.23	0.40	0.02	-0.06	0.38
Item 13	0.11	0.56	-0.04	0.13	0.04	0.47
Item 14	-0.03	0.63	0.07	-0.06	0.01	0.39
Item 27	-0.06	-0.03	0.88	-0.08	0.03	0.69
Item 28	0.06	-0.05	0.64	0.15	0.02	0.53
Item 42	0.04	0.04	-0.03	0.04	0.51	0.29
Item 43	0.04	0.03	0.05	-0.19	0.62	0.38
Item 44	-0.09	-0.07	0.02	0.12	0.59	0.36
Item 49	0.05	-0.04	-0.01	0.57	-0.01	0.33
Item 50	0.08	0.03	-0.11	0.61	0.11	0.47
Item 59	-0.11	-0.01	0.12	0.63	-0.11	0.36
Eigenvalue	4.15	1.56	1.39	1.28	1.07	
% Explained	27.63	10.39	9.27	8.52	7.14	

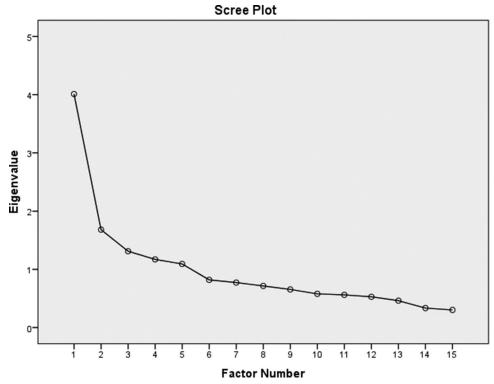


Figure 1. Scree plot for exploratory factor analysis with promax rotation of MCHS scale items.

of sampling adequacy (value of .81), Bartlett's test (df = 105, $\chi^2 = 1,559.81$, p < .001), a 29:1 ratio of participants to items, and sufficient MSA (.66 or greater) for each item. The EFA (see Table 3) produced a model with five factors that explained 62.95% of the variance and had an eigenvalues of 1 or higher (Kaisers Rule). The scree plot (Figure 1) demonstrated a distinct break between 5 and 6 factors, which supports the findings. Factor one produced an eigenvalue of 4.15 (27.66% of the variance), factor two produced an eigenvalue of 1.56 (10.39% of the variance), factor three produced an eigenvalue of 1.39 (9.27% of the variance), factor four produced an eigenvalue of 1.28 (8.52% of the variance), and factor five produced an eigenvalue of 1.07 (7.14% of the variance). A second parallel analysis using the syntax provided by O'Connor (2000) with 100 random datasets was conducted to confirm our findings. The results from the parallel analysis with the final 15-item scale confirmed the final five factors extracted with the EFA. The Cronbach's alpha for the entire scale was .78. The Cronbach's alpha coefficients produced acceptable internal consistency reliability for most of the five factors with these data with values of .73, .69, .72, 62, and .59 respectively. However, factor four and five produced questionable Cronbach's alpha coefficients. The factors were labeled Openness, Self-Awareness, Ego-Less, Self-Reflection and Critique, and Supportive Interactions, respectively. The five factors replicated the Foronda et al.'s (2016) five-component model. Table 2 presents the final items assigned to the five dimensions for the Multidimensional Cultural Humility Scale.

Confirmatory Factor Analysis

In the next step, we facilitated a CFA using the second sample $(n_2 = 431)$ in AMOS (Version 24). The CFA tested the 15-item five-factor model of the MCHS that was revealed in the EFA. The CFA yielded factor loadings from .57 to .88 for Openness, .56 to .72 for Self-Awareness, .68

Table 4. Correlations Between Scores on the MCHS and Self-Awareness and Social Desirability Demonstrating Evidence for Convergent and Discriminant Validity.

MCHS Scales	Surroundings Self-Awareness	Private Self-Awareness	Public Self-Awareness	Social Desirability
Openness	.20**	.16**	.65**	09**
Self-Awareness	.17**	.18**	.25**	05
Ego-less	.19**	.18**	.42**	05
Self-Reflection and Critique	.23**	.27**	.31**	10**
Supportive Interactions	.05	.09*	.31**	.05

Note. ** p < .01; *p < .05; MCHS = Multidimensional Cultural Humility Scale.

to .78 for Ego-Less, .46 to .67 for Self-Reflection and Critique, and .47 to .51 for Supportive Interactions (Figure 2). The hypothesized model analyzed in this CFA produced a good fitting model across all fit indices: $\chi^2 = 147.89$ (df = 80, p < .001), $\chi^2/df = 1.85$, CFI = .95, TLI = .94, RMSEA = .04, Bollen-Stine bootstrap p value of .03. Therefore, no modifications were made. However, we compared the five-factor model to a one-factor model to provide evidence for the dimensionality of the MCHS. The one factor model analyzed in this CFA produced a poor fitting model across all fit indices: $X^2 = 635.29$ (df = 90, p < .001), $\chi^2/df = 7.06$, CFI = .62, TLI = .56, RMSEA = .12, Bollen-Stine bootstrap p value of .001. Regarding internal consistency reliability, the Cronbach's alpha coefficients produced were acceptable for most of the five factors with values of .76, .66, .77, .56, and .53 respectively. Similar to earlier analysis, factors four (Self-Reflection and Critique) and five (Supportive Interactions) has questionable alpha coefficients. The Cronbach's alpha for the entire scale was .79.

Relationship Between MCHS and Self-Awareness

We investigated the relationship between scores on the MCHS factors and the SSAS using Spearman's rho correlation coefficient (see Table 4). Overall, all five factors of the MCHS were positively correlated with all three subscales of the SSAS. MCHS Factor 1 had a positive, yet small, correlation with the Surroundings and Private subscales of the SSAS. MCHS Factor 1 had a large positive correlation with the Public subscale of the SSAS. MCHS Factor 2 had positive, yet small, correlation with all three of the subscales of the SSAS. MCHS Factor 3 had positive correlations with all three of the subscales of the SSAS. MCHS Factor 4 had positive correlations with all three of the subscales of the SSAS. MCHS Factor 5 had positive correlations with two subscales of the SSAS, including Private and Public. MCHS Factor 5 had a nonsignificant positive correlation with Surroundings subscale of the SSAS. The significant correlations between four factors of the MCHS (e.g., Openness, Self-awareness, and Self-reflection and Critique) and all three subscales of the SSAS established some convergent validity

Relationship Between MCHS and Social Desirability

All 861 participants completed the MCSDS-FC (Reynolds, 1982) and 58.9% of individuals (M=5.81, SD=3.21) scored below the recommended amount (e.g., a score of 6 or less) for indication of social desirability. Thus, more than half of the participants were not answering in a social desirable way. We investigated the relationship between scores on the MCHS factors and the MCSDS-FC using Spearman's rho correlation coefficient (see Table 4). MCHS factors 1, and 4 had small negative correlations with participants' total scores on the MCSDS-FC. MCHS factor 2, factor 3, and factor 5 did not have a statistically significant correlation with participants' MCSDS-FC total scores. The lack of strong correlations between three of the MCHS factors (e.g., self-awareness, ego-less, and supportive interactions) and social desirability established some discriminant validity for the MCHS.

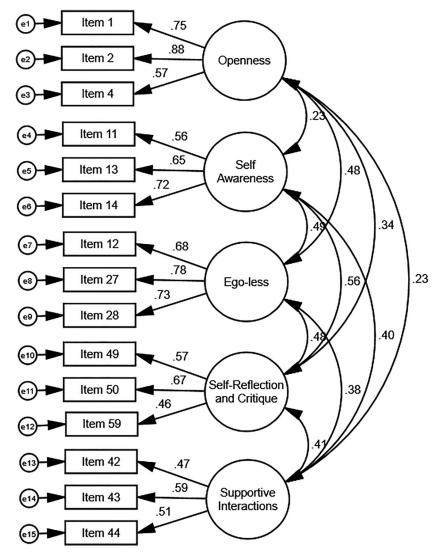


Figure 2. Confirmatory factor analysis results for the MCHS.

Discussion

The principal aim of the present study was to design a counselor-report scale to measure a counselor's cultural humility. Items were developed based on the five factors of cultural humility (Foronda et al., 2016). The psychometric properties of the MCHS were analyzed within a sample of 861 practicing helping professionals from a southern state. The researchers used a principal axis factoring with an oblique rotation. After removing items due to low commonalties, factor loadings, and cross loading variables, the MCHS was reduced to a total of 15 items, explaining 62.95% of variance. EFA indicated that the MCHS is compromised by five factors: a counselor's Openness to knowing more about their diverse clients; a counselor's Self-awareness of their own skills and knowledge; a counselor's ability to eliminate power differentials (Ego-less); a counselor's ability to Self-reflect and critique; and a counselor's ability to provide positive, Supportive interactions. Each factor included three items and the subsequent CFA supported the MCHS's factorial validity.

The MCHS five-factor structure is different from the two-factor structure of the CHS in various ways. The CHS measures a counselor's level of cultural humility from the client's point-ofview and consists of 12 items; 7 items represent positive aspects of cultural humility (i.e., positive other-oriented characteristics) and five items represent negative aspects of cultural humility (i.e., superiority and making assumptions; Hook et al., 2013). On the other hand, the MCHS counselor-report scale measures a counselor's cultural humility and its five-factor structure reflects Foronda et al.'s (2016) five dimensions of cultural humility (i.e., Openness, Self-Awareness, Ego-Less, Self-Reflection and Critique, and Supportive Interactions). However, there is some overlap between the items of the MCHS and CHS.

We used bivariate correlation to assess the relationship between the five factors of the MCHS, SSAS subscales, and MCSDS-FC as a means to develop construct validity (Swank & Mullen, 2017). The five factors of the MCHS were correlated with the subscales of the SSAS to assess for convergent validity. Further, the five factors of the MCHS were correlated with the total score of MCSDS-FC to assess for discriminant validity. The significant correlations between four factors of the MCHS (e.g., Openness, Self-awareness, and Self-reflection and Critique) and all three subscales of the SSAS established some convergent validity. Factor five of the MCHS had significant correlations between the private and public subscales of the SSAS but not the surroundings subscale. The lack of strong correlations between three of the MCHS factors (e.g., self-awareness, ego-less, and supportive interactions) and social desirability established some discriminant validity for the MCHS.

Implications for Counseling Practice

The current study of MCHS contributes to the literature on cultural humility as its findings uphold Foronda et al. (2016) five dimensions of cultural humility amongst mental health professionals. The MCHS itself can be used by counselors as a tool to self-assess their levels of cultural humility; a higher level of cultural humility is important as it can impact positive therapeutic outcomes of counseling, especially amongst diverse clients (Owen et al., 2016). For example, counselors with high levels of cultural humility commit fewer racial microaggressions and avoid cultural stereotypes (Hook et al., 2016; Tervalon & Murray-Garcia, 1998), thus promoting a positive therapeutic relationship that is sensitive to cultural differences (Hook et al., 2016).

Counselors who use the MCHS as a self-assessment tool can gain awareness on which of the five factors of cultural humility can be improved. Once counselors become aware of which area needs to be strengthened, they can pursue assistance through supervision and consultation on supplementing their identified dimension of weakness. They can also use the measurement to determine their areas of strength when working with a diverse clientele. The area of strength can be implemented to further build a positive therapeutic relationship with diverse clients. There should be caution with two factors (e.g., self-reflection and critique and supportive interactions) given their low internal consistencies. If used in conjunction with the CHS, the scores from both scales can provide the counselor with insight on whether their perception of the counseling session matches with their client's perception of counseling. In other words, counselors can gain a more accurate awareness on how their cultural humility is being perceived by their clients.

Danso (2018) posited that in order to be respectful of another culture, one must build a sufficient knowledge base for that culture. Though cultural humility emphasizes the absence of the assumption of knowledge or expertise regarding cultural diversity (Owen, 2013; Owen et al., 2011), it does not prohibit a counselor's active acquisition of cultural knowledge. Instead, cultural humility is seen as a way of being with a client that emphasizes a counselor's awareness of their personal values and beliefs, which allows a counselor to avoid stereotyping in order to better understand others (Foronda et al., 2016; Tervalon & Murray-Garcia, 1998; Yeager & Bauer-Wu, 2013). Cultural humility achieves this by allowing a collaborative relationship with a client to deeply understand his or her cultural lens and background (Hook et al., 2013). Despite any previously obtained information about particular cultures, counselors with cultural humility acknowledge that their knowledge and understanding of a client's cultural background is limited (Hook

et al., 2013), which helps them maintain openness and motivation toward acquiring new knowledge (Hook et al., 2013; Tervalon & Murray-Garcia, 1998) by actively partnering with the client to learn more about his or her culture (Hook et al., 2013). The authors do not discourage the pursuit of cultural competence as delineated by the ACA's 2014 Code of Ethics (C.2.a.), but urge counselors to adopt a way of being with clients that is culturally humble, which will ultimately promote culturally competent and ethical care for clients.

Implications for Research

The findings from this study contribute to current literature of cultural humility in the counseling field. This study developed a counselor-report scale that can be used in clinical settings in order to assess cultural humility. ACA's (2014) Code of Ethics states the importance of multicultural sensitive in a professional setting (B.1.a). The MCHS provides a way for counselors to assess their cultural humility with the intention of increasing their multicultural sensitivity.

Further validation studies are recommended for the MCHS. The sample of this study included helping professionals; therefore, this scale is only validated for this population. Future validation studies should include a sample of counseling students. The MCHS has the potential the be utilized within counseling programs, particularly in supervision. However, the scale should first be validated among this population.

Along with further validation of the MCHS, future studies recommendations include administering the MCHS and Hook et al. (2013) CHS to explore clients' perspectives of their counselors' cultural humility with their counselors' perspectives on their cultural humility. Exploration of the two concepts will provide insight on the relationship between the client's and counselor's perception of cultural humility as well as provide concurrent validity of the MCHS. Multiple methods of assessing cultural humility will facilitate the exploration of the importance of cultural humility among the counseling profession (Davis & Hook, 2014).

Limitations

It is important to note some limitations to consider when interpreting the results of this study. For example, the present study recruited participants from the counseling licensure board database of a single state, limiting the replicability of the findings to a diverse sample outside of this database. The generalizability of the current study's findings may not be applicable to a wider sample of counselors from other states. Researchers should recruit from a national database to further validate the MCHS in broader samples. Suggested samples to utilize in future validation studies of the MCHS include counselors and counseling students in different states. An additional limitation of the sample used in this study is the low response rate of 8.76%. The low response rate was expected with the use of email surveys to collect data (Shih & Fan, 2009.) Future studies should consider using mail survey research (Shih & Fan, 2009) to have a higher response rate of at least 10% to further validate the MCHS. As noted, the use of online administration of the MCHS is considered a limitation. Though online administration provided ready access to the survey, the standardization of administration is limited.

Further, the levels of internal consistency were acceptable for three of the five factors (i.e., openness, self-awareness, and ego-less). The self-reflection and critique and supportive interactions subscales produced poor internal consistency reliability. The inter-correlation between factors showed that the five factors are all highly correlated with each other, thus a second one factor CFA was done to test if the scale could be unidimensional model. The MCHS can be utilized as either a unidimensional scale or a multidimensional scale. However, there should be caution when using the subscale level scores given the low internal consistencies of self-reflection and critique and supportive interactions. Validation studies are recommended to further evaluate the psychometrics of the MCHS scale.



Conclusion

The present study described the development of the MCHS, along with the use of an EFA and CFA to reduce the number of items and to strengthen the scale's psychometric properties. Our results indicated promising evidence for the validity of the MCHS with a sample of mental health professions, along with a five-factor structure that reflected the five dimensions of cultural humility; each factor possessed three items and the five factors accounted for 62.95% of the variance. Thus, the MCHS is a promising scale for counselors to use as a self-assessment of their cultural humility and may also be useful for education, supervision, and evaluation purposes.

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