Development and Psychometric Testing of the Workplace Civility Index: A Reliable Tool for Measuring Civility in the Workplace

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abstract

Background: Fostering civility in practice and academic health care settings is a desirable goal for individuals, teams, and organizations and is paramount to safe patient care.

Method: A convenience sample of 393 nursing faculty and practice-based nurses in the United States participated in a study to test the psychometric properties of the Workplace Civility Index (WCI).

Results: A factor analysis and other reliability analyses support the use of the WCI as a valid and reliable measurement to measure perceptions of workplace civility acumen.

Conclusion: The WCI is a 20-item psychometrically sound instrument used to measure perceptions of workplace civility among individuals and groups within work environments. The index may be completed as an individual exercise; however, it is highly recommended that the index be completed with a trusted coworker, colleague, or work group to improve self-awareness, give and receive constructive feedback, and form the basis for continuing strengths and addressing areas for improvement.

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Workplace incivility is a serious concern for individuals, teams, and organizations and a condition that may have detrimental and lasting consequences. Incivility is defined as a range of lower intensity acts of aggression (including failing to act when action is warranted) that may result in psychological or physiological distress for the individuals involved. If these actions and inactions are ignored or left unaddressed, they may spiral into more purposeful efforts to harm another individual or group, or progress into more threatening situations (American Nurses Association [ANA], 2015b; Andersson & Pearson, 1999; Clark, 2017a; Clark & Kensing, 2017; Pearson & Porath, 2009; Porath, 2016; Porath & Pearson, 2013).

Each year since 2010, Weber Shandwick and Powell Tate (2017), in partnership with KRC Research, have conducted an annual nationwide survey, Civility in America. The survey is designed to gauge Americans’ attitudes toward civility in a variety of areas affecting American society and daily life. One of the key findings from the Civility in America report (Weber Shandwick & Powell Tate, 2017) was that 69% of respondents reported incivility as a major problem in the United States, a record high since the survey began in 2010. Many respondents (84%) have experienced incivility in their daily lives and 34% have experienced incivility at work. According to the report, workplace incivility may result in higher turnover rates, loss of job morale, less collaboration, and reduced work quality; 24% of workers reported leaving their job due to incivility; and 56% expect civility in America to worsen over the next few years. The respondents blame this condition on several factors, including politicians (75%), Internet and social media (69%), and...
news media (59%). In fact, nearly 60% of respondents have stopped paying attention to politics altogether due to exposure to incivility.

INCIVILITY IN THE HEALTH CARE SETTING

Acts of incivility in the patient care setting can have devastating and lasting effects on individuals, teams, organizations, and patient safety (ANA, 2015b; Clark, 2017a; Crawford et al., 2017; Kerber, Woith, Jenkins, & Astroth, 2015; Laschinger, Wong, Regan, Young-Ritchie, & Bushell, 2013; Oyeyeye, Hanson, O’Conner, & Dunn, 2013). A highly stressful health care work environment, combined with attending to high-stakes life-and-death situations, can lead to patient safety errors, injury, and death. Several common stressors contribute to incivility in health care environments, such as work overload, unclear roles and expectations, organizational volatility, abuse of position and authority, and a lack of knowledge and skills. Work environments where stress levels are already high may be particularly vulnerable to acts of incivility because emotional resources are already strained. To address these issues, health care workers at all levels need to be effective communicators and skilled at managing conflict in a constructive manner.

The ANA (2015b) recommends that all nurses reflect on and be cognizant of their own interactions and to participate in ongoing education to improve effective communication and conflict negotiation skills. In addition, standard 7 (Ethics) of the ANA’s Nursing: Scope and Standards of Practice (2015a) emphasizes a nurse’s ethical obligation to engage in self-reflection to practice ethically. Similarly, standard 12 (Education) requires nurses to mentor and acclimate nurses new to their roles by practicing lifelong learning through self-reflection and shared educational experiences. Reflecting on our style of communication, interactions with others, and level of civility acumen enhances our ability to effectively communicate, problem solve, resolve conflicts, and collaborate with others.

FOSTERING SELF-AWARENESS

As an expert in fostering civility, the lead author (C.M.C) has found that in many cases, individuals do not know or realize how their uncivil actions and inactions affect others. In that author’s experience, many people lack self-awareness and a true understanding as to which behaviors and interactions others might find uncivil or disrespectful. According to Goleman, Davidson, Boyatzis, Kohlrieser, and Urch (2017), emotional self-awareness is the ability to understand one’s emotions and their effects on others. To be self-aware means to know what one is feeling and why, how it helps and hinders what one is trying to do, and the ability to sense how others perceive you. Emotional self-awareness also requires an individual to possess an accurate reading of one’s strengths, limitations, and clarity of one’s values and purpose. In other words, being fully self-aware means having a deep understanding of one’s emotions, strengths, weaknesses, needs, and drives. People with strong self-awareness are neither overly critical nor unrealistically hopeful. Instead, they are honest with themselves and others and recognize how their feelings and behaviors affect other people. Self-awareness requires candor and an honest ability to assess oneself realistically and extends to a person’s understanding of his or her values and goals and self-knowledge about how he or she relates to others.

According to Bennis (2009), true understanding of oneself comes from reflecting on life experiences, discovering the truth about oneself, and making meaning of that discovery. Similarly, Avolio, Wálumbwa, and Weber (2009) described self-awareness as understanding oneself, knowing one’s strengths and areas for improvement, and recognizing the impact behaviors have on others. Avolio et al. (2009) suggested that reflecting on one’s core values, identity, emotions, motives, and goals will help an individual come to terms with who they are at the deepest level. Becoming more self-aware heightens our ability to build a strong character, lead with a sense of purpose and authenticity, and better understand what we need most from other people to complement our own deficiencies.

SELF-REFLECTION AND ASSESSING CIVILITY ACUMEN

Because self-awareness is essential to workplace civility, the lead author (C.M.C) created the Workplace Civility Index (WCI) as a self-reflection tool to assess civility acumen and competence. Treating one another with civility and respect is fundamental to establishing and sustaining healthy workplaces, fostering interpersonal and intrapersonal relationships, building and maintaining top-performing interprofessional teams, and ultimately protecting patient safety. Reflecting and thinking deeply about civil and respectful interactions with others and engaging in thoughtful self-reflection are important steps toward improving our competence as leaders, colleagues, and team members. In addition, obtaining colleague and mentor feedback on the WCI can improve self-awareness and determine areas of strengths and improvement.

DESIGNING AND SCORING THE WORKPLACE CIVILITY INDEX

The WCI was developed by the lead author (C.M.C) on the basis of extensive experience as an expert on civility, organizational leadership, and fostering healthy workplaces;
a thorough review of the literature; consultation with and
review by three content experts; and extensive pilot testing
with more than 2,000 practice-based nurses and nursing
faculty who did not participate in the study reported here.
Responses from content experts and results of the pilot test
were favorable regarding the ease of survey administration
and completion, content validity, readability, and logical
flow. Slight modifications were made to the revised survey
after content expert review and participant feedback de-
derived from pilot testing.

The WCI is an original, 20-item, Likert-type survey
consisting of 20 essential elements related to workplace
civilcy and respectful coworker interactions. Respondents
assess the perceived frequency of civil workplace interac-
tions using the following response categories: 1 = nev-
er, 2 = rarely, 3 = sometimes, 4 = usually, and 5 = always.
Scores range from 20 to 100 and indicate the respondents’
overall perception of civil workplace interactions: 90 to
100 = very civil; 80 to 89 = civil; 70 to 79 = moderately civil;
60 to 69 = minimally civil; 50 to 59 = uncivil; and < 50 =
very uncivil. A total score ranging from 20 to 100 can be
calculated by summing all items on the WCI to indicate
the overall perceived level of civility. The range of the total
score for each level of overall perceived workplace civility
is derived from the recommendations of expert judgments
based on extensive pilot testing. Calculating scores may be
done to evaluate the sample as a whole or to conduct com-
parisons across individual items and total scores.

METHOD

Procedure

Institutional review board approval was obtained to
conduct psychometric testing on the WCI. The index was
completed by 393 attendees from one international nurs-
ing conference and one national nursing conference. The
sample included nursing faculty and practice-based nurses
throughout the United States and Canada. After obtaining
consent, respondents voluntarily completed the WCI in
“real time” during plenary sessions at each conference using
smartphone apps and Web-based technology. All responses
were collected anonymously and reported as aggregate data.

Analytic Strategy

Initial data screening of the WCI included an assess-
ment of the mean and standard deviation of each scale
item and the total score. Assumptions of normality were
based on histograms, skewness, and kurtosis statistics.
Normal distributions were assumed for items with a skew-
ness statistic less than three and a kurtosis statistic less
than five. Use of response categories for each item was
also examined. Data were considered suitable for analysis
if Kaiser-Meyer-Olkin measure of sampling adequacy val-
ues were .50 or greater and Bartlett’s test of sphericity was
significant (p ≤ .05). Interitem correlations were assessed
to determine the direction and magnitude of the relation-
ships among scale items.

An exploratory factor analysis of the WCI was per-
formed to determine the factor structure of the scale.
Maximum likelihood estimation was used for factor ex-
traction. The number of factors to be retained was based
on the eigenvalues and the corresponding scree plot. All
factors to the left of the inflection point on the scree plot
and those with eigenvalues greater than one were initially
retained. An exploratory factor analysis was performed
without data rotation for a 1-factor model. If more than
one factor was retained, it was assumed the items were
 correlated and oblique rotation (promax) was performed.
If data were rotated, the number of factors that provided
the best-rotated factor structure was retained. Factor load-
ings were assessed and items with factor loadings of .30
or greater were considered as having a reasonably strong
association between the item and the factor (Kline, 1994).

Reliability was assessed using Cronbach’s alpha and the
scale was considered reliable if Cronbach’s alpha was greater
than .70 (Furr & Bacharach, 2014). Pairwise deletion was
used to exclude missing data from analysis and reporting of
correlations. Listwise deletion was used to exclude missing
data from analysis and reporting of the exploratory factor
analysis. All missing data were assumed to be missing at ran-
dom. SPSS® version 24 software was used for all data analysis.

RESULTS

Demographic Information

A total of 393 nurses completed the WCI. No demo-
graphic or identifying information was collected because
the purpose of the study was to conduct psychometric
testing of the tool and to ensure participants felt as com-
fortable as possible providing honest answers. However,
every effort was made to ensure that the sample was as
heterogeneous as possible such that it resembles a good
representation of the population for which the WCI is in-
tended. As a result, the sample included nursing faculty
and practice-based nurses throughout the United States
and Canada in various workplace settings.

Preliminary Item Analysis

Item means ranged from 3.42 (SD = .78) to 4.64
(SD = .52) and the mean score for the scale was 85.66
(SD = 6.34). Refer to Table 1 for the mean and standard
deviations of each item. Standard deviations were similar
for all items. Many of the items appeared normal based on
histograms, kurtosis (7.95 to −0.56), and skewness statis-
tics (0.01 to −2.84). However, items 7 (“Avoid abusing my
position or authority”) and 11 (“Avoid taking credit for
another individual’s or team’s contributions”) had kurtosis values greater than the a priori value of 5. Based on the Kaiser-Meyer-Olkin measure of sampling adequacy (.86) and Bartlett’s test of sphericity ($p < .001$), data were assumed to be suitable for analysis.

All response categories were used for seven of the 20 scale items. Study participants did not use the never response category for 10 items (3, 5, 8, 9, 12, 16, 17, 18, 19, and 20). The remaining three items (2, 6, and 13) did not have responses to the rarely or never categories.

Most items were statistically positively correlated. Statistically significant item correlations ranged from .43 to .10. The largest positive interitem correlation (.43, $p < .05$) was between “How often do I avoid gossip and spreading rumors” (item 4), and “How often do I keep confidences and respect others’ privacy” (item 5). “How often do I avoid taking credit for another individual’s or team’s contributions” (item 11) had five statistically significant interitem correlations, only one of which was greater than .30 (“How often do I avoid abusing my position or authority,” item 7). Refer to Table 2 for interitem correlations. Item discrimination index of item-total correlations was computed for each item, and it ranged from .30 to .55, with .30 for all items.

Total possible scores for the WCI range from 20 to 100 and are approximately normally distributed. The scores indicate the overall self-perception of civil interactions in the workplace: 90 to 100 = very civil; 80 to 89 = civil; 70 to 79 = moderately civil; 60 to 69 = minimally civil; 50 to 59 = uncivil; and < 50 = very uncivil. The mean total score for this sample was 85.66 ($SD = 6.34$), indicating that respondents perceived their behavior and interactions in the workplace as civil.

**Factor Analyses**

Although more than five factors had eigenvalues $\geq 1$ (1.07 to 4.70), the scree plot indicated a clear 1-factor model. The eigenvalue for factor 1 = 3.93 and explained 19.64% of the variance. Factor loadings ranged from .55 (“How often do I uphold the vision, mission, and values of my organization,” item 16) to .16

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**TABLE 1**

FACTOR LOADINGS AND MEANS AND STANDARD DEVIATIONS FOR 1-FACTOR MODEL OF THE WCI

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item Name</th>
<th>Factor Loading</th>
<th>Mean ($SD$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assume good will and think the best of others</td>
<td>.35</td>
<td>3.99 (.54)</td>
</tr>
<tr>
<td>2</td>
<td>Include and welcome new and current colleagues</td>
<td>.48</td>
<td>4.52 (.60)</td>
</tr>
<tr>
<td>3</td>
<td>Communicate respectfully (by e-mail, telephone, face-to-face) and really listen</td>
<td>.38</td>
<td>4.24 (.57)</td>
</tr>
<tr>
<td>4</td>
<td>Avoid gossip and spreading rumors</td>
<td>.36</td>
<td>3.42 (.78)</td>
</tr>
<tr>
<td>5</td>
<td>Keep confidences and respect others’ privacy</td>
<td>.37</td>
<td>4.40 (.62)</td>
</tr>
<tr>
<td>6</td>
<td>Encourage, support, and mentor others</td>
<td>.51</td>
<td>4.43 (.62)</td>
</tr>
<tr>
<td>7</td>
<td>Avoid abusing my position or authority</td>
<td>.31</td>
<td>4.54 (.79)</td>
</tr>
<tr>
<td>8</td>
<td>Use respectful language (i.e., no racial, ethnic, sexual, age, or religiously biased terms)</td>
<td>.36</td>
<td>4.42 (.63)</td>
</tr>
<tr>
<td>9</td>
<td>Attend meetings, arrive on time, participate, volunteer, and do my share</td>
<td>.34</td>
<td>4.42 (.67)</td>
</tr>
<tr>
<td>10</td>
<td>Avoid distracting others (misusing media, side conversations) during meetings</td>
<td>.45</td>
<td>3.92 (.75)</td>
</tr>
<tr>
<td>11</td>
<td>Avoid taking credit for another individual’s or team’s contributions</td>
<td>.16</td>
<td>4.59 (.96)</td>
</tr>
<tr>
<td>12</td>
<td>Acknowledge others and praise their work and contributions</td>
<td>.52</td>
<td>4.38 (.64)</td>
</tr>
<tr>
<td>13</td>
<td>Take personal responsibility and stand accountable for my actions</td>
<td>.48</td>
<td>4.64 (.52)</td>
</tr>
<tr>
<td>14</td>
<td>Speak directly to the person with whom I have an issue</td>
<td>.51</td>
<td>3.78 (.76)</td>
</tr>
<tr>
<td>15</td>
<td>Share pertinent or important information with others</td>
<td>.48</td>
<td>4.40 (.62)</td>
</tr>
<tr>
<td>16</td>
<td>Uphold the vision, mission, and values of my organization</td>
<td>.55</td>
<td>4.47 (.58)</td>
</tr>
<tr>
<td>17</td>
<td>Seek and encourage constructive feedback from others</td>
<td>.47</td>
<td>3.97 (.77)</td>
</tr>
<tr>
<td>18</td>
<td>Demonstrate approachability, flexibility, and openness to other points of view</td>
<td>.54</td>
<td>4.23 (.66)</td>
</tr>
<tr>
<td>19</td>
<td>Bring my “A” game and a strong work ethic to my workplace</td>
<td>.50</td>
<td>4.41 (.62)</td>
</tr>
<tr>
<td>20</td>
<td>Apologize and mean it when the situation calls for it</td>
<td>.54</td>
<td>4.49 (.67)</td>
</tr>
</tbody>
</table>

Note. $SD = $ standard deviation; WCI = workplace civility index.
| Item Number | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | Total Score |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 1           | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | .40     |
| 2           | .20 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | .48     |
| 3           | .24 | .16 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | .42     |
| 4           | .19 | .01 | .17 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | .44     |
| 5           | .11 | .10 | .18 | .43 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     |     | .51     |
| 6           | .20 | .42 | .19 | .16 | .15 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     |     | .51     |
| 7           | .14 | .15 | .15 | .21 | .19 | .08 | 1.00|     |     |     |     |     |     |     |     |     |     |     |     | .45     |
| 8           | .17 | .06 | .22 | .31 | .22 | .17 | .31 | 1.00|     |     |     |     |     |     |     |     |     |     |     | .52     |
| 9           | .15 | .16 | .08 | .06 | .05 | .18 | .11 | .10 | 1.00|     |     |     |     |     |     |     |     |     |     | .52     |
| 11          | .07 | .10 | .01 | .12 | .10 | .01 | .35 | .12 | .10 | .16 | 1.00|     |     |     |     |     |     |     |     | .54     |
| 12          | .09 | .38 | .20 | .14 | .14 | .36 | .12 | .10 | .11 | .07 | 1.00|     |     |     |     |     |     |     |     | .55     |
| 13          | .08 | .23 | .15 | .17 | .21 | .26 | .12 | .16 | .15 | .29 | .08 | .27 | 1.00|     |     |     |     |     |     | .52     |
| 15          | .15 | .22 | .15 | .09 | .17 | .26 | .16 | .08 | .18 | .21 | .10 | .27 | .20 | .23 | 1.00|     |     |     |     |     | .51     |
| 16          | .20 | .22 | .19 | .20 | .22 | .21 | .11 | .23 | .23 | .28 | .05 | .26 | .23 | .27 | .33 | 1.00|     |     |     |     | .53     |
| 17          | .15 | .25 | .11 | .07 | .10 | .18 | .14 | .15 | .13 | .20 | .07 | .29 | .21 | .31 | .24 | .29 | 1.00|     |     |     | .50     |
| 19          | .16 | .18 | .18 | .20 | .26 | .27 | .10 | .16 | .32 | .32 | .02 | .21 | .26 | .23 | .35 | .15 | .22 | 1.00|     |     | .51     |
| 20          | .15 | .28 | .25 | .14 | .13 | .23 | .13 | .16 | .16 | .25 | .03 | .30 | .30 | .33 | .28 | .31 | .28 | .31 | 1.00| .51     |
| **Total score** | .40 | .48 | .42 | .46 | .44 | .51 | .45 | .45 | .40 | .51 | .33 | .52 | .49 | .54 | .30 | .55 | .50 | .55 | .52 | .51 | 1.00 |

Note. WCI = workplace civility index.
(“How often do I avoid taking credit for another individual’s or team’s contribution,” item 11). All items, with the exception of item 11, had factor loadings greater than .30. Refer to Table 1 for factor loadings. The factor analysis results provide robust evidence for internal validity of this scale.

Reliability

The Cronbach’s alpha for the WCI is .82. This value indicates an internally consistent scale for this sample (Furr & Bacharach, 2014).

DISCUSSION

According to the Civility in America report (Weber Shandwick & Powell Tate, 2017), Americans appear to lack insight into their own behaviors. Individuals overwhelmingly believe they are always or usually civil (94%), followed by people they know (78%), people they work with (73%), people in their community (57%), and the least civil being all other people in the United States (24%). This lack of insight reinforces a potential lack of self-awareness. Similarly, Porath (2016) noted “incivility usually arises not from malice, but from ignorance” (p. 12) and further concluded that bad behavior in the workplace generally reflects a lack of self-awareness. Clark (2017b) conducted a quality improvement project with 50 nursing faculty and staff using the WCI. Respondents first rated their own perceived level of civility then rated the perceived level of civility among their coworkers. When rating themselves, respondents scored a civility rating of 91 (very civil); however, respondents rated their coworkers’ level of civility as 74 (moderately civil), representing a 17-point differential.

In this study, 10 items yielded a response of never, reinforcing the view that some individuals may lack awareness or in some cases may be reluctant to report certain behaviors. For example, item 11 had a low factor loading and therefore did not statistically relate to the construct of workplace civility. It is possible that this statistical relationship may be impacted by the legal nature of the item (e.g., stealing intellectual property) and level of severity of this type of incivility in academic and practice settings. Thus, retaining item 11 is recommended since purloining and misusing others’ intellectual property has been identified as a problem in empirical studies (Clark, 2013; Heinrich, 2007) and we expect this item to perform when the index is used to rate colleagues.

Because some individuals seem unaware of how their behaviors affect others and the workplace, the WCI was developed and tested to appraise an individual’s level of civility competence. Although it is helpful for an individual to self-reflect using the WCI, obtaining feedback from others using the WCI heightens awareness and helps to determine strengths and areas for improvement. Asking a trusted coworker or colleague to complete the index to rate their perceptions of how one relates and interacts in the workplace provides a more integrated review. Sharing perceptions and identifying an area for improvement, as well as identifying areas of strength, provides an opportunity for a candid discussion of perceived workplace interactions and a vehicle for personal, professional growth. Reflecting and thinking deeply about civil and respectful interactions with others and engaging in thoughtful self-reflection are important steps toward improving our competence as leaders, colleagues, and team members. Porath (2016) encouraged us to be mindful of our actions and how they affect others. Regardless of how civil and considerate we think we are, the most successful individuals are those who consistently seek to improve relationships within and outside the workplace.

The WCI is a psychometrically sound instrument used to measure perceptions of workplace civility acumen, raise awareness, and generate group discussion about the perceived state of civility in the work environment. The WCI may be completed as an individual exercise or completed by all members of a team to compare perceptions of civility and determine areas of strength and improvement. It has been used in dozens of practice and academic work environments domestically and abroad to improve health care workers’ awareness of the impact of incivility on workplace culture and patient safety.

LIMITATIONS

To obtain honest responses to the questions, participants were assured that all responses were confidential and that no demographics or identifiers were collected. However, it should be noted that the restriction of range in scores (e.g., not using the category never for some items) may be due to the self-report approach in collecting the data. Participants may underreport or exaggerate the frequency of the questions for various reasons.

FUTURE RESEARCH

Future studies using the WCI may include determining the relationship between workplace civility and employee productivity and the effects of incivility on patient care outcomes, such as fewer medication- or surgery-related errors, hospital-acquired infections, and delays in care. In academe, civility levels may be linked to faculty productivity, student–faculty relationships, and NCLEX pass rates. In addition, if incivility can be linked to poor outcomes and if employees tend to view themselves as more civil than they are, ongoing, comprehensive educational programs should be required. Insti-
tuting a 360-degree performance evaluation process to build in accountability, as well as a reward system for desired behaviors, is recommended.

CONCLUSION

The WCI is a 20-item psychometrically sound instrument used to measure perceptions of workplace civility among individuals and groups within work environments. The index may be completed as an individual exercise; however, it is highly recommended that the index be completed with a trusted coworker, colleague, or work group to improve self-awareness, give and receive constructive feedback, and form the basis for continuing strengths and addressing areas for improvement.

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