ASSESSING A CULTURE OF MATTERING IN A HIGHER EDUCATION CONTEXT

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ABSTRACT

Aim/Purpose  
The purpose of this study was to examine the factor structure of a newly developed Culture of Mattering survey (CoM) that evaluates mattering in the context of relationships with supervisors, colleagues, and the organization as a whole.

Background  
Mattering can be defined as the experience of feeling valued and adding value. Despite the importance of mattering in personal and occupational domains, there is very little research on organizational cultures that promote mattering. As far as we know, there is no research on the measurement and promotion of a culture of mattering in higher education settings.

Methodology  
Data were collected from 4,264 university employees across 469 work units using web-based surveys. CoM scores were aggregated into unit-level average scores, which were the focus of all analyses.
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**Contribution**

This study is the first to examine the measurement of a CoM in a higher education context. The specific context consists of a set of principles and behaviors enacted in relationship with supervisors, colleagues, and the organization as a whole.

**Findings**

Factor analysis of the CoM resulted in one general factor ($\alpha = .90$), and three sub-factors dealing with supervisors ($\alpha = .95$), colleagues ($\alpha = .92$), and the organization as a whole ($\alpha = .86$).

**Recommendations for Practitioners**

When trying to improve organizational culture, attention must be paid to how employees feel at all these levels.

**Recommendations for Researchers**

This study shows that it is important to pay attention to three contextual levels when assessing mattering among faculty and staff: interactions with supervisors, colleagues, and the entire organization.

**Impact on Society**

Mattering is a crucial aspect of organizational health and well-being.

**Future Research**

It is important to study how mattering in higher education impacts the well-being of faculty, staff, and students.

**Keywords**

mattering, organizational culture, instrument development, employee, higher education

**INTRODUCTION**

Mattering can be defined as the experience of feeling valued and adding value (Prilleltensky 2014; 2019). By feeling valued we mean feeling respected, recognized, and appreciated. By adding value we mean making a contribution. We can feel valued by ourselves and others, and we can add value to ourselves and others. When the workplace culture is rewarding, affirming, and supportive, employees can derive a great sense of mattering, which, in turn, is related to greater autonomy, life satisfaction, physical health, and overall well-being (Flett, 2018). Perhaps more than anything else, we are motivated in life by the pursuit of mattering. Mattering is about feeling valued and adding value. When these experiences are present, we flourish and thrive. When they are absent, we suffer and inflict pain, on ourselves and others, including our colleagues (Prilleltensky, 2019). The success or failure of organizations hinges on the engagement of their employees. When employees feel valued, they are much more likely to add value. When they feel ignored, they are more likely to be disengaged. Research has shown that organizations high in engagement and mattering perform much better on multiple outcomes than organizations with low levels of employee engagement. Some of these outcomes include productivity, profitability, customer satisfaction, turnover, safety and quality (Grawitch & Ballard, 2016; Harter et al., 2002; Worline & Dutton, 2017). Despite the importance of mattering in personal and occupational domains, there is very little research on organizational cultures that promote mattering. Some researchers have started to examine the role of mattering in the workplace (Dixon Rayle, 2006; Jung, 2015; Jung & Heppner, 2017; Reece et al., 2019), but as far as we know, there is no research on the measurement and promotion of a culture of mattering in higher education settings.

Most established constructs about mattering and related topics in organizations are in the management literature. For instance, perceived organizational support (POS) is the degree to which employees perceive their organization values their contributions and cares about their well-being (i.e., employees feeling valued) (Eisenberger et al., 1990; Rhoades & Eisenberger, 2002).

Some typological approaches to measure organizational culture classify organizations based on characteristics according to ideological profiles of power orientation, role orientation, task orientation, and person orientation (Harrison, 1972). Others identify forms of organizational culture based on employee values, beliefs, and ethical behaviors by placing these forms of culture in descriptive categories named bureaucratic, innovative, and supportive (Wallach, 1983). Some researchers use person-
fit preferences to categorize forms of organizational culture using constructs of innovation, supportiveness, stability, respect for people, outcome orientation, attention to detail, team orientation, and aggressiveness (O’Reilly et al., 1991). Competing Values Framework (Cameron & Quinn, 1999) identifies four types of organizational cultures as clan, adhocracy, market, and hierarchy.

Dimensional approaches have viewed organizations within a national culture (Hofstede, 1980), while others describe organizational culture through dimensions and sub-dimensions involving mission, adaptability, involvement, and consistency (Denison, 1990). Recently some researchers have begun to measure organizational culture within a unique business environment of an industry (e.g., hospitality, public child welfare) and have created instruments to measure constructs unique to an entire industry (Bavik, 2016; Westbrook et al., 2009). While we approach this study through Schein’s (2017) integration perspective, we vary from his recommendation to use qualitative methods as the primary measurement method by using quantitative measures as the sole method to conduct our investigation (Rousseau, 1990).

The present study describes the development of an instrument to assess mattering in a university setting incorporating the basic definition of mattering, plus unique elements of its culture, such as values, behaviors, leadership expectations, service standards, and a common purpose. Whereas it’s important to feel valued and add value in general, it’s also crucial to do so within a particular workplace. In our case, a specific organization expects its employees to add value through the enactment of specific values such as diversity, integrity, responsibility and excellence. Therefore, our study aimed to create a measure that combines a general notion of mattering (feeling valued and adding value), with a particular set of principles (e.g., values, service standards), within the context of relationships with supervisors, colleagues, and the organization as a whole.

The following are the research questions answered in this study:

1. What is the underlying factor structure of the Culture of Mattering (CoM) survey?
2. Do the CoM variables load as expected onto the three theorized factors of (1) Supervisor-based Mattering, (2) Colleague-based Mattering, and (3) Organization-based Mattering?

CULTURE IN THE WORKPLACE

Organizational culture -- the set of shared values, beliefs, practices and behavioral norms that constitute a workplace -- has enormous impact on employee engagement, productivity, and well-being (Grawitch & Ballard, 2016; Schein, 1990, 2017). There is a vast range of approaches to measure organizational culture across disciplines and industries. Researchers have characterized many types and forms of organizational culture. Some approach the topic by categorizing organizations into various culture typologies (e.g., ideological profiles, bureaucratic, innovative, clan, hierarchy) or dimensions (e.g., mission, adaptability, involvement) using broad-based descriptors (e.g., Cameron & Quinn, 2011; Harrison, 1972; O’Reilly et al., 1991; Ouchi, 1980; Wallach, 1983). Several quantitative instruments are available to measure organizational culture using this generalized approach (Scott et al., 2003). Other researchers study organizations as unique entities with unique cultures (Clark et al., 2012). Our study takes the latter approach by using an instrument that measures relevant and salient culture content that has meaning to this particular organization’s employees (Schein, 1990, p. 112). We use Schein’s definition of organizational culture (Schein, 1990, 2017) which supports the notion that organizations invent, discover, or develop the culture components (values, beliefs, assumptions, behavioral norms) that regulate how their members should behave as they pursue common goals.

In order to make conclusions about an organization’s culture, which is largely unseen, some researchers measure organizational climate, as climates define the observable content of a culture. Organizational culture and organizational climate are distinct but interrelated constructs (Clark et al., 2012). The climate refers to how members of the organization perceive and evaluate the culture as enacted by the organizations’ members (Reichers & Schneider, 1990). As such, “climates of organizations
emerge out of the naturally occurring interactions of people” (Schneider et al., 1980, p. 254). In observable terms, climate is a surface-level manifestation, or an artifact, of organizational culture. For example, some researchers measure dimensions including “the extent to which management is perceived as flexible and supportive, role clarity, freedom of self-expression, the employee’s perceived contribution toward organizational goals, adequacy of recognition received from the organization, and job challenge” (Brown & Leigh, 1996, p. 359).

The purpose of this study was to examine the factor structure of a newly developed Culture of Mattering (CoM) survey that evaluates mattering in the context of relationships with supervisors, colleagues, and the university organization as a whole.

**Organizational Culture across Multiple Contexts**

Equally important to creating a tool unique to the university was to develop items that reflect the multilevel structure of the organization. Supervisors, unit colleagues, and the organization as a whole, are critical, multilevel sources of culture. Supervisors influence their teams, which influences how colleagues relate to each other within teams, which in turn influences the organization. Work teams consist of individuals, embedded within an organizational system structure. Individuals on teams think, feel, and behave in an interactive context (Kozlowski & Klein, 2000). Since social interactions lead to shared meanings between members, we embrace a multi-level (e.g., individual, unit, organizational) approach to conceptualizing and measuring culture (Glick, 1985). In our study, individual employees provided perceptions of behaviors of different organizational actors (supervisors, unit co-workers, organization-wide employees).


Team members need to cooperate with and depend on each other to coordinate efforts to complete tasks in an interdependent fashion (Cummings, 1978). The quality of the cooperative work includes completing tasks on time and responding quickly to problems (Liden et al., 2006). This influences team cohesion and efforts to engage in high quality task performance (Casey-Campbell & Martens, 2009; Chiniara & Bentein, 2018; Gully et al., 1995). In a cascading manner, servant leaders foster unit-level team cohesion and task performance, impacting organization-wide service to others outside of the unit (Chiniara & Bentein, 2018).

For an organization to achieve its broad goals, employees must cooperate with each other across units to achieve common outcomes. For example, in higher education settings, unit-to-unit collaboration is critical in leading to successful outcomes (Khan & Matlay, 2009). This cooperation includes serving internal and external organizational constituents in task completion (Chiniara & Bentein, 2018). Successful cooperation requires collaboration through cross-unit exchanges and compliance with norms of responsive behavior (Paczkowski & Kuruzovich, 2016).

**Organizational Culture, Employee Engagement, and Productivity**

Organizational cultures that focus on supporting the psychological and physical needs of employees foster employee engagement and productivity (Edmonson, 2012; Grawitch & Ballard, 2016). These cultures promote trust with transformational, ethical leaders who create psychologically safe working conditions (Edmonson, 2012; Harter et al., 2002; Kahn, 1990). Organizational cultures like this create conditions for employees to feel valued and to add value. Healthy organizations afford workers an opportunity to add value not just to the organization, but also to themselves (Nelson, 2016). The Gallup Organization defines employee engagement as “the individual’s involvement and satisfaction
with as well as enthusiasm for work” (Harter et al., 2002, p. 269), and “is a measure of the extent to which employees are psychologically committed and emotionally connected to their roles as a result of having their performance-related needs met” (Jaschik & Lederman, 2015, p. 7).

Incongruence (i.e., lack of fit) between organizational values (e.g., competitiveness, achievement, task focus) and employee personal values (cooperation, justice, love, empathy) is related to an increase in employee burnout (i.e., non-engagement) and turnover intention (i.e., non-productivity) (Bao et al., 2013). Employees are always watching how supervisors behave. If they perceive that supervisors are behaving ethically and responsibly, a climate of trust is likely to emerge. Such climate, in turn, leads to employee engagement and productivity (Engelbrecht et al., 2017; Jiang & Proubst, 2015).

Leadership style impacts employees’ perceptions of feeling valued and opportunities to add value. A transformational leadership style boosts employee optimism and engagement (Tims et al., 2011). Additionally, supervisors who create psychologically safe work conditions positively influence collegiality among employees (Carmeli et al., 2014). In turn, this collegiality fosters employee willingness and capacity to participate in team problem solving (Carmeli et al., 2014; Conceição & Altman, 2011; Schein, 1990, 2017).

**Organizational Culture and Employee Well-Being**

Environments that help employees feel valued (i.e., being cared for and supported) and create opportunities for them to add value promote employee well-being (Eisenberger et al., 1990; Rhoades & Eisenberger, 2002). Well-being has been defined in various ways, including subjective appraisals of life satisfaction (Diener et al., 1985), affect (Bradburn, 1969), and personal functioning (Ryff & Keyes, 1995). Rath and Harter (2010) define well-being as “the combination of our love for what we do each day, the quality of our relationships, the security of our finances, the vibrancy of our physical health, and the pride we take in what we have contributed to our communities” and “how these five elements interact” (p. 4).

Employees who feel valued and perceive they add value to the organization report positive engagement and well-being outcomes. In one study, employee engagement (cognitive, emotional, and behavioral) moderated the relation between positive psychological climate, personal accomplishment and psychological well-being. High levels of engagement were associated with high levels of accomplishment and well-being (Shuck & Reio, 2014). In another study, organizational cultures with high-performance practices and perceived organizational support were positively related to employee well-being and negatively related to low physical well-being (Veld & Alfes, 2017). In sum, cultures that support employees to feel valued and add value provide an environment for employees to feel like they matter.

**Importance of a Culture of Mattering**

We define mattering as the experience of (a) feeling valued by self and others, and (b) the experience of adding value, to self and others (Prilleltensky, 2014, 2019). Mattering to important others and feeling noticed by them is a fundamental human need, constitutive of well-being (Rosenberg & McCullough, 1981). Mattering is an “individual’s feeling that he or she counts, makes a difference” (Rosenberg, 1985, p. 215). Mattering is positively related to healthy relationships with others, purpose in life, and self-acceptance (France & Finney, 2009); and negatively related to depression, anxiety, and negative affective states (Rosenberg & McCullough, 1981). Feeling valued through expressions of compassionate love is critical for a personal sense of worth (Sprecher & Fehr, 2005). An organizational culture of mattering is one where employees feel valued by supervisors, colleagues, and the organization, and one that provides employees opportunities to add value. Employees’ perceptions of mattering are important for engagement, productivity, and well-being (Dutton et al., 2016; Flett, 2018; Jung & Heppner, 2017; Reece et al., 2019; Worline & Dutton, 2017).
Enacting a culture of mattering means interacting with peers and customers in ways that convey interpersonal recognition and appreciation. Organizational members feel their actions make a difference, and others in the organization depend on them. In a culture of mattering co-workers express “affection, caring, generosity, and tenderness without expecting specific organizational benefits” (Eldor & Shoshani, 2016, p. 126). Compassionate acts foster trust and collegial relationships (Lilius et al., 2008). A culture of mattering helps employees feel valued through expressions of respect and dignity (Liao & Rupp, 2005), trust (Jiang & Proubst, 2015) and engagement (Engelbrecht et al., 2017).

The experience of adding value is no less important than the experience of feeling valued. When employees perceive the organization values their contributions and cares about their well-being, they are more likely to take proactive measures to collaborate and create innovative ways to improve performance (Caesens et al., 2016).

**Organizational Culture in Higher Education**

The study of organizational culture in higher education differs from traditional corporate hierarchical and bureaucratic organizations. The academic environment is not a rigidly linear organizational structure but rather a space where people shape the culture through shared governance, social identities, interpersonal connections, personal agency, and trust (Tierney, 2008). These unique conditions of higher education mean organizational culture should support internal conditions of trust, which rely on collaboration and cooperation among faculty and staff. (Tierney, 2008).

In a study of 334 higher education institutions, cultures where behaviors are informed by values were most effective for student academic development, student educational satisfaction, and system openness and community interaction (Smart & St. John, 1996). Not surprisingly, in academic settings, the strength of the “alignment between espoused cultural values and actual management practices is essential to…improve organizational performance” (Smart & St. John, 1996, p. 232).

In a number of studies in higher education it was found that building a culture by design, as opposed to a culture by default, was superior in goal attainment. When a culture of innovation was purposely built, more innovation was found (Zhu & Engels, 2014), and when a culture of collaboration was fostered, more collegial relationships emerged (Cho & Sriram, 2016; Conceição & Altman, 2011).

Eddy & Hart (2012) sought to understand faculty culture within rural institutions of higher education in the Hinterlands. Their interview study explored how cultural expectations of rural faculty trained at research extensive universities did not match the lived faculty work experience in the rural higher education context. The influence of the institutional, departmental, and disciplinary culture mattered.

**Measures of Organizational Culture**

Organizational culture is the set of shared values, beliefs, assumptions, and behavioral norms created and learned by a group to regulate interactions and task completion (Schein, 1990, 2017). There are two common measurement approaches to organizational culture: typological and dimensional. Typological approaches classify organizations based on ideological profiles of power orientation, role orientation, task orientation, and person orientation (Harrison, 1972). Others identify organizational culture based on values, beliefs, and behaviors that result in bureaucratic, innovative, or supportive environments (Wallach, 1983). The Competing Values Framework (Cameron & Quinn, 2011) identifies four types of organizational cultures: clan, adhocracy, market, and hierarchy. The typological and dimensional approaches differ from Schein’s (2017) in that they use broad-based views of organizations in general, as opposed to measuring organizations as unique entities with unique cultures. We follow Schein’s approach.
MEASURES OF MATTERING

Existing instruments evaluate perceptions of mattering to important others or to society in general. Like our newly created measure, existing ones assess the extent to which individuals feel valued and add value. For example, the General Mattering Scale (DeForge & Barclay, 1997; Marcus, 1991) reflects feeling valued based on how others view the individual on dimensions such as importance, attention, and ways they add value to others. A 24-item Interpersonal Mattering Index (Elliott et al., 2004) revealed three latent factors named awareness, importance, and reliance, which reflect feeling valued and adding value. For instance, an awareness item reflecting the importance of feeling valued is, “Whatever else may happen, people do not ignore me.” Feeling important is a way to feel valued, reflected in the reverse coded item “People do not care what happens to me.” An item indicating adding value is “People count on me to be there in times of need.”

The School Counselor Mattering Survey measures feeling valued by others (i.e., students, administrators, parents, teachers) in an educational setting (Dixon Rayle, 2006). For instance, the anchor item measuring feeling valued is, “How important do you feel you are to the following persons in your school workplace?” The Mattering to Others survey measures significance to others in society in general (France & Finney, 2009). Items reflect feeling valued statements such as, “Often, people trust me with things that are important to them,” and reverse-coded items such as, “Sometimes, I feel almost as if I were invisible,” and “People do not care what happens to me.” Items reflecting adding value are, “When people need help, they come to me” and “Quite a few people look to me for advice on issues of importance.”

Recently, some research has expanded the measurement of mattering to investigate interpersonal mattering and societal mattering at work (Jung & Heppner, 2017). The 45-item Work Mattering Scale (Jung & Heppner, 2017) includes items about feeling valued such as, “I think that society values the work I do” and “My coworkers/colleagues would be disappointed if they knew that I may leave my job.”

Overall, these mattering instruments gather personal perceptions of feelings of mattering in general. Our approach is more specific. We wanted to examine to what extent employees experienced mattering by the expression of specific values, behaviors, and expectations created for a particular university.

CONTEXT-SPECIFIC MEASURE DEVELOPMENT

Since organizational culture is the set of shared values, beliefs, assumptions and behavioral norms created and learned by a group over time (Schein, 1990, 2017), we created a measure that reflected the unique culture of mattering of a particular organization (see the CoM Survey in the Appendix).

In 2013, based on employee feedback, a large, private, non-profit university partnered with an established industry consultant to conduct focus groups with employees and guide executive leaders to begin a long-term organizational culture transformation. During this discovery process, key themes emerged as areas for university improvement. Executive leaders shared these themes with other top leaders across the university. In 2014, a group of senior leaders throughout the university formed a Culture Leadership Team (CLT). With vast input from the university community, university leaders developed principles for a unique new culture, driven by a shared common purpose and unique values. Beginning in fall 2014, the common purpose and values were communicated to the university community. In 2015, the CLT formed work teams of university employees to develop a corresponding set of service standards and leadership expectations for the university. Training began on the new elements of the university’s culture in fall 2015.

Given the bottom-up nature of the newly designed culture, an instrument was built that integrated mattering (i.e., feeling valued and adding value), with the unique elements of the university’s culture.
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In addition, there was a need to evaluate mattering in the unique context of relationships to supervisors, colleagues, and the organization as a whole. Each item in the tool is a confluence of these three considerations. One unique culture element is the common purpose which focuses on education, research, and service, while another element is the university’s values, which include excellence, diversity, and responsibility. A third element is the list of behavior expectations for leaders including the ability to develop people by being visionaries who build trust.

The final culture element is the list of service standards, which focus on ensuring safety and exhibiting caring, responsive, and professional treatment towards everyone. Multiple sources of mattering (i.e., supervisors, colleagues, and organization) were included because work teams consist of individuals embedded within an organizational system structure.

In summary, culture is important. Mattering is equally important. While there are many instruments for both organizational culture and individual mattering, we felt the need to synthesize culture in terms of mattering (feeling valued, adding value) within an organization.

CULTURE OF MATTERING SURVEY CONTENT

Based on the importance of supervisors, colleagues, and the organization as a whole in fostering a climate of mattering, we devised an instrument that would capture these diverse sources of mattering. We hypothesized that these three levels of influence would form three distinct factors in the CoM survey. Consequently, the nine items of the survey measure supervisor-based mattering, colleague-based mattering, and organization-based mattering, with three items per dimension. Items that reflect adding value and feeling valued are noted.

Supervisor-based mattering
We measured supervisor-based mattering using three items of employees rating their unit supervisor as someone who treats others with respect (feeling valued), creates a climate of trust (feeling valued), and is responsible (adding value).

Colleague-based mattering
We measured colleague-based mattering with three items where employees rated their unit colleagues as employees who perform their tasks with high quality (adding value), behave compassionately (feeling valued), and actively pursue creative ways to solve problems (adding value).

Organization-based mattering
We measured organization-based mattering using three items dealing with responsiveness to requests by cross-organization units (adding value), perception of organization-wide employees feeling valued (feeling valued), and perception of organization-wide employees being provided opportunities to impact the future of the organization (adding value).

STUDY AIMS AND METHOD

Given the importance of mattering for well-being and organizational success, it is important to explore this phenomenon in more depth in higher education. But before we can investigate the relationship of mattering to other outcomes, we first need to develop a robust instrument to measure mattering. The survey was created by generating items that reflected how the specific culture of the organization related to either feeling valued or adding value. For example, the first item (My supervisor treats everyone with respect) pertains to the organizational value of caring and feeling valued at the same time. Item number four (Employees in my unit perform their tasks with the highest level of quality) pertains to the organizational value of excellence and to adding value at the same time. All items were created with the dual goal of addressing an organizational value and an aspect of mattering.
ing. The aim of this study was to examine the factor structure of a newly developed culture of mattering survey based on three levels of mattering: supervisor, colleague, and university organization as a whole.

**PARTICIPANTS**

The study sample consisted of 4,264 university employees from 469 separate departments or units from a single organization. This represents approximately 28% of the workforce.

After providing online consent, employees voluntarily responded to web-based surveys administered by an external vendor. Some demographics were collected from employees during the self-report administration, while other demographics were collected from the university’s human resources file.

The sample consisted of 2685 females (63.6%) and 1539 males (36.4%). Most individuals were either White (40.7%; $n = 1630$) or Hispanic/Latino (41.4%; $n = 1660$). Overall, the respondents were well-educated, with 86.9% ($n = 3445$) having completed at least a 4-year college degree.

**PROCEDURES**

This study was conducted online, between October 31 and November 13, 2016, as part of the organizational campaign to measure culture at the university.

**MEASURE**

The Culture of Mattering Survey consists of nine positively worded item statements that were rated on a Likert scale of 1-5 where one (1) meant “strongly disagree” and five (5) meant “strongly agree” with an un-scored sixth option of “don’t know/does not apply.” As explained, authors wrote the items using a conscious mix of expected culture practices aligned with some of the values, leadership behavior expectations, and service standards. Each sub-content area (supervisor-, colleague-, and organization-based mattering) had three items, so we hypothesized a factor structure with three sub-dimensions. The authors planned to create sub-scores for each of these sub-dimensions using three associated items as well as to create an overall score using all nine items.

**STATISTICAL ANALYSES AND FINDINGS**

Research question #1 asked, “What is the underlying factor structure of the Culture of Mattering (CoM) survey?” Findings revealed that a bifactor structure clearly provided the best fit. Research question #2 inquired, “Do the CoM variables load as expected onto the three theorized factors of (1) Supervisor-based Mattering, (2) Colleague-based Mattering, and (3) Organization-based Mattering?” The confirmatory factor analysis supported the intended factor structure for the nine items of the Culture of Mattering survey. A complete list of the items may be found in the Appendix.

We used R for all analyses. For the CFA model, we used the correlation matrix obtained from existing data using pairwise deletion. We did not remove any observation with missing data, nor did we impute the missing observations. Explanations of the statistical analyses we performed along with the evidence to support the findings follow.

First, we computed the eigenvalues from the correlations among nine items and examined the scree plot (Cattell, 1966) with the help of parallel analysis (Green et al., 2012; Horn, 1965). The scree plot (see Figure 1) and accompanying parallel analysis procedure suggested a 3-factor solution as hypothesized by the researchers. In order to examine the factor structure, we first obtained a random two splits of the data with equal sample size. On the first split (test data to explore the factor structure), we first used an exploratory bifactor modeling approach. The main purpose of an exploratory bifactor model is to partition the variance in a way that there exists a general factor representing the common variance among all items and group factors representing systematic variation unrelated to the
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general factor. This approach also allows researchers to judge the relative strength of the general factor and group factors in order to argue the use of sub-scores.

Figure 1. The scree plot with parallel analysis procedure for the Culture of Mattering Scale

We fitted a three-factor model on the first random split from the dataset and implemented Schmid-Leiman orthogonalization (Schmid & Leiman, 1957). The estimated factor loadings are presented in Table 1. All items loaded significantly on the general factor, and each item significantly loaded on a group factor. The factor structure from the exploratory analysis supported the intended factor structure with one general dimension and three sub-dimensions.

Table 1. The estimated factor loadings of the exploratory factor analysis for the Culture of Mattering Scale on the first random split

<table>
<thead>
<tr>
<th></th>
<th>General Factor</th>
<th>Group Factor 1</th>
<th>Group Factor 2</th>
<th>Group Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>C05</td>
<td>0.63</td>
<td>0.69</td>
<td>-0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>C06</td>
<td>0.70</td>
<td>0.68</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>C07</td>
<td>0.62</td>
<td>0.61</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>C08</td>
<td>0.54</td>
<td>0.04</td>
<td>0.68</td>
<td>0.00</td>
</tr>
<tr>
<td>C09</td>
<td>0.52</td>
<td>0.02</td>
<td>0.70</td>
<td>-0.01</td>
</tr>
<tr>
<td>C10</td>
<td>0.54</td>
<td>-0.03</td>
<td>0.74</td>
<td>0.02</td>
</tr>
<tr>
<td>C11</td>
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<td>-0.06</td>
<td>0.19</td>
<td>0.39</td>
</tr>
<tr>
<td>C12</td>
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<td>0.01</td>
<td>0.00</td>
<td>0.66</td>
</tr>
<tr>
<td>C13</td>
<td>0.61</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.60</td>
</tr>
</tbody>
</table>
After the exploratory factor analysis, we fitted the estimated factor structure on the second random split from the test data in the context of confirmatory factor analysis to examine how well this bifactor structure supported by the exploratory analysis would fit on the second random split. The overall fit indices and the estimated factor loadings from the confirmatory factor analysis is reported in Table 2. In addition to the bifactor structure, we also fitted a one-factor model and three factor model (with correlated factors) for the sake of comparison. The bifactor structure clearly provided the best fit among these three potential structures, and the confirmatory factor analysis also supported the intended factor structure for these nine items.

Table 2. The estimated factor loadings and fit indices from the confirmatory factor analysis for the Culture of Mattering Scale on the second random split

<table>
<thead>
<tr>
<th></th>
<th>Bifactor Solution</th>
<th>One-factor Solution</th>
<th>Three-factor Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Factor</td>
<td>Group Factor 1</td>
<td>Group Factor 2</td>
</tr>
<tr>
<td>C05</td>
<td>0.31</td>
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<td>C08</td>
<td>0.30</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>C09</td>
<td>0.27</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>C10</td>
<td>0.28</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>C11</td>
<td>0.34</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>C12</td>
<td>0.44</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>C13</td>
<td>0.44</td>
<td>0.22</td>
<td></td>
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<table>
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<tr>
<th></th>
<th>RMSEA</th>
<th>[95% CI]</th>
<th>CFI</th>
<th>SRMR</th>
<th>AIC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.072</td>
<td>[0.037,0.105]</td>
<td>0.989</td>
<td>0.027</td>
<td>1151</td>
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<tr>
<td></td>
<td>0.356</td>
<td>[0.333,0.378]</td>
<td>0.592</td>
<td>0.210</td>
<td>1806</td>
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<tr>
<td></td>
<td>0.095</td>
<td>[0.068,0.122]</td>
<td>0.97</td>
<td>0.044</td>
<td>1169</td>
</tr>
</tbody>
</table>

Lastly, we also followed the guidelines provided by Feinberg & Jurich (2017) for reporting and interpreting subscores. A detailed discussion about how to evaluate whether sub-scores have adequate psychometric properties and provide valuable information beyond a general composite score is provided by Haberman (2008). Haberman (2008) proposed a quantity called the proportional reduction in mean square error (PRMSE) for evaluating the quality of subscores. Later, Feinberg & Wainer (2014) refined this approach and proposed the value-added-ratio (VAR) in order to quantify the value of sub-scores beyond the general total score. In their detailed discussion and study, Feinberg & Jurich (2017) proposed the following guidelines:

1) Subscores should not be used and reported when VAR is smaller than .9.
2) Subscores are redundant with the total score if VAR is between .9 and 1.1, and there is no practical value of using subscores in addition to a total score unless the subscore is highly reliable (e.g., .9).
Assessing a Culture of Mattering

3) Subscores with VAR value above 1.1 are meaningful and provide a significant amount of additional information beyond what has been already provided by the total score.

Using the procedures described in these papers, we computed the values for VAR and reliabilities for each sub-dimension hypothesized while creating these 9 items and supported by exploratory and confirmatory factor analysis. Table 3 provides the values computed from this procedure. As can be seen from Table 3, each sub-dimension has high reliability and the computed value-added-ratios (PRMSES/PRMSEX) for all sub-dimensions are well above 1.1, the suggested threshold by Feinberg & Jurich (2017). This indicates that a meaningful total score for all these nine items as well as reliable sub-scores that provide valuable information beyond this total score for each of the sub-dimensions (supervisor-, colleague-, and organization-based mattering) can be created and used.

Table 3. Reliability, Proportional Reduction in Mean Squared Error, and Value-Added-Ratio of Sub-dimensions

<table>
<thead>
<tr>
<th>Number of Items</th>
<th>Reliability</th>
<th>PRMSES</th>
<th>PRMSEX</th>
<th>PRMSEsx</th>
<th>VAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor-based Mattering</td>
<td>3</td>
<td>0.95</td>
<td>0.946</td>
<td>0.567</td>
<td>0.947</td>
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<tr>
<td>Colleague-based Mattering</td>
<td>3</td>
<td>0.92</td>
<td>0.921</td>
<td>0.573</td>
<td>0.923</td>
</tr>
<tr>
<td>Organization-based Mattering</td>
<td>3</td>
<td>0.86</td>
<td>0.864</td>
<td>0.577</td>
<td>0.870</td>
</tr>
<tr>
<td>Overall Mattering</td>
<td>9</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION

Following the approach recommended by Schein (2017), we believe that unique organizational cultures require unique means of evaluation. Since the university embarked on a culture transformation project that delivered unique outcomes, we felt it was necessary to build an instrument that would capture this university’s unique common purpose, values, leadership expectations, and service standards. All these elements are part of a culture of mattering, which we define as a culture where people feel valued and have opportunities to add value. When these two conditions are met, we can expect a sense of mattering to emerge. However, mattering derives from interactions in specific contexts. We identified three types of relationships in which mattering can potentially take place: relationships with supervisors, colleagues, and with the university as a whole. Based on this conceptualization we created an instrument that would capture mattering based on this university’s unique culture, across these three levels of interactions. The result was a nine-item survey.

Based on our statistical analyses, a bifactor model emerged in which there was one general mattering factor, and three specific sub-factors dealing with supervisors, colleagues, and the organization as a whole. The results show that it is possible to create a robust tool to measure the unique culture of a university through a mattering lens at multiple levels of analysis. Each item was created to reflect this university’s unique cultural elements (values, leadership expectations, service standards, etc.), an aspect of mattering (feeling valued or adding value), and a specific context (interactions with supervisors, colleagues, or organization as a whole).

The process used in the case of this university can be replicated in other universities or organizations wishing to evaluate their unique culture through a mattering lens. There are many ways to feel valued and add value. In this university, for example, leaders were expected to develop their staff (add value)
and show compassion towards them (make them feel valued). Other institutions can build mattering tools based on their unique principles. We do recommend paying attention to levels of interaction, however, since employees can feel valued by colleagues and not by supervisors, or vice versa. Results of surveys like this can be used to customize action plans for units and divisions within the organization.

Based on the literature on mattering, we know that it is correlated with autonomy, health, life satisfaction, self-determination, pleasure, purpose, and overall psychological well-being (Flett, 2018). On the basis of these findings, we think it is important to pay attention not just to organizational culture in general, but to a culture of mattering in particular. We hope that our instrument may encourage others to look into mattering in depth within their own organizations.

It would be important to understand differences among tenure/tenure track, clinical/educator, and adjunct faculty members. In addition, it would be useful to study not just levels of mattering among different groups but also how mattering relates to outcomes such as well-being, life satisfaction, and productivity.

**CONCLUSION**

Institutions of higher education must make sure that all employees feel valued and have opportunities to add value. Based on research from other sectors, reviewed here, we know that mattering leads to engagement and well-being. We encourage universities and colleges not only to measure mattering, but also to put in place structures and policies that nurture it throughout the organization.

**REFERENCES**


Assessing a Culture of Mattering


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### APPENDIX

**Culture of Mattering Survey**

On a five-point scale, where 5 means strongly agree and 1 means strongly disagree with an unscored sixth option of “don’t know/does not apply”.

| 1. | My supervisor treats everyone with respect |
| 2. | My supervisor creates a climate of trust in my unit |
| 3. | My supervisor is very responsible |
| 4. | Employees in my unit perform their tasks with the highest level of quality |
| 5. | Employees in my unit behave in compassionate ways |
| 6. | Employees in my unit actively pursue creative ways to solve problems |
| 7. | Units across my organization respond promptly to requests for help |
| 8. | Employees feel valued at my organization |
| 9. | Employees have opportunities to impact the future of my organization |

### BIOGRAPHIES

**Isaac Prilleltensky** is the former dean of the school of education and human development at the University of Miami, where he currently serves as Professor of Educational and Psychological Studies and Vice Provost for Institutional Culture. He was born in Argentina and has lived and worked in Israel, Canada, Australia and the United States. He has published ten books and over one hundred and thirty scholarly papers and book chapters. His areas of expertise are well-being, mattering, and organizational culture. In his current role he leads a team dedicated to improving the culture of the institution through measurement, education, consultation, and the creation of online resources. His research team has also produced ways to measure and promote multidimensional well-being.

**Samantha Dietz**, Ph.D., LCSW, MCAP, ICADC, is the Executive Director of Programs for the Office of Institutional Culture at the University of Miami. In addition to her work assisting in the development and validation of an instrument measuring a culture of mattering, Dr. Dietz has participated in the development and validation of instruments measuring multidimensional well-being and culture of belonging. She has co-authored multiple research team scholarly papers related to the development, testing, and measurement of an online well-being intervention.
Cengiz Zopluoglu joined the Educational Psychological Studies (EPS) faculty at the University of Miami in 2013. Prior to joining the EPS faculty, he received his Ph.D. in Quantitative Methods in Education program in the Department of Educational Psychology at the University of Minnesota. He held research positions with the Quantitative Methods in Education program and Office of Research and Consultation Services at the University of Minnesota, and also had the privilege of doing psychometric research at the Minneapolis Public Schools in Minnesota and ACT, Inc. in Iowa. In the RME program at the University of Miami, he teaches courses on educational measurement and psychometric theory.

Adam Clarke is the Senior Manager of Business Operations in the Department of Psychology at the University of Miami. He is a double alumnus of the University of Miami, completing his Bachelor’s degree in Business Administration in 2012 and his Masters of Education degree in Research, Measurement, and Evaluation in 2018. His academic interests include data visualization and statistics.

Dr. Miriam Lipsky serves as the Assistant Provost for Institutional Culture at the University of Miami. Since joining the Office of Institutional Culture (OIC) in 2016, Dr. Lipsky has helped spearhead the new Intergroup Dialogue initiative, obtaining several grants to move this work forward within the university. She teaches a course for undergraduates on Intergroup Dialogue, and launched the UDialogue program on Intergroup Dialogue for faculty and staff in the fall of 2019. As part of her work in the OIC, Dr. Lipsky designs and leads educational programs about diversity and inclusion, and consults with units throughout the university on programs to promote a Culture of Belonging.
Chris Hartnett is a Senior Learning and Facilitation Specialist for the Office of Institutional Culture (OIC), working under the leadership of Vice Provost for Institutional Culture, Dr. Isaac Prilleltensky. He has been at the University of Miami (UM) in several capacities from student to employee, having earned both his undergraduate and graduate degrees from UM. Most recently prior to joining the OIC team, Chris served as the Director of Residence Life in the Department of Housing and Residential Life where he was responsible for managing the residential curriculum, student programmatic efforts of the department, and supervising the professional staff members of the residence life unit. In his role with the OIC, Chris is responsible for hosting and leading training sessions, preparing culture transformation materials for online dissemination, and working with all team members to foster the spirit of culture transformation at the U. He currently serves as a co-facilitator for the University’s “UDialogue” program which informs employees how to have constructive dialogue across different social identities, such as gender, race, ethnicity, and sexual orientation. Chris also serves in leadership roles on the LGBTQ Faculty and Staff Network and the Dean’s Diversity Council at the University’s medical campus.