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The Implicit Curriculum in an Urban University Setting: Pathways to Students' Empowerment

N. Andrew Peterson, Antoinette Y. Farmer, and Allison Zippay

Professional schools are developing conceptual frameworks that can be used to assess and improve implicit curricula. Students' professional empowerment, defined to include perceived professional competence and identity, may be considered a vital outcome of these efforts. Our study evaluated measures and tested a path model that included perceptions of characteristics of implicit curricula (i.e., faculty and staff diversity, supportive faculty, opportunity role structure, and access to information) and mediating variables (i.e., participation, sense of community, and feeling valued by the school) as predictors of professional empowerment. Respondents were students ($N = 423$) of a school of social work in the northeast. Results supported the validity of the scales and fit of the hypothesized model. Implications and directions for future research are discussed.

The implicit curriculum, which refers to a student's learning environment, has been identified as an essential feature of an integrated professional social work curriculum by the 2008 Educational Policy and Accreditation Standards (EPAS) of the Council on Social Work Education (CSWE). The implicit curriculum is considered distinct from other key curricular features specified by the EPAS. Other features involve the program mission and goals, explicit curriculum (i.e., the courses and field experiences, core competencies, and associated practice behaviors), and assessment. Together, the features of a curriculum may shape the future of a profession by influencing the quality of the educational experience, the creation of knowledge, and the capabilities of potential leaders in professional and broader community contexts.

This is the first time that the CSWE accreditation standards have referenced an implicit curriculum, and its components are described as including support for diversity, policies, and procedures that are equitable and transparent, student participation in governance, a climate of inquiry, and other environmental factors that may affect student learning. It is expected that schools of social work will use assessment data to affirm the implicit curriculum, which is considered to be equally important as the explicit curriculum in "shaping the professional character and competence of the program's graduates" (CSWE, 2008, p. 10). Furthermore, it is expected that programs will use assessment data to make changes in the implicit curriculum to enhance student

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outcomes and will share those assessment data with constituents such as students, faculty, and advisory boards.

Although the EPAS state that schools of social work will need to provide ongoing evidence of their collection and analysis of data related to the implicit curriculum, there are no recommendations made by CSWE about what specific frameworks and measures should be used for assessment. Most schools of social work are in the beginning phases of developing models and tools to measure and evaluate the implicit curriculum and its effects. Although some have described their measurement efforts (e.g., Grady, Powers, Despard, & Naylor, 2011), conceptual frameworks (Miller, 2010), or development strategies (Holosko, Skinner, MacCaughelty, & Stahl, 2010), few empirical studies have been conducted to test the ways in which components of an implicit curriculum may be associated with student outcomes such as perceived professional competence and identity as a social worker.

An empowerment framework was used to guide this study. Literature in social work and other disciplines was reviewed to identify characteristics of the implicit curriculum that might facilitate students' professional empowerment, which we defined to include their perceptions of professional competence and identity. Although no research to date has presented and empirically tested a model that identifies predictors of professional empowerment in the context of implicit curriculum development, we considered prior research that focused on the promotion of psychological empowerment in organizational contexts as we developed our conceptual model. The data for the present study were drawn from surveys administered to more than 400 MSW students attending a university in the northeastern United States. Four characteristics of implicit curriculum were included in the model (i.e., faculty and staff diversity, supportive faculty, opportunity role structure, and access to information), as were three mediating variables (students' participation in extracurricular activities, sense of community, and sense of being valued by the school), as predictors of students' professional empowerment. We conceptualized social work students' professional empowerment to involve their identity as a professional social worker, belief in their potential for professional competence, perceptions of autonomy as a professional social worker, and beliefs regarding their ability to have an effect as a social worker. If the hypothesized relationships between the variables in our model are empirically confirmed with the data from our sample of students, it would suggest that an empowerment-based approach may be useful to institutions as they develop conceptual frameworks, measurement tools, and strategies to improve their implicit curricula.

ASSESSMENT OF IMPLICIT CURRICULA

Professional Education

The concept of an implicit curriculum has long been recognized as a component of professional education and training across disciplines including education, medicine, nursing, and other health-related fields (Balmer, Master, Richards, & Giardino, 2009; Bennett et al., 2004; Cribb & Bignold, 1999; Hamburg, 1969; Shephard & Jensen, 1990; Van Der Vleuten, 1996; Wear & Castellani, 2000). First noted in education, it has been described to include the climate, culture, and values that make up a hidden or unseen learning environment that may complement or contradict the content of an explicit curriculum (Eisner, 1985; Peterson & Deal, 2002; Rennert-Ariev,

2008; Wren, 1999). Much discourse has focused on both the beneficial and detrimental messages that can be conveyed through these learning environments and the possible effects of the implicit curriculum on students' socialization processes (Deon, Lear, Turner, & Jones, 2007; Holosko et al., 2010; Miller, 2010; Wren, 1999). Researchers have noted that an implicit curriculum will invariably affect student outcomes such as their professional character and conduct (Cohen, 2006; Karnieli-Miller, Vu, Holtman, Clyman, & Inui, 2010; Thomas, 1991). For example, studies within medicine and nursing have shown that although an explicit curriculum may exhort the values of a compassionate manner with patients, students may be absorbing a contradictory message in observing a brusque or task-oriented demeanor among clinical faculty and their patients (Jones, 2007). Likewise, researchers across disciplines have observed that a nondiverse faculty and staff may contradict explicit curriculum content that asserts the critical importance of culturally competent and diverse professionals (Adams, 1992; Brayboy, 2010; Turbis, Krebs, & Axtell, 2002). Fewer studies have been framed to focus on the potential positive effects of learning environments within professional training; these include examinations of the ways in which norms, positive role models, and school culture reinforce motivation, common purpose, and appropriate professional practice (Jones, Hanson, & Longacre, 2004; Karnieli-Miller et al., 2010; Maudsley, 2001; Weissman, Branch, Gracey, Haidet, & Frankel, 2006).

Though the presence and potential effects of an implicit curriculum are widely discussed across these disciplines, there are no standard definitions or measures. Rather, the conceptualization of implicit learning environments varies widely, as does its assessment (Cohen, 2006; Harden, 2002; Sambell & McDowell, 1998; Van der Vleuten, 1996). Many researchers have also asserted the need to extend assessments to link an implicit curriculum to student outcomes in professional schools. Yet there are few published studies of results (Allan, Smith, & O'Driscoll, 2011; Billings, Engelberg, Curtis, Block, & Sullivan, 2010; Miller, 2013). Some researchers have reported testing and validating measures (Haidet, Kelly, & Chou, 2005; McNeil, Hughes, Toohey, & Dowton, 2006). Others have examined the effects of aspects of implicit curricula on clinical behaviors among nursing and medical students (Billings et al., 2011; Fitz et al., 2007; Jones, 2007; Jones et al., 2004) and medical student burnout and cynicism (Billings et al., 2011). A few have related messages implicit in teaching styles to variations in students' interpretation of content (Lempp, 2004; Tarshis, 2008).

Social Work and the Implicit Curriculum

Within the field of social work the assessment of the implicit curriculum is in its infancy, with little published research on the topic. Reviewing EPAS expectations regarding the implicit curriculum, Petracchi and Zastrow (2010) suggested several options for assessment tools, such as student exit surveys and course evaluations. Holosko et al. (2010) described a process used to develop an implicit curriculum in a bachelor of social work (BSW) program. Grady and colleagues (2011) piloted an Implicit Factors Survey (IFS) with 64 graduating master's of social work (MSW) students that examined their perceptions of four components of an implicit curriculum, as specified by the CSWE evaluation standards: community, diversity, faculty advising, and support services. Their results described student satisfaction with these program features and identified, from open-ended responses, factors that contributed to students' positive or negative perceptions. The study was a pilot, its scales were not empirically tested for reliability or validity,

and no relationships between implicit factors and student outcomes were assessed. Elsewhere, Miller (2010, 2013) presented and tested a framework for the professional socialization of social workers. Her framework identified and integrated features of explicit and implicit curricula that may be essential for promoting a strong commitment to social work values, positive attitudes toward the profession's history and mission, and various forms of social work identity. Other social work programs have described, in unpublished reports, initiatives aimed at identifying and assessing aspects of their implicit curricula in response to CSWE self-study and reaccreditation expectations. No previous research in social work has examined or measured how features of an implicit curriculum might shape students' professional empowerment.

EMPOWERMENT AS A CONCEPTUAL FRAMEWORK FOR ASSESSMENT OF THE IMPLICIT CURRICULUM

Figure 1 shows the conceptual framework for the present study. It demonstrates how empowering characteristics of the implicit curriculum are hypothesized to have direct effects on students' professional empowerment, as well as indirect effects through their influence on several mediating variables. Empowerment represents a vital theoretical framework and value orientation for social work, community psychology, public health, and other disciplines (Gutiérrez, 1990; Rappaport, 1987; Wallerstein, 1992). For social work, empowerment is "a process of increasing personal, interpersonal, or political power so that individuals can take action to improve their life situations" (Gutiérrez, 1990, p. 149). Empowerment has been further conceptualized to entail key subcomponents, including self-perceptions of control and feelings of efficacy or the competence to act. Spreitzer (1995), for example, presented a conceptual framework for understanding empowerment in professional settings that included individuals' sense of meaning and identity, their belief in the competence that they demonstrate in their work, their perceptions of the autonomy and independence that they exercise, and their beliefs about the extent to which they can have an effect through their work. These self-perceptions are crucial because they may equip individuals to take actions that produce the power needed to influence organizational or community conditions that affect well-being. Subsequent research using Spreitzer's (1995) model has found professional empowerment to be related to individuals' motivation to perform effectively

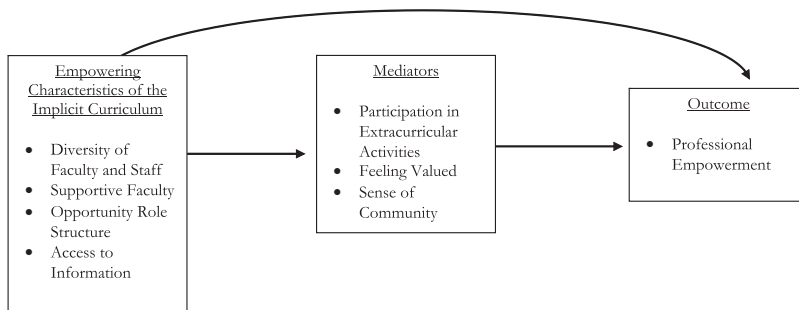


FIGURE 1 Conceptual framework for the study.

(Chen et al., 2007; Seibert, Silver, & Randolph, 2004) as well as their work performance, as measured by effectiveness (Spreitzer et al., 1997), productivity (Koberg, Boss, Senjem, & Goodman, 1999), and newcomer role performance (Chen & Klimoski, 2003).

An important body of research has focused on how characteristics of the environment may affect empowerment. These studies have emphasized how empowerment may be facilitated or hindered in organizational contexts (e.g., Gutiérrez, GlenMaye, & DeLois, 1995; Hardina, 2011; Ohmer, 2008; Wallach & Mueller, 2006; Wilke & Speer, 2011). Of particular interest has been development of knowledge about empowerment processes at the boundary between organizational and individual levels of analysis. These studies have generally found that characteristics of organizations, across a wide variety of types, can have effects on the empowerment of individuals. Organizations such as schools of social work that cultivate activities and characteristics that facilitate empowerment among members have been described as *empowering organizations* (Peterson & Zimmerman, 2004). Organizational characteristics identified as promoting individual empowerment have been termed *empowering organizational characteristics* and include features such as an organization's opportunity role structure and social support (Gutiérrez et al., 1995; Maton, 2008).

Organizational characteristics have been hypothesized as affecting empowerment directly as well as indirectly through their effects on variables such as participation, sense of community, and feeling valued by others (Ohmer, 2008; Peterson & Zimmerman, 2004). In the context of the learning environment in schools of social work it is also reasonable to consider features such as students' access to information and the diversity of faculty and staff as potentially empowering organizational characteristics. These two features—access to information and the diversity of faculty and staff—have been identified as important aspects of implicit curricula for schools of social work (CSWE, 2008). Efforts to identify characteristics of the learning environment that facilitate empowerment have the potential to guide future interventions. Previous research suggests that characteristics of the environment may promote individual empowerment in a variety of different contexts. More research is needed, however, to examine whether these components of an implicit curriculum may be directly or indirectly associated with students' professional empowerment.

CURRENT STUDY

The purpose of this study was to test a path model that included characteristics of implicit curricula as predictors of students' professional empowerment. Prior to testing our model, we evaluated the measures that were used to assess the implicit curriculum. Our study adds to the knowledge base in important ways. We test a theoretical model that was developed by the authors to assess the influence of four characteristics of the implicit curriculum (i.e., diversity of faculty and staff, supportive faculty, opportunity role structure, and access to information) and three mediator variables (i.e., students' participation in extracurricular activities, sense of community, and feeling valued by the school) on students' professional empowerment (conceptualized as students' identity as a social worker, belief in their potential for professional competence, perceptions of autonomy as a professional social worker, and beliefs regarding their ability to have an effect as a social worker). By applying an empowerment framework in this way, we are measuring variables that

are consistent with the intent of the implicit curriculum as specified by the EPAS. This is the first research to date to empirically test a model that identifies predictors of students' professional empowerment in the context of implicit curriculum development.

METHOD

Sample and Procedures

Data were collected in the year 2011 as part of a larger pilot survey designed to evaluate the effects of the implicit curriculum in a public northeastern U.S. university. A total of 423 students participated in the survey (response rate = 45%). Data were collected in the spring semester using paper-and-pencil survey procedures in a classroom setting. Survey respondents were students who were enrolled in the MSW program. We attempted a census of all MSW students. Survey administration typically lasted between 15 and 35 minutes in length. The sample was 83.3% female, 9.1% Hispanic, 67.1% Caucasian, 20.4% Black or African American, and 4.4% Asian. Regarding the age of respondents, 29% of the sample was between 18 and 24 years, 45.2% was 25–34 years, 12.8% was 35–44 years, 11.1% was 45–54 years, and 2% was age 55 or older. In addition, 75% of the sample was enrolled full-time, and 40.2% was enrolled in the first year of the graduate program.

Measures

Eight variables were examined in this study. Students' professional empowerment served as the criterion. Only one of the measures (i.e., professional empowerment) was drawn from an existing, validated instrument. The remaining measures were designed specifically for our study. All items, with the exception of the participation scale, were answered using a 7-point Likert-type scale that ranged from *strongly disagree* to *strongly agree*. Scale scores represented the mean of items comprising each measure.

The measure of professional empowerment used in this study was based on Spreitzer's (1995) conceptual framework and instrument. The measure was designed to assess dimensions of empowerment that included students' sense of meaning and identity as a social worker, their belief in the competence that they will demonstrate in their profession, their perceptions of the autonomy and independence that they will be able to exercise as professional social workers, and their beliefs about the extent to which they can have influence on an agency and in the broader community as a social worker. Support for the validity of this framework and measure has been demonstrated by several previous studies. Included in this study was a 15-item version of the measure. Cronbach's alpha was .92 ($M = 6.11$; $SD = .71$) for the sample of students in this study. The overall empowerment score was used in this study.

Four measures were used to assess students' perceptions of characteristics of the implicit curriculum. First, diversity of faculty and staff was measured with three items (Cronbach's $\alpha = .76$; $M = 5.18$; $SD = 1.25$) that were intended to assess students' perceptions of the extent to which faculty and administrators reflected the diverse population of the state and whether the school provided programs that addressed the needs of persons from diverse backgrounds. Second, the measure of supportive faculty was designed to assess students' perceptions of the extent to

which faculty created a learning environment that was supportive of their success, whether faculty understood students' point of view, and whether faculty were encouraging of students in the use of research to inform their practice. Three items were included in the measure of supportive faculty (Cronbach's $\alpha = .71$; $M = 6.08$; $SD = .82$). Third, opportunity role structure was measured with four items (Cronbach's $\alpha = .89$; $M = 4.36$; $SD = 1.47$) intended to assess students' perceptions of the extent to which they were aware and involved in the decision-making process of student organizations and whether there were adequate extracurricular activities offered to help meet their needs. Fourth, access to information was measured with four items (Cronbach's $\alpha = .91$; $M = 5.07$; $SD = 1.20$) designed to assess students' perceptions of the extent to which various school policies were easily accessible, clear, and easy to understand.

Three measures were used to assess variables that were hypothesized as mediators of the effects of the implicit curriculum on students' professional empowerment. The first measure, which assessed students' feelings of being valued by the school, asked them to rate the extent to which they felt appreciated and respected by other people within the school. Three items were included in the measure of feeling valued (Cronbach's $\alpha = .96$; $M = 5.74$; $SD = 1.21$). Second, sense of community was assessed using three items asking students to indicate whether they had feelings of attachment to others in the school. Although existing theory (McMillan & Chavis, 1986) and previous research (Barati, Abu Samah, & Ahmad, 2012; Peterson, Speer, & McMillan, 2008; Wombacher, Tagg, Burgi, & MacBryde, 2010) on sense of community have described and validated four dimensions of the construct (i.e., needs fulfillment, membership, influence, and emotional connection), we focused on the emotional connection dimension for this study and included three items (Cronbach's $\alpha = .94$; $M = 5.59$; $SD = 1.29$), which were answered using a 7-point Likert-type scale that ranged from *strongly disagree* to *strongly agree*. Third, participation in extracurricular activities within the school asked students to indicate which organizations and activities they engaged in during the last year. Specifically, they were asked about their involvement in 12 activities of the school-sponsored student organization (e.g., fundraising walk-a-thons, policy advocacy efforts, licensure review workshops, student government representative, mentoring other students), as well as their involvement in eight school-sponsored activities for students that were not directly part of the student organization (e.g., attending organized lectures, career fairs, social gathering, presentations by faculty, food drive). Students were asked to indicate whether they had engaged in each activity during the last 1-year period using a 6-point scale. The scale was coded as follows: 6 = *10 times or more*, 5 = *7 to 9 times*, 4 = *5 to 6 times*, 3 = *3 to 4 times*, 2 = *1 or 2 times*, and 1 = *not at all* ($M = 1.32$; $SD = .44$).

Analytic Approach

Prior to testing our model we conducted an exploratory factor analysis (EFA) using SPSS 19 to examine the measures that were used in the implicit curriculum survey and that had not been previously tested. We excluded from the EFA the items of the empowerment measure because they were drawn from an existing, validated instrument. In addition, we excluded the items of the participation measure from the EFA because those items were not expected to necessarily correlate.

To test our conceptual model we applied path analysis within the framework of structural equation modeling (SEM; Bryan, Schmiede, & Broadus, 2007). Although SEM denotes a type of analytic technique that usually includes the estimation of unobserved or latent constructs as

well as an estimation of the structure of the relationships among latent constructs, path analysis represents a special case of SEM in which every variable in the model is directly measured or observed. One advantage of this approach is that the fit of complex, multicomponent models to data from a sample of participants can be tested parsimoniously. Many applied studies, including the present research, lack the sample size needed to test full SEM models with latent constructs. Our application of path analysis of observed variables within an SEM framework allowed us to obtain an adequate participants-to-parameters ratio, while also permitting examination of direct effects, indirect effects, and total effects simultaneously in one model rather than a series of regression analyses.

We tested our path model using AMOS 20 (Arbuckle, 2007). We initially tested a fully saturated model that included only observed variables. Maximum likelihood estimation was used to analyze the variance–covariance matrix. The fit indices that we interpreted are widely accepted and considered to be robust measures of fit. These included the discrepancy chi-square (X^2), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square of Error Approximation (RMSEA). Nonsignificant X^2 values and higher values (i.e., greater than .95) on the CFI and TLI, as well as smaller RMSEA values ($<.05$), indicate good model-to-data fit.

RESULTS

Table 1 presents descriptive statistics and exact wording of the items used in the principal axis factor analysis, and Table 2 shows the oblimin-rotated pattern loadings for the items included in the six significant factors with eigenvalues greater than 1. Table 2 lists the factors in the order in which they were extracted. The scree test suggested that six factors were extracted appropriately. The critical value used for a significant loading was set at .50, and the value for cross-loadings was set at .30. As can be seen in Table 2, all hypothesized factors were extracted. The factor analysis yielded four subscales representing students' perceptions of the implicit curriculum: (1) opportunity role structure, which explained 38.3% of the total variance; (2) access to information (11.0% of the variance); (3) supportive faculty (6.6% of the variance); and (4) diversity of faculty and staff (7.1% of the variance). In addition, the factor analysis yielded subscales representing two of the hypothesized mediating variables: (1) sense of community (8.4% of the variance) and (2) feeling valued (7.5% of the variance).

Figure 2 presents the overidentified path model, which includes only significant paths. The path coefficients in Figure 2 represent statistically significant ($p < .05$) standardized beta weights. This model was found to fit well for the sample, $X^2(10) = 17.65$, $p = .061$; CFI = .998; TLI = .956; RMSEA = .043, and accounted for 21% of the variance in students' professional empowerment. In addition, the model accounted for 29% of the variability in students' feelings of being valued by the school, 28% of the variability in students' sense of community, and 5% of the variability in students' participation in extracurricular activities.

As can be seen in Figure 2, sense of community was found to have the strongest direct effect on professional empowerment. Among the implicit curriculum characteristics, diversity of faculty and staff was found to predict professional empowerment indirectly through its effects on students' feelings of being valued by the school and their sense of community. These results indicate that students who reported greater diversity of faculty and staff were more likely to have higher scores representing feeling valued, and students who felt more valued tended to have higher

TABLE 1
Items of the Implicit Curriculum Survey (ICS) Included in the Factor Analysis

<i>Concept</i>	<i>Item</i>	<i>Item Wording</i>	<i>M</i>	<i>SD</i>
D	ICS1	SSW faculty members reflect the diverse population of the state of (____).	5.34	1.57
D	ICS2	SSW administrators reflect the diverse population of the state of (____).	4.92	1.51
D	ICS3	The SSW provides programs that address the needs of persons from diverse backgrounds.	5.48	1.41
SF	ICS4	The SSW faculty create a learning environment that is supportive of my success.	6.12	.90
SF	ICS5	My SSW professors encourage me to use research to inform my practice.	6.21	.99
SF	ICS6	I believe many faculty members understand my point of view.	5.93	1.05
ORS	ICS7	Students are involved in the decision-making process about what activities the SSW student organizations will engage in.	4.14	1.78
ORS	ICS8	There are adequate extracurricular activities within the SSW to help me meet my social needs.	4.07	1.76
ORS	ICS9	Students are made aware of how they can be involved in the SSW student organizations.	5.08	1.64
ORS	ICS10	There are many extracurricular activities within the SSW that build a sense of community among students.	4.23	1.60
AI	ICS11	The SSW policy related to termination from the program is easily accessible.	5.34	1.31
AI	ICS12	The SSW policy related to termination from the program is clear and easy to understand.	5.33	1.32
AI	ICS13	The SSW policy related to the transferring of credits is easily accessible.	4.86	1.37
AI	ICS14	The SSW policy related to the transferring of credits is clear and easy to understand.	4.83	1.36
FV	ICS15	I feel valued by people in the SSW.	5.65	1.30
FV	ICS16	In the SSW, I feel like a person of worth.	5.73	1.27
FV	ICS17	I feel respected as an individual by people in the SSW.	5.78	1.31
SOC	ICS18	I have a strong sense of community with others in the SSW.	5.36	1.56
SOC	ICS19	I feel connected with other people in the SSW.	5.66	1.30
SOC	ICS20	I have a good bond with others in the SSW.	5.70	1.31

Note. SSW = school of social work; *SD* = standard deviation; D = diversity of faculty and staff; SF = supportive faculty; ORS = opportunity role structure; AI = access to information; FV = feeling valued; SOC = sense of community.

scores on the measure of professional empowerment. In addition, students who reported greater diversity were more likely to have higher sense of community, and students who were more connected with others in the school also tended to be more empowered. Similarly, the implicit curriculum characteristic of supportive faculty was shown to predict professional empowerment indirectly through its effect on students' feeling valued by the school.

Figure 2 also shows that opportunity role structure had positive, indirect effects on students' professional empowerment through all three of the hypothesized mediating variables of students' participation in extracurricular activities, feeling valued by the school, and sense of community. This finding indicates that students who reported being more aware and involved in the decision-making process of student organizations also tended to participate more in extracurricular activities, feel more valued by the school, or report a stronger sense of community, and these variables of participation, feeling valued, and sense of community were then positively related with professional empowerment. Access to information was also found to have a positive, direct effect on students' professional empowerment as well as an indirect effect through their feelings

TABLE 2
Rotated Factor Loadings for the Implicit Curriculum Survey (ICS) Items

Item	Opportunity Role Structure	Access to Information	Sense of Community	Feeling Valued	Diversity of Faculty and Staff	Supportive Faculty
ICS1	-.06	.01	-.07	.04	.73	.02
ICS2	.05	.01	.03	-.06	.90	-.13
ICS3	.09	.03	.05	-.04	.51	.15
ICS4	.08	-.02	.03	-.14	.00	.76
ICS5	.11	-.05	.00	.07	.02	.62
ICS6	-.12	.10	-.08	-.06	.02	.58
ICS7	.85	-.05	-.13	.00	.07	-.01
ICS8	.92	-.01	-.06	-.00	.03	-.06
ICS9	.63	.09	.02	-.06	-.05	.07
ICS10	.65	.13	.04	-.05	.03	.09
ICS11	-.04	.75	-.05	-.01	.06	.05
ICS12	-.04	.83	-.07	.00	.02	.10
ICS13	.06	.89	.03	.02	-.02	-.07
ICS14	.09	.83	.04	-.02	-.02	-.08
ICS15	.01	-.00	-.01	-.89	.04	.03
ICS16	.02	-.04	-.00	-.96	.01	.01
ICS17	.00	.03	-.03	-.93	-.03	-.03
ICS18	.05	.06	-.75	-.03	.04	.06
ICS19	.03	.00	-.98	.01	-.03	.02
ICS20	.01	-.03	-.94	-.04	.01	-.05

Note. Items and wording correspond to those presented in Table 1.

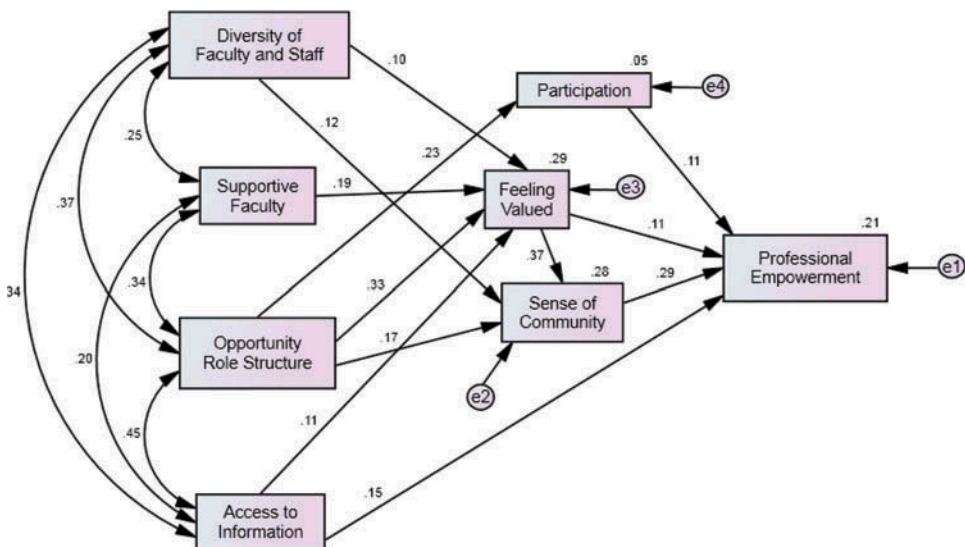


FIGURE 2 Path model predicting students' professional empowerment.
Note. Fit indices for the model: $X^2(10) = 17.65$, $p = .061$; CFI = .988; TLI = .956; RMSEA = .043. Paths shown are statistically significant standardized regression weights; $p < .05$.

of being valued by the school. The path model in [Figure 2](#) also demonstrates that several of the implicit curriculum characteristics predicted students' sense of community directly or indirectly through their effects on students' feeling valued by the school.

[Table 3](#) presents an analysis of the effects shown in [Figure 2](#). The decomposition of effects is a useful approach to understanding the relative strength of direct, indirect, and total effects in a path model (Alwin & Hauser, 1975). The ratio of a variable's indirect effect to its total effect can also be helpful in interpreting the results of a path model because it represents the proportion of a predictor variable's total effect on a criterion variable that is mediated through another variable (Preacher & Kelley, 2011; Sobel, 1982). Beyond the direct effects shown in [Figure 2](#), two sets of indirect effects can be computed from our model, including one set of indirect effects of the predictor variables (i.e., characteristics of the implicit curriculum) on sense of community and another set of indirect effects of the predictor variables on professional empowerment. [Table 3](#) presents standardized values representing each total effect, indirect effect, and the ratio of each indirect effect to the total effect that were computed from the results of the path analysis.

As can be seen in [Table 3](#), diversity of faculty and staff was found to have a relatively strong total effect on sense of community. The ratio of the indirect effect of .04 to the total effect of .16 indicates that 25% of the overall effect of the diversity of faculty and staff on students' sense of community was indirect through students' feeling valued by the school. This finding demonstrates that most of the overall effect of diversity of faculty and staff on sense of community was direct. Conversely, [Table 3](#) shows that the effects of supportive faculty and access to information, variables that had relatively small total effects on sense of community, were completely indirect through students' feeling valued by the school. Furthermore, opportunity role structure, which was found to have the strongest total effect on students' sense of community, had a standardized indirect effect of .12 through its effect on students' feeling valued. The ratio of this indirect effect to the total effect indicates that 41% of the overall effect of opportunity role structure on students' sense of community was mediated by students' feeling valued by the school.

[Table 3](#) also presents a decomposition of effects of the predictor variables on professional empowerment. As stated previously, diversity of faculty and staff was found to predict professional empowerment indirectly through students' feeling valued by the school and students' sense of community. The ratios of the indirect effects to the standardized total effect in [Table 3](#) indicate that sense of community mediated 50% of the overall effect of diversity of faculty and staff on students' professional empowerment, whereas a smaller proportion (17%) of the overall effect of diversity of faculty and staff on professional empowerment was mediated through students' feeling valued by the school. Analysis of the effects of supportive faculty indicates that students' feeling valued mediated 50% of the overall effect of this implicit curriculum characteristic on students' professional empowerment.

Opportunity role structure was found to have a relatively strong total effect on students' professional empowerment. [Table 3](#) shows that 80% of the overall effect of opportunity role structure on professional empowerment was indirect through the three hypothesized mediating variables of students' participation (20%), feeling valued (27%), and sense of community (33%). Access to information was found to also have a relatively strong total effect on students' professional empowerment, and most of this effect was direct. Students' feeling valued by the school was found to mediate only a small proportion (6%) of the total effect of access to information on empowerment.

TABLE 3
Decomposition of Effects in the Path Model

Criterion Variable	Predictor Variables	Total Effect*	Indirect Effect* via			Ratio of Indirect Effect to Total Effect		
			PART	FV	SOC	PART	FV	SOC
Sense of community	Diversity of faculty and staff	.16	—	.04	—	—	.25	—
	Supportive faculty	.07	—	.07	—	—	1.00	—
	Opportunity role structure	.29	—	.12	—	—	.41	—
	Access to information	.04	—	.04	—	—	1.00	—
Professional empowerment	Diversity of faculty and staff	.06	—	.01	.03	—	.17	.50
	Supportive faculty	.04	—	.02	—	—	.50	—
	Opportunity role structure	.15	.03	.04	.05	.20	.27	.33
	Access to information	.18	—	.01	—	—	.06	—

Note. *Standardized effects; direct effects are displayed in Figure 2. PART = participation; FV = feeling valued; SOC = sense of community.

DISCUSSION

The EPAS of CSWE state that implicit curricula in schools of social work are expected, in part, to shape professional competence and character. The evidence from this study suggests that, for this sample, components of an implicit curriculum were directly and indirectly associated with students' professional empowerment, which was defined to include professional identity as well as beliefs and expectations regarding their own evolving competence, autonomy, and efficacy as professional social workers. The measures used in this study were found to be reliable, and results of our factor analysis supported the validity of the scales used to assess the implicit curriculum. Results of our path analysis also showed that the hypothesized model provided a good fit to the data from the sample of students.

Findings of our path analysis revealed that, among the implicit curriculum characteristics included in this study, opportunity role structure and access to information had the strongest total effects, including both direct and indirect effects, on students' professional empowerment. Our results also uncovered particular pathways to empowerment that were stronger than others. Specifically, most of the overall effect of opportunity role structure on empowerment appeared to be indirect, and this indirect effect was strongest through students' sense of community. On the other hand, the overall effect of access to information on students' professional empowerment was largely direct, with only a relatively small proportion mediated through students' feeling valued by the school. In addition, although its total effect on empowerment was relatively weak compared with other implicit curriculum features, diversity of faculty and staff had a relatively strong total effect on sense of community. Supportive faculty had generally weaker overall effects on students' sense of community and professional empowerment.

Although no previous research has empirically tested the specific direct and indirect relationships in our model, our results are consistent with prior work identifying opportunity role structure as a key empowering characteristic of learning environments in higher education. Maton and colleagues (Maton, 2008; Maton & Hrabowski, 2004; Maton, Pollard, McDougall Weise, & Hrabowski, 2012; Maton & Salem, 1995) have described the Meyerhoff Scholars Program, an initiative that was designed to enhance the number of underrepresented minority students who pursue doctoral degrees in science, technology, engineering, and mathematics. Using in-depth case study methods, they documented the ways in which the school's opportunity role structure was a key feature of the program's learning environment that created a sense of belonging, shared identity, and facilitated participants' psychological empowerment and professional development.

This study contributes to the scant knowledge base in this area by empirically testing a conceptual model that included predictors of perceived professional competence and identity in the context of implicit curriculum development. The findings suggest that an empowerment-based approach may be useful to institutions as they develop tools to measure and strategies to improve their implicit curricula. These initial findings from our pilot study provide an example of how social work programs might operationalize features of the implicit curriculum and demonstrate associations with crucial student outcomes. Based on our sample and the variables used in this model, attention might focus on (a) opportunity role structures, including efforts to ensure student awareness of program decision making structures, opportunities for student participation in school activities and governance, and availability of social and other extracurricular activities; (b) school policies that are accessible and clear via well-written and well-advertised electronic and other communications; (c) faculty and staff diversity, mindful of the critical need

for aggressive recruitment and retention efforts; and (d) supportive faculty, which may require initiatives to facilitate faculty–student interaction in learning, research, mentoring, and advising. Programs may also want to explore how these and other initiatives enhance among students their engagement, perceptions of feeling valued by the school, and their sense of community. The components of the implicit curriculum that were measured in this study are features of most social work programs, though the specifics of their implementation are likely to vary widely. Knowledge regarding the potential positive associations of the variables tested in this model with student outcomes might spur increased attention, resources, and systematic structuring of efforts focused on assessment and development of implicit curricula.

It is recognized in the EPAS that faculty and staff diversity is an important aspect of implicit curricula for schools of social work (CSWE, 2008). Although we did not report the actual diversity (or lack thereof) of faculty and staff within the school being studied, our findings support the notion that even students' perceptions of diversity may influence their development as professionals. Given that students' perceptions of the diversity of faculty and staff had a direct effect on both students' feeling valued by the school and their sense of community, as well as an indirect effect on their professional empowerment, it may be useful for administrators at schools of social work to consider efforts to improve their structural diversity and effectively communicate their results. Attention to these issues may enrich the learning environment for students as well as enhance the explicit curriculum.

Our findings also raise questions about the meaning of direct and indirect effects such as those shown in our path model. One might ask, for instance, what does it mean, concretely, to conclude that the effect of access to information on students' professional empowerment was largely direct? Magill (2011) and MacKinnon (2011) discussed the value of testing direct and indirect effects in social work research. They noted that because most studies focus only on direct relationships between independent variables (IVs) and dependent variables (DVs), they often do not explain precisely how IVs may have influenced DVs. Mediators are variables that intervene between, or help to explain, the relationships between IVs and DVs. As applied to our study, the indirect effects represent the mechanisms or processes through which features of the implicit curriculum were found to influence students' professional empowerment. We hypothesized that these mediational processes would involve students' participation in extracurricular activities, sense of community, and feeling valued by the school. Our findings suggest that for many of the features of the implicit curriculum (particularly opportunity role structure) that were tested in this study, the hypothesized mediators did serve as explanatory variables as evidenced by stronger ratios of indirect to total effects. For access to information, however, the hypothesized mediators did not provide a good explanation of how it influenced students' professional empowerment. More specifically, access to information was found to have an indirect effect on empowerment only through students' feeling valued by the school, and this indirect effect was relatively weak compared to the variable's total effect on empowerment. This finding highlights the need for additional research on other potential mediators beyond those considered in this study that can help us to better understand the process through which access to information is related to empowerment. As research is conducted in other contexts and with representative samples of students to further test and develop the empowerment framework used in our study, it may also be useful for researchers to consider possible moderators. Moderators such as student characteristics might be used to examine whether features of implicit curricula, such as institutional diversity,

for example, are more important for the sense of community and subsequent empowerment of some students than others.

There are several limitations to our study that should be recognized when interpreting our findings. First, caution should be exercised in making inferences of causality when using path analysis with cross-sectional data. Inferring causality is strongest when researchers apply experimental designs with random assignment. These designs allow researchers to meet several criteria for inferring causality, including the demonstration of relationships between variables, their temporal sequence, and the ruling out of rival explanations for the observed relationships (Kundi, 2006). In the absence of these designs, strong inferences of causality from the use of path analysis with this type of data are tenuous. We did, however, subject our hypothesized model to potential falsification based on data collected from our sample of students. We hypothesized a specific ordering of variables based on our conceptual framework, and we used causal language to discuss our results, but we acknowledge the limits of our design and the tentativeness of our inferences.

Our study was also limited by the measures used to assess features of, and outcomes associated with, the implicit curriculum. The measure of student participation, for example, focused only on extracurricular activities within the school and failed to consider activities outside of the school in the broader community. One explanation for the weak influence of student participation in the path analysis may be because levels of participation were not great overall. Although reasonably reliable and valid, the measures of faculty support and sense of community were also limited in their assessments of very circumscribed aspects of the constructs. Although brief measures are often useful in applied research contexts, future work might benefit from expanding the measurement of these variables to include, for instance, multiple dimensions of sense of community (e.g., needs fulfillment) beyond emotional connection. Future research should also consider collecting information about how self-assessment of skills and abilities relates to performance.

Our nonprobability sampling strategy also limits the generalizability of our findings. Clearly, more research is needed to expand our framework and test new models using data from randomly selected samples of undergraduate and graduate social work students. Larger and more diverse samples will also allow examination of differences in student perceptions and outcomes based on variables including student status (e.g., full-time/ part-time; graduate/ undergraduate), gender, race, age, and other individual and program characteristics. Our study was also limited by its exclusion of qualitative methods. Future studies should also analyze qualitative data, such as those generated from open-ended questions, to advance our understanding of the context and substance of students' perceptions.

Despite these limitations, our findings are consistent with existing theory and previous research on empowerment and the importance of empowering organizational characteristics in community settings. Based on our study's findings, we suggest that the effort and attention devoted by faculty to developing courses and field experiences as part of the explicit curriculum should also be given to enhancing the implicit curriculum so that students may become more professionally empowered. Recommending that faculty attend equally to both the explicit and implicit curriculum is consistent with the CSWE's (2008) educational policy 3.0, which states that both the explicit and implicit curricula are important in contributing to the professional development of students in a program. One of the challenges to the valid assessment of implicit curricula involves identifying and measuring hidden dimensions and then linking those factors to student outcomes. Intuitively, professions have long recognized the power of learning environments. As demonstrated in this

study, efforts to determine empirically those characteristics of implicit curricula that are related to student outcomes can be useful to professional schools as they begin to develop interventions that further enhance social work education.

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