

Professional Factors

August 2013

Factor Analysis Procedures

Researchers¹ used exploratory and confirmatory factor analyses to develop scales using the fall 2007 data set from the PSRI. Factor analysis is a data reduction technique that allows researchers to identify broad constructs that underlie related survey items. Factor analysis, therefore, reduces a large number of individual items to a more manageable set of factors by combining items that are statistically and conceptually related to one another. The items identified under a single factor can be combined into a "scale," which will allow for greater ease of interpretation and application. Researchers used confirmatory factor analysis on data from the 2012 and 2013 administrations to confirm the scales. Statistics (alpha reliabilities, means, and standard deviations) within this report are based on the confirmatory factor analysis with the 2012 and 2013 data.

Procedures: All attitudinal and behavioral variables are coded so that higher numbers signified more agreement or a greater frequency. Exploratory factor analyses were used to consider clusters of items that hung together empirically and conceptually. The scales described below were determined using factor analysis with principal component Varimax rotation.

The factor analytic procedures were used to identify scales both across and within each of the dimensions. Across-dimension scales include items from each of the five dimensions of the PSRI, whereas within-dimension scales include only those items previously identified under a specific dimension (e.g., Striving for Excellence). The across-dimension scales represent the perception of students' growth on the dimensions measured by the PSRI as a consequence of their time on campus. The within-dimension scales represent general measures of campus climate for each of the five dimensions. The reliability values for each of the across-dimension scales ranges from $\alpha = 0.69 - 0.93$.

The factors that emerged from this process are detailed in this report. The name given to each factor is followed by the items that comprise the factor. A double asterisks (**) indicates a factor for which student and professional scales are directly comparable—with all component items containing the exact language or analogous language. Where discrepancies occurred between the items in the students' factors and professional factors, the student factor items were used to create directly comparable factors.

In reports to institutions, a factor score is provided. Factor scores are calculated as the mean of all items contained in the factor.

¹ Much of the work described in this section of the report, particularly the process of identifying across-dimension scales, was conducted by Dr. Eric Dey and Graduate Research Assistants at the University of Michigan.

Professional Factors

Across-Dimension Factor

FACTOR: P_GENGROWTH - Campus Professionals' Perceptions of Students' Growth on the Dimensions

Component Survey Items $\alpha = .86$ M = 4.12 SD = .65

- **PETHC_11** Students usually have an increased capacity for ethical and moral reasoning at graduation than they had at the beginning of college
- **PCOMM_7** Students usually have an expanded awareness of the importance of being involved in the community and contributing to the greater good at the end of their time on campus than they had at the beginning of college
- **PPERS_12** Students here develop an increased ability to gather and thoughtfully use evidence to support their ideas during their studies on campus
- **PPERS_13** During the time students are here, they develop an increased ability to understand evidence, analysis, and the perspectives of others even when they disagree
- **PPERS_11** Students usually have an increased capacity to learn from diverse perspectives at graduation than they had at the beginning of college
- **PACIN_9** Students usually have a better understanding of academic integrity when they graduate than they demonstrated at the beginning of college
- PEXCE 12 Students have a stronger work ethic at the end of their studies here

Within-Dimension Factors

Professionals Dimension: Striving for Excellence

FACTOR: PEXEC_CLIM - Overall Climate for Excellence**

 $\alpha = .93$

M = 3.72

SD = .97

- EXCE_1 Helping students develop a strong work ethic is a major focus of this campus
- **EXCE_3** The characteristics of a strong work ethic are frequently emphasized and discussed in this campus community
- EXCE_4 This campus makes clear connections between having a strong work ethic and success in college
- EXCE_5 This campus makes clear connections between having a strong work ethic and success after college
- **EXCE_6** This campus community has high expectations for students in terms of their personal work ethic in non-academic areas

FACTOR: PEXEC_EXPECT - Communicating Expectations about Excellence**

 $\alpha = .81$

M = 4.08

SD = .86

- **EXCE_17** How often do **senior administrators** communicate high expectations for students in terms of their academic work?
- **EXCE_16** How often do **faculty members** communicate high expectations for students in terms of their academic work?
- **EXCE_18** How often do **student affairs professionals** communicate high expectations for students in terms of their academic work?

FACTOR: PEXEC SUPP - Professional Role in Supporting Excellence

 $\alpha = .77$

M = 4.47

SD = .70

- **PEXCE_20** In my professional role at this institution, I help motivate students to become more self-disciplined, accountable, and responsible in their work.
- **PEXCE_13** My professional role at this institution helps students to further develop their work ethic

Professionals Dimension: Cultivating Academic Integrity

FACTOR: PACIN_CLIM - General Climate for Academic Integrity**

 $\alpha = .80$ M = 3.91 SD = .78

- ACIN_3 Students at this institution are academically honest
- ACIN_4 Students at this institution conduct themselves with respect for others
- ACIN_7 The campus academic honesty policies help stop cheating
- **ACIN_1** Helping students develop a strong sense of academic integrity is a major focus of this institution

FACTOR: PACIN_FAC - Faculty Roles in Academic Integrity**

 $\alpha = .80$ M = 4.34 SD = .68

- ACIN_5 Faculty at this institution understand the campus academic honesty policies
- ACIN_6 Faculty at this institution support the campus academic honesty policies
- ACIN 10 Faculty reinforce the campus academic honesty policies
- **ACIN_11** Formal course syllabi define academic dishonesty (plagiarism, improper citation of Internet sources, buying papers from others, cheating on assignments or tests, etc.)

Professionals Dimension: Contributing to a Larger Community

FACTOR: PCOMM_CLIM - General Climate for Contributing to a Larger Community**

 $\alpha = .73$ M = 4.24 SD = .67

- **COMM_1** The importance of contributing to a larger community and the greater good **is** a major focus of this institution
- **COMM_2** The importance of contributing to a larger community and the greater good **should be** a major focus of this institution
- **COMM_3** Contributing to a larger community and the greater good is a responsibility that this campus values and promotes
- **PCOMM_6** Students on this campus are aware of the importance of being involved in the community and contributing to the greater good prior to coming to college

FACTOR: PCOMM_ADVO - Advocating for Contributing to a Larger Community**

 $\alpha = .84$ M = 3.85 SD = .79

- **COMM_11** How often do **senior administrators** publicly advocate the need for students to become active and involved citizens?
- **COMM_10** How often do **faculty members** publicly advocate the need for students to become active and involved citizens?
- **COMM_12** How often do **student affairs professionals** publicly advocate the need for students to become active and involved citizens?
- **COMM_13** How often do **students** publicly advocate the need for students to become active and involved citizens?

FACTOR: PCOMM_ENCO - Professional Roles in Encouraging Contributing to a Larger Community

 $\alpha = .84$ M = 3.13 SD = 1.03

- **PCOMM_14** Within the past three years, how often have you overseen community-based projects that **were** officially connected to my courses or programs
- **PCOMM_17** Within the past three years, how often have you included materials on global, political, and economic issues in my courses or programs
- **PCOMM_18** Within the past three years, how often have you participated in community-based projects that **were not** connected to my courses or programming
- **PCOMM_16** Within the past three years, how often have you had meaningful discussions with students about the need to contribute to the greater good
- **PCOMM_15** Within the past three years, how often have you encouraged students to participate in community-based projects that were not connected to courses or programming

Professionals Dimension: Taking Seriously the Perspectives of Others

FACTOR: PPERS_CLIM - General Climate for Perspective Taking**

 $\alpha = .89$ M = 4.02 SD = .77

- **PERS_1** Helping students recognize the importance of taking seriously the perspectives of others **is** a major focus of this campus
- **PERS_3** This campus helps students understand the connection between appreciating various opinions and perspectives and being a well-informed citizen
- **PERS_4** It is safe to hold unpopular positions on this campus
- **PERS_5** Faculty at this institution teach about the importance of considering diverse intellectual viewpoints
- **PERS_6** Faculty at this institution help students think through new and challenging ideas or perspectives
- **PERS_7** Students at this institution are respectful of one another when discussing controversial issues or perspectives
- **PERS_8** This campus has high expectations for students in terms of their ability to take seriously the perspectives of others, especially those with whom they disagree

FACTOR: PPERS_ADVO - Advocating for Perspective Taking**

 $\alpha = .85$ M = 3.94 SD = .71

- **PERS_15** Out-of-class activities help students explore diverse perspectives, cultures, and world views
- **PERS_18** How often do **senior administrators** publicly advocate the need for students to respect perspectives different from their own?
- **PERS_17** How often do **faculty members** publicly advocate the need for students to respect perspectives different from their own?
- **PERS_19** How often do **student affairs professionals** publicly advocate the need for students to respect perspectives different from their own?
- **PERS_20** How often do **students** publicly advocate the need for students to respect perspectives different from their own?
- **PERS_16** Classes encourage students to research ideas and explore controversial issues with various perspectives using evidence-based claims

Professionals Dimension: Refining Ethical and Moral Reasoning

FACTOR: PETHC_CLIM - General Climate for Ethical and Moral Reasoning**

 $\alpha = .92$ M = 3.92 SD = .84

- ETHC_1 Helping students develop their ethical and moral reasoning is a major focus of this campus
- ETHC_3 This campus helps students to develop their ethical and moral reasoning, including the ability to express and act upon personal values responsibly
- ETHC_4 The importance of developing a personal sense of ethical and moral reasoning is frequently communicated to students
- ETHC_14 This campus provides opportunities for students to develop their ethical and moral reasoning in their **personal life**
- ETHC_13 This campus provides opportunities for students to develop their ethical and moral reasoning in their academic work

FACTOR: PETHC_SUPP - Sources of Support for Ethical and Moral Reasoning**

 $\alpha = .71$ M = 3.95 SD = .76

- ETHC_6 Students feel they can go to senior administrators to discuss questions or concerns they have about their own ethical and moral thinking and the challenges they face.
- ETHC_5 Students feel they can go to **faculty members** to discuss questions or concerns they have about their own ethical and moral thinking and the challenges they face
- ETHC_7 Students feel they can go to **student affairs professionals** to discuss questions or concerns they have about their own ethical and moral thinking and the challenges they face.
- ETHC_8 Students feel they can go to **students** to discuss questions or concerns they have about their own ethical and moral thinking and the challenges they face.

FACTOR: PETHC_ROLE - Professional Roles in Developing Ethical and Moral Reasoning

 $\alpha = .69$ M = 4.04 SD = .67

- ETHC_2 Helping students to develop their ethical and moral reasoning should be a major focus of this campus
- **PETHC_16** Class activities, and the curriculum in general, provide opportunity for students to further develop their ethical and moral reasoning
- **PETHC_18** In my professional role, I encourage students to discuss the ethical aspects of the subject matter they are studying
- **PETHC_17** There are opportunities outside the classroom for students to develop their ethical and moral reasoning

^{**}Indicates a factor score that is comparable to students' factor score. The factor is comprised of exact (or analogous) items as the students' factor.

Correlation Matrix for 2012-2013 PSRI Professional Factors

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	General climate for excellence	Communicating expectations about excellence	Professional role in supporting excellence	climate for academic integrity	Faculty roles in academic integrity	General climate for contributing to a larger community	Advocating for contributing to a larger community	encouraging contributing to a larger community	General climate for perspective taking	Advocating for perspective taking	General climate for ethical and moral reasoning	support for ethical and moral reasoning	Professional roles in developing ethical and moral reasoning
Campus professionals' perceptions of students' growth on the dimensions	.569**	.484**	.278**	.612**	.478**	.567**	.528**	.170**	.691**	.605**	.672**	.514**	.442**
General climate for excellence	1	.606**	.341**	.536**	.422**	.482**	.465**	.129**	.518**	.470**	.603**	.463**	.401**
Communicating expectations about excellence		1	.254**	.454**	.428**	.403**	.511**	.095**	.420**	.514**	.493**	.472**	.381**
Professional role in supporting excellence			1	.171**	.191**	.181**	.191**	.270**	.218**	.198**	.228**	.196**	.280**
General climate for academic integrity				1	.605**	.459**	.407**	.054**	.525**	.462**	.551**	.421**	.333**
Faculty roles in academic integrity					1	.346**	.340**	.077**	.435**	.411**	.423**	.371**	.312**
General climate for contributing to a larger community						1	.584**	.143**	.521**	.494**	.583**	.433**	.395**
Advocating for contributing to a larger community							1	.203**	.493**	.618**	.564**	.511**	.454**
Professional roles in encouraging contributing to a larger community								1	.131**	.173**	.137**	.093**	.318**
General climate for perspective taking									1	.673**	.623**	.488**	.404**
Advocating for perspective taking										1	.568**	.522**	.466**
General climate for ethical and moral reasoning											1	.604**	.583**
Sources of support for ethical and moral reasoning												1	.461**

^{**} Correlation is significant at the 0.01 level (2-tailed).

About the PSRI and AAC&U

The Personal and Social Responsibility Inventory (PSRI): An Institutional Climate Measure is a campus climate survey developed originally as part of an initiative called Core Commitments: Educating Students for Personal and Social Responsibility. Sponsored by the Association of American Colleges and Universities and directed by Caryn McTighe Musil, Core Commitments was supported by a grant from the John Templeton Foundation. The initial inventory was developed in 2006 by L. Lee Knefelkamp, Teachers College, Columbia University, who consulted with Richard Hersh, Council for Aid to Education, and drew on the research assistance of Lauren Ruff. The initial inventory was then refined in cooperation with Eric L. Dey and associates at the University of Michigan's Center for the Study of Higher and Postsecondary Education and refined after Dey's death by Robert D. Reason, at Iowa State University.

AAC&U is the leading national association concerned with the quality, vitality, and public standing of undergraduate liberal education. Its members are committed to extending the advantages of a liberal education to all students, regardless of academic specialization or intended career. Founded in 1915, AAC&U now comprises 1250 member institutions--including accredited public and private colleges and universities of every type and size.

