IBM SPSS Dataset Files

Alienation.sav

$N = 117$

**Variables:**
- gender (Gender)
- ethnicity (Ethnicity)
- soc_com (Social Community)
- lrn-com (Learning Community)
- soc-iso (Social Isolation)
- powerl (Powerlessness)
- norml (Normlessness)

**Instrumentation:**
Social community and learning community were operationalized using the Classroom Community Scale (CCS; Rovai, 2002). Possible CCS subscale raw scores vary from a minimum of zero (suggesting very weak feelings of community) to a maximum of 40 (suggesting very strong feelings of community). Rovai (2002) reported Cronbach’s alpha internal consistency reliability for the full CCS was .93, indicating excellent reliability. Additionally, the internal consistency estimates for social community (connectedness) and learning community (learning) subscales were .92 and .87, respectively.

The Alienation Scale (Dean, 1961) was used to operationalize the three major components of alienation: powerlessness, normlessness, and isolation. Possible subscale scores range from a low of 9 to a high of 45 for social isolation and powerlessness and from 6 to 30 for normlessness. Higher scores represent stronger levels of alienation. Dean (1961) reports the following split-half internal consistency reliability coefficients: 0.78 for total alienation, 0.83 for social isolation, 0.78 for powerlessness, and 0.73 for normlessness.

Community Index.sav

$N = 375$

**Variables:**
- q01
- q02
- q03
- q04
- q05
Variables q01 through q12 reflect individual Likert-scale items (questions) from an early developmental form of the Classroom Community Scale (CCS; Rovai, 2002). The variable index represents the total raw score and operationalizes sense of classroom community. Possible total raw scores range from a minimum of 0 (minimal sense of classroom community) to a maximum of 48 (strong sense of classroom community).

Gender, age, and race reflect characteristics of research participants.

**Community.sav**

N = 123

**Variables:**
mode
age
grade
race
total
spirit
trust
interaction
learning

Mode (distance or traditional students), age, and race reflect characteristics of research participants (college students). Grade (pass or fail) represents assignment grade.

**Instrumentation:**
Sense of community (total) and four subscales (spirit, trust, interaction, and learning) were operationalized using the Sense of Classroom Community Index, Second Edition (SCCI2), an unpublished instrument developed in 2000 to operationalize classroom community. It consists of a self-report
questionnaire of 40 items, 10 items each for the subscales of spirit, trust, interaction, and learning. Sample items for each subscale are: (a) spirit—“I feel connected to other students” and “I feel isolated in this course,” (b) trust—“I feel that I can depend on others in this course” and “I trust other students,” (c) interaction—“I feel that I am encouraged to ask questions” and “I feel that discussions are one-way,” and (d) learning—“I feel that everyone in this course contributes to the learning process” and “I feel that my educational needs are not being met.” Following each item is a five-point Likert scale of potential responses: strongly agree, agree, neutral, disagree, and strongly disagree. The respondents check the place on the scale that best reflects their feelings about the item. One computes scores by adding points assigned to each of the 40 five-point items. Items are reverse-scored where appropriate to ensure that the most favorable choice is always assigned a value of 4 and the least favorable choice is assigned a value of 0. Therefore, the total possible scores range from 0 to 160, with higher scores reflecting a stronger sense of classroom community. Similarly, scores for each of the four SCCI2 subscales of spirit, trust, interaction, and learning range from 0 to 40.

Rovai (2001) reports Cronbach’s coefficient alpha was applied to SCCI2 scores obtained from a sample of 134 graduate university students enrolled in distance-education courses to determine instrument reliability. Resultant coefficients of internal consistency were .95 for the overall SCCI2 score, .87 for the spirit subscale, .83 for the trust subscale, .87 for the interaction subscale, and .80 for the learning subscale.

Computer Anxiety.sav

N = 92

Variables:
Gender (Student gender)
Age (Student age)
Class (Class)
comown (Computer Ownership Pretest)
comexp (Computer Experience Pretest)
comknow (Computer Knowledge Pretest)
control (Locus of Control Pretest)
traitanx (Trait Anxiety Pretest)
comconf1 (Computer Confidence Pretest)
comconf2 (Computer Confidence Posttest)
comconf3 (Computer Confidence Delayed Test)
comanx1 (Computer Anxiety Pretest)
comanx2 (Computer Anxiety Posttest)
comanx3 (Computer Anxiety Delayed Test)
Gender and age reflect characteristics of research participants (students enrolled in an undergraduate computer literacy course).

The variable class identifies which of four undergraduate computer literacy course sections (A, B, C or D) research participants were enrolled.

Computer ownership (yes, no) represents whether or not study participants owned a personal computer at the pretest measurement.

**Instrumentation:**

Computer experience and computer knowledge are two unpublished instruments using semantic differential scales that operationalize their respective constructs. Possible scores for the computer experience scale range from a low of zero (no computer experience) to a high of 25 (substantial computer experience). Possible scores for the computer knowledge scale range from a low of zero (no computer knowledge) to a high of 33 (substantial computer knowledge). Rovai and Childress (2002) reported that the computer experience scale yielded a coefficient of internal consistency reliability of .68 using the equal-length split-half method and a coefficient of stability of .83 over a four week period. They also reported that the computer knowledge scale yielded a Cronbach’s alpha internal consistency coefficient of .90 and a coefficient of stability (test-retest) of .77 over a four week period.

Locus of control was operationalized using Rotter’s (1966) Internal-External Control Scale. This scale measures generalized expectancies for internal versus external control of reinforcement. The score is the total number of external choices. Scores range from 0 to 23. Lower scores reflect stronger internality and higher scores reflect stronger externality. Rotter (1966) reported internal consistency reliability (Kuder-Richardson 20) of .70 obtained from a sample of 400 college students. Test-retest reliability for a one-month period using 60 college students was .72.

Tait anxiety was operationalized using the trait form of the State-Strait Anxiety Inventory (STAI; Spielberger, 1983). The instrument consists of 20 Likert-scale items. Possible scores can vary from a minimum of 20 to a maximum of 80, with higher scores reflecting higher levels of trait anxiety. Spielberger (1983) reported trait form Cronbach alpha internal consistency reliabilities of .90 and .91, respectively, for male \((N = 324)\) and female \((N = 531)\) college students. Additionally, he reported test-retest reliabilities of .73 and .77, respectively, for male and female college students over a six-month period.

Computer anxiety data obtained from study participants using the Computer Anxiety Scale (COMPAS; Oetting, 1983). For each item the questionnaire utilizes a statement followed by a semantic differential scale consisting of
adjective pairs, with each adjective as an end anchor in a single five point continuum. For example, the first COMPAS statement is “just being around a computer [makes me feel]”, with a five-point continuum anchored by the terms “calm” and “tense.” Scores range from 20 to 100 with higher scores reflecting greater computer anxiety. Oetting (1983) reports Cronbach’s alpha internal consistency reliability of .93.

Computer anxiety pretest was measured at the start of a computer literacy course. Computer anxiety posttest was measured at the end of the course (15 weeks after the pretest). Computer anxiety delayed test was measured 15 weeks after the posttest.

Computer confidence data was obtained from study participants using the Computer Attitude Scale (CAS; Gressard & Loyd, 1985). This variable reflects the degree to which subjects have confidence or self-efficacy in their abilities to use computers. The instrument contains 10 Likert-scale items to measure each attitude. Participants indicate the degree of agreement or disagreement with each statement. For example, an item that measures computer confidence starts out with the statement “I’m no good with computers,” followed by the choices strongly agree, slightly agree, slightly disagree, and strongly disagree. Each CAS item is given a weighted score of 1 to 4 based on the test key. Item scores are then added to obtain the score. Scores can range from 10 to 40 with higher scores reflecting higher degrees of computer confidence. Loyd and Loyd (1985) reported Cronbach alpha internal consistency reliability of .89. Computer confidence pretest was measured at the start of a computer literacy course. Computer confidence posttest was measured at the end of the course (15 weeks after the pretest). Computer confidence delayed test was measured 15 weeks after the posttest.

**Computer Knowledge.sav**

*N = 209*

**Variables:**
status (student status)
mode (type course)
employed (employment status)
gender (gender)
compkno1 (computer knowledge pretest)
compkno2 (computer knowledge posttest)

The first four variables (status, mode, employed, and gender) provide demographic information regarding the research participants (undergraduate teacher education students enrolled in a semester-long computer literacy course).
Computer knowledge pretest and posttest observations took place during the first and last weeks of the course, respectively.

**Instrumentation:**
Computer knowledge is an unpublished instrument using a semantic differential scale that operationalizes computer knowledge. Possible scores range from a low of zero (no computer knowledge) to a high of 33 (substantial computer knowledge). Rovai and Childress (2002) reported that the computer knowledge scale yielded a Cronbach’s alpha internal consistency coefficient of .90 and a coefficient of stability (test-retest) of .77 over a four week period.

**Grades.sav**

\[ N = 105 \]

**Variables:**
- gender (gender)
- ethnicity (ethnicity)
- year (year in school)
- lowup (lower or upper division)
- section (course section)
- prevgpa (previous GPA)
- extcred (completed extra credit)
- review (attended review session)
- quiz1 (quiz 1)
- quiz2 (quiz 2)
- quiz3 (quiz 3)
- quiz4 (quiz 4)
- quiz5 (quiz 5)
- final (final exam)
- total (total points)
- percent (percent)
- grade (course grade)

The first eight variables (gender, ethnicity, year, lowup, section, prevgpa, extcred, and review), employed, and gender) provide demographic information regarding the research participants (undergraduate teacher education students enrolled in a semester-long computer literacy course).

**Instrumentation:**
Quizzes 1 through 5 were graded classroom assignments with each quiz worth a maximum of 10 points. The final exam was worth a maximum of 75 points. Total points represent the total points earned in all quizzes and the final exam (125 points possible). Percent represents of percent of total course points earned by each student.
**Motivation.sav**

*N* = 169

**Variables:**
gender (gender)  
age (age)  
ethnicity (ethncity)  
gpa (GPA)  
p_learning (perceived learning)  
c_community (classroom community)  
csoc_com (classroom social community)  
clrn_com (classroom learning community)  
s-community (school community)  
ssoc-com (school social community)  
slrn_com (school learning community)  
intr_mot (intrinsic motivation)  
extr_mot (extrinsic motivation)  
a_mot (amotivation)  
self-est (self-esteem)  
alienation (alienation)  
isolation (social isolation)  
powerl (powerlessness)  
norml (normlessness)  
acad_self_concept (academic self-concept)

The first four variables (gender, age, ethnicity, and gpa) provide demographic information regarding the research participants (graduate teacher education students enrolled in a semester-long online course).

**Instrumentation:**
Student perception of learning (perceived learning) was measured by self-reports of their learning. The perceived learning instrument has been used in many studies related to learning (McCroskey, Sallinen, Fayer, Richmond, & Barraclough, 1996). Participants were asked to respond to the following item: “On a scale of 0 to 9, how much did you learn in this course, with 0 meaning you learned nothing and 9 meaning you learned more than in any other course you’ve had?” McCroskey et al. (1996) report that test-retest reliability over a 5-day period was .85 in a study of 162 adult learners.

The Classroom and School Community Inventory (CSCI; Rovai, Wighting, & Lucking, 2004) was used to measure classroom community and school community. The total possible scores range from 0 to 40 for each of the classroom community and school community scales, with higher scores reflecting stronger sense of community. The total possible scores for each
of the two subscales of social community and learning community can range from 0 to 20 for each scale. Internal consistency estimates of reliabilities for the classroom scale and school scale using Cronbach’s coefficient alpha were .84 and .83 respectively. Additionally, internal consistency coefficients for the social community and learning community subscales of the classroom form were .90 and .87 respectively, and for the school form the coefficients were .85 and .82 respectively. Stability estimates for each scale using Pearson r correlation coefficients and a 2-week interval between pretest and posttest measurements was .91.

The Academic Motivation Scale – College (AMS-C 28) was used to operationalize intrinsic, extrinsic, and amotivation in college students (Villerand et al., 1992). Scales can range as follows: intrinsic and extrinsic motivation, from low of 12 to high of 84; amotivation scale from a low of 4 to a high of 28. Villerand et al. (1992) report the overall scale’s internal consistency reliability using Cronbach’s alpha as .91.

The Alienation Scale (Dean, 1961) was used to operationalize the three major components of alienation: powerlessness, normlessness, and isolation. Possible subscale scores range from a low of 9 to a high of 45 for social isolation and powerlessness and from 6 to 30 for normlessness. Higher scores represent stronger levels of alienation. Dean (1961) reports the following split-half internal consistency reliability coefficients: 0.78 for total alienation, 0.83 for social isolation, 0.78 for powerlessness, and 0.73 for normlessness.

The Academic Self-Concept Scale (Reynolds, 1988) measures an academic facet of general self-concept in college students. The instrument consists of 40 4-point Likert scale items with no neutral item that provide various statements regarding attitudes toward school. Items are scored 1 (strongly disagree) through 4 (strongly agree). Reynolds reports scale internal consistency reliability of .92.

Ratings.sav

N = 44

Variables:
A
B
C
D

Variables represent statistics examination outcomes (pass or fail) from each of four independent judges (A, B, C, or D) for college students enrolled in an online education program.
Risk.sav

N = 58

Variables:
residency (Attended residency)
dropout (Is a dropout?)

Residency (yes or no) measures whether or not a distance education student attended an optional beginning of program on-campus residency.

Dropout (yes or no) measures whether or not a student completed the program.

Survey.sav

N = 105

Variables:
ob1 (Observation 1)
ob2 (Observation 2)

Observation 1 reflects student pretest attitudes (favor or not favor) regarding an educational issue. Observation 2 reflects student posttest attitudes (favor or not favor) regarding the same issue.

References


