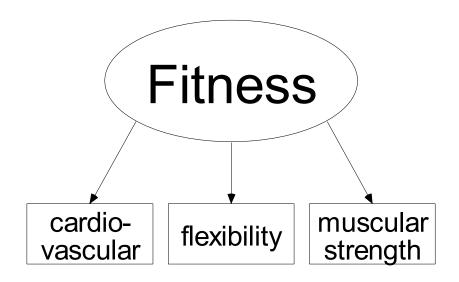
Measurement

Conceptualization pertains to defining variables

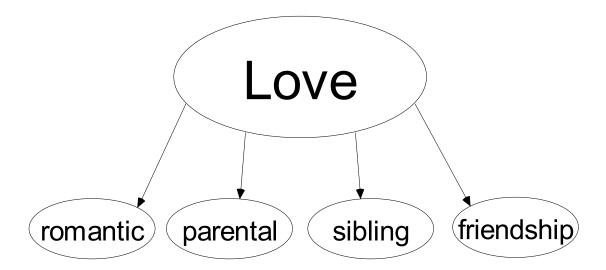
Specification pertains to distinguishing dimensions

Operationalization pertains to developing/finding indicators

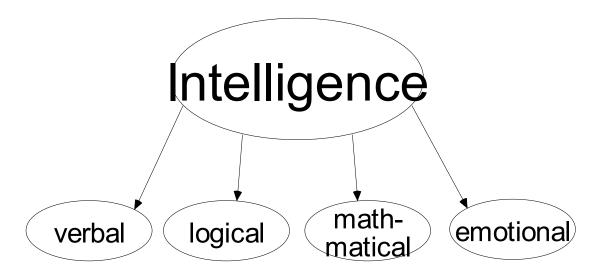
Dimensions of Fitness



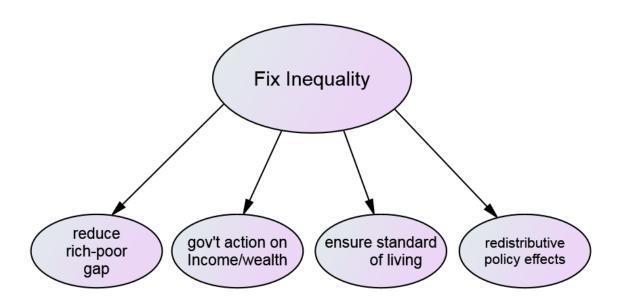
Dimensions of Love



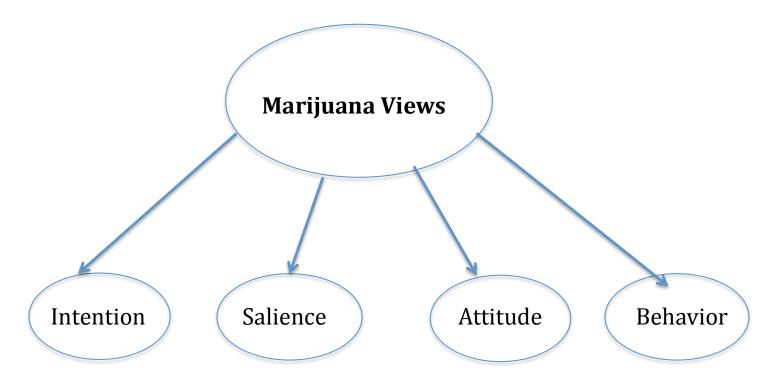
Dimensions of Intelligence



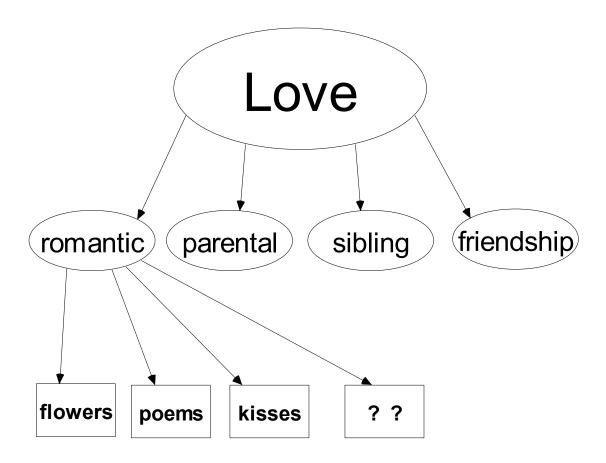
Dimensions and Indicators of Attitudes toward Inequality



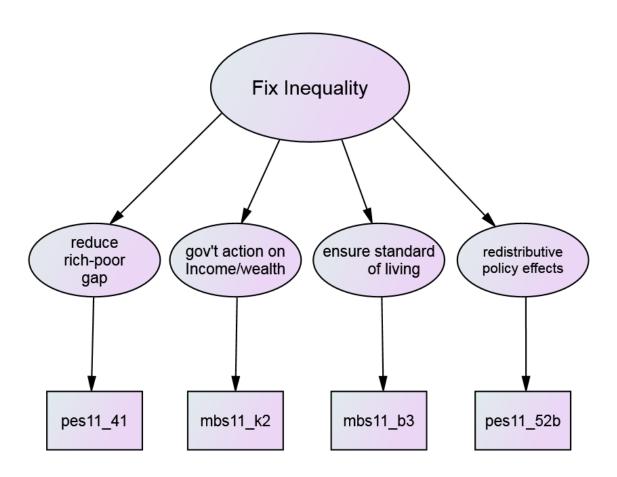
Dimensions of Views on Marijuana



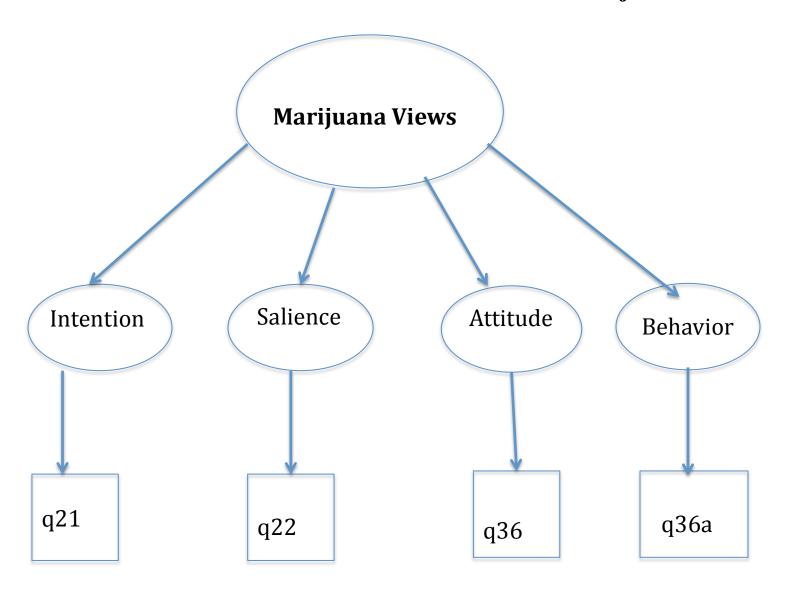
Indicators of the Romantic Dimension of Love



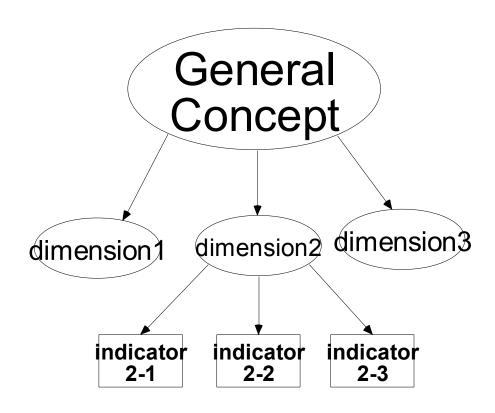
Dimensions and Indicators of Attitudes toward Inequality



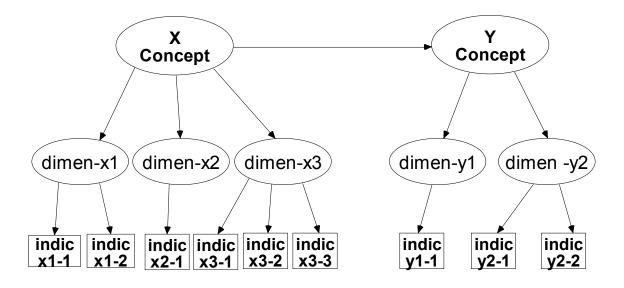
Dimensions and Indicators of Views on Marijuana



Dimensions & Indicators



Dimensions & Indicators in Explanatory Research



Steps in creating an Index

- 1. Select possible indicators & handle missing values/recodes;
- 2. Check that the indicators go together;
- 3. Combine indicators into an index
- 4. Relate you index to independent variables

PPIC Items on Marijuana

Q21. "Proposition 64 is called the 'Marijuana Legalization. Initiative Statute' ... If the election were held today, would you vote yes or no on Proposition 64?"

Q22 "How important to you is the outcome of the vote on Proposition 64—is it very important, somewhat important, not too important, or not at all important?"

Q36 "Next, in general, do you think the use of marijuana should be legal, or not?"

Q36a" Keeping in mind that all of your answers in the survey are confidential, have you ever tried marijuana? (IF YES, ASK: have you used marijuana in the last 12 months?)"

PPIC Items on Marijuana Dimensions

Q21.

"Proposition 64 is called the 'Marijuana Legalization. Initiative Statute' ... If the election were held today, would you vote yes or no on Proposition 64?"

Political intention

Q22 "How important to you is the outcome of the vote on Proposition 64—is it very important, somewhat important, not too important, or not at all important?"

Personal Salience

Q36

"Next, in general, do you think the use of marijuana should be legal, or not?"

Overall Attitude

Q36a" Keeping in mind that all of your answers in the survey are confidential, have you ever tried marijuana? (IF YES, ASK: have you used marijuana in the last 12 months?)"

Behavior

Syntax for PPIC Marijuana Items

```
*Identifying RecrMJ Index Items*.

recode q21 (1=1) (2=0) into MJPropD.

value labels MJPropD 1 'yes' 0 'no'.

fre var = MJPropD.

recode q22 (1=1) (2=.66) (3=.33) (4=0) into MJImp.

value labels MJImp 1 'very' .66 'somewhat'
    .33 'not too' 0 'notatall'.

fre var = MJImp.

recode q36 (1=1) (2=0) into MJLegalD.

value labels MJLegalD 1 'yes' 0 'no'.

fre var = MJLegalD.

recode q36a (1=1) (2=.5) (3=.0) into MJTry.

value labels MJTry 1 'recent' .5 'not recent'
    0 'no'.

fre var = MJTry.
```

Syntax for PPIC Marijuana Items

```
*Identifying RecrMJ Index Items*.
*missing values q21 (8,9).*
recode q21 (1=1) (2=0) into MJPropD.
value labels MJPropD 1 'yes' 0 'no'.
fre var = MJPropD.
*missing values q22 (8,9),*
recode q22 (1=1) (2=.66) (3=.33) (4=0) into MJImp.
value labels MJImp 1 'very' .66 'somewhat'
  .33 'not too' 0 'notatall'.
fre var = MJImp.
*missing values q36 (8,9),*
recode q36 (1=1) (2=0) into MJLegalD.
value labels MJLegalD 1 'yes' 0 'no'.
fre var = MJLegalD.
*missing values q36a (8,9),*
recode q36a (1=1) (2=.5) (3=.0) into MJTry.
value labels MJTry 1 'recent' .5 'not recent'
  0 'no'.
fre var = MJTry.
```

Steps in creating an Index

- 1.Select possible indicators & handle missing values/recodes;
- 2. Check that the indicators go together;
- 3. Combine indicators into an index;
- 4. Relate you index to independent variables.

Reliability analysis

looks at how the items are inter-related.

Cronbach's Alpha (α),

more advanced than crosstabulation

A summary measure of vertical dimension of our graphic.

Discussed by Ludwig-Mayerhoffer as Item Analysis
Under Data Analysis→Data Reduction

Covered in Lab 8

Syntax for Reliability Analysis of PPIC Marijuana Items

```
*Conducting Reliability Analysis*.
reliability /variables=MJPropD MJImp MJLegalD MJTry
/scale('RecMJ4') all
/statistics=descriptive
/summary=total.
```

Steps in creating an Index

- 1.Select possible indicators & handle missing values/recodes;
- 2. Check that the indicators go together;
- 3. Combine indicators into an index;
- 4. Relate you index to independent variables.

Steps 3&4 covered in Lab 9

Combining Indicators into an Index

```
Compute NewName = (V_1 + V_2 + V_3 ...).
```

```
*Constructing the Index*.

compute RawMJ3 = (MJPropD + MJLegalD + MJTry).

fre var RawMJ3

/statistics = mean median mode stddev var skew kurtosis.
```

Recoding the Index.

recode RawMJ3 (0, .5=0) (1 thru 2= .5) (2.5, 3 =1) into MJ3.

value labels MJ3 0 'low' .5 'med' 1 'hi'.
fre var MJ3.

Steps in creating an Index

- 1. Select possible indicators & handle missing values/recodes;
- 2. Check that the indicators go together;
- 3. Combine indicators into an index;
- 4. Relate you index to independent variables.

Syntax for Crosstabulation of Index

Recoding the Index.

Crosstabs tables = MJ3 by IV1 IV2
 /cells = column count
 /statistics = btau.

Reviewing steps in creating an Index

- 1. Select a set of possible indicators & handle missing values and recodes;
- 2. Check that the indicators go together;
- 3. Combine indicators into an index;
- 4. Relate you index to independent variables.