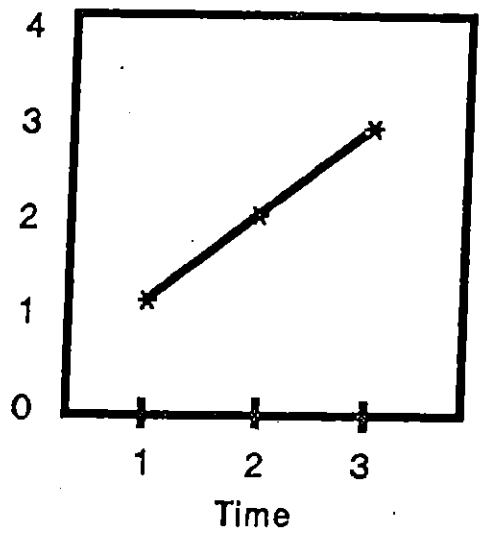
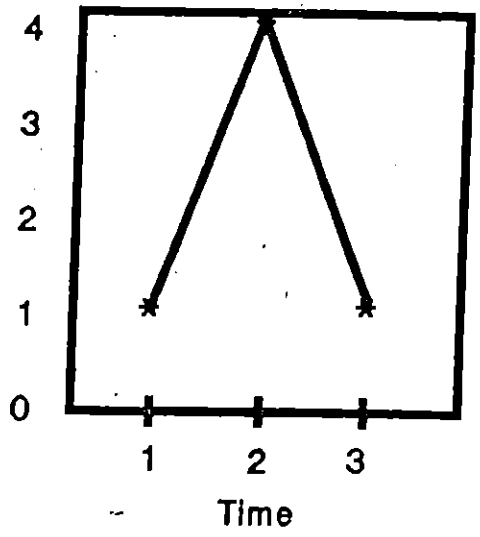
Person 1



Xt1	Xt2	Xt3	Ave	Lin	Quad
1	2	3	2	2	0

Person 2



Xt1	Xt2	Xt3	Ave	Lin	Quad
1	4	1	2	0	−6

Ave = 1*Xt1 +1*Xt2 +1*Xt3

Lin = −1*Xt1 +0*Xt2 +1*Xt3

Quad = 1*Xt1 −2*Xt2 +1*Xt3

New Variables

Other coefficients

Contrast

-1	1	0	0
-1	0	1	0
-1	0	0	1

Polynomial

-3	-1	1	3
1	-1	-1	1
-1	3	-3	1

Helmert

1	-0.33	-0.33	-0.33
0	1	-0.50	-0.50
0	0	1	-1

Mean

1	-0.33	-0.33	-0.33
-0.33	1	-0.33	-0.33
-0.33	-0.33	1	-0.33

Profile

1	-1	0	0
0	1	-1	0
0	0	1	-1

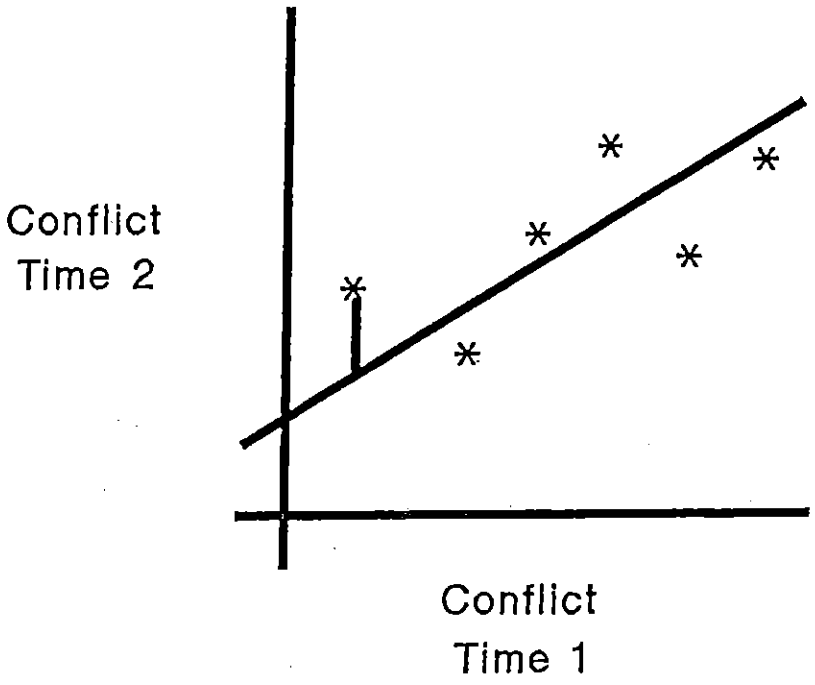
TABLE A-11

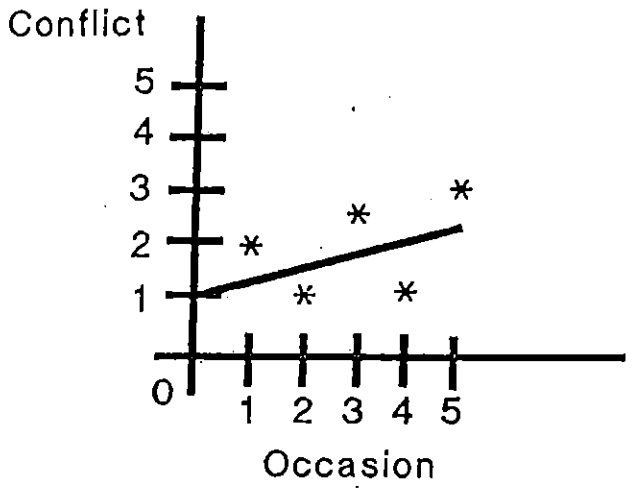
Coefficients of Orthogonal Polynomials

a	Polynomial	$X = 1$	2	3	4	5	6	7	8	9	10	$\Sigma \xi^2$	λ
3	Linear	−1	0	1								2	1
	Quadratic	1	−2	1								6	3
4	Linear	−3	−1	1	3							20	2
	Quadratic	1	−1	−1	1							4	1
	Cubic	−1	3	−3	1							20	1⅗
5	Linear	−2	−1	0	1	2						10	1
	Quadratic	2	−1	−2	−1	2						14	1
	Cubic	−1	2	0	−2	1						10	⅚
	Quartic	1	−4	6	−4	1						70	3½
6	Linear	−5	−3	−1	1	3	5					70	2
	Quadratic	5	−1	−4	−4	−1	5					84	⅚
	Cubic	−5	7	4	−4	−7	5					180	⅝
	Quartic	1	−3	2	2	−3	1					28	⅗
7	Linear	−3	−2	−1	0	1	2	3				28	1
	Quadratic	5	0	−3	−4	−3	0	5				84	1
	Cubic	−1	1	1	0	−1	−1	1				6	⅚
	Quartic	3	−7	1	6	1	−7	3				154	⅗
8	Linear	−7	−5	−3	−1	1	3	5	7			168	2
	Quadratic	7	1	−3	−5	−5	−3	1	7			168	1
	Cubic	−7	5	7	3	−3	−7	−5	7			264	⅝
	Quartic	7	−13	−3	9	9	−3	−13	7			616	⅗
	Quintic	−7	23	−17	−15	15	17	−23	7			2184	⅓
9	Linear	−4	−3	−2	−1	0	1	2	3	4		60	1
	Quadratic	28	7	−8	−17	−20	−17	−8	7	28		2772	3
	Cubic	−14	7	13	9	0	−9	−13	−7	14		990	⅚
	Quartic	14	−21	−11	9	18	9	−11	−21	14		2002	⅗
	Quintic	−4	11	−4	−9	0	9	4	−11	4		468	⅓
10	Linear	−9	−7	−5	−3	−1	1	3	5	7	9	330	2
	Quadratic	6	2	−1	−3	−4	−4	−3	−1	2	6	132	⅔
	Cubic	−42	14	35	31	12	−12	−31	−35	−14	42	8580	⅝
	Quartic	18	−22	−17	3	18	18	3	−17	−22	18	2860	⅗
	Quintic	−6	14	−1	−11	−6	6	11	1	−14	6	780	⅓

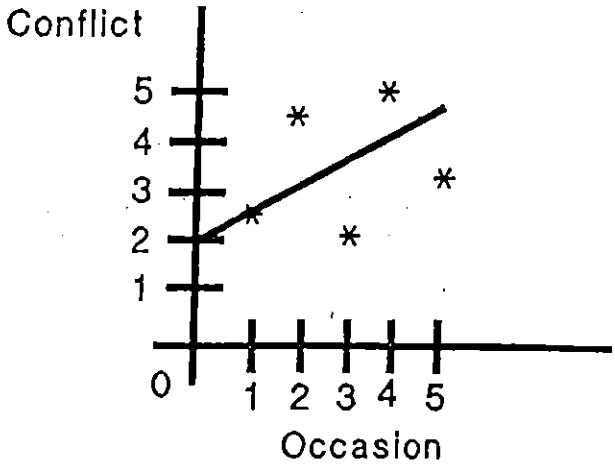
This table is adapted with permission from B. J. Winer, *Statistical Principles in Experimental Design* (New York: McGraw Hill, 1962).

Residualized gain





Person 1



Person 2

Estimating person curves

ID	Variable	Intercept	Slope	Error	Ave	Lin	Quad	T1	T2	T3
101	HLOVE	87.333333	-1.000000	2.667	86	-2	4	88	85	86
102	HLOVE	81.833333	-4.500000	48.167	77	-9	-17	79	83	70
103	HLOVE	79.500000	2.500000	1.500	82	5	3	80	81	85
104	HLOVE	78.333333	-1.000000	0.667	77	-2	-2	78	78	76
105	HLOVE	78.500000	-0.500000	37.500	78	-1	15	81	73	80
106	HLOVE	79.000000	-1.000000	6.000	78	-2	-6	78	80	76
107	HLOVE	79.500000	0.500000	13.500	80	1	-9	78	83	79
108	HLOVE	75.333333	-1.000000	80.667	72	-2	22	79	67	77
110	HLOVE	66.833333	-3.500000	20.167	63	-7	-11	65	67	58
111	HLOVE	76.333333	-1.000000	2.667	75	-2	4	77	74	75
114	HLOVE	75.333333	1.000000	0.667	76	2	-2	75	77	77
115	HLOVE	64.666667	3.000000	112.667	68	6	26	69	59	75
116	HLOVE	73.666667	1.000000	0.667	75	2	2	74	74	76
201	HLOVE	70.500000	-2.500000	73.500	68	-5	21	74	61	69
202	HLOVE	42.500000	1.500000	73.500	44	2	21	46	37	49
203	HLOVE	88.333333	-1.000000	0.667	87	-2	-2	88	88	86
204	HLOVE	68.000000	0.000000	6.000	68	0	-6	67	70	67
205	HLOVE	66.166667	2.500000	160.167	69	5	-31	61	79	66
206	HLOVE	71.166667	6.500000	0.167	78	13	-1	71	78	84
207	HLOVE	72.000000	-1.000000	96.000	71	-2	24	76	63	74

```
 options nodate linesize=72;
 data;
 infile 'c:\hdfs523\h523pg01.dat';
 input id  wife w1love w2love w3love
   #2  id2 husb h1love h2love h3love;

 * MAKE NEW VARIABLE;

 hloveave=( 1*h1love + 1*h2love + 1*h3love)/3;
 hlovelin= -1*h1love + 0*h2love + 1*h3love;
 hlovequa=  1*h1love -2*h2love + 1*h3love;
 wloveave=( 1*w1love + 1*w2love + 1*w3love)/3;
 wlovelin= -1*w1love + 0*w2love + 1*w3love;
 wlovequa=  1*w1love -2*w2love + 1*w3love;

 constant=1;

 file print;
 if _n_ le 20 then
 put id 1-3 h1love 5-6 h2love 8-9 h3love 11-12 hloveave 14-17
     hlovelin 19-21 hlovequa 23-25;
run;

proc corr;
 var hloveave hlovelin wloveave wlovelin;
run;

proc corr cov sscp;
 var h1love h2love h3love constant;
run;

proc reg;
 model  h2love=h1love;
    output out=newdaset residual=h21res;
run;
```

101	88	85	86	86	-2	4
102	79	83	70	77	-9	-17
103	80	81	85	82	5	3
104	78	78	76	77	-2	-2
105	81	73	80	78	-1	15
106	78	80	76	78	-2	-6
107	78	83	79	80	1	-9
108	79	67	77	74	-2	22
110	65	67	58	63	-7	-11
111	77	74	75	75	-2	4
114	75	77	77	76	2	-2
115	69	59	75	68	6	26
116	74	74	76	75	2	2
201	74	61	69	68	-5	21
202	46	37	49	44	3	21
203	88	88	86	87	-2	-2
204	67	70	67	68	0	-6
205	61	79	66	69	5	-31
206	71	78	84	78	13	-1
207	76	63	74	71	-2	24

Dependent Variable: h2love

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	7004.54036	7004.54036	183.65	<.0001
Error	153	5835.67899	38.14169		
Corrected Total	154	12840			

Root MSE	6.17590	R-Square	0.5455
Dependent Mean	75.32903	Adj R-Sq	0.5425
Coeff Var	8.19856		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	19.61381	4.14116	4.74	<.0001
h1love	1	0.72901	0.05380	13.55	<.0001

ID	T1	T2	Resid. Gain	Change Score
101	88	85	1.233258	-3
102	79	83	5.794353	4
103	80	81	3.065342	1
104	78	78	1.523364	0
105	81	73	-5.663667	-8
106	78	80	3.523364	2
107	78	83	6.523364	5
108	79	67	-10.205646	-12
110	65	67	0.000501	2
111	77	74	-1.747625	-3
114	75	77	2.710395	2
115	69	59	-10.915540	-10
116	74	74	0.439406	0
201	74	61	-12.560593	-13
202	46	37	-16.148298	-9
203	88	88	4.233258	0
204	67	70	1.542480	3
205	61	79	14.916543	18
206	71	78	6.626437	7
207	76	73	-12.018614	-13

	lov12dif	h21res	Mean	Std
lov12dif	1.00000	0.92614 <.0001	-1.097	6.646
h21res Residual	0.92614 <.0001	1.00000	0	6.155

Variable	N	Mean	Std Dev
xhachfe	128	8.33594	4.94900
phlove	128	75.87500	9.73346
xhconbew	128	7.16406	3.21849
xhanghos	128	7.89844	6.27059

Pearson Correlation Coefficients, N = 128
Prob > |r| under H0: Rho=0

	xhachfe	phlove	xhconbew	xhanghos
xhachfe	1.00000	-0.19364 0.0285	0.31190 0.0003	0.31320 0.0003
phlove	-0.19364 0.0285	1.00000	-0.04986 0.5762	-0.07207 0.4189
xhconbew	0.31190 0.0003	-0.04986 0.5762	1.00000	0.61376 <.0001
xhanghos	0.31320 0.0003	-0.07207 0.4189	0.61376 <.0001	1.00000

R square = .15

Unstandardized regression:

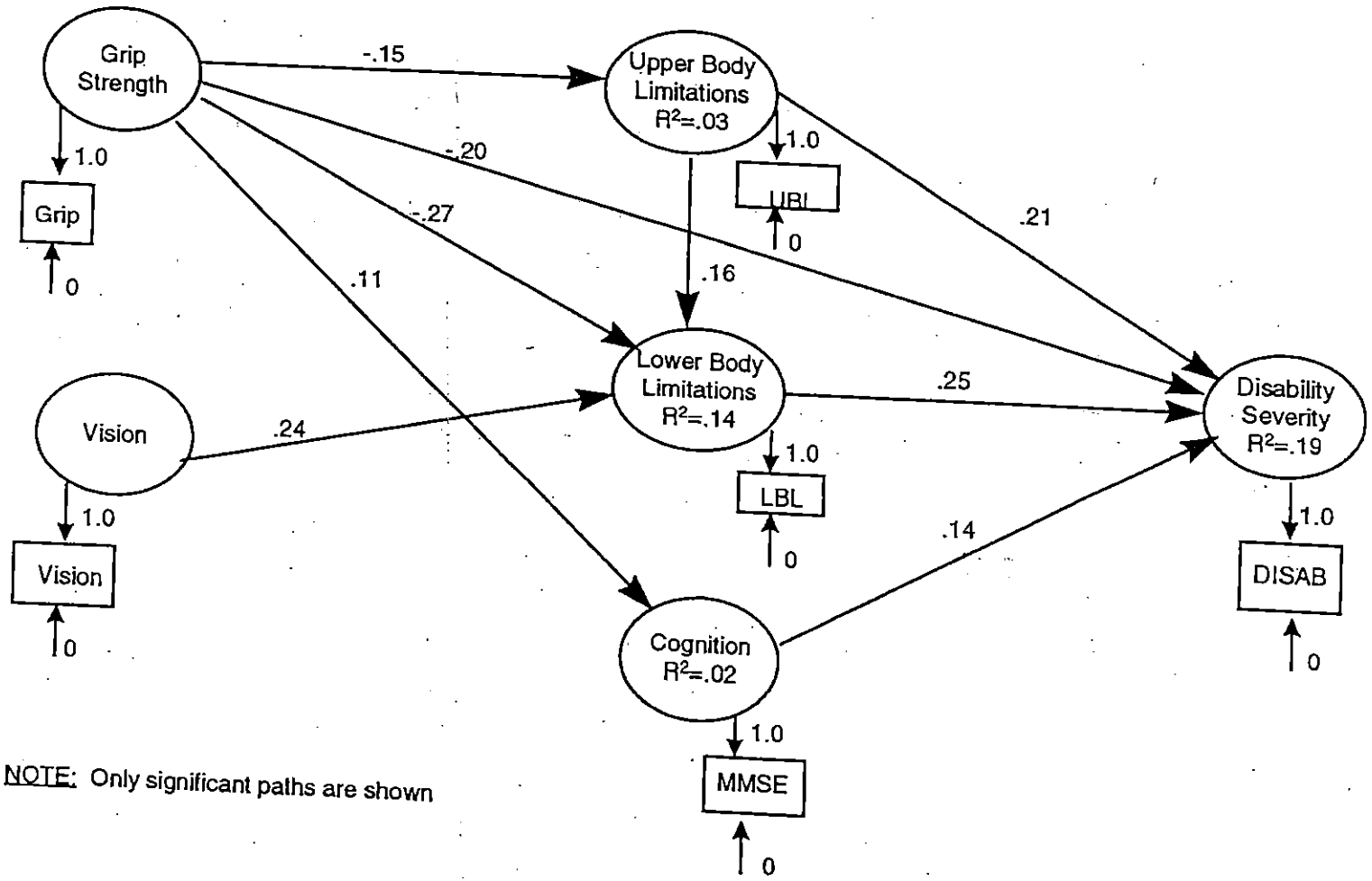
ChildProblems = 11.68 + -.09 Love + .29 Confused + .14 AngryHostile

Standardized regression:

ChildProblem_z = -.17 Love_z + .19 Confused_z + .18 AngryHostile_z

Figure 3

Final Structural Model for Main Pathway



NOTE: Only significant paths are shown

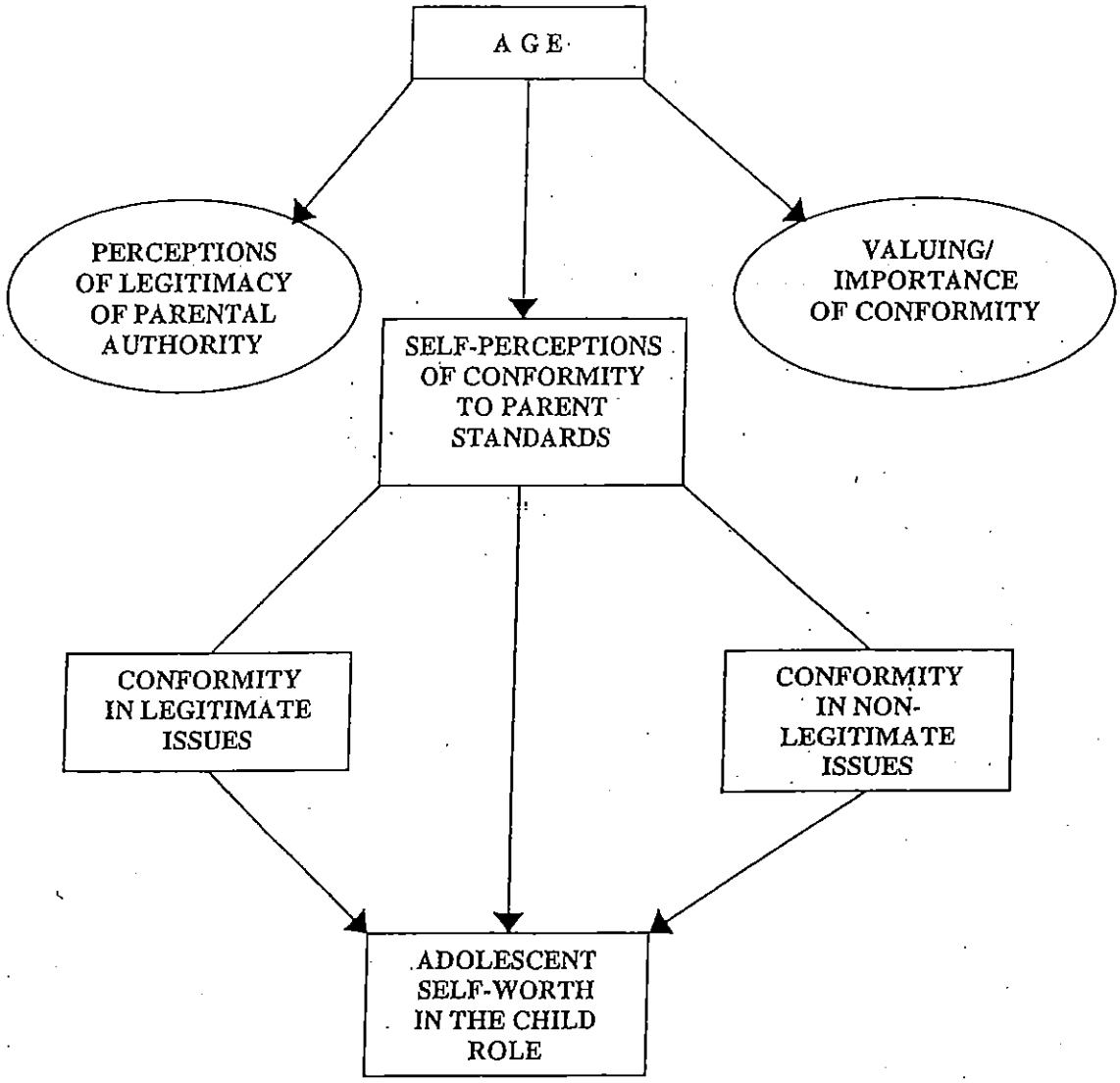


Figure 1. Conceptual framework illustrating the interrelationships of adolescent self-perceptions of conformity, self-worth in the child role, perceptions of the legitimacy of parental authority, and age. Conformity in important issues and in unimportant issues (not shown in this illustration) are conceptualized to relate with self-worth in the same manner as conformity in legitimate and in non-legitimate issues.

Figure 1

Conceptual Model of the Disablement Process (Verbrugge and Jette, 1994, p. 4)