

First-Year Undergraduate Student Attrition

Volume 2 – Appendices and References

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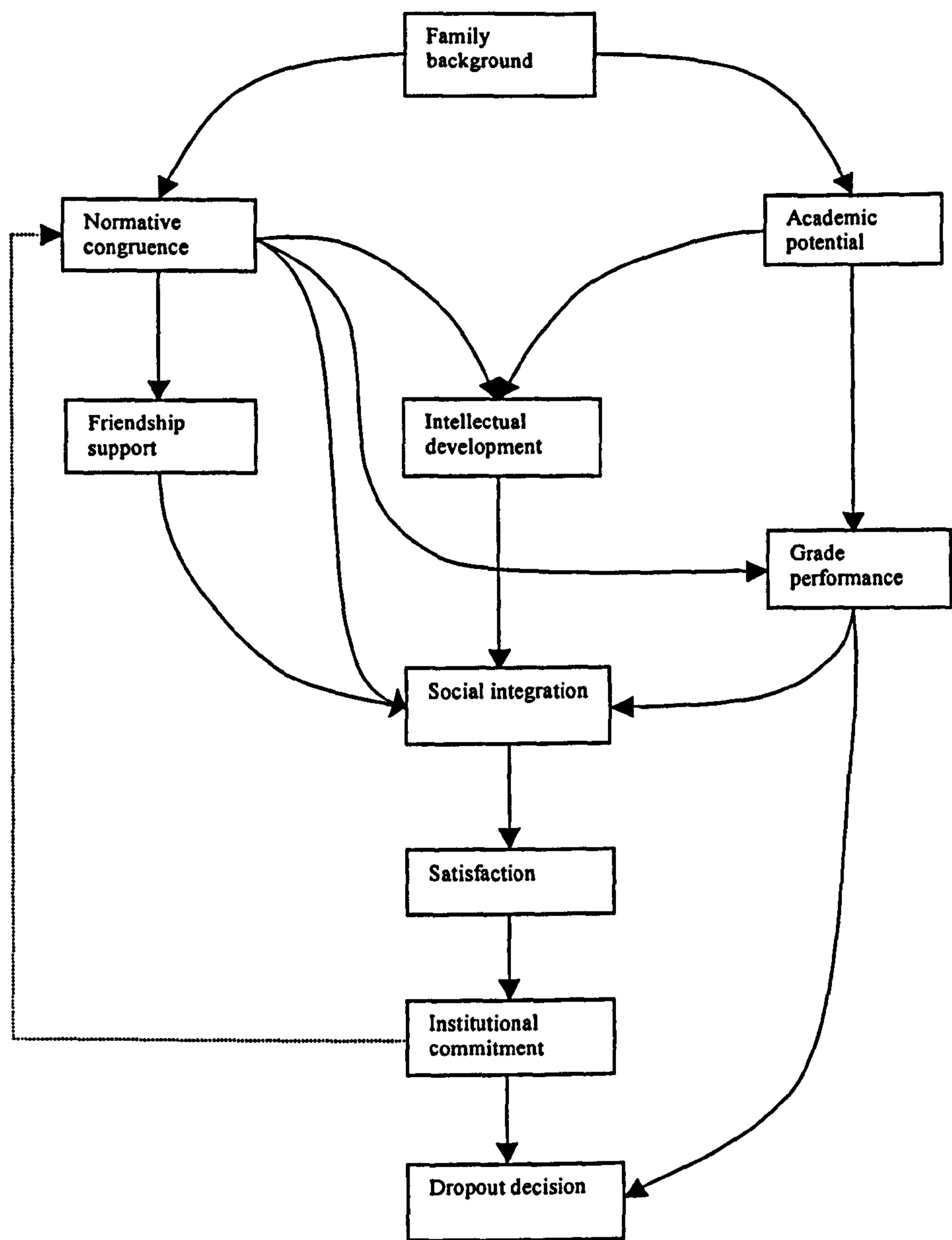
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Appendices to Chapter 2

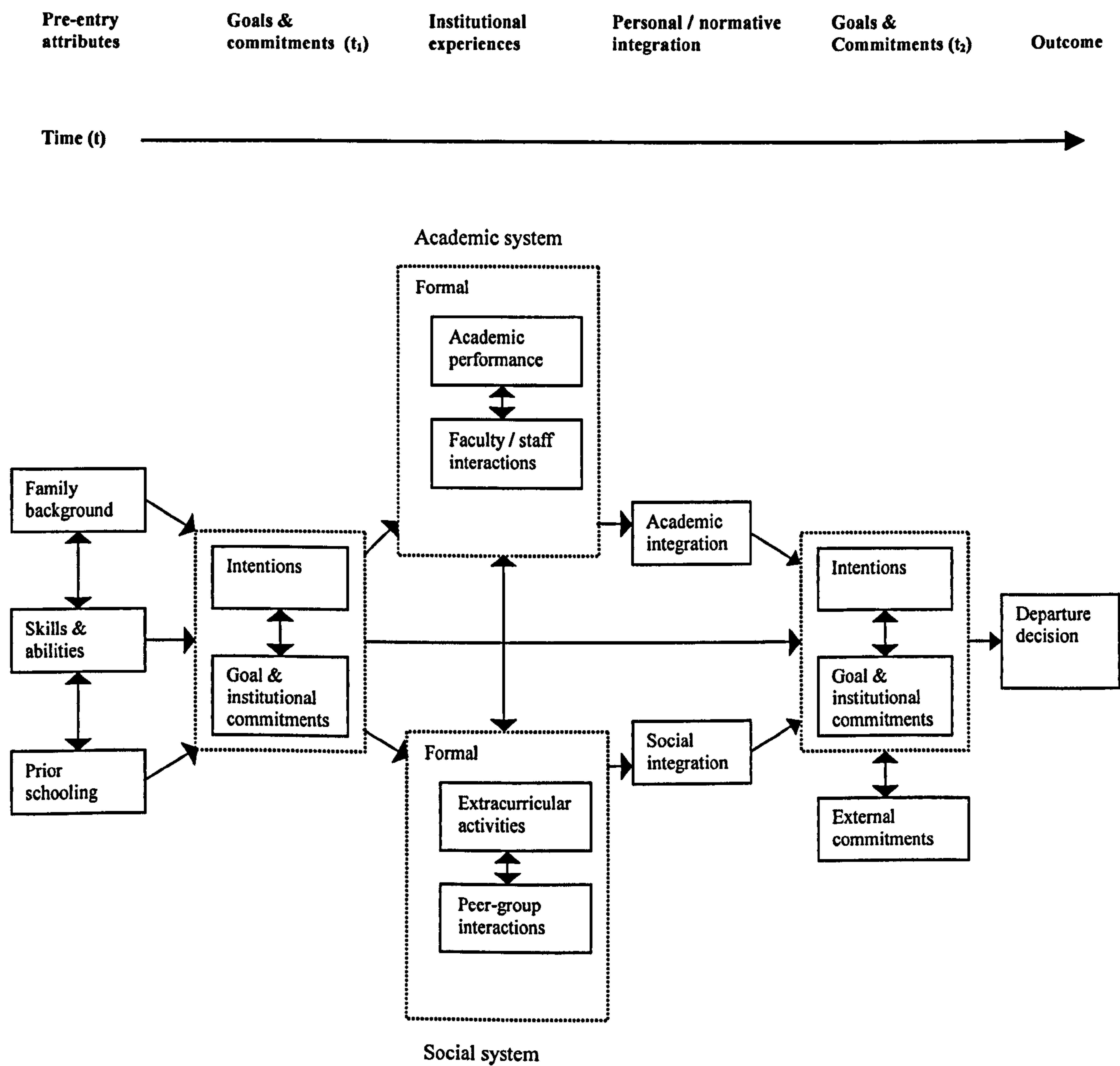
Appendix 2.1: Empirically Derived Factors Associated with Attrition (Yorke et al., 1997, p. 11)

Factor	Component items (abbreviated)	Interpretation
1	Inadequate staff support, both within and outside timetable; teaching quality; programme organisation; teaching not suited; class size too large; programme not as expected.	Unsatisfactory experience of the programme
2	Accommodation problems; dislike of city/town; homesickness; fear of crime; difficulty in making friends; travel difficulties.	Unhappiness with the locality of the institution
3	Programme difficulty; workload too heavy; lack of study skills; stress; insufficient academic progress.	Inability to cope with the demand of the programme
4	Chose wrong field of study; programme not relevant to career; lack of commitment; programme not as expected.	Wrong choice of field of study
5	Institutional provision of library, computing, specialist equipment, and social facilities; institution not as expected.	Dissatisfaction with institutional provision of facilities
6	Financial problems; demands of employment whilst studying; travel difficulties.	Problems associated with finance
7	Health problems; needed a break from education; problems with drugs/alcohol; lack of commitment.	Health-related problems
8	Emotional difficulties with others; needs of dependants; lack of support from family, students; difficulty in making friends.	Problems associated with relationships

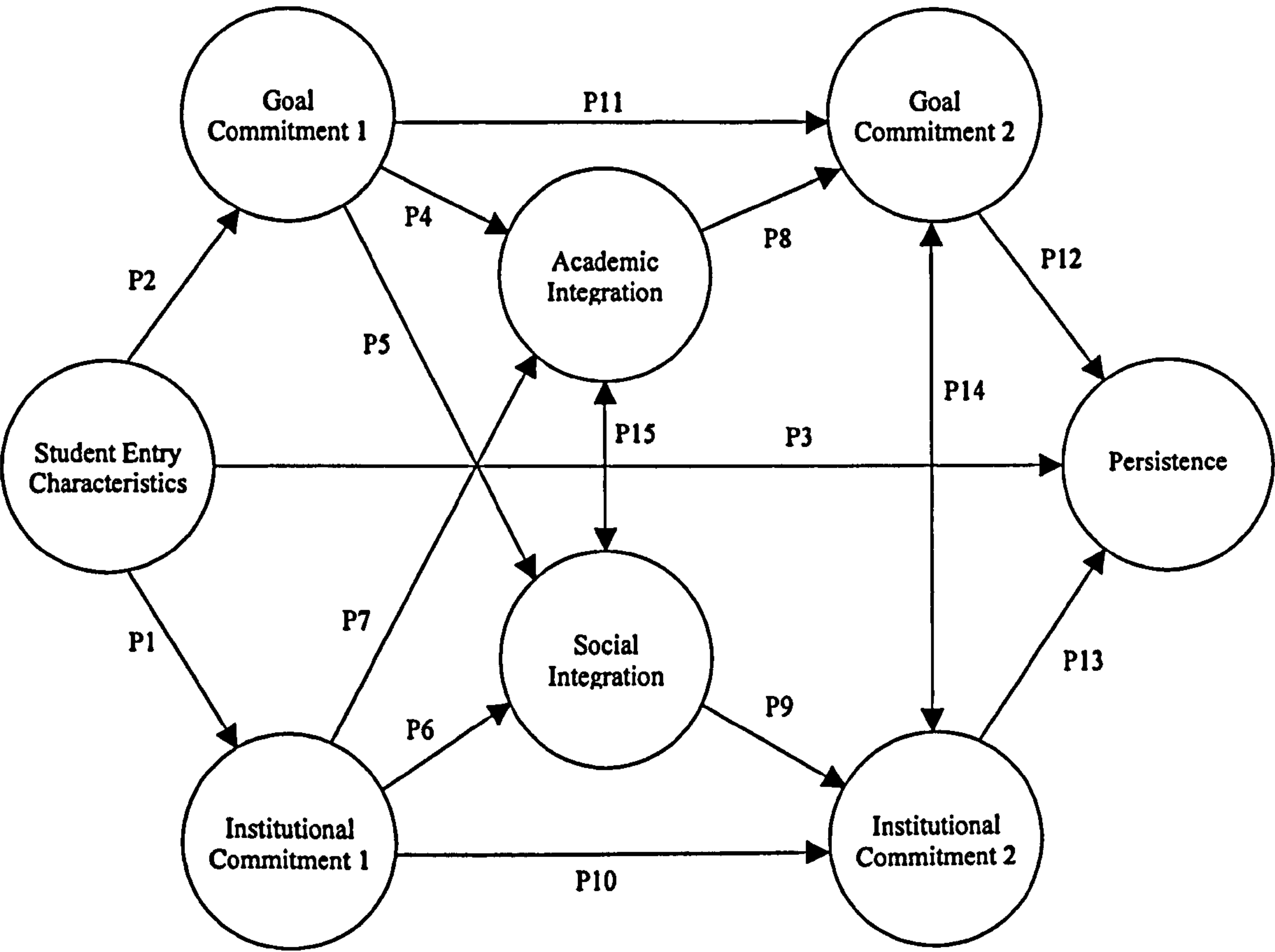
Appendix 2.2: Spady's sociological model of the dropout process (Spady, 1970, p. 79)



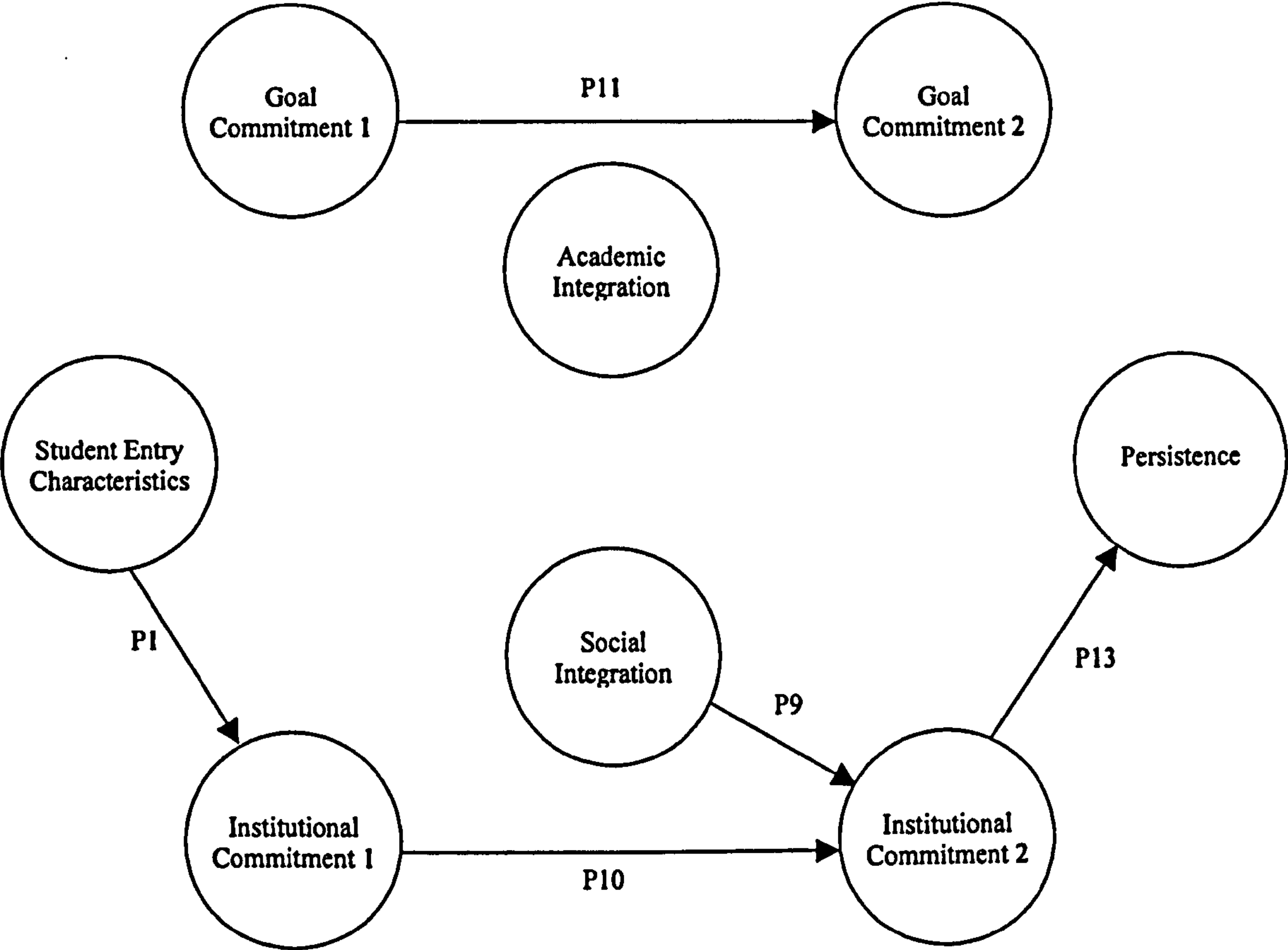
Appendix 2.3: Tinto's model of institutional departure (Tinto, 1987, p.114)



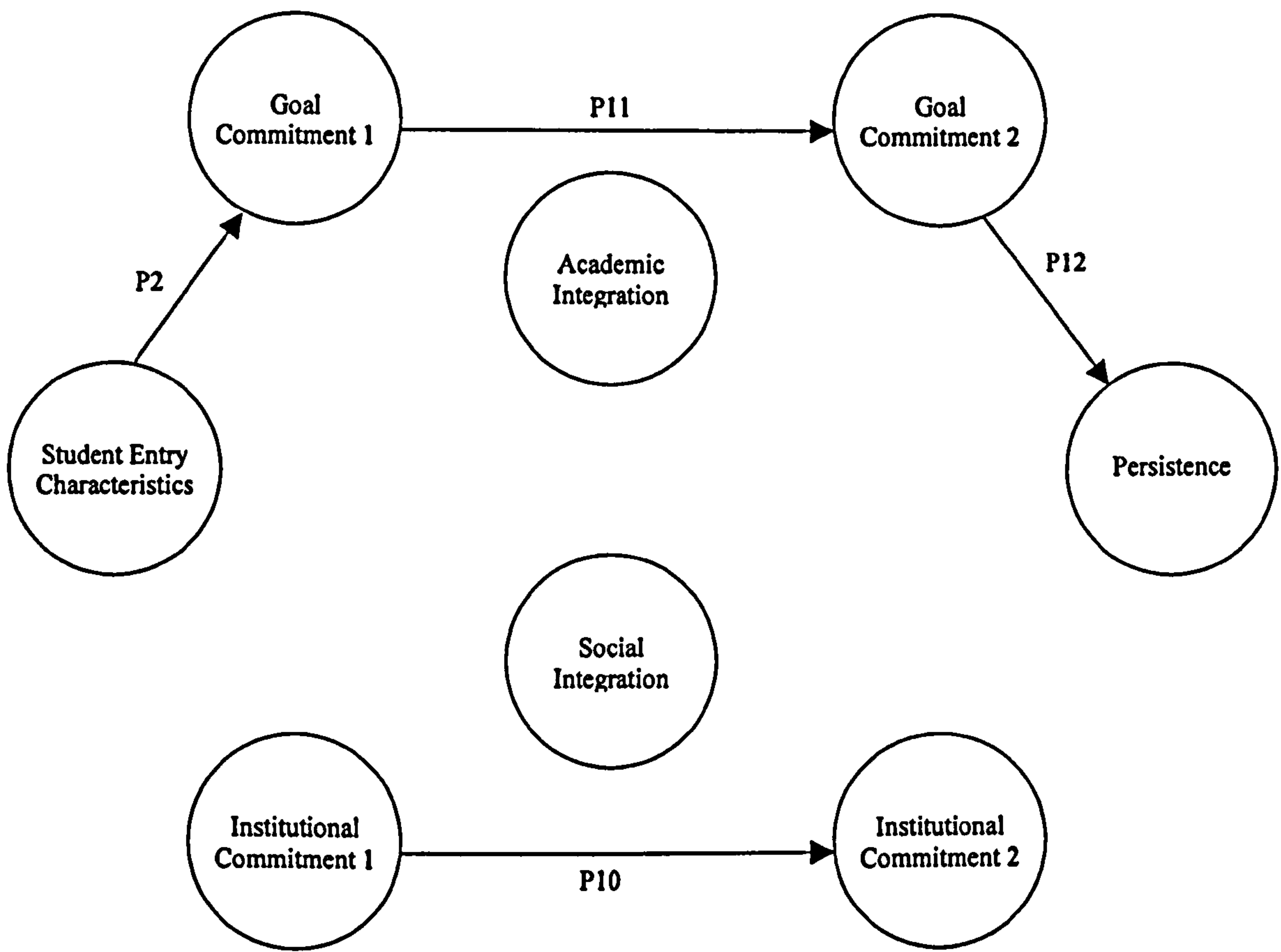
Appendix 2.4: Fifteen Testable Propositions Derived From Tinto's Student Integration Model (Braxton, Sullivan, and Johnson, 1997, p. 113)



Appendix 2.5: Strongly Supported Propositions: Aggregated Single Institutional Tests (Braxton, Sullivan, and Johnson, 1997, p. 155)



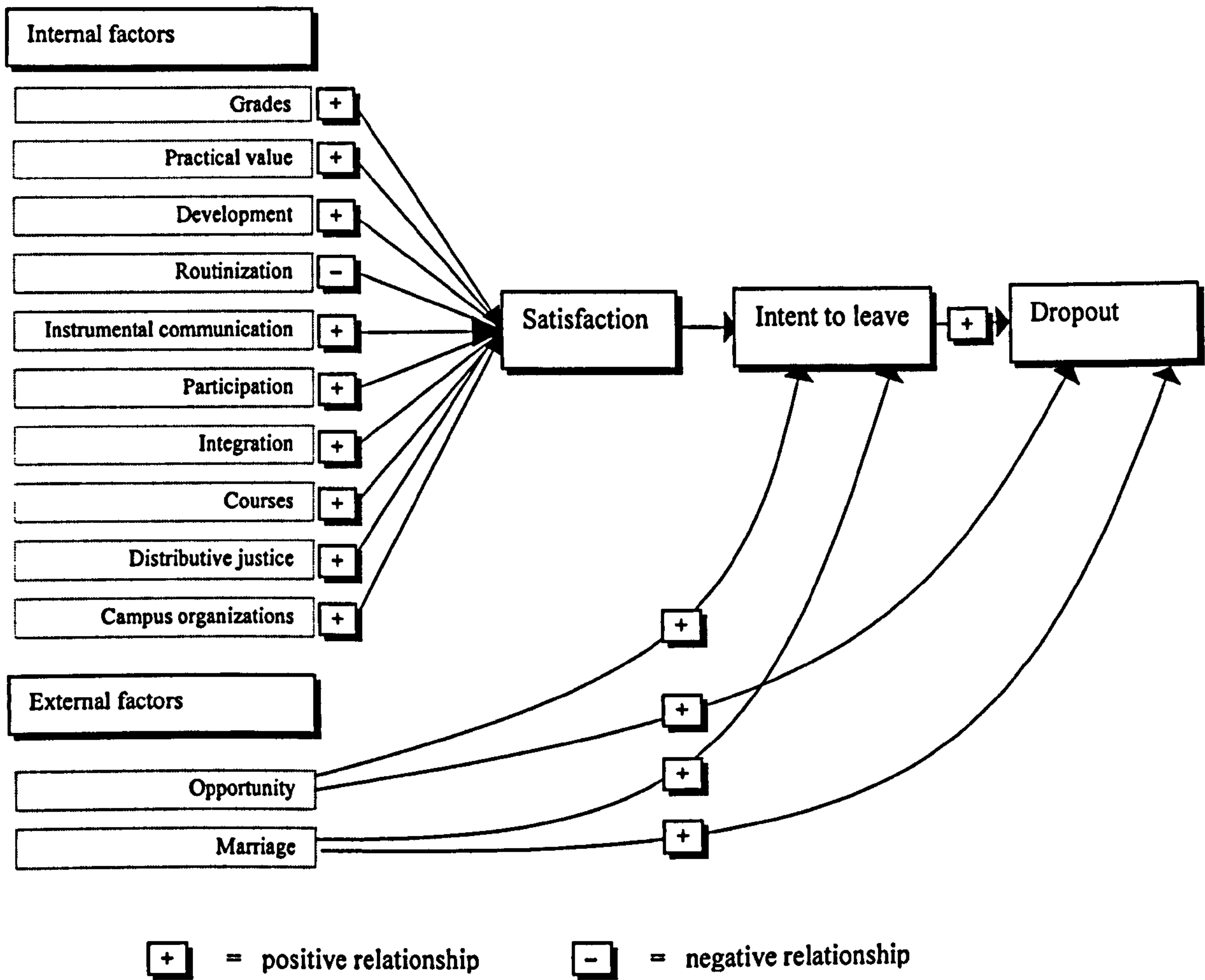
Appendix 2.6: Strongly Supported Propositions: Aggregated Multiple Institutional Tests (Braxton, Sullivan, and Johnson, 1997, p. 155)



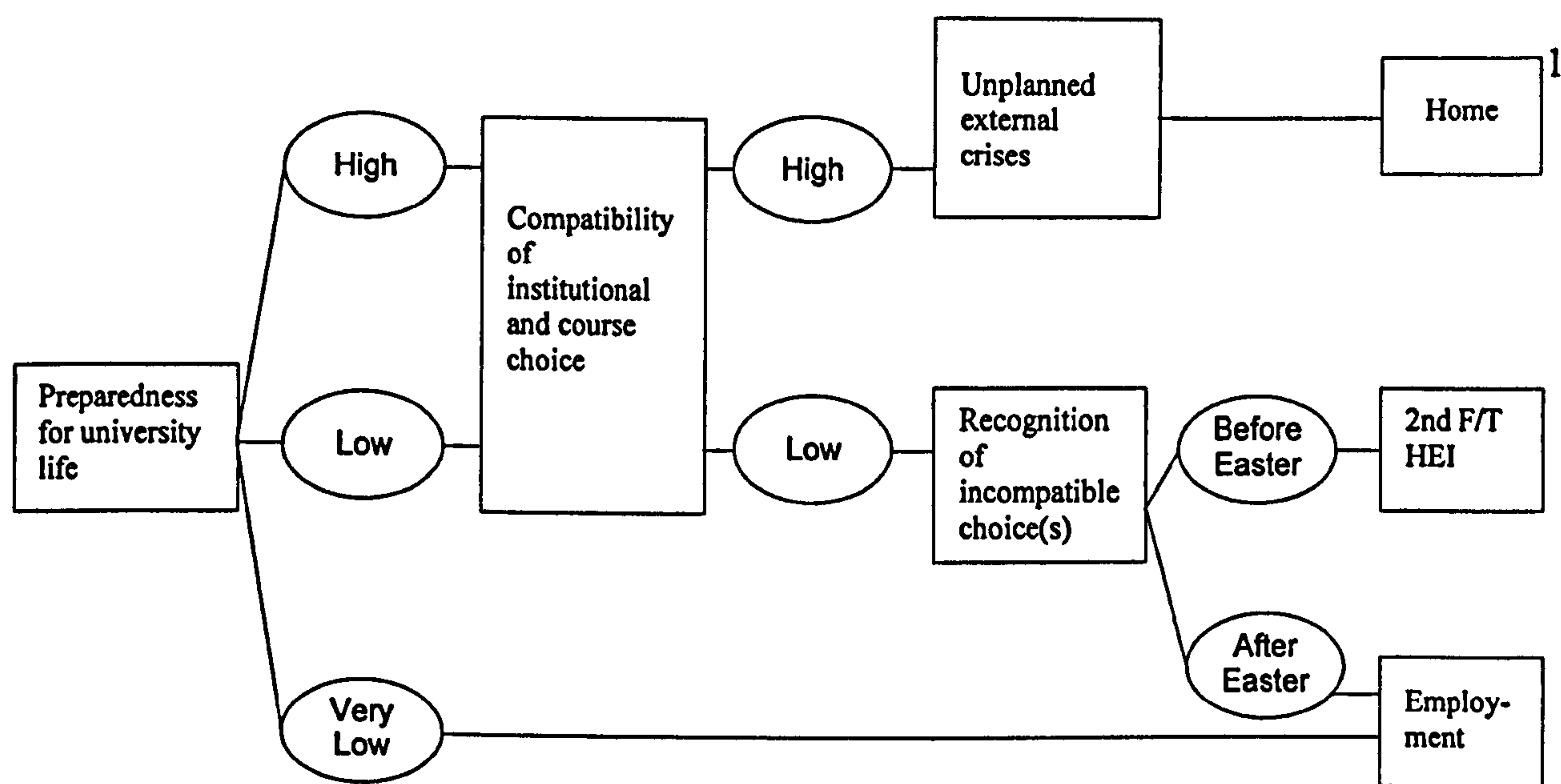
Appendix 2.7: Two Approaches to Research on American Indian Undergraduate Student Retention (Tierney, 1992, p. 36)

Theoretical focus:	Functionalism: Cultural Integration	Critical theory: Empowerment
Problem:	Student cannot negotiate the collegiate experience effectively	To create the organisational conditions for empowerment
Research questions:	Student centred: Prior academic experience, family support, academic achievement	Institution centred: Nature of curriculum, type of support services, nature of the faculty
Conceptual framework:	Student centred: Prior academic experience, family support, academic achievement	Systemic: Highlighting clash between mainstream culture and Indian cultural values and beliefs, tribal goals
Method:	Quantitative: Statistical techniques to determine relationships between dependent and independent variables; prediction and explanation	Qualitative: Case studies, ethnographies to interpret Indian perceptions and views
Findings:	Inadequate academic preparation, lack of motivation, lack of family support and encouragement, lack of financial aid	Lack of societal, institutional commitment to Indian students, lack of relevant coursework and services, cultural alienation
Solutions:	Better academic preparation, more family support, compensatory programs (counselling, advising), more financial aid	Innovative programs (Indian studies, faculty training and orientation, student orientation and transition), creation of new institutions

Appendix 2.8: Bean’s industrial model of student attrition (Bean, 1983, p. 132)



Appendix 2.9: An Explanatory Model of Undergraduate Non-Completion (Ozga and Sukhnandan, 1998, p. 320)



Key
1 – Route typical of mature non-completers

Appendix 2.10:Variables and Constructs Associated with Attrition

Variables and Constructs	Cited as Reported/ Hypothesised by	Subsequently Selected for Study? (Chapter 6)
Student Entry Characteristics: Demographic Variables		
Age	Tinto, 1975 et seq.; dropped by Bean, 1982, 1983	Y
Sex	Lenning, 1982; Yorke, 1997; Smith & Naylor, 2001	Y
Socio-economic status, social class	Lenning, 1982; Yorke, 1997; Smith & Naylor, 2001	Y
Unemployment in county of origin	Tinto, 1975 et seq.; Lenning, 1982; Anderson, 1988; Yorke, 1997; Smith & Naylor, 2001	Y
Ethnic background	Smith & Naylor, 2001	
Religious-ethnic origin	Tinto, 1975 et seq.; Lenning, 1982; Cabrera, Stampen & Hansen, 1990; Yorke, 1997	
Marital status	Bean, 1970	
Hometown location and size	Lenning, 1982; Smith & Naylor, 2001	
Degree of urbanisation	Lenning, 1982	
Proximity of home to institution	Bean, 1970	
Living with parents	Johnes, 1990	
Parental education	Smith & Naylor, 2001	
Father's education level	Lenning, 1982	
Mother's education level	Bean, 1970	
Father's occupation	Bean, 1970	
Home/overseas origin	Johnes, 1990; Smith & Naylor, 2001	
Cultural capital	Bourdieu, 1973, 1977, 1993; Berger 2002	
Self-reproducing social attainment	Anderson, 1988	
Student Entry Characteristics: Academic Attributes		
Aptitude test scores	Tinto, 1975 et seq.; dropped by Bean, 1982, 1983	Y
Scholastic Aptitude Test (SAT) Verbal and Mathematical scores	Lenning, 1982	
High school achievement	Spady, 1970; Lenning, 1982	
Rank in high school class	Tinto, 1975 et seq.; Lenning, 1982	
High school GPA	Spady, 1970	
A-levels and other UK entry qualifications	Kanoy, Wester, & Latta, 1989	
Scottish school-leaving qualifications	HEFCE, 1999 et seq.; Smith & Naylor, 2001	Y
High school attended	Smith & Naylor, 2001	Y
High school quality	Lenning, 1982	
Grammar, independent/other	Spady, 1970	
Subjects and number of courses taken in high school	Johnes, 1990; Smith & Naylor, 2001	
Entry through Clearing	Lenning, 1982	
	Yorke, 1997	
Student Attributes, Personality and Value Variables		
Study skills	Lenning, 1982; Yorke, 1997; HEFCE, 2001	Y
Study habits	Lenning, 1982	Y
Attitudes towards study	Lenning, 1982	Y
Motivation	Lenning, 1982	
Needed a break from education	Yorke, 1997	
Lack of commitment	Yorke, 1997; HEFCE, 2001	Y
Motivational orientations	Stage, 1989	
Maturity and responsibility	Lenning, 1982	
Self-management skills	HEFCE, 2001	
Independence and autonomy	Lenning, 1982	
Intellectual orientation	Lenning, 1982	
Creativity	Lenning, 1982	
Assertiveness	Lenning, 1982	
Expressed need for counselling	Lenning, 1982	
Life-task orientations	Brower (1992)	
Career decision-making self-efficacy	Peterson, 1993	
Locus of control	Kanoy, Wester, & Latta, 1989	
Prior work experience	Johnes, 1990	
Family and Friends' Support		
Familial aspirations for college	Lenning, 1982	
Parental encouragement for college	Tinto, 1975 et seq.; Kysel, West, & Scott, 1992	
Support from family	Yorke, 1997	Y
Family-college relationships	Lenning, 1982	
Family approval of the institution	Bean, 1980, 1982, 1983	
Family relationships	Spady, 1970	
Parental marital stability	Spady, 1970	
Student's view of the general happiness of his previous home life	Spady, 1970	
Perceived freedom from family rule	Spady, 1970	
Psychological independence from parents	Spady, 1970	
Emotional support provided by families and by parents, in particular	Bean, 1982; Cabrera, Stampen, & Hansen, 1990; Cabrera, Nora, & Castañeda, 1993; Nora, 1987; Nora & Rendon, 1990; & Nora, Attinasi, & Matonak, 1990	
Parental encouragement	Nora & Cabrera, 1996	
Parental and peer group pressure	HEFCE, 2001	Y
Institutional variables		
Size	Lenning, 1982	N
Type (two/four-year; single-sex/co-educational)	Lenning, 1982; Astin, 1975, 1984	
Proportion of students in halls of residence	Johnes & Taylor, 1989	
Religious affiliation	Lenning, 1982	
Selectivity	Lenning, 1982	
Academic subject mix of institution	HEFCE, 1999 et seq.	
Student entry qualifications profile of institution	HEFCE, 1999 et seq.	
Regional variation in social inclusion	HEFCE, 1999 et seq.	
Housing	Lenning, 1982	
Student services	Lenning, 1982	

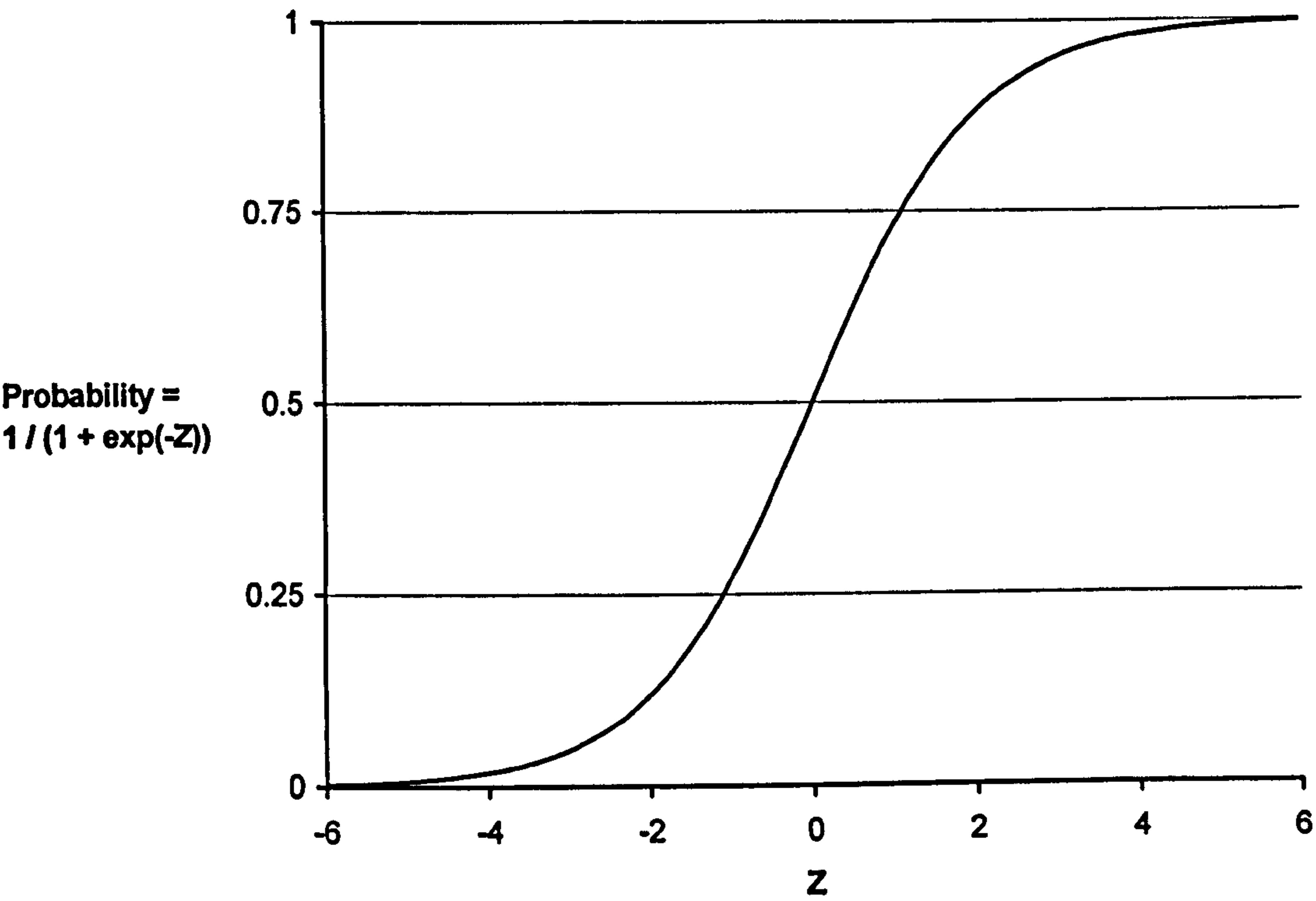
Variables and Constructs	Cited as Reported/ Hypothesised by	Subsequently Selected for Study? (Chapter 6)
Institutional provision of library, computing, specialist equipment, and social facilities	Yorke, 1997	
Provision of a challenging but not unduly stressful environment	Lenning, 1982	
Institutional mission	Lenning, 1982	
Prestige	Lenning, 1982	
Control (private or public)	Lenning, 1982	
Institutions as mechanisms of social reproduction	Anderson, 1988	
Institutional cultural capital	Bourdieu, 1973, 1977, 1993; Berger, 2002	
Information Source		
Insufficient information about institution/course	HEFCE, 2001	Y
Direct engagement with prospective institution	Yorke, 2001	
Campus visits	Tinto, 1993	
Expectations		
Expectations concerning informal social and intellectual climates	Tinto, 1993	
Expectations concerning academic and intellectual development	Braxton, Vesper, & Hossler, 1995	
Expectations concerning career development	Braxton, Vesper, & Hossler, 1995	Y
Programme not as expected	Yorke, 1997	Y
Institution not as expected	Yorke, 1997	Y
Chose wrong field of study	Yorke, 1997	Y
Programme not relevant to career	Yorke, 1997	Y
Initial Student Aspirations: Goal Commitment		
Degree aspirations	Tinto, 1975 et seq.	Y
Vocational and occupational goals	Lenning, 1982	Y
Initial Student Aspirations: Institutional Commitment		
Commitment to the college	Tinto, 1975 et seq.	Y
	Lenning, 1982	Y
'Fit' of Student with Institution		
Compatibility between student and institutional values		N
The 'fit' between student and college:	Lenning, 1982	
Religious background	Astin, 1975, 1984	
Ethnic origin	Astin, 1975, 1984	
Urbanisation	Astin, 1975, 1984	
Normative congruence	Astin, 1975, 1984	
Patterns of relationships and expectations generated in the high school context	Spady, 1970	
Various personality dispositions	Spady, 1970	
Measures of intellectual, moral and vocational values	Spady, 1970	
Attitudes towards the institution	Spady, 1970	
Political, extracurricular and academic subcultural orientations	Spady, 1970	
Background characteristics similar to those of other students	Smith & Naylor, 2001	
Academic Integration: Academic Preparedness		
Preparedness		Y
Match between school and university subjects	Ozga & Sukhnandan, 1997, 1998	Y
Compatibility between student and course/institution	Smith & Naylor, 2001	
Learning-preference congruence	Ozga & Sukhnandan, 1997, 1998; HEFCE, 2001	Y
Teaching-method congruence	Lenning, 1982	
Teaching not suited	Lenning, 1982	
Class size too large	Yorke, 1997	Y
Student ability to meet college demands	Yorke, 1997	Y
Programme difficulty	Lenning, 1982	Y
Workload too heavy	Yorke, 1997	Y
Insufficient academic progress	Yorke, 1997	
	Yorke, 1997; HEFCE, 2001	
Academic Integration: Academic Help and Feedback		
Student satisfaction		Y
Teaching quality	Lenning, 1982; Bean, 1980, 1982, 1983	
Programme organisation	Yorke, 1997	
Satisfaction with the year so far	Yorke, 1997	
Perceived practical value of the education in getting a job	Spady, 1970	
Faculty concern for students and teaching	Bean, 1980, 1982, 1983	
Inadequate staff support, both within and outside timetable	Lenning, 1982	
Institutionally generated student development	Yorke, 1997	Y
Stimulation provided by course work	Lenning, 1982	
Expansion of intellectual and cultural perspectives	Spady, 1970	
Increased ability to think systematically and critically	Spady, 1970	
Institutional encouragement	Spady, 1970	
	Cabrera, Castañeda, Nora & Hengler, 1992; Cabrera, Nora & Castañeda, 1993	Y
Responsiveness to student complaints and expressed needs	Lenning, 1982	
Academic Integration: other aspects		
College program taken; subjects studies		N
College grades	Lenning, 1982; Yorke, 1997; HEFCE 1999 et seq.	
Grade point average	Lenning, 1982	
	Bean, 1980, 1982, 1983; Cabrera, Castañeda, Nora & Hengler, 1992; Cabrera, Nora & Castañeda, 1993	
Full-time/part-time status	HEFCE, 1999 et seq.	
Routinisation "the degree to which being a student is repetitive"	Bean, 1980, 1982, 1983	
Participation: "degree of power that a student exercises in classroom decisions"	Bean, 1980, 1982, 1983	
Instrumental communication: "degree to which information about being a student is transmitted by the institution to its students"	Bean, 1980, 1982, 1983	
Academic program involvement and success	Lenning, 1982	

Variables and Constructs	Cited as Reported/ Hypothesised by	Subsequently Selected for Study? (Chapter 6)
Development quality	Bean, 1980, 1982, 1983	
Academic Self-Concept	Kanoy, Wester, & Latta, 1989	Y
Self-concept	Lenning, 1982	
Self-perceived excellence of academic work	Spady, 1970	
Social Integration	Tinto, 1975 et seq.	Y
Social integration/ peer group relations	Lenning, 1982	
Difficulty in making friends	Yorke, 1997	Y
Lack of support from students	Yorke, 1997	Y
Quality and quantity of students' relationships with peers	Spady, 1970	Y
Sense of belonging and fitting in at the institution	Spady, 1970	Y
Reactions to the general warmth of interpersonal relationships on campus	Spady, 1970	
Normative differences between the respondent and other students	Spady, 1970	
Belonging to campus organizations	Bean, 1980, 1982, 1983	Y
Having close friends in the same institution	Bean, 1980, 1982, 1983	Y
Extracurricular involvement	Lenning, 1982	Y
Practical manifestations of involvement	Astin, 1975, 1984; Smith & Naylor, 2001	
Living in residence halls	Astin, 1975, 1985	Y
Membership of social fraternities and sororities	Astin, 1975, 1986	
Participation in sporting activities	Astin, 1975, 1987	
Enrolment in honours programmes	Astin, 1975, 1988	
Involvement in the Reserve Officers Training Corps (ROTC)	Astin, 1975, 1989	
Participation in professors' undergraduate research projects	Astin, 1975, 1990	
Holding a part-time job on-campus	Astin, 1975, 1991	
Out-of-class interactions with faculty	Tinto, 1975 et seq.; Lenning, 1982	
Student body characteristics	Lenning, 1982	
Student participation in student services	Lenning, 1982	
Subsequent Goal Commitment	Tinto, 1975 et seq.	Y
Commitment to the goal of graduation	Lenning, 1982	Y
Subsequent Institutional Commitment	Tinto, 1975 et seq.; Bean, 1980, 1982, 1983; Cabrera, Castañeda, Nora & Hengler, 1992; Cabrera, Nora & Castañeda, 1993	Y
Commitment to the college	Lenning, 1982	Y
Importance of graduating from the institution	Spady, 1970	
Perceived quality of the institution	Bean, 1980, 1982, 1983	
Opportunity to transfer to another college	Bean, 1980, 1982, 1983	
Study Time		Y
Amount of effort	Lenning, 1982; Kanoy, Wester, & Latta, 1989	Y
Finances and Outside Paid Work		Y
Concern about finance	Lenning, 1982	Y
Ability to pay	Cabrera, Stampen & Hansen, 1990	
Satisfaction with costs	Cabrera, Stampen & Hansen, 1990	Y
Level of financial aid	Cabrera, Nora & Castañeda, 1992	
Financial problems	Yorke, 1997; HEFCE, 2001	Y
Demands of employment whilst studying	Yorke, 1997	Y
Commitments to employer	Tinto, 1975 et seq.	
Paid work	Utley, 2001	Y
Student debt and financial hardship	Callender, 2001	Y
Extraneous Factors and Inhibitors		Y
Family and financial commitments	Lenning, 1982	Y
Needs of dependants	Yorke, 1997	
Kinship responsibility to one's spouse and children	Bean, 1980, 1982, 1983	
Health-related problems	Tinto, 1975 et seq.	
Anxiety	Lenning, 1982	
Stress	Yorke, 1997	
Health problems	Yorke, 1997	Y
Problems with drugs/alcohol	Yorke, 1997	
Emotional difficulties with others	Yorke, 1997	
Locality of the institution		
Dislike of city/town	Yorke, 1997	
Homesickness	Yorke, 1997	Y
Fear of crime	Yorke, 1997	
Travel difficulties	Yorke, 1997	Y
Accommodation problems	Yorke, 1997	Y
Student problems, viewed as costs	Braxton, Bier, & Hossler, 1988	
Not being able to take desired courses	Braxton, Bier, & Hossler, 1988	Y
Not being able to enrol on courses at convenient times	Braxton, Bier, & Hossler, 1988	
Difficulty balancing academic work with home/work demands	Braxton, Bier, & Hossler, 1988	
Personal problems	Braxton, Bier, & Hossler, 1988	Y
Difficulty financing college expenses	Braxton, Bier, & Hossler, 1988	
Intention to Persist		Y
Declared intention to withdraw or persist (Generally an ordinal variable, noting "intent to leave" may be said to be "empty" variable)	Lenning, 1982	
	Bean, 1980, 1982, 1983	
Persistence		Y
(Generally a binary variable, but noting		

Variables and Constructs	Cited as Reported/ Hypothesised by	Subsequently Selected for Study? (Chapter 6)
higher weights given to departures shortly after responding) Timing of departure	Bean, 1980, 1982, 1983 HEFCE, 1999 et seq.	

Appendices to Chapter 5

Appendix 5.1: Plot of Logistic Regression Curve



Appendix 5.2: Model One – Simple Logistic Regressions and Crosstabulations

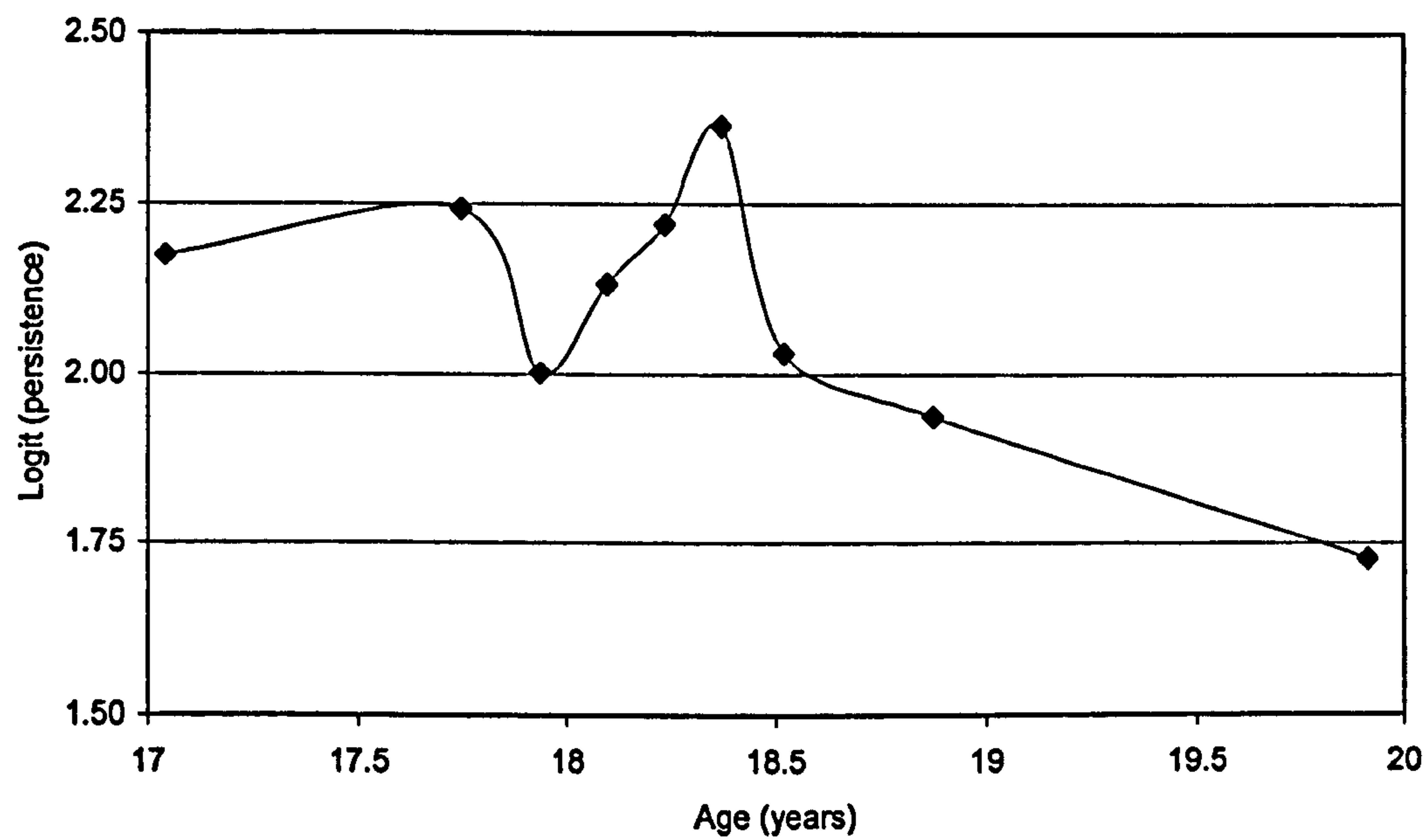
Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) Variables			
1	Faculty Grouping	Nominal (12 categories)	Arts Crichton Dentistry Divinity Education Engineering Law & FS Medicine Nursing Science Social Sciences Veterinary Medicine
2	Gender	Nominal (2 categories)	Female Male
3	Age	Scale	
4	Social Class	Nominal (8 categories)	Armed Forces I Professional II Intermediate IIIN Skilled Non-Manual IIIM Skilled Manual IV Partly Skilled V Unskilled Unemployed, Retired
5	Provenance/Home Residence Location	Nominal (5 categories)	In/under 30 miles from Glasgow Over 30 miles from Glasgow; In Scotland Outwith Scotland in UK Outwith UK in EU Outwith EU
6	Residential Category	Nominal (4 categories)	University-controlled Other Rented Flat/House Parental/Guardian's Home Own Home
7	Entry Qualification Route	Nominal (8 categories)	Scottish 6th year (qualified in 5th year) GCE Glasgow University Access course Scottish fifth year direct Scottish sixth year direct Scottish gap year Other UK Non-UK
8	Entry Point Score	Scale	

Appendix 5.3: Simple Logistic Regression Summary Results

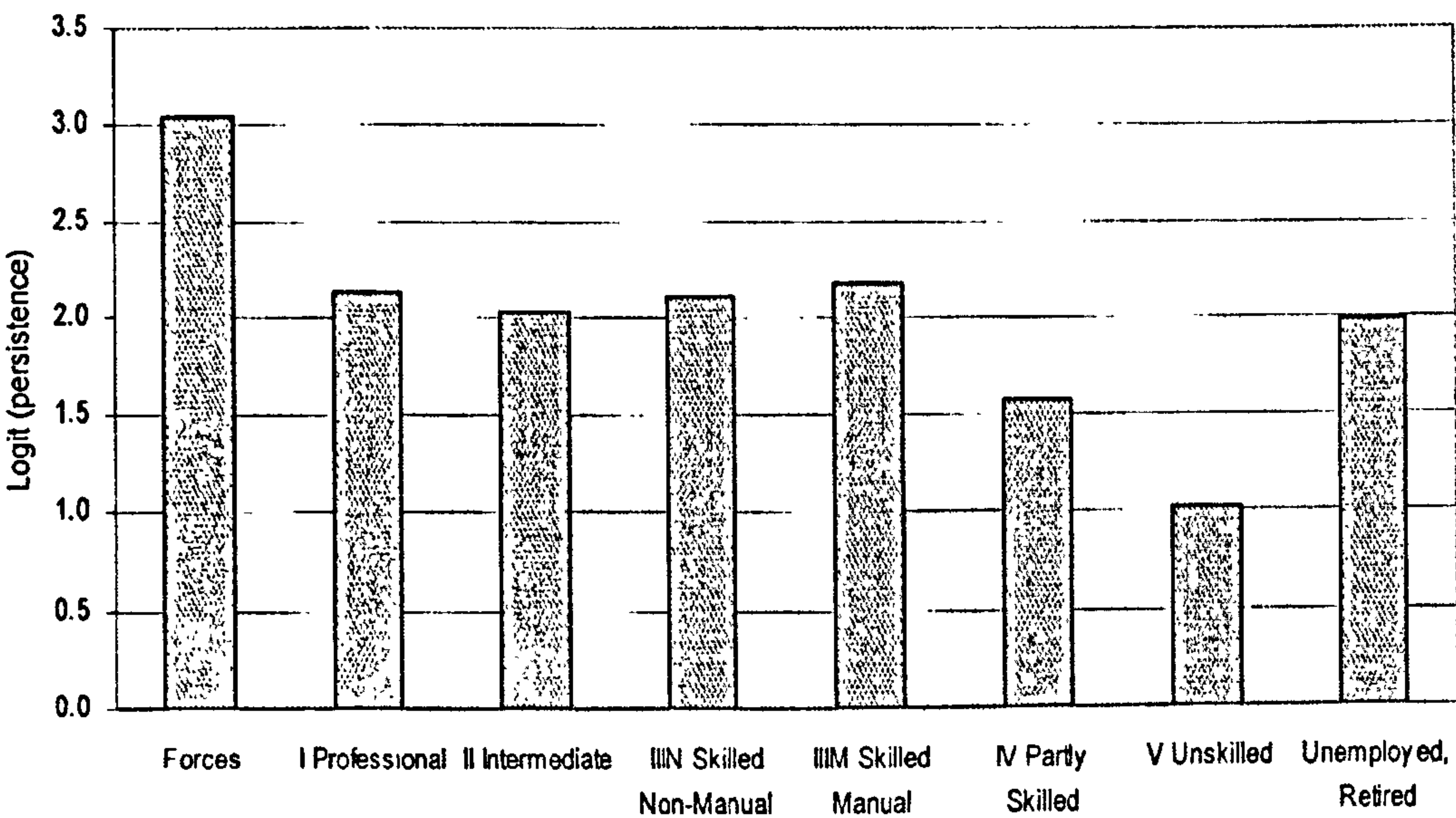
Explanatory Variable	1	2	3	4	5	6	7	8
	Faculty Grouping	Gender	Age	Social Class	Provenance/ Home Residence Location	Residential Category	Entry Qualification Route	Entry Point Score
Categories/Scale	12	2	Scale	8	5	4	8	Scale
Sample Size	3798	3798	3304	3505	3797	3750	3776	3243
Model								
-2 Log Likelihood	2676	2774	2297	2507	2759	2708	2686	2128
Goodness of Fit (*)	3795	3798	3300	3505	3797	3750	3776	3257
Cox & Snell R ^ 2	.027	.002	.002	.005	.005	.009	.021	.030
Nagelkerke R ^ 2	.052	.003	.004	.010	.009	.017	.041	.061
Likelihood Ratio Chi-Square	104.16	6.37	7.193	18.21	17.24	32.33	80.28	99.16
Degrees of Freedom	11	1	1	7	4	3	7	1
Significance	.0000	.0116	.0073	.0111	.0017	.0000	.0000	.0000
Variable								
Wald	54.4	6.4	8.38	19.95	16.92	32.02	78.63	87.84
Degrees of Freedom	11	1	1	7	4	3	7	1
Significance	.0000	.0397	.0038	.0057	.0020	.0000	.0000	.0000

(*) defined as $\sum (\text{Residual})^2 / (P_i * (1 - P_i))$, where the residual is the difference between the observed value and the predicted value, P_i .

Appendix 5.4: Logit (persistence) Plotted against Age At Entry



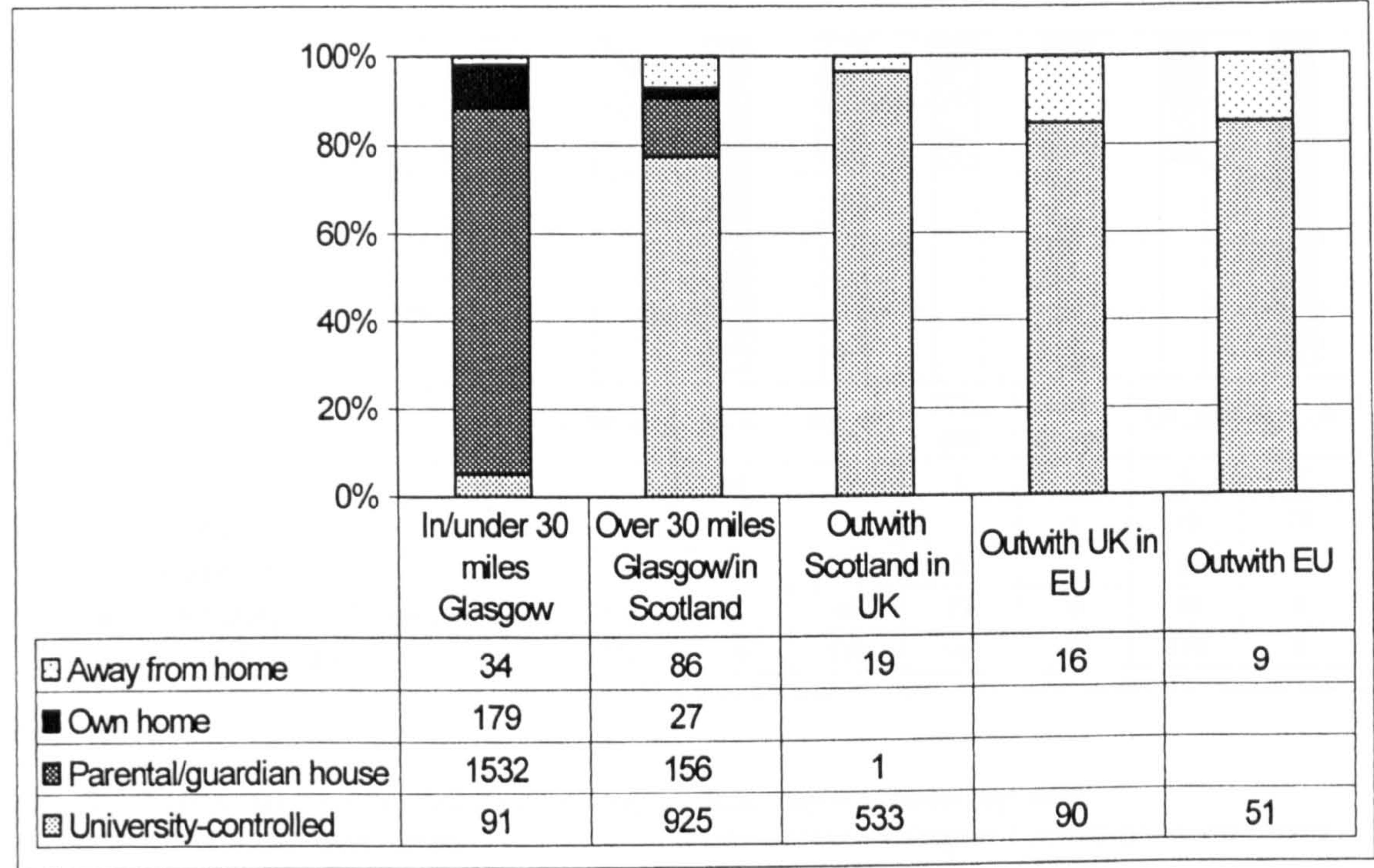
Appendix 5.5: Logit (persistence) by Social Class



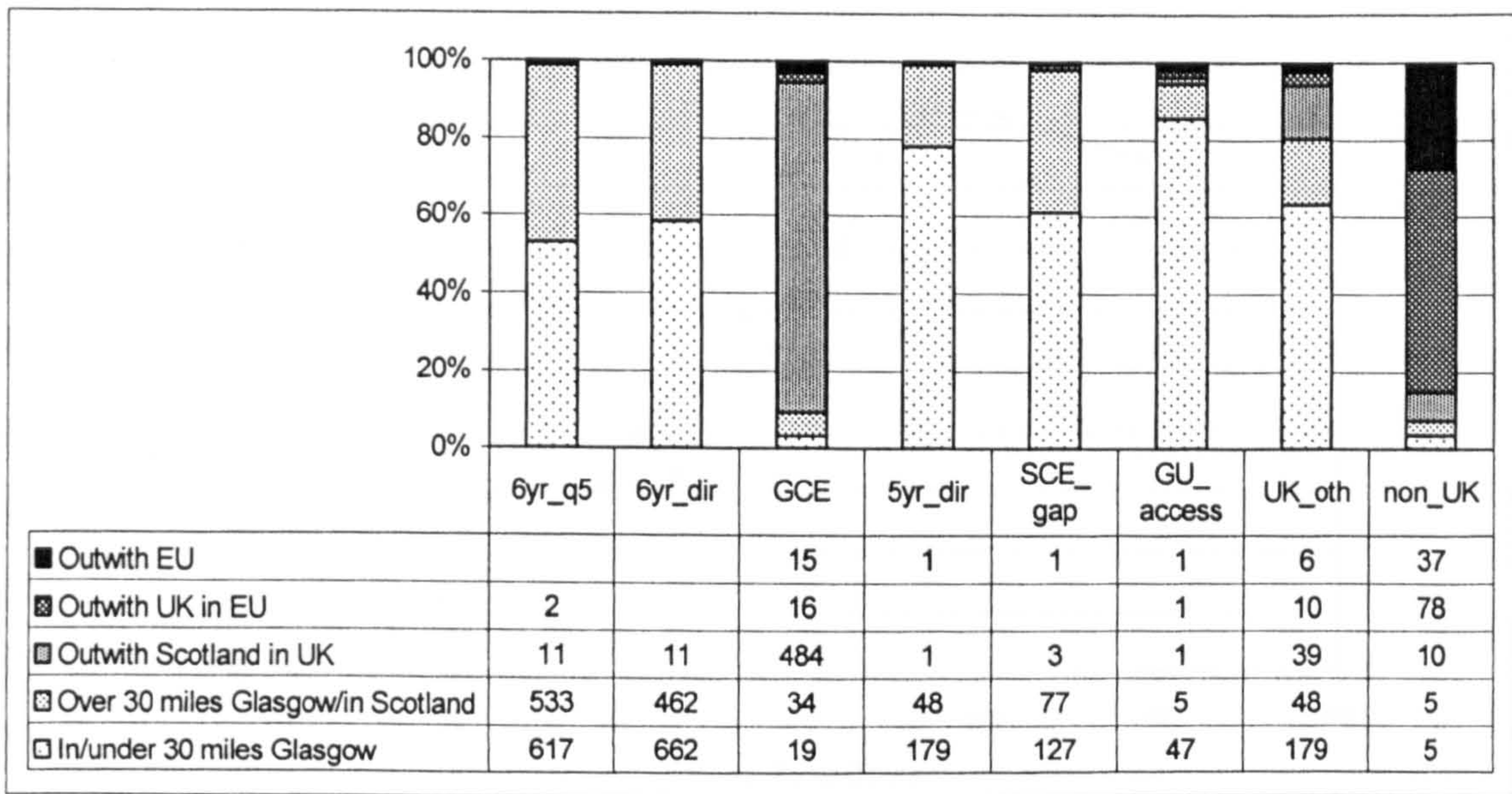
Appendix 5.6: Residential Category – Central Records and Online Responses

Central Records Data		Online Responses	
Univ Hall/ Student House	43.0%	Hall of Residence	41.8%
Univ Res/ Sub-Let Flat	1.5%	University Flat/ House	5.5%
Percentage of Sample Total	44.5%	Percentage of Sample Total	47.3%

Appendix 5.7: Provenance/Home Residence Location crosstabulated against Residential Category



Appendix 5.8: Entry Qualification Route crosstabulated with Home Residence Location



Key:

- 6yr_q5 – Scottish 6th year (qualified in 5th year)

6yr_dir – Scottish sixth year direct

GCE – GCE

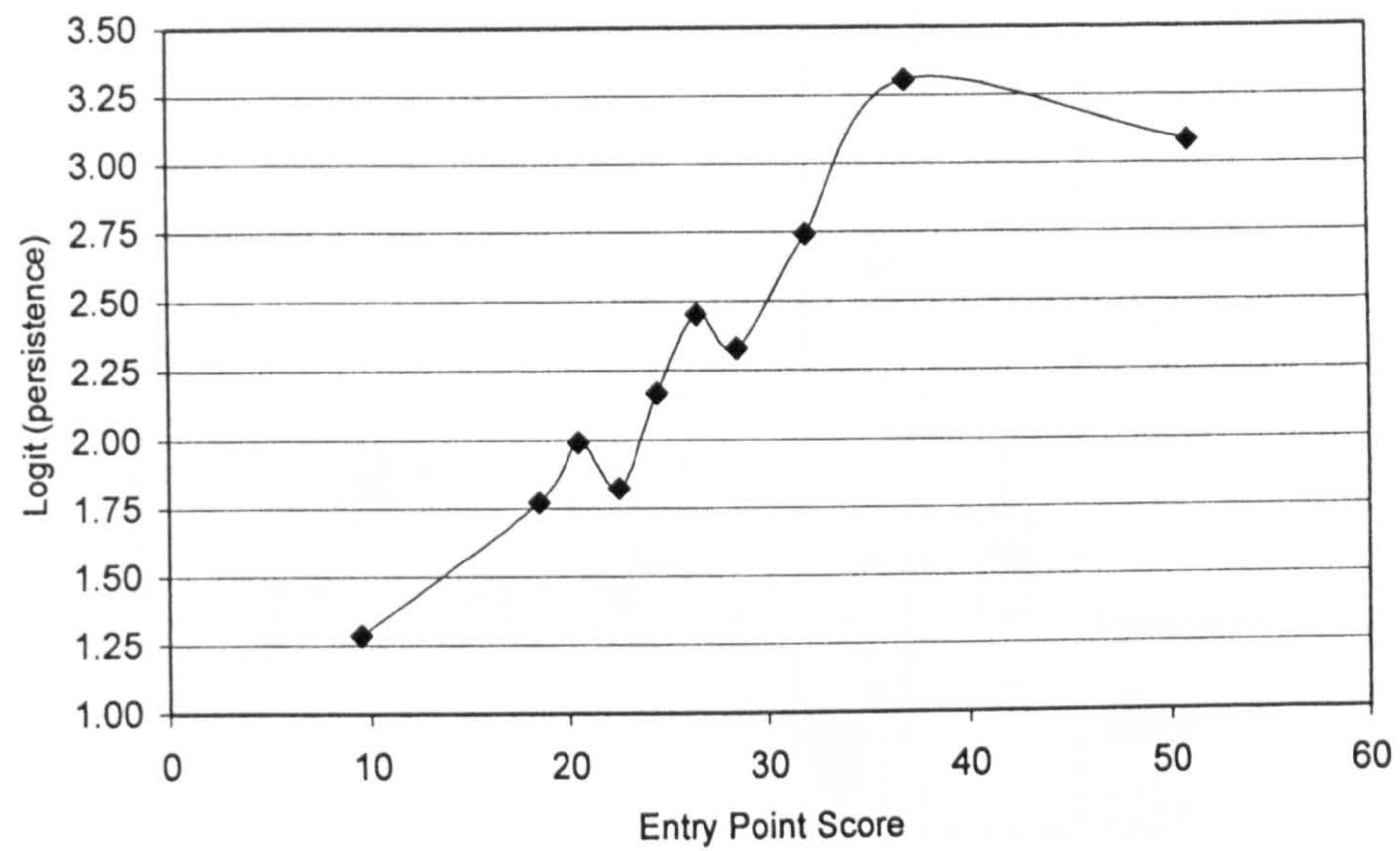
5yr_dir – Scottish fifth year direct
- SCE_gap – Scottish gap year

GU_access – Glasgow University Access course

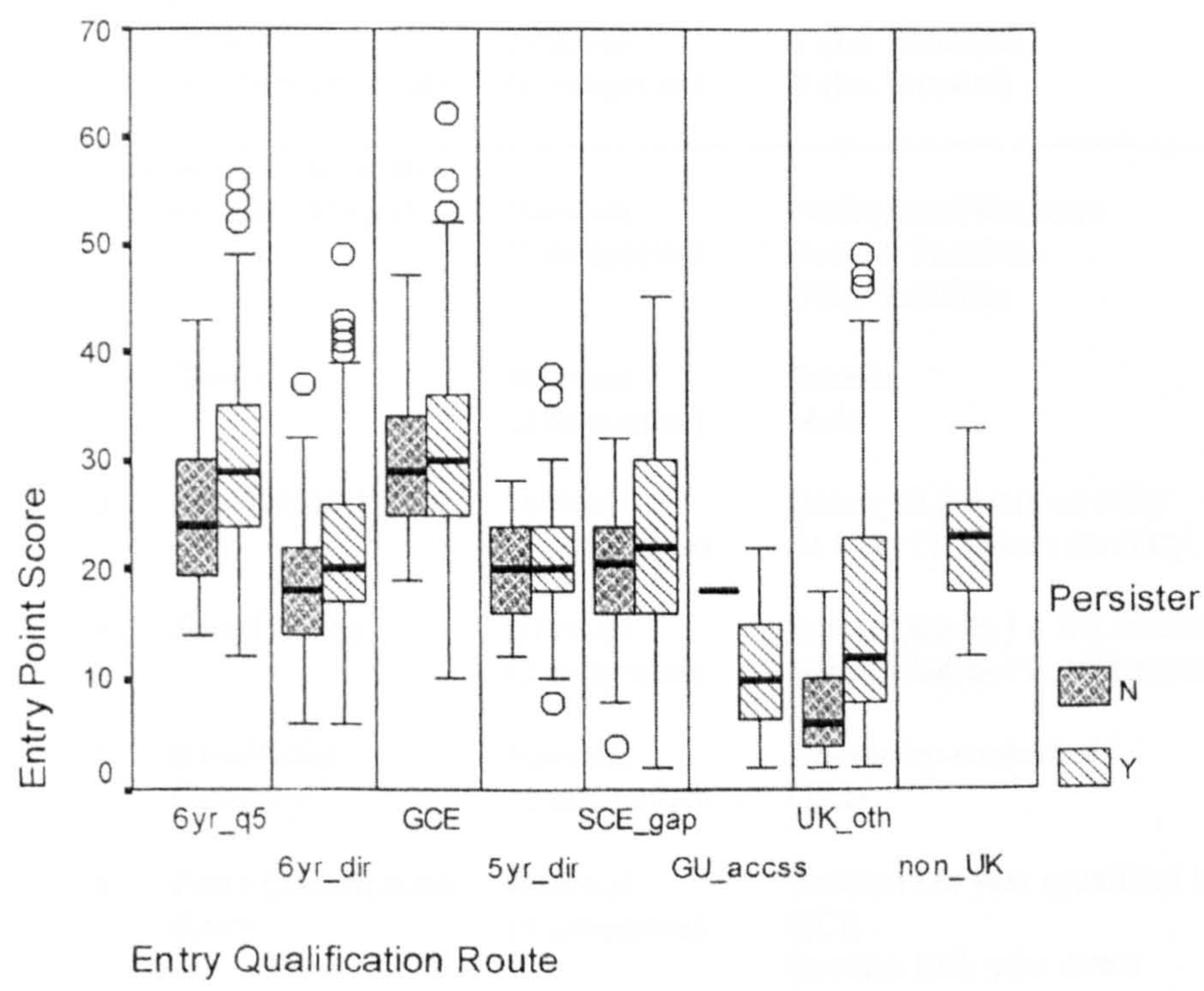
UK_oth – Other UK

non_UK – Non-UK

Appendix 5.9: Logit (persistence) Plotted against Entry Point Score



Appendix 5.10: Boxplots – Entry Qualification Routes, Entry Point Scores, and Persistence



Appendix 5.11: Model Two – Initial Multiple Logistic Regression Analysis including Main Effects Only

Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) variables			
1	Faculty Category	Nominal (3 categories)	Professional Faculties General Faculties Other Faculties
2	Gender	Nominal (2 categories)	Female Male
3	Age Category	Ordinal (2 categories)	Below 19.5 years on entry At least 19.5 years on entry
4	Social Group	Nominal (2 categories)	Social Classes I – III; Armed Forces Social Classes IV, V; Retired; Unemployed
5	Residential Category	Nominal (2 categories)	University-controlled Other
6	Entry Qualification Route	Nominal (5 categories)	Scottish 6th year (qualified in 5th year) GCE Scottish fifth year direct Scottish sixth year direct Scottish gap year
7	Entry Point Score	Scale	Constrained such that maximum = 37

Appendix 5.12: Model Two – Initial Multiple Logistic Regression Analysis, including Main Effects Only

INPUTS		
Dependent Variable	Frequency	
Persister		
Y	2,764	
N (= Dropout)	330	(10.7%)
	3,094	
Explanatory (Predictor) Variables		
Indicator Coding System, using reference categories shown below		
Entry Qualification Route		
6yr_q5	1,130	
6yr_dir	1,062	
GCE	527	
5yr_dir	200	
SCE_gap	175	(reference category)
	3,094	
Faculty Category		
Professional	598	
General	2,196	
Other	300	(reference category)
	3,094	
Social Group		
Class I-IIIIm, Forces	2,443	
Class IV, V, Retired, Unemployed	651	(reference category)
	3,094	
Age Category		
Age =< 19.5	2,883	
19.5 < Age	211	(reference category)
	3,094	
Residential Category		
University-controlled	1,458	
Other	1,636	(reference category)
	3,094	
Gender		
Female	1,781	
Male	1,313	(reference category)
	3,094	
RESULTS		
Goodness of Fit	3040.688	
D(0) = -2 Log Likelihood =	2100.6442	
D(M) = -2 Log Likelihood =	1967.306	(convergence attained on 5th iteration)
Model Chi-Square	133.3382	
df	11	
Significance	0.0000	
Cox & Snell - R^2	0.042	
Nagelkerke - R^2	0.086	

Hosmer and Lemeshow Goodness-of-Fit Test

Group	Persister = N		Persister = Y		Total
	Observed	Expected	Observed	Expected	
1	76	77.378	240	238.622	316
2	62	54.593	249	256.407	311
3	42	43.108	267	265.892	309
4	32	36.578	278	273.422	310
5	27	31.319	282	277.681	309
6	25	26.743	284	282.257	309
7	28	22.295	281	286.705	309
8	20	17.603	289	291.397	309
9	13	12.757	297	297.243	310
10	5	7.626	297	294.374	302
Chi-Square	5.5738				
df	8				
Significance	0.6948				

Classification Table

The Cut Value is .89			
Observed outcome	Predicted outcome		Percentage correct
	N	Y	
Persister = N	210	120	63.64%
Persister = Y	1015	1749	63.28%
			63.32% Overall

Variable	β	S.E.	Wald	df	Sig	R	Exp(β)	95% CI for Exp(β)	
								Lower	Upper
Faculty Category			12.3147	2	0.0021	0.0629			
Professional	1.0071	0.2882	12.2139	1	0.0005	0.0697	2.7377	1.5563	4.8158
General	0.3691	0.1744	4.4785	1	0.0343	0.0343	1.4464	1.0276	2.0358
Gender									
Female	0.0036	0.1247	0.0008	1	0.9769	0.0000	1.0036	0.7860	1.2814
Age Category									
Age < 19.5	0.4153	0.2412	2.9651	1	0.0851	0.0214	1.5148	0.9442	2.4300
Social Group									
Class I-IIIIm, Forces	0.0073	0.1426	0.0026	1	0.9590	0.0000	1.0074	0.7618	1.3321
Residential Category									
University-controlled	0.4378	0.1422	9.4769	1	0.0021	0.0597	1.5492	1.1724	2.0472
Entry Qualification Route			10.9473	4	0.0272	0.0375			
6yr_q5	0.5695	0.2665	4.5677	1	0.0326	0.0350	1.7675	1.0484	2.9798
6yr_dir	0.1667	0.2472	0.4548	1	0.5000	0.0000	1.1814	0.7277	1.9181
GCE	0.1708	0.2911	0.3442	1	0.5574	0.0000	1.1863	0.6704	2.0990
5yr_dir	0.6533	0.3270	3.9926	1	0.0457	0.0308	1.9219	1.0126	3.6479
Entry Point Score	0.0466	0.0102	20.9380	1	0.0000	0.0949	1.0477	1.0270	1.0688
Constant	-0.2798	0.3482	0.6458	1	0.4216				

Appendix 5.13: Model Three – Modified Multiple Logistic Regression Analysis including Main Effects Only

Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) Variables			
1	Faculty Category	Nominal (3 categories)	Professional Faculties General Faculties Other Faculties
2	Gender	Nominal (2 categories)	Female Male
3	Age Category	Ordinal (2 categories)	Below 19.5 years on entry At least 19.5 years on entry
4	Social Group	Nominal (2 categories)	Social Classes I – III; Armed Forces Social Classes IV, V; Retired; Unemployed
5	Residential Category	Nominal (2 categories)	University-Controlled Other
6	Entry Qualification Category	Nominal (2 categories)	Fifth-Year Qualifiers Sixth-Year Qualifiers and Scottish Gap-Year Students
7	Entry Point Score	Scale	Constrained such that maximum = 37

Appendix 5.14: Model Three – Modified Multiple Logistic Regression Analysis including Main Effects Only

INPUTS		
Dependent Variable	Frequency	
Persister		
Y	2,764	
N (= Dropout)	330	(10.7%)
	3,094	
Explanatory (Predictor) Variables		
Indicator Coding System, using reference categories shown below		
Entry Qualification Category		
q5	1,330	
q6, SCE_gap	1,764	(reference category)
	3,094	
Faculty Category		
Professional	598	
General	2,196	
Other	300	(reference category)
	3,094	
Social Group		
Class I-IIIIm, Forces	2,443	
Class IV, V, Retired, Unemployed	651	(reference category)
	3,094	
Age Category		
Age >= 19.5	2,883	
Age < 19.5	211	(reference category)
	3,094	
Residential Category		
University-controlled	1,458	
Other	1,636	(reference category)
	3,094	
Gender		
Female	1,781	
Male	1,313	(reference category)
	3,094	
RESULTS		
Goodness of Fit	3042.551	
D(0) = -2 Log Likelihood =	2100.644	
D(M) = -2 Log Likelihood =	1967.441	(convergence attained on 5th iteration)
Model Chi-Square	133.2032	
df	8	
Significance	0.0000	
Cox & Snell - R^2	0.042	
Nagelkerke - R^2	0.086	

Hosmer and Lemeshow Goodness-of-Fit Test

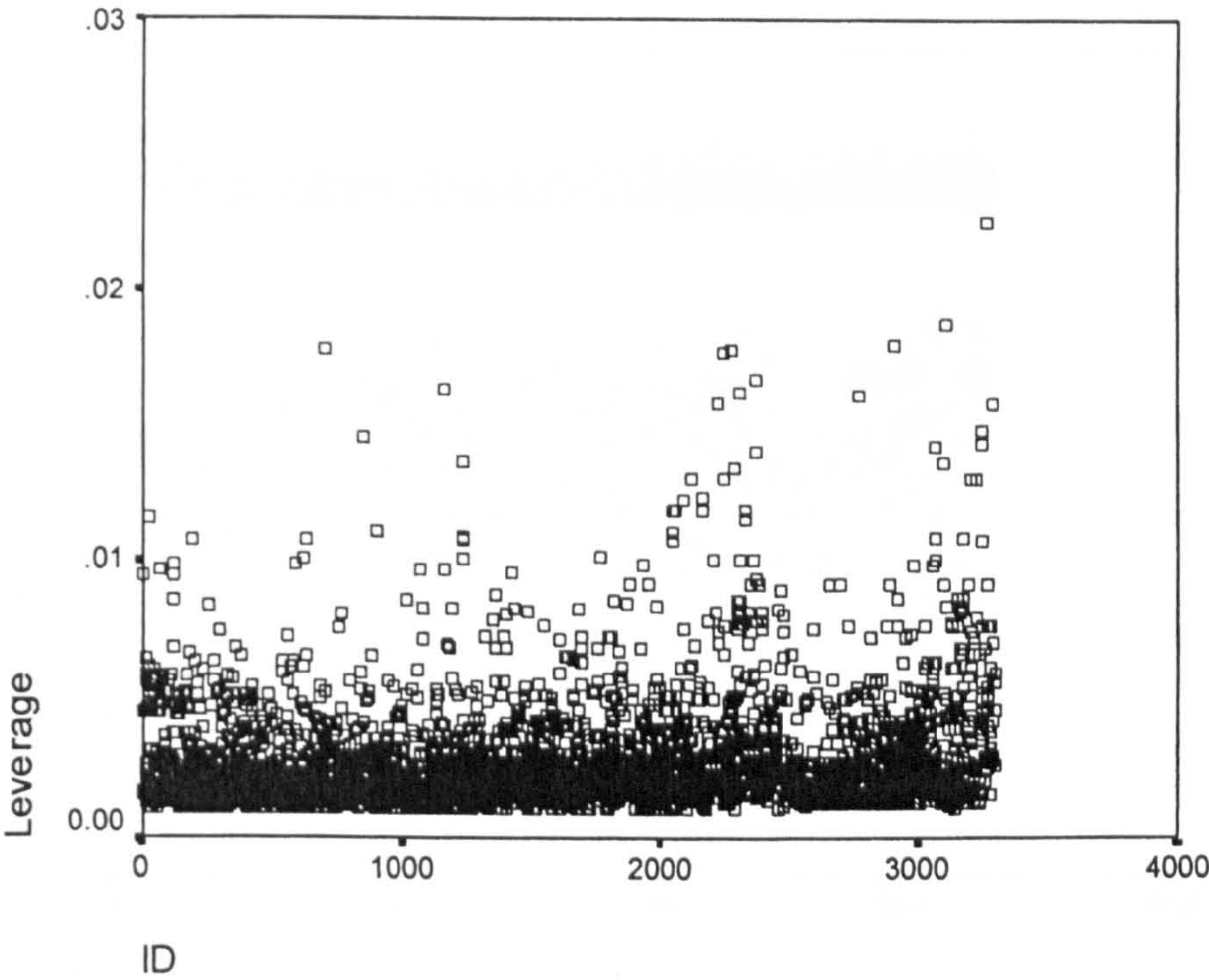
Group	Persister = N		Persister = Y		Total
	Observed	Expected	Observed	Expected	
1	72	74.471	229	226.529	301
2	63	55.126	246	253.874	309
3	45	44.098	265	265.902	310
4	25	37.126	285	272.874	310
5	33	31.334	276	277.666	309
6	25	26.666	285	283.334	310
7	26	22.179	283	286.821	309
8	23	17.663	290	295.337	313
9	14	12.905	295	296.095	309
10	4	8.432	310	305.568	314
Chi-Square	11.1209				
df	8				
Significance	0.1949				

Classification Table

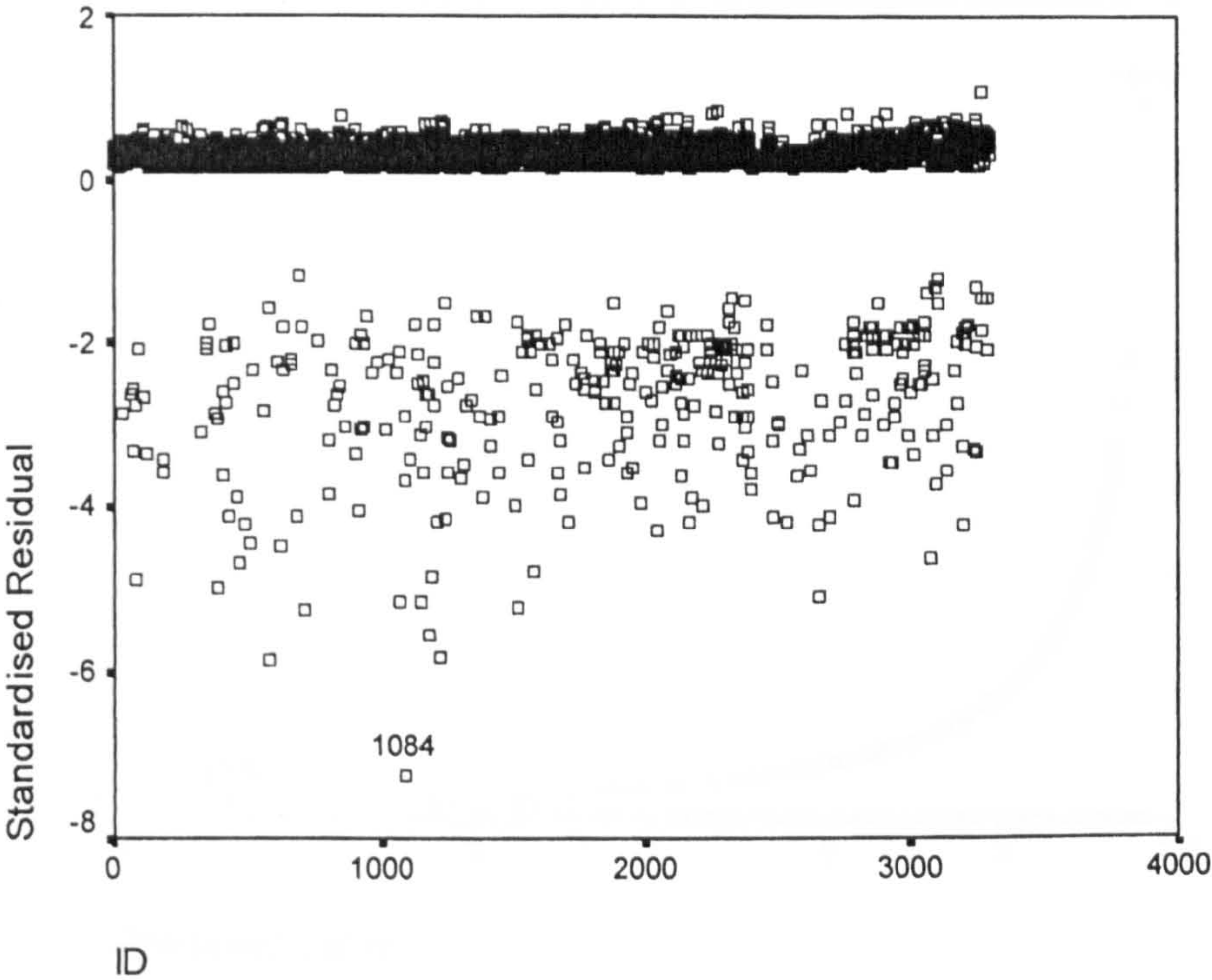
The Cut Value is .89				
Observed outcome	Predicted outcome		Percentage correct	
	N	Y		
Persister = N	206	124	62.42%	
Persister = Y	1030	1734	62.74%	
			62.70%	Overall

Variable	β	S.E.	Wald	df	Sig	R	Exp(β)	95% CI for Exp(β)	
								Lower	Upper
Faculty Category			12.5902	2	0.0018	0.0639			
Professional	1.0142	0.2864	12.5406	1	0.0004	0.0708	2.7572	1.5728	4.8334
General	0.3627	0.1743	4.3295	1	0.0375	0.0333	1.4372	1.0213	2.0224
Gender									
Female	-0.0043	0.1246	0.0012	1	0.9724	0	0.9957	0.78	1.2711
Age Category									
Age < 19.5	0.4769	0.2073	5.2935	1	0.0214	0.0396	1.6110	1.0732	2.4184
Social Group									
Class I-IIIIm, Forces	-0.0098	0.1425	0.0047	1	0.9451	0.0000	0.9902	0.7489	1.3093
Residential Category									
University-controlled	0.4436	0.1311	11.4584	1	0.0007	0.0671	1.5584	1.2053	2.0148
Entry Qualification Category									
q5	0.4262	0.1357	9.869	1	0.0017	0.0612	1.5314	1.1739	1.9979
Entry Point Score	0.0499	0.0098	26.0245	1	0.0000	0.1069	1.0512	1.0312	1.0716
Constant	-0.2347	0.3237	0.5259	1	0.4683				

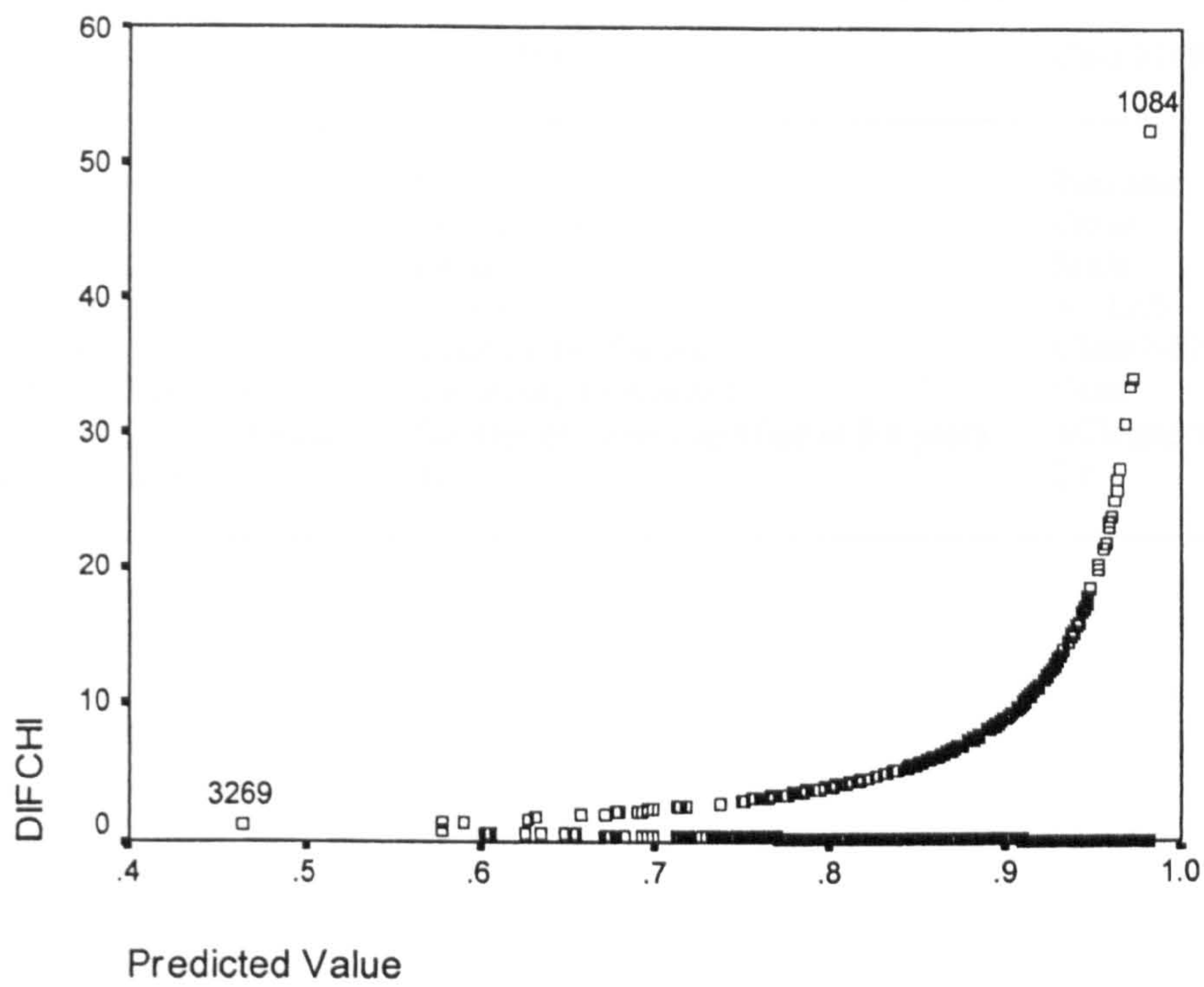
Appendix 5.15: Leverage Plotted for Each Case



Appendix 5.16: Standardised Residuals Plotted for Each Case



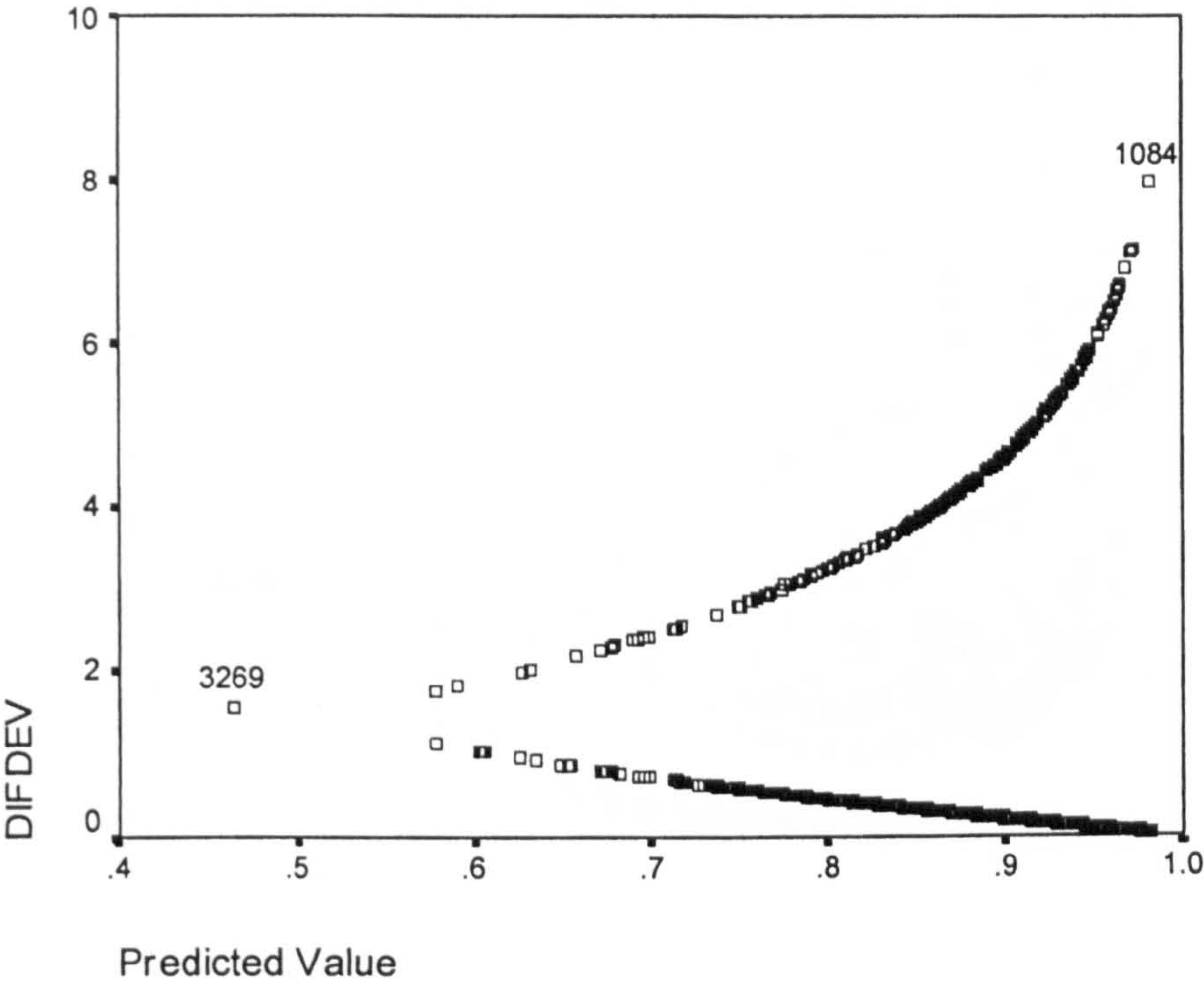
Appendix 5.17: DIFCHI Plotted against Estimated Probability of Persistence



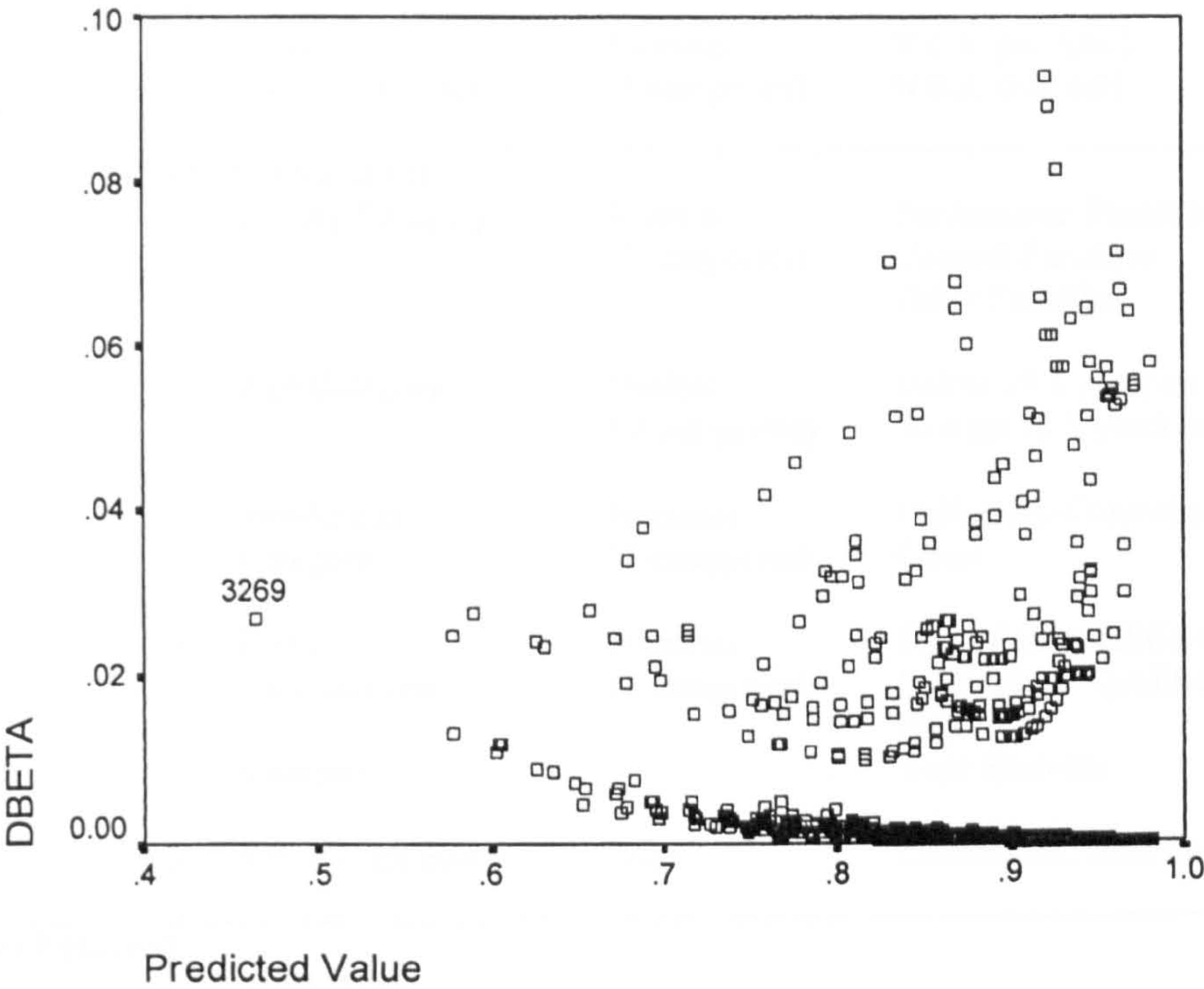
Appendix 5.18: Characteristics of Outliers

	Case 1084	Case 3269
Dependent Variable	Leaver	Persister
Faculty Category	Professional	Other
Gender	Female	Male
Age Category	< 19.5	>= 19.5
Social Group	Class I-IIIIm, Forces	Class I-IIIIm, Forces
Residential Category	University-Controlled	Other
Entry Qualification Route	Scottish 6th year (qualified in 5th year)	SCE gap year
Entry Point Score	42	2 (!)

Appendix 5.19: DIFDEV Plotted against Estimated Probability of Persistence



Appendix 5.20: DBETA Charted against Estimated Probability of Persistence



Appendix 5.21: Model Four – Multiple Logistic Regression Analysis including Significant Main Effects Only

Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) Variables			
1	Faculty Category	Nominal (3 categories)	Professional Faculties General Faculties Other Faculties
2	Age Category	Ordinal (2 categories)	Below 19.5 years on entry At least 19.5 years on entry
3	Residential Category	Nominal (2 categories)	University-Controlled Other
4	Entry Qualification Category	Nominal (2 categories)	Fifth-Year Qualifiers Sixth-Year Qualifiers and Scottish Gap- Year Students
5	Entry Point Score	Scale	Constrained such that maximum = 37
Cases Removed			
	1084, 3269		

Appendix 5.22: Model Four – Including Statistically Significant Main Effects Only

INPUTS		
Dependent Variable	Frequency	
Persister		
Y	2,860	
N (= Dropout)	345	(10.8%)
	3,205	
Explanatory (Predictor) Variables		
Indicator Coding System, using reference categories shown below		
Entry Qualification Category		
q5	1,360	
q6, SCE_gap	1,845	(reference category)
	3,205	
Faculty Category		
Professional	615	
General	2,279	
Other	311	(reference category)
	3,205	
Age Category		
Age >= 19.5	2,979	
Age < 19.5	226	(reference category)
	3,205	
Residential Category		
University-controlled	1,500	
Other	1,705	(reference category)
	3,205	
RESULTS		
Goodness of Fit	3120.817	
D(0) = -2 Log Likelihood =	2189.410	
D(M) = -2 Log Likelihood =	2044.405	(convergence attained on 5th iteration)
Model Chi-Square	145.0053	
df	6	
Significance	0.0000	
Cox & Snell - R^2	0.044	
Nagelkerke - R^2	0.089	

Hosmer and Lemeshow Goodness-of-Fit Test

Group	Persister = N		Persister = Y		Total
	Observed	Expected	Observed	Expected	
1	70	74.97	225	220.03	295
2	67	59.628	259	266.372	326
3	51	45.864	262	267.136	313
4	32	40.731	300	291.269	332
5	34	34.603	302	301.397	336
6	26	28.208	302	299.792	328
7	29	22.892	293	299.108	322
8	20	17.522	296	298.478	316
9	13	12.663	305	305.337	318
10	3	7.92	316	311.08	319
Chi-Square	9.8334				
df	8				
Significance	0.2769				

Classification Table

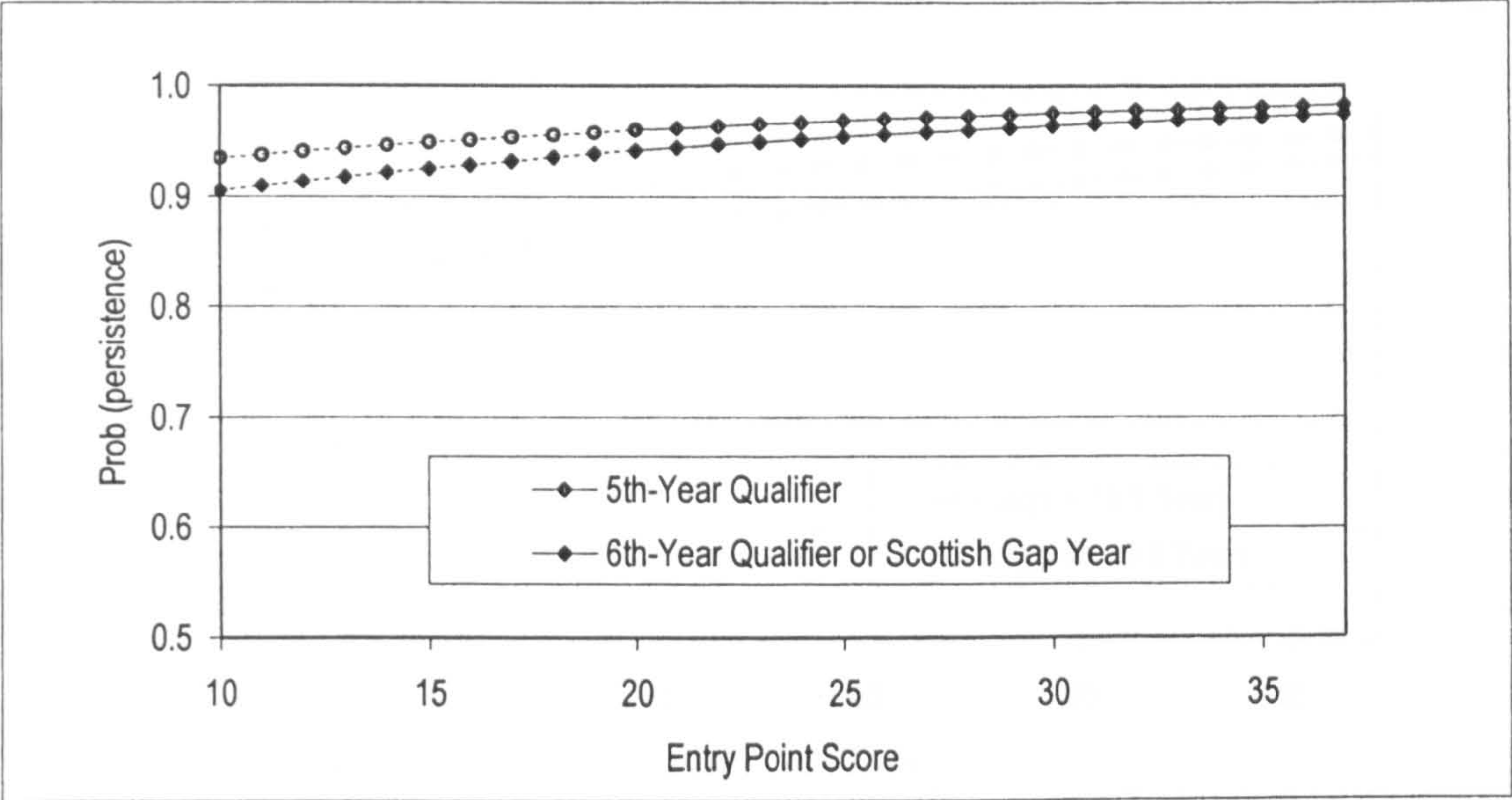
The Cut Value is .89			
Observed outcome	Predicted outcome		Percentage correct
	N	Y	
Persister = N	225	120	65.22%
Persister = Y	1097	1763	61.64%
			62.03% Overall

Variable	β	S.E.	Wald	df	Sig	R	Exp(β)	95% CI for Exp(β)	
								Lower	Upper
Faculty Category			14.5019	2	0.0007	0.0693			
Professional	1.0835	0.2851	14.4454	1	0.0001	0.0754	2.9551	1.6901	5.167
General	0.355	0.1656	4.595	1	0.0321	0.0344	1.4262	1.0309	1.973
Age Category									
Age < 19.5	0.4833	0.1994	5.8732	1	0.0154	0.0421	1.6213	1.0968	2.3967
Residential Category									
University-controlled	0.4577	0.1275	12.8807	1	0.0003	0.0705	1.5805	1.2309	2.0294
Entry Qualification Category									
q5	0.3959	0.1332	8.8322	1	0.0030	0.0559	1.4857	1.1443	1.9289
Entry Point Score	0.0514	0.0095	28.9997	1	0.0000	0.1110	1.0528	1.0332	1.0727
Constant	-0.2770	0.3007	0.8487	1	0.3569				

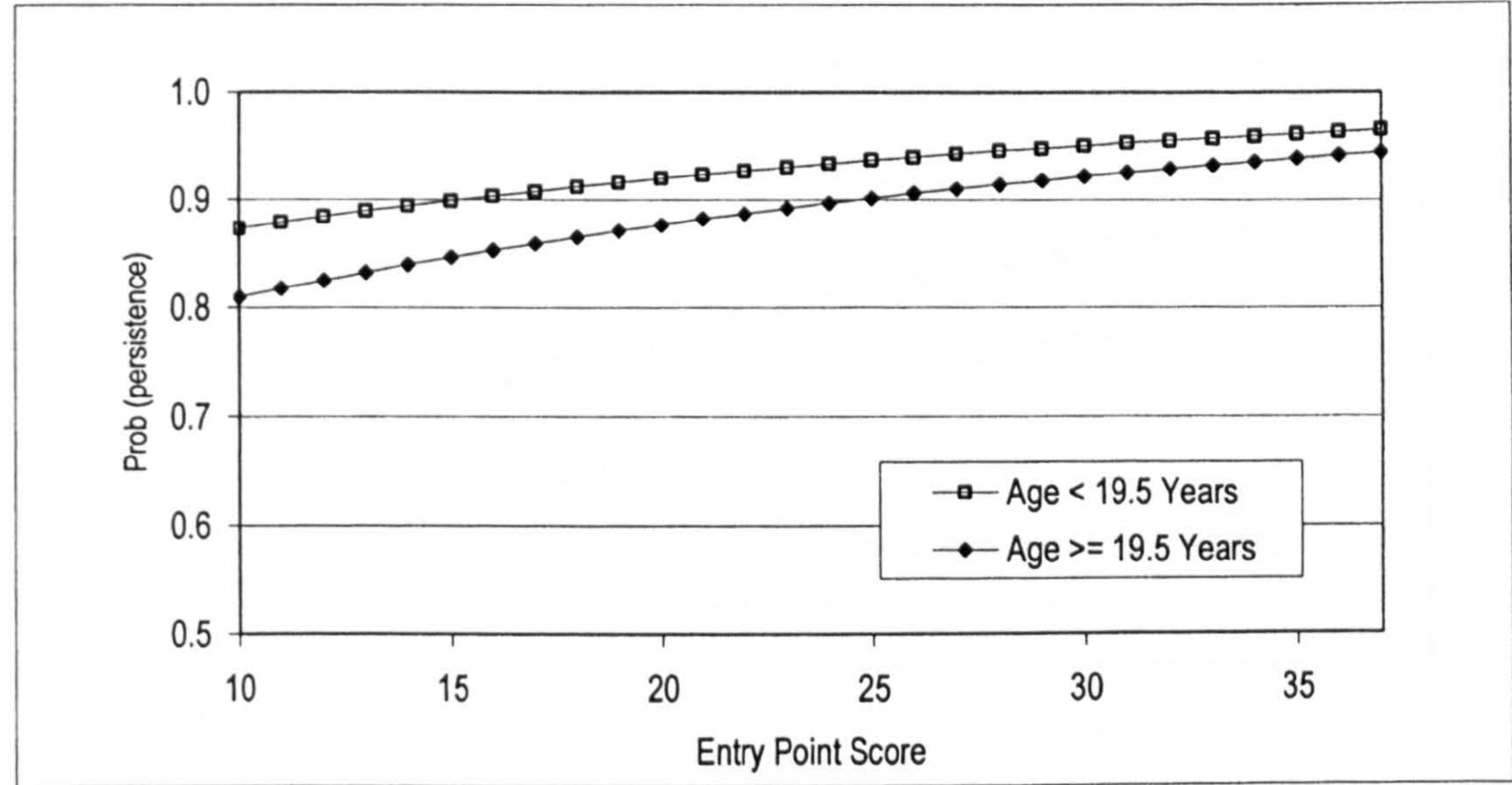
Appendix 5.23: Model Four – Characteristics in Common of Students in Profiles A, B and C

Profile A <i>(showing the effect of Entry Qualification Category)</i>	Profile B <i>(showing the effect of Age Category)</i>	Profile C <i>(showing the effect of Residential Category)</i>
Professional Faculties University-controlled accommodation Age < 19.5	General Faculties University-controlled accommodation Fifth-Year Qualifier	Other Faculties Age >= 19.5 Sixth-Year Qualifiers and Scottish Gap-Year Students

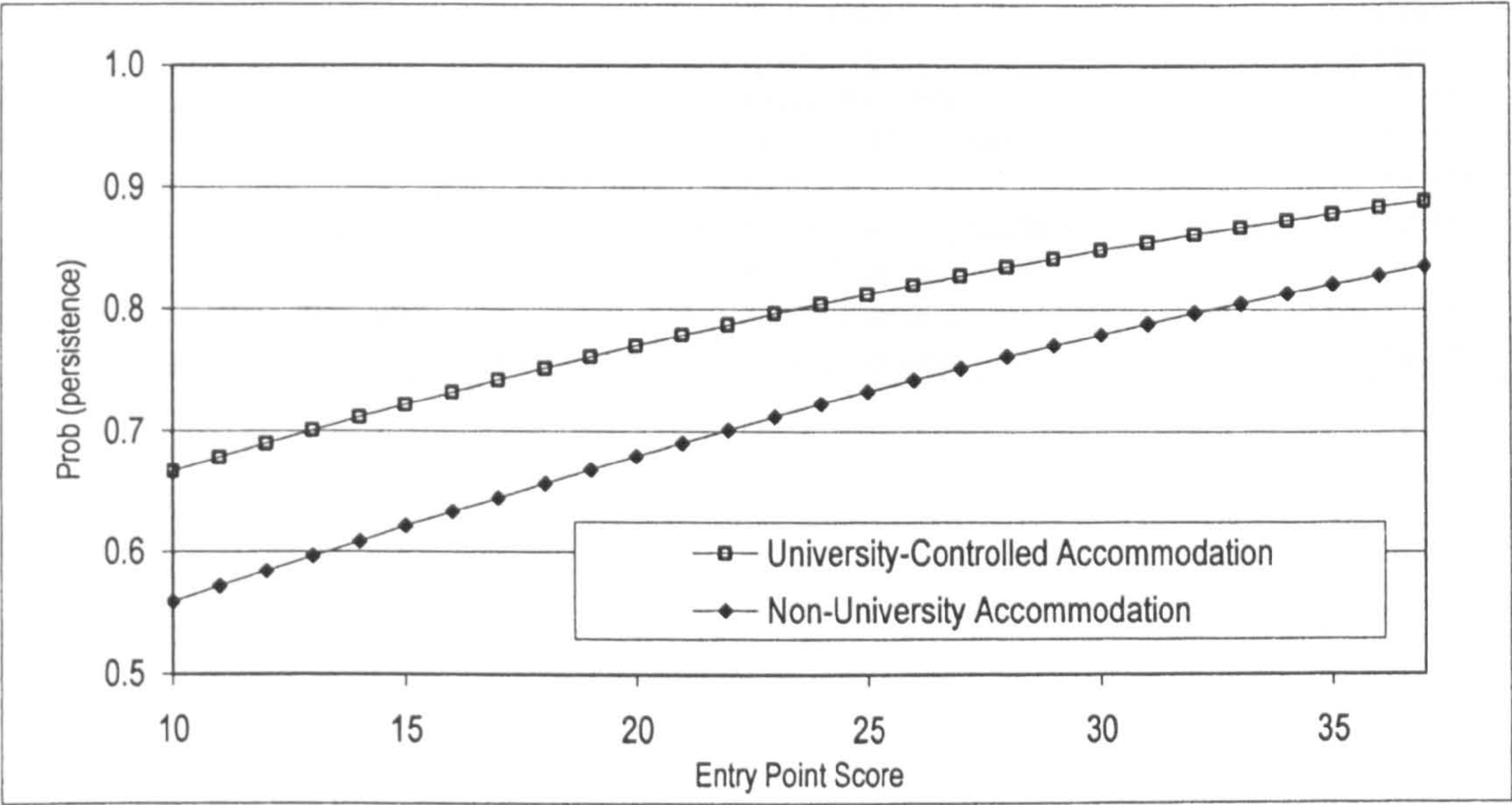
Appendix 5.24: Profile A – Model Four – Younger Students in the Professional Faculties Living in University Accommodation



Appendix 5.25: Profile B – Model Four – Fifth-Year Qualifiers in the General Faculties Living in University Accommodation



Appendix 5.26: Profile C – Model Four – Older Sixth-Year Qualifiers and Scottish Gap-Year Students in the Other Faculties



Appendix 5.27: Model Four – Odds Ratios

Explanatory Variable/ Category	Reference Category	Odds Ratio
Faculty Category = Professional	Other Faculties	2.96 ***
Age Category < 19.5 years	Age >= 19.5 years	1.62 **
Residential Category = University Controlled	Other	1.58 ***
Entry Qualification Category = Fifth-Year Qualifiers	Sixth-Year Qualifiers and Scottish Gap-Year Students	1.49 ***
Faculty Category = General	Other Faculties	1.43 **
One A-Grade Higher (6 Entry Points)	(scale variable)	1.36 ***

* $p \leq 0.1$; ** $p \leq 0.05$; *** $p \leq 0.01$

Appendix 5.28: Model Five – Multiple Logistic Regression Analysis including All Main Effects and All Three Significant Interaction Terms

Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) Variables			
1	Faculty Category	Nominal (3 categories)	Professional Faculties General Faculties Other Faculties
2	Gender	Nominal (2 categories)	Female Male
3	Age Category	Ordinal (2 categories)	Below 19.5 years on entry At least 19.5 years on entry
4	Social Group	Nominal (2 categories)	Social Classes I – III; Armed Forces Social Classes IV, V; Retired; Unemployed
5	Residential Category	Nominal (2 categories)	University-Controlled Other
6	Entry Qualification Route	Nominal (2 categories)	Fifth-Year Qualifiers Sixth-Year Qualifiers and Scottish Gap- Year Students
7	Entry Point Score	Scale	Constrained such that maximum = 37
Interaction Terms Found to be Significant			
1	Faculty Category x Age Category		
2	Faculty Category x Entry Point Score		
3	Gender x Entry Point Score		
Cases Removed			
	1084, 3269		

Appendix 5.29: Model Five – Including All main Effects and Three Interaction Terms

INPUTS		
Dependent Variable	Frequency	
Persister		
Y	2,763	
N (= Dropout)	329	(10.6%)
	3,092	
Explanatory (Predictor) Variables		
Indicator Coding System, using reference categories shown below		
Entry Qualification Category		
q5	1,329	
q6, SCE_gap	1,763	(reference category)
	3,092	
Faculty Category		
Professional	597	
General	2,196	
Other	299	(reference category)
	3,092	
Social Group		
Class I-IIIIm, Forces	2,441	
Class IV, V, Retired, Unemployed	651	(reference category)
	3,092	
Age Category		
Age >= 19.5	210	
Age < 19.5	2,882	(reference category)
	3,092	
Residential Category		
University-controlled	1,457	
Other	1,635	(reference category)
	3,092	
Gender		
Female	1,780	
Male	1,312	(reference category)
	3,092	
RESULTS		
Goodness of Fit	3024.883	
D(0) = -2 Log Likelihood =	2095.940	
D(M) = -2 Log Likelihood =	1934.613	(convergence attained on 5th iteration)
Model Chi-Square	161.3273	
df	13	
Significance	0.0000	
Cox & Snell - R^2	0.051	
Nagelkerke - R^2	0.103	

Hosmer and Lemeshow Goodness-of-Fit Test

Group	Persister = N		Persister = Y		Total
	Observed	Expected	Observed	Expected	
1	78	79.166	233	231.834	311
2	58	55.741	261	263.259	319
3	42	43.494	267	265.506	309
4	34	36.667	277	274.333	311
5	40	31.674	272	280.326	312
6	19	27.008	290	281.992	309
7	24	22.652	285	286.348	309
8	18	17.923	294	294.077	312
9	14	10.565	296	299.435	310
10	2	4.123	288	285.877	290
Chi-Square	7.8031				
df	8				
Significance	0.4529				

Classification Table

The Cut Value is .89			
Observed outcome	Predicted outcome		Percentage correct
	N	Y	
Persister = N	206	123	62.61%
Persister = Y	1017	1746	63.19%
			63.13% Overall

Variable	β	S.E.	Wald	df	Sig	R	Exp(β)	95% CI for Exp(β)	
								Lower	Upper
Faculty Category			6.9382	2	0.0311	0.0387			
Professional	-1.6598	1.5450	1.1541	1	0.2827	0.0000	0.1902	0.0092	3.9288
General	1.3545	0.8489	2.5457	1	0.1106	0.0167	3.8747	0.7339	20.4571
Social Group									
Class I-III, Forces	0.0037	0.1434	0.0007	1	0.9794	0.0000	1.0037	0.7578	1.3295
Gender									
Female	0.9954	0.4234	5.5273	1	0.0187	0.0424	2.7058	1.1801	6.2043
Age Category									
Age < 19.5	2.0354	0.5664	12.9140	1	0.0003	0.0747	7.6552	2.5226	23.2312
Residential Category									
University-controlled	0.4610	0.1325	12.1098	1	0.0005	0.0719	1.5856	1.2230	2.0556
Entry Qualification Category									
q5	0.4222	0.1364	9.5774	1	0.0020	0.0622	1.5253	1.1674	1.9929
Entry Point Score	0.0451	0.0246	3.3694	1	0.0664	0.0264	1.0461	0.9970	1.0977
Age Category by Faculty Category			9.0976	2	0.0106	0.0510			
Age < 19.5 by Professional	-1.2416	0.8767	2.0054	1	0.1567	-0.0017	0.2889	0.0518	1.6109
Age < 19.5 by General	-1.8391	0.6161	8.9109	1	0.0028	-0.0594	0.1590	0.0475	0.5317
Faculty Category by Entry Point Score			8.1296	2	0.0172	0.0459			
Professional by Entry Point Score	0.1375	0.0483	8.1207	1	0.0044	0.0559	1.1475	1.0439	1.2613
General by Entry Point Score	0.0333	0.0262	1.6177	1	0.2034	0.0000	1.0338	0.9822	1.0882
Gender by Entry Point Score									
Female by Entry Point Score	-0.0455	0.0186	5.9731	1	0.0145	-0.0450	0.9556	0.9214	0.9910
Constant	-1.5913	0.7851	4.1083	1	0.0427				

Appendix 5.30: Model Six – Multiple Logistic Regression including Significant Main Effects and One Interaction Term

Dependent Variable			
	Persister (i.e. Non-Dropout)	Nominal (2 categories)	Y (i.e. persister) N (i.e. dropout)
Explanatory (Predictor) Variables			
1	Faculty Category	Nominal (3 categories)	Professional Faculties General Faculties Other Faculties
2	Gender	Nominal (2 categories)	Female Male
3	Age Category	Ordinal (2 categories)	Below 19.5 years on entry At least 19.5 years on entry
4	Residential Category	Nominal (2 categories)	University-Controlled Other
5	Entry Qualification Category	Nominal (2 categories)	Fifth-Year Qualifiers Sixth-Year Qualifiers and Scottish Gap- Year Students
6	Entry Point Score	Scale	Constrained such that maximum = 37
Interaction Term			
1	Gender x Entry Point Score		
Cases Removed			
	1084, 3269		

Appendix 5.31: Model Six – Including Statistically Significant Main Effects and One Interaction Term

INPUTS		
Dependent Variable		Frequency
Persist		
Y	2,860	
N (= Dropout)	345	(10.8%)
	3,205	
Explanatory (Predictor) Variables		
Indicator Coding System, using reference categories shown below		
Entry Qualification Category		
q5	1,360	
q6, SCE_gap	1,845	(reference category)
	3,205	
Faculty Category		
Professional	615	
General	2,279	
Other	311	(reference category)
	3,205	
Age Category		
Age >= 19.5	226	
Age < 19.5	2,979	(reference category)
	3,205	
Residential Category		
University-controlled	1,500	
Other	1,705	(reference category)
	3,205	
Gender		
Female	1,837	
Male	1,368	(reference category)
	3,205	
RESULTS		
Goodness of Fit	3115.037	
D(0) = -2 Log Likelihood =	2189.410	
D(M) = -2 Log Likelihood =	2039.935	(convergence attained on 5th iteration)
Model Chi-Square	149.475	
df	8	
Significance	0.0000	
Cox & Snell - R^2	0.046	
Nagelkerke - R^2	0.092	

Hosmer and Lemeshow Goodness-of-Fit Test

Group	Persister = N		Persister = Y		Total
	Observed	Expected	Observed	Expected	
1	84	85.674	253	251.326	337
2	60	56.127	261	264.873	321
3	46	45.48	275	275.52	321
4	33	36.04	271	267.96	304
5	32	32.398	287	286.602	319
6	25	27.729	295	292.271	320
7	26	22.658	293	296.342	319
8	21	18.393	303	305.607	324
9	12	11.627	280	280.373	292
10	6	8.875	342	339.125	348
Chi-Square	2.8557				
df	8				
Significance	0.9431				

Classification Table

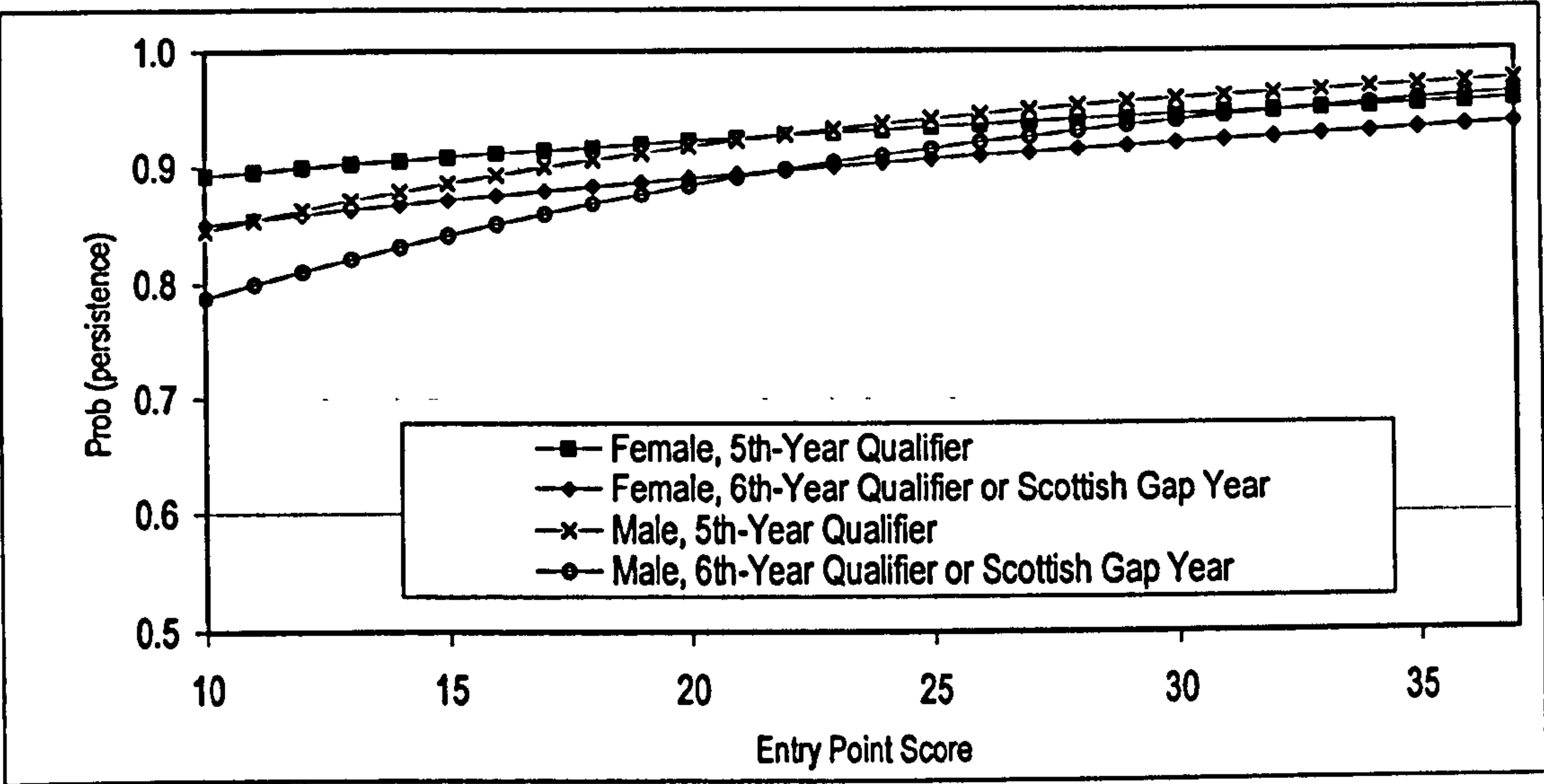
The Cut Value is .89			
Observed outcome	Predicted outcome		Percentage correct
	N	Y	
Persister = N	218	127	63.19%
Persister = Y	1021	1839	64.30%
			64.18% Overall

Variable	β	S.E.	Wald	df	Sig	R	Exp(β)	95% CI for Exp(β)	
								Lower	Upper
Faculty Category			14.0158	2	0.0009	0.0676			
Professional	1.0821	0.2891	14.0111	1	0.0002	0.0741	2.9509	1.6745	5.2003
General	0.3293	0.1722	3.6563	1	0.0559	0.0275	1.3901	0.9918	1.9482
Gender									
Female	0.7862	0.3922	4.0182	1	0.0450	0.0304	2.1950	1.0176	4.7347
Age Category									
Age < 19.5	0.5010	0.1996	6.2973	1	0.0121	0.0443	1.6503	1.1159	2.4407
Residential Category									
University-controlled	0.4691	0.1280	13.4281	1	0.0002	0.0722	1.5985	1.2438	2.0543
Entry Qualification Category									
q5	0.3857	0.1334	8.3538	1	0.0038	0.0539	1.4707	1.1322	1.9103
Entry Point Score	0.0723	0.0140	26.6589	1	0.0000	0.1061	1.0750	1.0459	1.1049
Gender by Entry Point Score									
Female by Entry Point Score	-0.0360	0.0171	4.4093	1	0.0357	-0.0332	0.9647	0.9328	0.9976
Constant	-0.7097	0.3647	3.7866	1	0.0517				

Appendix 5.32: Model Six – Characteristics in Common of Students in Profile D

Profile D
General Faculties
University-controlled accommodation
Age < 19.5

Appendix 5.33: Profile D – Model Six – Separate Analyses for Young Male and Female Students in General Faculties living in University-Controlled Accommodation



Appendices to Chapter 6

Appendix 6.1: Summary of Constructs, Questionnaire Items, and Their Sources

Construct	Matriculation Questionnaire Item(s) (shortened) († = derivation from focus groups)	Online Questionnaire Item(s) (shortened) († = derivation from focus groups)	Source(s)
1. Background Characteristics		oq26 Accommodation type	[doubts concerning accuracy of central records]
2. Recent Experiences and Current Frame of Mind	mq01 Enjoyed university	oq01 Enjoyed university	[student questionnaire testers] Spady (1970, 1971)
3. Family and Friends' Support	mq02 Family supportive † mq04 Unpressurized decision mq09 Lose friends	oq02 Family supportive	Focus groups Lenning (1982) Tinto (1975 et seq) Bean (1980, 1982, 1983) Nora and Cabrera (1996)
4. Initial Commitment - Goals	† mq06 Career clear † mq03 Unsure what to study mq08 Last-minute decision † mq13 Found out about subject content		Focus groups Lenning (1982) Tinto (1975 et seq) Yorke (1997)
5. Initial Commitment - Institutional	† mq07 GU right institution		Focus groups Lenning (1982) Tinto (1975 et seq)
6. Expectations	† mq10 Help with studies: staff easy † mq12 Know source of personal help † mq15 Expect big classes		Focus groups Tinto (1975 et seq) Braxton, Vesper, and Hossler (1995)
7. Study Time	mq14 Know amount of effort † mq18 Study time	† oq59 Study time	Staff focus group Kanoy, Wester, and Latta (1989) Tinto (1997)
8. Academic Integration: Academic Preparedness		† oq12 Right subject choice † oq23 No preparation for university life † oq24 Classes too big † oq34 Subject content uninteresting oq37 Subject content meeting expectations oq49 No prior knowledge of subject content † oq50 Prior knowledge: difficulty of course † oq51 Should have found out more	Focus groups Tinto (1975 et seq) Yorke (1997) Ozga and Subkhndan (1997),
9. Academic Integration: Academic Help and Feedback		† oq08 Help with studies: staff difficult † oq19 Help with studies: students vs staff † oq20 Help with studies: left alone † oq22 Not enough academic feedback	Focus groups Yorke (1997)
10. Academic Self-Concept	mq11 Study effectively mq16 Well prepared for exams, etc	oq05 Doing well academically oq09 Well prepared for exams, etc oq17 Difficulties with studies	Focus groups Spady (1970, 1971) Kanoy, Wester, and Latta (1989)
11.Information Source		† oq48 Information source	Focus groups
12. Social Integration	mq05 New friendships	oq04 Not enough societies/clubs † oq15 Excluded from social activities † oq07 Not part of GU † oq11 Personal help from students difficult oq35 Different institution: friends oq06 New friendships † oq10 Friends studying same subject oq03 Lost friends oq38 Miss friends oq25 Homesick † oq30 No source of personal help † oq31 Personal help: students vs staff	Focus groups Spady (1970, 1971) Tinto (1975 et seq) Lenning (1982) Bean (1980, 1982, 1983) Hurtado and Carter (1997) Yorke (1997)

Construct	Matriculation Questionnaire Item(s) (shortened) († = derivation from focus groups)	Online Questionnaire Item(s) (shortened) († = derivation from focus groups)	Source(s)
13.Subsequent Commitment – Goals		oq43 Committed to university education oq52 Future course development unclear † oq53 Career clear † oq54 Good job	Focus groups Tinto (1975 et seq) Lenning (1982)
14. Subsequent Commitment – Institutional		† oq13 Different institution: better job † oq18 Different institution: work easier oq44 GU right institution † oq46 Alternative course: different institution † oq47 Alternative course: within GU	Focus groups Tinto (1975 et seq) Lenning (1982) Bean (1980, 1982, 1983) Cabrera, Castañeda, Nora, and Hengler (1992) Cabrera, Nora, and Castañeda (1993)
15. Extraneous Factors and Inhibitors		oq27 Accommodation problems oq29 Personal problems † oq39 Daily travel limiting oq40 Family responsibilities limiting oq42 Health problems limiting † oq28 Accommodation/not enough help	Focus groups Bean (1980, 1982, 1983) Lenning (1982) Yorke (1997) Ozga and Sukhnandan (1997)
16. Finances and Outside Paid Work	mq17 Financial implications considered	† oq57 Unexpectedly expensive oq32 Financial difficulties oq55 Financial worry † oq33 Know source of financial help oq56 Leaving = waste of money † oq58 Loan amount † oq41 Paid work limiting † oq60 Paid work time	Focus groups Lenning (1982) Cabrera, Stampen, and Hansen (1990) Cabrera, Nora, and Castañeda (1992) Yorke (1997) Mackie (1998)
17. Intention to Persist		† oq45 Considering leaving GU	Focus groups Bean (1980, 1982, 1983) for detailed discussion
18. Exploring Policies		oq14 Peer mentoring useful oq16 Induction programme useful oq21 Teaching study skills desirable oq36 Discourage absenteeism	[Student Retention Committee]

Appendix 6.2: Prompts for Student Focus Group Facilitators

Part A

Q1 Think back to when you made your decision to come to University.

- Whose decision was it to come to University?
- What factors influenced your choice?

Q2 Where did get your information?

- School/University prospectus/Open Day/visit to the University/Web?

Q3 What was it like when you got here – initial impressions?

Q4 Freshers Week/"University and Its Ways" – go to them; impressions?

Q5 Advisers of Studies/What was it like seeing him (or her)?

Q6 What did it feel like when you first started attending lectures?

Q7 How have you been coping with your work?

- Where have you been able to get help?
- Do you get enough feedback?
- Do you feel you've got the right study skills – did it take a while to get used to working on your own?
- Did you skip lectures/tutorial/practicals?

Q8 What about exams and other assessments?

- Do you have a clear idea of what's expected of you?

Q9 What about the social life?

- What's it like?
- Does where you stay influence the number of friends you can make?

Q10 What about the City of Glasgow?

- A good place to be?

Q11 Where would you turn for help?

- Have you or some of your friends looked for help?
- Lecturers/Advisers/friends
- SRC??
- Student counsellors/University health centre/chaplaincy
- Anyone that you know of who could help you with study skills?

Q12 Overall, has the University met your expectations?

- Thought of leaving?
- Know anyone who has left?

Part B

Attitudes towards the study next year

Appendix 6.3: Matriculation Questionnaire

University of Glasgow

First-Year Undergraduate Student Survey

Instructions : Please help the University by spending a little time answering the questions below.

1. Use only a pencil or a black pen.

2. For each question choose one answer and mark your choice with a stroke like this: 

3. Please do not fold or bend this form.

4. When you are finished, hand this form to one of the helpers, who will be pleased to assist you, if you have any questions. Please ask one of the helpers for an information sheet, if you want one.

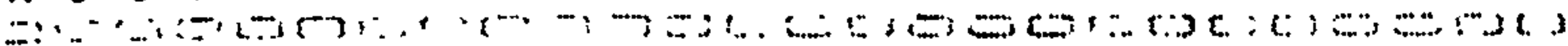
Confidentiality : PLEASE BE HONEST! - THERE ARE NO RIGHT OR WRONG ANSWERS!

Although you are asked to supply your name and matriculation number, only the researchers conducting this survey will know the answers you give. If you would prefer not to answer any particular questions, please leave them blank.

Purpose : The purpose of the questionnaire is to improve the University's teaching and student support services for the benefit of all its students.

Surname:

Forename(s):

Please mark the bubble corresponding to the FIRST letter of your SURNAME:
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z


Please write your Matriculation Number in the boxes below, and mark the corresponding bubbles in the grid.

0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I've really enjoyed my experience of university so far					
2. My family is supportive of my coming to university					
3. I'm not sure what I want to study at university					
4. I made the decision to come to university without pressure from anyone else					
5. I expect to make a lot of new friendships with other students					
6. I'm coming to university because I have a clear idea of my future career					
7. Coming to the University of Glasgow rather than another university was the right decision					
8. Coming to university was a last-minute decision					
9. I may lose friends as a result of coming to university					
10. It will be easy to get help with my studies from the staff					
11. I feel confident that I shall be able to study effectively					
12. I know where in the University I could get help with any personal difficulties					
13. I have found out about the subject content of what I'll be studying this year					
14. I know how much effort will be expected of me with my studies this year					
15. I expect that I'll be one of a large number of students all being taught in the same class					
16. Generally I put a lot of effort into being well prepared for exams and assessments					
17. I have carefully considered the financial implications of coming to university					
	Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
18. I expect that the average weekly amount of time I shall spend during term on study outside of lectures, tutorials, labs, etc. will be:					

That's all! Thank you!

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Appendix 6.4: Information Sheet for the Matriculation Questionnaire

University of Glasgow First-Year Undergraduate Student Survey

Information Sheet

Why should I answer the questions?

- It's in your interest. We'd like you to help us, and your views are important. The University wants to improve its teaching and learning support services for students like you, and for those who follow in your footsteps. In particular, we wish to:
 - Know a bit more about why you're here – we want to help applicants to make the right choice when they decide to come to university.
 - Know a bit more about what you expect for the future – we want to be able to meet students' expectations, so far as we can.

What if I really don't want to give any answers?

- You're not obliged to answer the questions. We should nevertheless be very grateful if you could. If you prefer not to answer any particular questions, just leave them blank.
- On surveys of this sort, it is essential that we get a high return rate in order to obtain an accurate representation of ALL students' views. We will conduct follow-up surveys of those who do not return forms but, as long as you give your name and matriculation number, we'll not ask you again to answer the questions.

Is this a test? Why should I be truthful, when it's pretty obvious what some of the "correct" answers are?

- This is definitely NOT a test! As far as we're concerned, there are no "right" answers, and no "wrong" answers, even though you may think so. No-one's going to assess you as an individual in any way. So you have everything to gain by saying what you really feel, rather than what you think we'd like to hear!

Why are you asking for my Matriculation Number?

- Because it saves having to ask you a lot of other questions, the answers to which are on your Matriculation Form and your Application Form.

Just how confidential are my answers?

- Totally! Only the researchers who are carrying out the survey will know your answers. Your answers will not be revealed to anyone else, and will be treated simply as anonymous statistics. They will not be kept with any of the other records that the University keeps about students. They will never be revealed to any of your lecturers or to anyone else in the University (or outside).

Should I compare answers with my friends?

- Please don't! We value your answers because they're yours, and not those of your friends!

University of Glasgow
First-Year Undergraduate Student Survey

How do I fill in the bit about my Matriculation Number?

Easy! Here’s an example. If your Matriculation Number is 9901234, you fill it in like this:

9	9	0	1	2	3	4
0	0	0	0	0	0	0
☐	☐	☒	☐	☐	☐	☐
1	1	1	1	1	1	1
☐	☐	☐	☒	☐	☐	☐
2	2	2	2	2	2	2
☐	☐	☐	☐	☒	☐	☐
3	3	3	3	3	3	3
☐	☐	☐	☐	☐	☒	☐
4	4	4	4	4	4	4
☐	☐	☐	☐	☐	☐	☒
5	5	5	5	5	5	5
☐	☐	☐	☐	☐	☐	☐
6	6	6	6	6	6	6
☐	☐	☐	☐	☐	☐	☐
7	7	7	7	7	7	7
☐	☐	☐	☐	☐	☐	☐
8	8	8	8	8	8	8
☐	☐	☐	☐	☐	☐	☐
9	9	9	9	9	9	9
☒	☒	☐	☐	☐	☐	☐

Thank you for your time and co-operation!

First Year Undergraduate
Student Survey

UNIVERSITY
of
GLASGOW



Instructions

Please answer the questions below. Then click the **Send Answers NOW** button at the end of the form.

PLEASE DON'T GIVE UPI Answering the questions is quick and easy. Please don't stop before the end.

PLEASE BE HONEST! You're not being assessed in any way. Say what you really feel. There are no right or wrong answers.

Confidentiality

Although you are asked to supply your name and matriculation number, only the researchers conducting this survey will know the answers you give. Your answers will never be disclosed to anyone else. If you prefer not to answer any particular questions, please leave them blank. Your answers will be treated only as anonymous statistics. (We need personal identifiers to be able to link responses to other information, such as the Degree for which you are studying.)

Purpose

We are very interested in your views about coming to the University and your experiences so far, because we wish to improve our teaching and student support services. This is a follow-up to the questionnaire which first-year undergraduates were asked to complete at matriculation.

THANK YOU FOR YOUR HELP!

Matriculation Number:

(Compulsory)

Surname:

(Compulsory)

Other Name(s):

There are 60 questions. It will take you less than 10 minutes to answer them. Please click one answer on each line.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I've really enjoyed my experience of university so far	☐	☐	☐	☐	☐
2. My family is supportive of my being at university.	☐	☐	☐	☐	☐
3. I have lost friends as a result of coming to university	☐	☐	☐	☐	☐

4. There are not enough student societies or clubs for people with my interests	☐	☐	☐	☐	☐	
5. I'm confident that I'm doing well academically	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
6. I have lots of new friendships with other students	☐	☐	☐	☐	☐	
7. I don't really feel part of the University of Glasgow	☐	☐	☐	☐	☐	
8. It's difficult to ask the staff for advice or help with my studies	☐	☐	☐	☐	☐	
9. Generally I put a lot of effort into being well prepared for exams and assessments	☐	☐	☐	☐	☐	
10. Most of my friends are studying the same subjects as myself	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
11. Few of the students I know would be willing to listen to me and help me if I had a personal problem	☐	☐	☐	☐	☐	
12. I made the right choice of subjects to study	☐	☐	☐	☐	☐	
13. I should have gone to a different university or college where the academic work is more relevant to getting a good job afterwards	☐	☐	☐	☐	☐	
14. It would be useful to speak regularly to a student who's already done my first-year subjects	☐	☐	☐	☐	☐	
15. I feel excluded from other students' social activities	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Did not Attend

16. The "University and Its Ways" induction programme is useful for students like me	☐	☐	☐	☐	☐	☐
17. I have been having difficulties with my studies	☐	☐	☐	☐	☐	
18. I should have gone to a different university or college where the academic work is easier	☐	☐	☐	☐	☐	
19. I'd sooner ask other students for help with my studies than ask a member of staff	☐	☐	☐	☐	☐	
20. I'm left alone to cope as best I can with my studies	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
21. All students should be taught study skills at the beginning of the first term	☐	☐	☐	☐	☐	
22. I have not received enough feedback about my academic progress	☐	☐	☐	☐	☐	
23. Nothing I'd done before prepared me properly for university life	☐	☐	☐	☐	☐	
24. My classes are too big	☐	☐	☐	☐	☐	
25. Students like me often feel homesick	☐	☐	☐	☐	☐	
	Parental/ Guardian's Home	Own Home	Hall of Residence	University Flat/House	Other Rented Flat/House	Other
26. Currently my accommodation is:	☐	☐	☐	☐	☐	☐
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
27. I have been having problems with my accommodation	☐	☐	☐	☐	☐	
						Not Applicable
28. The University hasn't done enough to help me find appropriate accommodation <i>[Please click "Not</i>	☐	☐	☐	☐	☐	☐

applicable if you're
in your parental
home or your own
home by choice]*

29. I have been having personal problems	☐	☐	☐	☐	☐	
30. There is no-one in the University to whom I could turn for help with any personal problems	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
31. I'm more likely to seek help with serious personal problems from other students than from the staff	☐	☐	☐	☐	☐	
32. I have been having financial difficulties	☐	☐	☐	☐	☐	
33. It would be hard to find where in the University to get help with financial difficulties	☐	☐	☐	☐	☐	
34. Most of the content of my subjects doesn't interest me	☐	☐	☐	☐	☐	
35. I should have gone to another university or college where my friends are	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
36. The University should try harder to discourage students from missing lectures, tutorials and practicals	☐	☐	☐	☐	☐	
37. The subject content of my studies is meeting my original expectations	☐	☐	☐	☐	☐	
38. I really miss the friends I had before I came to university	☐	☐	☐	☐	☐	
39. Daily travel limits the amount of effort I can put into my studies	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
40. My family responsibilities limit the amount of effort	☐	☐	☐	☐	☐	☐

I can put into my studies						
41. My outside paid work limits the amount of effort I can put into my studies	☐	☐	☐	☐	☐	☐
42. My health problems (or those of my family) limit the amount of effort I can put into my studies	☐	☐	☐	☐	☐	☐
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
43. I'm committed to getting a university education	☐	☐	☐	☐	☐	
44. Coming to the University of Glasgow rather than another university was the right decision for me	☐	☐	☐	☐	☐	
45. I am considering leaving the University of Glasgow	☐	☐	☐	☐	☐	
46. It would be easy for me to find an alternative course at another university or college if the one I'm on now doesn't work out	☐	☐	☐	☐	☐	
47. It would be easy for me to find an alternative course <i>within</i> the University of Glasgow if the one I'm on now doesn't work out	☐	☐	☐	☐	☐	
	My School/ College	Glasgow University Literature	Visit to Glasgow University	My Parents	Other Relatives/ Friends	Other Source(s)
48. Before I decided to come to University, my main source of information about the University was:	☐	☐	☐	☐	☐	☐
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
49. Before I decided to come to University, I did not know what the subject content of my course would be	☐	☐	☐	☐	☐	

50. Before I decided to come to University, I did not know how difficult my course would be	☐	☐	☐	☐	☐	
51. I should have found out more about my course before deciding to come to university	☐	☐	☐	☐	☐	
52. I'm not clear how my course will develop in future	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
53. I have a clear idea of my future career	☐	☐	☐	☐	☐	
54. My course will lead to a good job after I graduate	☐	☐	☐	☐	☐	
55. My financial situation worries me	☐	☐	☐	☐	☐	
56. I wouldn't want to leave the University before graduating, because this would waste the money I've already spent on being here	☐	☐	☐	☐	☐	
57. I did not realize how expensive being at university would be	☐	☐	☐	☐	☐	
	£0	Up to £1000	£1001 to £3000	£3001 to £5000	Over £5000	
58. I expect that by June 2000 I shall have on loan (from all sources, including my family):	☐	☐	☐	☐	☐	
	No time	Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
59. The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:	☐	☐	☐	☐	☐	☐
60. The average weekly amount of time during term that I spend in outside paid work is:	☐	☐	☐	☐	☐	☐

Thank you very much for taking the time to answer the questions! Now click on the

Send Answers NOW button below.



Last Update: September 1999
Page Author: ldrysdale@compserv.gla.ac.uk

University of Glasgow [home page](#)

Appendix 6.6: Information Sheet and Script for the Online Questionnaire

University of Glasgow First-Year Undergraduate Student Survey (On-Line Version)

Introductory Script and Further Information

Timing of the Survey

The survey is conducted towards the end of the taught element of the first-year IT course. Those students exempted from all taught elements answer the questionnaire immediately before being assessed. The identity of students who are neither taught nor assessed by the ITEU is given to the Planning Office, which contacts them separately.

The survey is NOT a test of students' IT competency. Tutors are therefore asked to render whatever technical assistance is necessary to allow respondents to answer the questions. In order to ensure that all students approach the questionnaire with the same instructions, tutors are requested to read the following introductory script to all those about to answer the questions.

Introductory Script

"I've been asked to read this text to you concerning a survey which the University is conducting this year. It applies to all first-year students. This is a follow-up to the paper questionnaire that all or most of you were asked to complete at the time of matriculation. The survey that I'm about to ask you to complete is on-line, and you'll be using a Web browser to respond to the questions.

"The purpose is to improve the University's teaching and learning support services. The University needs feedback in order to do this, and your help and co-operation will be greatly appreciated. You're being asked to say in general terms:

- What motivated you to come to university,
- How you're finding it so far, and
- What your expectations are for the future.

"Answering the questions is very simple, but there are two special requests:

- The first is that you're encouraged to finish the questionnaire without giving up part way through. There may seem to be quite a few questions, but they have been tested, and we know that it shouldn't take more than about 10 minutes of your time to get to the end. So please persevere!
- The second request is an appeal for honesty! Don't just give the answers that you think the University would like to hear. The questionnaire is entirely confidential, and the best way in which you can help the University is by being frank. You are not being assessed as an individual in any way, so you have nothing to lose.

"If you prefer not to answer any particular question, you should just leave it blank. You're not obliged to answer the questions. It's nevertheless important that you should. It is essential that we get a high return rate in order to obtain an accurate representation of ALL students' views. The University will conduct follow-up surveys of those who send no responses but, so long as you give your name and matriculation number, you'll not be asked to answer the questions again.

"The survey is strictly confidential. Only the researchers who are carrying out the survey will know your answers. The answers will not be revealed to anyone else, and they'll be treated simply as anonymous statistics. They will not be kept with any of the other records that the University holds about individual students. Answers will never be revealed to any of the teaching staff or to anyone else in the University (or outside the University). You'll be asked to provide your Matric Number, but that's just to save having to ask for information about you (such as the Degree for which you are studying) which the University already holds.

“Please don’t collude with other people doing the questionnaire – some of the questions are quite personal.

“At the end, there are details given of various sources of help available in the University. You’re more than welcome to make a note of them for future reference. There are also some e-mail addresses, if you’d prefer to use them straightaway.

“Finally, I’ll try to assist you if you have any problems with your computer or the browser.

“Are there any questions?”

After all questions have been answered, the tutor should show respondents the URL (possibly by writing it up on a whiteboard).

The questionnaire is to be found at:

<http://www.gla.ac.uk/student/survey.html>

Further Information

What follows amplifies and extends the information given in the introductory script above. It is intended mainly to give tutors more detailed information about the survey, so that they can answer students’ questions and give assurances concerning confidentiality.

Purpose of the Questionnaire

The questionnaire is being administered to every first-year student. It’s a follow-up to the paper questionnaire that (almost all) first-year students were asked to complete at the time of matriculation. We’re very interested in getting students’ views on a variety of aspects of university life. We want to improve the University’s teaching and learning support services. For example, we want to know students’ views on:

- What motivated them to come here in the first place.
- Are their expectations being fulfilled?
- If they’re in difficulty, what’s the problem?
- Are they having difficulties with their academic studies?
- Are they getting enough feedback about their studies?
- Do they know what is expected of them academically?
- Have they been having difficulty socialising?
- Are they having difficulty with their accommodation?
- Are they having financial problems?
- What are their expectations and intentions for the future?

Once we have the answers to questions like these, we’ll be in a better position to know how best to help students make the most of their time at university.

So it’s in students’ own best interests to answer the questions as best they can.

Special Requests

There are two special requests:

Students should be encouraged to **finish the questionnaire**, and not give up before the end. There may seem to be a lot of questions, but they have been tested on other students, and we know that it should not take more than 10 minutes to finish the questionnaire. The best strategy is to try not to think too deeply about the questions, and just to give an immediate reaction to what's being asked.

For many of the questions, there is what may seem to be a "correct" answer – one which students may think the University would like to hear. The questionnaire really is confidential, and students should be encouraged to be as frank as possible. It will do them no harm at all to **tell us how they really feel**, rather than what they think the University would like them to say. Their views are important, and it's in their interests to be frank. We are not trying to assess them as individuals in any way.

What if a Student Really Doesn't Want to Give Answers?

Students are not obliged to answer the questions. We should nevertheless be very grateful if they could. If they prefer not to answer any particular question, they should just leave it blank.

Why Must Students give their Matriculation Numbers?

This is because it saves us having to ask a lot of other questions, the answers to which were collected on students' Matriculation Forms and Application Forms. If we have students' matriculation numbers, we can match their answers to the other pieces of information that we hold on students centrally in the University. (Names are needed just in case someone keys the wrong matriculation number.)

Just How Confidential are Students' Answers?

Totally! Only the researchers who are carrying out the survey will know students' answers. The answers will not be revealed to anyone else, and will be treated simply as anonymous statistics. They will not be kept with any of the other records that the University holds about students. Answers will never be revealed to any of the teaching staff or to anyone else in the University (or outside the University).

There's Help Available!

Students should always feel that there are various forms of help available in the University, should they want it. Details of sources of help will come up on the screen once respondents click the 'Send Answers NOW' button. If anyone wants to get in touch with any of the contacts listed, they could do so either using the e-mail addresses given, or else by making a note of the contact details for future reference.

Response Rate

On surveys of this sort, it is essential that we get a high return rate in order to obtain an accurate representation of ALL students' views. *We will conduct follow-up surveys of those who send no responses but, so long as a student gives his or her name and matriculation number, we'll not ask that person to answer the questions again.*

A further Point about Confidentiality

If several students are using a machine one after the other, it may be possible for someone to see what other students have already submitted by simply clicking the 'Back' button on the browser. To prevent this happening, students may wish to quit out of the browser and reboot the machine when they're finished.

Collaboration

Students should be discouraged from discussing their answers with one another while they are completing the questionnaire. This is partly because some of the questions are quite personal, and some students – quite reasonably – would prefer their friends not to see their answers. Another reason why they should be discouraged from collaborating is that we want each student's answers to be independent of anyone else's. If the responses are not independent, this will spoil their statistical validity.

A Technical Point

Each time a student clicks the 'Send Answers NOW' button, a record is written to a file for subsequent analysis. If someone changes his or her mind about the answer to a particular question, for example, then it's OK to use the 'Back' button to get a student's answers back on the screen, make the desired change(s), and then use the 'Send Answers NOW' button again. The responses are time-stamped and, generally, if a student sends more than one set of responses within a short space of time, all but the most recent set of responses will be disregarded.

Results of the Survey

The overall results of the survey will be posted to the Web pages of the University's Planning Office. This is will be next summer.

Further Information

Further information about this survey and the questionnaire are available from Mr Bill Patrick, Planning Officer (0141 330 4218 or wjpatrick@admin.gla.ac.uk).

Bill Patrick
September 1999

Appendix 6.7 Paper Version of Online Questionnaire

Please supply your matriculation number and name:

Matriculation Number:
(Compulsory)

--	--	--	--	--	--	--

Surname:
(Compulsory)

Other Name(s):

Please tick ONE answer on each line:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
1. I've really enjoyed my experience of university so far	☐	☐	☐	☐	☐	
2. My family is supportive of my being at university	☐	☐	☐	☐	☐	
3. I have lost friends as a result of coming to university	☐	☐	☐	☐	☐	
4. There are not enough student societies or clubs for people with my interests	☐	☐	☐	☐	☐	
5. I'm confident that I'm doing well academically	☐	☐	☐	☐	☐	
6. I have lots of new friendships with other students	☐	☐	☐	☐	☐	
7. I don't really feel part of the University of Glasgow	☐	☐	☐	☐	☐	
8. It's difficult to ask the staff for advice or help with my studies	☐	☐	☐	☐	☐	
9. Generally I put a lot of effort into being well prepared for exams and assessments	☐	☐	☐	☐	☐	
10. Most of my friends are studying the same subjects as myself	☐	☐	☐	☐	☐	
11. Few of the students I know would be willing to listen to me and help me if I had a personal problem	☐	☐	☐	☐	☐	
12. I made the right choice of subjects to study	☐	☐	☐	☐	☐	
13. I should have gone to a different university or college where the academic work is more relevant to getting a good job afterwards	☐	☐	☐	☐	☐	
14. It would be useful to speak regularly to a student who's already done my first-year subjects	☐	☐	☐	☐	☐	
15. I feel excluded from other students' social activities	☐	☐	☐	☐	☐	
16. The "University and Its Ways" induction programme is useful for students like me	☐	☐	☐	☐	☐	☐
17. I have been having difficulties with my studies	☐	☐	☐	☐	☐	
18. I should have gone to a different university or college where the academic work is easier	☐	☐	☐	☐	☐	
19. I'd sooner ask other students for help with my studies than ask a member of staff	☐	☐	☐	☐	☐	
20. I'm left alone to cope as best I can with my studies	☐	☐	☐	☐	☐	
21. All students should be taught study skills at the beginning of the first term	☐	☐	☐	☐	☐	
22. I have not received enough feedback about my academic progress	☐	☐	☐	☐	☐	
23. Nothing I'd done before prepared me properly for university life	☐	☐	☐	☐	☐	
24. My classes are too big	☐	☐	☐	☐	☐	
25. Students like me often feel homesick	☐	☐	☐	☐	☐	
26. Currently my accommodation is:	Parental/ Guardian's Home	Own Home	Hall of Residence	University Flat/House	Other Rented Flat/House	Other
	☐	☐	☐	☐	☐	☐
27. I have been having problems with my accommodation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
28. The University hasn't done enough to help me find appropriate accommodation [Please tick "Not applicable" if you're in your parental home or your own home by choice]	☐	☐	☐	☐	☐	☐
29. I have been having personal problems	☐	☐	☐	☐	☐	
30. There is no-one in the University to whom I could turn for help with any personal problems	☐	☐	☐	☐	☐	

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
31. I'm more likely to seek help with serious personal problems from other students than from the staff	☐	☐	☐	☐	☐	
32. I have been having financial difficulties	☐	☐	☐	☐	☐	
33. It would be hard to find where in the University to get help with financial difficulties	☐	☐	☐	☐	☐	
34. Most of the content of my subjects doesn't interest me	☐	☐	☐	☐	☐	
35. I should have gone to another university or college where my friends are	☐	☐	☐	☐	☐	
36. The University should try harder to discourage students from missing lectures, tutorials and practicals	☐	☐	☐	☐	☐	
37. The subject content of my studies is meeting my original expectations	☐	☐	☐	☐	☐	
38. I really miss the friends I had before I came to university	☐	☐	☐	☐	☐	
39. Daily travel limits the amount of effort I can put into my studies	☐	☐	☐	☐	☐	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
40. My family responsibilities limit the amount of effort I can put into my studies	☐	☐	☐	☐	☐	☐
41. My outside paid work limits the amount of effort I can put into my studies	☐	☐	☐	☐	☐	☐
42. My health problems (or those of my family) limit the amount of effort I can put into my studies	☐	☐	☐	☐	☐	☐
43. I'm committed to getting a university education	☐	☐	☐	☐	☐	
44. Coming to the University of Glasgow rather than another university was the right decision for me	☐	☐	☐	☐	☐	
45. I am considering leaving the University of Glasgow	☐	☐	☐	☐	☐	
46. It would be easy for me to find an alternative course at another university or college if the one I'm on now doesn't work out	☐	☐	☐	☐	☐	
47. It would be easy for me to find an alternative course <i>within</i> the University of Glasgow if the one I'm on now doesn't work out	☐	☐	☐	☐	☐	
	My School/ College	Glasgow University Literature	Visit to Glasgow University	My Parents	Other Relatives/ Friends	Other Source(s)
48. Before I decided to come to University, my main source of information about the University was:	☐	☐	☐	☐	☐	☐
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
49. Before I decided to come to University, I did not know what the subject content of my course would be	☐	☐	☐	☐	☐	
50. Before I decided to come to University, I did not know how difficult my course would be	☐	☐	☐	☐	☐	
51. I should have found out more about my course before deciding to come to university	☐	☐	☐	☐	☐	
52. I'm not clear how my course will develop in future	☐	☐	☐	☐	☐	
53. I have a clear idea of my future career	☐	☐	☐	☐	☐	
54. My course will lead to a good job after I graduate	☐	☐	☐	☐	☐	
55. My financial situation worries me	☐	☐	☐	☐	☐	
56. I wouldn't want to leave the University before graduating, because this would waste the money I've already spent on being here	☐	☐	☐	☐	☐	
57. I did not realize how expensive being at university would be	☐	☐	☐	☐	☐	
	£0	Up to £1,000	£1001 to £3,000	£3001 to £5,000	Over £5000	
58. I expect that by June 2000 I shall have on loan (from all sources, including my family):	☐	☐	☐	☐	☐	
	No time	Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
59. The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:	☐	☐	☐	☐	☐	☐
60. The average weekly amount of time during term that I spend in outside paid work is:	☐	☐	☐	☐	☐	☐

Thank you very much for taking the time to answer the questions! Now please return this form in the pre-paid envelope provided.

Appendix 6.8: Covering Letter for Hardcopy Version of the Online Questionnaire

Mr W.J. Patrick
Planning Officer



UNIVERSITY
of
GLASGOW

15 May 2000

Dear Student,

First-Year Undergraduate Survey

This year the University is asking all first-year undergraduates to complete a brief questionnaire part-way through the academic session. This is a follow-up to the survey which students were asked to complete at matriculation. Please help the University to improve its teaching and student support services by answering the questions on the enclosed questionnaire and returning it in the stamped addressed envelope provided.

Some information about the survey is shown on the reverse side of this letter.

As an alternative to filling out the paper questionnaire, you can answer the questions on-line. Next time you are using a computer which is attached to the network – in the University Library, or at home, for example – please go to the following address, and follow the instructions there:

<http://www.gla.ac.uk/student/survey.html>

Whichever way you choose to respond, please do so *as soon as possible*. Your answers will be treated in the strictest confidence.

With many thanks for your time and co-operation,

Yours sincerely,

PLANNING OFFICE
University of Glasgow, Glasgow G12 8QQ
Planning Officer: Mr W.J. Patrick, Direct Line 0141-330 4218
Telephone: 0141-339 8855 Telex: 777070 Fax: 0141-330 4920

University of Glasgow

First-Year Undergraduate Student Survey

Information Sheet

Why should I answer the questions?

It's in your interest. We'd like you to help us, and your views are important. The University wants to improve its teaching and learning support services for students like you, and for those who follow in your footsteps. In particular, we wish to:

- Know a bit more about why you're here – we want to help applicants to make the right choice when they decide to come to university.
- Know a bit more about what you expect for the future – we want to be able to meet students' expectations, as best we can.

What if I really don't want to give any answers?

You're not obliged to answer the questions. We should nevertheless be very grateful if you could. If you prefer not to answer any particular questions, just leave them blank.

On surveys of this sort, it is essential that we get a high return rate in order to obtain an accurate representation of ALL students' views. We will conduct follow-up surveys of those who do not return forms but, as long as you give your name and matriculation number, we'll not ask you again to answer the questions.

Is this a test? Why should I be truthful, when it's pretty obvious what some of the "correct" answers are?

This is definitely NOT a test! As far as we're concerned, there are no "right" answers, and no "wrong" answers, even though you may think so. No-one's going to assess you as an individual in any way. So you have everything to gain by saying what you really feel, rather than what you think we'd like to hear!

Why are you asking for my Matriculation Number?

Because it saves having to ask you a lot of other questions, the answers to which are on your original Application Form and your Matriculation Form.

Just how confidential are my answers?

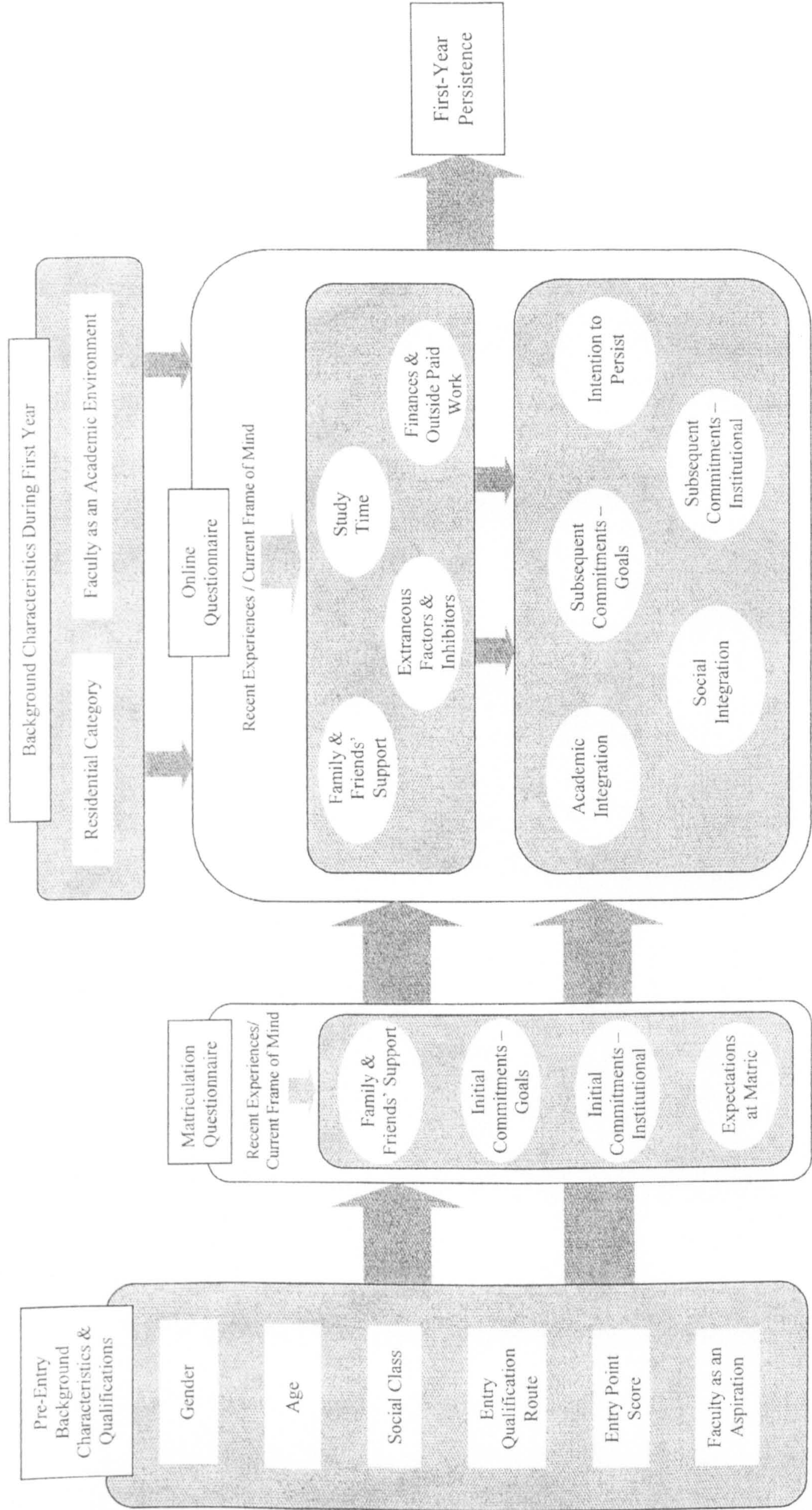
Totally! Only the researchers who are carrying out the survey will know your answers. Your answers will not be revealed to anyone else, and will be treated simply as anonymous statistics. They will not be kept with any of the other records that the University keeps about students. They will never be revealed to any of your lecturers or to anyone else in the University (or outside).

PLANNING OFFICE

University of Glasgow, Glasgow G12 8QQ

Planning Officer: Mr W.J. Patrick, Direct Line 0141-330 4218

Telephone: 0141-339 8855 Telex: 777070 Fax: 0141-330 4920



Appendices to Chapter 7

Appendix 7.1: Matriculation Questionnaire Responses, analysed by Category of Leaver

Category of Leaver	Responses		Non-Responses		Total
Pre-Summer Leaver	233	95.1%	12	4.9%	245
Summer Leaver	202	96.7%	7	3.3%	209
Persister	3,263	97.6%	81	2.4%	3,344
Total	3,698	97.4%	100	2.6%	3,798

Appendix 7.2: Online Questionnaire Responses, analysed by Category of Leaver

Category of Leaver	Responses		Non-Responses		Total
Pre-Summer Leaver	45	18.4%	200	81.6%	245
Summer Leaver	167	79.9%	42	20.1%	209
Persister	2,878	86.1%	466	13.9%	3,344
Total	3,090	81.4%	708	18.6%	3,798

Appendix 7.3: Online Questionnaire – All Responses Analysed by Faculty Grouping

Faculty Grouping	Responses		Non-Responses		Total
Arts	769	74.2%	268	25.8%	1,037
Crichton	18	78.3%	5	21.7%	23
Dentistry	65	94.2%	4	5.8%	69
Divinity	13	59.1%	9	40.9%	22
Education	83	72.2%	32	27.8%	115
Engineering	282	84.7%	51	15.3%	333
Law & Financial Studies	277	93.3%	20	6.7%	297
Medicine	226	95.8%	10	4.2%	236
Nursing	27	81.8%	6	18.2%	33
Science	991	82.7%	207	17.3%	1,198
Social Sciences	251	73.8%	89	26.2%	340
Veterinary Medicine	88	92.6%	7	7.4%	95
Total	3,090	81.4%	708	18.6%	3,798

Table 7.4: Online Responses – Non-Pre-Summer Leavers' Responses, Analysed by Faculty Grouping

Faculty Grouping	Responses		Non-Responses		Total
Arts	761	80.0%	190	20.0%	951
Crichton	18	81.8%	4	18.2%	22
Dentistry	65	95.6%	3	4.4%	68
Divinity	13	68.4%	6	31.6%	19
Education	82	76.6%	25	23.4%	107
Engineering	268	88.2%	36	11.8%	304
Law & Financial Studies	275	95.5%	13	4.5%	288
Medicine	226	95.8%	10	4.2%	236
Nursing	27	93.1%	2	6.9%	29
Science	976	87.2%	143	12.8%	1,119
Social Sciences	247	78.2%	69	21.8%	316
Veterinary Medicine	87	92.6%	7	7.4%	94
Total	3,045	85.7%	508	14.3%	3,553

Appendix 7.5: Summer Leavers – Chi-Square Tests of Association between Response and Background Characteristics

Variable	Chi-Square	df	<i>p</i>
Gender (2)	0.522	1	0.470
Age category (2)	0.350	1	0.554
Entry Qualification Route (4) (*)	2.216	3	0.529
Faculty Category (3)	0.417	2	0.812
Social Group (2)	0.009	2	0.925
Residential Category (2)	0.081	2	0.776

() Including those entrants from the non-traditional Entry Qualification Routes*

Appendix 7.6: Survey Item Text and Coding				
Question	Text	Short Text	Coding	Coding Reversed?
<i>Matriculation Questionnaire</i>				
mq01	I've really enjoyed my experience of university so far	Enjoyed university	Standard	n
mq02	My family is supportive of my coming to university	Family supportive	Standard	n
mq03	I'm not sure what I want to study at university	Unsure what to study	Standard	y
mq04	I made the decision to come to university without pressure from anyone else	Unpressurized decision	Standard	n
mq05	I expect to make a lot of new friendships with other students	New friendships	Standard	n
mq06	I'm coming to university because I have a clear idea of my future career	Career clear	Standard	n
mq07	Coming to the University of Glasgow rather than another university was the right decision	GU right institution	Standard	n
mq08	Coming to university was a last-minute decision	Last-minute decision	Standard	y
mq09	I may lose friends as a result of coming to university	Lose friends	Standard	y
mq10	It will be easy to get help with my studies from the staff	Help with studies: staff easy	Standard	n
mq11	I feel confident that I shall be able to study effectively	Study effectively	Standard	n
mq12	I know where in the University I could get help with any personal difficulties	Know source of personal help	Standard	n
mq13	I have found out about the subject content of what I'll be studying this year	Found out about subject content	Standard	n
mq14	I know how much effort will be expected of me with my studies this year	Know amount of effort	Standard	n
mq15	I expect that I'll be one of a large number of students all being taught in the same class	Expect big classes	Standard	n
mq16	Generally I put a lot of effort into being well prepared for exams and assessments	Well prepared for exams, etc	Standard	n
mq17	I have carefully considered the financial implications of coming to university	Financial implications considered	Standard	n
mq18	I expect that the average weekly amount of time I shall spend during term on study outside lectures, tutorials, labs, etc. will be:	Study time	mq18	y (*)
<i>Online Questionnaire</i>				
oq01	I've really enjoyed my experience of university so far	Enjoyed university	Standard	n
oq02	My family is supportive of my being at university	Family supportive	Standard	n
oq03	I have lost friends as a result of coming to university	Lost friends	Standard	y
oq04	There are not enough student societies or clubs for people with my interests	Not enough societies/clubs	Standard	y
oq05	I'm confident that I'm doing well academically	Doing well academically	Standard	n
oq06	I have lots of new friendships with other students	New friendships	Standard	n
oq07	I don't really feel part of the University of Glasgow	Not part of GU	Standard	y
oq08	It's difficult to ask the staff for advice or help with my studies	Help with studies: staff difficult	Standard	y
oq09	Generally I put a lot of effort into being well prepared for exams and assessments	Well prepared for exams, etc	Standard	n
oq10	Most of my friends are studying the same subjects as myself	Friends studying same subject	Standard	n
oq11	Few of the students I know would be willing to listen to me and help me if I had a personal problem	Personal help from students difficult	Standard	y
oq12	I made the right choice of subjects to study	Right subject choice	Standard	n
oq13	I should have gone to a different university or college where the academic work is more relevant to getting a good job afterwards	Different institution: better job	Standard	y
oq14	It would be useful to speak regularly to a student who's already done my first-year subjects	Peer mentoring useful	Standard	y
oq15	I feel excluded from other students' social activities	Excluded from social activities	Standard	y
oq16	The "University and Its Ways" induction programme is useful for students like me	Induction programme useful	oq16	n
oq17	I have been having difficulties with my studies	Difficulties with studies	Standard	y
oq18	I should have gone to a different university or college where the academic work is easier	Different institution: work easier	Standard	y
oq19	I'd sooner ask other students for help with my studies than ask a member of staff	Help with studies: students vs staff	Standard	y
oq20	I'm left alone to cope as best I can with my studies	Help with studies: left alone	Standard	y
oq21	All students should be taught study skills at the beginning of the first term	Teaching study skills desirable	Standard	y
oq22	I have not received enough feedback about my academic progress	Not enough academic feedback	Standard	y
oq23	Nothing I'd done before prepared me properly for university life	No preparation for university life	Standard	y
oq24	My classes are too big	Classes too big	Standard	y
oq25	Students like me often feel homesick	Homesick	Standard	y
oq26	Currently my accommodation is:	Accommodation type	oq26	n
oq27	I have been having problems with my accommodation	Accommodation problems	Standard	y
oq28	The University hasn't done enough to help me find appropriate accommodation [Please tick "Not applicable" if you're in your parental home or your own home by choice]	Accommodation/not enough help	oq28_40_41_42	y
oq29	I have been having personal problems	Personal problems	Standard	y
oq30	There is no-one in the University to whom I could turn for help with any personal problems	No source of personal help	Standard	y
oq31	I'm more likely to seek help with serious personal problems from other students than from the staff	Personal help: students vs staff	Standard	y
oq32	I have been having financial difficulties	Financial difficulties	Standard	y
oq33	It would be hard to find where in the University to get help with financial difficulties	Know source of financial help	Standard	y
oq34	Most of the content of my subjects doesn't interest me	Subject content uninteresting	Standard	y
oq35	I should have gone to another university or college where my friends are	Different institution: friends	Standard	y
oq36	The University should try harder to discourage students from missing lectures, tutorials and practicals	Discourage absenteeism	Standard	y
oq37	The subject content of my studies is meeting my original expectations	Subject content meeting expectations	Standard	n
oq38	I really miss the friends I had before I came to university	Miss friends	Standard	y
oq39	Daily travel limits the amount of effort I can put into my studies	Daily travel limiting	Standard	y
oq40	My family responsibilities limit the amount of effort I can put into my studies	Family responsibilities limiting	oq28_40_41_42	y
oq41	My outside paid work limits the amount of effort I can put into my studies	Paid work limiting	oq28_40_41_42	y
oq42	My health problems (or those of my family) limit the amount of effort I can put into my studies	Health problems limiting	oq28_40_41_42	y
oq43	I'm committed to getting a university education	Committed to university education	Standard	n
oq44	Coming to the University of Glasgow rather than another university was the right decision for me	GU right institution	Standard	n
oq45	I am considering leaving the University of Glasgow	Considering leaving GU	Standard	y
oq46	It would be easy for me to find an alternative course at another university or college if the one I'm on now doesn't work out	Alternative course: different institution	Standard	y
oq47	It would be easy for me to find an alternative course within the University of Glasgow if the one I'm on now doesn't work out	Alternative course: within GU	Standard	y
oq48	Before I decided to come to University, my main source of information about the University was:	Information source	oq48	n
oq49	Before I decided to come to University, I did not know what the subject content of my course would be	No prior knowledge of subject content	Standard	y
oq50	Before I decided to come to University, I did not know how difficult my course would be	Prior knowledge: difficulty of course	Standard	y
oq51	I should have found out more about my course before deciding to come to university	Should have found out more	Standard	y
oq52	I'm not clear how my course will develop in future	Future course development unclear	Standard	y
oq53	I have a clear idea of my future career	Career clear	Standard	n
oq54	My course will lead to a good job after I graduate	Good job	Standard	n
oq55	My financial situation worries me	Financial worry	Standard	y
oq56	I wouldn't want to leave the University before graduating, because this would waste the money I've already spent on being here	Leaving = waste of money	Standard	n
oq57	I did not realize how expensive being at university would be	Unexpectedly expensive	Standard	y
oq58	I expect that by June 2000 I shall have on loan (from all sources, including my family):	Loan amount	oq58	n
oq59	The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:	Study time	oq59	y (*)
oq60	The average weekly amount of time during term that I spend in outside paid work is:	Paid work time	oq60	n

(to compensate for the PERL or Optical Mark Recognition software's coding of this item, rather than because of the wording of the question) (*)

Appendix 7.7: Survey Items Responses

Short Text	Question No	Cases	Response Rate %	Mean	Coding Reversed?	Percentage of Respondents, reversed where indicated (†):				
						SA/ SP	A/ P	N/ N	D/ Neg	SD/ SN
Enjoyed university	mq01	3652	96.2%	4.05	n	26.6%	52.7%	19.5%	1.0%	0.2%
Family supportive	mq02	3686	97.1%	4.76	n	78.3%	19.3%	2.1%	0.2%	0.1%
Unsure what to study	mq03	3677	96.8%	4.09	y	36.6%	45.2%	10.3%	6.7%	1.3%
Unpressurized decision	mq04	3682	96.9%	4.34	n	51.3%	36.7%	7.7%	3.3%	1.0%
New friendships	mq05	3683	97.0%	4.41	n	46.9%	47.7%	5.0%	0.3%	0.1%
Career clear	mq06	3685	97.0%	3.45	n	21.6%	29.3%	26.8%	17.7%	4.7%
GU right institution	mq07	3681	96.9%	4.16	n	35.1%	46.5%	17.8%	0.5%	0.1%
Last-minute decision	mq08	3686	97.1%	4.56	y	67.4%	26.2%	2.5%	2.7%	1.2%
Lose friends	mq09	3682	96.9%	3.67	y	25.7%	35.8%	20.9%	14.9%	2.6%
Help with studies: staff easy	mq10	3672	96.7%	3.60	n	6.2%	49.3%	42.8%	1.6%	0.2%
Study effectively	mq11	3681	96.9%	3.89	n	12.0%	67.2%	19.1%	1.4%	0.2%
Know source of personal help	mq12	3678	96.8%	3.51	n	9.3%	51.7%	21.6%	15.5%	2.0%
Found out about subject content	mq13	3683	97.0%	3.71	n	13.8%	56.1%	18.8%	9.9%	1.3%
Know amount of effort	mq14	3684	97.0%	3.89	n	20.0%	56.1%	17.1%	6.3%	0.5%
Expect big classes	mq15	3679	96.9%	4.03	n	25.3%	56.3%	14.4%	3.5%	0.4%
Well prepared for exams, etc	mq16	3685	97.0%	4.02	n	24.0%	58.6%	13.7%	3.4%	0.3%
Financial implications considered	mq17	3684	97.0%	4.04	n	27.5%	55.1%	12.5%	4.2%	0.7%
Study time	mq18	3627	95.5%	2.98	y	(See continuation sheet, showing non-standard response frames.)				
Enjoyed university	oq01	3078	81.0%	4.01	n	27.9%	51.6%	15.2%	4.3%	0.9%
Family supportive	oq02	3076	81.0%	4.69	n	73.4%	22.7%	3.2%	0.6%	0.2%
Lost friends	oq03	3075	81.0%	3.58	y	20.1%	40.8%	19.8%	15.9%	3.4%
Not enough societies/clubs	oq04	3067	80.8%	3.46	y	9.8%	43.1%	33.1%	11.8%	2.2%
Doing well academically	oq05	3071	80.9%	3.37	n	3.0%	45.6%	38.6%	11.1%	1.8%
New friendships	oq06	3067	80.8%	4.09	n	32.7%	50.7%	10.7%	4.7%	1.2%
Not part of GU	oq07	3070	80.8%	3.70	y	16.3%	51.7%	20.7%	9.0%	2.4%
Help with studies: staff difficult	oq08	3067	80.8%	3.33	y	7.0%	41.1%	32.0%	17.2%	2.6%
Well prepared for exams, etc	oq09	3069	80.8%	3.55	n	9.8%	50.5%	26.0%	12.0%	1.7%
Friends studying same subject	oq10	3062	80.6%	2.82	n	5.8%	27.2%	19.8%	37.0%	10.1%
Personal help from students difficult	oq11	3070	80.8%	3.73	y	20.9%	47.6%	17.9%	10.9%	2.6%
Right subject choice	oq12	3070	80.8%	3.70	n	20.5%	44.9%	21.2%	10.7%	2.8%
Different institution: better job	oq13	3066	80.7%	4.13	y	33.4%	50.6%	12.6%	2.5%	0.9%
Peer mentoring useful	oq14	3068	80.8%	2.27	y	16.1%	49.6%	26.6%	6.7%	0.9%
Excluded from social activities	oq15	3067	80.8%	3.65	y	13.6%	51.1%	23.4%	10.6%	1.4%
Induction programme useful	oq16	3057	80.5%	2.85	n	(See continuation sheet, showing non-standard response frames.)				
Difficulties with studies	oq17	3067	80.8%	3.33	y	4.8%	46.4%	28.0%	18.7%	2.1%
Different institution: work easier	oq18	3065	80.7%	4.19	y	31.7%	58.1%	7.7%	2.1%	0.4%
Help with studies: students vs staff	oq19	3067	80.7%	2.70	y	2.4%	20.9%	27.8%	42.4%	6.5%
Help with studies: left alone	oq20	3053	80.6%	2.91	y	3.3%	28.5%	29.5%	33.3%	5.5%
Teaching study skills desirable	oq21	3068	80.7%	2.38	y	17.2%	43.0%	26.3%	11.8%	1.8%
Not enough academic feedback	oq22	3066	80.7%	2.68	y	0.9%	23.3%	29.0%	37.1%	9.8%
No preparation for university life	oq23	3070	80.7%	3.06	y	6.6%	36.5%	21.2%	28.0%	7.7%
Classes too big	oq24	3066	80.7%	3.20	y	5.3%	41.3%	28.0%	19.3%	6.1%
Homesick	oq25	3016	80.4%	3.77	y	29.9%	34.0%	22.0%	11.2%	2.9%
Accommodation type	oq26	3058	80.5%	-	n	(See continuation sheet, showing non-standard response frames.)				
Accommodation problems	oq27	2993	78.8%	3.85	y	33.6%	36.1%	15.5%	11.5%	3.4%
Accommodation/not enough help	oq28	3016	79.4%	4.96	y	(See continuation sheet, showing non-standard response frames.)				
Personal problems	oq29	3030	79.8%	3.69	y	27.3%	38.3%	15.5%	13.9%	5.0%
No source of personal help	oq30	3031	79.8%	3.60	y	18.4%	41.3%	24.8%	12.5%	2.9%
Personal help: students vs staff	oq31	3059	80.5%	2.33	y	1.8%	10.8%	22.2%	48.9%	16.3%
Financial difficulties	oq32	3059	80.5%	3.12	y	8.8%	34.7%	25.0%	22.0%	9.4%
Know source of financial help	oq33	3046	80.2%	2.98	y	4.0%	31.1%	29.0%	30.7%	5.3%
Subject content uninteresting	oq34	3057	80.5%	3.72	y	18.5%	50.3%	17.6%	11.2%	2.3%
Different institution: friends	oq35	3052	80.4%	4.19	y	37.9%	47.7%	10.6%	2.8%	1.0%
Discourage absenteeism	oq36	3063	80.6%	2.65	y	3.3%	16.4%	33.2%	36.0%	11.1%
Subject content meeting expectations	oq37	3060	80.6%	3.31	n	4.9%	46.7%	25.3%	20.3%	2.7%
Miss friends	oq38	3056	80.5%	2.86	y	6.4%	23.4%	29.7%	30.7%	9.9%
Daily travel limiting	oq39	3045	80.2%	3.18	y	13.8%	36.5%	16.4%	20.6%	12.7%
Family responsibilities limiting	oq40	3054	80.4%	4.45	y	(See continuation sheet, showing non-standard response frames.)				
Paid work limiting	oq41	3052	80.4%	4.29	y	(See continuation sheet, showing non-standard response frames.)				
Health problems limiting	oq42	3046	80.2%	4.90	y	(See continuation sheet, showing non-standard response frames.)				
Committed to university education	oq43	3062	80.6%	4.49	n	56.7%	37.1%	5.2%	0.8%	0.1%
GU right institution	oq44	3066	80.7%	4.19	n	41.9%	39.5%	15.2%	2.5%	0.8%
Considering leaving GU	oq45	3058	80.5%	4.35	y	57.9%	27.5%	8.4%	4.3%	1.8%
Alternative course: different institution	oq46	3056	80.5%	2.97	y	9.7%	19.7%	35.5%	27.6%	7.5%
Alternative course: within GU	oq47	3044	80.1%	3.25	y	7.9%	36.0%	35.4%	15.2%	5.6%
Information source	oq48	3012	79.3%	-	n	(See continuation sheet, showing non-standard response frames.)				
No prior knowledge of subject content	oq49	3065	80.7%	2.97	y	6.1%	33.6%	19.6%	32.7%	8.0%
Prior knowledge: difficulty of course	oq50	3064	80.7%	2.61	y	3.1%	21.4%	19.6%	45.3%	10.5%
Should have found out more	oq51	3059	80.5%	3.08	y	6.5%	34.4%	25.9%	26.4%	6.8%
Future course development unclear	oq52	3051	80.3%	2.86	y	5.7%	27.6%	22.4%	35.8%	8.4%
Career clear	oq53	3069	80.8%	3.08	n	17.1%	27.2%	17.1%	23.8%	14.7%
Good job	oq54	3065	80.7%	3.70	n	19.2%	40.2%	33.9%	5.2%	1.6%
Financial worry	oq55	3057	80.5%	2.88	y	6.2%	28.9%	25.0%	26.8%	13.2%
Leaving = waste of money	oq56	3064	80.7%	4.22	n	44.6%	40.2%	9.2%	4.5%	1.5%
Unexpectedly expensive	oq57	3052	80.4%	2.32	y	2.2%	15.0%	18.7%	41.2%	22.9%
Loan amount	oq58	3011	79.3%	2.96	n	(See continuation sheet, showing non-standard response frames.)				
Study time	oq59	3052	80.4%	2.25	y	(See continuation sheet, showing non-standard response frames.)				
Paid work time	oq60	3029	79.8%	4.60	n	(See continuation sheet, showing non-standard response frames.)				

(†) for items without reverse coding:

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

for items with reverse coding:

SN = Strongly Negative; Neg = Negative; N = Neutral; P = Positive; SP = Strongly Positive

Appendix 7.7: (continued) – Non-Standard Response Frames

Short Text	Question No	Cases	Reponse Rate %	Reversed?	Response Frame (with reverse-coding applied only to oq28, oq40, oq41 and oq42)					
					My School/ College	Glasgow University Literature	Visit to Glasgow University	My Parents	Other Relatives/ Friends	Other Sources(s)
Information source	oq48	3012	79.3%	n	27.7%	29.3%	23.4%	2.4%	11.6%	5.6%
					Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Did not Attend
Induction programme useful	oq16	3057	80.5%	n	2.0%	19.7%	25.3%	8.9%	2.3%	41.9%
					Parental/ Guardian's Home	Own Home	Hall of Residence	University Flat/ House	Other Rented Flat/House	Other
Accommodation type	oq26	3058	80.5%	n	43.1%	4.5%	41.8%	5.5%	4.3%	0.8%
					[SA] SP	[A] P	[N] N	[D] Neg	[SD] SN	Not Applicable
Accommodation/not enough help	oq28	3016	79.4%	y	11.6%	23.8%	9.0%	3.1%	1.0%	51.5%
Family responsibilities limiting	oq40	3054	80.4%	y	9.7%	28.9%	11.0%	9.8%	3.0%	37.6%
Health problems limiting	oq42	3046	80.2%	y	7.0%	18.3%	8.9%	6.9%	2.4%	56.6%
					£0	Up to £1,000	£1001 to £3,000	£3001 to £5,000	Over £5,000	
Loan amount	oq58	3011	79.3%	n	13.4%	10.3%	41.7%	28.6%	6.0%	
						Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
Study time (matriculation questionnaire)	mq18	3627	95.5%	y		3.8%	28.8%	40.4%	19.3%	7.6%
					No time	Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
Study time (online questionnaire)	oq59	3052	80.4%	y	2.0%	25.4%	35.7%	24.5%	8.9%	3.5%
					[SA] SP	[A] P	[N] N	[D] Neg	[SD] SN	Not Applicable
Paid work limiting	oq41	3052	80.4%	y	4.9%	15.2%	10.1%	17.2%	7.3%	45.2%
					No time	Up to 5 hours	6 to 10 hours	11 to 15 hours	16 to 20 hours	Over 20 hours
Paid work time	oq60	3029	79.8%	n	51.8%	5.4%	14.0%	13.8%	10.2%	4.8%

Appendix 7.8: Online Items Having Mean Scores of Less Than Three

Online Question	Short Text	Mean Score	Construct
oq49	No prior knowledge of subject content	2.97	Academic Integration
oq50	Prior knowledge: difficulty of course	2.61	Academic Integration
oq33	Know source of financial help	2.98	Finances and Outside Paid Work
oq55	Financial worry	2.88	Finances and Outside Paid Work
oq57	Unexpectedly expensive	2.32	Finances and Outside Paid Work
oq20	Help with studies: left alone	2.91	Help and Feedback
oq19	Help with studies: students vs staff	2.70	Help and Feedback
oq22	Not enough academic feedback	2.68	Help and Feedback
oq38	Miss friends	2.86	Social Integration
oq10	Friends studying same subject	2.82	Social Integration
oq31	Personal help: students vs staff	2.33	Social Integration
oq52	Future course development unclear	2.86	Subsequent Goal Commitment
oq46	Alternative course: different institution	2.97	Subsequent Institutional Commitment

Appendix 7.9: Questions mq16 and oq09 – "Generally I put a lot of effort into being well-prepared for exams and assessments" – Mean Scores

Questions mq16 and oq09		Mean Score
At matriculation:	(early Oct 1999)	4.02
Month of Online Response:	Oct 1999	3.81
	Nov 1999	3.85
	Dec 1999	3.86
	Jan 2000	3.59
	Feb 2000	3.55
	Mar 2000	3.38
	Apr 2000	3.43
	May 2000	3.36
	Jun 2000	3.44

Appendix 7.10: Mean Response Scores Over Time

Question Short Text	Mean Scores		Online Scores												Online Monthly Slope	Sig.	(not analysed) Jul 2000
	Matric.	Online:	Oct 1999	Nov 1999	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000						
Average number of non-blank responses			3679	231	400	121	102	935	641	179	378	63			7		
(Enjoyed university (Enjoyed university [Family supportive [Family supportive (Lose friends	mq01	4.05	4.09	4.19	4.11	3.83	3.99	3.94	4.07	3.95	4.14	-0.026	0.000 ***		3.71		
	oq01																
	mq02	4.76	4.67	4.79	4.80	4.66	4.69	4.68	4.67	4.58	4.64	-0.020	0.000 ***		4.57		
	oq02																
	mq09	3.67															
(Lost friends (Not enough societies/clubs (Study effectively (Doing well academically (New friendships	oq03		3.70	3.63	3.50	3.62	3.54	3.58	3.63	3.57	3.67	-0.009	0.304		3.00		
	oq04		3.71	3.61	3.54	3.60	3.45	3.40	3.34	3.32	3.38	-0.051	0.000 ***		3.43		
	mq11	3.89															
	oq05		3.42	3.45	3.36	3.12	3.39	3.33	3.46	3.28	3.53	-0.013	0.059 *		2.71		
	mq05	4.41															
(New friendships (Not part of GU (Help with studies: staff easy (Help with studies: staff difficult (Well prepared for exams, etc	oq06		3.99	4.15	4.14	4.01	4.14	4.05	4.08	4.03	4.23	-0.003	0.657		4.57		
	oq07		3.82	3.92	3.83	3.64	3.77	3.53	3.68	3.51	3.72	-0.052	0.000 ***		3.57		
	mq10		3.40	3.38	3.40	3.28	3.37	3.27	3.18	3.30	3.28	-0.020	0.012 **		3.14		
	oq08																
	mq16	4.02															
(Well prepared for exams, etc (Friends studying same subject (Personal help from students difficult (Unsure what to study (Right subject choice	oq09		3.81	3.85	3.86	3.59	3.55	3.38	3.43	3.36	3.44	-0.079	0.000 ***		2.57		
	oq10		2.53	2.66	2.86	2.99	2.90	2.88	2.67	2.85	2.78	0.032	0.001 ***		2.86		
	oq11		3.57	3.73	3.89	3.80	3.74	3.70	3.90	3.71	3.88	0.012	0.159		3.57		
	mq03	4.09															
	oq12		3.90	4.05	4.11	3.41	3.68	3.57	3.62	3.47	3.60	-0.079	0.000 ***		3.57		
(Different institution: better job (Peer mentoring useful (Excluded from social activities (Induction programme useful (Difficulties with studies	oq13		4.20	4.34	4.39	4.01	4.09	4.07	4.07	4.03	4.10	-0.041	0.000 ***		4.43		
	oq14		2.07	2.03	2.08	2.25	2.29	2.41	2.30	2.31	2.67	0.055	0.000 ***		2.71		
	oq15		3.76	3.71	3.70	3.51	3.64	3.59	3.61	3.66	3.70	-0.015	0.052 *		3.71		
	oq16		3.34	2.71	2.65	3.22	2.80	2.64	3.08	2.95	3.17	-0.010	0.485		2.86		
	oq17		3.58	3.49	3.41	3.19	3.31	3.26	3.29	3.23	3.36	-0.043	0.000 ***		2.71		
(Different institution: work easier (Help with studies: students vs staff (Help with studies: left alone (Teaching study skills desirable (Know amount of effort	oq18		4.28	4.25	4.34	4.09	4.16	4.18	4.27	4.11	4.08	-0.020	0.001 ***		3.86		
	oq19		2.71	2.75	2.53	2.66	2.64	2.74	2.70	2.79	2.88	0.010	0.201		2.29		
	oq20		2.93	2.90	3.09	3.07	2.93	2.91	2.74	2.85	2.69	-0.018	0.028 **		2.71		
	oq21		2.26	2.22	2.43	2.39	2.37	2.43	2.44	2.47	2.55	0.036	0.000 ***		2.43		
	mq14	3.89															
(Not enough academic feedback (No preparation for university life (Expect big classes (Classes too big (Homesick	oq22		2.84	2.62	2.42	2.77	2.69	2.69	2.61	2.69	2.78	-0.001	0.908		3.14		
	oq23		3.21	3.15	3.21	2.83	3.04	3.09	2.96	2.98	3.03	-0.028	0.003 ***		1.86		
	mq15																
	oq24	4.03	3.10	3.43	3.26	3.01	3.18	3.25	3.02	3.09	3.33	-0.023	0.009 ***		3.71		
	oq25		3.89	3.70	3.43	3.68	3.78	3.72	3.89	3.87	3.85	0.015	0.098 *		4.00		

Question Short Text	Mean Scores Matric.	Online:												Online Monthly Slope	Sig.	(not analysed) Jul 2000
		Oct 1999	Nov 1999	Dec 1999	Jan 2000	Feb 2000	Mar 2000	Apr 2000	May 2000	Jun 2000						
Accommodation type Accommodation problems Accommodation/not enough help Personal problems (Know source of personal help	3.51	0.00 4.16 5.40 4.09	0.00 4.02 5.12 4.05	0.00 3.90 4.83 3.82	0.00 4.16 5.11 3.76	0.00 3.86 5.00 3.71	0.00 3.65 4.83 3.43	0.00 3.83 4.94 3.49	0.00 3.73 4.74 3.50	0.00 3.60 4.69 3.61	0.00 3.60 4.69 3.61	-0.064 -0.072 -0.096	0.000 *** 0.000 *** 0.000 ***	0.00 4.00 5.00 3.43		
(No source of personal help Personal help: students vs staff Financial difficulties Know source of financial help Subject content uninteresting		3.87 2.55 3.32 3.17 3.99	3.80 2.41 3.32 3.04 4.01	3.75 2.33 3.49 3.07 4.08	3.59 2.16 3.40 2.86 3.53	3.59 2.28 3.21 2.94 3.65	3.50 2.28 2.83 2.98 3.62	3.55 2.41 2.95 2.94 3.58	3.40 2.33 2.98 2.93 3.54	3.64 2.30 2.81 2.92 3.83	3.64 2.30 2.81 2.92 3.83	-0.060 -0.022 -0.075 -0.025 -0.071	0.000 *** 0.006 *** 0.000 *** 0.003 *** 0.000 ***	3.14 2.14 2.14 2.86 3.57		
Different institution: friends Discourage absenteeism Subject content meeting expectations Miss friends Daily travel limiting		4.29 2.84 3.45 2.87 3.01	4.24 2.74 3.58 2.60 3.14	4.30 2.74 3.34 2.55 3.12	4.01 2.78 3.16 2.63 3.21	4.19 2.67 3.24 2.93 3.18	4.15 2.55 3.20 2.89 3.20	4.23 2.49 3.30 2.88 3.29	4.11 2.57 3.28 3.02 3.24	4.23 2.59 3.45 2.98 3.43	4.23 2.59 3.45 2.98 3.43	-0.018 -0.041 -0.039 0.047 0.029	0.009 *** 0.000 *** 0.000 *** 0.000 *** 0.007 ***	4.00 2.71 3.00 2.86 2.86		
Family responsibilities limiting Paid work limiting Health problems limiting Committed to university education (GU right institution	4.16	4.41 4.12 5.16 4.62	4.53 4.33 5.10 4.66	4.89 4.90 5.42 4.55	4.35 4.35 4.81 4.42	4.49 4.43 4.94 4.47	4.49 4.26 4.82 4.48	4.25 3.96 4.69 4.48	4.27 4.07 4.65 4.37	4.25 3.86 4.53 4.53	4.25 3.86 4.53 4.53	-0.033 0.000 -0.080 -0.034	0.008 *** 0.000 *** 0.000 *** 0.000 ***	3.86 3.29 4.29 3.86		
(GU right institution Considering leaving GU Alternative course: different institution Alternative course: within GU Information source		4.31 4.56 3.05 2.72 0.00	4.30 4.59 3.11 2.81 0.00	4.36 4.62 3.17 2.99 0.00	4.06 4.31 2.85 2.68 0.00	4.17 4.33 2.93 2.72 0.00	4.17 4.24 2.89 2.71 0.00	4.18 4.32 2.88 2.74 0.00	4.08 4.18 2.96 2.77 0.00	4.23 4.42 3.00 2.78 0.00	4.23 4.42 3.00 2.78 0.00	-0.029 -0.059 -0.027 -0.006	0.000 *** 0.000 *** 0.004 *** 0.461	4.00 3.57 3.29 2.43 0.00		
(Found out about subject content (No prior knowledge of subject content Prior knowledge: difficulty of course (Last-minute decision (Should have found out more	3.71	2.99 2.81	3.21 2.77	3.33 2.90	2.94 2.44	2.95 2.55	2.94 2.60	2.88 2.61	2.79 2.49	2.83 2.60	2.83 2.60	-0.050 -0.042	0.000 *** 0.000 ***	2.57 2.29		
Future course development unclear (Career clear (Career clear Good job Financial worry	4.56	3.19 2.99	3.26 3.09	3.43 3.18	2.95 2.66	3.03 2.85	3.08 2.77	2.96 2.70	2.89 2.75	3.00 3.13	3.00 3.13	-0.049 -0.046	0.000 *** 0.000 ***	3.00 2.43		
(Leaving = waste of money (Financial implications considered (Unexpectedly expensive Loan amount Study time	3.45	3.28 3.90 3.17	3.32 3.99 2.98	3.32 3.90 3.04	2.65 3.33 3.11	3.14 3.76 2.98	2.90 3.59 2.67	2.88 3.49 2.78	2.99 3.47 2.76	3.24 3.73 2.45	3.24 3.73 2.45	-0.054 -0.068 -0.063	0.000 *** 0.000 *** 0.000 ***	2.71 3.86 2.00		
(Leaving = waste of money (Financial implications considered (Unexpectedly expensive Loan amount Study time	4.04	4.31	4.27	4.35	4.22	4.21	4.19	4.30	4.14	4.11	4.11	-0.021	0.007 ***	3.86		
(Financial implications considered (Unexpectedly expensive Loan amount Study time	2.98	2.44 3.22	2.32 3.04	2.32 3.01	2.46 2.91	2.32 3.05	2.36 2.90	2.22 2.79	2.24 2.79	2.11 2.58	2.11 2.58	-0.020 -0.054	0.026 ** 0.000 ***	2.29 3.00		
Study time Paid work time		2.52 4.37	2.67 4.71	2.44 5.10	2.14 4.68	2.22 4.71	2.15 4.56	2.19 4.34	1.96 4.47	2.02 4.15	2.02 4.15	-0.092 -0.031	0.000 *** 0.032 **	2.14 3.86		

* p ≤ 0.1; ** p ≤ 0.05; *** p ≤ 0.01

Appendix 7.11: Average Matriculation Scores with Online Equivalents

Matric Question	Short Text	Mean Score	Online Equivalent	Match (*)	Online Mean Score
mq01	Enjoyed university	4.05	oq01	comparable	4.01
mq02	Family supportive	4.76	oq02	comparable	4.69
mq03	Unsure what to study	4.09	oq12	comparable	3.70
mq04	Unpressurized decision	4.34	-	-	-
mq05	New friendships	4.41	oq06	comparable	4.09
mq06	Career clear	3.45	oq53	comparable	3.08
mq07	GU right institution	4.16	oq44	comparable	4.19
mq08	Last-minute decision	4.56	oq51	approx.	3.08
mq09	Lose friends	3.67	oq03	comparable	3.58
mq10	Help with studies: staff easy	3.60	oq08	comparable	3.33
mq11	Study effectively	3.89	oq05	approx.	3.37
mq12	Know source of personal help	3.51	oq30	approx.	3.60
mq13	Found out about subject content	3.71	oq49	comparable	2.97
mq14	Know amount of effort	3.89	oq22	approx.	2.68
mq15	Expect big classes	4.03	oq24	comparable	3.20
mq16	Well prepared for exams, etc	4.02	oq09	comparable	3.55
mq17	Financial implications considered	4.04	oq57	comparable	2.32
mq18	Study time	2.98	oq59	comparable	2.25

(*) A "comparable" match is one where the wording and scoring of the online question are either identical or nearly identical to the wording to the matriculation question; an "approx." match is one which probes the same issue, but with slightly different wording.

Appendix 7.12.1: Comparison of Matriculation and Online responses Over Time (1)

mq01 oq01	(not reversed) (not reversed)	I've really enjoyed my experience of university so far		I've really enjoyed my experience of university so far		Mean Online Score	N	Mean Matriculation Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:	Mean Online Score	Mean Matriculation Score	N								
		Oct 1999	4.09	3.98	230	4.09	232			+0.12	0.603	0.008	0.002
		Nov 1999	4.19	4.09	388	4.19	402			+0.08	0.352	0.042	0.812
		Dec 1999	4.11	4.17	120	4.11	122			-0.07	0.458	0.355	0.659
		Jan 2000	3.83	4.01	100	3.83	103			-0.18	0.441	0.044	0.216
		Feb 2000	3.99	4.09	916	3.99	942			-0.09	0.374	0.001	0.000
		Mar 2000	3.94	4.03	624	3.94	644			-0.08	0.379	0.025	0.000
		Apr 2000	4.07	4.12	173	4.07	180			-0.02	0.380	0.727	0.622
		May 2000	3.95	4.07	367	3.95	381			-0.13	0.399	0.005	0.000
		Jun 2000	4.14	4.03	61	4.14	64			+0.13	0.312	0.241	0.157
		Slope (monthly change)	-0.026	0.003		-0.026				-0.028			
		Sig.	0.000	0.669		0.000				0.000			

Appendix 7.12.2: Comparison of Matriculation and Online responses Over Time (2)

mq02	(not reversed)	My family is supportive of my coming to university									
oq02	(not reversed)	My family is supportive of my being at university									
For Respondents Answering in:		Mean Marticulation		Mean Online		N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity	
		Score	N	Score	N						
Oct 1999		4.74	231	4.67	232		-0.07	0.494	0.035	0.094	
Nov 1999		4.82	389	4.79	403		-0.03	0.364	0.180	0.002	
Dec 1999		4.82	122	4.80	122		-0.02	0.451	0.534	0.532	
Jan 2000		4.76	101	4.66	103		-0.10	0.457	0.049	0.209	
Feb 2000		4.79	923	4.69	940		-0.10	0.423	0.000	0.000	
Mar 2000		4.72	629	4.68	645		-0.04	0.455	0.049	0.392	
Apr 2000		4.76	176	4.67	180		-0.09	0.433	0.055	0.285	
May 2000		4.74	372	4.58	380		-0.17	0.424	0.000	0.107	
Jun 2000		4.74	61	4.64	64		-0.10	0.527	0.135	0.346	
Slope (monthly change)		-0.009		-0.020		-0.012					
Sig.		0.037		0.000		0.009					

Appendix 7.12.3: Comparison of Matriculation and Online responses Over Time (3)

mq03 oq12	(reversed) (not reversed)	I'm not sure what I want to study at university I made the right choice of subjects to study		Mean Online Score	N	Mean Matriculation Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:									
		Oct 1999	4.17	230	3.90	231	-0.27	0.535	0.000	0.000	0.000
		Nov 1999	4.33	391	4.05	403	-0.28	0.476	0.000	0.000	0.000
		Dec 1999	4.35	121	4.11	121	-0.24	0.544	0.010	0.011	0.011
		Jan 2000	3.96	101	3.41	103	-0.52	0.207	0.000	0.000	0.000
		Feb 2000	4.11	922	3.68	939	-0.44	0.359	0.000	0.000	0.000
		Mar 2000	4.04	626	3.57	642	-0.47	0.293	0.000	0.000	0.000
		Apr 2000	4.05	174	3.62	180	-0.43	0.255	0.000	0.000	0.000
		May 2000	4.00	371	3.47	381	-0.53	0.264	0.000	0.000	0.000
		Jun 2000	4.03	61	3.60	63	-0.43	0.191	0.008	0.002	0.002
		Slope (monthly change)	-0.042		-0.079		-0.036				
		Sig.	0.000		0.000		0.000				

Appendix 7.12.4: Comparison of Matriculation and Online responses Over Time (4)

mq05	(not reversed)	I expect to make a lot of new friendships with other students				I have lots of new friendships with other students							
oq06	(not reversed)												
For Respondents Answering in:		Mean Matriculation Score	N	Mean Online Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity				
Oct 1999		4.38	230	3.99	231	-0.39	0.344	0.000	0.000				
Nov 1999		4.49	391	4.15	400	-0.35	0.288	0.000	0.000				
Dec 1999		4.52	121	4.14	121	-0.38	0.403	0.000	0.000				
Jan 2000		4.40	100	4.01	103	-0.38	0.364	0.000	0.002				
Feb 2000		4.43	921	4.14	941	-0.29	0.327	0.000	0.000				
Mar 2000		4.37	628	4.05	643	-0.32	0.317	0.000	0.000				
Apr 2000		4.39	176	4.08	178	-0.28	0.444	0.000	0.002				
May 2000		4.45	367	4.03	367	-0.43	0.405	0.000	0.000				
Jun 2000		4.26	61	4.23	64	+0.03	0.421	0.766	0.475				
Slope (monthly change)		-0.009		-0.003		0.007							
Sig.		0.101		0.657		0.313							

Appendix 7.12.5: Comparison of Matriculation and Online responses Over Time (5)

mq06 oq53	(not reversed) (not reversed)	I'm coming to university because I have a clear idea of my future career		I have a clear idea of my future career		Mean Online Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:	Mean Matriculation Score	N							
		Oct 1999	3.65	231	3.28	232	-0.36	0.583	0.000	0.000	0.000
		Nov 1999	3.77	392	3.32	401	-0.48	0.694	0.000	0.000	0.000
		Dec 1999	3.79	120	3.32	120	-0.46	0.826	0.000	0.000	0.000
		Jan 2000	3.26	100	2.65	103	-0.57	0.603	0.000	0.000	0.000
		Feb 2000	3.52	924	3.14	938	-0.38	0.627	0.000	0.000	0.000
		Mar 2000	3.28	628	2.90	945	-0.40	0.612	0.000	0.000	0.000
		Apr 2000	3.32	176	2.88	179	-0.43	0.574	0.000	0.000	0.000
		May 2000	3.30	370	2.99	381	-0.32	0.526	0.000	0.000	0.000
		Jun 2000	3.67	61	3.24	63	-0.43	0.516	0.005	0.002	
		Slope (monthly change)	-0.064		-0.054		0.010				
		Sig.	0.000		0.000		0.295				

Appendix 7.12.6: Comparison of Matriculation and Online responses Over Time (6)

mq07 oq44	(not reversed) (not reversed)	Coming to the University of Glasgow rather than another university was the right decision		Coming to the University of Glasgow rather than another university was the right decision for me		Mean Matriculation Score	N	Mean Online Score	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:	Mean Matriculation Score	N	Mean Online Score	N						
		Oct 1999	4.08	231	4.31	232		+0.23		0.519	0.000	0.000
		Nov 1999	4.19	390	4.30	399		+0.10		0.443	0.008	0.000
		Dec 1999	4.34	121	4.36	121		+0.02		0.297	0.830	0.829
		Jan 2000	4.27	101	4.06	102		-0.20		0.278	0.038	0.066
		Feb 2000	4.20	923	4.17	938		-0.03		0.310	0.408	0.029
		Mar 2000	4.16	628	4.17	644		+0.01		0.301	0.715	0.438
		Apr 2000	4.15	174	4.18	179		+0.02		0.433	0.805	0.189
		May 2000	4.12	371	4.08	380		-0.04		0.288	0.505	0.047
		Jun 2000	4.13	61	4.23	64		+0.16		0.399	0.115	0.048
		Slope (monthly change)	-0.006		-0.029			-0.023				
		Sig.	0.315		0.000			0.004				

Appendix 7.12.7: Comparison of Matriculation and Online responses Over Time (7)

mq09 oq03	(reversed) (reversed)	I may lose friends as a result of coming to university I have lost friends as a result of coming to university		Mean Online Score	N	Mean Matriculation Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:									
		Oct 1999	3.45	231	3.70	232	+0.26	0.374	0.001	0.001	0.001
		Nov 1999	3.68	392	3.63	402	-0.05	0.440	0.349	0.037	0.037
		Dec 1999	3.66	122	3.50	122	-0.16	0.287	0.192	0.191	0.191
		Jan 2000	3.75	100	3.62	103	-0.13	0.433	0.258	0.105	0.105
		Feb 2000	3.66	921	3.54	940	-0.13	0.330	0.002	0.000	0.000
		Mar 2000	3.71	627	3.58	645	-0.13	0.388	0.009	0.000	0.000
		Apr 2000	3.60	176	3.63	180	+0.02	0.501	0.846	0.755	0.755
		May 2000	3.74	371	3.57	380	-0.17	0.374	0.010	0.000	0.000
		Jun 2000	3.74	61	3.67	64	-0.10	0.118	0.621	0.374	0.374
		Slope (monthly change)	0.021		-0.009		-0.031				
		Sig.	0.027		0.304		0.003				

Appendix 7.12.8: Comparison of Matriculation and Online responses Over Time (8)

mq10 oq08	(not reversed) (reversed)	For Respondents Answering in:	It will be easy to get help with my studies from the staff		It's difficult to ask the staff for advice or help with my studies		Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
			Mean Matriculation Score	N	Mean Online Score	N				
		Oct 1999	3.54	230	3.40	230	-0.14	0.277	0.021	0.033
		Nov 1999	3.61	390	3.38	401	-0.23	0.264	0.000	0.000
		Dec 1999	3.72	121	3.40	121	-0.32	0.277	0.000	0.000
		Jan 2000	3.53	100	3.28	102	-0.21	0.113	0.040	0.040
		Feb 2000	3.63	918	3.37	940	-0.26	0.229	0.000	0.000
		Mar 2000	3.56	624	3.27	642	-0.29	0.164	0.000	0.000
		Apr 2000	3.64	174	3.18	179	-0.45	0.249	0.000	0.000
		May 2000	3.62	371	3.30	381	-0.33	0.206	0.000	0.000
		Jun 2000	3.62	61	3.28	64	-0.34	0.395	0.007	0.014
		Slope (monthly change)	0.003		-0.020		-0.026			
		Sig.	0.593		0.012		0.003			

Appendix 7.12.9: Comparison of Matriculation and Online responses Over Time (9)

mq13 oq49	(not reversed) (reversed)	I have found out about the subject content of what I'll be studying this year Before I decided to come to University, I did not know what the subject content of my course would be		Mean Online Score		N	Mean Matriculation Score		N	Mean (Online less Matric) Scores		Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
For Respondents Answering in:														
Oct 1999			3.65	2.99	231	232	3.65	2.99	232	-0.66	0.319	0.000	0.000	0.000
Nov 1999			3.84	3.21	391	401	3.84	3.21	401	-0.62	0.310	0.000	0.000	0.000
Dec 1999			3.97	3.33	120	120	3.97	3.33	120	-0.65	0.336	0.000	0.000	0.000
Jan 2000			3.70	2.94	101	102	3.70	2.94	102	-0.73	0.274	0.000	0.000	0.000
Feb 2000			3.75	2.95	923	935	3.75	2.95	935	-0.81	0.176	0.000	0.000	0.000
Mar 2000			3.64	2.94	628	645	3.64	2.94	645	-0.70	0.206	0.000	0.000	0.000
Apr 2000			3.70	2.88	175	179	3.70	2.88	179	-0.83	0.203	0.000	0.000	0.000
May 2000			3.69	2.79	371	380	3.69	2.79	380	-0.90	0.259	0.000	0.000	0.000
Jun 2000			3.72	2.83	61	64	3.72	2.83	64	-0.87	0.167	0.000	0.000	0.000
Slope (monthly change)			-0.018	-0.050			-0.018	-0.050		-0.033				
Sig.			0.016	0.000			0.016	0.000		0.002				

Appendix 7.12.10: Comparison of Matriculation and Online responses Over Time (10)

		I expect that I'll be one of a large number of students all being taught in the same class									
		My classes are too big									
For	Respondents	Mean Matriculation Score	N	Mean Online Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity		
mq15	(not reversed)										
oq24	(reversed)										
	Answering in:										
	Oct 1999	4.03	228	3.10	228	-0.92	0.112	0.000	0.000		
	Nov 1999	3.95	392	3.43	402	-0.52	-0.158	0.000	0.000		
	Dec 1999	4.01	122	3.26	122	-0.75	-0.115	0.000	0.000		
	Jan 2000	4.31	100	3.01	103	-1.29	-0.026	0.000	0.000		
	Feb 2000	4.04	921	3.18	935	-0.85	-0.084	0.000	0.000		
	Mar 2000	4.01	628	3.25	644	-0.77	-0.099	0.000	0.000		
	Apr 2000	4.07	174	3.02	180	-1.04	-0.115	0.000	0.000		
	May 2000	4.02	369	3.09	381	-0.93	-0.187	0.000	0.000		
	Jun 2000	4.15	61	3.33	64	-0.82	0.010	0.000	0.000		
	Slope (monthly change)	0.006		-0.023		-0.027					
	Sig.	0.348		0.009		0.020					

Appendix 7.12.11: Comparison of Matriculation and Online responses Over Time (11)

mq16 oq09	(not reversed) (not reversed)	Generally I put a lot of effort into being well prepared for exams and assessments		Generally I put a lot of effort into being well prepared for exams and assessments		Mean Matriculation Score	N	Mean Online Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		For Respondents Answering in:	Mean Matriculation Score	Mean Online Score	Mean (Online less Matric) Scores								
		Oct 1999	4.07	3.81	-0.26	231	231	3.81	231	-0.26	0.480	0.000	0.000
		Nov 1999	4.18	3.85	-0.32	392	402	3.85	402	-0.32	0.502	0.000	0.000
		Dec 1999	4.34	3.86	-0.48	119	119	3.86	119	-0.48	0.387	0.000	0.000
		Jan 2000	4.13	3.59	-0.50	101	103	3.59	103	-0.50	0.360	0.000	0.000
		Feb 2000	4.08	3.55	-0.54	924	941	3.55	941	-0.54	0.397	0.000	0.000
		Mar 2000	3.96	3.38	-0.59	626	642	3.38	642	-0.59	0.400	0.000	0.000
		Apr 2000	4.02	3.43	-0.57	174	180	3.43	180	-0.57	0.384	0.000	0.000
		May 2000	3.92	3.36	-0.55	372	380	3.36	380	-0.55	0.460	0.000	0.000
		Jun 2000	4.05	3.44	-0.56	61	64	3.44	64	-0.56	0.296	0.000	0.000
		Slope (monthly change)	-0.036	-0.079	-0.044			-0.079		-0.044			
		Sig.	0.000	0.000	0.000			0.000		0.000			

Appendix 7.12.12: Comparison of Matriculation and Online responses Over Time (12)

mq17 oq57	(not reversed) (reversed)	I have carefully considered the financial implications of coming to university I did not realize how expensive being at university would be		Mean		N	Mean		N	Mean		N	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity
		Mean Matriculation Score	N	Mean Online Score	N	Mean (Online less Matric) Scores									
For Respondents Answering in:															
Oct 1999		3.97	230	2.44	230	-1.52							0.129	0.000	0.000
Nov 1999		4.13	392	2.32	400	-1.82							0.023	0.000	0.000
Dec 1999		4.17	120	2.32	120	-1.88							-0.050	0.000	0.000
Jan 2000		4.16	101	2.46	101	-1.71							-0.156	0.000	0.000
Feb 2000		4.10	922	2.32	930	-1.77							0.004	0.000	0.000
Mar 2000		4.07	626	2.36	642	-1.70							0.018	0.000	0.000
Apr 2000		3.99	176	2.22	179	-1.77							0.040	0.000	0.000
May 2000		3.97	371	2.24	379	-1.73							-0.066	0.000	0.000
Jun 2000		4.00	61	2.11	64	-1.89							-0.018	0.000	0.000
Slope (monthly change)		-0.012		-0.020		-0.007									
Sig.		0.064		0.026		0.558									

Appendix 7.12.13: Comparison of Matriculation and Online responses Over Time (13)

mq18	(reversed)	I expect that the average weekly amount of time I shall spend during term on study outside lectures, tutorials, labs, etc. will be:									
oq59	(reversed)	The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:									
For Respondents Answering in:		Mean Marticulation Score	N	Mean Online Score	N	Mean (Online less Matric) Scores	Matric vs Online: Spearman Corr	Sig. Paired Samples t-test	Sig. Marginal Homogeneity		
Oct 1999		3.03	229	2.52	231	-0.51	0.345	0.000	0.000		
Nov 1999		3.11	384	2.67	399	-0.43	0.297	0.000	0.000		
Dec 1999		3.16	121	2.44	121	-0.72	0.324	0.000	0.000		
Jan 2000		2.88	101	2.14	102	-0.73	0.405	0.000	0.000		
Feb 2000		3.04	910	2.22	930	-0.82	0.393	0.000	0.000		
Mar 2000		2.94	615	2.15	643	-0.78	0.308	0.000	0.000		
Apr 2000		3.05	172	2.19	179	-0.84	0.213	0.000	0.000		
May 2000		2.91	365	1.96	376	-0.93	0.345	0.000	0.000		
Jun 2000		2.92	59	2.02	64	-0.92	0.125	0.000	0.000		
Slope (monthly change)		-0.025		-0.092		-0.066					
Sig.		0.003		0.000		0.000					

Appendix 7.13: Parallel Forms Analysis – Online Questions Having Inconclusive Trends

Online Question	Short Text	Matric Question	Short Text
oq08	Help with studies: staff difficult	mq10	Help with studies: staff easy
oq24	Classes too big	mq15	Expect big classes
oq57	Unexpectedly expensive	mq17	Financial implications considered

Appendix 7.14: Parallel Forms Analysis – Online Questions Having Unadjusted Slopes Likely to be Too Steep

Online Question	Short Text	Matric Question	Short Text
oq02	Family supportive	mq02	Family supportive
oq09	Well prepared for exams, etc	mq16	Well prepared for exams, etc
oq12	Right subject choice	mq03	Unsure what to study
oq49	No prior knowledge of subject content	mq13	Found out about subject content
oq59	Study time	mq18	Study time

Appendix 7.15: Summary of Parallel Forms Analysis

	Online Question	Matric Question	Conclusion/comment
1	oq01	mq01	Accept unadjusted slope
2	oq02	mq02	Unadjusted slope too steep
3	oq12	mq03	Unadjusted slope too steep
4	oq06	mq05	(no slope)
5	oq53	mq06	Unadjusted slope wholly attributable to response bias
6	oq44	mq07	Accept unadjusted slope
7	oq03	mq09	Slope significant only after adjustment
8	oq08	mq10	No conclusion possible (poor matric/online correlations)
9	oq49	mq13	Unadjusted slope too steep
10	oq24	mq15	No conclusion possible (poor matric/online correlations)
11	oq09	mq16	Unadjusted slope too steep
12	oq57	mq17	No conclusion possible (poor matric/online correlations)
13	oq59	mq18	Unadjusted slope too steep

Appendix 7.16: Test-Retest Reliability

Online Question	Short Text	Spearman's Correlation Coefficient (t)	N	Change Per Day	Change Per Month	Sig. Paired Samples t-test	Sig.	Corr < 0.45, Slope Not sig.
oq01	Enjoyed university	0.51	319	-0.003	-0.083	0.021	**	
oq02	Family supportive	0.48	319	-0.001	-0.031	0.220		
oq03	Lost friends	0.40	318	-0.004	-0.118	0.039	**	
oq04	Not enough societies/clubs	0.55	318	-0.001	-0.040	0.336		
oq05	Doing well academically	0.44	319	-0.002	-0.057	0.148		Not reliable?
oq06	New friendships	0.56	317	-0.001	-0.034	0.310		
oq07	Not part of GU	0.55	317	-0.002	-0.051	0.235		
oq08	Help with studies: staff difficult	0.41	317	0.001	0.016	0.727		Not reliable?
oq09	Well prepared for exams, etc	0.59	318	-0.002	-0.068	0.074	*	
oq10	Friends studying same subject	0.52	317	0.003	0.087	0.103		
oq11	Personal help from students difficult	0.43	317	0.003	0.080	0.123		Not reliable?
oq12	Right subject choice	0.62	317	-0.004	-0.118	0.004	***	
oq13	Different institution: better job	0.43	314	0.000	-0.007	0.875		Not reliable?
oq14	Peer mentoring useful	0.45	316	0.001	0.034	0.408		
oq15	Excluded from social activities	0.55	316	-0.002	-0.051	0.226		
oq16	Induction programme useful	0.45	313	-0.001	-0.026	0.761		
oq17	Difficulties with studies	0.39	316	-0.005	-0.148	0.001	***	
oq18	Different institution: work easier	0.39	317	-0.001	-0.017	0.631		Not reliable?
oq19	Help with studies: students vs staff	0.46	315	0.000	0.003	0.957		
oq20	Help with studies: left alone	0.44	313	0.001	0.029	0.569		Not reliable?
oq21	Teaching study skills desirable	0.56	315	0.002	0.053	0.232		
oq22	Not enough academic feedback	0.36	314	-0.003	-0.090	0.088	*	
oq23	No preparation for university life	0.56	317	-0.003	-0.100	0.040	**	
oq24	Classes too big	0.58	317	-0.002	-0.057	0.171		
oq25	Homesick	0.64	307	0.001	0.023	0.619		
oq26	Accommodation type	.	316					
oq27	Accommodation problems	0.49	310	-0.002	-0.051	0.353		
oq28	Accommodation/not enough help	0.78	309	-0.001	-0.032	0.488		
oq29	Personal problems	0.48	309	-0.003	-0.083	0.116		
oq30	No source of personal help	0.48	308	0.001	0.024	0.609		
oq31	Personal help: students vs staff	0.43	316	-0.001	-0.024	0.619		Not reliable?
oq32	Financial difficulties	0.50	317	-0.002	-0.069	0.166		
oq33	Know source of financial help	0.39	314	-0.001	-0.030	0.564		Not reliable?
oq34	Subject content uninteresting	0.52	317	-0.005	-0.146	0.001	***	
oq35	Different institution: friends	0.56	314	-0.002	-0.059	0.069	*	
oq36	Discourage absenteeism	0.48	315	-0.001	-0.045	0.339		
oq37	Subject content meeting expectations	0.43	316	-0.005	-0.149	0.002	***	
oq38	Miss friends	0.52	316	-0.001	-0.022	0.674		
oq39	Daily travel limiting	0.67	313	0.000	0.013	0.784		
oq40	Family responsibilities limiting	0.52	315	-0.002	-0.063	0.333		
oq41	Paid work limiting	0.63	314	-0.002	-0.050	0.474		
oq42	Health problems limiting	0.51	314	-0.002	-0.053	0.371		
oq43	Committed to university education	0.48	318	-0.002	-0.055	0.050	*	
oq44	GU right institution	0.52	316	-0.004	-0.107	0.004	***	
oq45	Considering leaving GU	0.49	318	-0.003	-0.082	0.051	*	
oq46	Alternative course: different institution	0.47	316	-0.002	-0.069	0.220		
oq47	Alternative course: within GU	0.44	315	-0.001	-0.037	0.465		Not reliable?
oq48	Information source	.	313					
oq49	No prior knowledge of subject content	0.55	315	-0.004	-0.109	0.040	**	
oq50	Prior knowledge: difficulty of course	0.52	316	-0.004	-0.130	0.008	***	
oq51	Should have found out more	0.55	315	-0.002	-0.073	0.140		
oq52	Future course development unclear	0.50	311	-0.002	-0.048	0.377		
oq53	Career clear	0.71	318	-0.002	-0.069	0.153		
oq54	Good job	0.63	317	-0.002	-0.055	0.128		
oq55	Financial worry	0.56	315	-0.004	-0.124	0.011	**	
oq56	Leaving = waste of money	0.36	314	-0.002	-0.047	0.350		Not reliable?
oq57	Unexpectedly expensive	0.54	312	-0.001	-0.036	0.446		
oq58	Loan amount	0.67	296	0.000	-0.002	0.958		
oq59	Study time	0.55	315	0.001	0.043	0.372		
oq60	Paid work time	0.65	310	0.000	-0.003	0.960		

(t) p ≤ 0.001 in all cases

* p ≤ 0.1; ** p ≤ 0.05; *** p ≤ 0.01

Appendix 7.17: Test-Retest Analysis – High Values of Spearman's Rank Correlation Coefficient

Online Question	Short Text	Spearman's Correlation Coefficient
oq12	Right subject choice	0.62
oq25	Homesick	0.64
oq28	Accommodation/not enough help	0.78
oq39	Daily travel limiting	0.67
oq41	Paid work limiting	0.63
oq53	Career clear	0.71
oq54	Good job	0.63
oq58	Loan amount	0.67
oq60	Paid work time	0.65

Appendix 7.18: Comparison of Conclusions of Analyses of Changes Over Time in Online Responses

Monthly Changes in Average Responses (values for $p \leq .10$ only)		Appendix 7.10 Cohort Mean Changing?	Appendix 7.12: Parallel Forms Mean Changing?	Appendix 7.16: Test-Retest Mean Changing?
oq01	Enjoyed university	-0.026	-0.026	-0.083
oq02	Family supportive	-0.020	-0.012	.
oq03	Lost friends	.	.	-0.118
oq04	Not enough societies/clubs	-0.051	.	.
oq05	Doing well academically	-0.013	.	.
oq06	New friendships	.	.	.
oq07	Not part of GU	-0.052	.	.
oq08	Help with studies: staff difficult	-0.020	-0.031	.
oq09	Well prepared for exams, etc	-0.079	-0.044	-0.068
oq10	Friends studying same subject	0.032	.	.
oq11	Personal help from students difficult	.	.	.
oq12	Right subject choice	-0.079	-0.036	-0.118
oq13	Different institution: better job	-0.041	.	.
oq14	Peer mentoring useful	0.055	.	.
oq15	Excluded from social activities	-0.015	.	.
oq16	Induction programme useful	.	.	.
oq17	Difficulties with studies	-0.043	.	-0.148
oq18	Different institution: work easier	-0.020	.	.
oq19	Help with studies: students vs staff	.	.	.
oq20	Help with studies: left alone	-0.018	.	.
oq21	Teaching study skills desirable	0.036	.	.
oq22	Not enough academic feedback	.	.	-0.090
oq23	No preparation for university life	-0.028	.	-0.100
oq24	Classes too big	-0.023	.	.
oq25	Homesick	0.015	.	.
oq26	Accommodation type	.	.	.
oq27	Accommodation problems	-0.064	.	.
oq28	Accommodation/not enough help	-0.072	.	.
oq29	Personal problems	-0.096	.	.
oq30	No source of personal help	-0.060	.	.
oq31	Personal help: students vs staff	-0.022	.	.
oq32	Financial difficulties	-0.075	.	.
oq33	Know source of financial help	-0.025	.	.
oq34	Subject content uninteresting	-0.071	.	-0.146
oq35	Different institution: friends	-0.018	.	-0.059
oq36	Discourage absenteeism	-0.041	.	.
oq37	Subject content meeting expectations	-0.039	.	-0.149
oq38	Miss friends	0.047	.	.
oq39	Daily travel limiting	0.029	.	.
oq40	Family responsibilities limiting	-0.033	.	.
oq41	Paid work limiting	0.000	.	.
oq42	Health problems limiting	-0.080	.	.
oq43	Committed to university education	-0.034	.	-0.055
oq44	GU right institution	-0.029	-0.029	-0.107
oq45	Considering leaving GU	-0.059	.	-0.082
oq46	Alternative course: different institution	-0.027	.	.
oq47	Alternative course: within GU	.	.	.
oq48	Information source	.	.	.
oq49	No prior knowledge of subject content	-0.050	-0.033	-0.109
oq50	Prior knowledge: difficulty of course	-0.042	.	-0.130
oq51	Should have found out more	-0.049	.	.
oq52	Future course development unclear	-0.046	.	.
oq53	Career clear	-0.054	.	.
oq54	Good job	-0.068	.	.
oq55	Financial worry	-0.063	.	-0.124
oq56	Leaving = waste of money	-0.021	.	.
oq57	Unexpectedly expensive	-0.020	.	.
oq58	Loan amount	-0.054	.	.
oq59	Study time	-0.092	-0.066	.
oq60	Paid work time	-0.031	.	.

Appendix 7.19: Changes Suggested in Unadjusted Slopes by Parallel Forms and Test-Retest Analyses

Suggested direction of change to the unadjusted slopes:					
Online Q		Short Text	Parallel Forms Analysis:	Test-Retest Analysis:	Contradictory Direction?
1	oq01	Enjoyed university	no change	steeper	no
2	oq02	Family supportive	less steep	less steep	no
3	oq03	Lost friends	no change	steeper	no
4	oq06	New friendships	no change	no change	no
5	oq08	Help with studies: staff difficult	steeper	no conclusion	-
6	oq09	Well prepared for exams, etc	less steep	less steep	no
7	oq12	Right subject choice	less steep	steeper	yes
8	oq24	Classes too big	less steep	no conclusion	-
9	oq44	GU right institution	none	less steep	no
10	oq49	No prior knowledge of subject content	less steep	steeper	yes
11	oq53	Career clear	less steep	less steep	no
12	oq57	Unexpectedly expensive	less steep	no conclusion	-
13	oq59	Study time	less steep	less steep	no

Appendices to Chapter 8

Appendix 8.1: Multiple Logistic Regression Models for Persistence – Model Calibration and Model Discrimination

	All Leavers	Pre-Summer Leavers	Summer Leavers
Model Four			
Hosmer and Lemeshow: <i>p</i> -value	0.2769	0.1565	0.7534
Cut Value	0.89	0.94	0.95
Percentage correctly classified	62.03%	60.43%	60.50%
Model Five			
Hosmer and Lemeshow: <i>p</i> -value	0.4529	0.1801	0.4237
Cut Value	0.89	0.94	0.95
Percentage correctly classified	63.13%	59.88%	61.39%
Model Six			
Hosmer and Lemeshow: <i>p</i> -value	0.9431	0.7958	0.9407
Cut Value	0.89	0.94	0.95
Percentage correctly classified	61.18%	60.72%	64.64%

Appendix 8.2: Model Four – Multiple Logistic Regression Model for Persistence – Odds Ratios – All Leavers, Pre-Summer Leavers and Summer Leavers

Explanatory Variable/ Category	Reference Category	Odds Ratio		
		All Leavers	Pre-Summer Leavers	Summer Leavers
Faculty Category = Professional	Other Faculties	2.96 ***	3.43 **	2.81 **
Faculty Category = General	Other Faculties	1.43 **	1.09	1.93 **
Age Category < 19.5 years	Age >= 19.5 years	1.62 **	1.34	1.93 **
Residential Category = University	Other	1.58 ***	1.90 ***	1.28
Entry Qualification Route = Fifth-Year Qualifiers	Sixth-Year Qualifiers and Scottish Gap-Year Students	1.49 ***	1.53 **	1.42 *
Entry Point Score: One Entry Point	(scale variable)	1.05 ***	1.06 ***	1.05 ***

* p≤0.1; ** p≤0.05; *** p≤0.01

Appendix 8.3: Model Five – Multiple Logistic Regression Model for Persistence – Odds Ratios – All Leavers, Pre-Summer Leavers and Summer Leavers

Explanatory Variable/ Category	Reference Category	Odds Ratio		
		All Leavers	Pre-Summer Leavers	Summer Leavers
Main Effects				
Faculty Category = Professional	Other Faculties	0.19 †	0.01 †	1.47 †
Faculty Category = General	Other Faculties	3.87 †	1.41 †	11.07 †
Gender = Female	Male	2.71 †	2.34 †	3.45 †
Age Category < 19.5 years	Age >= 19.5 years	7.66 †	6.76 †	9.68 †
Social Group = Social Classes I-III; Armed Forces	Social Classes IV, V; Retired, Unemployed	1.00	1.15	0.81
Residential Category = University	Other	1.59 ***	1.78 **	1.39 *
Entry Qualification Route = Fifth-Year Qualifiers	Sixth-Year Qualifiers and Scottish Gap-Year Students	1.53 **	1.61 **	1.45 *
Entry Point Score: One Entry Point	(scale variable)	1.04 †	1.01 †	1.08†
Interactions				
Professional Faculties: Age < 19.5	Other Faculties: Age >= 19.5 years	0.29	0.28	0.26
General Faculties: Age < 19.5	Other Faculties: Age >= 19.5 years	0.16 **	0.15 **	0.15 **
Professional Faculties: One Entry Point	(scale variable)	1.15 **	1.29 ***	1.06
General Faculties: One Entry Point	(scale variable)	1.03	1.08 **	0.99
Females: One Entry Point	(scale variable)	0.96 **	0.96 *	0.95 **

* p ≤ 0.1; ** p ≤ 0.05; *** p ≤ 0.01; † see corresponding interaction term(s)

Appendix 8.4: Model Six – Multiple Logistic Regression Model for Persistence – Odds Ratios – All Leavers, Pre-Summer Leavers and Summer Leavers

Explanatory Variable/ Category	Reference Category	Odds Ratio		
		All Leavers	Pre-Summer Leavers	Summer Leavers
Main Effects				
Faculty Category = Professional	Other Faculties	2.95 ***	3.54 **	2.65 **
Faculty Category = General	Other Faculties	1.39 *	1.11	1.74 **
Gender = Female	Male	2.20 †	1.58 †	3.47 †
Age Category < 19.5 years	Age >= 19.5 years	1.65 **	1.36	2.01 **
Residential Category = University	Other	1.60 ***	1.92 ***	1.30
Entry Qualification Route = Fifth-Year Qualifiers	Sixth-Year Qualifiers and Scottish Gap-Year Students	1.47 **	1.52 **	1.40 *
Entry Point Score: One Entry Point	(scale variable)	1.08 †	1.08 †	1.07 †
Interaction				
Females: One Entry Point	(scale variable)	0.96 *	0.97	0.95 **

* p ≤ 0.1; ** p ≤ 0.05; *** p ≤ 0.01; † see corresponding interaction term(s)

Appendix 8.5: Summer and Pre-Summer Leavers, Analysed by Faculty Category

Faculty Category	Persisters	Pre-Summer Leavers	Summer Leavers	Overall Dropout %	Pre-Summer Dropout %	Summer Dropout %
Professional	607	8	14	3.5%	1.3%	2.2%
General	2,060	162	118	11.9%	6.9%	5.0%
Other	269	30	34	19.2%	9.0%	10.2%
Total	2,936	200	166	11.1%	6.1%	5.0%

Appendix 8.6: Summer and Pre-Summer Leavers, Analysed by Social Group

Social Group	Persisters	Pre-Summer Leavers	Summer Leavers	Overall Dropout %	Pre-Summer Dropout %	Summer Dropout %
Class I-III m, Forces	2,234	136	130	10.6%	5.4%	5.2%
Classes IV, V, Retired, Unemployed	585	49	31	12.1%	7.4%	4.7%
Total ‡	2,819	185	161	10.9%	5.8%	5.1%

‡ *Note: excluding 137 cases having missing data for Social Group*

Appendix 8.7: Social Group, Analysed by Residential Category

Social Group	Residential Category	
	University-Controlled	Other
Class I-IIIIm, Forces	1,227 (83.8%)	1,243 (74.7%)
Classes IV, V, Retired, Unemployed	238 (16.2%)	422 (25.3%)
Total ‡	1,465 (100.0%)	1,665 (100.0%)

‡ *Note: excluding 172 cases having missing data for Social Group or Residential Category*

Appendix 8.8: Faculty Category and Age Category Crosstabulated for Persisters, Pre-Summer Leavers and Summer Leavers separately

Faculty Category	Persisters		Pre-Summer Leavers		Summer Leavers	
	Age < 19.5	Age >=19.5	Age < 19.5	Age >=19.5	Age < 19.5	Age >=19.5
Professional	566	41	7	1	12	2
General	1,901	159	147	15	103	15
Other	258	11	24	6	26	8
Total	2,725	211	178	22	141	25

Appendices to Chapter 9

Appendix 9.1: Matriculation and Online Items Having Only Low Correlations with Other Items

Item	Short Text
mq04	Unpressurized decision
mq08	Last-minute decision
mq12	Know source of personal help
mq15	Expect big classes
oq10	Friends studying same subject
oq24	Classes too big
oq33	Know source of financial help
oq56	Leaving = waste of money
oq58	Loan amount

Appendix 9.2: Communalities

Using
Non-adjusted
Non-detrended
Online
Responses

oq41	Paid work limiting	0.803
oq60	Paid work time	0.735
oq55	Financial worry	0.731
oq32	Financial difficulties	0.715
oq53	Career clear	0.707
oq46	Alternative course: different institution	0.698
mq06	Career clear	0.698
oq44	GU right institution	0.690
mq02	Family supportive	0.674
oq05	Doing well academically	0.670
oq42	Health problems limiting	0.652
oq06	New friendships	0.649
oq17	Difficulties with studies	0.646
oq47	Alternative course: within GU	0.645
oq01	Enjoyed university	0.633
oq02	Family supportive	0.631
oq29	Personal problems	0.628
oq54	Good job	0.626
oq40	Family responsibilities limiting	0.623
oq45	Considering leaving GU	0.619
oq59	Study time	0.615
oq51	Should have found out more	0.606
oq09	Well prepared for exams, etc	0.605
oq12	Right subject choice	0.579
oq49	No prior knowledge of subject content	0.575
mq09	Lose friends	0.574
mq16	Well prepared for exams, etc	0.569
oq03	Lost friends	0.569
oq35	Different institution: friends	0.565
oq34	Subject content uninteresting	0.563
oq50	Prior knowledge: difficulty of course	0.558
oq07	Not part of GU	0.545
mq01	Enjoyed university	0.540
oq31	Personal help: students vs staff	0.530
oq13	Different institution: better job	0.530
oq08	Help with studies: staff difficult	0.527
oq57	Unexpectedly expensive	0.523
oq19	Help with studies: students vs staff	0.519
mq05	New friendships	0.516
mq18	Study time	0.513
oq52	Future course development unclear	0.513
oq15	Excluded from social activities	0.512
mq14	Know amount of effort	0.509
oq38	Miss friends	0.504
mq15	Expect big classes	0.503
oq30	No source of personal help	0.501
oq43	Committed to university education	0.498
mq10	Help with studies: staff easy	0.497
mq11	Study effectively	0.495
mq12	Know source of personal help	0.484
oq25	Homesick	0.469
mq07	GU right institution	0.469
oq37	Subject content meeting expectations	0.465
oq33	Know source of financial help	0.456
oq18	Different institution: work easier	0.454
mq03	Unsure what to study	0.452
oq20	Help with studies: left alone	0.442
mq08	Last-minute decision	0.435
oq39	Daily travel limiting	0.426
mq13	Found out about subject content	0.426
oq10	Friends studying same subject	0.424
oq56	Leaving = waste of money	0.423
oq22	Not enough academic feedback	0.421
mq17	Financial implications considered	0.410
oq23	No preparation for university life	0.406
oq27	Accommodation problems	0.400
oq58	Loan amount	0.399
oq11	Personal help from students difficult	0.398
mq04	Unpressurized decision	0.380
oq04	Not enough societies/clubs	0.372
oq24	Classes too big	0.323

Using
Detrended
Online
Responses

Comparison:
Non-detrended
less
Detrended
Communality

oq41	Paid work limiting	0.795	0.008
oq32	Financial difficulties	0.715	0.000
oq60	Paid work time	0.711	0.023
oq55	Financial worry	0.708	0.023
oq53	Career clear	0.699	0.008
oq46	Alternative course: different institution	0.695	0.003
mq06	Career clear	0.692	0.006
oq44	GU right institution	0.690	0.000
mq02	Family supportive	0.681	-0.007
oq42	Health problems limiting	0.651	0.000
oq47	Alternative course: within GU	0.646	-0.001
oq06	New friendships	0.646	0.004
oq02	Family supportive	0.643	-0.013
oq01	Enjoyed university	0.643	-0.010
oq17	Difficulties with studies	0.638	0.008
oq29	Personal problems	0.627	0.001
oq54	Good job	0.623	0.004
oq05	Doing well academically	0.622	0.048
oq59	Study time	0.620	-0.005
oq45	Considering leaving GU	0.614	0.004
oq40	Family responsibilities limiting	0.613	0.010
oq09	Well prepared for exams, etc	0.604	0.001
oq03	Lost friends	0.595	-0.026
oq12	Right subject choice	0.579	0.000
oq51	Should have found out more	0.575	0.031
oq35	Different institution: friends	0.570	-0.005
mq16	Well prepared for exams, etc	0.570	-0.001
mq09	Lose friends	0.568	0.007
oq49	No prior knowledge of subject content	0.568	0.007
oq50	Prior knowledge: difficulty of course	0.566	-0.008
oq34	Subject content uninteresting	0.563	0.000
oq07	Not part of GU	0.551	-0.005
mq01	Enjoyed university	0.547	-0.007
oq13	Different institution: better job	0.536	-0.006
oq08	Help with studies: staff difficult	0.532	-0.005
oq31	Personal help: students vs staff	0.529	0.001
mq05	New friendships	0.528	-0.012
mq15	Expect big classes	0.525	-0.021
mq12	Know source of personal help	0.524	-0.040
oq19	Help with studies: students vs staff	0.520	-0.001
oq52	Future course development unclear	0.513	0.000
oq57	Unexpectedly expensive	0.509	0.014
mq14	Know amount of effort	0.509	0.000
oq15	Excluded from social activities	0.507	0.005
mq10	Help with studies: staff easy	0.506	-0.009
oq30	No source of personal help	0.504	-0.003
oq43	Committed to university education	0.491	0.007
mq18	Study time	0.489	0.024
oq37	Subject content meeting expectations	0.488	-0.023
oq38	Miss friends	0.484	0.020
mq08	Last-minute decision	0.477	-0.043
mq11	Study effectively	0.476	0.019
mq07	GU right institution	0.474	-0.005
oq25	Homesick	0.464	0.005
oq20	Help with studies: left alone	0.458	-0.016
oq18	Different institution: work easier	0.456	-0.002
mq03	Unsure what to study	0.454	-0.001
oq33	Know source of financial help	0.453	0.003
mq13	Found out about subject content	0.426	0.000
oq11	Personal help from students difficult	0.425	-0.027
oq22	Not enough academic feedback	0.424	-0.003
oq56	Leaving = waste of money	0.423	0.000
oq23	No preparation for university life	0.414	-0.008
mq17	Financial implications considered	0.409	0.001
oq39	Daily travel limiting	0.400	0.026
mq04	Unpressurized decision	0.398	-0.018
oq27	Accommodation problems	0.394	0.006
oq58	Loan amount	0.383	0.016
oq10	Friends studying same subject	0.377	0.047
oq04	Not enough societies/clubs	0.357	0.015
oq24	Classes too big	0.327	-0.004

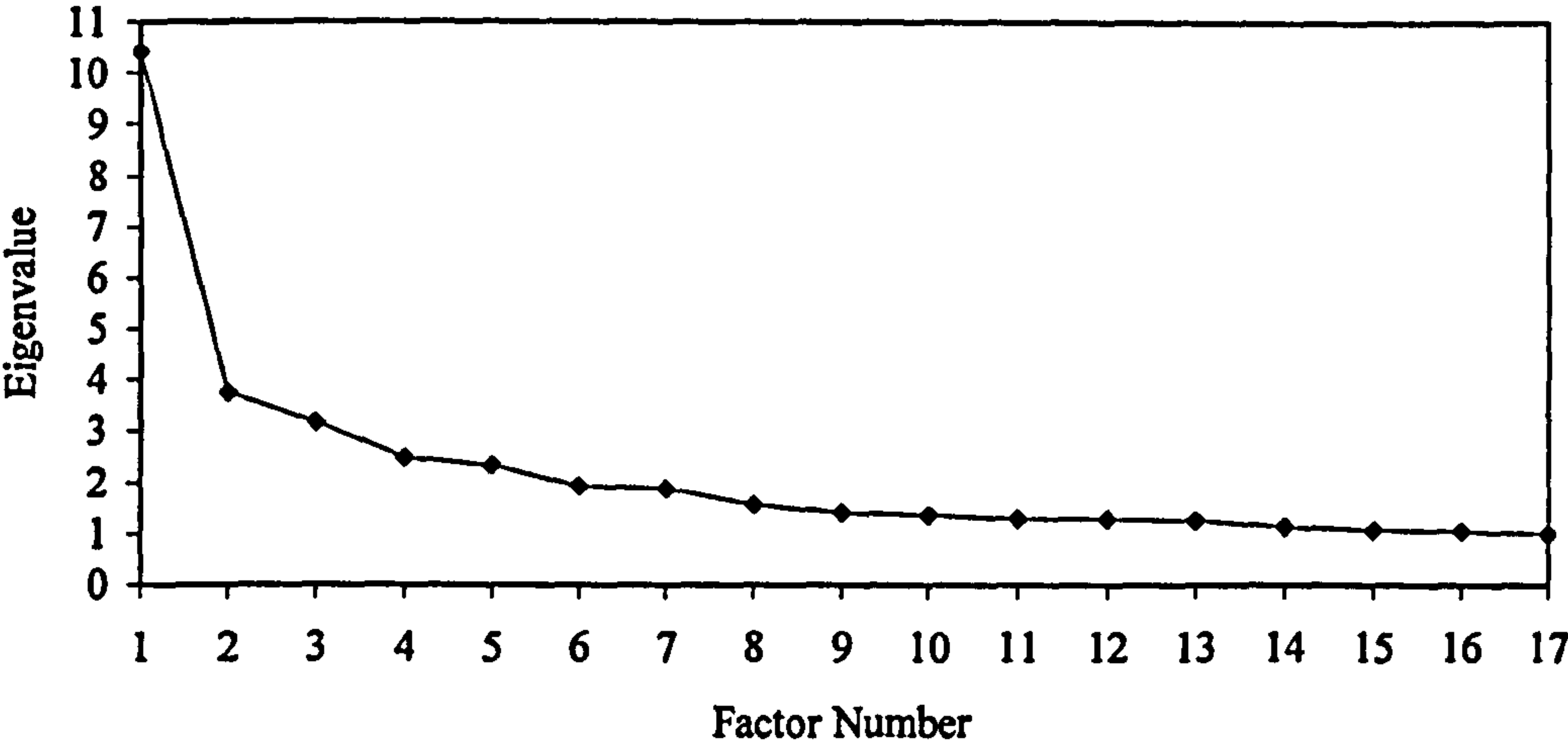
Appendix 9.3: Total Variance Explained by the 17 Factors Explaining the Greatest Variance, Using Unadjusted (Non-Detrended) Online Responses

Component	Initial Eigenvalue	Variance % Explained	Cumulative % Explained
1	10.441	14.7	14.7
2	3.762	5.3	20.0
3	3.175	4.5	24.5
4	2.481	3.5	28.0
5	2.322	3.3	31.2
6	1.921	2.7	33.9
7	1.870	2.6	36.6
8	1.555	2.2	38.8
9	1.413	2.0	40.8
10	1.363	1.9	42.7
11	1.304	1.8	44.5
12	1.289	1.8	46.3
13	1.265	1.8	48.1
14	1.143	1.6	49.7
15	1.086	1.5	51.3
16	1.064	1.5	52.8
17	1.008	1.4	54.2

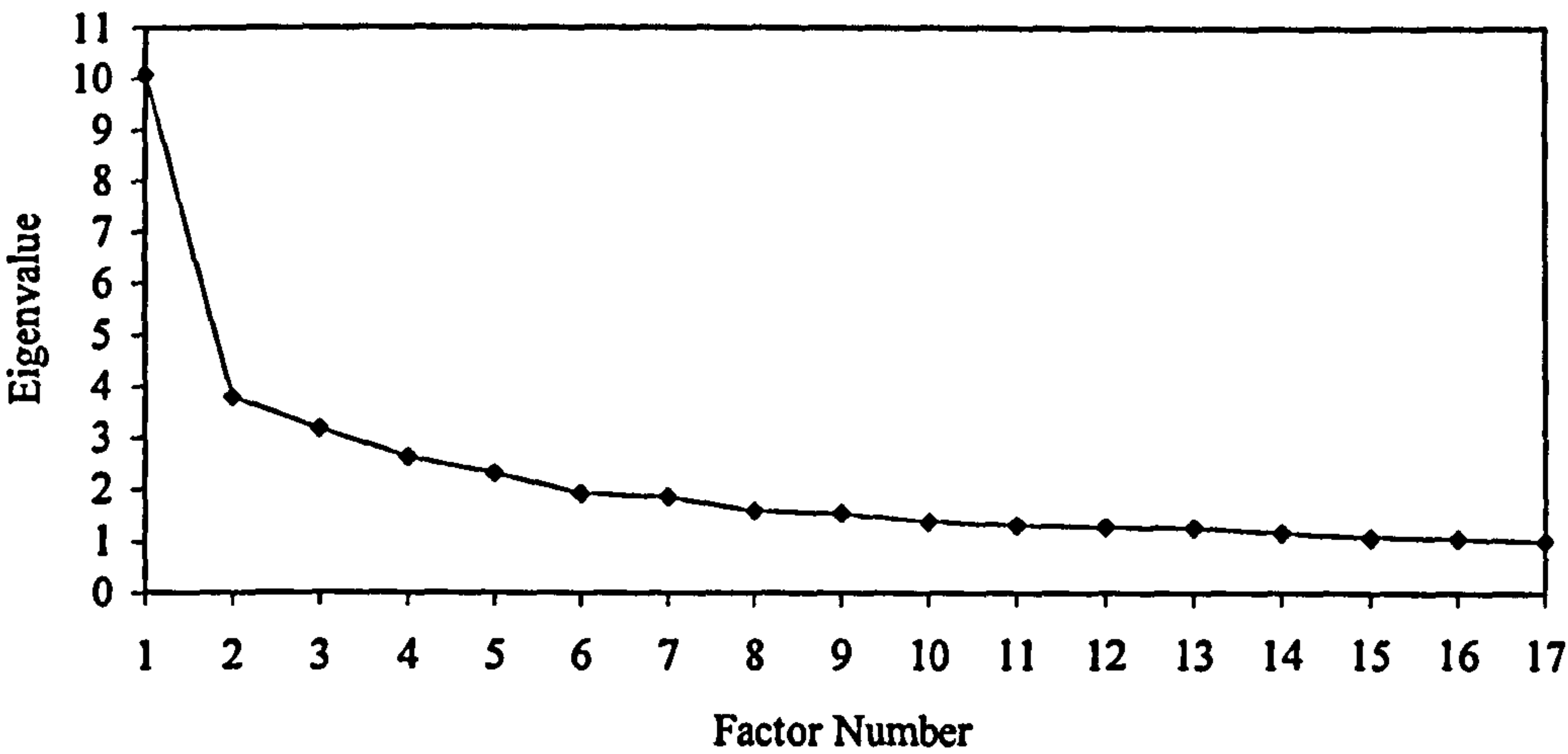
Appendix 9.4: Total Variance Explained by the 17 Factors Explaining the Greatest Variance, Using Detrended Online Responses

Component	Initial Eigenvalue	Variance % Explained	Cumulative % Explained
1	10.097	14.2	14.2
2	3.770	5.3	19.5
3	3.163	4.5	24.0
4	2.616	3.7	27.7
5	2.309	3.3	30.9
6	1.928	2.7	33.6
7	1.852	2.6	36.2
8	1.589	2.2	38.5
9	1.542	2.2	40.7
10	1.377	1.9	42.6
11	1.301	1.8	44.4
12	1.280	1.8	46.2
13	1.259	1.8	48.0
14	1.167	1.6	49.6
15	1.082	1.5	51.2
16	1.060	1.5	52.7
17	1.003	1.4	54.1

Appendix 9.5: Scree Plot – Non-Detrended Online Responses



Appendix 9.6: Scree Plot – Detrended Online Responses



Appendix 9.7: Rotated Component Matrix – Unadjusted (Non-Detrended) Items

■ = item (left) selected for component (top)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Commitment	Academic integration	Social integration	Expectations for the future	Financial concerns	Perspicacity at matriculation	Help and feedback	Time constraints	Academic self-concept	Self-assuredness at matriculation	Extraneous problems	Academic effort	Loss of friends & homesickness	Family support	Transfer awareness	Help anticipated at matriculation	Friends studying same subject	Last-minute decision
Cronbach's alpha	0.81	0.81	0.73	0.77	0.67	0.66	0.62	0.70	0.74	0.58	0.62	0.58	0.54	0.64	0.54	0.41	-	-
oq44 GU_right_instn	0.79																	
oq45 leaving_GU_r	0.71																	
oq13 diff_instn_job_r	0.64																	
oq35 diff_instn_frnds_r	0.63																	
oq43 cmmtd_univ_edn	0.57																	
oq18 diff_instn_easier_r	0.54																	
oq01 enjoy	0.52		0.38						0.27									
oq34 subj_uninteresting_r	0.43	0.38							0.29									
oq56 leaving_wastes_money	0.38				-0.28													
oq12 right_subj	0.37	0.37		0.35					0.29								-0.28	
oq50 prior_diffcilty_knwldg_r		0.72																
oq49 prior_subj_knwldg_r		0.71																
oq51 found_out_more_r		0.70																
oq52 crse_fut_unclear_r		0.51		0.39														
oq23 not_prep_univ_r		0.44							0.27									
oq37 subj_expected	0.30	0.42							0.30								0.25	
oq15 soc_excld_r			0.65															
oq06 new_frnds			0.62															
oq07 not_part_GU_r	0.39		0.57															
oq04 socs/clubs_r			0.54															
oq11 studs_pers_hlp_r			0.52															
oq30 no_pers_hlp_r			0.47							0.31								
oq24 classes_big_r		0.32	0.34															
oq53 career_clear			0.80															
mq06 career			0.78															
oq54 good_job	0.27		0.70															
mq03 sure_study_r			0.54															
oq55 fin_worry_r					0.82													
oq32 fin_diffs_r					0.81													
oq58 loan_amt					0.53													
oq57 expense_unexpected_r		0.30			0.50													
oq33 srce_fin_hlp_r					0.34		0.33										0.29	
mq14 know_effrt						0.63												
mq15 class_size						0.60												
mq17 fin_impins						0.55												
mq16 big_effrt						0.50					0.41							
mq13 know_subj						0.48												
mq11 study_well						0.44				0.29	0.32							
oq19 stff/stds_help_studies_r							0.67											
oq31 stdnt/stff_pers_hlp_r							0.64											
oq08 staff_help_studies_r			0.29				0.56											
oq20 studies_left_alone_r			0.33				0.46											
oq22 acad_feedbck_r							0.42											
oq41 work_lmtng_r								0.85										
oq60 work_time								0.83										
oq39 travel_lmtng_r								0.44										
oq05 acad_well									0.77									
oq17 diffs_study_r		0.28							0.64									
mq01 enjoy			0.27							0.63								
mq05 new_frnds			0.26							0.54								
mq07 gu_right	0.29									0.53								
mq04 my_decsn										0.37								
oq42 health_lmtng_r											0.26							
oq40 family_lmtng_r								0.41			0.75							
oq29 pers_probs_r			0.28							0.63								
oq27 accomm_probs_r				0.28						0.61								
oq59 study_time_r										0.30								
mq18 study_time_r											0.73							
oq09 big_effrt								0.42			0.65							
mq09 lose_frnds_r											0.49							
oq03 lost_friends_r												0.73						
oq38 miss_frnds_r												0.70						
oq25 homesick_r								-0.31				0.46					0.37	
mq02 family												0.33					0.27	
oq02 family													0.77					
oq46 diff_instn_crse_r													0.72					
oq47 diff_crse_GU_r														0.81				
mq12 know_pers_hlp														0.26				
mq10 staff_help_studies					0.27				0.34						0.60			
oq10 frnds_same_subj															0.47			
mq08 last_min_r									0.27							0.53		
																	-0.46	

Appendix 9.8: Rotated Component Matric – Detrended Items

 = item (left) selected for component (top)

Component	Component																	
	1	3	2	4	5	9	7	6	8	11	12	10	14	13	15	16	17	18
Cronbach's alpha	0.81	0.80	0.73	0.77	0.66	0.70	0.66	0.71	0.61	0.58	0.62	0.57	0.55	0.64	0.41	0.54	-	-
oq44 GU_right_instn	0.79																	
oq45 leaving_GU_r	0.71																	
oq35 diff_instn_frnds_r	0.65																	
oq13 diff_instn_job_r	0.63																	
oq43 cmmtd_univ_edn	0.56																	
oq01 enjoy	0.53		0.34							0.30								
oq18 diff_instn_easier_r	0.53																	
oq34 subj_uninteresting_r	0.44	0.36						0.34										
oq12 right_subj	0.38	0.35		0.34				0.33										
oq56 leaving_wastes_money	0.36				-0.29													
oq50 prior_diffcilty_knwldg_r		0.73														0.32		
oq49 prior_subj_knwldg_r		0.71																
oq51 found_out_more_r		0.65																
oq52 crse_fut_unclear_r		0.48		0.42														
oq23 not_prep_univ_r		0.45						0.27										
oq37 subj_expected	0.31	0.41						0.36										
oq15 soc_excl'd_r			0.65															
oq06 new_frnds	0.25		0.60							0.26								
oq07 not_part_GU_r	0.37		0.59															
oq04 socts/clubs_r			0.55															
oq11 studs_pers_hlp_r			0.51						-0.27									
oq30 no_pers_hlp_r			0.50								0.32							
oq24 classes_big_r		0.36	0.36															
oq53 career_clear				0.80														
mq06 career				0.78														
oq54 good_job				0.71														
mq03 sure_study_r				0.55														
oq55 fin_worry_r					0.81													
oq32 fin_diffs_r					0.80													
oq58 loan_amt					0.52													
oq57 expense_unexpected_r		0.30			0.51													
oq33 srce_fin_hlp_r			0.26		0.34				0.31							0.31		
oq41 work_lmtng_r						0.85												
oq60 work_time						0.82												
oq39 travel_lmtng_r						0.47												
mq15 class_size							0.64											
mq14 know_effrt							0.60											
mq17 fin_impins							0.53											
mq16 big_effrt							0.47					0.45						
mq13 know_subj							0.44									0.28		
mq11 study_well							0.40	0.26		0.28						0.29		
oq05 acad_well								0.67										
oq17 diff_study_r		0.31						0.64										
oq19 stff/sids_help_studies_r									0.68									
oq31 stdnt/stff_pers_hlp_r									0.66									
oq08 staff_help_studies_r			0.34						0.54									
oq20 studies_left_alone_r			0.37						0.44									
oq22 acad_feedbck_r		0.29							0.35				-0.26					
mq01 enjoy										0.84								
mq05 new_frnds										0.57					0.28			
mq07 gu_right	0.28									0.53								
mq04 my_decsn										0.39								
oq42 health_lmtng_r											0.75							
oq29 pers_probs_r			0.30								0.63							
oq40 family_lmtng_r					0.44						0.61							
oq27 accomm_probs_r				0.27							0.31							
oq59 study_time_r												0.74						
mq18 study_time_r												0.64						
oq09 big_effrt						0.43						0.51						
oq03 lost_friends_r													0.73					
mq09 lose_frnds_r													0.71					
oq38 miss_frnds_r													0.47				-0.30	
oq25 homesick_r					-0.32					0.26			0.32					
mq02 family														0.78				
oq02 family														0.74				
mq12 know_pers_hlp															0.68			
mq10 staff_help_studies									0.28						0.55			
oq46 diff_instn_crse_r																0.81		
oq47 diff_crse_GU_r																0.76		
mq08 last_min_r									0.28								0.53	
oq10 frnds_same_subj																	-0.46	

Appendix 9.9: Initial Constructs Compared with Empirically Derived Components

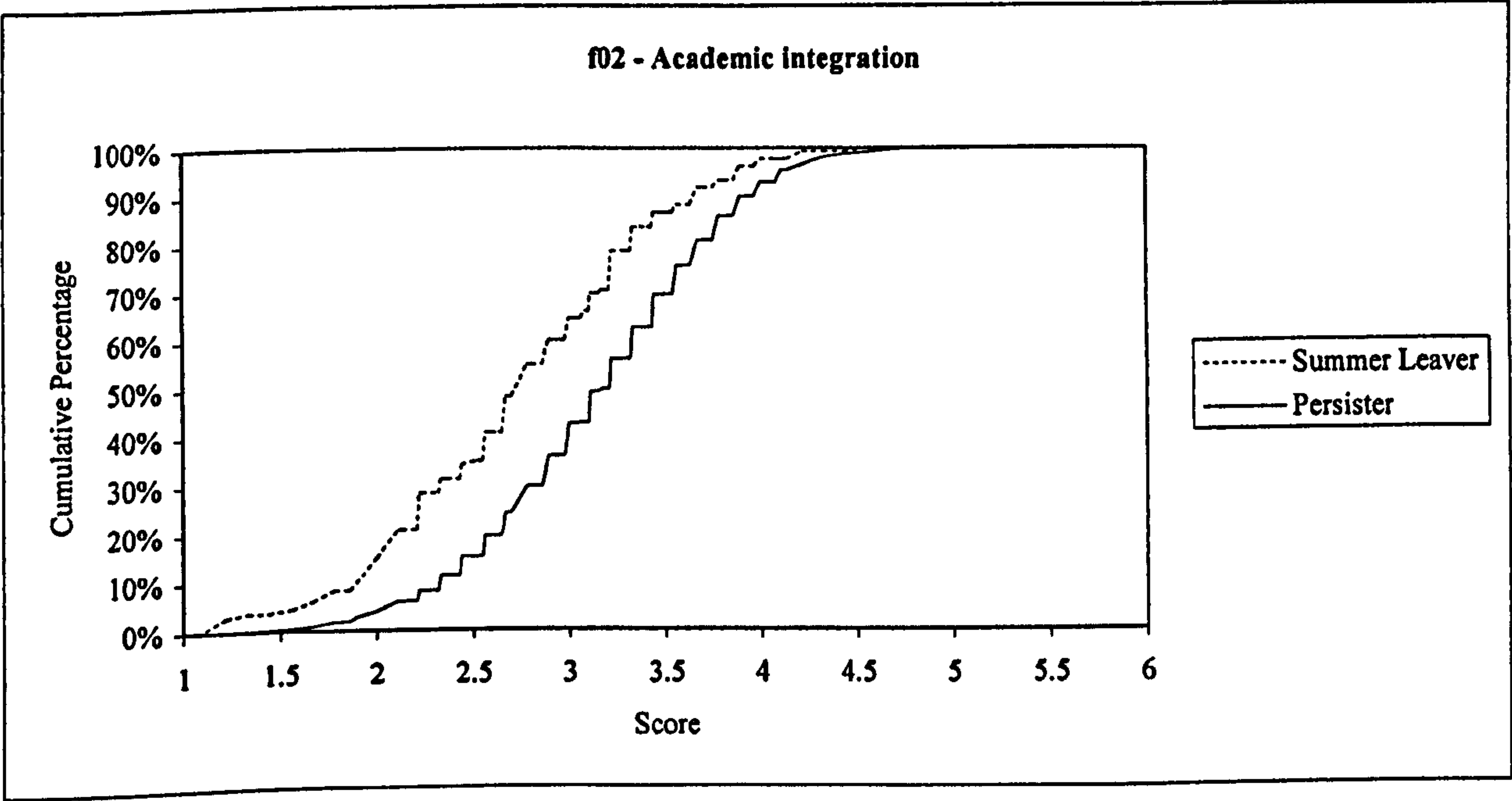
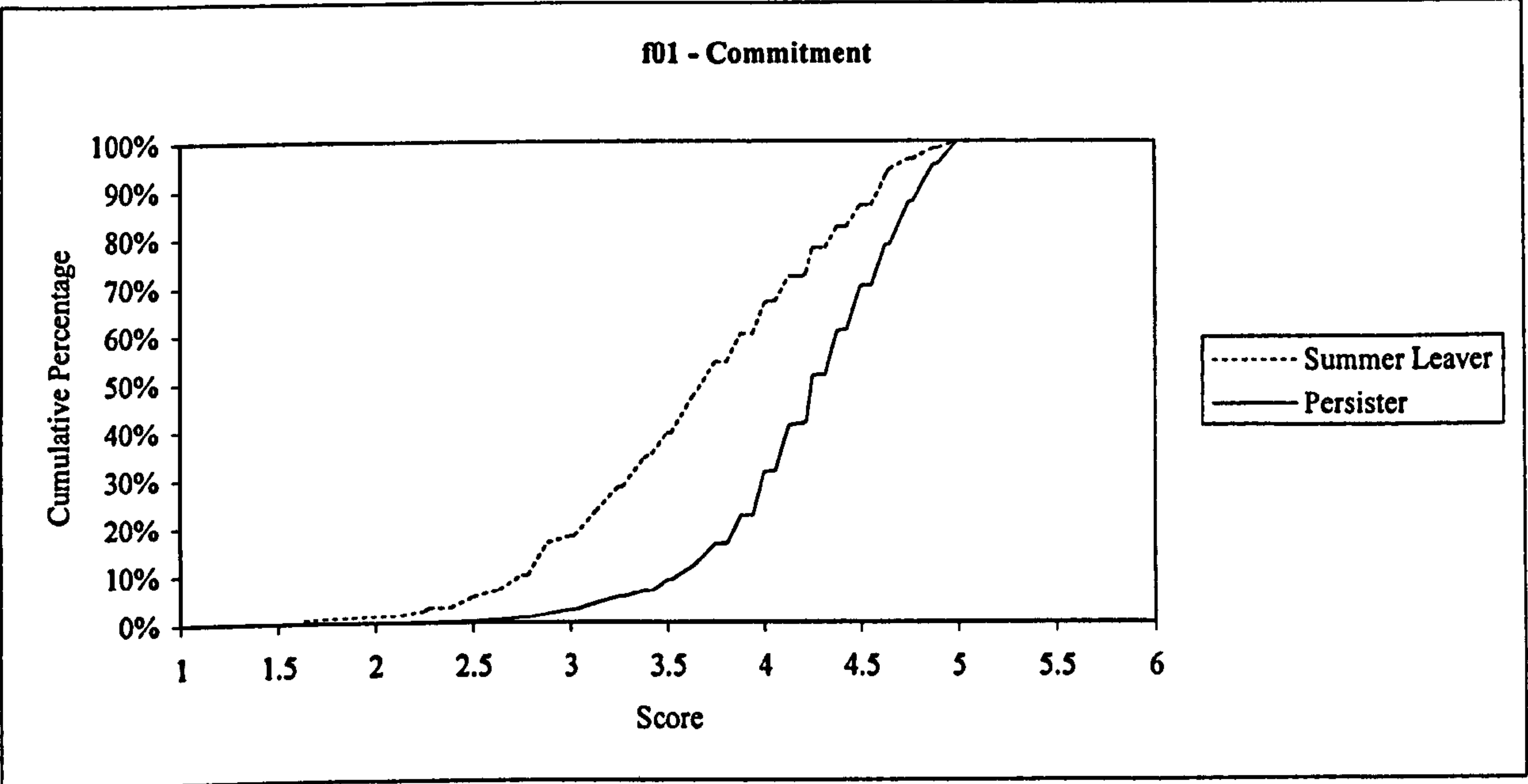
Component (empirically derived)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	.
Initial Construct (Ch 6)		Commitment	Academic integration	Social integration	Expectations for the future	Financial concerns	Perplexity at matric	Help and feedback	Time constraints	Academic self-concept	Self-assuredness at matric	Extraneous problems	Academic effort	Loss of friends & homesickness	Family support	Transfer awareness	Help anticipated at matric	Friends studying same subject	Last-minute decision	(dropped from analysis)
1 Backgr'nd Charact's	oq26 Accommodation type																			.
2 Frame of Mind	oq01 Enjoyed university	.																		.
	mq01 Enjoyed university									.										
3 Family and friends' support	mq04 Unpressurized decision									.										
	mq09 Lose friends												.							
	mq02 Family supportive												.							
	oq02 Family supportive												.							
4 Goal commitment 1	mq03 Unsure what to study			.																
	mq06 Career clear			.																
	mq13 Found out about subject content					.														
	mq08 Last-minute decision																		.	
5 Inst'l commitment 1	mq07 GU right institution									.										
6 Expectations	mq15 Expect big classes					.														
	mq10 Help with studies: staff easy															.				
	mq12 Know source of personal help															.				
7 Study time	mq14 Know amount of effort					.														
	mq18 Study time											.								
	oq59 Study time											.								
8 Academic integration	oq12 Right subject choice	.																		
	oq23 No preparation for university life	.																		
	oq24 Classes too big	.																		
	oq34 Subject content uninteresting	.																		
	oq37 Subject content meeting expectations	.																		
	oq49 No prior knowledge of subject content	.																		
	oq50 Prior knowledge: difficulty of course	.																		
	oq51 Should have found out more	.																		
9 Help and feedback	oq08 Help with studies: staff difficult						.													
	oq19 Help with studies: students vs staff						.													
	oq20 Help with studies: left alone						.													
	oq22 Not enough academic feedback						.													
10 Academic self-concept	mq11 Study effectively					.														
	mq16 Well prepared for exams, etc					.														
	oq05 Doing well academically								.											
	oq17 Difficulties with studies								.											
	oq09 Well prepared for exams, etc											.								
11 Info source	oq48 Information source												.							.
12 Social integration	oq35 Different institution: friends	.																		
	oq04 Not enough societies/clubs		.																	
	oq06 New friendships		.																	
	oq07 Not part of GU		.																	
	oq11 Personal help from students difficult		.																	
	oq15 Excluded from social activities		.																	
	oq30 No source of personal help		.																	
	oq31 Personal help: students vs staff		.																	
	mq05 New friendships						.													
	oq03 Lost friends									.				.						
	oq25 Homesick												.	.						
	oq38 Miss friends												.	.						
13 Goal commitment 2	oq43 Committed to university education	.																		
	oq52 Future course development unclear		.																	
	oq53 Career clear				.															
	oq54 Good job				.															
14 Inst'l commitment 2	oq13 Different institution: better job	.																		
	oq18 Different institution: work easier	.																		
	oq44 GU right institution	.																		
	oq46 Alternative course: different institution														.					
	oq47 Alternative course: within GU														.					
15 Extraneous problems	oq39 Daily travel limiting						.													
	oq27 Accommodation problems										.									
	oq29 Personal problems										.									
	oq40 Family responsibilities limiting										.									
	oq42 Health problems limiting										.									
	oq28 Accommodation/not enough help																			.
16 Finances and Paid Work	oq56 Leaving = waste of money	.																		
	oq32 Financial difficulties			.																
	oq33 Know source of financial help			.																
	oq55 Financial worry			.																
	oq57 Unexpectedly expensive			.																
	oq58 Loan amount			.																
	mq17 Financial implications considered					.														
	oq41 Paid work limiting						.													
	oq60 Paid work time						.													
17 Intention to persist	oq45 Considering leaving GU	.																		

Appendix 9.10: Summary of Derived Components (plus one Observed Variable)

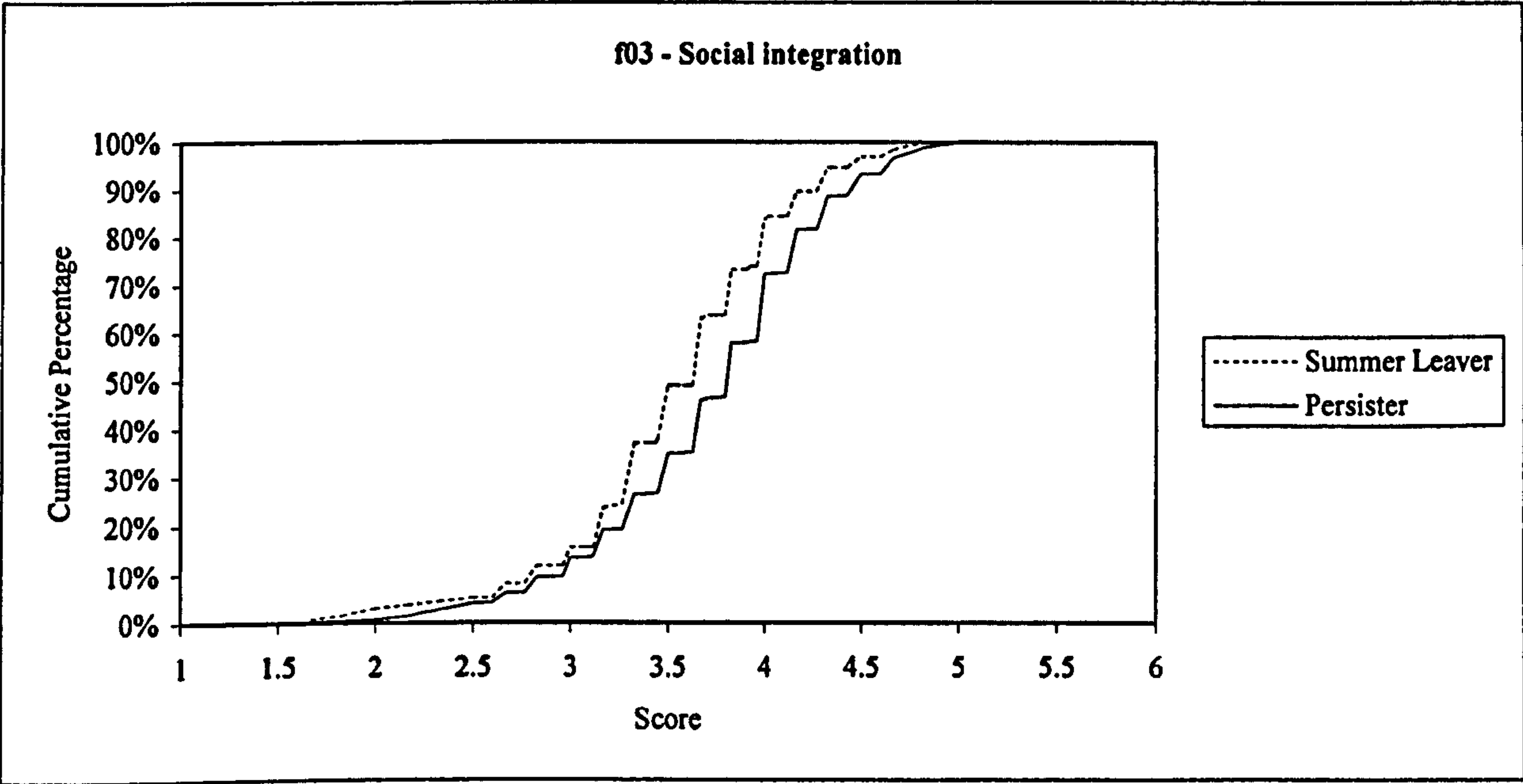
Component		No. of matric items	No. of online items
1	Commitment	0	8
2	Academic integration	0	9
3	Social integration	0	6
4	Expectations for the future	2	2
5	Financial concerns	0	5
6	Perspicacity at matriculation	6	0
7	Help and feedback	0	5
8	Time constraints	0	3
9	Academic self-concept	0	2
10	Self-assuredness at matriculation	4	0
11	Extraneous problems	0	4
12	Academic effort	1	3
13	Loss of friends & homesickness	1	3
14	Family support	1	1
15	Transfer awareness	0	2
16	Help anticipated at matriculation	2	0
17	Friends studying same subject	0	1
(n/a)	Last-minute decision (mq08)	1	0
Total		18	54

Appendices to Chapter 10

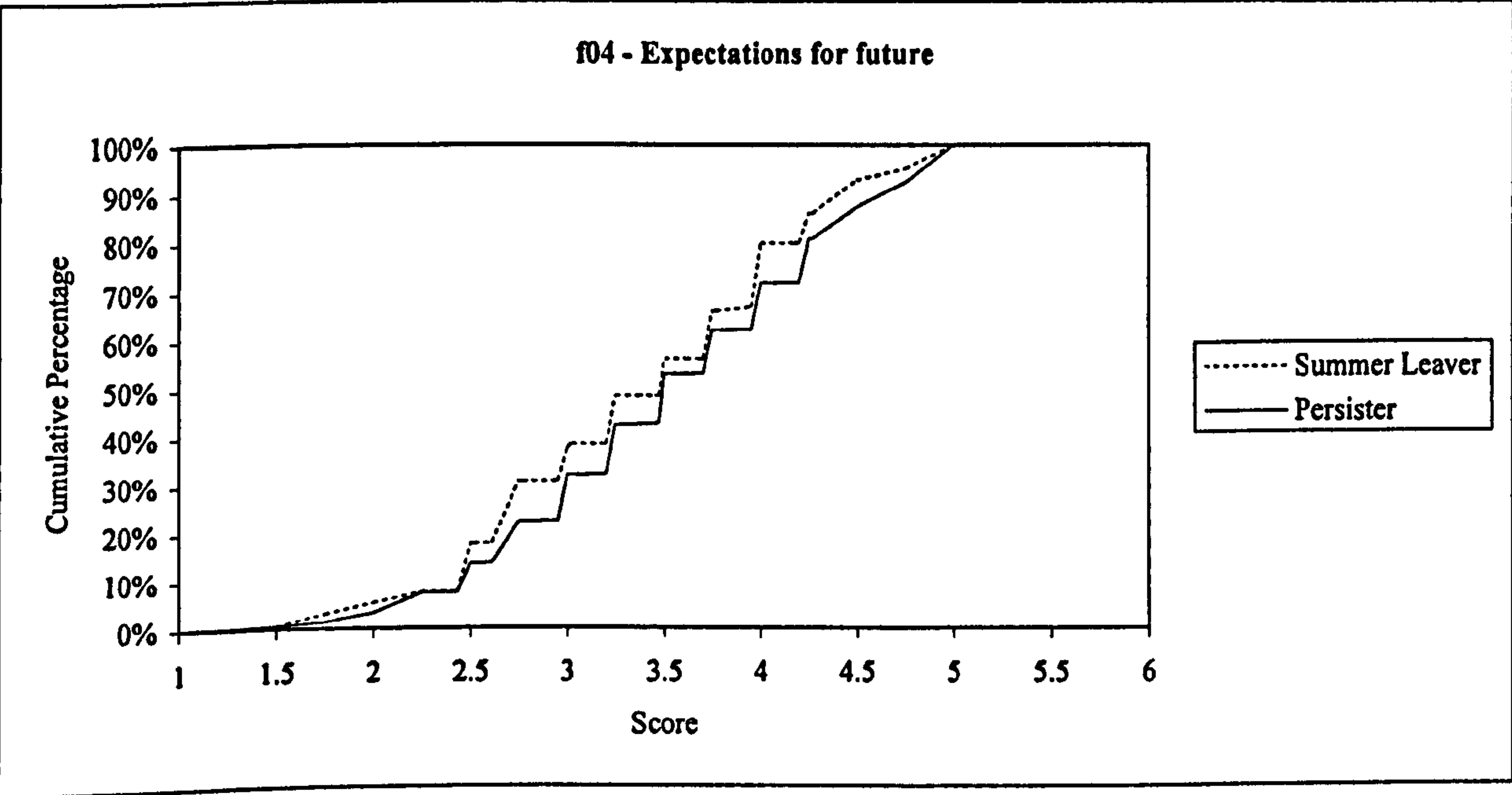
Appendix 10.1: Cumulative Frequency Polygons for Summer Leavers and Persisters

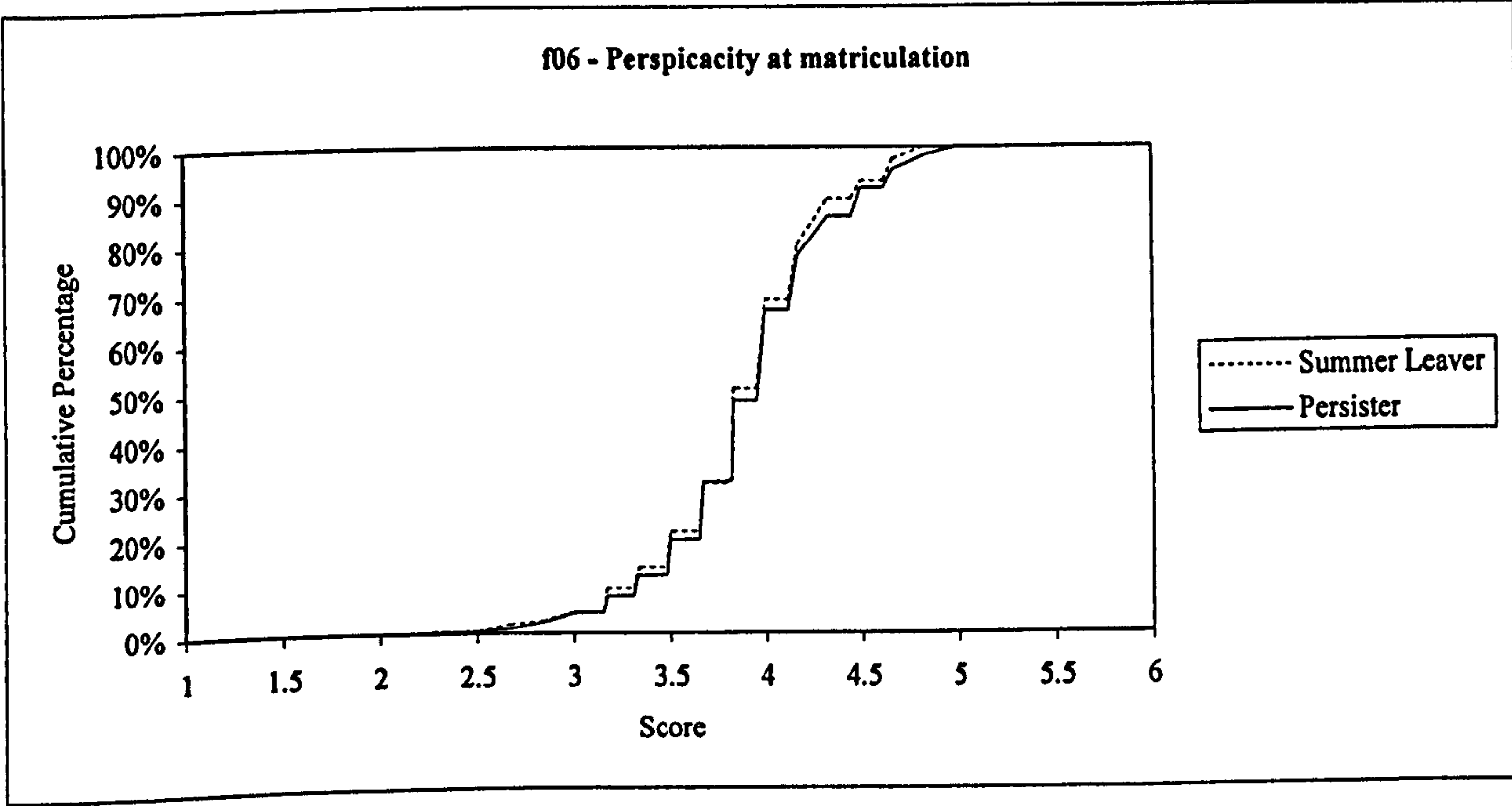
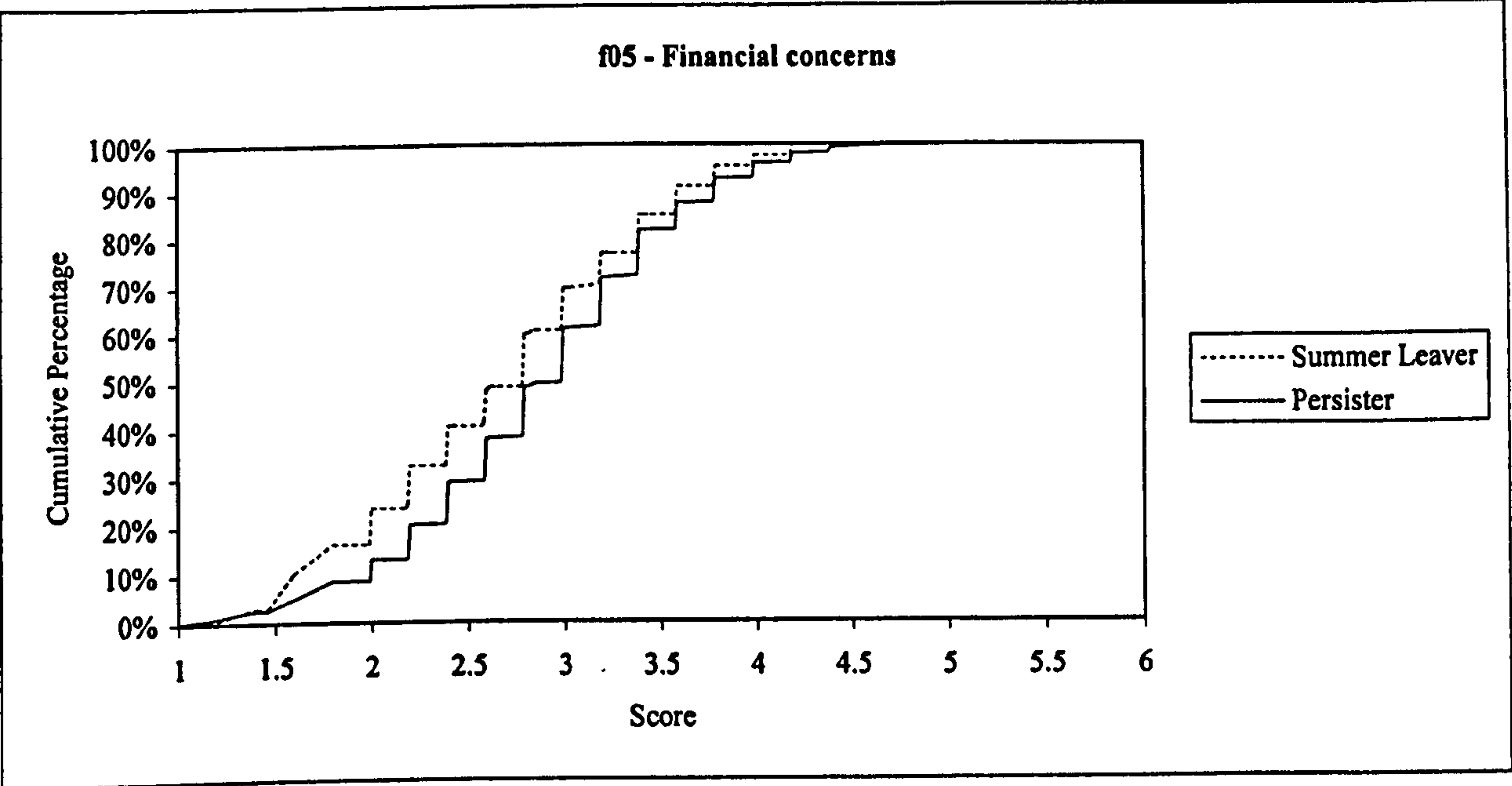


f03 - Social integration

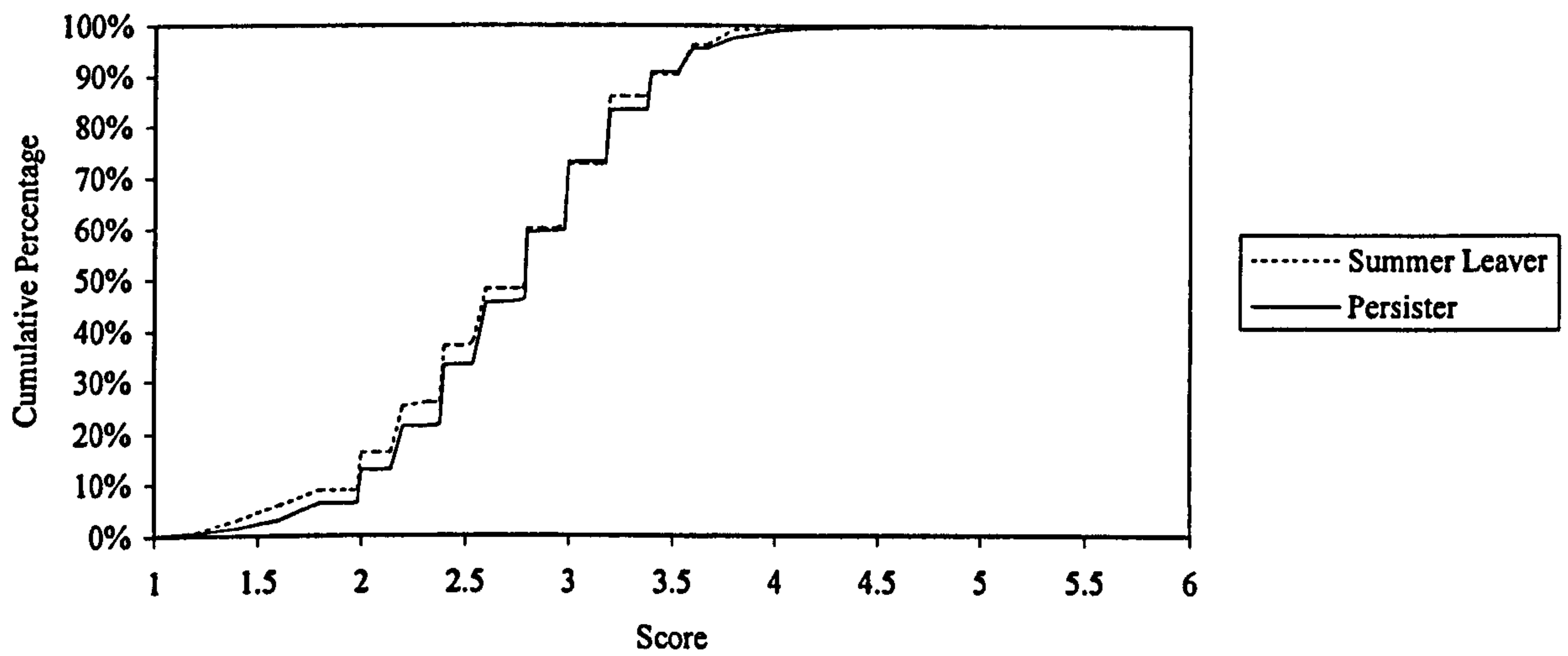


f04 - Expectations for future

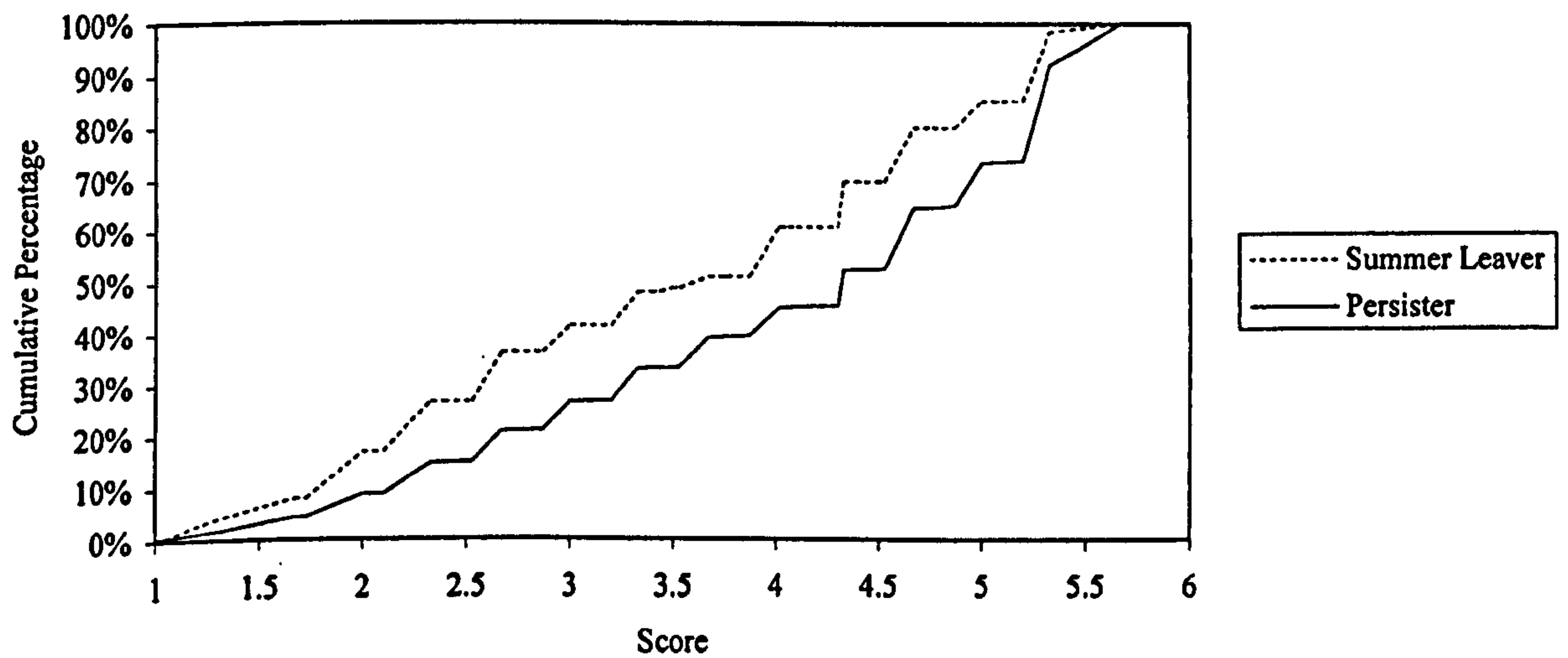


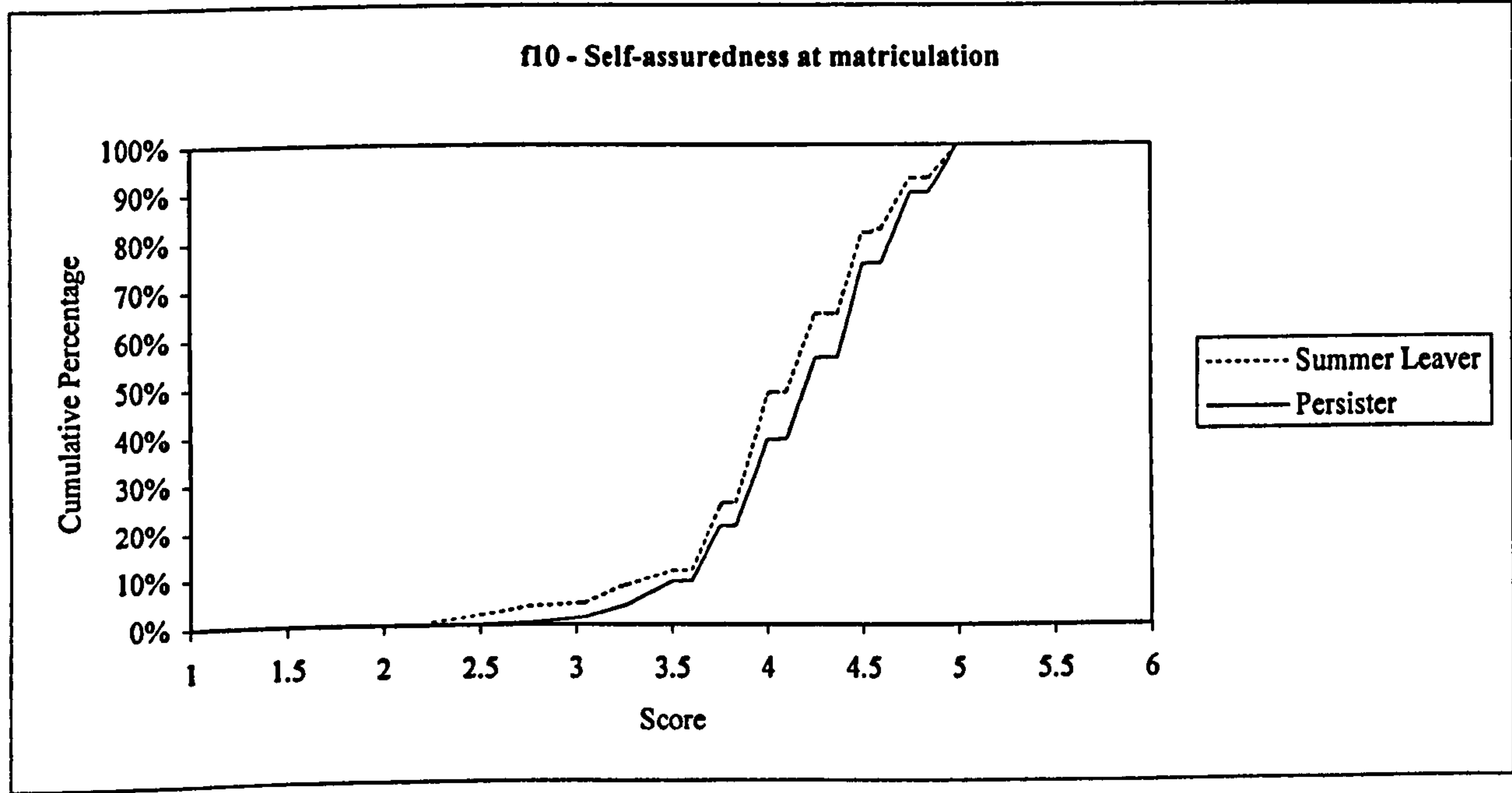
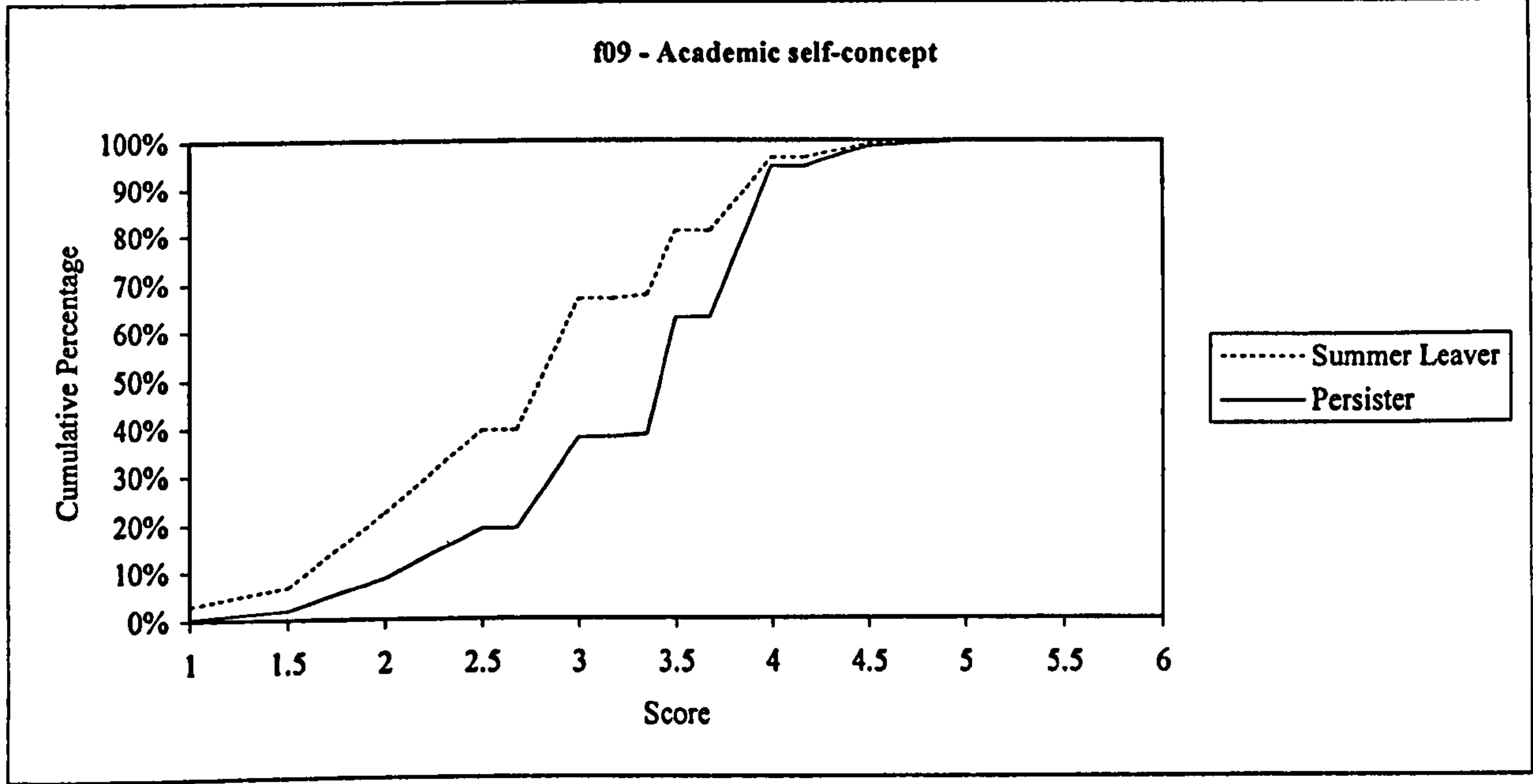


f07 - Help and feedback

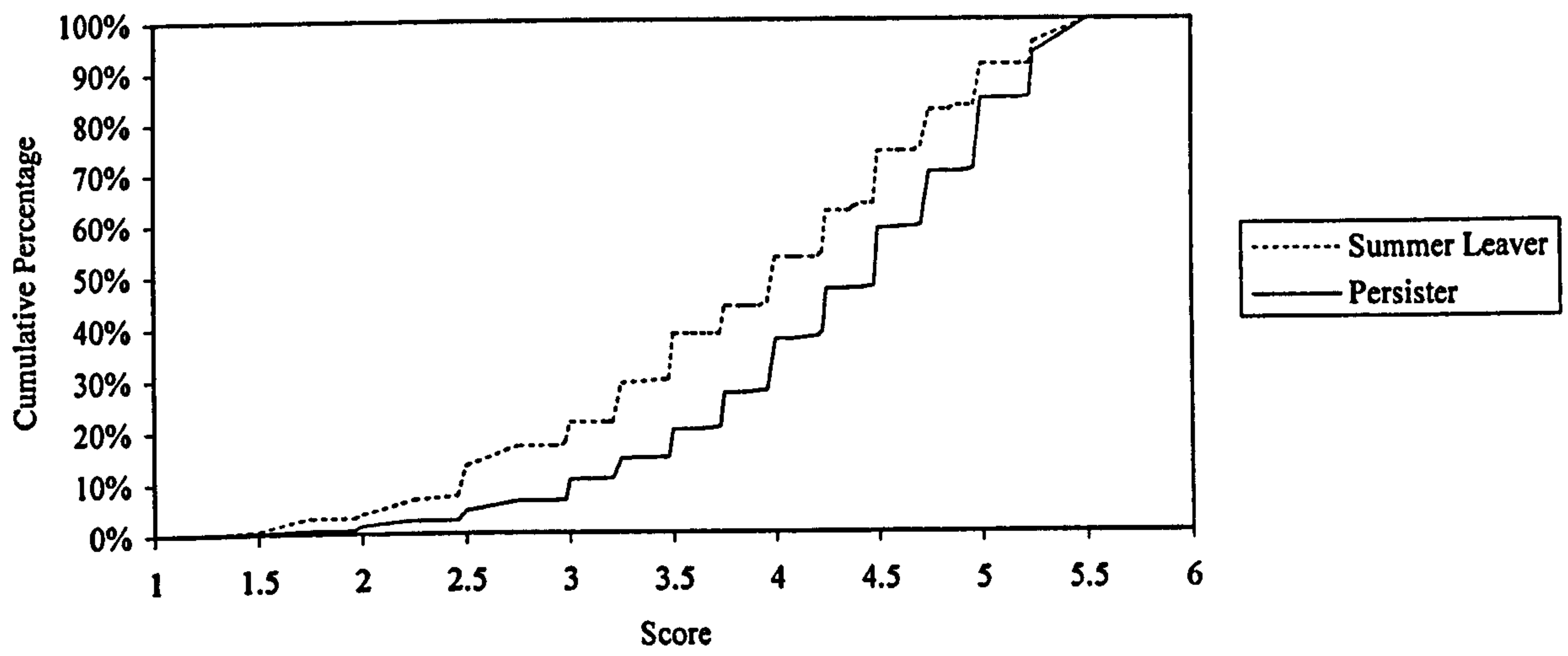


f08 - Time constraints

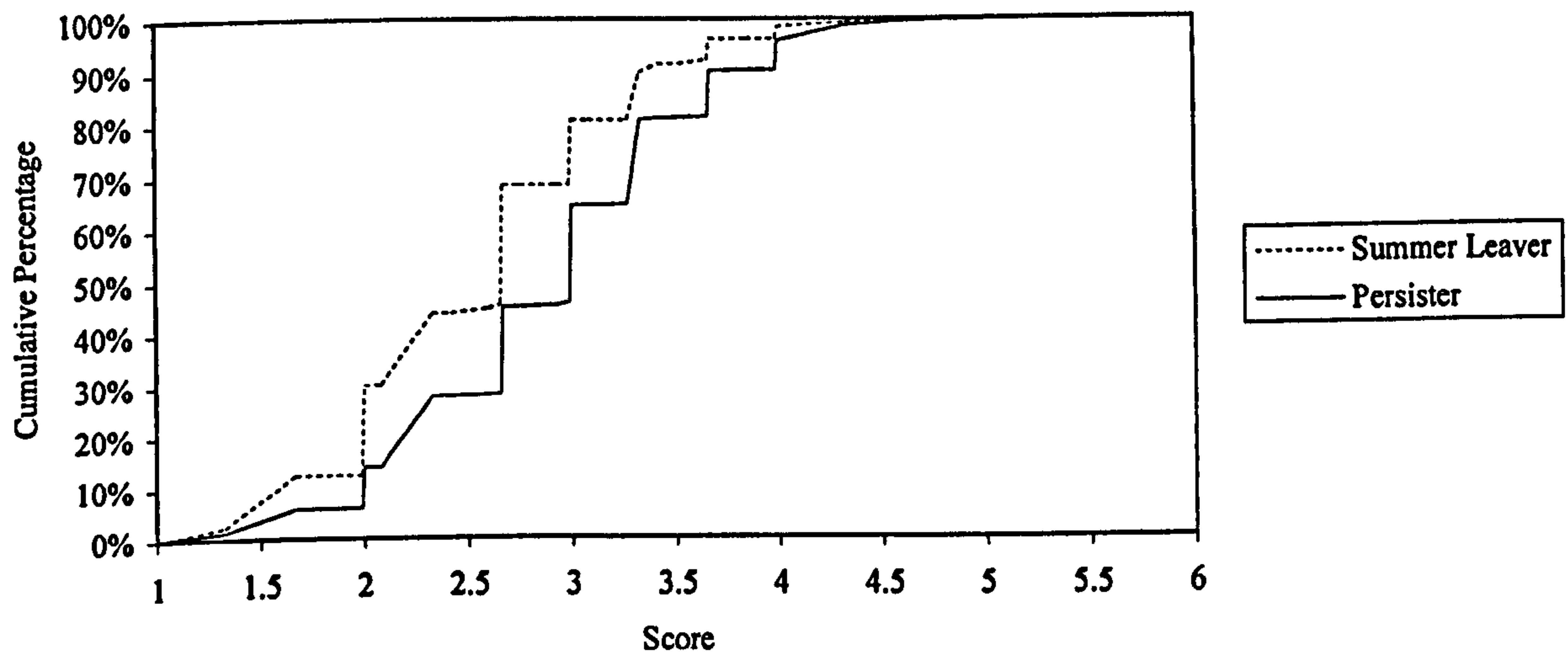




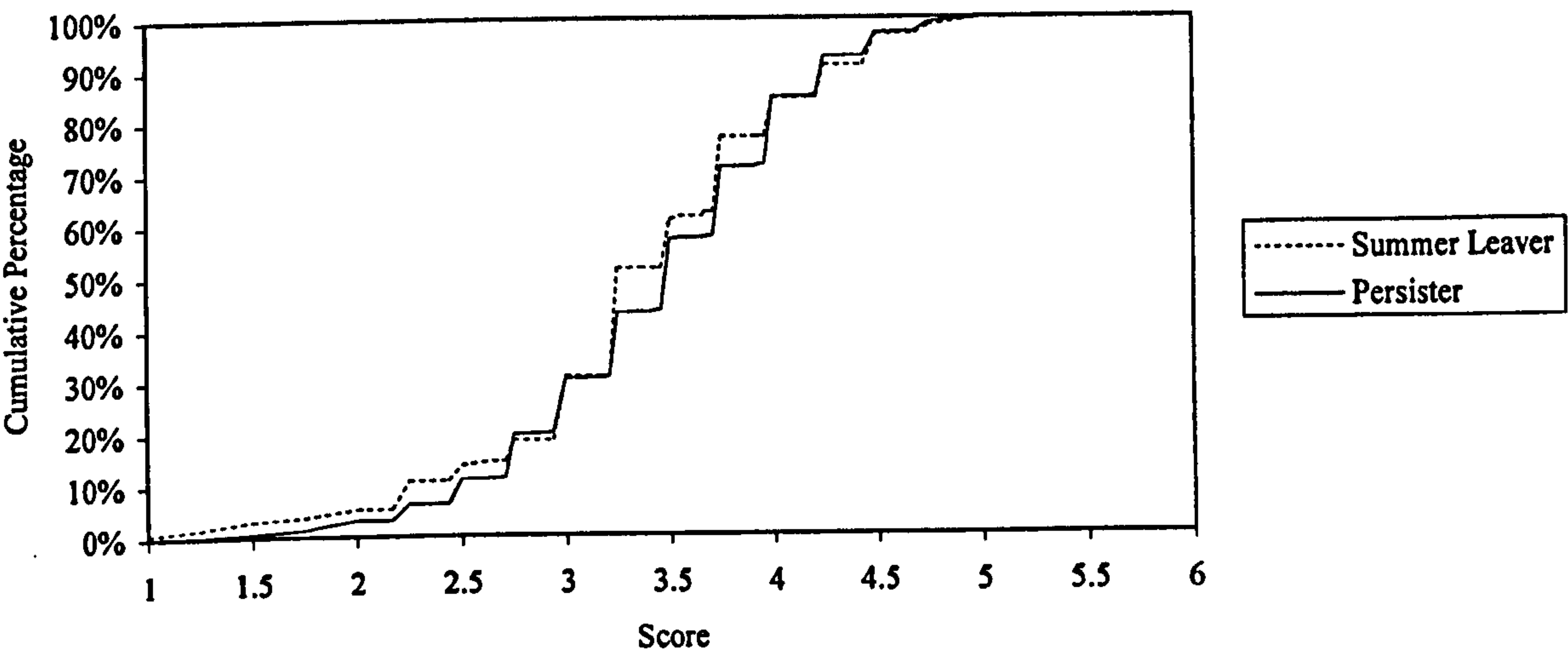
f11 - Extraneous problems



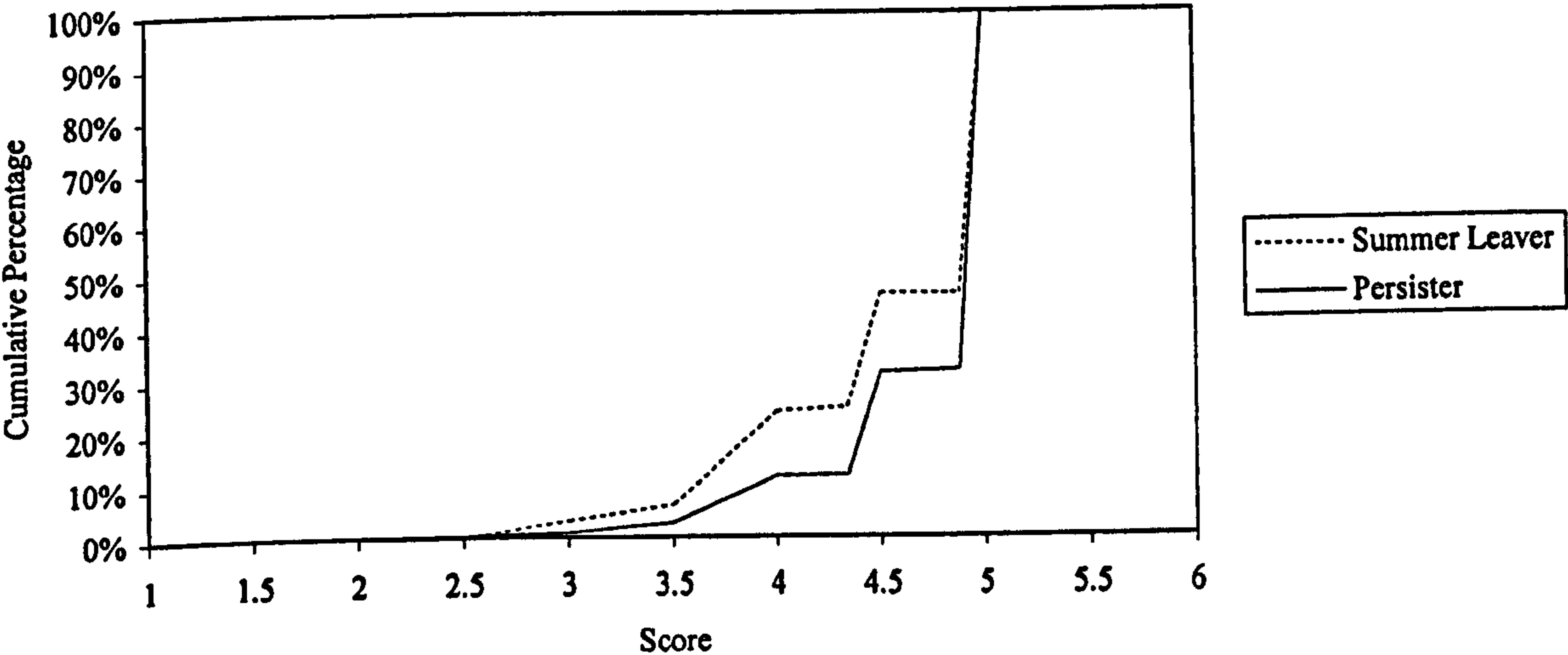
f12 - Academic effort

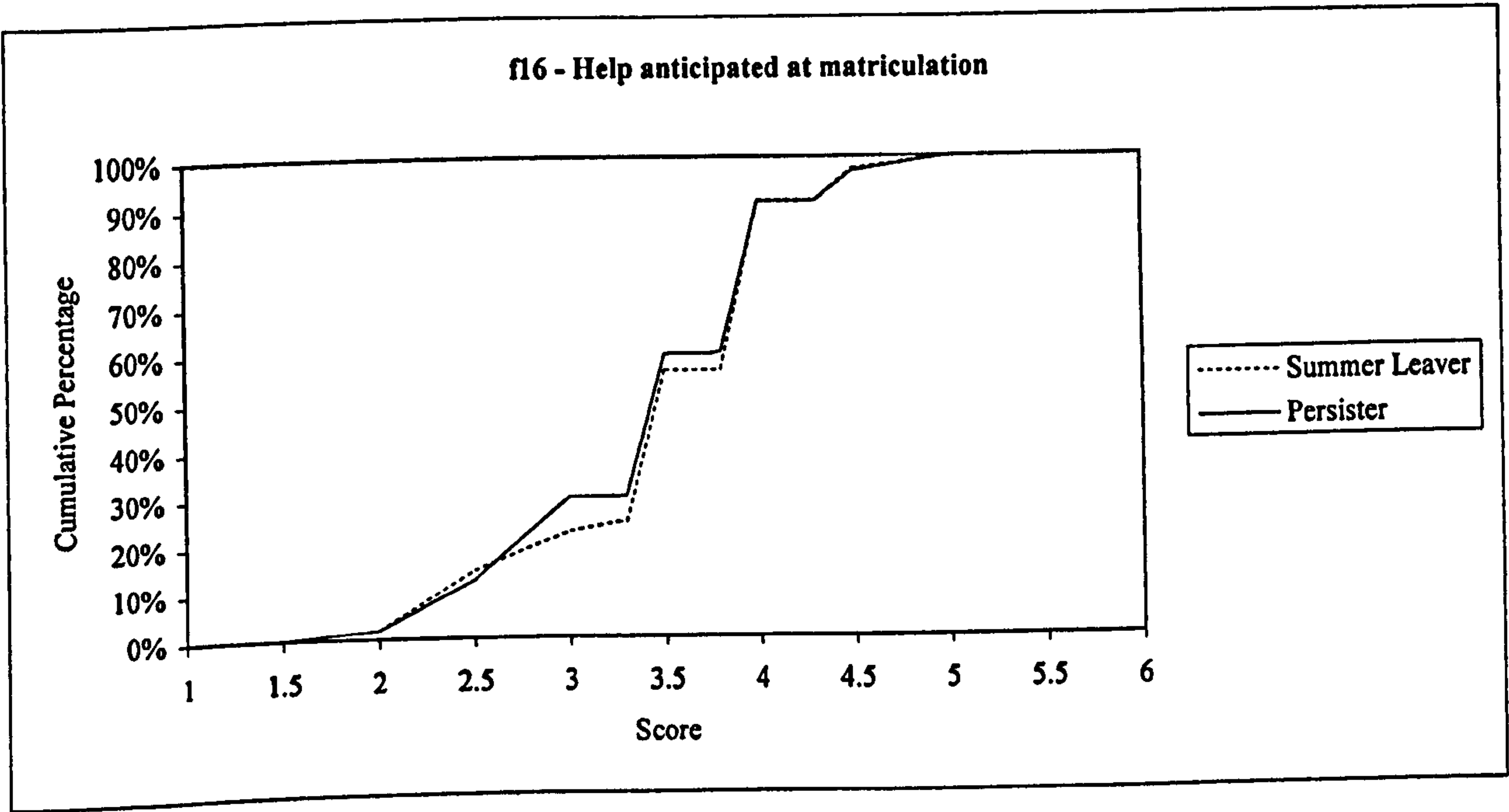
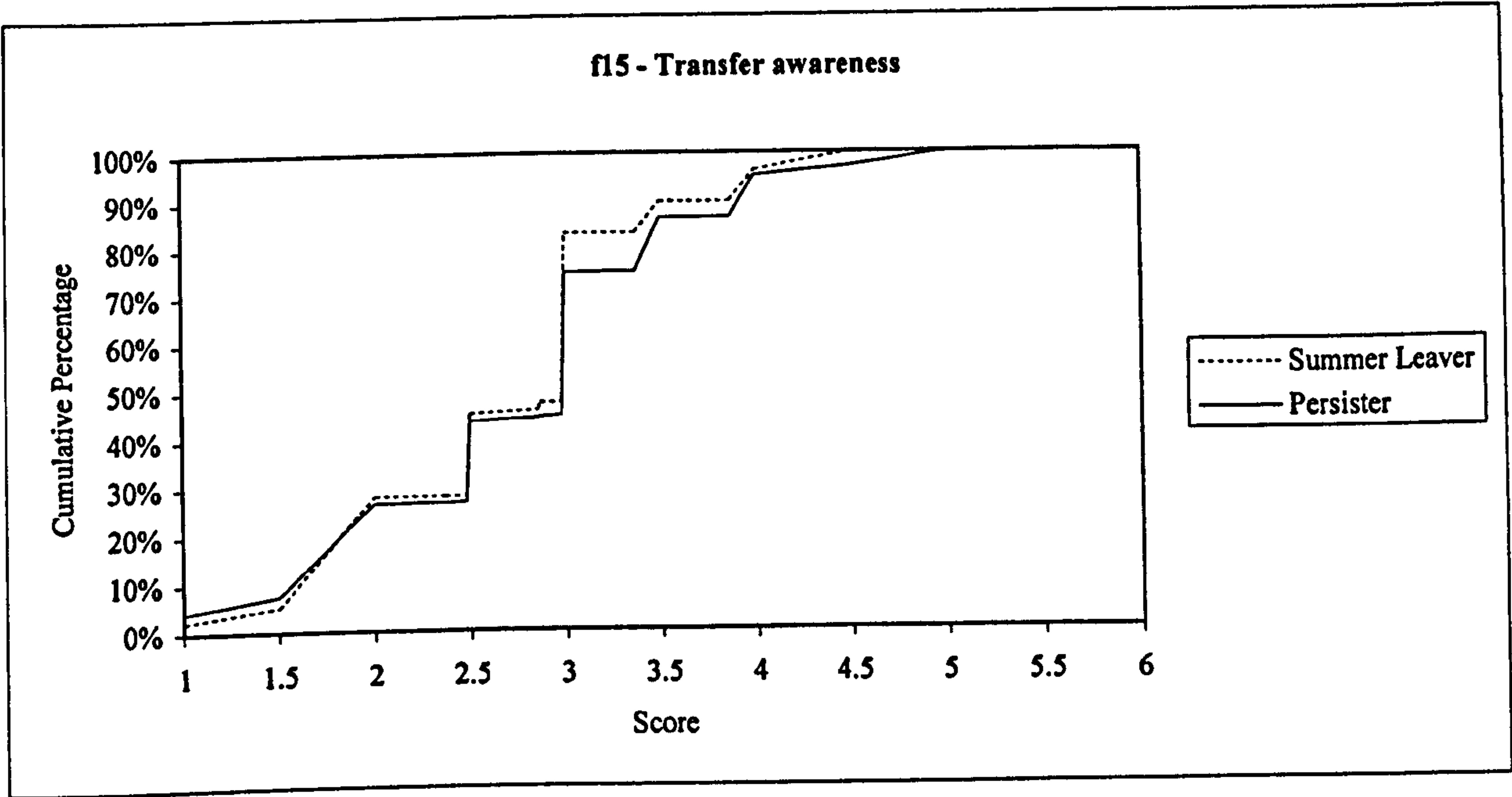


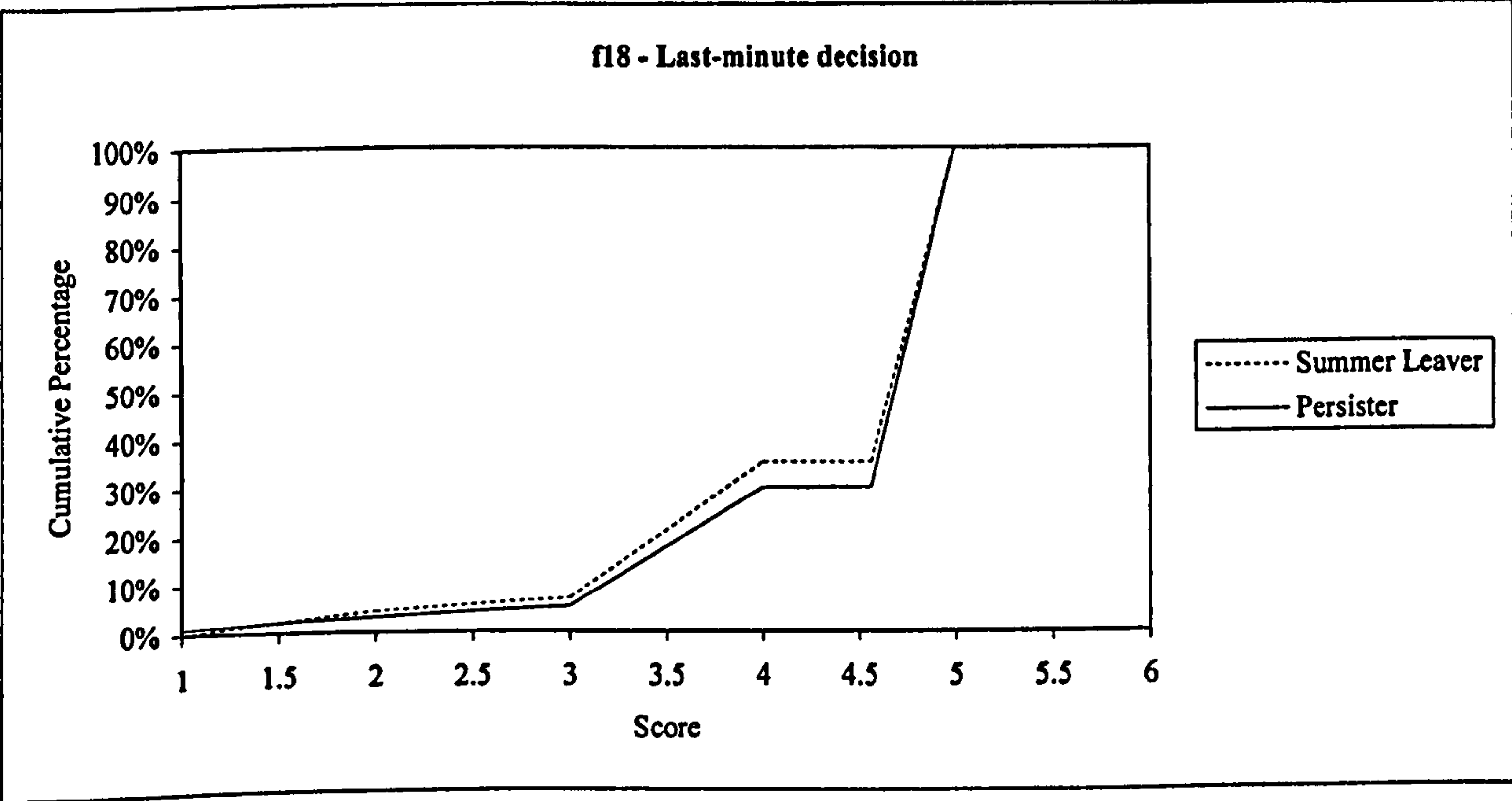
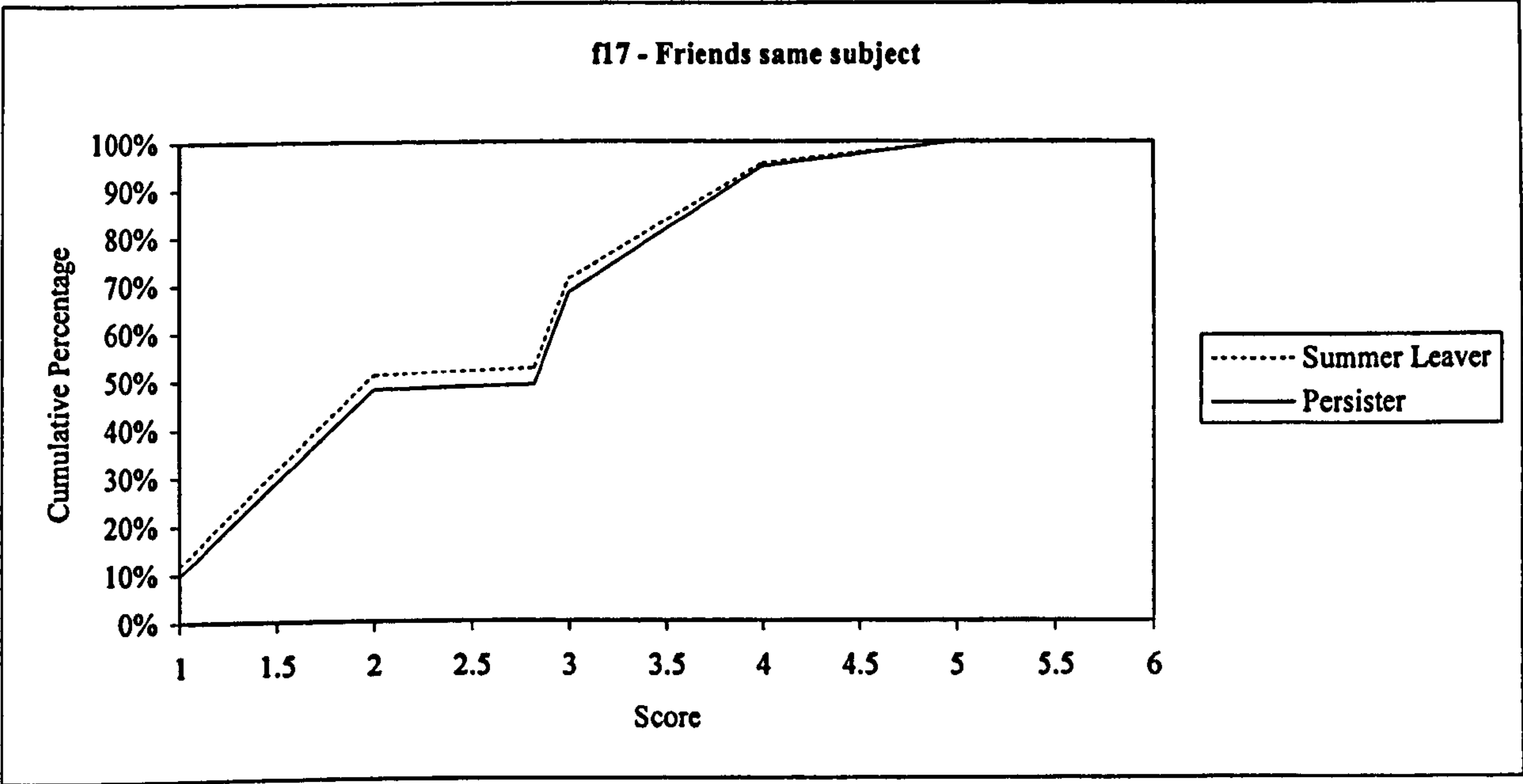
f13 - Lost friends; homesickness



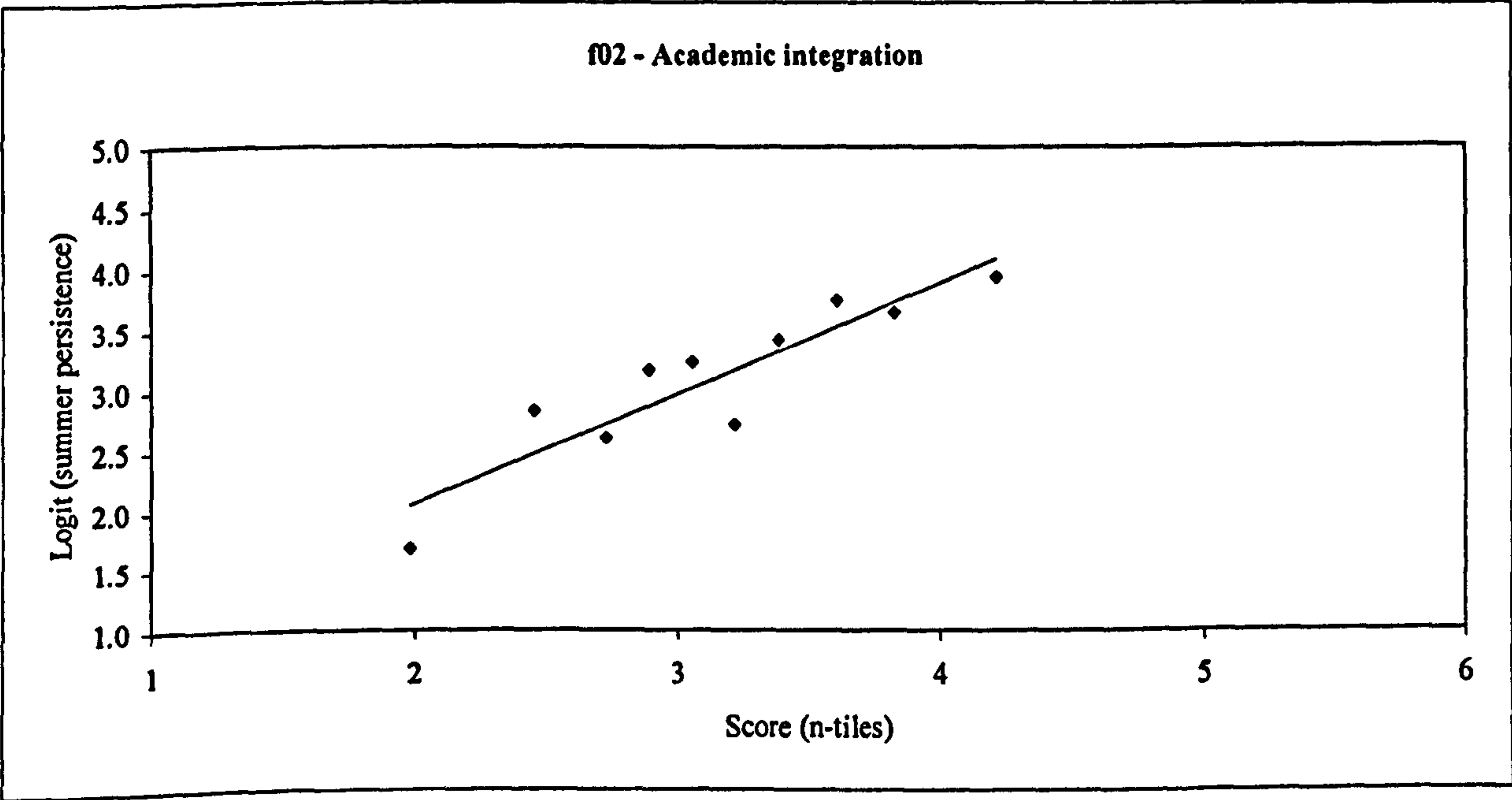
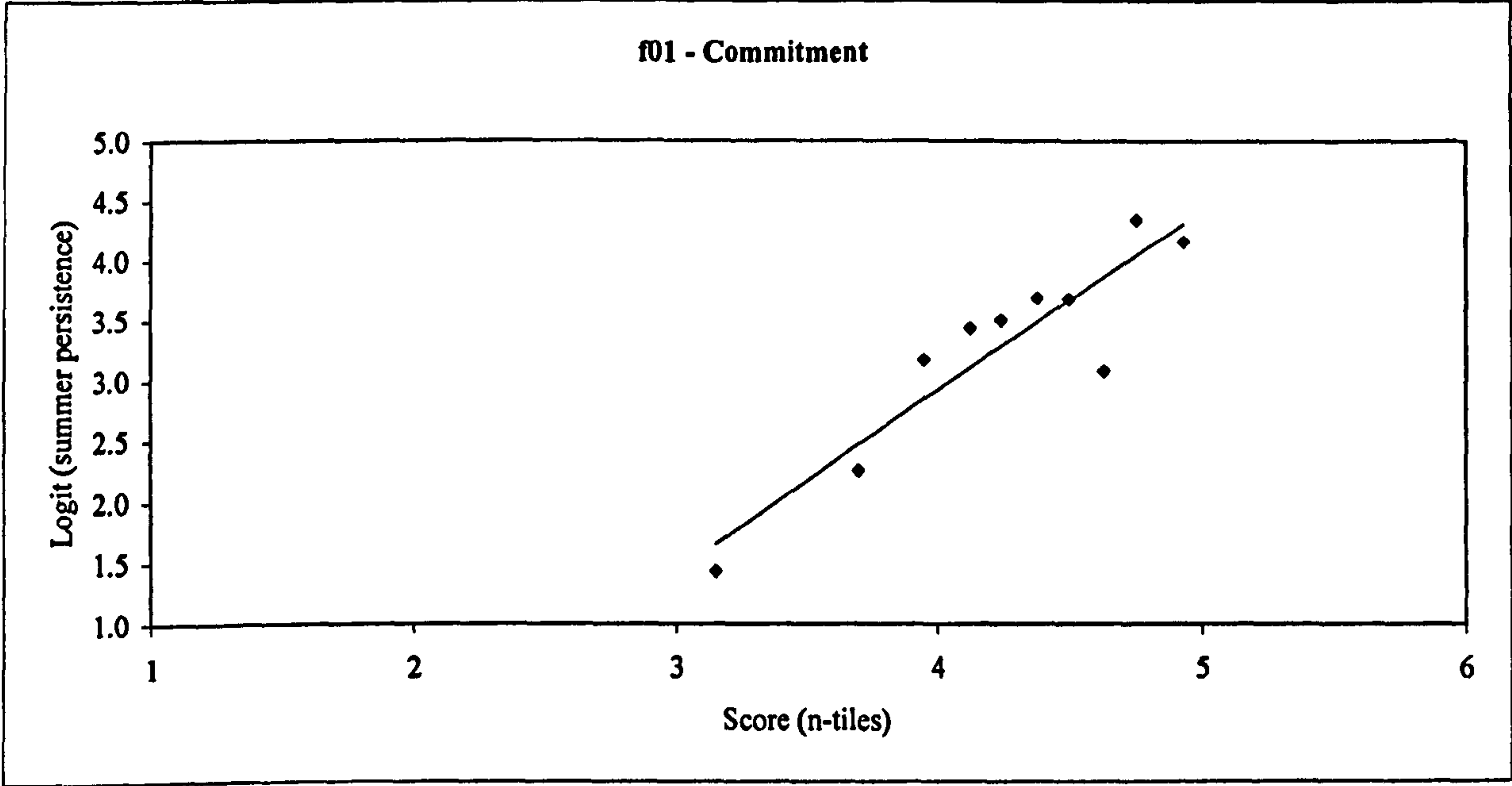
f14 - Family support

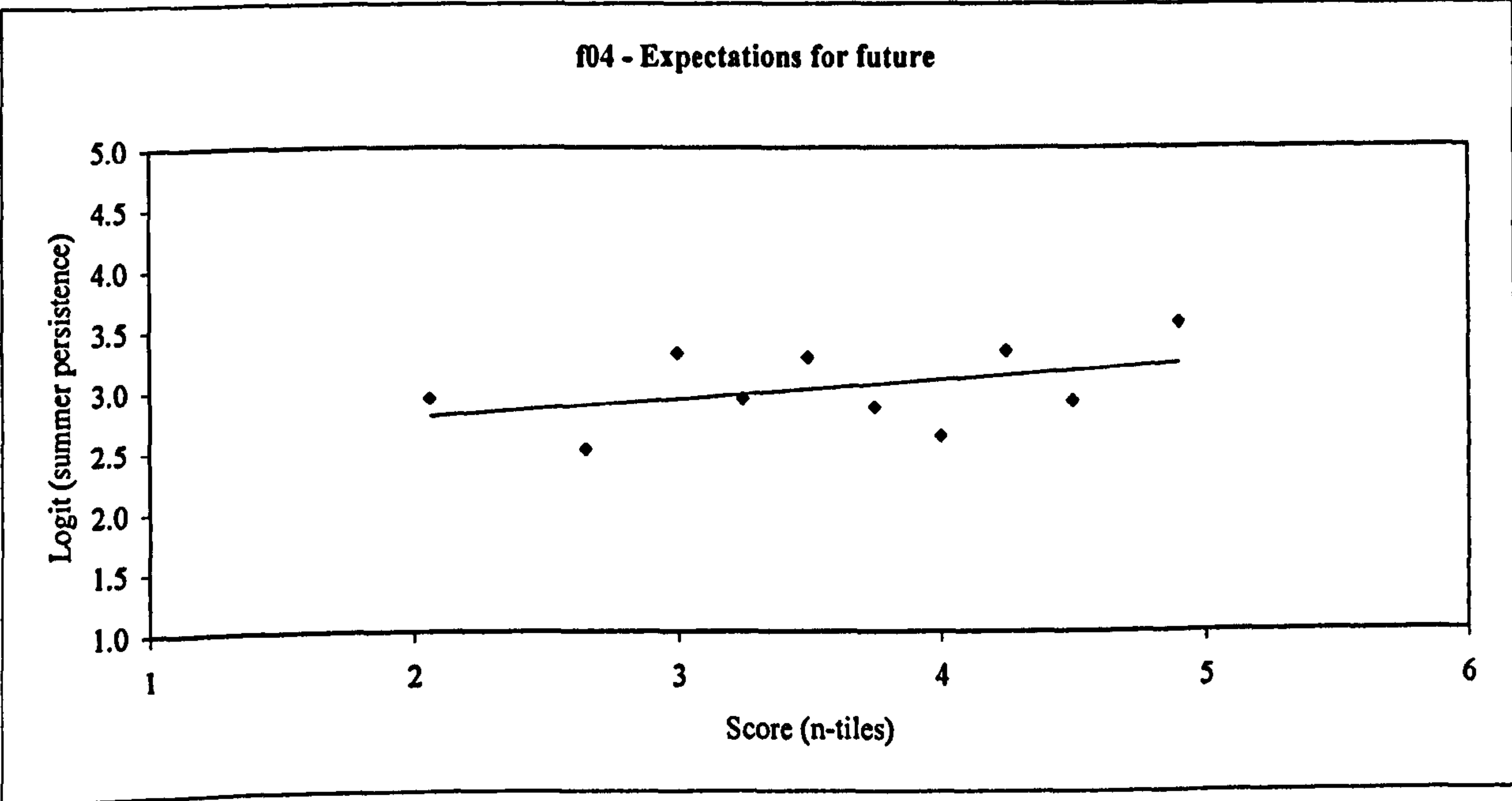
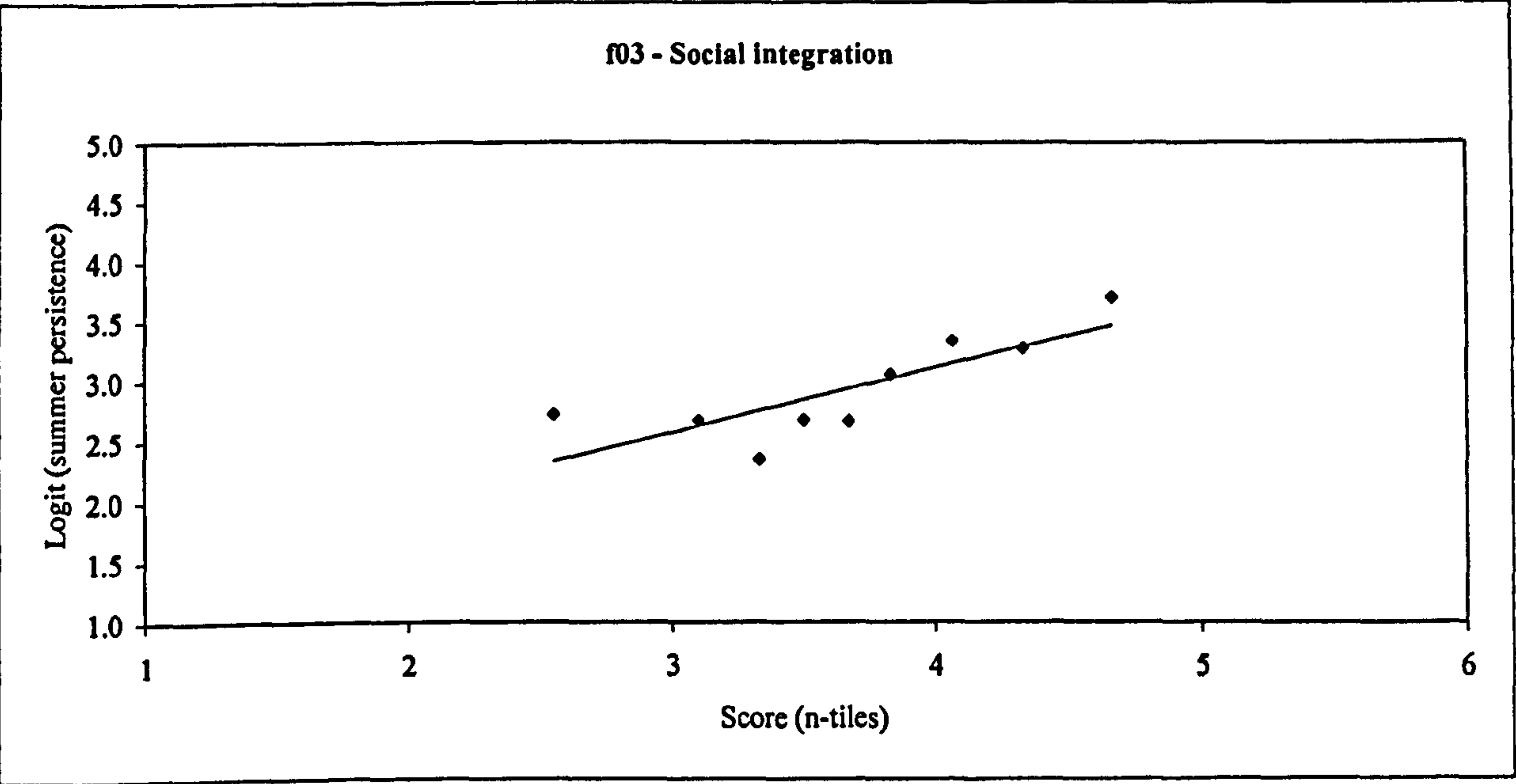




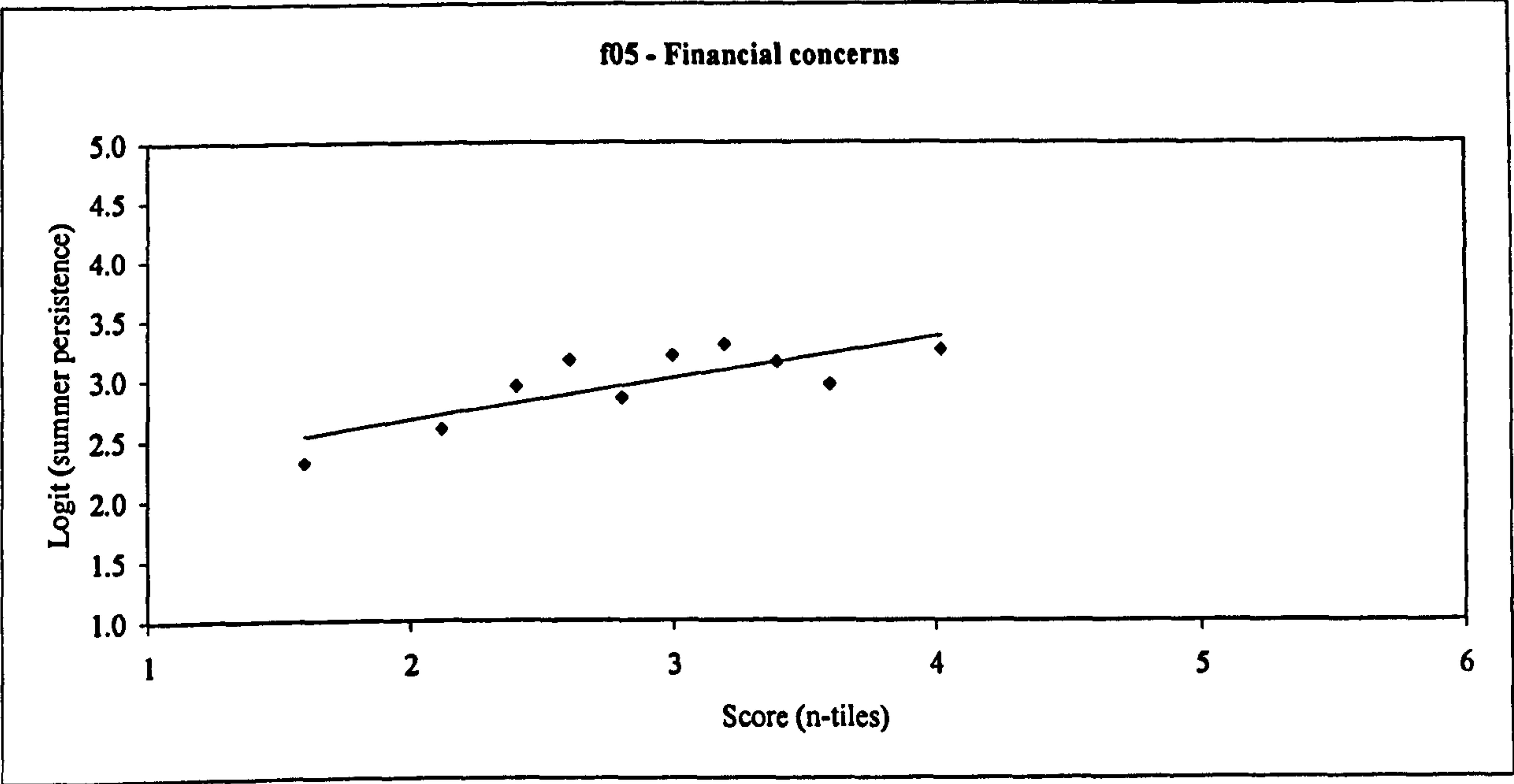


Appendix 10.2: Examination of the Logits

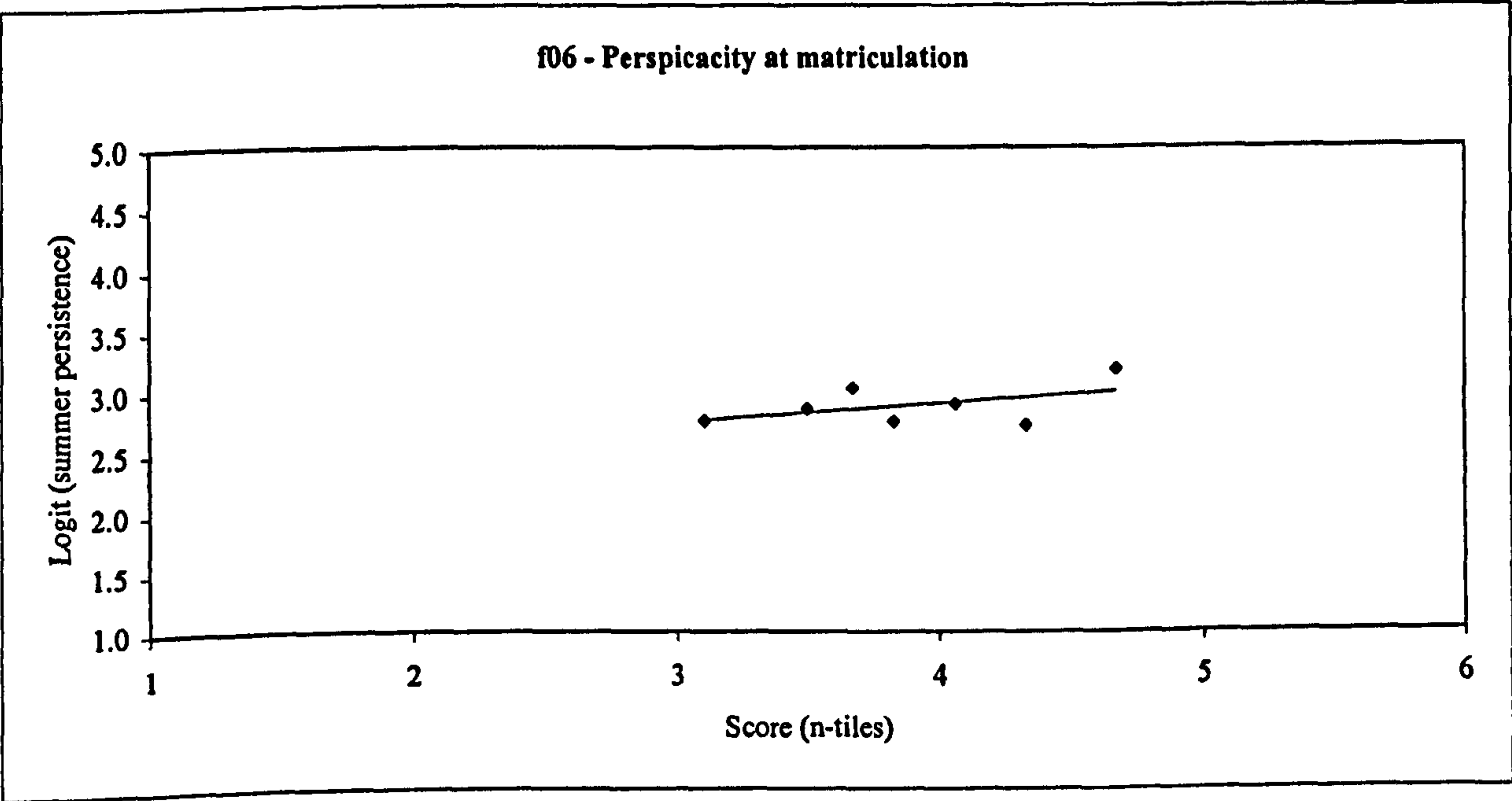


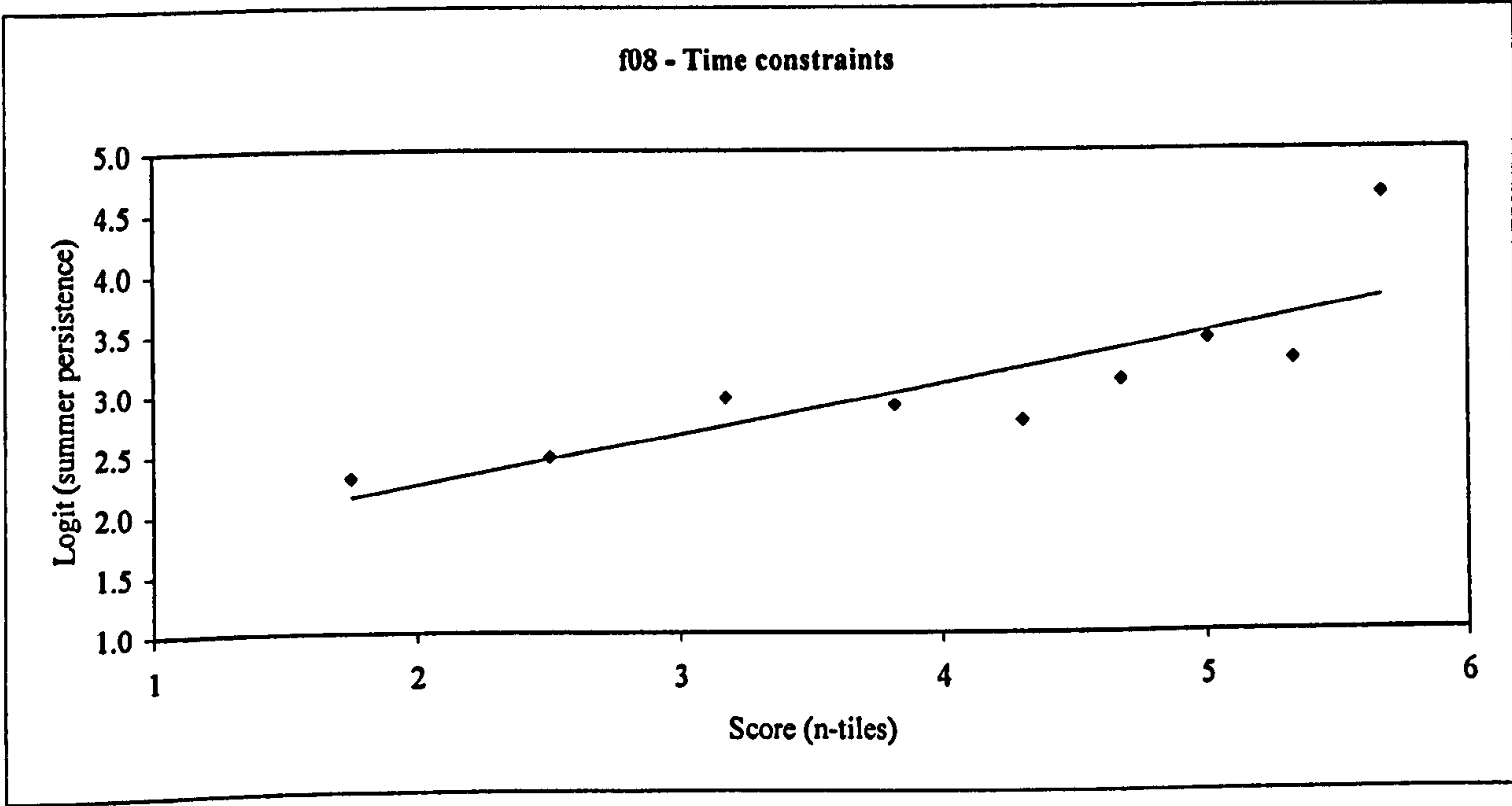
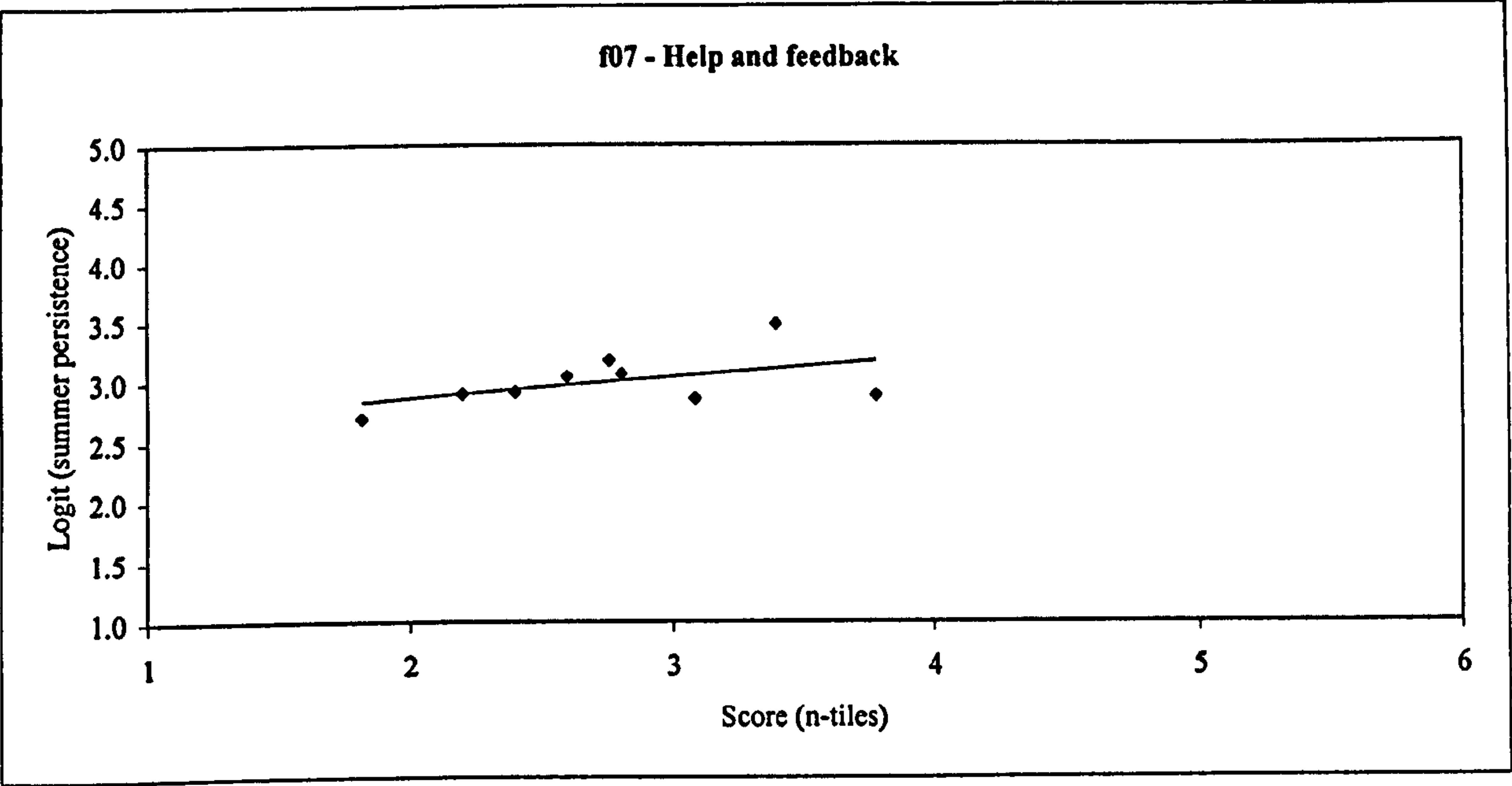


f05 - Financial concerns

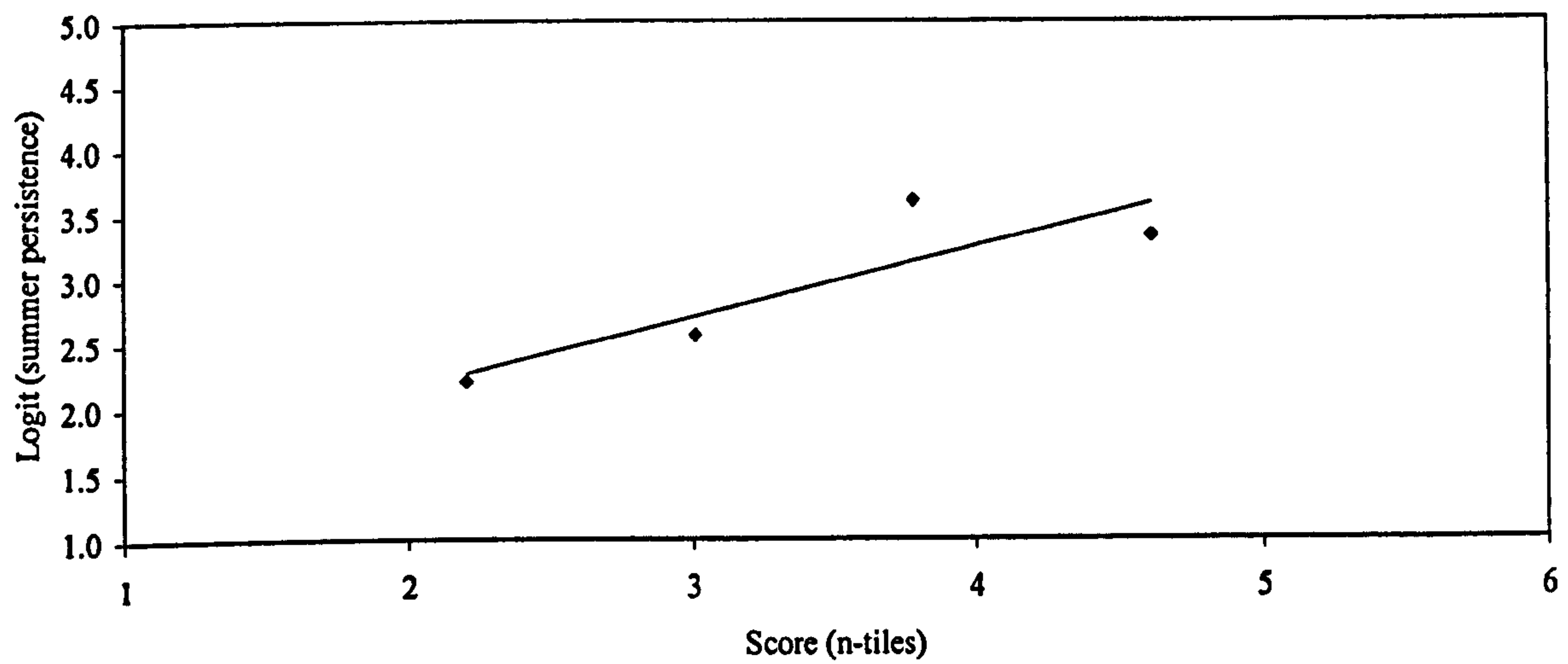


f06 - Perspicacity at matriculation

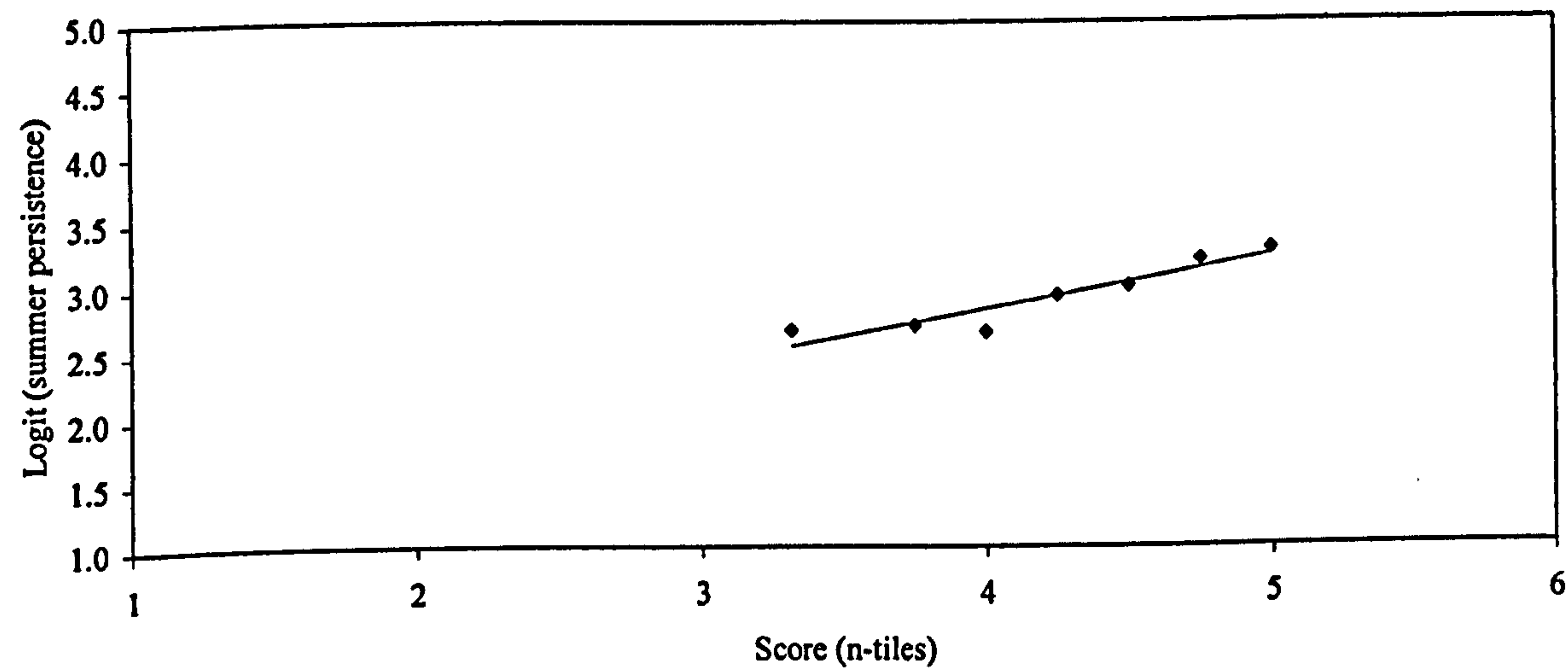




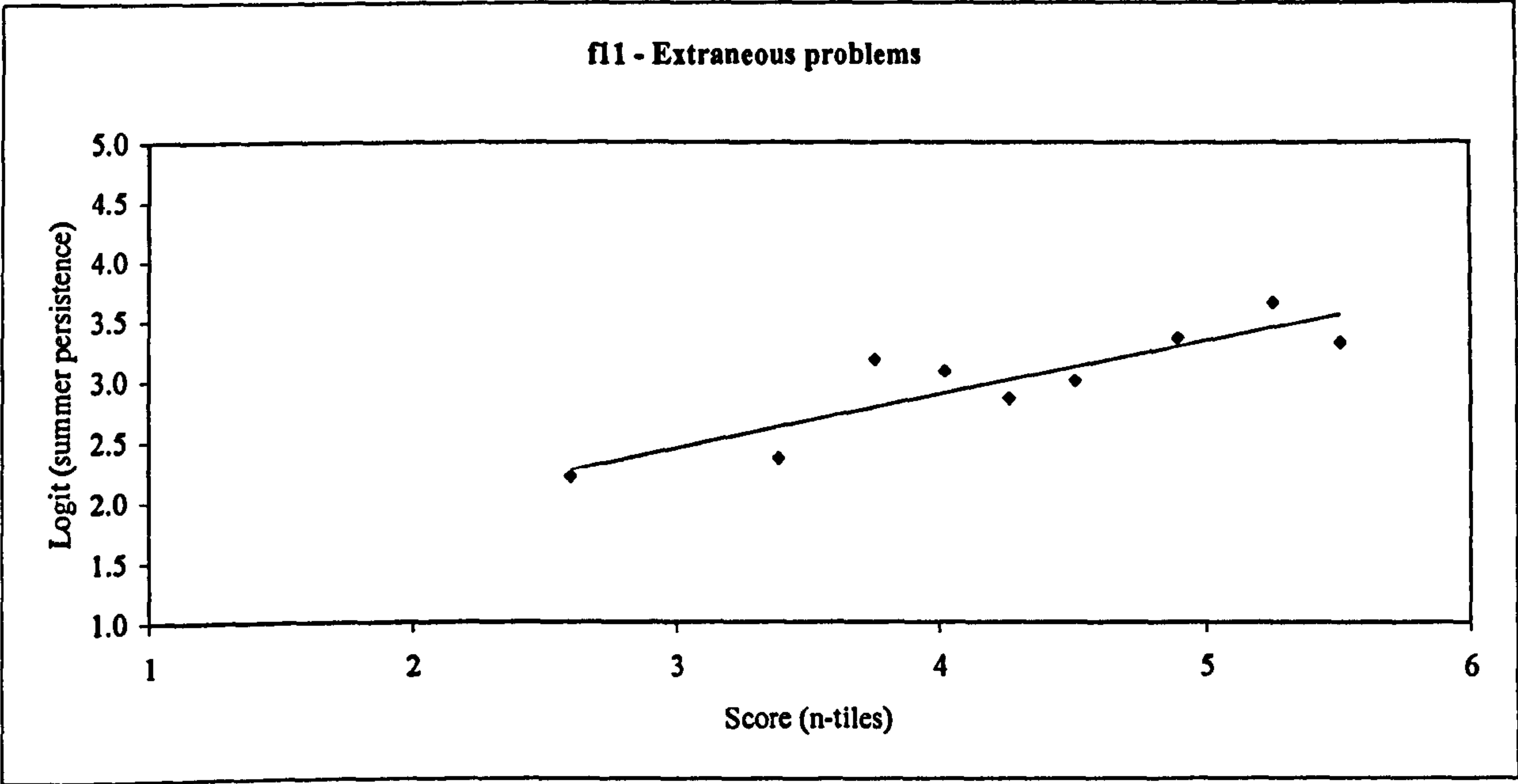
f09 - Academic self-concept



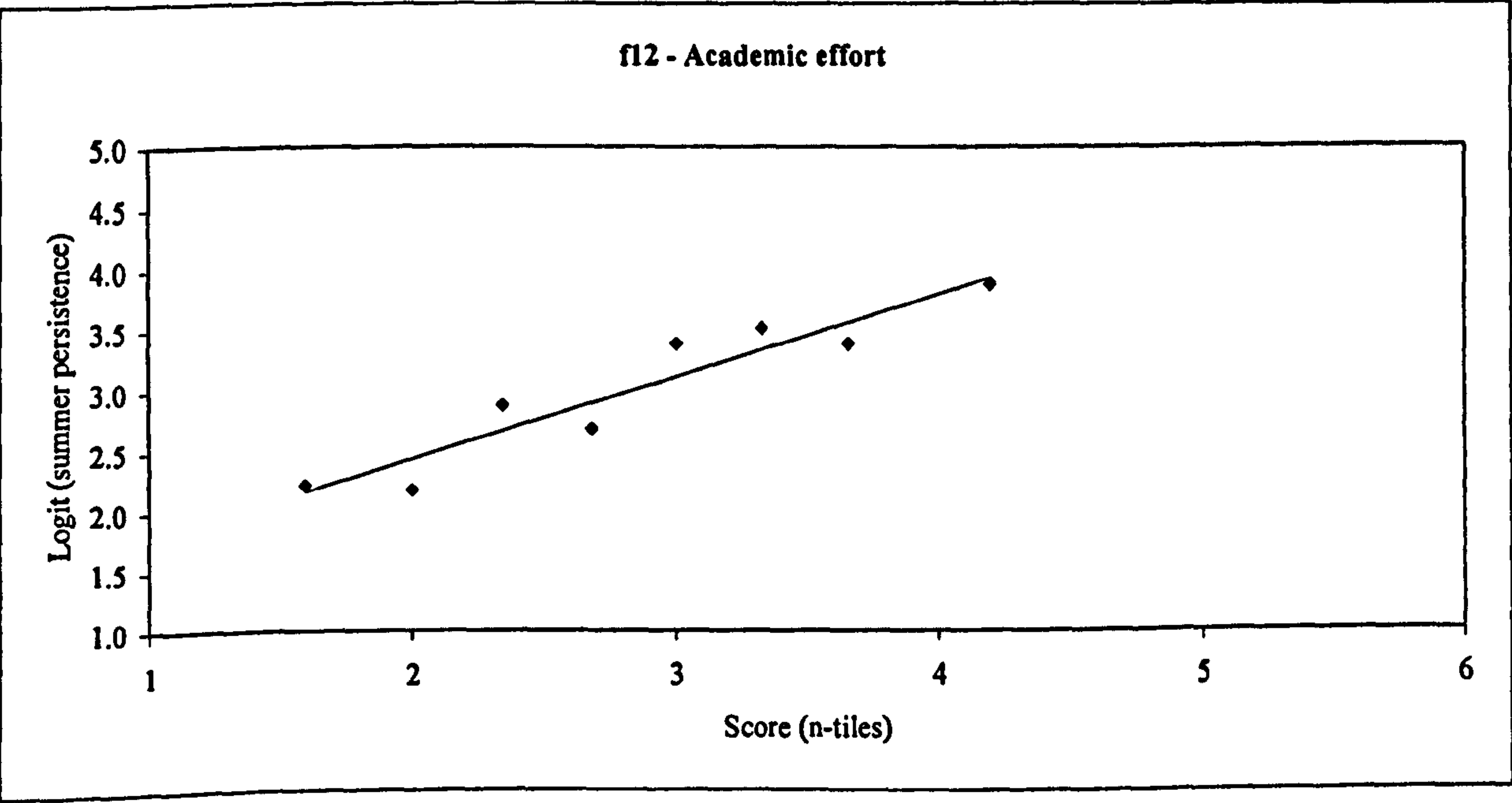
f10 - Self-assuredness at matriculation



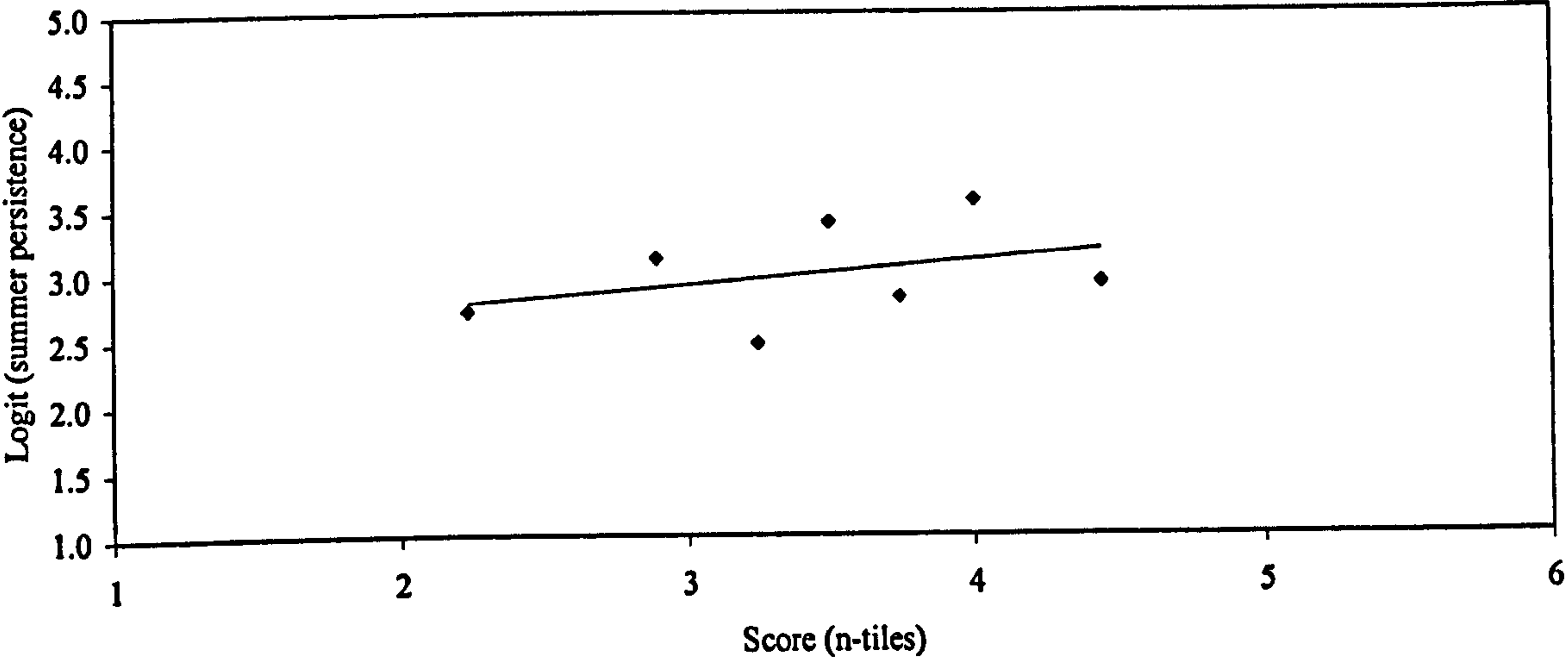
f11 - Extraneous problems



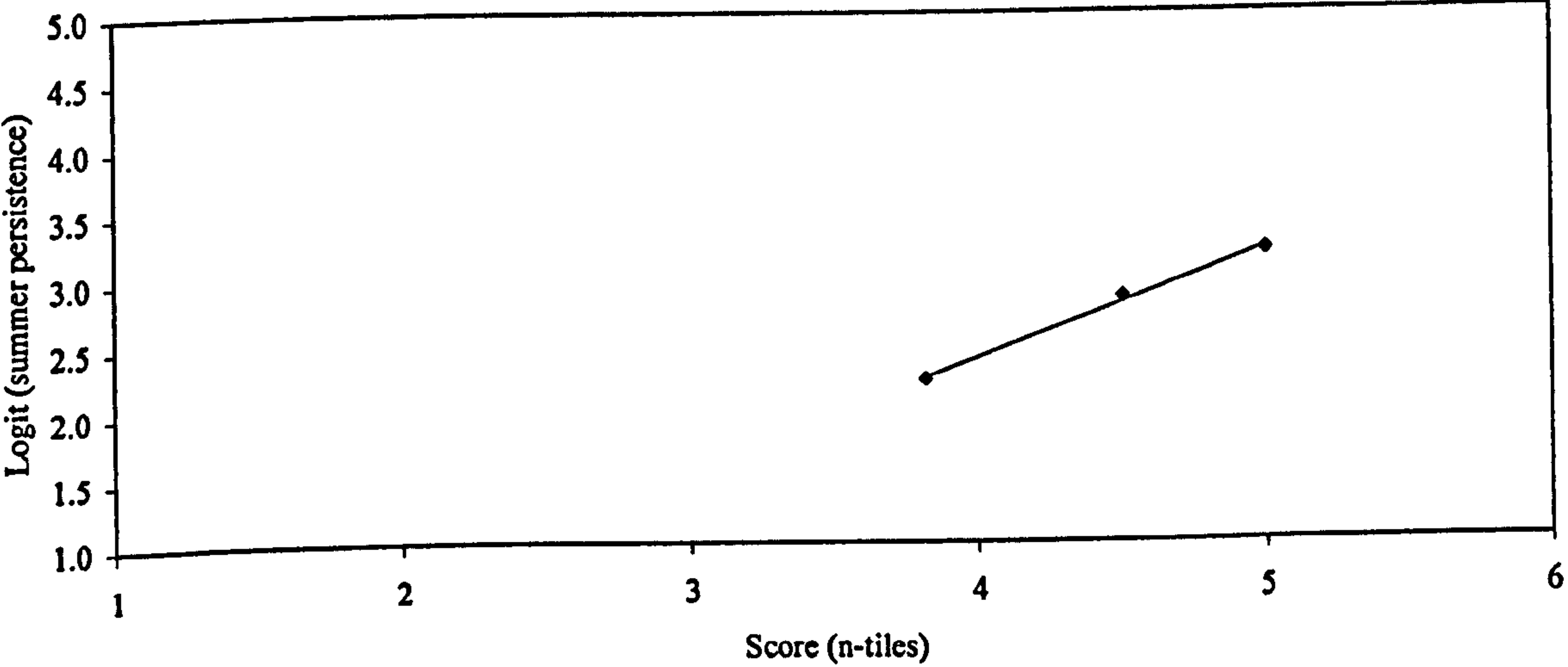
f12 - Academic effort



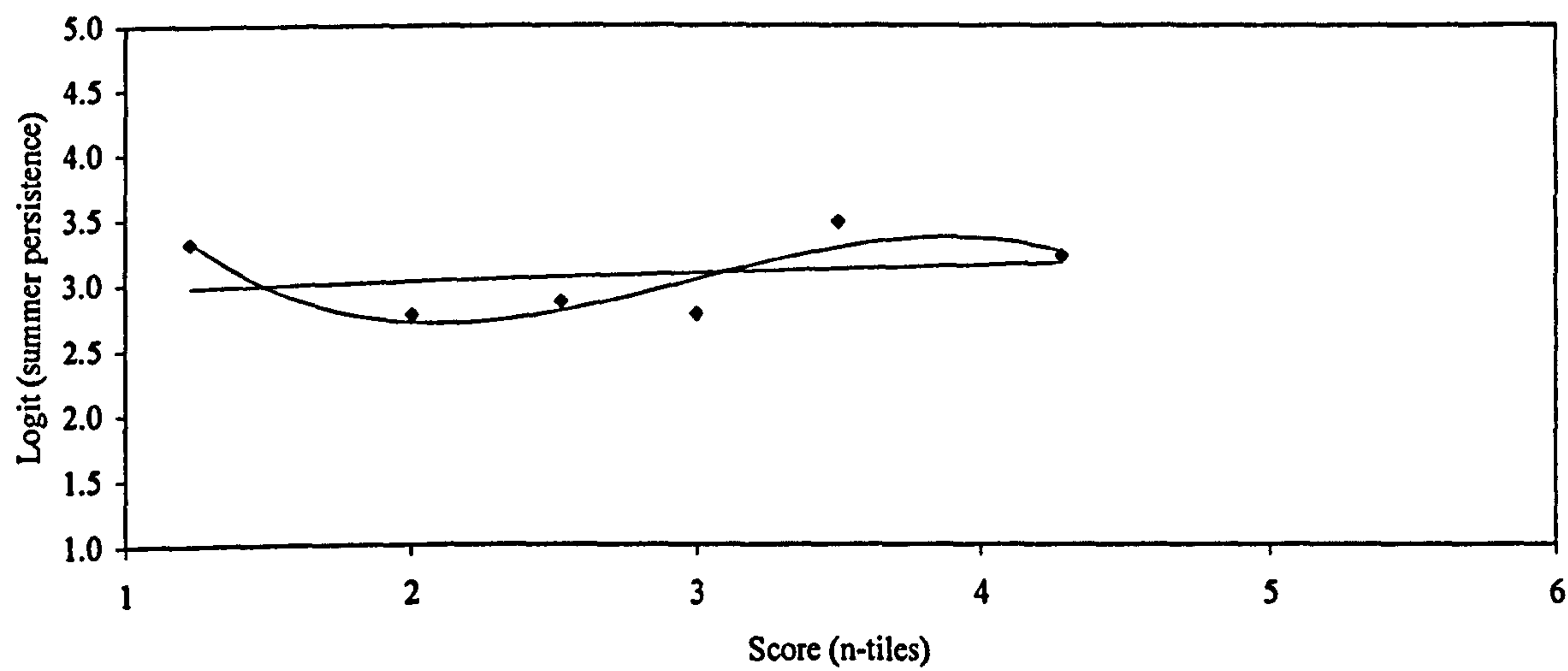
f13 - Lost friends; homesickness



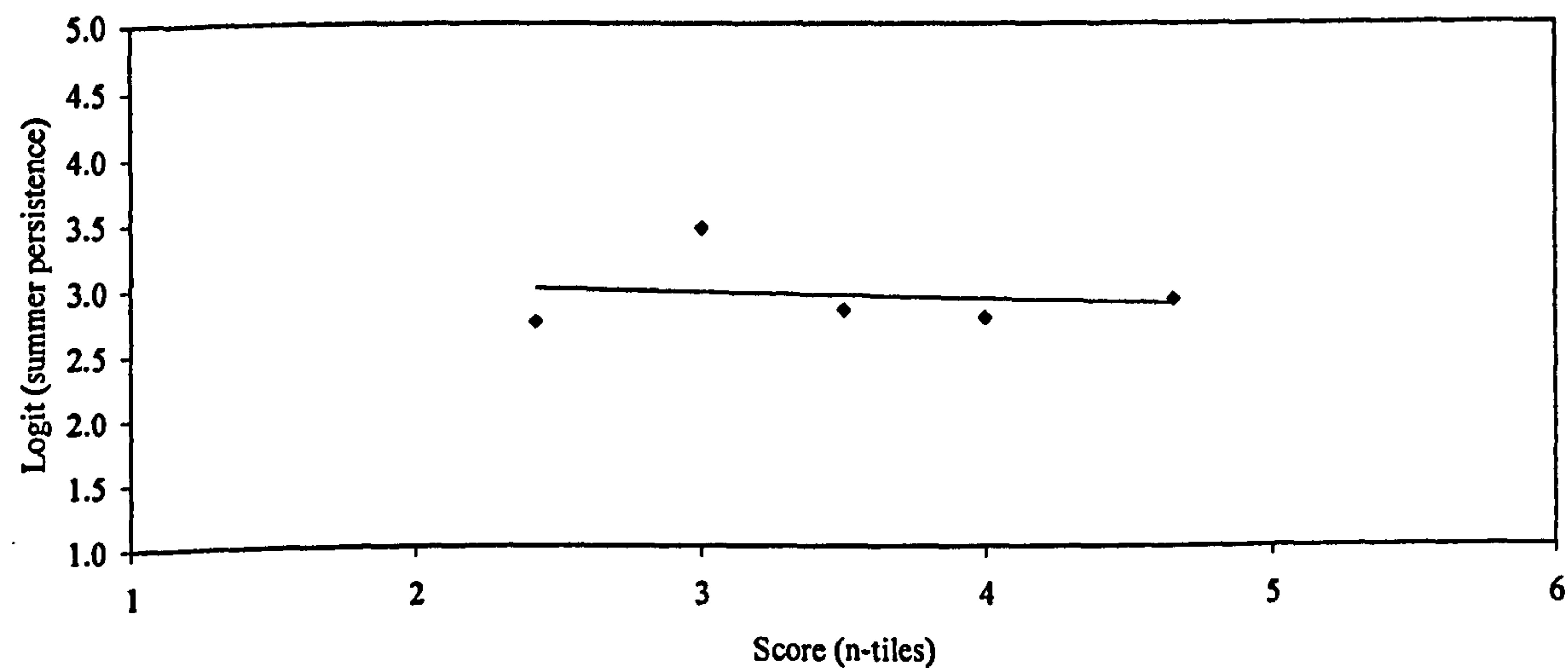
f14 - Family support



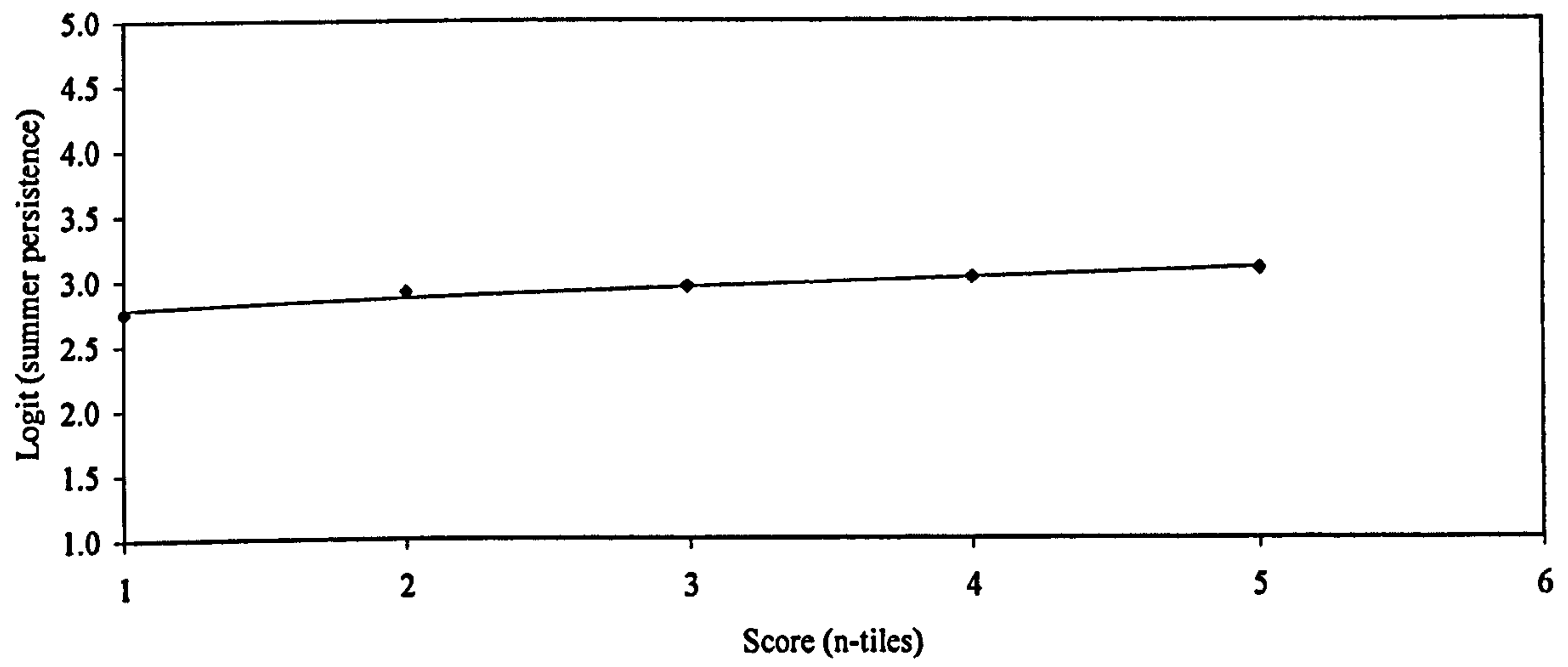
f15 - Transfer awareness



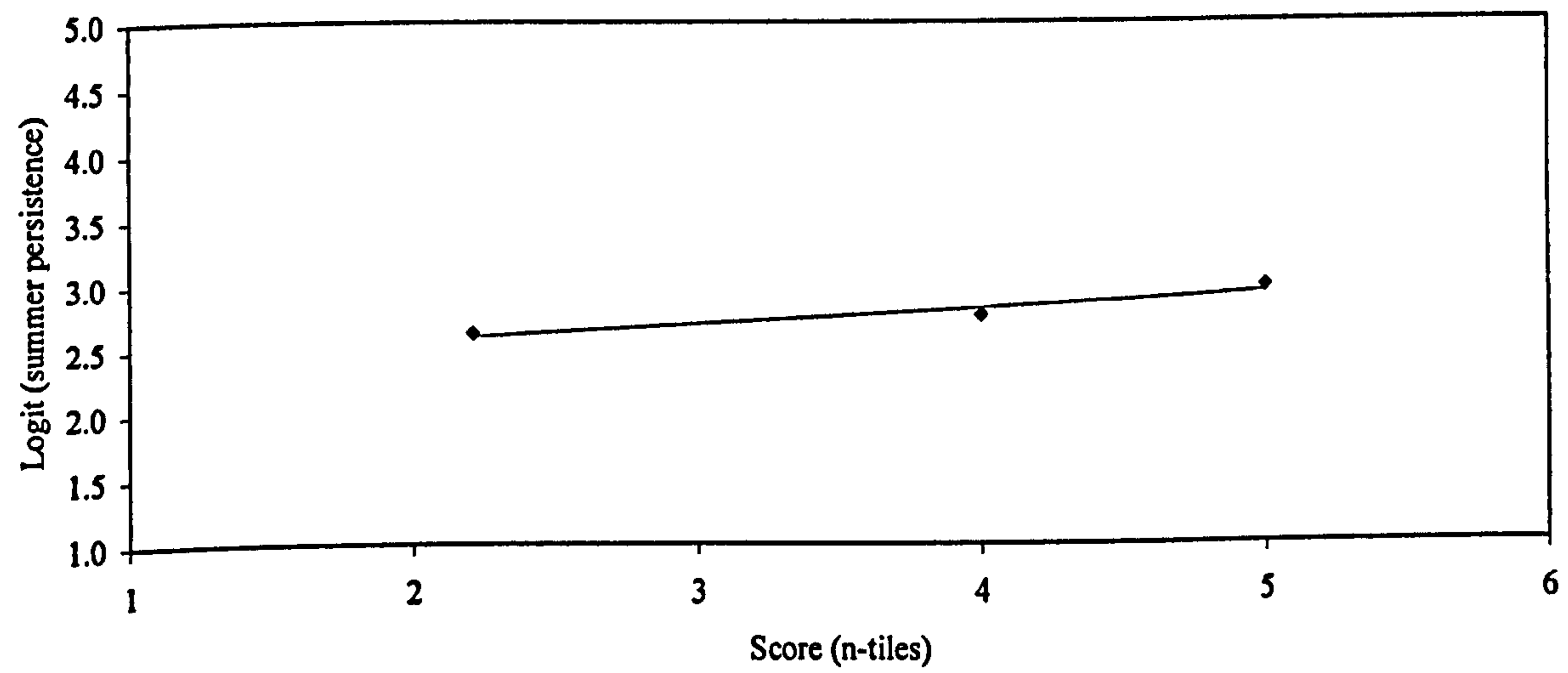
f16 - Help anticipated at matriculation



f17 - Friends same subject



f18 - Last-minute decision



Appendix 10.3: Summer Leavers and Persisters – Family Support (f14) – Raw and Dichotomised Data

Scale value	Summer leavers	Persisters	Leaving percentage		Average scale value	Grouped summer leavers	Grouped Persisters	Average leaving percentage
2.00		4		)	4.25	60	791	7.1%
2.50		5		)				
3.00	4	14	22.2%	)				
3.50	4	44	8.3%	)				
4.00	23	223	9.3%	)				
4.34	1	3	25.0%	)				
4.50	28	486	5.4%	)	5.00	70	1,702	4.0%
4.84		10		)				
4.88		2		)				
5.00	70	1,702	4.0%					
Total	130	2,493	5.0%			130	2,493	5.0%

Appendix 10.4: Summer Leavers and Persisters – Last-Minute Decision (f18)
– Raw and Dichotomised Data

Scale value	Summer leavers	Persisters	Leaving percentage		Average scale value	Grouped summer leavers	Grouped Persisters	Average leaving percentage
1.00		30		)				
2.00	7	61	10.3%	)				
3.00	4	60	6.3%	)	3.68	56	859	6.1%
4.00	45	705	6.0%	)				
4.56		3		)				
5.00	104	2,019	4.9%		5.00	104	2,019	4.9%
Total	160	2,878	5.3%			160	2,878	5.3%

Appendix 10.5: Simple Logistic Regression Summary Results

Dependent Variable	n01 Commitment	n02 Academic Integration	n03 Social Integration	n04 Expectations For Future	n05 Financial Concerns	n06 Perspicacity At Matrix	n07 Help And Feedback	n08 Time Constraints	n09 Academic Self- Concept	n10 Self- Assuredness At Matrix	n11 Extraneous Problems	n12 Academic Effort	n13 Lost Friends; Home- sickness	n14 Family Support (binary)	n15 Transfer Awareness	n16 Help Anticipated At Matrix	n17 Friends Same Subject	n18 Last- Minute Decision (binary)
	(t)																	
Model																		
-2 Log Likelihood	955.799	1016.069	1057.527	1030.950	1059.539	1252.511	1068.060	1049.604	1023.848	1244.179	1044.060	1006.039	1033.018	1023.504	1068.222	1252.907	1068.391	1251.559
Goodness of Fit	2778.433	2753.472	2653.823	2621.723	2678.537	3037.333	2673.775	2662.019	2700.421	3045.064	2678.855	2628.454	2625.766	2622.982	2670.657	3038.006	2673.114	3037.997
Cox & Snell R ²	.042	.020	.004	.001	.004	.000	.000	.007	.017	.003	.009	.011	.001	.004	.000	.000	.000	.001
Nagelkerke R ²	.126	.060	.013	.004	.011	.001	.001	.022	.051	.009	.028	.033	.002	.013	.001	.001	.001	.002
Likelihood Ratio Chi-Square	113.399	53.129	11.671	3.678	9.659	0.921	1.118	19.594	45.351	9.252	25.138	28.589	1.610	11.124	0.976	0.524	0.807	1.862
Degrees of Freedom	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Significance	.0000	.0000	.0006	.0551	.0019	.3373	.2903	.0000	.0000	.0024	.0000	.0000	.2044	.0009	.3231	.4690	.3689	.1724
Percentage of Predictions Correct (Cut Value = 0.95)	68.69%	63.90%	54.58%	56.73%	51.59%			60.12%	62.40%	45.16%	61.99%	55.78%		67.17%				
Hosmer & Lemeshow Goodness-of-Fit Test																		
Chi-Square	11.1548	11.4297	7.8946	8.3718	3.8370			5.9416	7.0797	1.7288	3.6903	7.0513		(fewer than 6 groups)				
Degrees of Freedom	8	7	8	8	8			7	6	5	8	6						
Significance	.1931	.1209	.4438	.3980	.8715			.5466	.3135	.8853	.8839	.3161						
Variable																		
Beta	1.5681	1.0229	0.4893	0.2080	0.3936			0.3046	0.7596	0.4989	0.4838	0.7166		0.6121				
Exp (Beta) = Odds Ratio	4.7974	2.7812	1.6311	1.2312	1.4823			1.3561	2.1375	1.6468	1.6222	2.0474		1.8443				
S.E.	.1459	.1426	.1409	.1086	.1270			.0685	.1112	.1618	.0939	.1371		.1811				
R	.3257	.2151	.0970	.0401	.0844			.1290	.2043	.0774	.1515	.1564		.0954				

Note:
(t) For n14 Family Support, the reference category is made up of cases for which the average response value is 4.25; the other category refers to those cases having a response value of 5.00.
For n18 Last-Minute Decision [to come to University], the reference category is made up of cases for which the average response value is 3.68; the other category refers to those cases having a response value of 5.00.

Appendix 10.6: Tolerance

Construct	Tolerance
Entry Point Score	.843
f01 Commitment	.541
f02 Academic Integration	.495
f03 Social Integration	.617
f04 Expectations For Future	.688
f05 Financial Concerns	.779
f06 Perspicacity At Matric	.649
f07 Help And Feedback	.736
f08 Time Constraints	.804
f09 Academic Self-Concept	.656

Construct	Tolerance
f10 Self-Assuredness At Matric	.679
f11 Extraneous Problems	.701
f12 Academic Effort	.768
f13 Lost Friends; Homesickness	.839
f14 Family Support	.829
f15 Transfer Awareness	.959
f16 Help Anticipated At Matric	.822
f17 Friends Same Subject	.948
f18 Last-Minute Decision	.880

Appendix 10.7: Pearson Correlations - Attitudinal Constructs and Entry Point Score (Capped)

	R01 Commitment	R02 Academic integration	R03 Social integration	R04 Expectations for future	R05 Financial concerns	R06 Perspicacity at matric	R07 Help and feedback	R08 Time constraints	R09 Academic self-concept	R10 Self-assuredness at matric	R11 Extraneous problems	R12 Academic effort	R13 Lost friends; homesickness	R14 Family support	R15 Transfer awareness	R16 Help anticipated at matric	R17 Friends same subject	R18 Last-minute decision	Entry point score (capped)
R01 Commitment	1																		
R02 Academic integration	0.487	1																	
R03 Social integration	0.507	0.372	1																
R04 Expectations for future	0.292	0.447	0.185	1															
R05 Financial concerns	0.091	0.270	0.203	0.083	1														
R06 Perspicacity at matric	0.253	0.251	0.181	0.365	0.102	1													
R07 Help and feedback	0.214	0.397	0.254	0.148	0.276	0.139	1												
R08 Time constraints	0.198	0.174	0.249	-0.019	0.141	-0.053	0.095	1											
R09 Academic self-concept	0.410	0.495	0.302	0.200	0.264	0.205	0.321	0.160	1										
R10 Self-assuredness at matric	0.395	0.218	0.337	0.256	0.024	0.379	0.074	0.091	0.161	1									
R11 Extraneous problems	0.298	0.254	0.379	0.082	0.319	0.123	0.175	0.335	0.304	0.175	1								
R12 Academic effort	0.238	0.319	0.107	0.321	0.115	0.339	0.132	0.023	0.275	0.153	0.057	1							
R13 Lost friends; homesickness	0.221	0.213	0.239	0.113	0.165	0.131	0.242	-0.048	0.154	0.139	0.199	0.018	1						
R14 Family support	0.245	0.150	0.249	0.125	0.145	0.175	0.023	0.171	0.159	0.289	0.288	0.050	0.097	1					
R15 Transfer awareness	-0.056	0.035	-0.111	0.079	-0.064	0.022	-0.011	-0.037	-0.086	-0.033	-0.051	0.058	0.003	-0.067	1				
R16 Help anticipated at matric	0.158	0.197	0.175	0.189	0.124	0.377	0.192	0.042	0.181	0.253	0.085	0.155	0.081	0.101	-0.028	1			
R17 Friends same subject	0.060	0.128	0.007	0.153	0.035	0.127	0.055	-0.087	0.069	0.024	-0.026	0.075	0.086	-0.030	0.047	0.055	1		
R18 Last-minute decision	0.193	0.131	0.124	0.169	0.049	0.173	0.005	0.106	0.096	0.268	0.094	0.119	0.064	0.165	0.002	0.090	-0.013	1	
Entry point score (capped)	0.137	0.178	0.165	0.074	0.135	-0.047	-0.070	0.174	0.183	0.043	0.140	0.141	-0.079	0.161	-0.102	0.007	-0.097	0.128	1

Appendix 10.8: Summary of Univariate Results

Construct	Cumulative frequency polygon for Summer Leavers & Persisters appreciably different?	Logit Linear?	Is there a relationship with retention?	Simple Logistic Reg'n: Odds Ratio
f01 Commitment	Y	Y	Y	4.80
f02 Academic integration	Y	Y	Y	2.78
f03 Social integration	Y	Y	Y	1.63
f04 Expectations for future	Y	Y	n	(‡)
f05 Financial concerns	Y	Y	Y	1.48
f06 Perspicacity at matric	n	Y	n	(‡)
f07 Help and feedback	n	Y	n	(‡)
f08 Time constraints	Y	Y	Y	1.36
f09 Academic self-concept	Y	Y	Y	2.14
f10 Self- assuredness at matric	Y	Y	Y	1.65
f11 Extraneous problems	Y	Y	Y	1.62
f12 Academic effort	Y	Y	Y	2.05
f13 Lost friends; homesickness	n	Y	n	(‡)
f14 Family support	Y	(†)	Y	1.84
f15 Transfer awareness	n	n	n	(‡)
f16 Help anticipated at matric	n	Y	n	(‡)
f17 Friends same subject	n	Y	n	(‡)
f18 Last-minute decision	n	(†)	n	(‡)

(†) binary

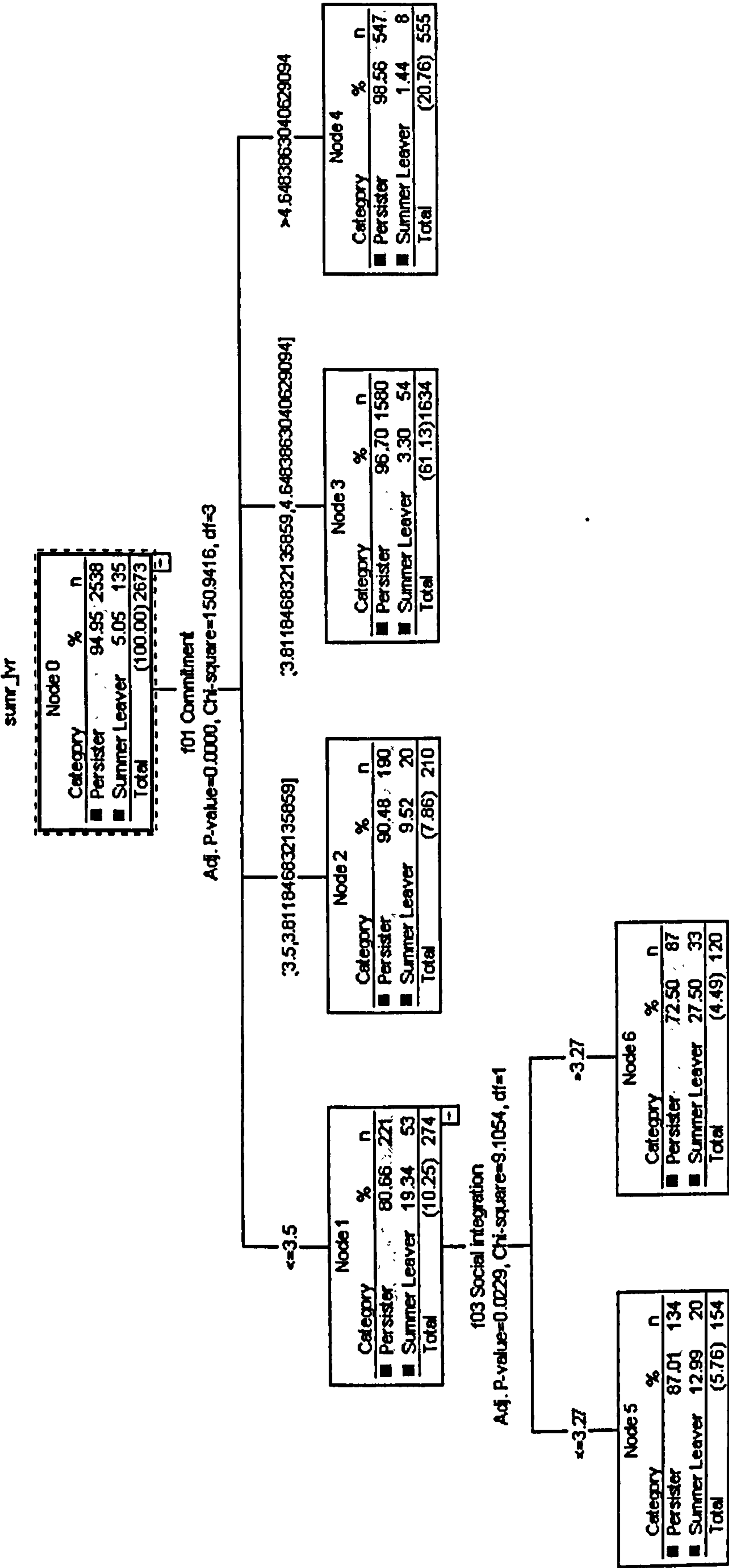
(‡) not sig. (p ≤ 0.05)

Appendix 10.9: Multiple Logistic Regression Analysis, incorporating Attitudinal Constructs Only – Summary Results

Criterion for inclusion is $p = 0.10$ and criterion for exclusion is $p = 0.15$

Notes: (1) = Variable excluded in this step
(2) = Term removed at next step

Appendix 10.10: CHAID Decision Tree – Summer Persistence (i.e. 'sumr_lvr') as the Target Variable, with Commitment and Social Integration as the Predictors



Appendix 10.11: Multiple Logistic Regression Analysis, incorporating both Attitudinal and Background Variables – Summary Results

Summer Persistence is the Dependent Variable; Forward Stepwise Method of Inclusion of Explanatory Variables used; Criterion for inclusion is $p = 0.10$ and criterion for exclusion is $p = 0.15$

		Step 0 (constant only)			Step 1			Step 2			Step 3			Step 4			Step 5			Step 6			Step 7		
For Variables Included:	Betas	SE	Sig (Wald)	Odds Ratio	Betas	SE	Sig (Wald)	Odds Ratio	Betas	SE	Sig (Wald)	Odds Ratio	Betas	SE	Sig (Wald)	Odds Ratio	Betas	SE	Sig (Wald)	Odds Ratio	Betas	SE	Sig (Wald)	Odds Ratio	
																									Score (*)
For Variables Excluded:																									
901 Commitment	133.34 (*)	0.000		5.02	1.61	0.15	0.000	4.75	1.56	0.15	0.000	7.12	1.96	0.20	0.000	7.25	1.96	0.20	0.000	7.07	1.85	0.20	0.000	6.36	
	24.98 (*)	0.000			14.95 (*)	0.000			0.05	0.01	0.000	1.06	0.05	0.01	0.000	1.06	0.05	0.01	0.000	1.05	0.05	0.01	0.002	1.05	
	7.20 (*)	0.007			11.81 (*)	0.001			13.33 (*)	0.000		0.47	-0.76	0.21	0.000	0.47	-0.76	0.21	0.000	0.42	-0.81	0.21	0.000	0.44	
Age Category < 19.5 years (†)	8.81 (*)	0.003			8.96 (*)	0.003			11.37 (*)	0.001			11.51 (*)	0.001		2.81	1.03	0.32	0.001	2.99	1.10	0.32	0.000	3.13	
908 Time constraints	20.79 (*)	0.000			6.47 (*)	0.011			3.71 (*)	0.064			6.71 (*)	0.010			7.75 (*)	0.005		1.25	0.22	0.08	0.005	1.25	
†12 Academic effort	29.17 (*)	0.000			9.46 (*)	0.002			7.46 (*)	0.006			6.97 (*)	0.008			6.93 (*)	0.009		1.51	0.41	0.16	0.008	1.53	
Faculty Category = Professional (‡)	9.57 (*)	0.002			2.48 (*)	0.115			0.00 (*)	0.989			0.01 (*)	0.932			0.03 (*)	0.874			0.05 (*)	0.41	0.179	1.74	
Faculty Category = General (§)	0.24 (*)	0.622			1.42 (*)	0.233			5.29 (*)	0.022			3.94 (*)	0.047			4.28 (*)	0.046			5.22 (*)	0.27	0.007	2.07	
Model Chi-Square	df	Sig:			109.21	1	0.000		124.21	2	0.000		138.50	3	0.000		147.52	4	0.000		155.11	5	0.000		
Step Chi-Square	df	Sig:			109.21	1	0.000		15.00	1	0.000		14.29	1	0.000		9.03	1	0.003		7.58	1	0.008		
Hosmer & Lemeshow Chi-Square	df	Sig:			9.33	8	0.402		8.35	8	0.400		6.07	8	0.639		5.94	8	0.653		4.96	8	0.762		
Percentage of Predictions Correct (Cut Value = 0.95)			95.14%		77.62%				72.93%				74.75%				75.27%				75.80%				

Notes: (†) = Variable excluded in this step
(‡) Reference category is Age Category >= 19.5 years.
(§) Reference category is Other Faculty Category.

Appendices to Chapter 11

Appendix 11.1 Anti-Image Correlation Matrix

Appendix 11.1 Anti-Image Correlation Matrix																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Commitment					Academic integration					Social integration					Expectations for future					Financial concerns					Perspicacity at matric					Help and feedback					Time constraints					Academic self-concept					Self-assuredness at matric					Extraneous problems					Academic effort					Lost friends; homesickness					Family support					Transfer awareness					Help anticipated at matric					Friends same subject					Last-minute decision					Entry Point Score (capped)					Female					Younger					Hi_class					Uni_acc					Q5					Fac_Prof					Fac_Gen					Summer Persister																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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(t) Key:

- Younger:
- Hi_class:
- Uni_acc:
- Q5:
- Fac_Gen:
- Fac_Prof:
- Age Category indicator variable - below 19.5 years on entry
- Social Group indicator variable - Social Classes I - III; Armed Forces
- Residential Category indicator variable - University accommodation
- Entry Qualification Route indicator variable - Fifth-Year Qualifiers
- Faculty Category indicator variable - General
- Faculty Category indicator variable - Professional

Appendix 11.2.1: Matrix of Pearson Correlation Coefficients for the Observed Variables

	SMR PERS	UNI ACC	FAC GEN	admittance score (capped)	mq01 enjoy	mq02 family	mq03 sure study r	mq04 my decsn	mq05 new frnds	mq06 career	mq07 gu right
SMR PERS	1										
UNI ACC	0.05	1									
FAC GEN	-0.01	0.06	1								
admittance score (capped)	0.10	0.18	-0.33	1							
mq01 enjoy	0.05	0.24	-0.03	0.03	1						
mq02 family	0.07	0.03	-0.05	0.10	0.18	1					
mq03 sure study r	0.05	-0.08	-0.24	0.10	0.07	0.10	1				
mq04 my decsn	0.04	-0.03	-0.06	0.04	0.16	0.16	0.19	1			
mq05 new frnds	0.01	0.18	-0.07	0.05	0.38	0.24	0.08	0.25	1		
mq06 career	0.01	-0.11	-0.33	0.02	0.04	0.08	0.45	0.21	0.17	1	
mq07 gu right	0.04	-0.01	-0.04	-0.01	0.30	0.12	0.19	0.26	0.24	0.23	1
mq09 lose frnds r	0.01	-0.05	0.04	-0.02	0.06	0.10	0.10	0.16	0.09	0.07	0.10
mq11 study well	0.02	-0.02	-0.02	0.02	0.14	0.10	0.25	0.24	0.20	0.25	0.25
mq13 know subj	0.00	-0.06	-0.13	-0.02	0.11	0.07	0.27	0.17	0.10	0.30	0.16
mq14 know effrt	0.03	-0.14	-0.11	-0.07	0.11	0.08	0.22	0.21	0.15	0.29	0.19
mq15 class size	-0.02	-0.07	0.19	-0.17	0.02	0.05	-0.05	0.07	0.07	-0.05	0.06
mq16 big effrt	0.07	-0.10	-0.10	0.10	0.07	0.13	0.22	0.18	0.18	0.25	0.20
mq17 fin implns	-0.01	-0.03	-0.05	-0.02	0.07	0.10	0.18	0.18	0.17	0.25	0.24
mq18 study time r	0.06	0.00	-0.13	0.04	0.05	0.03	0.13	0.06	0.06	0.18	0.10
oq01 enjoy	0.15	0.24	-0.13	0.14	0.38	0.12	0.10	0.16	0.25	0.09	0.18
oq02 family	0.07	0.13	-0.08	0.13	0.14	0.44	0.12	0.15	0.21	0.08	0.13
oq03 lost frnds r	0.00	0.01	0.00	0.02	0.07	0.09	0.06	0.12	0.09	0.03	0.03
oq04 socs/clubs r	-0.01	0.02	-0.12	0.09	0.14	0.07	0.09	0.07	0.11	0.07	0.08
oq05 acad well	0.12	0.03	-0.03	0.17	0.07	0.09	0.14	0.13	0.08	0.11	0.07
oq06 new frnds	0.07	0.25	-0.10	0.05	0.28	0.09	0.09	0.09	0.32	0.10	0.15
oq07 not part GU r	0.10	0.10	-0.14	0.12	0.24	0.11	0.10	0.11	0.19	0.07	0.16
oq08 staff help studies r	0.03	0.01	-0.08	0.03	0.13	0.04	0.11	0.11	0.04	0.07	0.09
oq09 big effrt	0.10	-0.08	-0.09	0.10	0.01	0.07	0.18	0.12	0.07	0.18	0.10
oq11 studs pers hlp r	0.01	0.21	0.02	0.11	0.18	0.12	0.06	0.07	0.18	0.03	0.08
oq12 right subj	0.16	0.00	-0.27	0.20	0.13	0.12	0.33	0.16	0.11	0.30	0.16
oq13 diff instn job r	0.14	0.05	-0.16	0.07	0.17	0.14	0.20	0.18	0.18	0.16	0.23
oq15 soc exclud r	0.01	0.15	-0.08	0.04	0.19	0.09	0.09	0.08	0.17	0.07	0.12
oq17 diffc study r	0.11	0.02	-0.07	0.20	0.08	0.08	0.15	0.14	0.07	0.09	0.06
oq18 diff instn easier r	0.09	0.10	-0.11	0.16	0.17	0.12	0.14	0.14	0.16	0.08	0.15
oq19 stff/stds help studies r	0.03	-0.05	0.01	-0.01	-0.01	0.01	0.03	0.07	-0.04	0.02	0.02
oq20 studies left alone r	0.02	0.02	0.00	-0.05	0.10	0.03	0.05	0.04	0.04	0.01	0.05
oq22 acad feedbck r	-0.02	-0.03	0.01	-0.04	0.03	0.00	0.02	0.05	-0.03	0.01	-0.03
oq23 not prep univ r	0.10	0.10	-0.02	0.14	0.05	0.02	0.06	0.05	0.03	-0.01	0.01
oq24 classes big r	0.04	0.00	-0.27	0.08	0.11	0.05	0.15	0.07	0.06	0.16	0.07
oq25 homesick r	0.04	-0.32	-0.04	-0.05	0.04	0.06	0.07	0.07	0.02	0.03	0.05
oq27 accomm probe r	0.06	-0.26	-0.06	-0.01	0.03	0.12	0.09	0.15	0.05	0.09	0.07
oq29 pers probe r	0.08	-0.03	-0.14	0.09	0.10	0.14	0.10	0.15	0.11	0.04	0.07
oq30 no pers hlp r	0.04	0.11	-0.10	0.12	0.16	0.07	0.12	0.12	0.15	0.09	0.13
oq31 stdnt/stff pers hlp r	0.01	-0.16	-0.06	-0.09	-0.07	-0.01	0.02	0.01	-0.10	0.06	0.01
oq32 fin diffc r	0.07	-0.09	-0.10	0.15	-0.01	0.12	0.13	0.07	-0.01	0.08	0.03
oq33 srce fin hlp r	0.03	-0.03	-0.05	0.06	0.07	0.04	0.09	0.07	0.01	0.02	0.04
oq34 subj uninteresting r	0.18	0.02	-0.14	0.16	0.12	0.11	0.24	0.16	0.11	0.17	0.12
oq35 diff instn frnds r	0.09	0.06	-0.07	0.04	0.19	0.10	0.13	0.16	0.16	0.10	0.22
oq37 subj expected	0.07	0.01	-0.10	0.07	0.08	0.06	0.13	0.12	0.05	0.12	0.06
oq38 miss frnds r	0.01	-0.20	-0.01	-0.04	0.02	0.04	0.04	0.06	-0.05	0.02	0.03
oq39 travel lmtng r	0.05	0.47	0.00	0.10	0.15	0.03	0.01	0.03	0.10	-0.03	0.00
oq40 family lmtng r	0.05	0.33	0.00	0.11	0.12	0.11	0.09	0.09	0.11	0.00	0.05
oq41 work lmtng r	0.08	0.43	-0.02	0.12	0.13	0.08	0.06	0.02	0.05	-0.03	0.02
oq42 health lmtng r	0.06	0.12	-0.07	0.09	0.11	0.11	0.07	0.08	0.06	-0.02	0.05
oq43 cmvmtid univ edn	0.13	-0.01	-0.13	0.14	0.12	0.13	0.19	0.21	0.17	0.18	0.18
oq44 GU right instn	0.20	0.07	-0.11	0.04	0.22	0.09	0.16	0.21	0.17	0.14	0.34
oq45 leaving GU r	0.30	0.08	-0.11	0.12	0.20	0.12	0.20	0.20	0.16	0.13	0.20
oq49 prior subj knwldg r	0.05	-0.02	-0.16	0.11	0.08	0.10	0.25	0.11	0.05	0.24	0.08
oq50 prior diffcilty knwldg r	0.05	0.03	-0.20	0.15	0.07	0.08	0.16	0.07	0.05	0.16	0.03
oq51 found out more r	0.09	0.00	-0.16	0.13	0.12	0.10	0.25	0.11	0.08	0.23	0.10
oq52 crse fut unclear r	0.05	-0.03	-0.23	0.11	0.11	0.10	0.27	0.11	0.06	0.30	0.13
oq53 career clear	0.03	-0.09	-0.32	0.04	0.04	0.06	0.35	0.10	0.09	0.62	0.15
oq54 good job	0.04	-0.06	-0.40	0.11	0.10	0.12	0.30	0.14	0.16	0.48	0.19
oq55 fin worry r	0.07	-0.12	-0.12	0.11	0.01	0.12	0.10	0.04	0.00	0.07	0.02
oq56 leaving wastes money	0.11	0.09	-0.01	0.02	0.07	-0.02	0.07	0.06	0.09	0.05	0.10
oq57 expense unexpected r	0.02	-0.03	-0.05	0.09	-0.05	0.00	0.01	0.01	-0.10	-0.03	-0.03
oq58 loan amt	-0.01	-0.26	-0.03	0.02	-0.06	0.03	0.01	-0.04	-0.05	0.00	-0.06
oq59 study time r	0.08	-0.03	-0.24	0.20	0.06	0.02	0.20	0.06	0.10	0.19	0.08
oq60 work time	0.09	0.44	-0.04	0.17	0.11	0.06	0.01	-0.02	0.03	-0.06	-0.02

	mq09 lose frnds r	mq11 study well	mq13 know subj	mq14 know effrt	mq15 class size	mq16 big effrt	mq17 fin implns	mq18 study tme r	oq01 enjoy	oq02 family	oq03 lost friends r	oq04 socts/clubs r
SMR PERS												
UNI ACC												
FAC GEN												
admittance score (capped)												
mq01 enjoy												
mq02 family												
mq03 sure study r												
mq04 my decsn												
mq05 new frnds												
mq06 career												
mq07 gu right												
mq09 lose frnds r	1											
mq11 study well	0.14	1										
mq13 know subj	0.10	0.26	1									
mq14 know effrt	0.14	0.31	0.36	1								
mq15 class size	0.01	0.09	0.09	0.19	1							
mq16 big effrt	0.10	0.36	0.26	0.30	0.13	1						
mq17 fin implns	0.09	0.28	0.25	0.32	0.12	0.36	1					
mq18 study time r	0.04	0.13	0.14	0.17	-0.04	0.22	0.15	1				
oq01 enjoy	0.08	0.16	0.11	0.06	-0.07	0.10	0.10	0.04	1			
oq02 family	0.10	0.14	0.08	0.06	0.02	0.13	0.13	-0.01	0.25	1		
oq03 lost friends r	0.36	0.06	0.01	0.05	0.01	0.01	0.04	-0.04	0.08	0.12	1	
oq04 socts/clubs r	0.13	0.09	0.08	0.09	0.04	0.08	0.06	0.02	0.16	0.12	0.16	1
oq05 acad well	0.08	0.27	0.12	0.08	0.01	0.22	0.14	0.09	0.31	0.17	0.07	0.07
oq06 new frnds	0.08	0.12	0.10	0.07	-0.02	0.07	0.09	0.03	0.52	0.19	0.09	0.19
oq07 not part GU r	0.11	0.13	0.14	0.08	0.00	0.10	0.09	0.04	0.48	0.18	0.14	0.28
oq08 staff help studies r	0.07	0.16	0.12	0.08	0.00	0.04	0.06	-0.01	0.25	0.11	0.15	0.20
oq09 big effrt	0.08	0.21	0.21	0.16	0.02	0.44	0.22	0.15	0.13	0.11	0.04	0.05
oq11 studs pers hlp r	0.11	0.10	0.05	0.03	-0.03	0.02	0.04	0.03	0.25	0.16	0.10	0.15
oq12 right subj	0.05	0.19	0.19	0.12	-0.11	0.18	0.15	0.12	0.34	0.18	0.08	0.08
oq13 diff instn job r	0.08	0.15	0.14	0.12	-0.04	0.12	0.12	0.08	0.38	0.20	0.10	0.18
oq15 soc excld r	0.14	0.14	0.13	0.06	0.00	0.07	0.07	0.00	0.33	0.13	0.18	0.31
oq17 drifts study r	0.09	0.23	0.14	0.04	-0.04	0.13	0.10	0.05	0.29	0.15	0.14	0.14
oq18 diff instn easier r	0.07	0.18	0.13	0.11	0.00	0.12	0.10	0.07	0.32	0.20	0.06	0.13
oq19 stff/sids help studies r	0.08	0.12	0.05	0.02	-0.02	0.06	0.05	0.02	0.05	0.05	0.10	0.05
oq20 studies left alone r	0.06	0.09	0.10	0.06	-0.01	-0.01	0.05	0.00	0.18	0.08	0.12	0.15
oq22 acad feedback r	0.06	0.04	0.10	0.03	-0.01	-0.04	0.00	-0.05	0.11	0.03	0.13	0.15
oq23 not prep univ r	0.09	0.08	0.03	0.02	-0.06	-0.02	0.01	-0.01	0.20	0.07	0.18	0.13
oq24 classes big r	0.10	0.07	0.16	0.13	-0.13	0.04	0.08	0.05	0.20	0.07	0.12	0.17
oq25 homesick r	0.12	0.04	0.05	0.09	0.05	0.00	0.01	0.00	0.08	0.01	0.12	0.05
oq27 accomm probs r	0.12	0.10	0.09	0.10	0.07	0.11	0.10	0.03	0.08	0.15	0.18	0.11
oq29 pers probs r	0.12	0.10	0.12	0.08	0.00	0.10	0.05	0.01	0.26	0.21	0.20	0.18
oq30 no pers hlp r	0.12	0.14	0.12	0.06	0.01	0.09	0.08	0.04	0.28	0.16	0.16	0.26
oq31 stdnt/stff pers hlp r	0.04	0.01	0.03	0.03	-0.04	0.01	0.00	0.02	-0.07	-0.03	0.06	0.03
oq32 fin drifts r	0.05	0.11	0.08	0.08	0.01	0.12	0.09	0.03	0.07	0.15	0.09	0.10
oq33 arce fin hlp r	0.07	0.11	0.11	0.08	-0.02	0.07	0.05	0.03	0.12	0.09	0.08	0.19
oq34 subj uninteresting r	0.07	0.19	0.19	0.07	-0.10	0.19	0.13	0.12	0.37	0.16	0.07	0.13
oq35 diff instn frnds r	0.13	0.16	0.13	0.09	0.01	0.11	0.10	0.05	0.41	0.18	0.14	0.15
oq37 subj expected	0.05	0.14	0.13	0.05	-0.04	0.07	0.07	0.06	0.29	0.10	0.05	0.09
oq38 miss frnds r	0.14	0.06	0.06	0.04	-0.02	-0.01	0.01	0.01	0.10	0.00	0.18	0.09
oq39 travel lmtng r	0.02	0.07	0.02	-0.04	-0.02	-0.03	0.00	-0.02	0.23	0.15	0.10	0.10
oq40 family lmtng r	0.08	0.07	0.09	0.02	-0.02	0.00	0.05	0.00	0.18	0.20	0.10	0.10
oq41 work lmtng r	0.03	0.05	-0.01	-0.05	-0.04	-0.02	-0.02	-0.01	0.21	0.18	0.06	0.08
oq42 health lmtng r	0.03	0.05	0.06	0.07	-0.02	0.03	0.04	0.02	0.18	0.19	0.09	0.11
oq43 cmmtdd univ edn	0.07	0.21	0.17	0.15	0.01	0.27	0.20	0.11	0.30	0.23	0.04	0.08
oq44 GU right instn	0.10	0.16	0.15	0.11	0.03	0.15	0.15	0.07	0.50	0.21	0.11	0.15
oq45 leaving GU r	0.08	0.16	0.14	0.10	-0.02	0.15	0.13	0.08	0.49	0.23	0.13	0.16
oq49 prior subj knwldg r	0.07	0.14	0.25	0.15	-0.06	0.13	0.14	0.10	0.18	0.09	0.07	0.12
oq50 prior diffcty knwldg r	0.06	0.14	0.17	0.17	-0.09	0.10	0.09	0.07	0.18	0.07	0.06	0.09
oq51 found out more r	0.09	0.16	0.23	0.14	-0.08	0.12	0.14	0.08	0.26	0.12	0.09	0.14
oq52 crse fut unclear r	0.09	0.18	0.22	0.16	-0.10	0.11	0.14	0.10	0.24	0.12	0.08	0.15
oq53 career clear	0.03	0.17	0.23	0.19	-0.09	0.17	0.17	0.14	0.14	0.08	0.01	0.07
oq54 good job	0.06	0.19	0.20	0.21	-0.10	0.17	0.14	0.14	0.22	0.13	0.00	0.10
oq55 fin worry r	0.08	0.11	0.08	0.07	0.01	0.08	0.05	0.01	0.07	0.14	0.12	0.11
oq56 leaving wastes money	-0.03	0.02	0.05	0.03	0.02	0.06	0.08	0.01	0.12	0.04	-0.06	-0.01
oq57 expense unexpected r	0.04	0.06	0.02	0.02	-0.06	-0.01	0.01	0.04	0.06	0.04	0.08	0.05
oq58 loan armt	0.00	0.00	0.04	0.02	0.05	0.04	-0.06	-0.03	-0.03	0.04	0.05	0.03
oq59 study time r	0.03	0.12	0.17	0.12	-0.11	0.29	0.17	0.32	0.13	0.07	-0.01	0.04
oq60 work time	-0.01	-0.01	-0.05	-0.10	-0.08	-0.04	-0.05	-0.03	0.18	0.13	0.03	0.05

	oq05 acad well	oq06 new frnds	oq07 not part GU r	oq08 staff help studies r	oq09 big effrt	oq11 studs pers hlp r	oq12 right subj	oq13 diff instn job r	oq15 soc excl d r	oq17 diffs study r	oq18 diff instn easier r	oq19 stff/stds help studies r
SMR PERS												
UNI ACC												
FAC GEN												
admittance score (capped)												
mq01 enjoy												
mq02 family												
mq03 sure study r												
mq04 my decsn												
mq05 new frnds												
mq06 career												
mq07 gu right												
mq09 lose frnds r												
mq11 study well												
mq13 know subj												
mq14 know effrt												
mq15 class size												
mq16 big effrt												
mq17 fin impns												
mq18 study time r												
oq01 enjoy												
oq02 family												
oq03 lost frnds r												
oq04 socs/clubs r												
oq05 acad well	1											
oq06 new frnds	0.16	1										
oq07 not part GU r	0.21	0.46	1									
oq08 staff help studies r	0.26	0.14	0.29	1								
oq09 big effrt	0.37	0.07	0.11	0.09	1							
oq11 studs pers hlp r	0.07	0.33	0.24	0.14	0.06	1						
oq12 right subj	0.34	0.16	0.22	0.23	0.25	0.14	1					
oq13 diff instn job r	0.21	0.27	0.36	0.23	0.16	0.19	0.37	1				
oq15 soc excl d r	0.10	0.40	0.44	0.24	0.05	0.30	0.16	0.25	1			
oq17 diffs study r	0.58	0.12	0.23	0.32	0.26	0.13	0.35	0.23	0.20	1		
oq18 diff instn easier r	0.30	0.19	0.26	0.22	0.17	0.19	0.29	0.43	0.22	0.34	1	
oq19 stff/stds help studies r	0.14	-0.07	0.06	0.30	0.13	-0.04	0.08	0.07	0.04	0.16	0.12	1
oq20 studies left alone r	0.17	0.13	0.21	0.37	0.06	0.12	0.13	0.19	0.21	0.22	0.15	0.17
oq22 acad feedbck r	0.16	0.07	0.14	0.32	-0.02	0.04	0.08	0.11	0.17	0.21	0.11	0.10
oq23 not prep univ r	0.22	0.09	0.19	0.22	0.11	0.12	0.18	0.13	0.15	0.28	0.22	0.08
oq24 classes big r	0.11	0.19	0.21	0.23	0.08	0.14	0.24	0.23	0.20	0.15	0.16	0.07
oq25 homesick r	0.03	0.05	0.10	0.09	-0.06	0.00	0.06	0.14	0.14	0.07	0.10	0.02
oq27 accomm probs r	0.10	0.06	0.16	0.10	0.08	0.06	0.12	0.16	0.16	0.13	0.08	0.09
oq29 pers probs r	0.22	0.18	0.25	0.22	0.13	0.16	0.24	0.21	0.26	0.34	0.20	0.07
oq30 no pers hlp r	0.17	0.26	0.36	0.34	0.10	0.26	0.23	0.25	0.33	0.23	0.25	0.12
oq31 stdnt/stff pers hlp r	0.05	-0.19	-0.02	0.15	0.08	-0.17	0.05	0.00	-0.03	0.08	-0.02	0.28
oq32 fin diffs r	0.19	-0.01	0.12	0.15	0.18	0.06	0.18	0.09	0.08	0.26	0.14	0.11
oq33 srce fin hlp r	0.13	0.03	0.17	0.27	0.09	0.09	0.11	0.12	0.17	0.19	0.16	0.15
oq34 subj uninteresting r	0.34	0.17	0.26	0.24	0.29	0.16	0.54	0.38	0.18	0.35	0.34	0.15
oq35 diff instn frnds r	0.20	0.34	0.34	0.20	0.13	0.21	0.28	0.43	0.29	0.20	0.43	0.06
oq37 subj expected	0.30	0.13	0.21	0.20	0.15	0.08	0.39	0.25	0.13	0.30	0.20	0.09
oq38 miss frnds r	0.08	0.09	0.13	0.11	0.01	0.00	0.07	0.11	0.12	0.12	0.06	0.04
oq39 travel lmtng r	0.14	0.16	0.19	0.15	-0.02	0.14	0.08	0.14	0.21	0.16	0.16	0.07
oq40 family lmtng r	0.13	0.11	0.13	0.12	0.02	0.15	0.10	0.19	0.17	0.17	0.18	0.04
oq41 work lmtng r	0.11	0.13	0.17	0.15	0.01	0.11	0.10	0.13	0.15	0.14	0.18	0.01
oq42 health lmtng r	0.16	0.09	0.17	0.11	0.03	0.10	0.12	0.17	0.15	0.19	0.17	0.01
oq43 cmmttd univ edn	0.29	0.15	0.21	0.12	0.29	0.09	0.29	0.30	0.13	0.23	0.34	0.07
oq44 GU right instn	0.25	0.35	0.40	0.20	0.18	0.15	0.36	0.53	0.27	0.22	0.40	0.07
oq45 leaving GU r	0.33	0.30	0.39	0.24	0.21	0.17	0.41	0.49	0.24	0.33	0.39	0.07
oq49 pncr subj knwldg r	0.20	0.12	0.15	0.19	0.15	0.08	0.30	0.21	0.12	0.25	0.18	0.07
oq50 prior dffcty knwldg r	0.19	0.07	0.10	0.20	0.12	0.11	0.25	0.16	0.10	0.28	0.19	0.11
oq51 found out more r	0.26	0.15	0.21	0.23	0.19	0.16	0.42	0.31	0.19	0.31	0.27	0.09
oq52 crse fut unclear r	0.22	0.19	0.23	0.28	0.16	0.13	0.36	0.29	0.21	0.31	0.25	0.13
oq53 career clear	0.16	0.16	0.11	0.09	0.19	0.05	0.36	0.18	0.07	0.14	0.11	0.06
oq54 good job	0.19	0.20	0.19	0.13	0.20	0.08	0.35	0.33	0.14	0.16	0.20	0.04
oq55 fin worry r	0.19	-0.01	0.13	0.17	0.14	0.04	0.15	0.09	0.13	0.25	0.14	0.09
oq56 leaving wastes money	0.05	0.09	0.08	-0.02	0.07	0.06	0.05	0.08	0.01	0.02	0.10	-0.04
oq57 expense unexpected r	0.12	-0.04	0.05	0.12	0.04	0.01	0.08	0.08	0.04	0.15	0.11	0.12
oq58 loan amt	0.04	-0.05	0.04	0.07	0.07	-0.02	0.06	0.01	-0.01	0.06	-0.03	0.01
oq59 study time r	0.20	0.05	0.10	0.07	0.42	0.05	0.24	0.14	0.04	0.17	0.12	0.10
oq60 work time	0.05	0.12	0.12	0.08	0.00	0.10	0.07	0.07	0.09	0.08	0.12	-0.02

	oq20 studies left alone r	oq22 acad feedbck r	oq23 not prep univ r	oq24 classes big r	oq25 homesick r	oq27 accomm probe r	oq29 pers probe r	oq30 no pers hlp r	oq31 stdnt/stff pers hlp r	oq32 fin diffs r	oq33 srce fin hlp r	oq34 subj uninterestin g r
SMR PERS												
UNI ACC												
FAC GEN												
admittance score (capped)												
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mq02 family												
mq03 sure study r												
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mq05 new frnds												
mq06 career												
mq07 gu right												
mq09 lose frnds r												
mq11 study well												
mq13 know subj												
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mq15 class size												
mq16 big effrt												
mq17 fin impns												
mq18 study time r												
oq01 enjoy												
oq02 family												
oq03 lost friends r												
oq04 socs/clubs r												
oq05 acad well												
oq06 new frnds												
oq07 not part GU r												
oq08 staff help studies r												
oq09 big effrt												
oq11 studs pers hlp r												
oq12 right subj												
oq13 diff instn job r												
oq15 soc exclud r												
oq17 diffs study r												
oq18 diff instn easier r												
oq19 stff/stds help studies r												
oq20 studies left alone r	1											
oq22 acad feedbck r	0.32	1										
oq23 not prep univ r	0.24	0.22	1									
oq24 classes big r	0.20	0.22	0.19	1								
oq25 homesick r	0.09	0.08	0.09	0.12	1							
oq27 accomm probe r	0.12	0.10	0.06	0.13	0.23	1						
oq29 pers probe r	0.20	0.16	0.18	0.15	0.19	0.32	1					
oq30 no pers hlp r	0.29	0.18	0.22	0.20	0.11	0.17	0.42	1				
oq31 stdnt/stff pers hlp r	0.13	0.09	0.05	0.00	0.05	0.08	0.06	0.10	1			
oq32 fin diffs r	0.13	0.11	0.14	0.11	0.08	0.24	0.24	0.17	0.12	1		
oq33 srce fin hlp r	0.23	0.17	0.18	0.17	0.06	0.15	0.13	0.28	0.14	0.29	1	
oq34 subj uninteresting r	0.16	0.10	0.20	0.23	0.05	0.11	0.22	0.25	0.07	0.15	0.18	1
oq35 diff instn frnds r	0.13	0.10	0.18	0.21	0.19	0.12	0.20	0.27	-0.04	0.07	0.11	0.31
oq37 subj expected	0.17	0.13	0.19	0.19	0.03	0.07	0.18	0.18	0.08	0.10	0.12	0.45
oq38 miss frnds r	0.12	0.15	0.12	0.14	0.30	0.11	0.14	0.10	0.11	0.08	0.08	0.07
oq39 travel limng r	0.15	0.13	0.15	0.11	-0.08	0.03	0.10	0.17	-0.02	0.10	0.10	0.10
oq40 family limng r	0.11	0.06	0.14	0.05	-0.02	0.09	0.27	0.22	-0.01	0.14	0.13	0.11
oq41 work limng r	0.09	0.09	0.12	0.09	-0.09	0.01	0.13	0.17	-0.01	0.15	0.10	0.10
oq42 health limng r	0.11	0.08	0.12	0.09	0.06	0.13	0.37	0.21	-0.01	0.15	0.10	0.13
oq43 crmmttd univ edn	0.04	-0.01	0.10	0.10	0.07	0.11	0.17	0.17	0.00	0.09	0.10	0.33
oq44 GU right instn	0.15	0.06	0.13	0.17	0.13	0.15	0.24	0.25	-0.01	0.05	0.11	0.35
oq45 leaving GU r	0.19	0.13	0.20	0.17	0.14	0.17	0.32	0.28	-0.01	0.12	0.13	0.41
oq49 prior subj knowldg r	0.18	0.15	0.21	0.23	0.07	0.10	0.13	0.16	0.09	0.15	0.18	0.31
oq50 prior diffcty knowldg r	0.18	0.14	0.28	0.23	0.06	0.07	0.14	0.15	0.08	0.15	0.17	0.22
oq51 found out more r	0.19	0.15	0.26	0.25	0.10	0.10	0.16	0.20	0.06	0.16	0.20	0.37
oq52 crse fut unclear r	0.22	0.20	0.21	0.25	0.14	0.10	0.17	0.24	0.08	0.16	0.20	0.34
oq53 career clear	0.06	0.02	0.03	0.18	0.06	0.07	0.09	0.11	0.08	0.08	0.04	0.24
oq54 good job	0.09	0.03	0.05	0.21	0.09	0.12	0.13	0.16	0.04	0.12	0.09	0.24
oq55 fin worry r	0.16	0.13	0.14	0.12	0.13	0.25	0.28	0.17	0.12	0.68	0.28	0.10
oq56 leaving wastes money	-0.02	-0.08	0.00	-0.01	-0.03	-0.05	-0.01	0.01	-0.07	-0.09	-0.04	0.06
oq57 expense unexpected r	0.14	0.16	0.21	0.07	0.08	0.09	0.10	0.11	0.13	0.34	0.23	0.08
oq58 loan amt	0.05	0.06	0.04	0.02	0.10	0.14	0.10	0.01	0.04	0.24	0.08	0.05
oq59 study time r	0.03	-0.03	0.05	0.15	-0.03	0.08	0.06	0.11	0.09	0.14	0.11	0.27
oq60 work time	0.04	0.03	0.11	0.07	-0.13	-0.07	0.06	0.12	-0.04	0.07	0.04	0.04

	oq35 diff instn frnds r	oq37 subj expected	oq38 miss frnds r	oq39 travel lmtng r	oq40 family lmtng r	oq41 work lmtng r	oq42 health lmtng r	oq43 cmmttd univ edn	oq44 GU right instn	oq45 leaving GU r	oq49 prior subj knwldg r	oq50 prior dficity knwldg r
SMR PERS												
UNI ACC												
FAC GEN												
admittance score (capped)												
mq01 enjoy												
mq02 family												
mq03 sure study r												
mq04 my decsn												
mq05 new frnds												
mq06 career												
mq07 gu right												
mq09 lose frnds r												
mq11 study well												
mq13 know subj												
mq14 know effrt												
mq15 class size												
mq16 big effrt												
mq17 fin impls												
mq18 study bme r												
oq01 enjoy												
oq02 family												
oq03 lost frnds r												
oq04 socs/clubs r												
oq05 acad well												
oq06 new frnds												
oq07 not part GU r												
oq08 staff help studies r												
oq09 big effrt												
oq11 studs pers hlp r												
oq12 right subj												
oq13 diff instn job r												
oq15 soc excld r												
oq17 drfts study r												
oq18 diff instn easier r												
oq19 stff/stds help studies r												
oq20 studies left alone r												
oq22 acad feedbck r												
oq23 not prep univ r												
oq24 classes big r												
oq25 homesick r												
oq27 accomm probe r												
oq29 pers probe r												
oq30 no pers hlp r												
oq31 stndt/stff pers hlp r												
oq32 fin drfts r												
oq33 srce fin hlp r												
oq34 subj unntrestng r												
oq35 diff instn frnds r	1											
oq37 subj expected	0.19	1										
oq38 miss frnds r	0.28	0.08	1									
oq39 travel lmtng r	0.18	0.06	0.01	1								
oq40 family lmtng r	0.16	0.08	0.03	0.32	1							
oq41 work lmtng r	0.13	0.08	-0.06	0.35	0.45	1						
oq42 health lmtng r	0.15	0.10	0.05	0.16	0.49	0.35	1					
oq43 cmmttd univ edn	0.27	0.19	0.02	0.06	0.10	0.06	0.10	1				
oq44 GU right instn	0.54	0.28	0.14	0.15	0.13	0.11	0.14	0.45	1			
oq45 leaving GU r	0.43	0.29	0.11	0.16	0.19	0.16	0.23	0.43	0.62	1		
oq49 prior subj knwldg r	0.17	0.30	0.08	0.09	0.13	0.09	0.09	0.14	0.16	0.18	1	
oq50 prior dficity knwldg r	0.13	0.21	0.09	0.11	0.10	0.12	0.07	0.10	0.11	0.13	0.46	1
oq51 found out more r	0.27	0.33	0.15	0.11	0.13	0.09	0.08	0.20	0.26	0.27	0.50	0.44
oq52 crse fut unclear r	0.22	0.29	0.13	0.07	0.12	0.11	0.10	0.19	0.25	0.27	0.39	0.36
oq53 career clear	0.13	0.18	0.03	-0.03	0.02	-0.02	0.00	0.20	0.17	0.14	0.26	0.19
oq54 good job	0.20	0.18	0.05	0.03	0.08	0.02	0.09	0.30	0.29	0.25	0.25	0.19
oq55 fin worry r	0.08	0.09	0.14	0.10	0.15	0.14	0.16	0.06	0.06	0.13	0.14	0.15
oq56 leaving wastes money	0.08	0.07	-0.05	-0.03	-0.01	0.00	0.01	0.24	0.18	0.19	0.02	-0.04
oq57 expense unexpected r	0.06	0.11	0.12	0.15	0.12	0.10	0.10	-0.01	0.01	0.06	0.12	0.21
oq58 loan amt	0.02	0.06	0.06	-0.07	-0.07	-0.08	0.02	0.01	0.00	0.02	0.03	0.02
oq59 study time r	0.11	0.14	0.02	0.02	0.05	0.04	0.04	0.23	0.12	0.16	0.19	0.16
oq60 work time	0.06	0.04	-0.08	0.25	0.26	0.72	0.17	0.02	0.04	0.10	0.06	0.10

	oq51 found out more r	oq52 crse fut unclear r	oq53 career clear	oq54 good job	oq55 fin worry r	oq56 leaving wastes money	oq57 expense unexpected r	oq58 loan amt	oq59 study time r	oq60 work time
SMR PERS										
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admittance score (capped)										
mq01 enjoy										
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mq06 career										
mq07 gu right										
mq09 lose frnds r										
mq11 study well										
mq13 know subj										
mq14 know effrt										
mq15 class size										
mq16 big effrt										
mq17 fin impns										
mq18 study time r										
oq01 enjoy										
oq02 family										
oq03 lost friends r										
oq04 socs/clubs r										
oq05 acad well										
oq06 new frnds										
oq07 not part GU r										
oq08 staff help studies r										
oq09 big effrt										
oq11 studs pers hlp r										
oq12 right subj										
oq13 diff instn job r										
oq15 soc excld r										
oq17 drifts study r										
oq18 diff instn easier r										
oq19 stff/stds help studies r										
oq20 studies left alone r										
oq22 acad feedbck r										
oq23 not prep univ r										
oq24 classes big r										
oq25 homesick r										
oq27 accomm probs r										
oq29 pers probs r										
oq30 no pers hlp r										
oq31 stdnt/stff pers hlp r										
oq32 fin drifts r										
oq33 srce fin hlp r										
oq34 subj uninteresting r										
oq35 diff instn frnds r										
oq37 subj expected										
oq38 miss frnds r										
oq39 travel lmtng r										
oq40 family lmtng r										
oq41 work lmtng r										
oq42 health lmtng r										
oq43 cmmttd univ edn										
oq44 GU right instn										
oq45 leaving GU r										
oq49 prior subj knwldg r										
oq50 prior diffcity knwldg r										
oq51 found out more r	1									
oq52 crse fut unclear r	0.45	1								
oq53 career clear	0.28	0.39	1							
oq54 good job	0.26	0.36	0.55	1						
oq55 fin worry r	0.17	0.17	0.06	0.14	1					
oq56 leaving wastes money	0.01	0.00	0.04	0.11	-0.16	1				
oq57 expense unexpected r	0.18	0.16	-0.01	0.02	0.36	-0.22	1			
oq58 loan amt	0.05	0.02	0.02	0.02	0.27	-0.10	0.12	1		
oq59 study time r	0.19	0.17	0.18	0.21	0.07	0.03	0.06	0.02	1	
oq60 work time	0.05	0.04	-0.05	-0.02	0.04	0.01	0.04	-0.10	0.01	1

Appendix 11.2.2: Matrix of Correlation Coefficients for the Observed Variables Based on the Asymptotic Correlation Matrix

	SMR PERS	mq01 enjoy	mq03 sure study r	mq04 my decsn	mq05 new frnds	mq06 career	mq07 gu right	mq11 study well	mq13 know subj	mq14 know effrt	mq16 big effrt
SMR PERS	1										
mq01 enjoy	0.11	1									
mq03 sure study r	0.12	0.09	1								
mq04 my decsn	0.09	0.21	0.26	1							
mq05 new frnds	0.01	0.48	0.13	0.37	1						
mq06 career	0.03	0.06	0.54	0.27	0.21	1					
mq07 gu right	0.09	0.37	0.26	0.35	0.32	0.28	1				
mq11 study well	0.04	0.18	0.33	0.34	0.26	0.31	0.32	1			
mq13 know subj	-0.01	0.15	0.35	0.22	0.17	0.35	0.21	0.34	1		
mq14 know effrt	0.08	0.14	0.28	0.29	0.22	0.34	0.25	0.40	0.45	1	
mq16 big effrt	0.15	0.09	0.29	0.25	0.24	0.30	0.25	0.45	0.32	0.38	1
mq17 fin implns	-0.02	0.10	0.24	0.25	0.23	0.30	0.31	0.37	0.32	0.40	0.44
mq18 study time r	0.14	0.06	0.17	0.08	0.08	0.20	0.12	0.17	0.17	0.20	0.27
oq01 enjoy	0.32	0.46	0.13	0.19	0.32	0.10	0.23	0.19	0.14	0.09	0.13
oq04 socs/clubs r	-0.02	0.16	0.12	0.09	0.16	0.08	0.10	0.12	0.10	0.11	0.10
oq05 acad well	0.25	0.08	0.16	0.16	0.10	0.12	0.08	0.33	0.14	0.11	0.26
oq06 new frnds	0.17	0.34	0.11	0.14	0.42	0.12	0.19	0.16	0.14	0.10	0.10
oq07 not part GU r	0.22	0.29	0.14	0.15	0.25	0.09	0.20	0.17	0.18	0.10	0.12
oq09 big effrt	0.21	0.01	0.24	0.15	0.10	0.21	0.13	0.26	0.24	0.20	0.52
oq11 studs pers hlp r	0.02	0.22	0.07	0.11	0.26	0.04	0.12	0.13	0.07	0.04	0.04
oq12 right subj	0.32	0.16	0.42	0.21	0.16	0.36	0.20	0.24	0.24	0.16	0.23
oq13 diff instn job r	0.29	0.21	0.25	0.24	0.24	0.20	0.30	0.20	0.18	0.17	0.17
oq15 soc exclud r	0.03	0.24	0.12	0.12	0.23	0.08	0.15	0.18	0.17	0.09	0.08
oq17 diff study r	0.23	0.10	0.20	0.18	0.09	0.10	0.08	0.29	0.17	0.06	0.16
oq18 diff instn easier r	0.20	0.21	0.19	0.20	0.23	0.11	0.20	0.25	0.18	0.16	0.17
oq24 classes big r	0.09	0.12	0.19	0.08	0.09	0.19	0.08	0.09	0.19	0.15	0.05
oq30 no pers hlp r	0.08	0.19	0.15	0.16	0.20	0.10	0.16	0.17	0.15	0.09	0.10
oq34 subj uninteresting r	0.35	0.15	0.31	0.20	0.15	0.22	0.16	0.24	0.23	0.11	0.23
oq35 diff instn frnds r	0.18	0.23	0.17	0.22	0.23	0.12	0.28	0.21	0.18	0.14	0.15
oq37 subj expected	0.15	0.09	0.17	0.15	0.08	0.15	0.09	0.18	0.17	0.08	0.10
oq43 cmmtd univ edn	0.29	0.16	0.26	0.30	0.24	0.24	0.24	0.30	0.22	0.21	0.35
oq44 GU right instn	0.37	0.27	0.21	0.26	0.23	0.17	0.42	0.21	0.19	0.16	0.20
oq45 leaving GU r	0.51	0.25	0.27	0.25	0.24	0.18	0.28	0.22	0.18	0.14	0.20
oq49 prior subj knowldg r	0.10	0.10	0.31	0.14	0.07	0.27	0.10	0.17	0.29	0.17	0.15
oq50 prior diffclty knowldg r	0.10	0.09	0.20	0.09	0.05	0.17	0.04	0.16	0.19	0.19	0.11
oq51 found out more r	0.20	0.15	0.31	0.13	0.10	0.26	0.12	0.19	0.27	0.17	0.15
oq52 crse fut unclear r	0.12	0.13	0.33	0.14	0.07	0.34	0.16	0.21	0.26	0.18	0.13
oq53 career clear	0.06	0.05	0.42	0.13	0.11	0.67	0.18	0.21	0.27	0.23	0.20
oq54 good job	0.08	0.12	0.38	0.17	0.20	0.54	0.23	0.24	0.24	0.26	0.21
oq59 study time r	0.20	0.07	0.25	0.08	0.12	0.21	0.10	0.15	0.19	0.14	0.35
UNI ACC	0.13	0.33	-0.11	-0.03	0.27	-0.13	-0.01	-0.03	-0.08	-0.18	-0.14
FAC GEN	-0.03	-0.05	-0.37	-0.08	-0.12	-0.45	-0.05	-0.04	-0.19	-0.16	-0.15
admittance score (capped)	0.21	0.03	0.12	0.05	0.04	0.03	-0.01	0.03	-0.02	-0.07	0.12
mq02 family	0.18	0.29	0.19	0.29	0.39	0.13	0.21	0.19	0.13	0.16	0.23
oq02 family	0.19	0.20	0.19	0.25	0.32	0.12	0.19	0.21	0.13	0.10	0.19
oq08 staff help studies r	0.06	0.15	0.13	0.14	0.06	0.08	0.11	0.19	0.15	0.09	0.05
oq20 studies left alone r	0.04	0.11	0.05	0.05	0.04	0.00	0.05	0.10	0.12	0.05	-0.02
oq22 acad feedbck r	-0.04	0.04	0.02	0.05	-0.04	0.00	-0.04	0.05	0.11	0.03	-0.05
oq27 accomm probs r	0.12	0.03	0.12	0.18	0.07	0.11	0.09	0.14	0.12	0.12	0.14
oq29 pers probs r	0.17	0.12	0.12	0.18	0.15	0.05	0.10	0.13	0.14	0.11	0.12
oq42 health lming r	0.14	0.14	0.09	0.10	0.08	-0.02	0.06	0.06	0.07	0.08	0.03

	mq17 fin implns	mq18 study time r	oq01 enjoy	oq04 socts/clubs r	oq05 acad well	oq06 new frnds	oq07 not part GU r	oq09 big effrt	oq11 studs pers hlp r	oq12 right subj	oq13 diff instn job r
SMR PERS											
mq01 enjoy											
mq03 sure study r											
mq04 my decsn											
mq05 new frnds											
mq06 career											
mq07 gu right											
mq11 study well											
mq13 know subj											
mq14 know effrt											
mq16 big effrt											
mq17 fin implns	1										
mq18 study time r	0.18	1									
oq01 enjoy	0.13	0.05	1								
oq04 socts/clubs r	0.08	0.03	0.19	1							
oq05 acad well	0.17	0.11	0.35	0.09	1						
oq06 new frnds	0.11	0.04	0.62	0.21	0.19	1					
oq07 not part GU r	0.12	0.06	0.55	0.33	0.24	0.53	1				
oq09 big effrt	0.27	0.17	0.14	0.07	0.42	0.08	0.13	1			
oq11 studs pers hlp r	0.07	0.05	0.31	0.19	0.08	0.41	0.30	0.07	1		
oq12 right subj	0.20	0.14	0.39	0.10	0.38	0.21	0.27	0.30	0.18	1	
oq13 diff instn job r	0.17	0.10	0.45	0.22	0.25	0.34	0.42	0.19	0.25	0.45	1
oq15 soc excld r	0.10	0.01	0.40	0.35	0.12	0.48	0.51	0.05	0.37	0.19	0.32
oq17 diffs study r	0.13	0.06	0.33	0.17	0.66	0.14	0.26	0.30	0.15	0.38	0.27
oq18 diff instn easier r	0.15	0.09	0.39	0.17	0.36	0.27	0.33	0.21	0.25	0.36	0.55
oq24 classes big r	0.09	0.06	0.24	0.18	0.11	0.23	0.23	0.09	0.17	0.28	0.27
oq30 no pers hlp r	0.10	0.05	0.32	0.29	0.19	0.31	0.41	0.12	0.32	0.26	0.31
oq34 subj uninteresting r	0.16	0.15	0.41	0.16	0.38	0.20	0.29	0.33	0.19	0.61	0.44
oq35 diff instn frnds r	0.15	0.06	0.48	0.18	0.25	0.42	0.40	0.17	0.27	0.35	0.54
oq37 subj expected	0.09	0.08	0.33	0.11	0.34	0.16	0.24	0.18	0.11	0.45	0.29
oq43 cmmtd univ edn	0.28	0.14	0.38	0.11	0.36	0.22	0.28	0.38	0.14	0.38	0.39
oq44 GU right instn	0.20	0.09	0.58	0.19	0.28	0.42	0.47	0.22	0.21	0.42	0.63
oq45 leaving GU r	0.19	0.10	0.57	0.21	0.40	0.39	0.48	0.27	0.23	0.50	0.59
oq49 prior subj knwldg r	0.17	0.11	0.22	0.13	0.24	0.15	0.18	0.17	0.10	0.36	0.25
oq50 prior dfclty knwldg r	0.11	0.08	0.21	0.11	0.22	0.08	0.12	0.14	0.13	0.30	0.20
oq51 found out more r	0.17	0.09	0.30	0.15	0.30	0.19	0.24	0.22	0.18	0.48	0.36
oq52 crse fut unclear r	0.16	0.12	0.28	0.17	0.26	0.22	0.27	0.19	0.16	0.42	0.34
oq53 career clear	0.20	0.15	0.17	0.08	0.19	0.19	0.13	0.22	0.06	0.42	0.22
oq54 good job	0.18	0.16	0.25	0.12	0.22	0.25	0.24	0.23	0.10	0.42	0.39
oq59 study time r	0.20	0.36	0.15	0.06	0.23	0.07	0.12	0.50	0.06	0.29	0.17
UNI ACC	-0.04	0.00	0.33	0.03	0.03	0.35	0.14	-0.11	0.29	0.01	0.07
FAC GEN	-0.07	-0.18	-0.18	-0.17	-0.03	-0.15	-0.20	-0.13	0.02	-0.38	-0.25
admittance score (capped)	-0.02	0.05	0.16	0.10	0.18	0.06	0.12	0.12	0.12	0.23	0.08
mq02 family	0.19	0.05	0.18	0.13	0.14	0.16	0.17	0.12	0.20	0.20	0.24
oq02 family	0.19	0.00	0.38	0.18	0.25	0.30	0.28	0.17	0.26	0.27	0.32
oq08 staff help studies r	0.07	0.00	0.27	0.23	0.29	0.16	0.33	0.11	0.17	0.25	0.27
oq20 studies left alone r	0.06	0.00	0.20	0.16	0.19	0.14	0.24	0.06	0.14	0.14	0.21
oq22 acad feedbck r	-0.01	-0.05	0.13	0.17	0.19	0.08	0.16	-0.03	0.04	0.08	0.12
oq27 accomm probs r	0.13	0.04	0.10	0.13	0.11	0.08	0.20	0.11	0.07	0.14	0.20
oq29 pers probs r	0.08	0.01	0.29	0.21	0.23	0.21	0.29	0.16	0.20	0.27	0.26
oq42 health limtg r	0.05	0.01	0.22	0.13	0.19	0.11	0.19	0.03	0.13	0.15	0.21

	oq15 soc excl d r	oq17 diffs study r	oq18 diff instn easier r	oq24 classes big r	oq30 no pers hlp r	oq34 subj uninteresting r	oq35 diff instn frnds r	oq37 subj expected	oq43 cmmtd univ edn	oq44 GU right instn	oq45 leaving GU r
SMR PERS											
mq01 enjoy											
mq03 sure study r											
mq04 my decsn											
mq05 new frnds											
mq06 career											
mq07 gu right											
mq11 study well											
mq13 know subj											
mq14 know effrt											
mq16 big effrt											
mq17 fin implns											
mq18 study time r											
oq01 enjoy											
oq04 socts/clubs r											
oq05 acad well											
oq06 new frnds											
oq07 not part GU r											
oq09 big effrt											
oq11 studs pers hlp r											
oq12 right subj											
oq13 diff instn job r											
oq15 soc excl d r	1										
oq17 diffs study r	0.24	1									
oq18 diff instn easier r	0.28	0.42	1								
oq24 classes big r	0.23	0.17	0.20	1							
oq30 no pers hlp r	0.38	0.26	0.30	0.23	1						
oq34 subj uninteresting r	0.22	0.39	0.40	0.27	0.29	1					
oq35 diff instn frnds r	0.35	0.25	0.55	0.25	0.33	0.38	1				
oq37 subj expected	0.15	0.34	0.25	0.22	0.20	0.51	0.23	1			
oq43 cmmtd univ edn	0.18	0.29	0.45	0.13	0.22	0.42	0.36	0.25	1		
oq44 GU right instn	0.32	0.26	0.50	0.20	0.30	0.40	0.62	0.34	0.57	1	
oq45 leaving GU r	0.32	0.40	0.52	0.21	0.35	0.48	0.53	0.35	0.56	0.73	1
oq49 prior subj knwldg r	0.14	0.28	0.21	0.26	0.18	0.36	0.21	0.35	0.18	0.20	0.24
oq50 prior dfcty knwldg r	0.12	0.33	0.23	0.25	0.17	0.26	0.17	0.25	0.11	0.13	0.18
oq51 found out more r	0.23	0.36	0.32	0.29	0.22	0.42	0.33	0.38	0.25	0.31	0.34
oq52 crse fut unclear r	0.24	0.36	0.30	0.29	0.27	0.39	0.26	0.33	0.24	0.29	0.35
oq53 career clear	0.08	0.16	0.14	0.21	0.13	0.28	0.16	0.22	0.26	0.21	0.20
oq54 good job	0.17	0.18	0.26	0.25	0.18	0.29	0.26	0.22	0.39	0.35	0.32
oq59 study time r	0.05	0.20	0.15	0.17	0.13	0.32	0.14	0.17	0.29	0.15	0.21
UNI ACC	0.21	0.03	0.13	0.01	0.15	0.02	0.09	0.02	-0.01	0.09	0.12
FAC GEN	-0.11	-0.09	-0.16	-0.37	-0.14	-0.21	-0.10	-0.15	-0.21	-0.17	-0.18
admittance score (capped)	0.04	0.21	0.18	0.09	0.12	0.17	0.05	0.08	0.17	0.05	0.15
mq02 family	0.15	0.13	0.21	0.07	0.11	0.17	0.18	0.10	0.22	0.15	0.22
oq02 family	0.22	0.21	0.31	0.12	0.24	0.25	0.28	0.15	0.36	0.33	0.37
oq08 staff help studies r	0.28	0.37	0.27	0.25	0.37	0.26	0.24	0.22	0.16	0.24	0.30
oq20 studies left alone r	0.23	0.26	0.17	0.22	0.32	0.17	0.16	0.20	0.05	0.17	0.23
oq22 acad feedbck r	0.20	0.24	0.12	0.25	0.20	0.11	0.10	0.15	-0.02	0.06	0.15
oq27 accomm probs r	0.19	0.14	0.11	0.14	0.21	0.13	0.17	0.07	0.15	0.18	0.23
oq29 pers probs r	0.31	0.37	0.25	0.17	0.49	0.24	0.25	0.19	0.22	0.28	0.38
oq42 health lmtng r	0.18	0.22	0.21	0.10	0.25	0.16	0.19	0.11	0.13	0.16	0.30

	oq49 prior subj knwldg r	oq50 prior diffcilty knwldg r	oq51 found out more r	oq52 crse fut unclear r	oq53 career clear	oq54 good job	oq59 study time r	UNI ACC	FAC GEN	admittance score (capped)	mq02 family
SMR PERS											
mq01 enjoy											
mq03 sure study r											
mq04 my decsn											
mq05 new frnds											
mq06 career											
mq07 gu right											
mq11 study well											
mq13 know subj											
mq14 know effrt											
mq16 big effrt											
mq17 fin impins											
mq18 study time r											
oq01 enjoy											
oq04 socts/clubs r											
oq05 acad well											
oq06 new frnds											
oq07 not part GU r											
oq09 big effrt											
oq11 studs pers hlp r											
oq12 right subj											
oq13 diff instn job r											
oq15 soc excl'd r											
oq17 diff's study r											
oq18 diff instn easier r											
oq24 classes big r											
oq30 no pers hlp r											
oq34 subj uninteresting r											
oq35 diff instn frnds r											
oq37 subj expected											
oq43 cmmtd univ edn											
oq44 GU right instn											
oq45 leaving GU r											
oq49 prior subj knwldg r	1										
oq50 prior diffcilty knwldg r	0.53	1									
oq51 found out more r	0.56	0.50	1								
oq52 crse fut unclear r	0.44	0.41	0.51	1							
oq53 career clear	0.30	0.22	0.31	0.43	1						
oq54 good job	0.29	0.21	0.30	0.42	0.62	1					
oq59 study time r	0.20	0.17	0.22	0.20	0.21	0.24	1				
UNI ACC	-0.03	0.04	-0.01	-0.04	-0.11	-0.08	-0.03	1			
FAC GEN	-0.21	-0.26	-0.22	-0.30	-0.43	-0.56	-0.33	0.10	1		
admittance score (capped)	0.12	0.16	0.14	0.11	0.05	0.12	0.21	0.23	-0.43	1	
mq02 family	0.16	0.13	0.16	0.15	0.09	0.19	0.04	0.05	-0.09	0.09	1
oq02 family	0.14	0.10	0.18	0.19	0.12	0.21	0.11	0.21	-0.14	0.16	0.62
oq08 staff help studies r	0.21	0.23	0.25	0.31	0.10	0.14	0.08	0.02	-0.11	0.04	0.06
oq20 studies left alone r	0.18	0.22	0.21	0.25	0.07	0.09	0.04	0.03	0.00	-0.06	0.06
oq22 acad feedbck r	0.17	0.17	0.17	0.22	0.03	0.04	-0.03	-0.05	0.02	-0.04	-0.01
oq27 accomm probs r	0.11	0.07	0.12	0.11	0.09	0.15	0.09	-0.36	-0.09	-0.01	0.17
oq29 pers probs r	0.16	0.16	0.19	0.20	0.10	0.16	0.07	-0.05	-0.19	0.09	0.21
oq42 health lmtng r	0.10	0.09	0.10	0.12	0.00	0.11	0.04	0.18	-0.09	0.11	0.16

	oq02 family	oq08 staff help studies r	oq20 studies left alone r	oq22 acad feedbck r	oq27 accomm probs r	oq29 pers probs r	oq42 health lmtng r
SMR PERS							
mq01 enjoy							
mq03 sure study r							
mq04 my decsn							
mq05 new frnds							
mq06 career							
mq07 gu right							
mq11 study well							
mq13 know subj							
mq14 know effrt							
mq16 big effrt							
mq17 fin implns							
mq18 study time r							
oq01 enjoy							
oq04 socts/clubs r							
oq05 acad well							
oq06 new frnds							
oq07 not part GU r							
oq09 big effrt							
oq11 studs pers hlp r							
oq12 right subj							
oq13 diff instn job r							
oq15 soc exclud r							
oq17 diffis study r							
oq18 diff instn easier r							
oq24 classes big r							
oq30 no pers hlp r							
oq34 subj uninteresting r							
oq35 diff instn frnds r							
oq37 subj expected							
oq43 cmmtd univ edn							
oq44 GU right instn							
oq45 leaving GU r							
oq49 prior subj knwldg r							
oq50 prior diffcity knwldg r							
oq51 found out more r							
oq52 crse fut unclear r							
oq53 career clear							
oq54 good job							
oq59 study time r							
UNI ACC							
FAC GEN							
admittance score (capped)							
mq02 family							
oq02 family	1						
oq08 staff help studies r	0.16	1					
oq20 studies left alone r	0.11	0.41	1				
oq22 acad feedbck r	0.02	0.35	0.37	1			
oq27 accomm probs r	0.21	0.12	0.14	0.10	1		
oq29 pers probs r	0.29	0.25	0.22	0.18	0.37	1	
oq42 health lmtng r	0.26	0.14	0.13	0.09	0.15	0.43	1

Appendix 11.3.1: Principal Components Analysis and Measurement Equations in Model C (relaxed, with error covariances) Compared

(factor loadings in structural model shown)

 = item (left) selected for component (top),
using Principal Components Analysis.

using Principal Components Analysis																		
	Commitment	Academic integration	Social integration	Expectations for the future	Financial concerns	Perspicacity at matriculation	Help and feedback	Time constraints	Academic self-concept	Self-assuredness at matriculation	Extraneous problems	Academic effort	Loss of friends & homesickness	Family support	Transfer awareness	Help anticipated at matriculation	Friends studying same subject	Last-minute decision
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Cronbach's alpha	0.84	0.78	0.72	0.77		0.69	0.60		0.67	0.56	0.53	0.59		0.50				
Percentage of variance explained by first principal component	45%	40%	42%	60%		40%	56%		44%	43%	52%	45%		51%				
oq44 GU_right_instn	0.88																	
oq45 leaving_GU_r	0.91																	
oq13 diff_instn_job_r	0.82																	
oq35 diff_instn_frnds_r	0.76																	
oq43 cmmtd_univ_edn	0.78																	
oq18 diff_instn_easier_r	0.58																	
oq01 enjoy	0.83								0.26									
oq34 subj_uninteresting_r	0.38	0.33										0.15						
oq56 leaving_wastes_money	-																	
oq12 right_subj		0.85																
oq50 prior_diffcity_knwldg_r		0.52																
oq49 prior_subj_knwldg_r		0.57																
oq51 found_out_more_r		0.74																
oq52 crse_fut_unclear_r		-																
oq23 not_prep_univ_r		-							0.47									
oq37 subj_expected		0.35							0.27									
oq15 soc_exclod_r			0.71															
oq06 new_frnds			0.82															
oq07 not_part_GU_r			0.78															
oq04 socts/clubs_r			0.46															
oq11 studs_pers_hlp_r			0.63															
oq30 no_pers_hlp_r			0.64															
oq24 classes_big_r		0.54																
oq53 career_clear		0.24		0.46														
mqq06 career				0.71														
oq54 good_job	0.32			0.51														
mqq03 sure_study_r				0.75														
oq55 fin_worry_r				-														
oq32 fin_diffs_r				-														
oq58 loan_amt				-														
oq57 expense_unexpected_r				-														
oq33 srce_fin_hlp_r				-														
mqq14 know_effrt						0.63												
mqq15 class_size						-												
mqq17 fin_implns						0.70												
mqq16 big_effrt						0.70												
mqq13 know_subj						0.76												
mqq11 study_well						0.61				0.13								
oq19 stff/stds_help_studies_r						-												
oq31 stdnt/stff_pers_hlp_r						-												
oq08 staff_help_studies_r						0.74												
oq20 studies_left_alone_r						0.52												
oq22 acad_feedbck_r						0.32												
oq41 work_lmtng_r						-												
oq60 work_time						-												
oq39 travel_lmtng_r						-												
oq05 acad_well									0.84									
oq17 diffs_study_r									0.85									
mqq01 enjoy																		
mqq05 new_frnds																		
mqq07 gu_right						0.27				0.79								
mqq04 my_decsn										0.28								
oq42 health_lmtng_r										0.66								
oq40 family_lmtng_r											0.58							
oq29 pers_probs_r											-							
oq27 accomm_probs_r											0.84				0.61			
oq59 study_time_r											0.54							
mqq18 study_time_r												0.75						
oq09 big_effrt												0.51						
mqq09 lose_frnds_r												0.88						
oq03 lost_friends_r												-						
oq38 miss_frnds_r												-						
oq25 homesick_r												-						
mqq02 family																		
oq02 family																		
oq46 diff_instn_crse_r																		
oq47 diff_crse_GU_r																		
mqq12 know_pers_hlp																		
mqq10 staff_help_studies																		
oq10 frnds_same_subj																		
mqq08 last_min_r																		

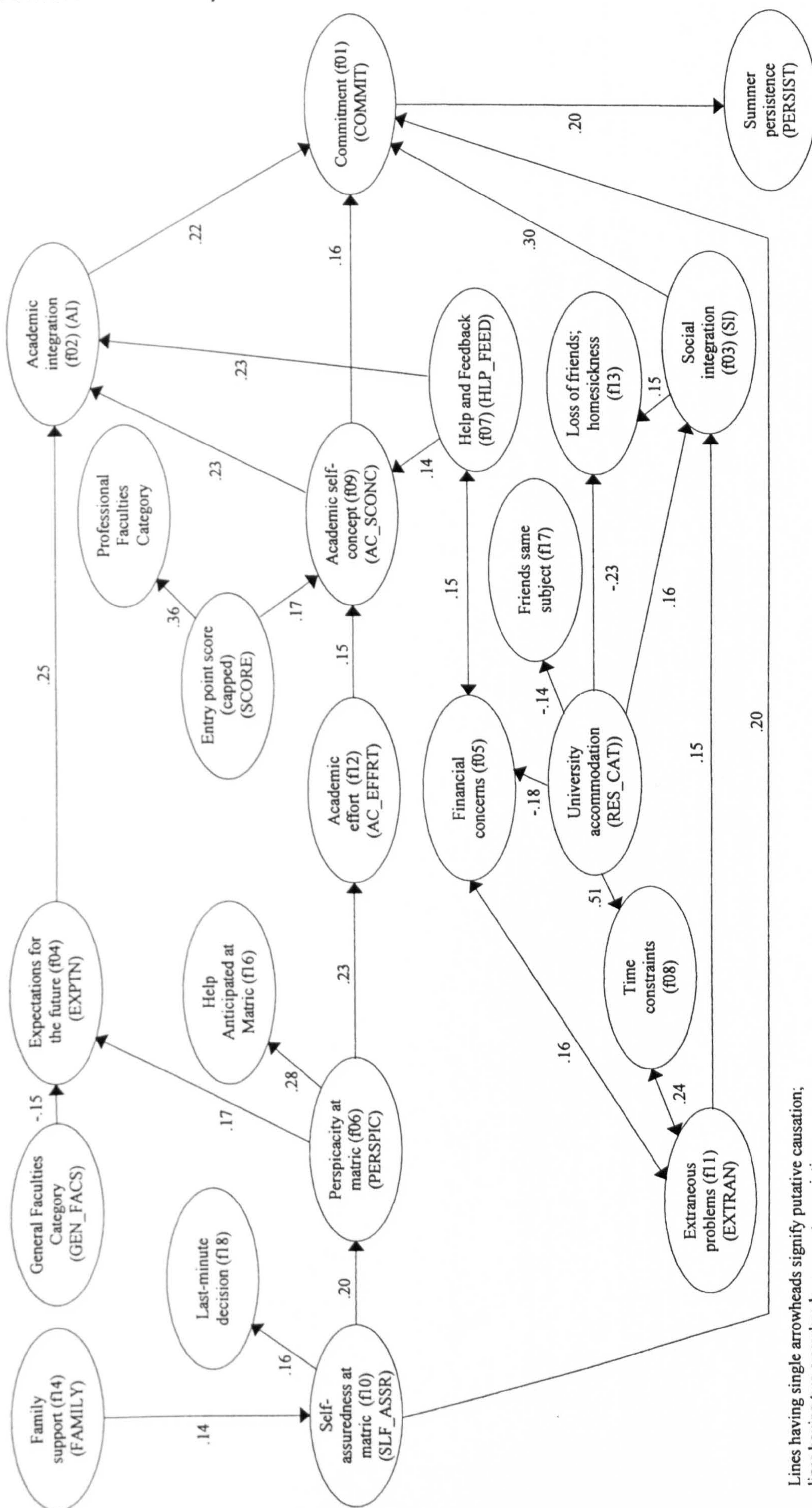
Appendix 11.3.2: Principal Components Analysis and Measurement Equations in Model C (constrained, with error covariances) Compared

(factor loadings in structural equation model shown)

 = item (left) selected for component (top), using Principal Components Analysis

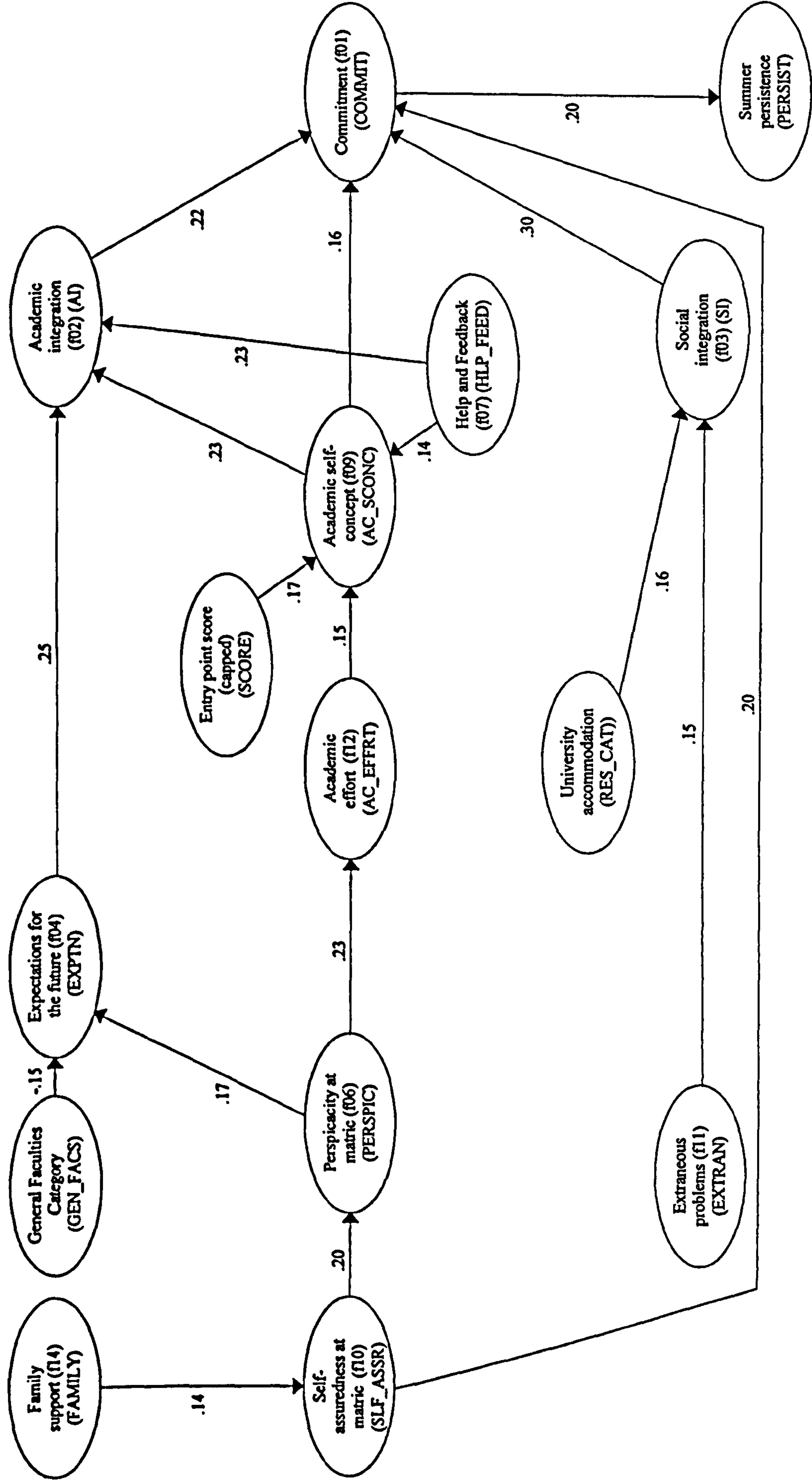
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Commitment	Academic integration	Social integration	Expectations for the future	Financial concerns	Perspicacity at matriculation	Help and feedback	Time constraints	Academic self-concept	Self-assuredness at matriculation	Extraneous problems	Academic effort	Loss of friends & homesickness	Family support	Transfer awareness	Help anticipated at matriculation	Friends studying same subject	Last-minute decision
Cronbach's alpha	0.84	0.80	0.72	0.77		0.69	0.60		0.73	0.59	0.53	0.56		0.61				
Percentage of variance explained by first principal component	51%	42%	42%	60%		45%	56%		79%	45%	52%	54%		72%				
oq44 GU_right_instn	0.94																	
oq45 leaving_GU_r	0.90																	
oq13 diff_instn_job_r	0.86																	
oq35 diff_instn_frnds_r	0.81																	
oq43 cmmtd_univ_edn	0.85																	
oq18 diff_instn_easier_r	0.87																	
oq01 enjoy	0.86																	
oq34 subj_uninteresting_r		0.89																
oq56 leaving_wastes_money																		
oq12 right_subj		0.90																
oq50 prior_diffclty_knwldg_r		0.55																
oq49 prior_subj_knwldg_r		0.64																
oq51 found_out_more_r		0.75																
oq52 crse_fut_unclear_r		0.78																
oq23 not_prep_univ_r																		
oq37 subj_expected		0.70																
oq15 soc_exclcd_r			0.75															
oq06 new_frnds			0.81															
oq07 not_part_GU_r			0.81															
oq04 socs/clubs_r			0.51															
oq11 studs_pers_hlp_r			0.62															
oq30 no_pers_hlp_r			0.66															
oq24 classes_big_r		0.60																
oq53 career_clear			0.83															
mq06 career			0.78															
oq54 good_job			0.88															
mq03 sure_study_r			0.70															
oq55 fin_worry_r																		
oq32 fin_diffs_r																		
oq58 loan_amt																		
oq57 expense_unexpected_r																		
oq33 srce_fin_hlp_r																		
mq14 know_effrt						0.60												
mq15 class_size																		
mq17 fin_impuls						0.70												
mq16 big_effrt						0.71												
mq13 know_subj						0.79												
mq11 study_well						0.74												
oq19 stff/stds_help_studies_r																		
oq31 stdnt/stff_pers_hlp_r																		
oq08 stff_help_studies_r							0.71											
oq20 studies_left_alone_r							0.52											
oq22 acad_feedbck_r							0.27											
oq41 work_lmtng_r																		
oq60 work_time																		
oq39 travel_lmtng_r																		
oq05 acad_well									0.82									
oq17 difts_study_r									0.85									
mq01 enjoy										0.58								
mq05 new_frnds										0.70								
mq07 gu_right										0.58								
mq04 my_decsn										0.59								
oq42 health_lmtng_r											0.54							
oq40 family_lmtng_r												0.82						
oq29 pers_probs_r												0.52						
oq27 accomm_probs_r													0.74					
oq59 study_time_r													0.45					
mq18 study_time_r													0.77					
oq09 big_effrt																		
mq09 lose_frnds_r																		
oq03 lost_friends_r																		
oq38 miss_frnds_r																		
oq25 homesick_r																		
mq02 family														0.73				
oq02 family														0.85				
oq46 diff_instn_crse_r																		
oq47 diff_crse_GU_r																		
mq12 know_pers_hlp																		
mq10 stff_help_studies																		
oq10 frnds_same_subj																		
mq08 last_min_r																		

Appendix 11.4.1: Initial Postulated Path Model (with partial correlation coefficients shown)

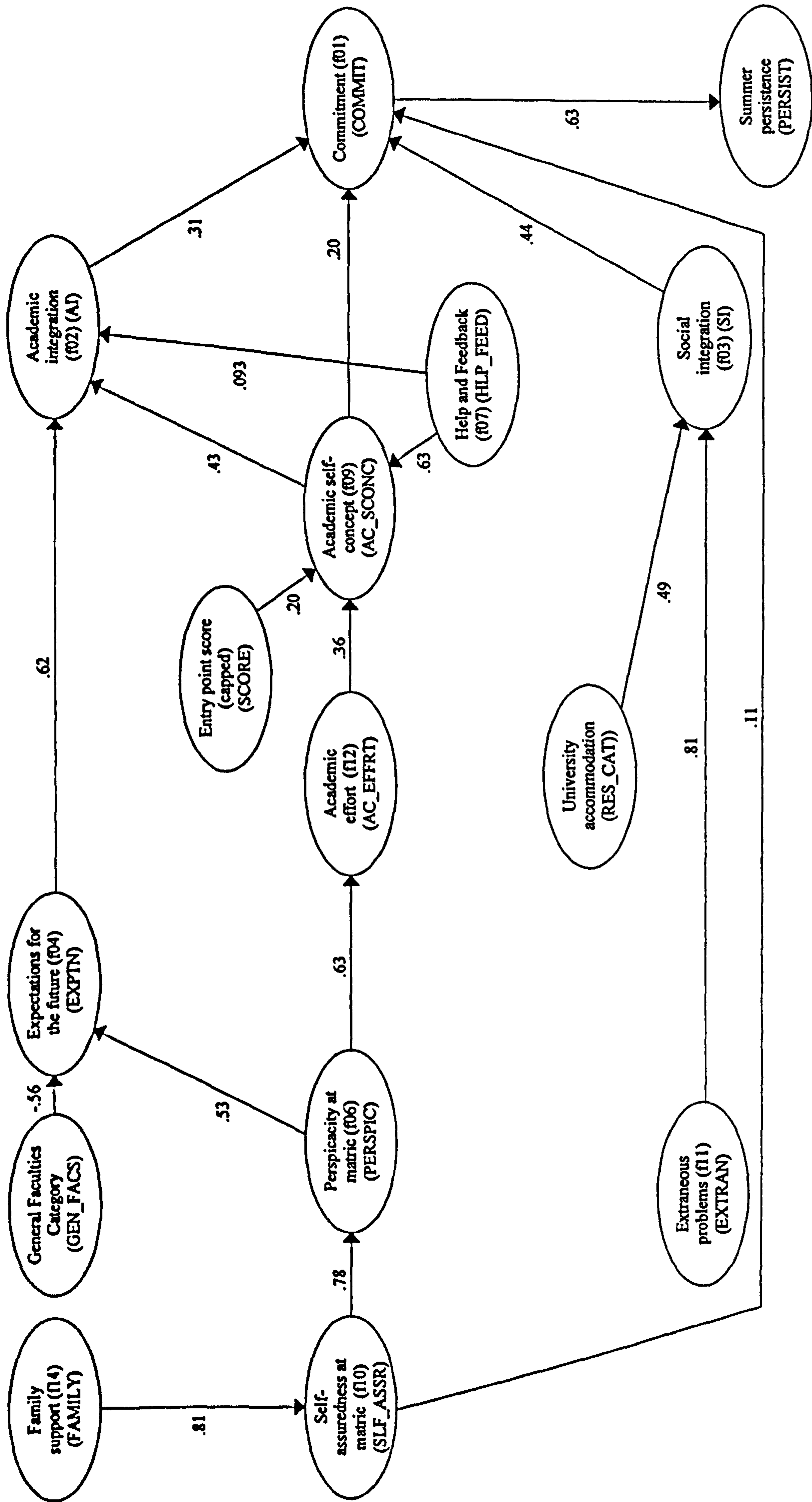


Lines having single arrowheads signify putative causation; lines having two arrowheads represent associations.

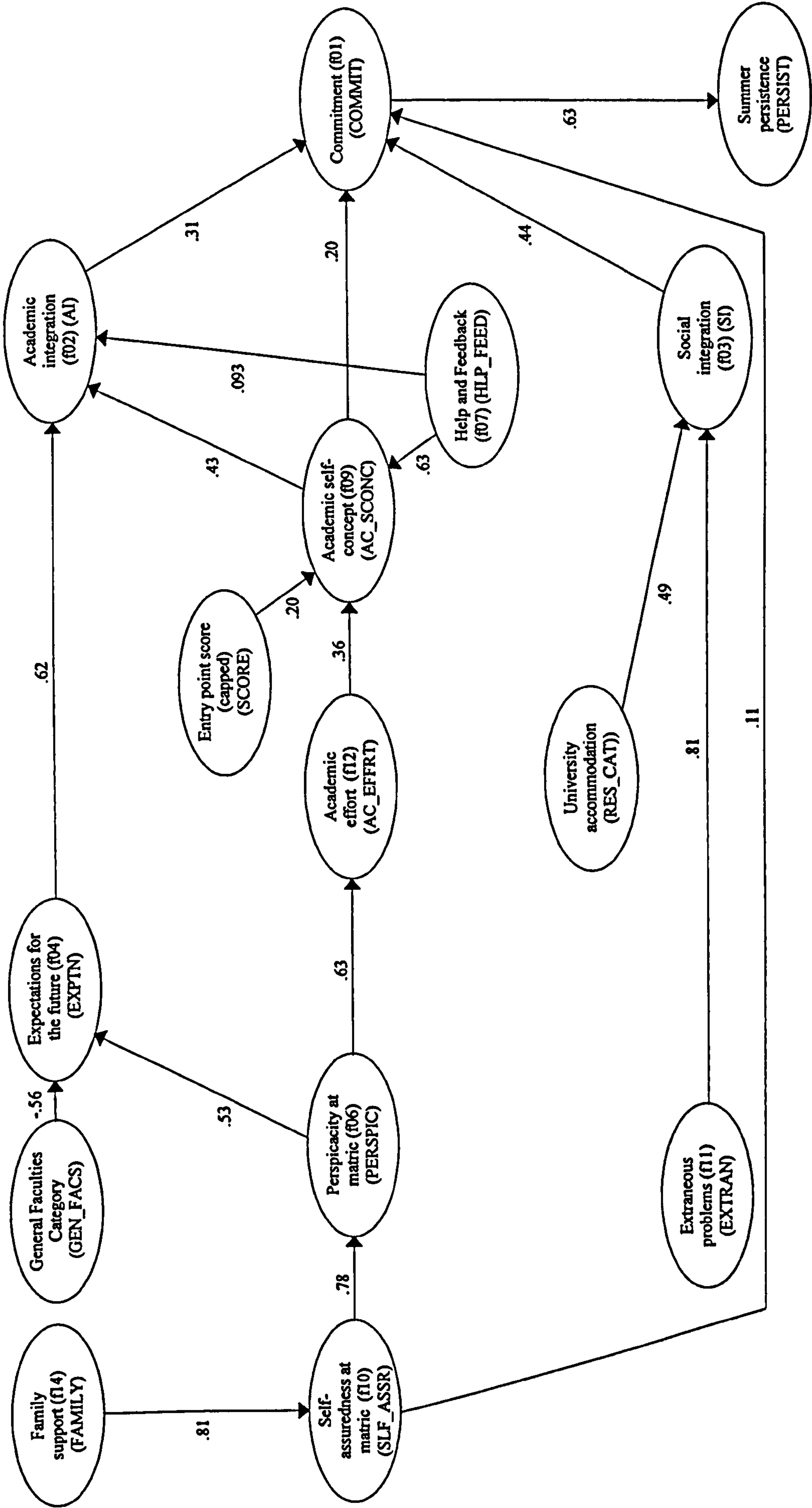
Appendix 11.4.2: Model 0 (with partial correlation coefficients shown)



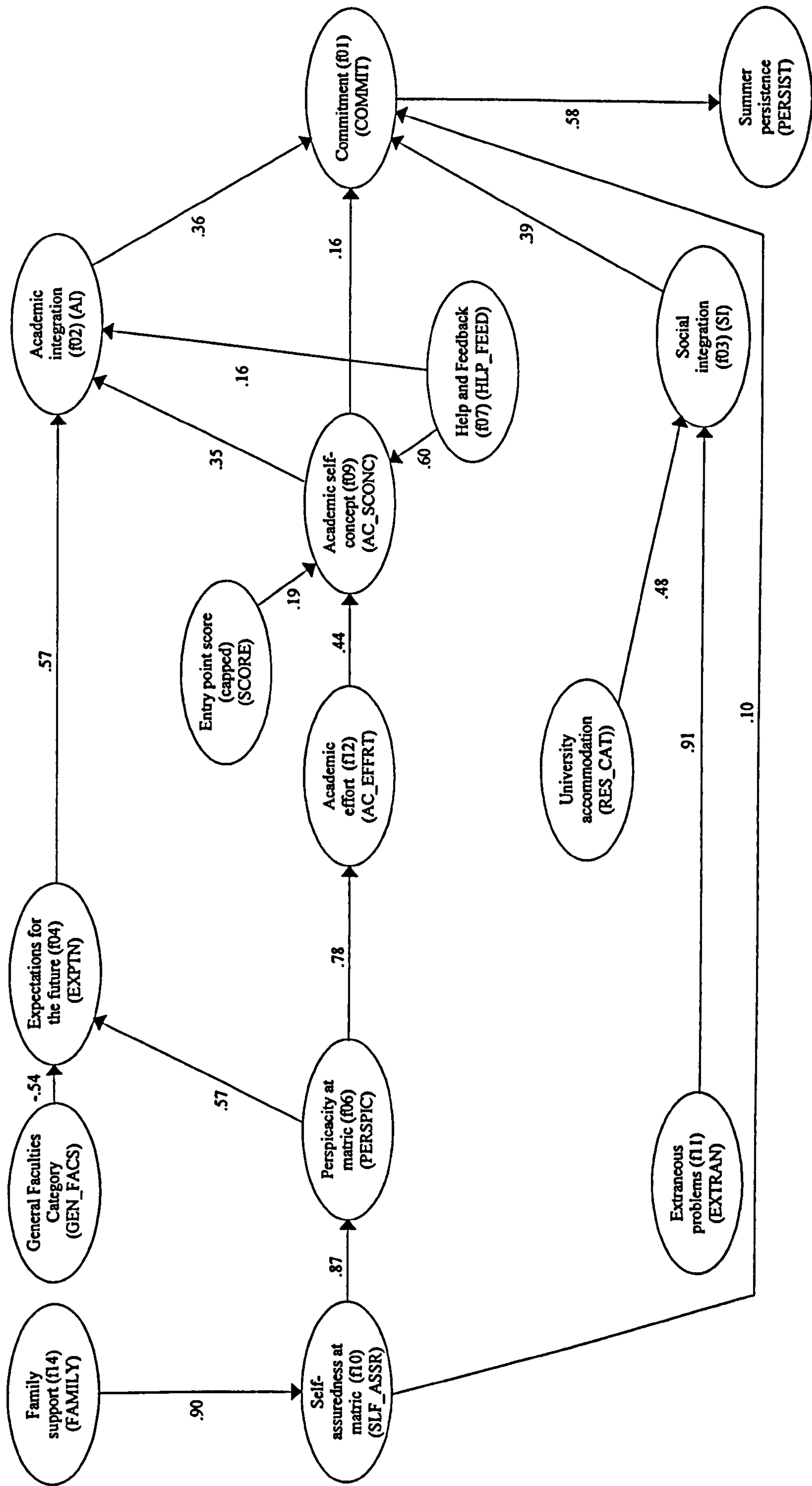
Appendix 11.4.3: Model 0 (with path coefficients show; with measurement equations and error covariances relaxed)



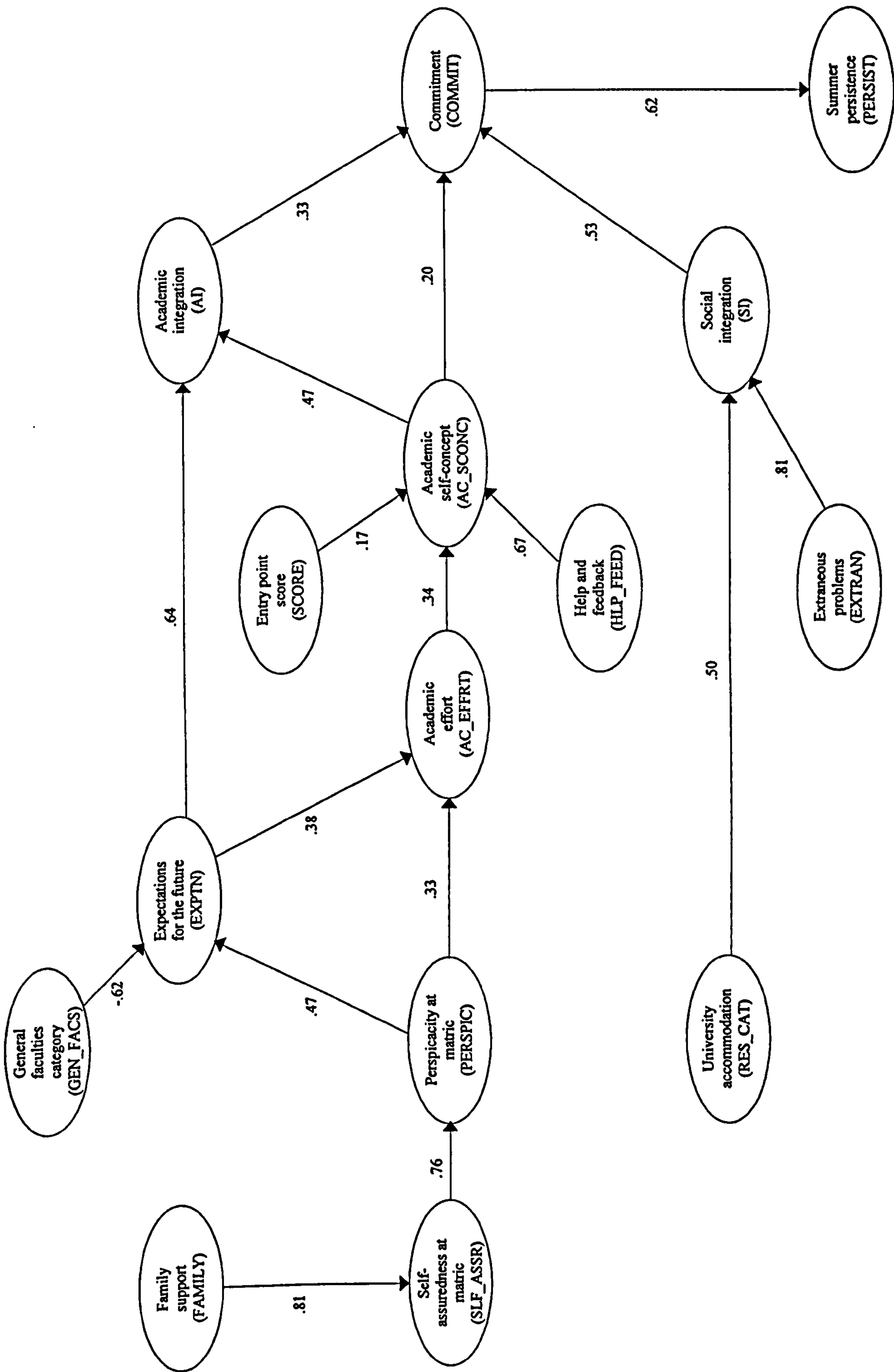
Appendix 11.4.3: Model 0 (with path coefficients show; with measurement equations and error covariances relaxed)



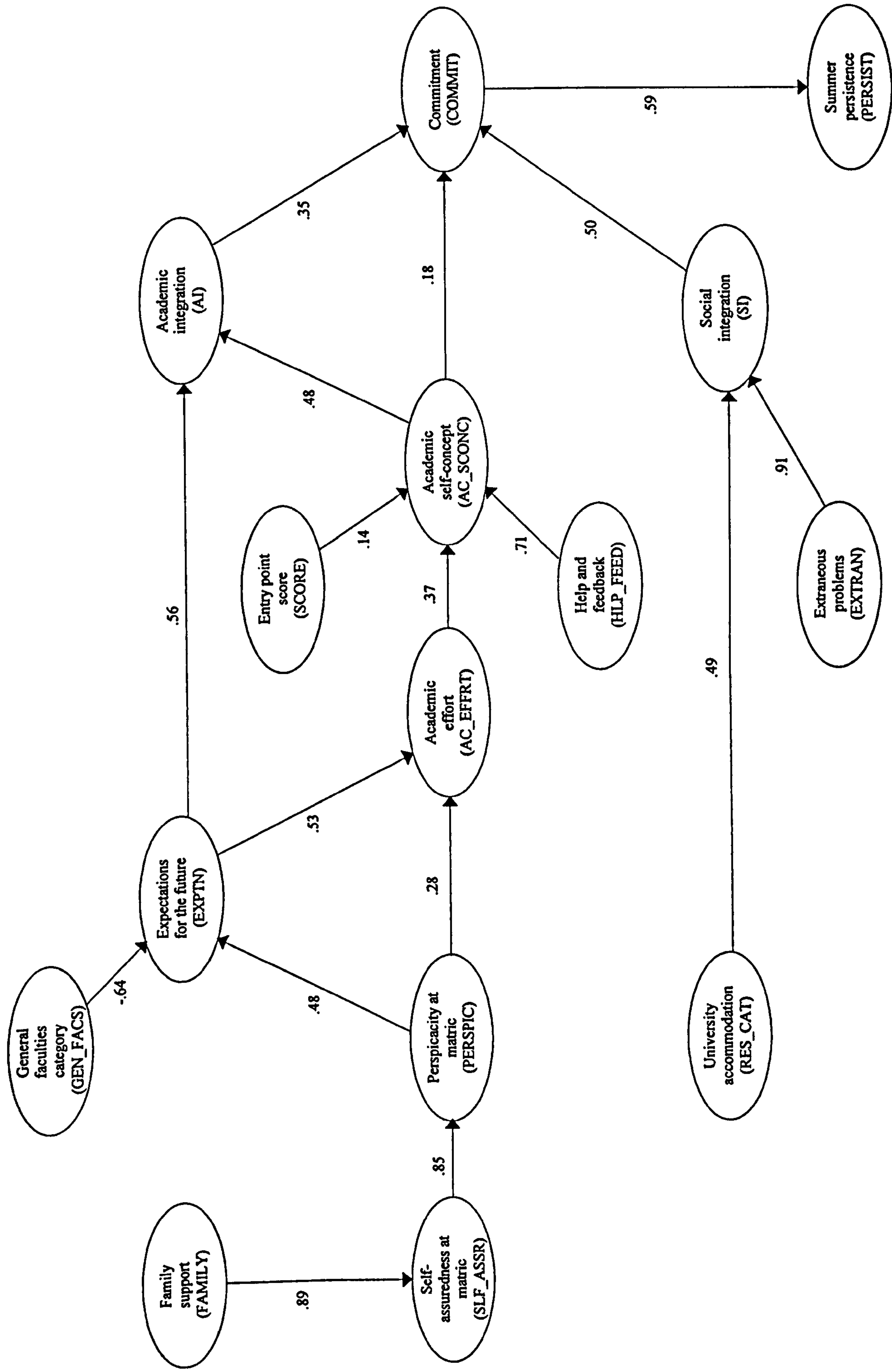
Appendix 11.4.4: Model 0 (with path coefficients shown; measurement equations and error covariances constrained)



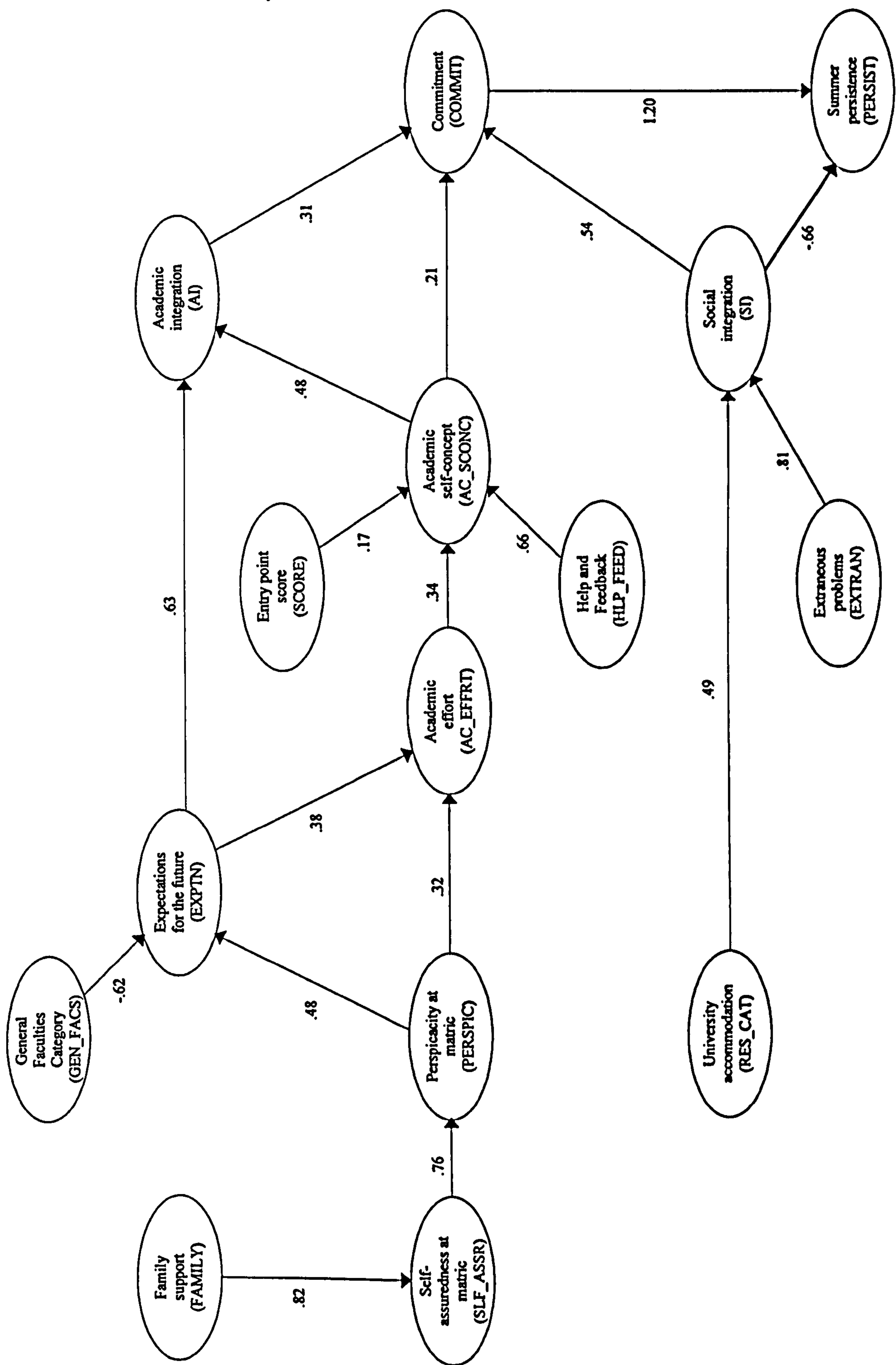
Appendix 11.4.5: Model A (with measurement equations and error covariances relaxed)



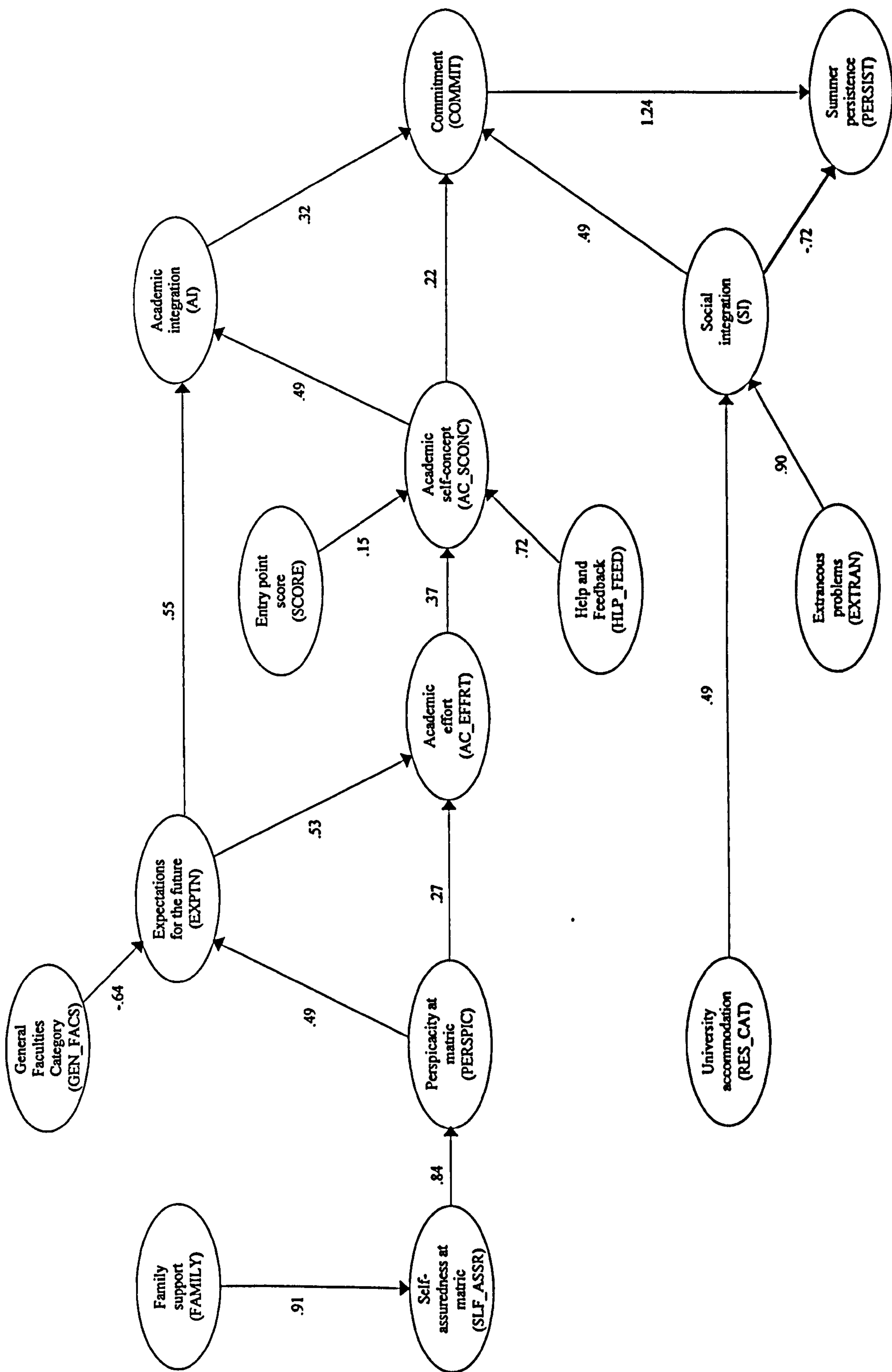
Appendix 11.4.6: Model A (with measurement equations and error covariances constrained)



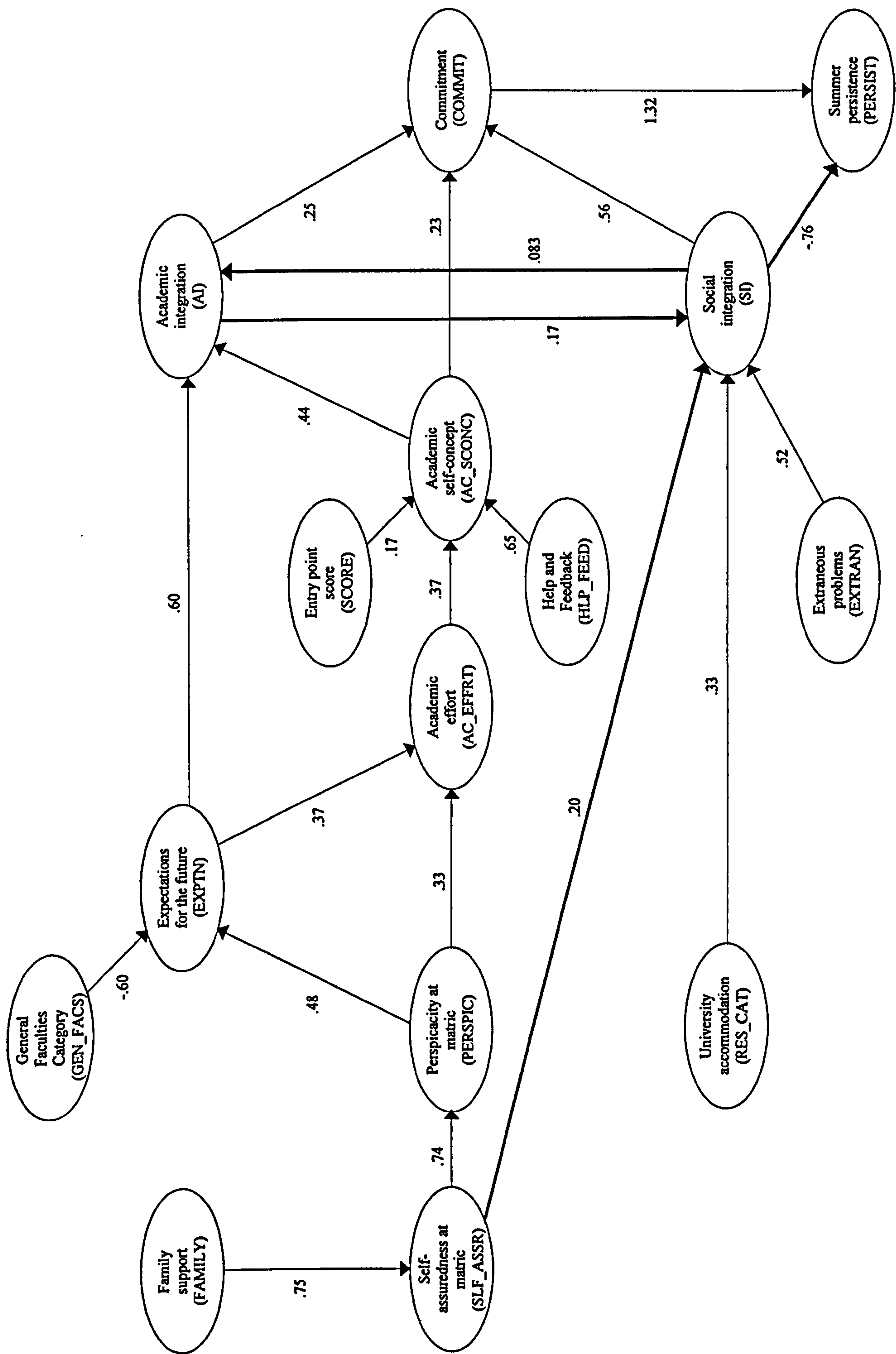
Appendix 11.4.7: Model B (with measurement equations and error covariances relaxed)



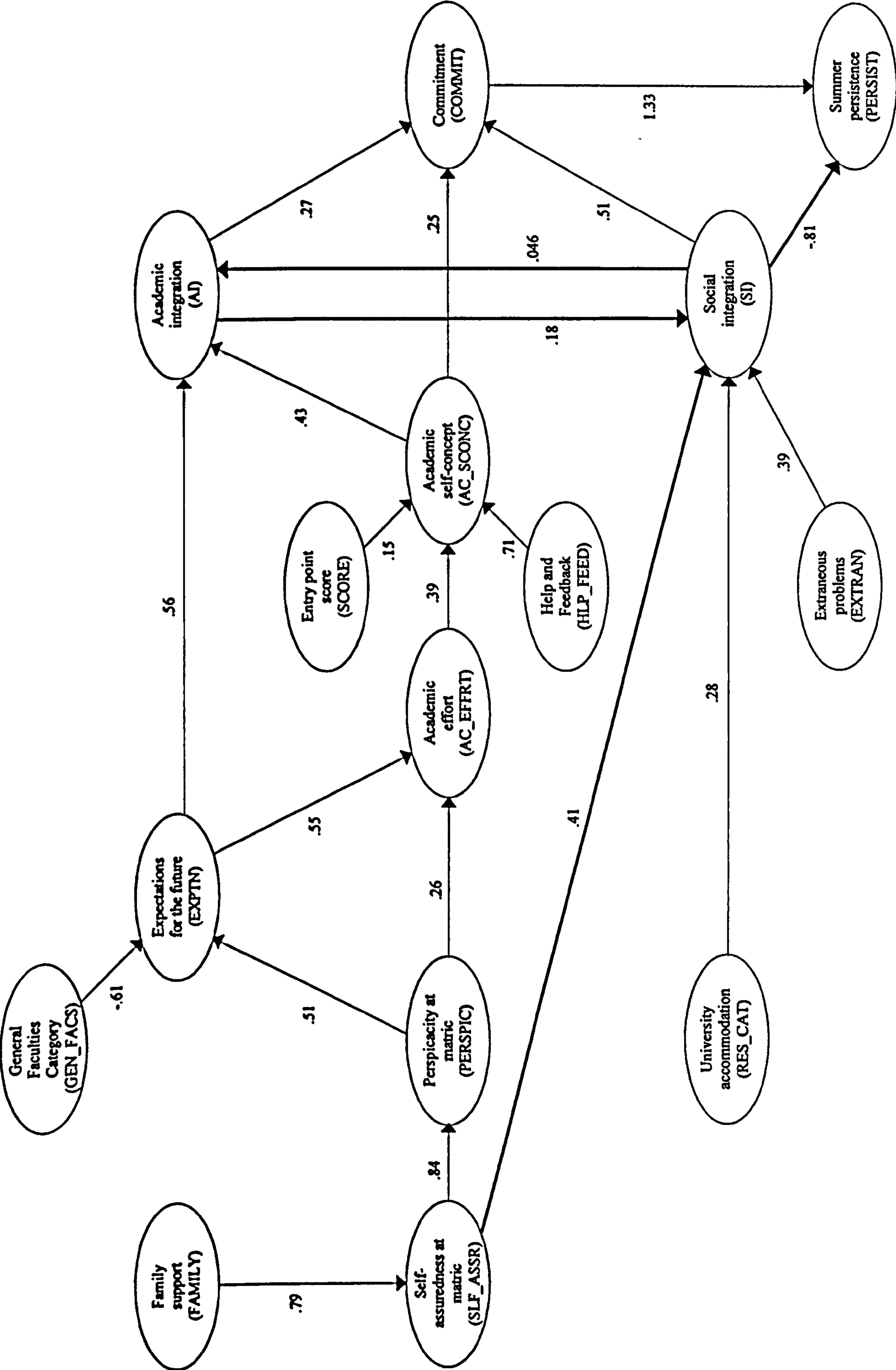
Appendix 11.4.8: Model B (with measurement equations and error covariances constrained)



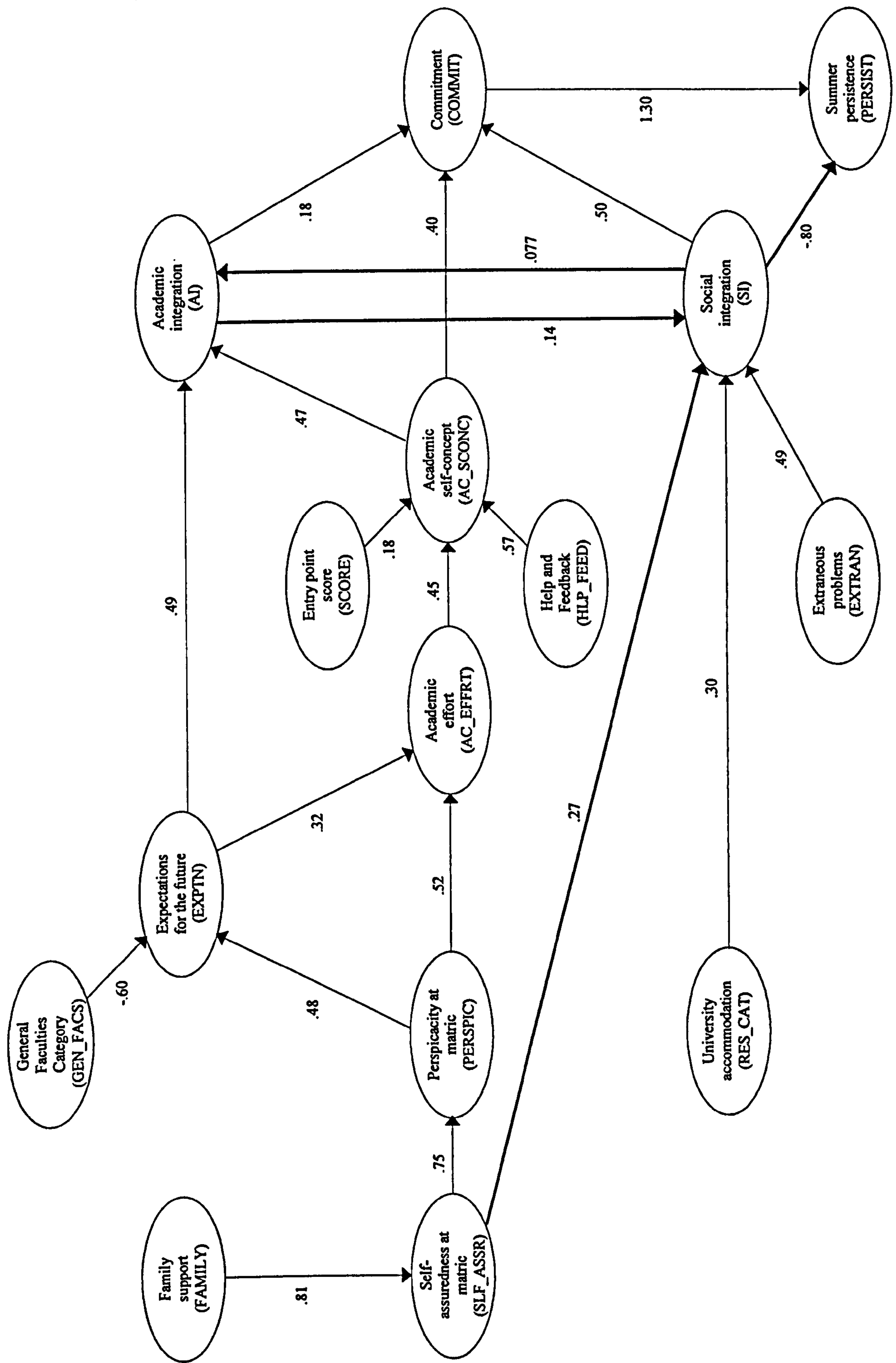
Appendix 11.4.9: Model C (with measurement equations and error covariances relaxed)



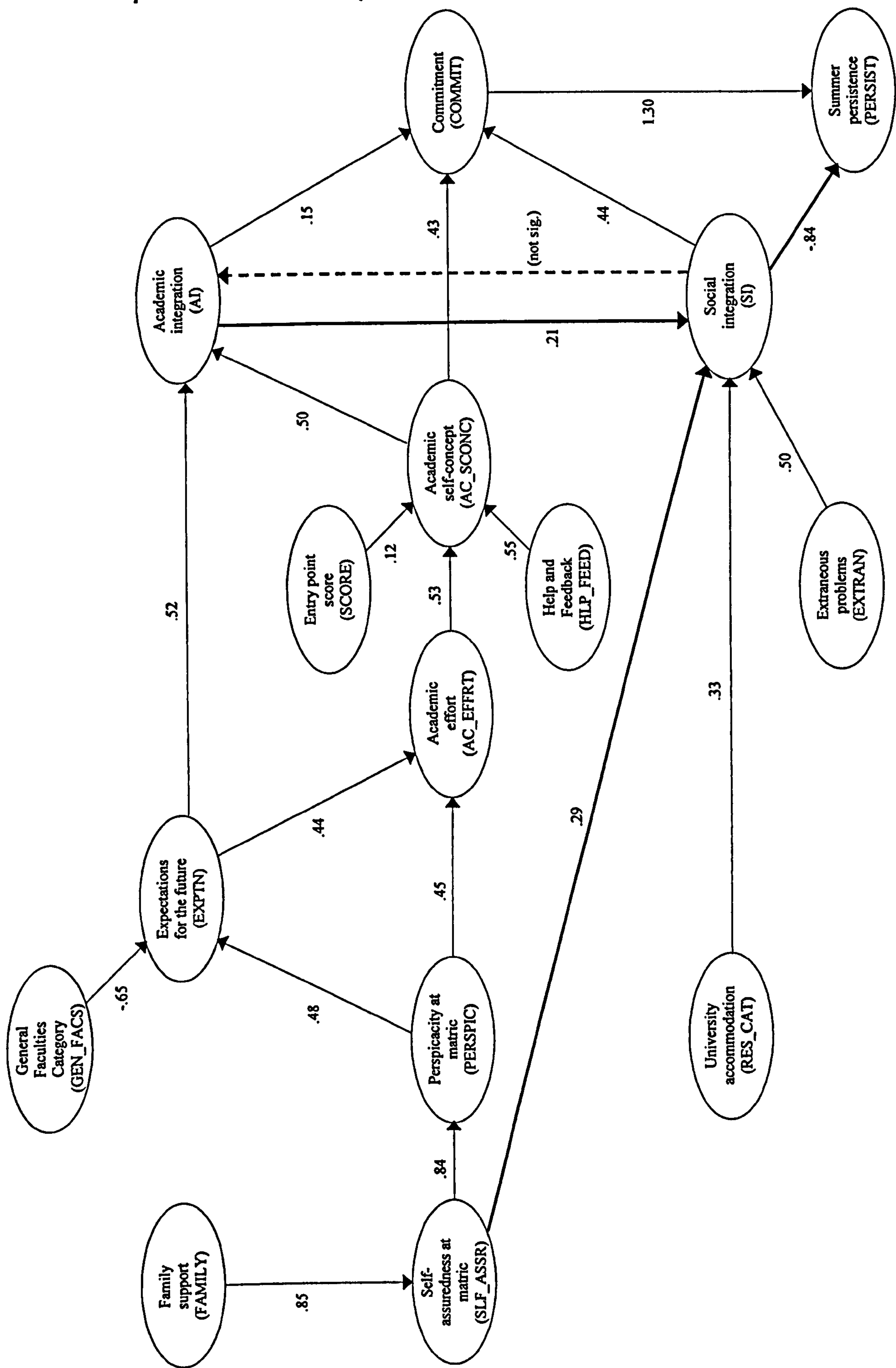
Appendix 11.4.10: Model C (with measurement equations and error covariances constrained)



Appendix 11.4.11: Model C (with error covariances removed; measurement equations relaxed)



Appendix 11.4.12: Model C (with error covariances removed; measurement equations constrained)



Appendix 11.5.1: Model C (relaxed), with error covariances - Measurement Equations

Summer Persistence

SMR_PERS = 1.00*PERSIST,, R² = 1.00

Living in University Accommodation

UNI_ACC = 1.00*RES_CAT,, R² = 1.00
(0.0097)
103.36

General Faculties Category

FAC_GEN = 1.03*GEN_FACS,, R² = 1.00
(0.0089)
116.23

Entry Point Score (capped)

EPS = 1.00*SCORE,, R² = 1.00
(0.0100)
100.22

Family Support

My family is supportive of my coming to university
MQ02FAMS = 0.61*FAMILY, Errorvar.= 0.63 , R² = 0.37
(0.016) (0.028)
38.98 22.82

My family is supportive of my being at university

OQ02FAMS = 0.76*FAMILY, Errorvar.= 0.43 , R² = 0.57
(0.014) (0.029)
54.82 14.64

My family responsibilities limit the amount of effort I can put into my studies
OQ40FAML = 0.61*FAMILY, Errorvar.= 0.63 , R² = 0.37
(0.012) (0.025)
49.90 24.91

Self-Assuredness at Matriculation

I made the decision to come to university without pressure from anyone else
MQ04DECN = 0.66*SLF_ASSR, Errorvar.= 0.56 , R² = 0.44
(0.027)
20.95

I expect to make a lot of new friendships with other students
MQ05NFRD = 0.79*SLF_ASSR, Errorvar.= 0.37 , R² = 0.63
(0.020) (0.028)
39.65 13.26

Self-Assuredness at Matriculation and Perspicacity at Matriculation

Coming to the University of Glasgow rather than another university was the right decision
MQ07GURT = 0.27*PERSPIC + 0.28*SLF_ASSR, Errorvar.= 0.74 , R² = 0.26
(0.034) (0.033) (0.024)
7.96 8.33 30.99

I feel confident that I shall be able to study effectively
MQ11STDY = 0.61*PERSPIC + 0.13*SLF_ASSR, Errorvar.= 0.49 , R² = 0.51
(0.039) (0.039) (0.027)
15.52 3.44 18.56

Perspicacity at Matriculation

I have found out about the subject content of what I'll be studying this year

$$\text{MQ13CONT} = 0.76 \cdot \text{PERSPIC}, \text{Errorvar.} = 0.43, R^2 = 0.57$$

(0.028)
15.54

I know how much effort will be expected of me with my studies this year

$$\text{MQ14EFRT} = 0.63 \cdot \text{PERSPIC}, \text{Errorvar.} = 0.61, R^2 = 0.39$$

(0.016) (0.025)
40.36 24.60

Generally I put a lot of effort into being well prepared for exams and assessments

$$\text{MQ16EXAM} = 0.70 \cdot \text{PERSPIC}, \text{Errorvar.} = 0.51, R^2 = 0.49$$

(0.016) (0.026)
43.00 19.37

I have carefully considered the financial implications of coming to university

$$\text{MQ17FINC} = 0.70 \cdot \text{PERSPIC}, \text{Errorvar.} = 0.51, R^2 = 0.49$$

(0.016) (0.026)
43.91 19.50

Expectations for the Future

I'm not sure what I want to study at university

$$\text{MQ03SURE} = 0.75 \cdot \text{EXPTN}, \text{Errorvar.} = 0.44, R^2 = 0.56$$

(0.025)
17.77

I'm coming to university because I have a clear idea of my future career

$$\text{MQ06CRER} = 0.71 \cdot \text{EXPTN}, \text{Errorvar.} = 0.49, R^2 = 0.51$$

(0.013) (0.024)
56.74 20.07

Expectations for the Future and Academic Integration

I have a clear idea of my future career

$$\text{OQ53CRER} = 0.24 \cdot \text{AI} + 0.46 \cdot \text{EXPTN}, \text{Errorvar.} = 0.54, R^2 = 0.46$$

(0.031) (0.035) (0.025)
7.77 13.18 21.26

Expectations for the Future and Commitment

My course will lead to a good job after I graduate

$$\text{OQ54GJOB} = 0.32 \cdot \text{COMMIT} + 0.51 \cdot \text{EXPTN}, \text{Errorvar.} = 0.44, R^2 = 0.56$$

(0.018) (0.021) (0.025)
17.79 24.55 17.62

Academic Effort

I expect that the average weekly amount of time I shall spend during term on study outside lectures, tutorials, labs, etc. will be:

$$\text{MQ18STIM} = 0.51 \cdot \text{AC_EFFRT}, \text{Errorvar.} = 0.74, R^2 = 0.26$$

(0.025)
29.40

Generally I put a lot of effort into being well prepared for exams and assessments

$$\text{OQ09EXAM} = 0.88 \cdot \text{AC_EFFRT}, \text{Errorvar.} = 0.22, R^2 = 0.78$$

(0.033) (0.041)
26.98 5.29

The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:

$$\text{OQ59STIM} = 0.75 \cdot \text{AC_EFFRT}, \text{Errorvar.} = 0.44, R^2 = 0.56$$

(0.026) (0.031)
28.39 14.28

Academic Effort, Academic Integration and Commitment

Most of the content of my subjects doesn't interest me

OQ34BORE = 0.38*COMMIT + 0.33*AI + 0.15*AC_EFFRT, Errorvar.= 0.41 , R² = 0.59
(0.030) (0.037) (0.019) (0.024)
12.37 8.84 8.00 17.05

Help and Feedback

It's difficult to ask the staff for advice or help with my studies

OQ08HSFF = 0.74*HLP_FEED, Errorvar.= 0.46 , R² = 0.54
(0.013) (0.028)
54.89 16.33

I'm left alone to cope as best I can with my studies

OQ20ALON = 0.52*HLP_FEED, Errorvar.= 0.73 , R² = 0.27
(0.014) (0.025)
37.22 29.46

I have not received enough feedback about my academic progress

OQ22FEED = 0.32*HLP_FEED, Errorvar.= 0.90 , R² = 0.10
(0.014) (0.022)
22.35 40.84

Academic Self-Concept

I'm confident that I'm doing well academically

OQ05ACAD = 0.84*AC_SCONC, Errorvar.= 0.29 , R² = 0.71
(0.025)
11.84

I have been having difficulties with my studies

OQ17DSTU = 0.85*AC_SCONC, Errorvar.= 0.27 , R² = 0.73
(0.012) (0.025)
68.26 11.04

Nothing I'd done before prepared me properly for university life

OQ23PREP = 0.47*AC_SCONC, Errorvar.= 0.78 , R² = 0.22
(0.013) (0.023)
35.72 33.78

Academic Self-Concept and Academic Integration

The subject content of my studies is meeting my original expectations

OQ37EXPN = 0.35*AI + 0.27*AC_SCONC, Errorvar.= 0.67 , R² = 0.33
(0.028) (0.029) (0.024)
12.34 9.09 27.77

Academic Self-Concept and Commitment

I should have gone to a different university or college where the academic work is easier

OQ18DIFW = 0.58*COMMIT + 0.26*AC_SCONC, Errorvar.= 0.37 , R² = 0.63
(0.024) (0.025) (0.025)
23.79 10.14 14.81

Academic Integration

I made the right choice of subjects to study

OQ12RSBJ = 0.85*AI, Errorvar.= 0.27 , R² = 0.73
(0.024)
11.15

My classes are too big

OQ24CBIG = 0.54*AI, Errorvar.= 0.70 , R² = 0.30
(0.012) (0.024)
44.93 29.47

Before I decided to come to University, I did not know what the subject content of my course would be
 QQ49PKNO = 0.57*AI, Errorvar.= 0.67 , R² = 0.33
 (0.012) (0.024)
 48.88 27.89

Before I decided to come to University, I did not know how difficult my course would be
 QQ50PDIF = 0.52*AI, Errorvar.= 0.73 , R² = 0.27
 (0.012) (0.024)
 41.75 30.82

I should have found out more about my course before deciding to come to university
 QQ51MORE = 0.74*AI, Errorvar.= 0.46 , R² = 0.54
 (0.011) (0.025)
 69.02 18.52

Extraneous Problems

I have been having problems with my accommodation
 QQ27ACCM = 0.54*EXTRAN, Errorvar.= 0.71 , R² = 0.29
 (0.012) (0.024)
 43.43 29.38

I have been having personal problems
 QQ29PERP = 0.84*EXTRAN, Errorvar.= 0.29 , R² = 0.71
 (0.010) (0.027)
 80.79 10.87

My health problems (or those of my family) limit the amount of effort I can put into my studies
 QQ42HLTH = 0.58*EXTRAN, Errorvar.= 0.66 , R² = 0.34
 (0.013) (0.025)
 44.11 25.89

Social Integration

There are not enough student societies or clubs for people with my interests
 QQ04SOCS = 0.46*SI, Errorvar.= 0.79 , R² = 0.21
 (0.023)
 34.22

I have lots of new friendships with other students
 QQ06NFRD = 0.82*SI, Errorvar.= 0.32 , R² = 0.68
 (0.023) (0.024)
 35.88 13.44

I don't really feel part of the University of Glasgow
 QQ07NOGU = 0.78*SI, Errorvar.= 0.39 , R² = 0.61
 (0.022) (0.025)
 35.04 15.64

Few of the students I know would be willing to listen to me and help me if I had a personal problem
 QQ11HSTU = 0.63*SI, Errorvar.= 0.61 , R² = 0.39
 (0.019) (0.025)
 32.74 24.66

I feel excluded from other students' social activities
 QQ15EXCL = 0.71*SI, Errorvar.= 0.50 , R² = 0.50
 (0.020) (0.025)
 35.09 20.35

There is no-one in the University to whom I could turn for help with any personal problems
 QQ30PHLP = 0.64*SI, Errorvar.= 0.59 , R² = 0.41
 (0.019) (0.024)
 34.22 24.77

Commitment

I've really enjoyed my experience of university so far
 QQ01ENJY = 0.83*COMMIT, Errorvar.= 0.30 , R² = 0.70
 (0.024)
 12.56

I should have gone to a different university or college where the academic work is more relevant to getting a good job afterwards

OQ13DIFJ = 0.82*COMMIT, Errorvar.= 0.33 , R² = 0.67
(0.011) (0.024)
77.32 13.67

I should have gone to another university or college where my friends are

OQ35DIFF = 0.76*COMMIT, Errorvar.= 0.43 , R² = 0.57
(0.011) (0.024)
70.06 17.71

I'm committed to getting a university education

OQ43UEDN = 0.78*COMMIT, Errorvar.= 0.38 , R² = 0.62
(0.012) (0.025)
66.72 15.41

Coming to the University of Glasgow rather than another university was the right decision for me

OQ44GURT = 0.88*COMMIT, Errorvar.= 0.22 , R² = 0.78
(0.010) (0.023)
85.35 9.30

I am considering leaving the University of Glasgow

OQ45LEAV = 0.91*COMMIT, Errorvar.= 0.17 , R² = 0.83
(0.0099) (0.023)
91.56 7.54

Appendix 11.5.2: Model C (constrained), with no error covariances - Measurement Equations

Summer Persistence

$$\text{SMR_PERS} = 1.00 * \text{PERSIST},, R^2 = 1.00$$

Living in University Accommodation

$$\begin{aligned} \text{UNI_ACC} &= 1.00 * \text{RES_CAT},, R^2 = 1.00 \\ &(0.0099) \\ &101.66 \end{aligned}$$

General Faculties Category

$$\begin{aligned} \text{FAC_GEN} &= 1.02 * \text{GEN_FACS},, R^2 = 1.00 \\ &(0.0080) \\ &126.90 \end{aligned}$$

Entry Point Score (capped)

$$\begin{aligned} \text{EPS} &= 1.00 * \text{SCORE},, R^2 = 1.00 \\ &(0.010) \\ &100.00 \end{aligned}$$

Family Support

$$\begin{aligned} &\text{My family is supportive of my coming to university} \\ \text{MQ02FAMS} &= 0.71 * \text{FAMILY}, \text{Errorvar.} = 0.49, R^2 = 0.51 \\ &(0.011) \qquad (0.026) \\ &62.61 \qquad 18.91 \end{aligned}$$

$$\begin{aligned} &\text{My family is supportive of my being at university} \\ \text{OQ02FAMS} &= 0.82 * \text{FAMILY}, \text{Errorvar.} = 0.33, R^2 = 0.67 \\ &(0.010) \qquad (0.026) \\ &81.60 \qquad 12.51 \end{aligned}$$

Self-Assuredness at Matriculation

$$\begin{aligned} &\text{I've really enjoyed my experience of university so far} \\ \text{MQ01ENJY} &= 0.63 * \text{SLF_ASSR}, \text{Errorvar.} = 0.60, R^2 = 0.40 \\ &\qquad (0.023) \\ &\qquad 25.71 \end{aligned}$$

$$\begin{aligned} &\text{I made the decision to come to university without pressure from anyone else} \\ \text{MQ04DECN} &= 0.64 * \text{SLF_ASSR}, \text{Errorvar.} = 0.59, R^2 = 0.41 \\ &(0.014) \qquad (0.024) \\ &46.41 \qquad 24.58 \end{aligned}$$

$$\begin{aligned} &\text{I expect to make a lot of new friendships with other students} \\ \text{MQ05NFRD} &= 0.79 * \text{SLF_ASSR}, \text{Errorvar.} = 0.37, R^2 = 0.63 \\ &(0.014) \qquad (0.025) \\ &56.73 \qquad 15.06 \end{aligned}$$

$$\begin{aligned} &\text{Coming to the University of Glasgow rather than another university was the right decision} \\ \text{MQ07GURT} &= 0.61 * \text{SLF_ASSR}, \text{Errorvar.} = 0.63, R^2 = 0.37 \\ &(0.012) \qquad (0.024) \\ &48.98 \qquad 26.75 \end{aligned}$$

Perspicacity at Matriculation

$$\begin{aligned} &\text{I feel confident that I shall be able to study effectively} \\ \text{MQ11STDY} &= 0.81 * \text{PERSPIC}, \text{Errorvar.} = 0.34, R^2 = 0.66 \\ &\qquad (0.025) \\ &\qquad 13.60 \end{aligned}$$

$$\begin{aligned} &\text{I have found out about the subject content of what I'll be studying this year} \\ \text{MQ13CONT} &= 0.77 * \text{PERSPIC}, \text{Errorvar.} = 0.40, R^2 = 0.60 \\ &(0.012) \qquad (0.024) \\ &63.44 \qquad 16.37 \end{aligned}$$

I know how much effort will be expected of me with my studies this year
 MQ14EFRT = 0.64*PERSPIC, Errorvar.= 0.59 , R² = 0.41
 (0.011) (0.023)
 58.36 25.21

Generally I put a lot of effort into being well prepared for exams and assessments
 MQ16EXAM = 0.77*PERSPIC, Errorvar.= 0.41 , R² = 0.59
 (0.011) (0.024)
 68.33 17.33

I have carefully considered the financial implications of coming to university
 MQ17FINC = 0.70*PERSPIC, Errorvar.= 0.51 , R² = 0.49
 (0.011) (0.024)
 62.57 21.19

Expectations for the Future

I'm not sure what I want to study at university
 MQ03SURE = 0.75*EXPTN, Errorvar.= 0.44 , R² = 0.56
 (0.023)
 18.88

I'm coming to university because I have a clear idea of my future career
 MQ06CRER = 0.80*EXPTN, Errorvar.= 0.36 , R² = 0.64
 (0.0092) (0.022)
 87.40 16.07

I have a clear idea of my future career
 OQ53CRER = 0.86*EXPTN, Errorvar.= 0.25 , R² = 0.75
 (0.011) (0.023)
 78.27 10.96

My course will lead to a good job after I graduate
 OQ54GJOB = 0.91*EXPTN, Errorvar.= 0.16 , R² = 0.84
 (0.011) (0.023)
 83.98 7.13

Academic Effort

I expect that the average weekly amount of time I shall spend during term on study outside lectures, tutorials, labs, etc. will be:
 MQ18STIM = 0.43*AC_EFFRT, Errorvar.= 0.81 , R² = 0.19
 (0.022)
 36.91

Generally I put a lot of effort into being well prepared for exams and assessments
 OQ09EXAM = 0.81*AC_EFFRT, Errorvar.= 0.35 , R² = 0.65
 (0.021) (0.024)
 37.83 14.27

The average weekly amount of time that I spend during term on study outside lectures, tutorials, labs, etc. is:
 OQ59STIM = 0.78*AC_EFFRT, Errorvar.= 0.40 , R² = 0.60
 (0.019) (0.024)
 41.10 16.38

Help and Feedback

It's difficult to ask the staff for advice or help with my studies
 OQ08HSFF = 0.74*HLP_FEED, Errorvar.= 0.45 , R² = 0.55
 (0.011) (0.026)
 65.88 17.27

I'm left alone to cope as best I can with my studies
 OQ20ALON = 0.56*HLP_FEED, Errorvar.= 0.69 , R² = 0.31
 (0.012) (0.024)
 47.98 28.99

I have not received enough feedback about my academic progress
 OQ22FEED = 0.39*HLP_FEED, Errorvar.= 0.85 , R² = 0.15
 (0.011) (0.022)
 34.25 38.53

Academic Self-Concept

I'm confident that I'm doing well academically

OQ05ACAD = 0.85*AC_SCONC, Errorvar.= 0.29 , R² = 0.71
 (0.023)
 12.21

I have been having difficulties with my studies
 OQ17DSTU = 0.87*AC_SCONC, Errorvar.= 0.25 , R² = 0.75
 (0.0091) (0.023)
 95.66 10.65

Academic Integration

I made the right choice of subjects to study
 OQ12RSBJ = 0.93*AI, Errorvar.= 0.13 , R² = 0.87
 (0.022)
 6.00

My classes are too big
 OQ24CBIG = 0.62*AI, Errorvar.= 0.61 , R² = 0.39
 (0.0095) (0.023)
 65.74 26.44

Most of the content of my subjects doesn't interest me
 OQ34BORE = 0.94*AI, Errorvar.= 0.12 , R² = 0.88
 (0.0068) (0.023)
 137.18 5.22

The subject content of my studies is meeting my original expectations
 OQ37EXPN = 0.76*AI, Errorvar.= 0.42 , R² = 0.58
 (0.0090) (0.024)
 84.44 17.46

Before I decided to come to University, I did not know what the subject content of my course would be
 OQ49PKNO = 0.75*AI, Errorvar.= 0.44 , R² = 0.56
 (0.0086) (0.023)
 87.02 19.13

Before I decided to come to University, I did not know how difficult my course would be
 OQ50PDIF = 0.66*AI, Errorvar.= 0.56 , R² = 0.44
 (0.0095) (0.023)
 69.75 23.86

I should have found out more about my course before deciding to come to university
 OQ51MORE = 0.85*AI, Errorvar.= 0.27 , R² = 0.73
 (0.0078) (0.023)
 109.83 11.67

I'm not clear how my course will develop in future

OQ52FCRS = 0.87*AI, Errorvar.= 0.25 , R² = 0.75
 (0.0080) (0.023)
 109.09 10.60

Extraneous Problems

I have been having problems with my accommodation
 OQ27ACCM = 0.52*EXTRAN, Errorvar.= 0.73 , R² = 0.27
 (0.011) (0.023)
 47.96 31.63

I have been having personal problems
 OQ29PERP = 0.86*EXTRAN, Errorvar.= 0.26 , R² = 0.74
 (0.0099) (0.026)
 87.16 9.81

My health problems (or those of my family) limit the amount of effort I can put into my studies
 OQ42HLTH = 0.50*EXTRAN, Errorvar.= 0.75 , R² = 0.25
 (0.012) (0.023)
 41.62 32.12

Social Integration

There are not enough student societies or clubs for people with my interests
 OQ04SOCS = 0.57*SI, Errorvar.= 0.68 , R² = 0.32
 (0.023)

I have lots of new friendships with other students

OQ06NFRD = 0.83*SI, Errorvar.= 0.31 , R² = 0.69

(0.016) (0.023)

51.75 13.61

I don't really feel part of the University of Glasgow

OQ07NOGU = 0.85*SI, Errorvar.= 0.28 , R² = 0.72

(0.017) (0.024)

51.27 11.70

Few of the students I know would be willing to listen to me and help me if I had a personal problem

OQ11HSTU = 0.62*SI, Errorvar.= 0.62 , R² = 0.38

(0.014) (0.023)

43.56 26.51

I feel excluded from other students' social activities

OQ15EXCL = 0.78*SI, Errorvar.= 0.39 , R² = 0.61

(0.015) (0.024)

51.72 16.28

There is no-one in the University to whom I could turn for help with any personal problems

OQ30PHLP = 0.76*SI, Errorvar.= 0.43 , R² = 0.57

(0.015) (0.023)

50.17 18.27

Commitment

I've really enjoyed my experience of university so far

OQ01ENJY = 0.94*COMMIT, Errorvar.= 0.12 , R² = 0.88

(0.023)

5.27

I should have gone to a different university or college where the academic work is more relevant to getting a good job afterwards

OQ13DIFJ = 0.87*COMMIT, Errorvar.= 0.24 , R² = 0.76

(0.0079) (0.023)

109.97 10.73

I should have gone to a different university or college where the academic work is easier

OQ18DIFW = 0.88*COMMIT, Errorvar.= 0.22 , R² = 0.78

(0.0090) (0.024)

98.66 9.04

I should have gone to another university or college where my friends are

OQ35DIFF = 0.83*COMMIT, Errorvar.= 0.31 , R² = 0.69

(0.0082) (0.023)

101.95 13.45

I'm committed to getting a university education

OQ43UEDN = 0.87*COMMIT, Errorvar.= 0.24 , R² = 0.76

(0.0089) (0.024)

98.42 10.20

Coming to the University of Glasgow rather than another university was the right decision for me

OQ44GURT = 0.95*COMMIT, Errorvar.= 0.10 , R² = 0.90

(0.0074) (0.022)

128.27 4.62

I am considering leaving the University of Glasgow

OQ45LEAV = 0.90*COMMIT, Errorvar.= 0.19 , R² = 0.81

(0.0073) (0.022)

122.65 8.59

Appendix 11.6.1: Model C (relaxed) – Error Covariances in the Measurement Equations

Error Covariance for MQ06CRER and MQ05NFRD = 0.031
(0.011)
2.93

Error Covariance for MQ07GURT and MQ04DECN = 0.037
(0.015)
2.44

Error Covariance for MQ11STDY and MQ05NFRD = -0.08
(0.016)
-5.14

Error Covariance for MQ13CONT and MQ04DECN = -0.05
(0.015)
-3.37

Error Covariance for MQ13CONT and MQ05NFRD = -0.05
(0.015)
-3.30

Error Covariance for MQ13CONT and MQ06CRER = 0.046
(0.010)
4.53

Error Covariance for MQ13CONT and MQ11STDY = -0.12
(0.016)
-7.38

Error Covariance for MQ14EFRT and MQ05NFRD = 0.034
(0.014)
2.39

Error Covariance for MQ16EXAM and MQ04DECN = -0.08
(0.013)
-5.58

Error Covariance for MQ16EXAM and MQ13CONT = -0.11
(0.014)
-8.08

Error Covariance for MQ17FINC and MQ04DECN = -0.05
(0.015)
-3.50

Error Covariance for MQ17FINC and MQ06CRER = 0.056
(0.010)
5.34

Error Covariance for MQ17FINC and MQ07GURT = 0.054
(0.014)
3.73

Error Covariance for MQ17FINC and MQ13CONT = -0.15
(0.016)
-9.45

Error Covariance for MQ18STIM and MQ05NFRD = -0.10
(0.014)
-6.98

Error Covariance for MQ18STIM and MQ06CRER = 0.049
(0.010)
4.71

Error Covariance for MQ18STIM and MQ16EXAM = 0.073
(0.014)
5.05

Error Covariance for OQ04SOCS and OQ01ENJY = -0.10
(0.012)
-8.44

Error Covariance for QQ05ACAD and MQ11STDY = 0.14
(0.013)
11.33

Error Covariance for QQ05ACAD and MQ16EXAM = 0.11
(0.012)
9.11

Error Covariance for QQ05ACAD and QQ04SOCS = -0.07
(0.011)

-6.17

Error Covariance for QQ06NFRD and QQ01ENJY = 0.11
(0.011)

9.98

Error Covariance for QQ06NFRD and QQ04SOCS = -0.07
(0.012)
-5.76

Error Covariance for QQ07NOGU and QQ01ENJY = 0.063
(0.0095)
6.60

Error Covariance for QQ09EXAM and MQ16EXAM = 0.18
(0.015)
11.84

Error Covariance for QQ09EXAM and MQ18STIM = -0.21
(0.018)
-11.93

Error Covariance for QQ09EXAM and QQ05ACAD = 0.11
(0.012)
8.78

Error Covariance for QQ09EXAM and QQ06NFRD = 0.041
(0.010)
4.09

Error Covariance for QQ11HSTU and QQ05ACAD = -0.08
(0.011)
-6.68

Error Covariance for QQ15EXCL and QQ07NOGU = 0.095
(0.012)
7.99

Error Covariance for QQ15EXCL and QQ11HSTU = 0.058
(0.013)
4.59

Error Covariance for QQ17DSTU and MQ11STDY = 0.11
(0.012)
8.68

Error Covariance for QQ18DIFW and QQ01ENJY = -0.05
(0.011)
-4.77

Error Covariance for QQ18DIFW and QQ13DIFJ = 0.13
(0.013)
10.16

Error Covariance for QQ18DIFW and QQ15EXCL = 0.045
(0.011)
4.00

Error Covariance for QQ23PREP and MQ13CONT = -0.05
(0.013)
-3.67

Error Covariance for QQ24CBIG and QQ12RSBJ = -0.06
(0.011)
-5.36

Error Covariance for QQ30PHLP and QQ06NFRD = -0.03
(0.010)
-2.94

Error Covariance for QQ34BORE and MQ03SURE = 0.039
(0.011)

3.62

Error Covariance for QQ34BORE and MQ07GURT = -0.09
(0.011)
-7.61

Error Covariance for QQ34BORE and QQ12RSBJ = 0.11
(0.011)
9.85

Error Covariance for QQ34BORE and QQ13DIFJ = 0.048
(0.010)
4.69

Error Covariance for QQ34BORE and QQ24CBIG = 0.054
(0.011)
4.78

Error Covariance for QQ35DIFF and MQ05NFRD = 0.046
(0.012)
3.75

Error Covariance for QQ35DIFF and QQ18DIFW = 0.15
(0.012)
11.79

Error Covariance for QQ35DIFF and QQ34BORE = 0.035
(0.010)
3.36

Error Covariance for QQ37EXPN and MQ03SURE = -0.07
(0.012)
-5.47

Error Covariance for QQ37EXPN and QQ01ENJY = 0.056
(0.0100)
5.63

Error Covariance for QQ37EXPN and QQ12RSBJ = 0.092
(0.012)
7.61

Error Covariance for QQ37EXPN and QQ17DSTU = 0.037
(0.011)
3.32

Error Covariance for QQ37EXPN and QQ34BORE = 0.20
(0.013)
15.35

Error Covariance for QQ43UEDN and QQ18DIFW = 0.091
(0.012)
7.61

Error Covariance for QQ44GURT and MQ07GURT = 0.11
(0.010)
10.08

Error Covariance for QQ44GURT and QQ13DIFJ = 0.056
(0.0098)
5.71

Error Covariance for QQ44GURT and QQ18DIFW = 0.065
(0.011)
6.00

Error Covariance for QQ44GURT and QQ34BORE = -0.02
(0.0088)
-2.50

Error Covariance for QQ44GURT and QQ35DIFF = 0.056
(0.0096)

5.79

Error Covariance for QQ44GURT and QQ43UEDN = 0.077
(0.010)
7.42

Error Covariance for QQ49PKNO and MQ13CONT = 0.082
(0.012)
6.84

Error Covariance for QQ49PKNO and MQ14EFRT = -0.04
(0.012)
-3.35

Error Covariance for QQ49PKNO and QQ37EXPN = 0.041
(0.011)
3.66

Error Covariance for QQ50PDIF and MQ07GURT = -0.06
(0.012)
-5.17

Error Covariance for QQ50PDIF and MQ13CONT = 0.062
(0.013)
4.86

Error Covariance for QQ50PDIF and MQ14EFRT = 0.091
(0.012)
7.49

Error Covariance for QQ50PDIF and QQ23PREP = 0.19
(0.012)
15.27

Error Covariance for QQ50PDIF and QQ49PKNO = 0.27
(0.013)
20.28

Error Covariance for QQ51MORE and QQ07NOGU = -0.03
(0.0096)
-3.44

Error Covariance for QQ51MORE and QQ13DIFJ = 0.053
(0.0094)
5.70

Error Covariance for QQ51MORE and QQ49PKNO = 0.18
(0.012)
14.86

Error Covariance for QQ51MORE and QQ50PDIF = 0.15
(0.013)
11.32

Error Covariance for QQ53CRER and MQ03SURE = -0.05
(0.012)
-4.33

Error Covariance for QQ53CRER and MQ04DECN = -0.06
(0.011)
-5.71

Error Covariance for QQ53CRER and MQ06CRER = 0.21
(0.013)
16.47

Error Covariance for QQ53CRER and QQ43UEDN = 0.058
(0.011)
5.39

Error Covariance for QQ54GJOB and MQ03SURE = -0.06
(0.012)
-4.80

Error Covariance for QQ54GJOB and MQ06CRER = 0.11
(0.012)
9.01

Error Covariance for QQ54GJOB and MQ13CONT = -0.06

(0.011)
 -5.64
 Error Covariance for QQ54GJOB and QQ35DIFF = -0.08
 (0.0096)
 -7.95
 Error Covariance for QQ54GJOB and QQ43UEDN = 0.068
 (0.011)
 6.08
 Error Covariance for QQ54GJOB and QQ53CRER = 0.19
 (0.013)
 14.69
 Error Covariance for QQ59STIM and MQ16EXAM = 0.10
 (0.014)
 7.66
 Error Covariance for QQ59STIM and QQ09EXAM = -0.11
 (0.026)
 -4.24
 Error Covariance for QQ59STIM and QQ43UEDN = 0.060
 (0.012)
 5.05
 Error Covariance for MQ02FAMS and MQ05NFRD = 0.18
 (0.018)
 10.14
 Error Covariance for QQ02FAMS and MQ02FAMS = 0.25
 (0.019)
 13.22
 Error Covariance for QQ08HSFF and MQ11STDY = 0.095
 (0.013)
 7.42
 Error Covariance for QQ08HSFF and MQ13CONT = 0.073
 (0.012)
 5.99
 Error Covariance for QQ08HSFF and QQ07NOGU = 0.14
 (0.011)
 12.60
 Error Covariance for QQ08HSFF and QQ09EXAM = 0.13
 (0.012)
 10.78
 Error Covariance for QQ08HSFF and QQ30PHLP = 0.14
 (0.012)
 11.64
 Error Covariance for QQ20ALON and MQ07GURT = 0.053
 (0.013)
 4.12
 Error Covariance for QQ20ALON and QQ05ACAD = -0.06
 (0.013)
 -4.65
 Error Covariance for QQ20ALON and QQ07NOGU = 0.079
 (0.012)
 6.66
 Error Covariance for QQ20ALON and QQ09EXAM = 0.060
 (0.012)
 4.88
 Error Covariance for QQ20ALON and QQ17DSTU = -0.04
 (0.013)
 -2.83
 Error Covariance for QQ20ALON and QQ23PREP = 0.075
 (0.014)
 5.46
 Error Covariance for QQ20ALON and QQ30PHLP = 0.17
 (0.012)
 14.12

Error Covariance for QQ20ALON and QQ45LEAV = 0.053
(0.010)
5.22

Error Covariance for QQ20ALON and QQ50PDIF = 0.043
(0.012)
3.71

Error Covariance for QQ22FEED and QQ05ACAD = 0.056
(0.012)
4.82

Error Covariance for QQ22FEED and QQ09EXAM = -0.03
(0.012)
-2.57

Error Covariance for QQ22FEED and QQ11HSTU = -0.12
(0.013)
-9.19

Error Covariance for QQ22FEED and QQ23PREP = 0.11
(0.014)
7.90

Error Covariance for QQ22FEED and QQ24CBIG = 0.081
(0.014)
6.02

Error Covariance for QQ22FEED and QQ30PHLP = 0.047
(0.013)
3.58

Error Covariance for QQ22FEED and QQ20ALON = 0.12
(0.015)
7.94

Error Covariance for QQ27ACCM and QQ30PHLP = 0.13
(0.012)
10.47

Error Covariance for QQ29PERP and QQ30PHLP = 0.19
(0.012)
15.70

Error Covariance for QQ29PERP and QQ02FAMS = -0.06
(0.014)
-4.64

Error Covariance for QQ40FAML and MQ04DECN = -0.06
(0.013)
-4.35

Error Covariance for QQ40FAML and QQ06NFRD = -0.06
(0.010)
-5.36

Error Covariance for QQ40FAML and QQ59STIM = 0.070
(0.011)
6.25

Error Covariance for QQ40FAML and QQ02FAMS = -0.08
(0.015)
-5.54

Error Covariance for QQ40FAML and QQ27ACCM = 0.11
(0.013)

8.32

Error Covariance for QQ42HLTH and QQ45LEAV = 0.083
(0.010)
7.92

Error Covariance for QQ42HLTH and QQ40FAML = 0.30
(0.014)
20.83

Appendix 11.6.2: Model C (constrained) – Error Covariances in the Measurement Equations

Error Covariance for MQ04DECN and MQ03SURE = 0.042
(0.012)
3.40

Error Covariance for MQ05NFRD and MQ01ENJY = 0.087
(0.014)
6.07

Error Covariance for MQ05NFRD and MQ04DECN = 0.12
(0.015)
8.13

Error Covariance for MQ06CRER and MQ03SURE = 0.068
(0.010)
6.65

Error Covariance for MQ06CRER and MQ05NFRD = 0.053
(0.010)
5.13

Error Covariance for MQ07GURT and MQ01ENJY = 0.067
(0.013)
5.09

Error Covariance for MQ07GURT and MQ06CRER = 0.057
(0.010)
5.43

Error Covariance for MQ11STDY and MQ06CRER = 0.046
(0.0097)
4.73

Error Covariance for MQ11STDY and MQ07GURT = 0.10
(0.013)
7.71

Error Covariance for MQ13CONT and MQ06CRER = 0.057
(0.0099)
5.71

Error Covariance for MQ13CONT and MQ11STDY = -0.06
(0.015)
-3.97

Error Covariance for MQ14EFRT and MQ13CONT = 0.033
(0.015)
2.17

Error Covariance for MQ16EXAM and MQ04DECN = -0.05
(0.013)
-4.15

Error Covariance for MQ16EXAM and MQ13CONT = -0.07
(0.014)
-4.71

Error Covariance for MQ17FINC and MQ01ENJY = -0.16
(0.013)
-12.35

Error Covariance for MQ17FINC and MQ05NFRD = -0.07
(0.014)
-4.90

Error Covariance for MQ17FINC and MQ13CONT = -0.10
(0.016)
-6.18

Error Covariance for MQ18STIM and MQ06CRER = 0.040
(0.011)
3.78

Error Covariance for MQ18STIM and MQ14EFRT = 0.087
(0.013)
6.74

Error Covariance for MQ18STIM and MQ16EXAM = 0.15
(0.014)
10.66

Error Covariance for QQ01ENJY and MQ01ENJY = 0.11
(0.010)
10.54

Error Covariance for QQ04SOCS and QQ01ENJY = -0.07
(0.010)
-7.12

Error Covariance for QQ05ACAD and MQ11STDY = 0.10
(0.013)
8.20

Error Covariance for QQ05ACAD and MQ16EXAM = 0.13
(0.012)
11.15

Error Covariance for QQ06NFRD and QQ01ENJY = 0.073
(0.010)
7.15

Error Covariance for QQ07NOGU and QQ01ENJY = 0.035
(0.0089)
3.89

Error Covariance for QQ07NOGU and QQ05ACAD = 0.051
(0.010)
4.99

Error Covariance for QQ09EXAM and MQ16EXAM = 0.23
(0.014)
16.08

Error Covariance for QQ09EXAM and QQ05ACAD = 0.11
(0.012)
9.09

Error Covariance for QQ09EXAM and QQ06NFRD = 0.062
(0.0098)
6.31

Error Covariance for QQ11HSTU and MQ07GURT = -0.05
(0.012)
-4.32

Error Covariance for QQ11HSTU and QQ05ACAD = -0.09
(0.011)
-7.94

Error Covariance for QQ12RSBJ and MQ03SURE = 0.064
(0.0097)
6.65

Error Covariance for QQ15EXCL and QQ13DIFJ = -0.05
(0.0098)
-5.23

Error Covariance for QQ17DSTU and MQ11STDY = 0.094
(0.012)
7.57

Error Covariance for QQ18DIFW and QQ17DSTU = 0.065
(0.010)
6.39

Error Covariance for QQ34BORE and MQ03SURE = 0.064
(0.010)
6.12

Error Covariance for QQ34BORE and MQ07GURT = -0.05
(0.011)
-4.88

Error Covariance for QQ34BORE and MQ14EFRT = -0.05
(0.010)
-5.15

Error Covariance for QQ34BORE and QQ13DIFJ = 0.032
(0.0098)
3.32

Error Covariance for QQ37EXPN and QQ13DIFJ = -0.05
(0.011)
-4.78

Error Covariance for QQ37EXPN and QQ34BORE = 0.046
(0.012)
3.92

Error Covariance for QQ43UEDN and MQ05NFRD = 0.088
(0.013)
6.85

Error Covariance for QQ44GURT and QQ37EXPN = 0.046
(0.0092)
5.01

Error Covariance for QQ45LEAV and MQ11STDY = -0.08
(0.011)
-7.54

Error Covariance for QQ49PKNO and MQ14EFRT = -0.05
(0.011)
-4.64

Error Covariance for QQ50PDIF and MQ03SURE = -0.06
(0.011)
-5.84

Error Covariance for QQ50PDIF and MQ07GURT = -0.04
(0.012)
-3.47

Error Covariance for QQ50PDIF and MQ14EFRT = 0.086
(0.012)
7.32

Error Covariance for QQ50PDIF and QQ49PKNO = 0.24
(0.013)
18.91

Error Covariance for QQ51MORE and MQ18STIM = -0.04
(0.011)
-3.45

Error Covariance for QQ51MORE and QQ13DIFJ = 0.053
(0.0089)
5.91

Error Covariance for QQ51MORE and QQ35DIFF = 0.035
(0.0097)
3.67

Error Covariance for QQ51MORE and QQ49PKNO = 0.17
(0.011)
14.54

Error Covariance for QQ51MORE and QQ50PDIF = 0.12
(0.012)
9.96

Error Covariance for QQ52FCRS and QQ49PKNO = 0.047
(0.011)
4.19

Error Covariance for QQ52FCRS and QQ51MORE = 0.066
(0.011)
6.18

Error Covariance for QQ53CRER and MQ04DECN = -0.09
(0.011)
-8.02

Error Covariance for QQ53CRER and QQ51MORE = 0.045
(0.0086)
5.16

Error Covariance for QQ53CRER and QQ52FCRS = 0.085
(0.0093)
9.14

Error Covariance for QQ54GJOB and MQ07GURT = 0.060
(0.011)
5.59

Error Covariance for QQ54GJOB and MQ17FINC = -0.12
(0.011)
-10.59

Error Covariance for QQ54GJOB and MQ18STIM = -0.09
(0.011)
-8.59

Error Covariance for QQ54GJOB and QQ43UEDN = 0.075
(0.010)
7.50

Error Covariance for QQ59STIM and MQ06CRER = -0.06
(0.0094)
-6.12

Error Covariance for QQ59STIM and MQ16EXAM = 0.077
(0.013)
5.97

Error Covariance for MQ02FAMS and MQ04DECN = 0.081
(0.017)
4.89

Error Covariance for MQ02FAMS and MQ05NFRD = 0.10
(0.018)
5.93

Error Covariance for QQ02FAMS and QQ15EXCL = -0.12
(0.012)
-9.26

Error Covariance for QQ08HSFF and MQ11STDY = 0.093
(0.013)
7.43

Error Covariance for QQ08HSFF and MQ13CONT = 0.025
(0.012)
2.00

Error Covariance for QQ08HSFF and MQ14EFRT = -0.07
(0.012)
-5.37

Error Covariance for QQ08HSFF and QQ05ACAD = -0.06
(0.012)
-4.74

Error Covariance for QQ08HSFF and QQ07NOGU = 0.098
(0.011)
8.89

Error Covariance for QQ08HSFF and QQ12RSBJ = -0.04
(0.0098)
-3.77

Error Covariance for QQ08HSFF and QQ30PHLP = 0.13
(0.012)
11.18

Error Covariance for QQ20ALON and QQ05ACAD = -0.09
(0.013)
-6.78

Error Covariance for QQ20ALON and QQ17DSTU = -0.09
(0.013)
-6.95

Error Covariance for QQ20ALON and QQ30PHLP = 0.097
(0.011)
8.64

Error Covariance for QQ20ALON and QQ50PDIF = 0.065
(0.012)
5.61

Error Covariance for QQ22FEED and QQ05ACAD = 0.054
(0.011)
4.75

Error Covariance for QQ22FEED and QQ07NOGU = -0.05
(0.011)
-4.33

Error Covariance for QQ22FEED and QQ11HSTU = -0.08
(0.013)
-6.45

Error Covariance for QQ22FEED and QQ24CBIG = 0.090
(0.013)
6.71

Error Covariance for QQ22FEED and QQ20ALON = 0.12
(0.014)
8.41

Error Covariance for QQ29PERP and QQ09EXAM = 0.082
(0.011)
7.81

Error Covariance for QQ29PERP and QQ30PHLP = 0.17
(0.012)
14.99

Error Covariance for QQ42HLTH and QQ44GURT = -0.06
(0.010)
-5.59

Error Covariance for QQ42HLTH and QQ45LEAV = 0.074
(0.012)
6.19

Appendix 11.7.1: Model 0 (relaxed), with error covariances – Structural Equations

PERSIST = 0.63*COMMIT, Errorvar.= 0.61, R² = 0.39
 (0.017) (0.029)
 35.77 21.14

COMMIT = 0.31*AI + 0.44*SI + 0.20*AC_SCONC + 0.11*SLF_ASSR, Errorvar.= 0.14, R² = 0.86
 (0.021) (0.023) (0.018) (0.025) (0.0086)
 14.94 18.83 11.25 4.66 16.71

AI = 0.62*EXPTN + 0.43*AC_SCONC + 0.093*HLP_FEED, Errorvar.= 0.11, R² = 0.89
 (0.017) (0.025) (0.024) (0.016)
 37.30 17.30 3.83 6.84

SI = 0.49*RES_CAT + 0.81*EXTRAN, Errorvar.= 0.14, R² = 0.86
 (0.019) (0.024) (0.017)
 25.99 34.07 8.30

EXPTN = 0.53*PERSPIC - 0.56*GEN_FACS, Errorvar.= 0.24, R² = 0.76
 (0.017) (0.017) (0.019)
 30.82 -33.27 12.58

PERSPIC = 0.78*SLF_ASSR, Errorvar.= 0.40 , R² = 0.60
 (0.022) (0.024)
 34.98 16.83

AC_SCONC = 0.36*AC_EFFRT + 0.20*SCORE + 0.63*HLP_FEED, Errorvar.= 0.28, R² = 0.72
 (0.021) (0.013) (0.017) (0.019)
 17.32 15.27 37.66 15.26

SLF_ASSR = 0.81*FAMILY, Errorvar.= 0.34, R² = 0.66
 (0.020) (0.025)
 41.65 13.40

AC_EFFRT = 0.63*PERSPIC, Errorvar.= 0.60, R² = 0.40
 (0.026) (0.042)
 24.10 14.32

Appendix 11.7.2: Model 0 (constrained), with error covariances – Structural Equations

PERSIST = 0.58*COMMIT, Errorvar.= 0.66 , R² = 0.34
(0.016) (0.027)
36.31 24.65

COMMIT = 0.36*AI + 0.39*SI + 0.16*AC_SCONC + 0.10*SLF_ASSR, Errorvar.= 0.15 , R² = 0.85
(0.022) (0.023) (0.023) (0.025) (0.0068)
16.65 17.41 7.00 4.16 21.55

AI = 0.57*EXPTN + 0.35*AC_SCONC + 0.16*HLP_FEED, Errorvar.= 0.12 , R² = 0.88
(0.017) (0.027) (0.025) (0.0087)
34.50 12.71 6.20 13.46

SI = 0.48*RES_CAT + 0.91*EXTRAN, Errorvar.= 0.039 , R² = 0.96
(0.020) (0.022) (0.016)
24.72 41.77 2.46

EXPTN = 0.57*PERSPIC - 0.54*GEN_FACS, Errorvar.= 0.15 , R² = 0.85
(0.017) (0.016) (0.014)
34.68 -34.75 10.48

PERSPIC = 0.87*SLF_ASSR, Errorvar.= 0.25 , R² = 0.75
(0.023) (0.019)
37.92 13.04

AC_SCONC = 0.44*AC_EFFRT + 0.19*SCORE + 0.60*HLP_FEED, Errorvar.= 0.14 , R² = 0.86
(0.024) (0.013) (0.021) (0.019)
18.22 14.26 28.84 7.03

SLF_ASSR = 0.90*FAMILY, Errorvar.= 0.20 , R² = 0.80
(0.020) (0.023)
44.65 8.53

AC_EFFRT = 0.78*PERSPIC, Errorvar.= 0.39 , R² = 0.61
(0.027) (0.030)
29.27 13.00

Appendix 11.7.3: Model A (relaxed), with error covariances – Structural Equations

PERSIST = 0.62*COMMIT, Errorvar.= 0.61, R² = 0.39
(0.017) (0.029)
35.74 21.34

$$\text{COMMIT} = 0.33 \cdot \text{AI} + 0.53 \cdot \text{SI} + 0.20 \cdot \text{AC_SCONC}, \text{ Errorvar.} = 0.14, R^2 = 0.86$$

(0.018)	(0.020)	(0.020)	(0.0087)
18.28	26.83	10.22	16.41

$$AI = 0.64 \cdot EXPTN + 0.47 \cdot AC_SCONC, \text{ Errorvar.} = 0.091, R^2 = 0.91$$

(0.017)
37.09

(0.016)
29.88

(0.015)
5.93

$$SI = 0.50 \cdot RES_CAT + 0.81 \cdot EXTRAN, \text{ Errorvar.} = 0.14, R^2 = 0.86$$

(0.019)
25.54

(0.025)
32.75

(0.017)
8.05

$$\text{EXPTN} = 0.47 \cdot \text{PERSPIC} - 0.62 \cdot \text{GEN_FACS}, \text{ Errorvar.} = 0.25, R^2 = 0.75$$

(0.017)	(0.016)	(0.018)
27.10	-37.57	13.54

PERSPIC = 0.76*SLF_ASSR, Errorvar.= 0.43 , R² = 0.57
(0.022) (0.025)
34.23 16.78

$$AC_SCONC = 0.34*AC_EFFRT + 0.17*SCORE + 0.67*HLP_FEED, \text{ Errorvar.} = 0.26, R^2 = 0.74$$

(0.020)	(0.014)	(0.016)	(0.019)
17.20	12.69	42.12	13.93

SLF_ASSR = 0.81*FAMILY, Errorvar.= 0.34, R² = 0.66
(0.020) (0.026)
41.51 13.42

$$AC_EFFRT = 0.38*EXPTN + 0.33*PERSPIC, \text{ Errorvar.} = 0.59, R^2 = 0.41$$

(0.024)	(0.024)	(0.040)
15.94	14.12	14.73

Appendix 11.7.4: Model A (constrained), with error covariances – Structural Equations

PERSIST = 0.59*COMMIT, Errorvar.= 0.66 , R² = 0.34
(0.016) (0.027)
36.69 24.43

COMMIT = 0.35*AI + 0.50*SI + 0.18*AC_SCONC, Errorvar.= 0.14 , R² = 0.86
(0.021) (0.019) (0.027) (0.0070)
16.35 25.69 6.54 20.25

AI = 0.56*EXPTN + 0.48*AC_SCONC, Errorvar.= 0.12 , R² = 0.88
(0.017) (0.017) (0.0087)
32.04 28.39 13.68

SI = 0.49*RES_CAT + 0.91*EXTRAN, Errorvar.= 0.026 , R² = 0.97
(0.020) (0.023) (0.016)
24.90 40.10 1.66

EXPTN = 0.48*PERSPIC - 0.64*GEN_FACS, Errorvar.= 0.17 , R² = 0.83
(0.016) (0.015) (0.015)
29.37 -41.89 11.19

PERSPIC = 0.85*SLF_ASSR, Errorvar.= 0.28 , R² = 0.72
(0.023) (0.021)
36.27 13.47

AC_SCONC = 0.37*AC_EFFRT + 0.14*SCORE + 0.71*HLP_FEED, Errorvar.= 0.086 , R² = 0.91
(0.022) (0.014) (0.019) (0.019)
16.87 10.16 37.91 4.59

SLF_ASSR = 0.89*FAMILY, Errorvar.= 0.20 , R² = 0.80
(0.021) (0.023)
43.26 8.50

AC_EFFRT = 0.53*EXPTN + 0.28*PERSPIC, Errorvar.= 0.44 , R² = 0.56
(0.027) (0.024) (0.030)
20.10 11.53 14.31

Appendix 11.7.5: Model B (relaxed), with error covariances – Structural Equations

PERSIST = 1.20*COMMIT - 0.66*SI, Errorvar.= 0.45 , R² = 0.55
 (0.054) (0.057) (0.038)
 22.10 -11.67 11.88

COMMIT = 0.31*AI + 0.54*SI + 0.21*AC_SCONC, Errorvar.= 0.14 , R² = 0.86
 (0.017) (0.020) (0.018) (0.0080)
 18.00 27.58 11.17 18.18

AI = 0.63*EXPTN + 0.48*AC_SCONC, Errorvar.= 0.098 , R² = 0.90
 (0.017) (0.016) (0.015)
 36.93 30.56 6.35

SI = 0.49*RES_CAT + 0.81*EXTRAN, Errorvar.= 0.15 , R² = 0.85
 (0.019) (0.024) (0.017)
 25.94 34.30 9.05

EXPTN = 0.48*PERSPIC - 0.62*GEN_FACS, Errorvar.= 0.24 , R² = 0.76
 (0.017) (0.016) (0.018)
 27.46 -37.61 13.23

PERSPIC = 0.76*SLF_ASSR, Errorvar.= 0.43 , R² = 0.57
 (0.022) (0.025)
 34.55 16.92

AC_SCONC = 0.34*AC_EFFRT + 0.17*SCORE + 0.66*HLP_FEED, Errorvar.= 0.26 , R² = 0.74
 (0.020) (0.013) (0.016) (0.018)
 17.50 13.29 42.63 14.43

SLF_ASSR = 0.82*FAMILY, Errorvar.= 0.33 , R² = 0.67
 (0.020) (0.026)
 41.81 12.96

AC_EFFRT = 0.38*EXPTN + 0.32*PERSPIC, Errorvar.= 0.60 , R² = 0.40
 (0.024) (0.024) (0.040)
 15.87 13.70 15.10

Appendix 11.7.6: Model B (constrained), with error covariances – Structural Equations

PERSIST = 1.24*COMMIT - 0.72*SI, Errorvar.= 0.49 , R² = 0.51
 (0.061) (0.064) (0.038)
 20.17 -11.21 12.83

COMMIT = 0.32*AI + 0.49*SI + 0.22*AC_SCONC, Errorvar.= 0.13 , R² = 0.87
 (0.020) (0.019) (0.025) (0.0066)
 15.86 26.07 8.63 20.00

AI = 0.55*EXPTN + 0.49*AC_SCONC, Errorvar.= 0.13 , R² = 0.87
 (0.017) (0.017) (0.0087)
 31.52 28.87 14.48

SI = 0.49*RES_CAT + 0.90*EXTRAN, Errorvar.= 0.053 , R² = 0.95
 (0.020) (0.022) (0.015)
 24.86 41.28 3.45

EXPTN = 0.49*PERSPIC - 0.64*GEN_FACS, Errorvar.= 0.16 , R² = 0.84
 (0.016) (0.015) (0.015)
 29.67 -41.85 10.88

PERSPIC = 0.84*SLF_ASSR, Errorvar.= 0.29 , R² = 0.71
 (0.023) (0.021)
 36.72 14.02

AC_SCONC = 0.37*AC_EFFRT + 0.15*SCORE + 0.72*HLP_FEED, Errorvar.= 0.075 , R² = 0.93
 (0.022) (0.013) (0.018) (0.018)
 16.92 11.31 39.03 4.04

SLF_ASSR = 0.91*FAMILY, Errorvar.= 0.17 , R² = 0.83
 (0.021) (0.023)
 43.85 7.46

AC_EFFRT = 0.53*EXPTN + 0.27*PERSPIC, Errorvar.= 0.44 , R² = 0.56
 (0.027) (0.025) (0.031)
 19.90 11.07 14.42

Appendix 11.7.7: Model C (relaxed), with error covariances – Structural Equations

PERSIST = 1.32*COMMIT - 0.76*SI, Errorvar.= 0.42 , R² = 0.58
(0.066) (0.069) (0.041)
19.86 -11.09 10.15

COMMIT = 0.25*AI + 0.56*SI + 0.23*AC_SCONC, Errorvar.= 0.14 , R² = 0.86
(0.019) (0.022) (0.017) (0.0079)
13.65 25.81 13.84 17.49

AI = 0.083*SI + 0.60*EXPTN + 0.44*AC_SCONC, Errorvar.= 0.11 , R² = 0.89
(0.018) (0.018) (0.017) (0.015)
4.56 33.02 25.15 7.66

SI = 0.17*AI + 0.20*SLF_ASSR + 0.33*RES_CAT + 0.52*EXTRAN, Errorvar.= 0.22 , R² = 0.78
(0.019) (0.027) (0.020) (0.027) (0.017)
8.98 7.34 16.76 19.60 12.82

EXPTN = 0.48*PERSPIC - 0.60*GEN_FACS, Errorvar.= 0.28 , R² = 0.72
(0.017) (0.016) (0.019)
28.27 -37.75 14.53

PERSPIC = 0.74*SLF_ASSR, Errorvar.= 0.45 , R² = 0.55
(0.022) (0.026)
33.22 17.30

AC_SCONC = 0.37*AC_EFFERT + 0.17*SCORE + 0.65*HLP_FEED, Errorvar.= 0.27 , R² = 0.73
(0.020) (0.013) (0.016) (0.019)
18.42 12.94 40.84 14.07

SLF_ASSR = 0.75*FAMILY, Errorvar.= 0.44 , R² = 0.56
(0.020) (0.028)
37.60 15.73

AC_EFFERT = 0.37*EXPTN + 0.33*PERSPIC, Errorvar.= 0.61 , R² = 0.39
(0.023) (0.023) (0.040)
16.12 14.16 15.14

Appendix 11.7.8: Model C (constrained), with error covariances – Structural Equations

PERSIST = 1.33*COMMIT - 0.81*SI, Errorvar.= 0.45 , R² = 0.55
(0.068) (0.070) (0.041)
19.77 -11.57 11.02

COMMIT = 0.27*AI + 0.51*SI + 0.25*AC_SCONC, Errorvar.= 0.13 , R² = 0.87
(0.019) (0.020) (0.021) (0.0066)
14.11 25.74 11.90 20.19

AI = 0.046*SI + 0.56*EXPTN + 0.43*AC_SCONC, Errorvar.= 0.13 , R² = 0.87
(0.018) (0.017) (0.020) (0.0088)
2.52 32.55 21.90 15.07

SI = 0.18*AI + 0.41*SLF_ASSR + 0.28*RES_CAT + 0.39*EXTRAN, Errorvar.= 0.17 , R² = 0.83
(0.021) (0.025) (0.015) (0.023) (0.014)
8.64 16.14 18.99 17.03 11.82

EXPTN = 0.51*PERSPIC - 0.61*GEN_FACS, Errorvar.= 0.20 , R² = 0.80
(0.016) (0.015) (0.015)
31.68 -42.25 13.05

PERSPIC = 0.84*SLF_ASSR, Errorvar.= 0.30 , R² = 0.70
(0.023) (0.021)
35.71 14.16

AC_SCONC = 0.39*AC_EFFRT + 0.15*SCORE + 0.71*HLP_FEED, Errorvar.= 0.072 , R² = 0.93
(0.021) (0.013) (0.018) (0.020)
18.35 11.11 38.72 3.63

SLF_ASSR = 0.79*FAMILY, Errorvar.= 0.38 , R² = 0.62
(0.020) (0.027)
39.37 14.04

AC_EFFRT = 0.55*EXPTN + 0.26*PERSPIC, Errorvar.= 0.44 , R² = 0.56
(0.027) (0.024) (0.031)
20.67 10.75 14.30

Appendix 11.7.9: Model C (relaxed), with no error covariances – Structural Equations

PERSIST = 1.30*COMMIT - 0.80*SI, Errorvar.= 0.48 , R² = 0.52
(0.057) (0.060) (0.036)
22.72 -13.18 13.46

COMMIT = 0.18*AI + 0.50*SI + 0.40*AC_SCONC, Errorvar.= 0.079 , R² = 0.92
(0.018) (0.017) (0.018) (0.0066)
10.24 28.82 22.17 12.02

AI = 0.077*SI + 0.49*EXPTN + 0.47*AC_SCONC, Errorvar.= 0.19 , R² = 0.81
(0.016) (0.016) (0.015) (0.0096)
4.68 31.53 30.31 19.54

SI = 0.14*AI + 0.27*SLF_ASSR + 0.30*RES_CAT + 0.49*EXTRAN, Errorvar.= 0.17 , R² = 0.83
(0.018) (0.030) (0.018) (0.025) (0.013)
7.84 9.02 16.98 19.21 13.13

EXPTN = 0.48*PERSPIC - 0.60*GEN_FACS, Errorvar.= 0.26 , R² = 0.74
(0.014) (0.014) (0.016)
34.03 -42.23 15.90

PERSPIC = 0.75*SLF_ASSR, Errorvar.= 0.44 , R² = 0.56
(0.018) (0.019)
42.59 22.80

AC_SCONC = 0.45*AC_EFFRT + 0.18*SCORE + 0.57*HLP_FEED, Errorvar.= 0.21 , R² = 0.79
(0.018) (0.011) (0.013) (0.013)
25.42 16.76 42.92 16.14

SLF_ASSR = 0.81*FAMILY, Errorvar.= 0.35 , R² = 0.65
(0.017) (0.021)
47.35 16.33

AC_EFFRT = 0.32*EXPTN + 0.52*PERSPIC, Errorvar.= 0.41 , R² = 0.59
(0.020) (0.022) (0.026)
16.16 23.18 16.10

Appendix 11.7.10: Model C (constrained), with no error covariances – Structural Equations

PERSIST = 1.30*COMMIT - 0.84*SI, Errorvar.= 0.52 , R² = 0.48
(0.065) (0.067) (0.037)
20.16 -12.58 14.01

COMMIT = 0.15*AI + 0.44*SI + 0.43*AC_SCONC, Errorvar.= 0.096 , R² = 0.90
(0.025) (0.018) (0.029) (0.0065)
6.08 24.27 15.15 14.90

AI = - 0.0077*SI + 0.52*EXPTN + 0.50*AC_SCONC, Errorvar.= 0.11 , R² = 0.89
(0.018) (0.018) (0.022) (0.0070)
-0.43 28.39 23.18 16.08

SI = 0.21*AI + 0.29*SLF_ASSR + 0.33*RES_CAT + 0.50*EXTRAN, Errorvar.= 0.10 , R² = 0.90
(0.021) (0.023) (0.015) (0.023) (0.013)
9.82 12.75 22.60 21.43 8.27

EXPTN = 0.48*PERSPIC - 0.65*GEN_FACS, Errorvar.= 0.15 , R² = 0.85
(0.014) (0.013) (0.013)
33.76 -48.39 10.92

PERSPIC = 0.84*SLF_ASSR, Errorvar.= 0.29 , R² = 0.71
(0.018) (0.017)
47.94 17.65

AC_SCONC = 0.53*AC_EFFRT + 0.12*SCORE + 0.55*HLP_FEED, Errorvar.= 0.078 , R² = 0.92
(0.021) (0.011) (0.017) (0.013)
25.43 10.95 33.17 6.12

SLF_ASSR = 0.85*FAMILY, Errorvar.= 0.28 , R² = 0.72
(0.017) (0.022)
50.02 12.76

AC_EFFRT = 0.44*EXPTN + 0.45*PERSPIC, Errorvar.= 0.33 , R² = 0.67
(0.021) (0.022) (0.022)
20.50 20.50 15.00

Appendix 11.8.1: Model A (relaxed), with error covariances – Reduced Form Equations

PERSIST = 0.038*SCORE - 0.099*GEN_FACS + 0.17*RES_CAT + 0.27*EXTRAN + 0.062*FAMILY
(0.0035) (0.0055) (0.0077) (0.010) (0.0035)
10.98 -17.95 21.46 26.06 17.76

+ 0.15*HLP_FEED, Errorvar.= 0.72, R² = 0.28
(0.0084)
17.65

COMMIT = 0.061*SCORE - 0.16*GEN_FACS + 0.27*RES_CAT + 0.43*EXTRAN + 0.100*FAMILY
(0.0055) (0.0081) (0.010) (0.013) (0.0050)
11.21 -19.70 25.77 33.35 19.86

+ 0.24*HLP_FEED, Errorvar.= 0.27, R² = 0.73
(0.012)
19.84

AI = 0.081*SCORE - 0.43*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.24*FAMILY
(0.0072) (0.013) (0.0091)
11.36 -32.81 26.12

+ 0.32*HLP_FEED, Errorvar.= 0.38, R² = 0.62
(0.013)
24.93

SI = 0.0*SCORE + 0.0*GEN_FACS + 0.50*RES_CAT + 0.81*EXTRAN + 0.0*FAMILY
(0.019) (0.025)
25.54 32.75

+ 0.0*HLP_FEED, Errorvar.= 0.14, R² = 0.86

EXPTN = 0.0*SCORE - 0.62*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.29*FAMILY
(0.016) (0.011)
-37.57 25.23

+ 0.0*HLP_FEED, Errorvar.= 0.39, R² = 0.61

PERSPIC = 0.0*SCORE + 0.0*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.61*FAMILY
(0.015)
40.13

+ 0.0*HLP_FEED, Errorvar.= 0.62, R² = 0.38

AC_SCONC = 0.17*SCORE - 0.079*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.11*FAMILY
(0.014) (0.0060) (0.0071)
12.69 -13.35 15.07

+ 0.67*HLP_FEED, Errorvar.= 0.35, R² = 0.65
(0.016)
42.12

SLF_ASSR = 0.0*SCORE + 0.0*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.81*FAMILY
(0.020)
41.51

+ 0.0*HLP_FEED, Errorvar.= 0.34, R² = 0.66

AC_EFFRT = 0.0*SCORE - 0.23*GEN_FACS + 0.0*RES_CAT + 0.0*EXTRAN + 0.31*FAMILY
(0.015) (0.014)
-15.83 21.76

+ 0.0*HLP_FEED, Errorvar.= 0.79, R² = 0.21

Appendix 11.8.2: Model C (constrained), with no error covariances – Reduced Form Equations

$$\begin{aligned} \text{PERSIST} = & 0.073 \cdot \text{SCORE} - 0.14 \cdot \text{GEN_FACS} - 0.089 \cdot \text{RES_CAT} - 0.14 \cdot \text{EXTRAN} + 0.11 \cdot \text{FAMILY} \\ & (0.0074) \quad (0.011) \quad (0.013) \quad (0.020) \quad (0.0094) \\ & 9.98 \quad -13.00 \quad -6.90 \quad -6.92 \quad 12.24 \\ & + 0.35 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.80, R^2 = 0.20 \\ & (0.021) \\ & 16.56 \end{aligned}$$

$$\begin{aligned} \text{COMMIT} = & 0.064 \cdot \text{SCORE} - 0.16 \cdot \text{GEN_FACS} + 0.15 \cdot \text{RES_CAT} + 0.22 \cdot \text{EXTRAN} + 0.29 \cdot \text{FAMILY} + \\ & (0.0062) \quad (0.0089) \quad (0.0081) \quad (0.013) \quad (0.0098) \\ & 10.32 \quad -18.32 \quad 18.08 \quad 17.01 \quad 29.46 \\ & + 0.30 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.24, R^2 = 0.76 \\ & (0.015) \\ & 20.62 \end{aligned}$$

$$\begin{aligned} \text{AI} = & 0.058 \cdot \text{SCORE} - 0.41 \cdot \text{GEN_FACS} - 0.0025 \cdot \text{RES_CAT} - 0.0039 \cdot \text{EXTRAN} + 0.30 \cdot \text{FAMILY} \\ & (0.0058) \quad (0.012) \quad (0.0059) \quad (0.0090) \quad (0.0086) \\ & 9.98 \quad -33.21 \quad -0.43 \quad -0.43 \quad 34.74 \\ & + 0.28 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.30, R^2 = 0.70 \\ & (0.014) \\ & 19.67 \end{aligned}$$

$$\begin{aligned} \text{SI} = & 0.012 \cdot \text{SCORE} - 0.084 \cdot \text{GEN_FACS} + 0.33 \cdot \text{RES_CAT} + 0.50 \cdot \text{EXTRAN} + 0.31 \cdot \text{FAMILY} \\ & (0.0017) \quad (0.0090) \quad (0.015) \quad (0.024) \quad (0.018) \\ & 7.14 \quad -9.32 \quad 22.50 \quad 21.14 \quad 17.47 \\ & + 0.056 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.15, R^2 = 0.85 \\ & (0.0068) \\ & 8.26 \end{aligned}$$

$$\begin{aligned} \text{EXPTN} = & 0.0 \cdot \text{SCORE} - 0.65 \cdot \text{GEN_FACS} + 0.0 \cdot \text{RES_CAT} + 0.0 \cdot \text{EXTRAN} + 0.34 \cdot \text{FAMILY} \\ & (0.013) \quad (0.011) \\ & -48.39 \quad 31.10 \\ & + 0.0 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.26, R^2 = 0.74 \end{aligned}$$

$$\begin{aligned} \text{PERSPIC} = & 0.0 \cdot \text{SCORE} + 0.0 \cdot \text{GEN_FACS} + 0.0 \cdot \text{RES_CAT} + 0.0 \cdot \text{EXTRAN} + 0.71 \cdot \text{FAMILY} \\ & (0.014) \\ & 51.87 \\ & + 0.0 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.49, R^2 = 0.51 \end{aligned}$$

$$\begin{aligned} \text{AC_SCONC} = & 0.12 \cdot \text{SCORE} - 0.15 \cdot \text{GEN_FACS} + 0.0 \cdot \text{RES_CAT} + 0.0 \cdot \text{EXTRAN} + 0.25 \cdot \text{FAMILY} \\ & (0.011) \quad (0.0081) \quad (0.0100) \\ & 10.95 \quad -18.60 \quad 24.87 \\ & + 0.55 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.24, R^2 = 0.76 \\ & (0.017) \\ & 33.17 \end{aligned}$$

$$\begin{aligned} \text{SLF_ASSR} = & 0.0 \cdot \text{SCORE} + 0.0 \cdot \text{GEN_FACS} + 0.0 \cdot \text{RES_CAT} + 0.0 \cdot \text{EXTRAN} + 0.85 \cdot \text{FAMILY} \\ & + 0.0 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.28, R^2 = 0.72 \\ & (0.017) \\ & 50.02 \end{aligned}$$

$$\begin{aligned} \text{AC_EFFRT} = & 0.0 \cdot \text{SCORE} - 0.29 \cdot \text{GEN_FACS} + 0.0 \cdot \text{RES_CAT} + 0.0 \cdot \text{EXTRAN} + 0.47 \cdot \text{FAMILY} + \\ & (0.014) \quad (0.016) \\ & -19.95 \quad 29.69 \\ & + 0.0 \cdot \text{HLP_FEED}, \text{Errorvar.} = 0.57, R^2 = 0.43 \end{aligned}$$

	Error Covariances:			
	<----- Included ----->		<----- Excluded ----->	
	Measurement Equations:			
	'Relaxed'	'Constrained'	'Relaxed'	'Constrained'
Minimum Fit Function Chi-Square (df)				
Model C	6,690.13 (1068)	8,702.03 (1103)	13,335.41 (1183)	13,551.40 (1192)
Model B	6,878.55 (1071)	9,090.78 (1106)	-	-
Model A	7,035.07 (1072)	9,227.60 (1107)	-	-
Model 0	7,320.30 (1071)	9,680.32 (1106)	-	-
Root Mean Square Error of Approximation (RMSEA) - point estimates				
Model C	0.046	0.053	0.064	0.065
Model B	0.047	0.054	-	-
Model A	0.047	0.054	-	-
Model 0	0.049	0.056	-	-
Bentler-Bonett Normed Fit Index (NFI)				
Model C	0.92	0.89	0.84	0.84
Model B	0.92	0.89	-	-
Model A	0.92	0.89	-	-
Model 0	0.91	0.88	-	-
Bentler-Bonett Non-Normed Fit Index (NNFI)				
Model C	0.92	0.89	0.84	0.84
Model B	0.92	0.89	-	-
Model A	0.91	0.88	-	-
Model 0	0.91	0.88	-	-
Comparative Fit Index (CFI)				
Model C	0.93	0.91	0.85	0.85
Model B	0.93	0.90	-	-
Model A	0.93	0.90	-	-
Model 0	0.92	0.89	-	-

Appendix 11.10: Second-Order Factor Analysis – Wellbeing

Structural Equations

Social Integration =
SI = 0.74*WELL, Errorvar.= 0.45 , R² = 0.55
 (0.032) (0.039)
 23.14 11.30

Financial Concerns =
FINANCE = 0.51*WELL, Errorvar.= 0.74 , R² = 0.26
 (0.018) (0.025)
 27.76 29.54

Academic Self-Concept =
AC_SCONC = 0.81*WELL, Errorvar.= 0.35 , R² = 0.65
 (0.019) (0.026)
 43.34 13.41

Extraneous Problems =
EXTRAN = 0.75*WELL, Errorvar.= 0.43 , R² = 0.57
 (0.016) (0.028)
 46.72 15.45

Lost Friends & Homesickness =
HM_SICK = 0.53*WELL, Errorvar.= 0.71 , R² = 0.29
 (0.029) (0.060)
 18.73 11.99

Family Support =
FAMILY = 0.56*WELL, Errorvar.= 0.69 , R² = 0.31
 (0.036) (0.051)
 15.55 13.43

Help and Feedback =
HLP_FEED = 0.77*WELL, Errorvar.= 0.41 , R² = 0.59
 (0.021) (0.035)
 36.08 11.78

Goodness of Fit Statistics

Degrees of Freedom = 364
Minimum Fit Function Chi-Square = 2134.50
Root Mean Square Error of Approximation (RMSEA) = 0.044
Normed Fit Index (NFI) = 0.87
Non-Normed Fit Index (NNFI) = 0.88
Comparative Fit Index (CFI) = 0.89

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