

**A comparative and exploratory study of the
Nfer-Nelson Emotional Literacy Scale in an Irish
context**

Submitted by

Sara Jane Flynn

The University of Exeter

**For the degree of Doctorate in
Educational, Child and Community
Psychology**

May 2010

Abstract (paper 1/2)

Culturally specific development of Emotional Literacy (EL) skills suggest that self report and observer ratings on EL scales would differ across cultures. This study is the first of two which explores and compares the Nfer-Nelson Emotional Literacy scale (Faupel, 2003) scores reported in the manual with those found in an Irish sample with a view to demonstrating its appropriateness as a cross cultural measure of EL. The three part scale comprise student (N=188), teacher (N=163) and parent (N=175) scales. The scales were completed in schools with a disadvantaged (74% of sample) or non-disadvantaged status (26%). Irish scores were organised into categories using percentile ranges to allow for comparative analysis with the original UK sample. Overall patterns of scores were similar but the cut off point for children in need of intervention was higher in the Irish sample. Within sample differences were explored using t-tests and children from disadvantaged backgrounds rated themselves with statistically lower EL than their non-disadvantaged counterparts. Inter-correlations were run to explore the relationships between and within the three scales. A mixed pattern of correlations was found and some evidence supporting Goleman's construct of EL came from strong consistent relationships (correlation range 0.41-0.77) between the empathy and self-regulation subscales in the three scales. Differences between teacher scores suggests cultural differences in perception of EL and strong relationships between parent and student scales suggests a qualitatively stronger understanding of emotions shared between Irish children and parents compared with their counterparts in the UK. A major limitation of this study is that the Irish sample was largely disadvantaged (74%), whereas the UK sample was nationally representative.

Abstract (paper 2/2)

This is the second of two papers which explores and compares the Nfer-Nelson Emotional Literacy scale in an Irish context. Emotional Literacy (EL) Scores obtained in paper one are used to explore the reliability (Study 1) and predictive validity (study 2) of the tripartite Nfer-Nelson scale. This scale is comprised of parent, teacher and student scales. Reliability is established, using internal consistency measures for the Total EL for all three scales (α range 0.77-0.92) and also for the majority of component subscales in the teacher scale (α range 0.77-0.88). The children ($n= 153$) who completed the student scale for paper one were assessed for their academic achievement using a reading attainment test, the Mary Immaculate College Reading Attainment Test (MICRA-T) and also for self esteem using The Culture Fair Self Esteem Inventory (CFSEI). Bivariate regression analysis indicated that academic achievement is predicted by the majority of the components (r range 0.247-0.329) comprising EL and the Total EL ($r=0.314$) from the teacher scale. Self esteem is predicted by all the components (r range 0.212-0.272) and the Total EL ($r=0.285$) from the teacher scale and the majority of components (r range 0.2-0.361) and the Total EL ($r= 0.384$) from the student scale. The items which constitute the scales were investigated and overlaps between the: self-awareness subscale and self esteem items as well as: motivation subscale and aspects of academic achievement bring the discreteness of the associated EL subscales into question. Statistical findings suggest the cross cultural use of the Nfer-Nelson scale. However, difficulties with the face validity of the scale items question the appropriateness of the items used to assess the EL construct. These findings suggest the EL construct to be otherwise acceptable

Table of Contents

Index of Tables

Index of Figures

Overview of research.....	1
Paper 1 Title Page.....	3
Abstract.....	4
Chapter 1: The study.....	5
1.1 Introduction.....	5
1.2 Study Outline.....	5
1.3 Rationale for Study.....	6
1.3.1 Is Emotional Literacy Development Universal or Culturally Specific?.....	7
1.3.1.1 Appraisal of Emotional Events.....	8
1.3.1.2 Expression of Emotions.....	9
1.4. In-group Differences in Emotional Literacy.....	11
1.4.1 Gender Differences in Emotional Literacy.....	11
1.4.2 Children from Disadvantaged Backgrounds.....	12
1.5 Summary.....	13
Chapter 2: Theory and Measurement Instruments	14
2.1 Introduction.....	14
2.2 Definition of Emotional Literacy.....	14
2.3 Theoretical Approaches to Emotional Literacy: Ability and Trait Approaches and Models.....	15
2.3.1 Trait Approaches and the Tests that Measure them.....	16
2.4 Scales other than Emotional Literacy Scales which appear to Measure the Same Competencies.....	18
2.5 Emotional Literacy as an Achievement.....	19
2.6 Observational and Self Reports of Emotional Literacy.....	19
2.7 Research Aims.....	20
2.8 Summary.....	21
Chapter 3: Methodology.....	22
3.1 Introduction.....	22
3.2 The Nfer-Nelson Emotional Literacy Scale.....	22
3.3 Design of this Study.....	24
3.4 Participants.....	24
3.5 Procedure for Compiling Sample.....	25
3.6 Administration of the Student and Teacher Scales.....	27
3.7 Scoring the Scales.....	28
3.8 Analysis of data.....	28

Chapter 4: Findings	30
4.1 Introduction.....	30
4.2 Sample Demographics.....	30
4.3 Item Attrition Patterns.....	32
4.4 Descriptive Statistics.....	33
4.5 Irish Sample Scores.....	36
4.6 Within Sample Comparisons.....	39
4.6.1 DEIS vs. Non-DEIS.....	39
4.6.2 Gender Differences	39
4.7 Inter-correlations within and between Scales.....	40
4.7.1 Inter-correlations within Scales.....	40
4.7.2 Inter-correlations between Scales.....	42
Chapter 5: Discussion	44
5.1 Introduction.....	44
5.2 Between Culture Comparisons.....	44
5.2.1 Student Sample Set.....	44
5.2.2 Parent and Teacher Sample Sets.....	45
5.3 Within-group Differences: Irish Sample.....	47
5.3.1 DEIS vs. Non-DEIS.....	47
5.3.2 Gender Differences.....	47
5.3.3 Relationships between Subscales.....	48
5.4 Summary and Conclusion.....	49
5.8 Implications.....	50
Paper 2 Title Page	52
Abstract	53
Chapter 1: The Study	54
1.1 Introduction.....	54
1.2 The Outline of the Study.....	54
1.3 The Rationale for the Study.....	55
1.3.1 Reliability - Study 1.....	55
1.3.2 Validity- Study 2.....	57
1.3.2.1 Academic Achievement.....	58
1.3.2.2 Self Esteem.....	59
1.4 Research Aims.....	61
1.5 Research Design.....	62
1.6 Summary.....	62
Chapter 2: Reliability- Study 1	63
2.1 Introduction.....	63
2.2 Participants.....	63
2.3 Data Analysis.....	63
2.4 Results.....	64
2.4.1 Reliability of the Student Scale.....	65
2.4.2 Reliability of the Teacher Scale.....	65
2.4.3 Reliability of the Parent Scale.....	65

Chapter 3: Validity- Study 2	67
3.1 Introduction.....	67
3.2 Predictive Validity of EL for Academic Achievement.....	67
3.2.1 Mary Immaculate College Reading Attainment Test (MICRA-T) -Wall & Burke (2004).....	67
3.2.2 Scoring of the MICRA-T.....	68
3.2.3 Participants.....	68
3.2.4 Method of Data Collection.....	69
3.2.5. Analysis of MICRA-T.....	69
3.3 Predictive Validity of EL for Self Esteem.....	70
3.3.1 The Culture Fair Self Esteem Inventory (CFSEI-3)-Battle (2002).....	70
3.3.2 Scoring the CFSEI-3.....	71
3.3.3 Participants.....	71
3.3.4 Method of Data Collection.....	71
3.3.5 Analysis of CFSEI -3.....	72
3.4 Results.....	72
3.4.1 Results of the regression with the MICRA-T.....	72
3.4.2 Results of the regression with the CFSEI-3.....	74
Chapter 4: Discussion	76
4.1 Introduction.....	76
4.2 The Reliability and Predictive Validity of the Scales.....	76
4.2.1 The Student Scale.....	76
4.2.2 The Parent Scale.....	77
4.2.3 The Teacher Scale.....	78
4.2.4 Within Sample Comparisons.....	79
4.3 The Construct and Face Validity of the Scales.....	80
4.3.1 Self-awareness Subscale.....	81
4.3.2 The Motivation Subscale	84
4.4 Summary and Conclusion.....	85
4.5 Implications.....	87
References	89
Appendix 1: Goleman’s and Bar-On’s Emotional Literacy scales	101
Appendix 2: Nfer-Nelson parent/child/teacher scales	105
Appendix 3: Delivering Equality of Opportunity in Schools (DEIS)	109
Appendix 4: School letter	112

Appendix 5: Information letters to parents and consent forms.....	114
Appendix 6: Cronbach alphas for the Nfer-Nelson scales and subscales....	119
Appendix 7: MICRA-T.....	122
Appendix 8: CFSEI-3.....	130
Appendix 9: Ethical approval from the University of Exeter.....	134
Appendix 10: Literature Review.....	138

Index of Tables

Table 1: Irish Schools Sample: Sex, Status, Participants and Teachers.....	26
Table 2: UK Sample: Score bands, Percentile Scores and Descriptive Categories	29
Table 3: Irish Sample: Age and Gender of Participants organised by Schools Status.....	31
Table 4: Student/Teacher/Parent Scales: Means and Standard Deviations of the Irish Sample.....	33
Table 5: Scores and Descriptive Categories for Total Emotional Literacy for Irish and UK Student Scales.....	36
Table 6: Irish/UK Sample Teacher Scales: Scores and Descriptive Categories for Subscales and Total Emotional Literacy.....	37
Table 7: Irish/UK Sample Parent Scales: Scores and Descriptive Categories for Subscales and Total Emotional Literacy.....	38
Table 8: Irish Sample Student (S) Teacher (T) and Parent (P) Scales: Inter-correlations between Subscales within each Scale.....	41
Table 9: Irish Sample Student, Teacher and Parent Sets: Inter-correlations between the Data Sets for each of the Individual Subscales.....	43
Table 10: Irish/UK, Student/Teacher/Parent Scales: Cronbach Alpha Coefficients for Total Emotional Literacy and Individual Subscales.....	64
Table 11: Irish Sample, Student/Teacher/Parent Scales: Correlation Matrix - Bivariate Regressions - Subscales and Total Emotional Literacy with Attainment and Self Esteem.....	73

Index of Figures

Figure 1: Normal Q-Q Plot of the Total Emotional Literacy Scores from the Irish Parent Sample.....	34
Figure 2: Total Emotional Literacy Scores from the Irish Parent Sample.....	34
Figure 3: Normal Q-Q Plot of the Total Emotional Literacy Scores from the Irish Student Sample.....	35
Figure 4: Total Emotional Literacy Scores from the Irish Student Sample.....	35
Figure 5: Normal Q-Q Plot of the Total Emotional Literacy Scores from the Irish Teacher Sample.....	35
Figure 6: Total Emotional Literacy Scores from the Irish Teacher Sample	35