

THE MEDIATING ROLE OF OPTIMISM
ON THE RELATIONSHIP
BETWEEN LEADER MEMBER EXCHANGE (LMX)
AND EMPLOYEE ENGAGEMENT:
EVIDENCE FROM THE IRISH FURTHER
EDUCATION AND TRAINING (FET) SECTOR

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**Submitted in Fulfilment of the Doctorate in Business
Administration**



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**Submitted to Waterford Institute of Technology
MAY 2017**

Authenticity Declaration

I declare that this thesis is wholly my own work except where I have made explicit reference to the work of others. I have read the DBA guidelines and relevant institutional regulations and hereby declare that this thesis is in line with these requirements. I have discussed, agreed, and complied with whatever confidentiality or anonymity terms of reference were deemed appropriate by those participating in the research and dealt appropriately with any other ethical matters arising.

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AISLINN BRENNAN

Dedication

I would like to dedicate this thesis to my kind and patient husband James and to my wonderful sons, Michael and Daniel.

Acknowledgements

There are a number of people who have continuously supported me to navigate the many challenges on the DBA journey.

I would like to thank my family for their ongoing sacrifices, support and encouragement. They are the voices of reason when the going gets tough.

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A final word of thanks to my family: Thank you so very much for bearing with me as you navigated this journey with me over the past five years.

Abstract

Employee engagement is recognised as a facilitator of positive work performance and greater employee wellbeing. As such fostering employee engagement is of significant interest to Further Education and Training (FET) organisational leaders, as they seek a competitive advantage in the sector. Whilst the connection between leadership and employee engagement has been identified, the role of the leader in fostering employee engagement has received limited research attention. The significance of this study lies in its particular focus on the perceived impact of the dyadic exchange relationship between the leader and the follower on employee engagement through the mediating mechanism of optimism. Optimism is recognised as a personal resource linked to multiple organisational outcomes including employee engagement. Prior studies have confirmed it as a direct predictor of employee engagement and as mediating mechanism in the leadership and engagement relationship.

A deductive, quantitative approach was used and data was gathered from 156 respondents in three Education and Training Boards (ETBs) using an online survey. Subsequent regression and mediation analysis revealed that optimism is mediating between LMX and Employee engagement at the 95% level. In addition, optimism is also found to mediate between components of LMX and Employee Engagement.

This study makes a practical contribution by facilitating a new understanding of the pivotal role of high quality LMX relationships between managers and FET teaching staff in driving employee engagement. An understanding of findings confirming the differential value of LMX currencies and LMX as a distal predictor of employee engagement through optimism will support FET leaders seeking to drive employee engagement in their organisations. The theoretical contribution of this study is based on its position as the first study to confirm that optimism mediates the LMX and employee engagement relationship. In this way it builds on the work of prior studies which confirmed LMX as a predictor of employee engagement.

Employee Engagement, Leader Member Exchange, Optimism, Mediator, Regression, Mediation

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List of Abbreviations

AEGS	Adult Educational Guidance Service
AEO	Adult Education Organiser
ALOA	Adult Literacy Organisers Association
ALS	Adult Literacy Service
BTEI	Back to Education Initiative
CPD	Continuing Professional Development
CPS	Cumulative Paper Series
DBA	Doctorate in Business Administration
EFA	Exploratory Factoral Analysis
ETB	Education and Training Board
ETBI	Education and Training Boards Ireland
FAS	Irish National Training and Employment Authority
FET	Further Education and Training
FETAC	Further Education and Training Awards Council
GESS-R	Generalised Expectancy for Success Scale-Revised
HETAC	Higher Education and Training Awards Council
IUQB	Irish Universities Quality Board
JDR	Jobs Demands Resource Model
LOETB	Laois and Offaly Education and Training Board
LOT-R	The Life Orientation Test-Revised
LMX	Leader Member Exchange
LMX-MDM	Leader Member Exchange Multidimensionality Measure
MBI (GS)	Maslach Burnout Inventory (General Survey)
NALA	National Adult Literacy Agency
NFP	Not For Profit
NQAI	National Qualifications Authority of Ireland
OLBI	Oldenburg Burnout Inventory
QQI	Quality and Qualifications Ireland
SET	Social Exchange Theory
SEM	Structural Equation Modelling
UWES	Utrecht Work Engagement Survey
VECs	Vocational Educational Committees
VTOS	Vocational Training Opportunities Scheme
WIT	Waterford Institute of Technology
WWETB	Waterford and Wexford Education and Training Board

SECTION 1: Research Overview and Context

1. Introduction

This first chapter of the thesis offers the reader an introduction to the research study examining The Mediating Role of Optimism on the Relationship between LMX and Employee Engagement. It begins by describing the background to the research topic and sets the overall sectoral context in which the study is framed. A discussion is presented on the specific challenges experienced by organisations operating in this sector and the relevance of this research topic to inform the development of an effective response to these issues. The sample group selected for the study is outlined and an overview of the research methodology selected for the study is presented. The researcher then discusses the overall research question under examination in this study and introduces the conceptual framework. This framework offers a depiction of each of the research objectives examined in this study. The final section of this introductory chapter provides an outline and discussion on the structure and layout of this thesis document.

1.1 Background to Research Topic

Employee engagement is a topic of longstanding interest to organisational leaders and change management consultants. Although this topic has its foundations in management practice, more recently it has captured the attention of academic researchers. This organisational interest in employee engagement is not surprising as engaged employees are recognised as being passionate, committed, involved and enthusiastic individuals (Sejits and Crim, 2006) who bring their full psychological presence to their work (Kahn, 1990). From an academic standpoint, there is now a consensus that employee engagement is a separate construct in its own right differing from concepts of commitment, loyalty, job involvement, organisational commitment, organisational citizenship behaviour and satisfaction (Saks, 2006). This agreement follows the resolution of earlier concerns expressed in the literature relating to the possibility of employee engagement as a “faddish” topic masquerading as a unique construct (Robinson *et al.*, 2004; Saks, 2006; Macey and Schneider, 2008). The academic literature recognises the construct of employee engagement as being characterised by an employee’s vigour (high energy levels and great mental resilience), dedication (strong involvement, enthusiasm and pride in work) and absorption (full concentration in work), (Schaufeli *et al.*, 2002; Breevaart *et al.*, 2012).

These aspects of vigour, dedication and absorption lead to a positive work experience for employees and organisations strive to attract and retain employees with high levels of these characteristics. In addition to these aspects, there is an association between employee

engagement and the realisation of multiple benefits for the individual employee and the organisation in which they work. These individual benefits include better physical, psychological and mental health (Schaufeli, *et al.*, 2008; Xanthopoulou, *et al.*, 2009; Breevaart and Bakker, 2013) and the improvement of each of these conditions for employees translates to them being in a stronger position to bring their energies to the role that they occupy and the organisations in which they work. Organisational benefits include enhanced job performance (Kahn, 1990, Bakker and Bal, 2010), improved financial returns (Xanthopoulou *et al.*, 2009b), reduced employee absenteeism (Breevaart and Bakker, 2013), a reduced intention to leave the organisation (Schaufeli and Bakker, 2004), and enhanced client satisfaction (Salanova *et al.*, 2005). It is considered that these documented benefits of employee engagement make it a concept worthy of organisational and scholarly interest and this could also be realised in the context of the author's work practice.

The scholarly and business practice communities both share a common desire to gain enhanced insights into the key drivers of employee engagement. Although it is clear that an employee's engagement in their work is determined by their own choices and actions (Robinson *et al.*, 2004) or in Macey and Schneider's words their "willingness to invest their discretionary effort to help the employer" (2008, p.7), nonetheless organisations play a pivotal role in fostering its development. The three dominant theoretical models of employee engagement reveal a number of key drivers as follows:

Psychological Model: Kahn's model (1990) suggests that employee engagement is driven externally through the satisfaction of each of the three psychological domains of meaningfulness (work elements), safety (social elements, including management style, process and organisational norms) and availability (individual distractions). Meaningfulness is described as a "sense of return on investments of self in role performance" (p. 75) and through their involvement in meaningful work; an employee is able to bring more of themselves to each of their roles (Saks, 2006; Amabile and Kramer 2011). Safety, relates to employees' ability to fully participate "without fear of negative consequences to self-image, status, or career" (Kahn 1990, p. 708). This is contingent upon the employee having a perception that they operate in an organisational climate in which they can trust cognitively, emotionally and behaviourally and in which they have an understanding of what is required of them at work (Kahn, 1990; Shuck, 2011). Availability relates to employees "sense of possessing the physical, emotional and psychological resources necessary" (Kahn 1990, p.

705) to engage and the levels of “individual distractions”, with which they are concerned. Mechanisms which satisfy these internal needs in turn drive engagement. Such examples might include the allocation of meaningful work, positive work environment, effective allocation of resources, job fit and supervisor support (Saks, 2006).

Job Demands Resource (JDR) Model: This model (Demerouti *et al.*, 2001; Schaufeli and Bakker, 2004) suggests that work breaks down into job demands and job resources with each yielding either positive or negative employee outcomes (Prieto *et al.*, 2008). Job demands relate to work aspects requiring physical or psychological investment from the employee and when these efforts are prolonged they are associated with personal employee costs including anxiety and burnout (Schaufeli and Bakker, 2004; Prieto *et al.*, 2008; Barbier *et al.*, 2012). Job resources are “social, psychological, physical and organisational aspects” that enable the employee to manage these work demands and associated costs (Prieto *et al.*, 2008, p. 354). The original JDR model had an exclusive focus on work-related resources and has been extended to include personal resources (Xanthopoulou, *et al.*, 2007; Prieto *et al.*, 2008, Barbier *et al.*, 2012). These personal resources refer to employees’ mental characteristics that buffer against negative psychological impact and examples include self-efficacy, organisational based self -esteem and optimism. Both job resources and personal resources are confirmed drivers of employee engagement (Bakker *et al.*, 2007; Demerouti and Bakker, 2011; Barbier *et al.*, 2012).

Social Exchange Theory Model (SET): Saks (2006) offers a multidimensional model of employee engagement, grounded in Social Exchange Theory. This theory incorporates cognitive, emotional and behavioural aspects and suggests that employees have a reciprocal response to the actions and treatment of the organisations in which they work. This reciprocity extends to employee engagement driven by Perceived Organisational Support (POS), procedural justice, job characteristics and supervisor support.

These models reveal key drivers of employee engagement such as creating the conditions of meaningfulness, safety and availability (psychological model); job and personal resources (jobs demands model) and leveraging reciprocal responses (SET). Through an examination of each of these models the researcher identified a common thread emphasising the critical influence of organisational leaders on these drivers of employee engagement. One example of this influence in action is the leaders potential to influence the employee’s entire experience of work through determining structural conditions, work environment, work and resource

allocation (Gerstner and Day, 1997) which is in alignment with JDR model. In the early stages of this study, the researcher found evidence of leaders influencing other employee related outcomes in prior studies; however there was little focus (Amabile and Kramer 2011; Bakker *et al.*, 2011; Breevaart and Bakker 2013) on the role of the leader in fostering engagement and the literature suggested a need to address this gap (Saks, 2006; Tims *et al.*, 2011; Tuckey *et al.*, 2012). The researcher perceived leadership as a potential mechanism through which organisations could realise employee engagement and sought an appropriate leadership theory in which to frame her research study.

The researcher sought a model to move from a leader centric focus to recognition of the socially constructed nature of leadership (Grint, 1997). LMX, grounded in social exchange theory offered such a relational view of leadership, transcending the narrow focus of more leader centric frames on “charismatic, all knowing leader[s] who [can] inspire and single-handedly positively transform work systems and the employees who work in them” (Pearce and Manz 2005, p.132). The LMX leadership lens concerns the dyadic relationship that develops between leaders and followers fostered through the cumulative (Graen and Uhl-Bien, 1995) reciprocal exchanges between the two parties. High quality relationships develop when these exchanges are based on valued resources and the perception of a fair exchange. These high quality relationships exceed transactional type relationships and result in increased trust and mutual understanding (Wang *et al.*, 2005; Schyns and Day, 2010). In parallel with the development of this research study, more recent studies emerged confirming leadership as viewed through the LMX lens as an antecedent of employee engagement (Agarwal *et al.*, 2012; Burch and Guarana, 2014; Breevaart, *et al.*, 2015; Martin *et al.*, 2015; Garg and Dhar, 2016).

Having decided to examine LMX as a potential driver of employee engagement the researcher was interested in the positive association between personal resources and employee engagement discussed earlier in the context of the JDR model in this paper. Self efficacy, optimism and organisational self- esteem (Xanthopoulou *et al.*, 2007) were linked to employee resilience and supporting employees to meet work place demands (Hobfoll *et al.*, 2003, Demerouti and Bakker, 2011; Breevaart and Bakker, 2013). The researcher’s curiosity was piqued by a prior study (Tims *et al.*, 2011) examining the direct and indirect role of optimism on employee engagement through transformational leadership. Optimism was confirmed as directly and indirectly influencing employee engagement in this study and this affirmation of optimism as a mediating mechanism in the relationship led to this researcher’s

consideration of optimism as potentially playing a role in the relationship between LMX and engagement.

Tiger (1979) defines optimism as “a mood or attitude associated with an expectation about the social or material future-one which the evaluator finds socially desirable, to his [or her] advantage or for his [or her] pleasure”, (p, 18) cited in Peterson (2000, p. 44). Such individual beliefs become a lever for different ways of behaving and Shifren and Hooker describe optimists as being “less likely to dwell on negative or stressful situations, less likely to give up amidst stress, and more likely to maintain a positive outlook and to develop plans of action to deal with stressful situations” (1995, p. 61). Such attributes have led to research on optimism confirming its link to multiple positive organisational outcomes and more specifically employee engagement (Xanthopoulou *et al.*, 2007; Youssef and Luthans, 2007; Kluemper *et al.*, 2009; Halbesleben 2010).

Although earlier studies exploring the outcomes of optimism viewed the concept as a trait, more recent studies have responded to calls in the literature to examine optimism as a malleable state (Kluemper *et al.*, 2009 and Higgins *et al.*, 2010). In a longitudinal study examining optimism as a malleable state in 136 graduates, Higgins and colleagues confirmed the influence of developmental relationships on optimism (2010). This finding and the link between optimism and employee engagement in the literature led the researcher to examine optimism as a direct driver of engagement and an indirect driver through LMX.

2. Sectoral Context

The sectoral setting selected for this study is the Irish FET sector. The researcher is an experienced FET leadership practitioner having accumulated over 12 years of experience in working directly in FET in a former VEC. Since 2014, she has assumed a management and lecturing role in The Literacy Development Centre at The School of Lifelong Learning and Education in Waterford Institute of Technology. This role involves the provision of accredited Continuing Professional Development (CPD) to FET employees. Irish FET is concerned with education and training that takes place after second level schooling but falls outside of the third level system. The following excerpt from the Further Education and Training Strategy 2014-2019 defines the concept of Further Education and Training:

“FET provides education and training and related supports to assist individuals to gain a range of employment, career, personal and social skills and qualifications at Levels 1-6 on the NFQ or equivalent, and is aimed at jobseekers, school leavers, labour market returners, employees, those

interested in new career direction, those wishing to access ‘second chance’ education, those wishing to re-engage in learning and to prepare school-leavers and others for higher education. FET also plays an important role in helping people to lead fulfilling lives, supporting some of the hard-to-reach individuals and groups to achieve their potential and reducing the costs to society of exclusion.” (2014, P. 21)

This description positions FET as a socio-economic response to learner needs and the requirements of a changing economy. The main providers of FET in Ireland are the sixteen Education and Training Boards established under the Further Education and Training Bill in 2013 and located across the Republic of Ireland. These newly formed statutory bodies, assumed the education and training functions formerly carried out by FAS (the Irish National Training and Employment Authority) in each county and the 33 Vocational and Educational Committees (See Table 1).

Table 1: Newly Formed ETBs

ETB	Former VECs
Cavan and Monaghan ETB	County Cavan VEC County Monaghan VEC
City of Dublin ETB	City of Dublin VEC
Dublin and Dun Laoghaire ETB	County Dublin VEC Dun Laoghaire VEC
Kerry ETB	County Kerry VEC
Limerick and Clare ETB	City of Limerick VEC County Limerick VEC County Clare VEC
Louth and Meath ETB	County Louth VEC & County Meath VEC
Tipperary ETB	Tipperary North Riding VEC Tipperary South Riding VEC
Kilkenny and Carlow ETB	County Kilkenny VEC County Carlow VEC
Cork ETB	City of Cork VEC County Cork VEC
Donegal ETB	County Donegal VEC
Galway and Roscommon ETB	City of Galway VEC County Galway VEC County Roscommon VEC
Kildare and Wicklow ETB	County Kildare VEC County Wicklow VEC
Laois and Offaly ETB	County Laois VEC & County Offaly VEC
Longford and Westmeath ETB	County Longford VEC County Westmeath VEC
Mayo, Sligo and Leitrim ETB	County Mayo VEC County Sligo VEC County Leitrim VEC
Waterford and Wexford ETB	City of Waterford VEC County Waterford VEC County Wexford VEC

Solas, The Further Education Authority, was also established as a statutory body under the Further Education and Training Bill (2013) to oversee this newly formed FET sector. Solas was assigned responsibility for funding, planning, co-ordinating and integrating FET and monitoring service delivery in conjunction with the newly formed ETBs. The abolition of the former VECs and dissolution of FAS meant that the sixteen ETB's now hold the responsibility for education, youth work and training in Ireland.

These changes in FET were situated in the wider context of Irish public sector reform, driven by a climate of austerity. Reforms in the education sector included the amalgamation of the functions formerly carried out by the Further Education and Training Awards Council (FETAC); the National Qualifications Authority of Ireland (NQAI) the Irish Universities Quality Board (IUQB) and the Higher Education and Training Awards Council (HETAC) into Quality and Qualifications Ireland (QQI), a newly formed statutory awarding body, established under the Qualifications and Quality Assurance (Education and Training) Act 2012. Wider reforms such as local government reform including government policy on cohesion and alignment (Putting People First, 2012) and the labour market activation agenda (Pathways to Work, 2012) with its emphasis on measurable performance outcomes linked to a pay per performance funding model, all influenced and changed the emphasis of expected outcomes for FET organisations and progression paths for students. This changing emphasis for the sector was reflected by the Vision Statement in the Further Education and Training Strategy 2014-2019 which seeks to have:

“A world class integrated FET system, highly valued by learners and employers, where a higher proportion of those who engage in FET, including those with barriers to participation, such as persons with a disability as well as current priority cohorts identified by DSP such as long term unemployed persons stay engaged, complete qualifications, transition successfully into employment or where appropriate move into higher qualifications in FET or HET” (Department of Education and Skills, 2014)”

2.1 The Challenges in FET

These reforms have significantly changed the FET landscape in Ireland and caused multiple challenges for the sector. FET teaching staff, are those who spend the most time involved in the direct delivery of adult and further education and regularly interact with students in order to realise their educational and development objectives. The very real challenges experienced by staff involved in the direct delivery of adult and further education programmes in the

ETBs have been observed by the author in her former capacity as a leadership practitioner in FET and expressed to her directly in her current role.

FET teaching staff have conveyed (to the author) a sense of frustration in navigating multiple challenges which include: increased work demands, greater emphasis on paperwork; decreases in supports and resources; embargoes on staff replacement or a backlog of work when embargoes are lifted; inconsistencies in approaches and requirements in the newly amalgamated organisations; managing change, job insecurity and contractual issues. The majority of FET teachers are women (Further Education and Training Professional Development Strategy 2017-2019) and the nature of their work can often mean that they are geographically dispersed, delivering their programmes across a number of locations. In many instances this delivery at multiple locations is also associated with multiple reporting mechanisms, and as such it is not uncommon for FET teachers to report to more than one manager. Some FET staff report that although there is a drive for consistencies in practice through the recent amalgamations; observations by the author and anecdotal evidence suggests that reporting to multiple managers means a variation in requirements, expectations and the quality of relationships.

Struggling to navigate these challenges, FET teaching staff have articulated their deeply held fears that the student centred focus of their work will be diluted by the increased alignment between FET and labour market activation (Sweeney, 2013; FET Strategy 2014). For many FET teachers this is in conflict with their learner centred values and their purpose.

As FET teaching staff navigate the practical realities of this changing landscape they are challenged to maintain 'client satisfaction' and their work engagement. In order to ensure that learners are at the heart of their operations FET organisations must support their staff to maintain and build their engagement despite the negative impact of this climate and its associated challenges. This research examines the potential for FET leaders to realise the strategic imperative of having engaged FET staff through the development of high quality dyadic exchange relationships. It explores the influence of these LMX relationships on employee optimism as a personal resource and in turn engagement. This study is a response to the identified need to understand the mechanisms through which FET leaders can support the development of passionate, committed, involved and enthusiastic FET teaching staff who bring vigour, dedication and absorption to their work.

3. Significance and Contribution of the Study

To the researchers knowledge, this study makes a unique theoretical contribution as the first study to examine the relevance of the relationship between LMX and employee engagement, and the influence of each LMX sub dimension (affect, loyalty, contribution and professional respect) as an independent predictor. It is the first study to consider LMX as a distal predictor of employee engagement through its influence on the personal resource of optimism. It is proposing that optimism mediates the relationship between LMX and employee engagement thus allowing LMX to directly impact on engagement and also to indirectly influence it through optimism. Its contribution to practice rests in adapting and implementing FET policies and practices based on the new insights on the role of high quality LMX relationships between managers and FET teaching staff in driving employee engagement, the differential value of LMX currencies and LMX as a distal predictor of employee engagement through optimism. These new approaches will support FET leaders seeking to foster and enhance employee engagement in their organisations.

4. Scope of the Study

This study was driven by the research practitioner's desire to support and inform the development of enhanced employee engagement amongst FET teaching staff, having regard to their roles, influences and particular challenges that they are experiencing. It focuses on data gathered from FET teaching staff working in excess of ten hours per week, in Irish ETBs. It was considered that this eligibility criterion of ten hours per week ensured that all respondents had sufficient scope for the existence of an LMX relationship.

5. Research Methodology

In order to select the most appropriate research methodology for this study, the researcher initially carried out a review of the approaches adopted by prior research focusing on similar constructs. In addition, she explored Edmonson and McManus' concept of 'methodological fit' (2007). The idea of a mixed methods study was explored earlier in the research journey, however based on feedback from examiners and the supervisory team and the DBA timeframe, it was decided that a quantitative approach to data collection was a more appropriate approach for this study. This quantitative approach was consistent with prior studies examining the three constructs which used questionnaires to gather the required data.

This researcher selected an online survey method using SurveyMonkey to collect the necessary data. This mechanism facilitated a cost effective means of collecting data and gave the researcher sufficient potential for a timely turnaround in responses. Strategies including accessing gatekeepers, a letter of introduction, securing organisational stakeholders and survey information sheets were implemented by the researcher in an effort to maximise participation and thus potential response rates.

The researcher reviewed a number of pre-existing, validated scales for each of the three constructs. The scales reviewed had proven successful in previous studies and those most suited to this particular study the LMX-MDM, UWES, GESS-R were included as questions in the survey. A number of demographic questions and consent options were also included and inputted on SurveyMonkey.

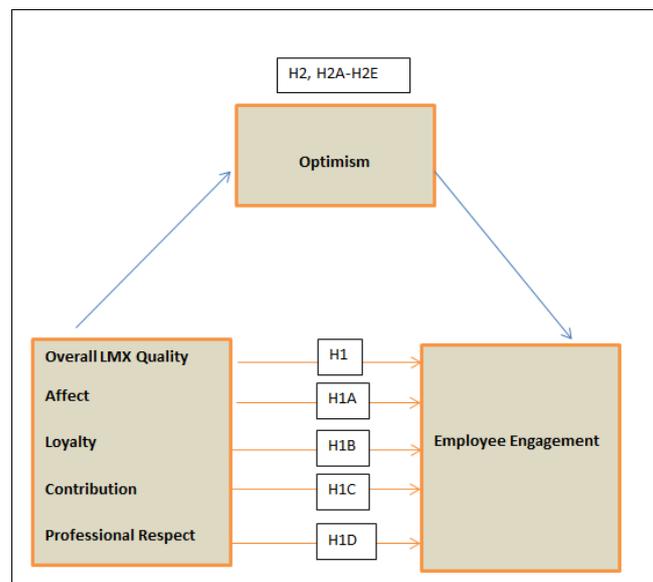
In an effort to control for potential Common Method Variance, the researcher developed two separate versions of this survey. Each survey contained the same questions however the order in which the questions appeared differed in line with recommendations by Podsakoff *et al.*, (2003). In one survey, the predictor variable came before the outcome variable and in the other the predictor variable followed the outcome. SurveyMonkey was used to host and distribute the surveys by embedding the survey links into an email. This email inviting participation also provided a background to the study and relevant information for potential participants.

A non- probability, purposive sampling strategy is used in the study facilitating the collection of data from a sample that is representative of the research population and as such were best placed to respond (MacNealy, 1999) to the research questions. The total research population is comprised of sixteen ETBs across the country. The Further Education and Training Professional Development Strategy (2017-2019) suggests that there are approximately 10,000 FET Practitioners (comprising of teaching, administrative and management roles) in Ireland; approximately 5,000 of these are estimated to have teaching roles. Two ETBs Laois and Offaly ETB (LOETB) and Waterford Wexford ETB (WWETB) agreed to participate and nominated a number of gatekeepers to randomly distribute the emails and surveys amongst FET teaching staff, delivering classes for a minimum of ten hours per week. Adopting this approach ensured ease of access for the researcher and the representation of all FET programmes. Survey data was collected from 156 respondents.

6. Research Question and Objectives

The overarching question considered in this research study is how does FET leadership influence employee engagement amongst FET teaching staff who work for a minimum of ten hours in the sector. The researcher's desire to gain an understanding of this influence of leadership on FET employee's engagement and the mechanisms through which this occur underpins this research question and led to the development of the final conceptual framework for the study. As discussed in the previous section, this study is concerned with examining the influence of Leader Member Exchange (LMX) on Employee Engagement, through the mediating mechanism of optimism in the Irish FET sector. A visual depiction of the study is illustrated on the Conceptual Framework along with a number of research hypotheses in Figure 1 below.

Figure 1: LMX as a Predictor of Employee Engagement and the Mediating Role of Optimism



The research aims depicted in figure 1 above include an examination of i) Overall LMX as a predictor of employee engagement with optimism mediating this relationship and ii) each LMX sub dimension as an independent predictor of employee engagement with optimism mediating these relationships. These aims are refined into a number of research hypotheses which are contained in Table Two below.

Table 2: Hypotheses under Examination

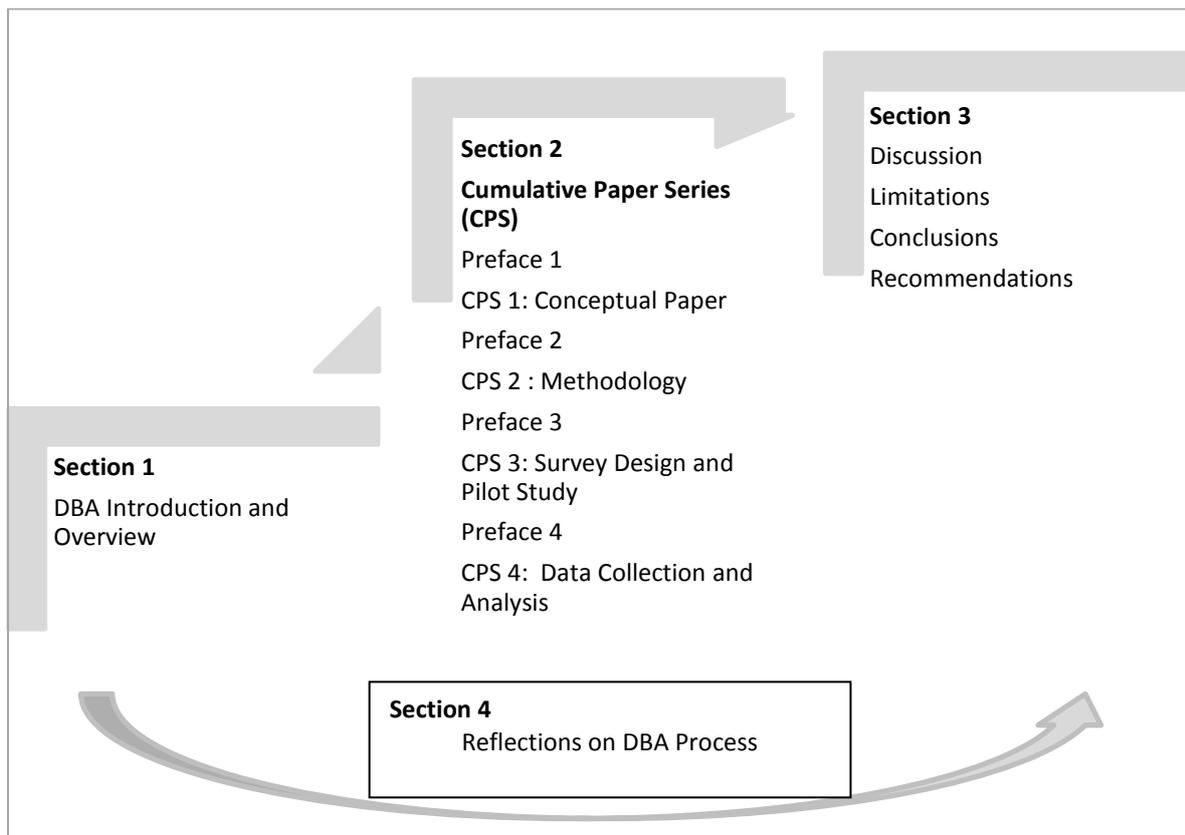
Hypotheses	
Hypothesis 1	High LMX quality positively predicts employee engagement
Hypothesis 1A	High affect positively predicts employee engagement
Hypothesis 1B	High loyalty positively predicts employee engagement
Hypothesis 1C	High contribution positively predicts employee engagement
Hypothesis 1D	High professional respect positively predicts employee engagement
Hypothesis 2	Optimism mediates the relationship between Overall LMX and Employee engagement
Hypothesis 2A	Optimism mediates the relationship between LMX affect and employee engagement
Hypothesis 2B	Optimism mediates the relationship between LMX loyalty and employee engagement
Hypothesis 2C	Optimism mediates the relationship between LMX contribution and employee engagement
Hypothesis 2D	Optimism mediates the relationship between LMX professional respect and employee engagement

The study examines each of these hypotheses individually in an effort to make a theoretical contribution to the mechanisms through which employee engagement occurs whilst supporting the realisation of employee engagement and the accrual of the associated multiple personal and organisational benefits for the FET sector. The findings of this study inform a number of recommendations to FET organisational leaders to drive employee engagement and foster passion, commitment, involvement and enthusiasm in their teaching staff.

7. Overall Structure of the Thesis

The structure of this thesis is depicted in Figure 2 below. The document is presented in four separate sections. Section 1 presents an overview and introduction to the thesis document. Section 2 encompasses the four cumulative papers that form part of the previously examined cumulative paper series and each of the three preface papers and Section 3 brings the research study to a conclusion. Section 4 of this document presents excerpts from the researcher's reflective log capturing the DBA learning journey. Each of these sections will be explored in more detail below.

Figure 2: Outline of Thesis Structure



7.1. Section 1

In section 1 of this thesis the researcher provides an introduction to the research study. This introduction sets forth the context for the study and a rationale for its execution. The objectives for the overall study are presented along with the selected methodological and analytic approaches. The reader is provided with an overview of the structure of the entire thesis document.

7.2 Section 2

As part of the DBA process, the author was required to submit and present four papers in a cumulative paper series, all of which were approved by the DBA Examination Panel. Part of this approval involved the final revision of each paper to incorporate the panel's observations and recommendations. The second section in this thesis document is comprised of these revised papers. The author has preceded each CPS Paper with a preface paper to discuss these developments and to link the journey between each paper. A synopsis of the issues addressed in each cumulative and preface paper is provided below:

- i) Preface 1: This first preface provides a brief outline of the developments from the presentation of the first paper to its final revision.

- ii) CPS Paper 1: In this first paper of the Cumulative Paper Series the researcher reviews the literature on employee engagement and leadership. The paper discusses the unique construct of employee engagement along with the conditions predicting its' realisation and the associated organisational and personal benefits. The leaders influence on the employee experience is explored along with theoretical models of leadership. A rationale is presented for the selection of Leader Member Exchange as the leadership lens most suited to the study. The paper presents the research problem and the proposed hypotheses.
- iii) Preface 2: This preface discusses post examination feedback developments between CPS Paper 1 and CPS Paper 2. These developments include a change of study setting, a rationale for the retention of LMX as the most appropriate theoretical lens of leadership to frame the overall study and the refinement of the research hypotheses.
- iv) CPS Paper 2 presents the methodological approach adopted by the researcher to undertake the research study and the rationale for the selection of a quantitative online survey to collect the data. The sampling strategy, ethical issues and approach to survey administration is presented along with the associated limitations and approaches selected to minimise them.
- v) Preface 3: Further developments and refinements to the overall research hypotheses and approaches to data collection that have regard to the issues of common method variance are presented in this preface.
- vi) CPS Paper 3 discusses the survey instrument design and the administration of a pilot study. The merits of the scales used to measure LMX, employee engagement and optimism are explored in addition to controls against common methods variance. Elements of the pilot study such as sample selection, ethics, and maximising response rates precede a discussion on the administration and analysis of the pilot study. The implications of the pilot findings for the overall research study are explored.
- vii) Preface 4: This paper presents a final revision of the conceptual framework post pilot and paper 4 presentation feedback. This revision discusses the positioning of optimism as a mediating variable in the LMX–employee engagement relationship.

viii) CPS Paper 4 presents the data collection and analysis in relation to each hypothesis in the Conceptual Framework (see Figure 1) for the overall study. The results of the data analysis using SPSS, and Hayes Process Macro Plug In are discussed. The findings are presented and the implications of these findings are discussed.

7.3 Section 3

Section 3 of this thesis follows the conclusions of the final paper in the cumulative paper series. This section offers discussions relating to the theoretical and practical implications of the study findings. On the basis of these implications the researcher makes a number of recommendations to researchers' who intend to carry out future studies in the field and to FET organisational leaders. This section acknowledges the limitations of the overall study.

7.4 Section 4

This final section of the thesis document provides a synopsis of the researcher's experiences along the path of the DBA journey. This synopsis comprises selected excerpts from a Reflective Log maintained by the researcher over a period of 5 years beginning at DBA commencement in June 2013 to date (May 2017). This selection captures the challenges and triumphs, trials and tribulations of the learning journey.

References

- Agarwal, U.A., Datta, S., Blake-Beard, S. and Bhargava, S. (2012) 'Linking LMX, innovative work behavior and turnover intentions', *Career Development International*, Vol. 17, No. 3, pp. 208-230.
- Amabile, T.M., and Kramer, S.J. (2011) *The Progress Principle: Using small wins to ignite joy, engagement, and creativity at work*. Boston, MA: Harvard Business Review Press.
- Bakker A.B. , Albrecht S.L and Leiter M.P. (2011) ,Key questions regarding work engagement', *European Journal of Work and Organizational Psychology*, Vol. 20, No.1, pp. 4-28.
- Bakker, A.B and BAL P.M. (2010) 'Weekly Work Engagement and Performance: A study Among Starting Teachers', *Journal of Occupational and Organizational Psychology*. Vol. 83, pp. 189-206.
- Barbier, M., Dardenne, B. And Hansez, I. (2012) 'A Longitudinal Test of the Jobs-Demands Resources Model using Perceived Stigma and Social Identity', *European Journal of Work and Organisational Psychology*, Vol. 22, No. 5, pp. 532-546.
- Breevaart, K. and Bakker, A.B. (2013) 'How leaders influence their followers' work engagement'. *European Work and Organizational Psychology in Practice*, Vol. 5, pp. 31-35.
- Breevaart, K., Bakker, A.B., Demerouti, E. and Van den Heuvel. M. (2015) 'Leader-Member Exchange, Work Engagement and Job Performance', *Journal of Managerial Psychology*, Vol. 30, pp.753-770.
- Breevaart, K., Bakker A.B., Demerouti E. and Hetland J. (2012) 'The Measurement of State Work Engagement: A Multilevel Factor Analytic Study', *European Journal of Psychological Assessment*, Vol. 28, No. 4, pp.305–312.
- Burch, T.C. and Guarana, C.L. (2014) 'The Comparative Influences of Transformational Leadership and Leader–Member Exchange on Follower Engagement', *Journal of Leadership Studies*, Vol. 8, No.3, pp. 6-25.
- Department of Education (2014) *Further Education and Training Strategy*, Dublin: Government Publications Office
- Department of Education and Skills (2013) *Further Education and Training Act 2013*, Dublin: Government Publications Office
- Department of Education and Skills (2013) *Education and Training Act 2012*, Dublin: Government Publications Office
- Department of the Environment, (2012) *Putting People First: Action Programme for Effective Local Government*, Dublin: Government Publication Office.
- Department of the Environment (2014) *Local Government Reform Act*, Dublin: Government Publication Office.

Department of Social Protection (2012) *Pathways to Work: Government Policy Statement on Labour Market Activation*, Dublin: Government Publication Office.

Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2001) 'The Job Demands-Resources model of burnout', *Journal of Applied Psychology*, Vol. 86, pp. 499-512.

Demerouti, E. and Bakker, A.B. (2011) 'The Job Demands-Resources model: Challenges for future research', *SA Journal of Industrial Psychology*, Vol. 37, No. 2, pp.1-9.

Edmondson, A. C., and S. E. McManus (2007) 'Methodological Fit in Management Field Research', *Academy of Management Review* Vol. 32, No. 4, pp. 1155-1179.

Education and Training Board Ireland (2017) *Further Education and Training Professional Development Strategy 2017-2019*, Dublin: Solas

Garg, S. and Dhar, R. (2016) 'The roles of leader-member exchange (LMX), work engagement and job autonomy', *International Journal of Manpower*, Vol. 38, No. 2, pp.242-258.

Gerstner, C.R. and Day, D.V. (1997) 'Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues', *Journal of Applied Psychology*, Vol. 82, No.6, pp. 827-844.

Graen, G.B. and Uhl Bien, M., (1995) 'Relationship-Based Approach to Leadership Development of Leader-Member-Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Domain Perspective', *Leadership Quarterly*. Vol. 6, No.2, pp. 219-247.

Grint, K. (1997) *Leadership: Classical, contemporary, and critical approaches.*, Oxford: Oxford University Press.

Halbelsleben, J.R.B. (2010) 'A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources and Consequences', in A.B. Bakker and M.P Leiter (eds.) *Work Engagement: A handbook of essential theory and research*, New York: Psychology Press, pp. 102-117.

Hobfoll, S.E. Johnson, R.J. Ennis, N. and Jackson, A.P. (2003) 'Resource loss, resource gain, and emotional outcomes among inner city women', *Journal of Personality and Social Psychology*, Vol 84, No. 3, pp. 632-643.

Kahn W.A (1990) 'Psychological Conditions of Personal Engagement at Work', *Academy of Management Journal*. Vol. 33, No. 4, pp. 692-724.

Kluemper, D.H., Little, L.M. and DeGroot T. (2009) 'State or Trait: Effects of State Optimism on Job- Related Outcomes', *Journal of Organizational Behavior*, Vol. 2, No. 2, pp. 209-231.

Macey, W. and Schneider, B. (2008) 'The Meaning of Employee Engagement', *Industrial and Organisational Psychology*, Vol. 1, pp. 3-30.

MacNealy, M. S. (1999) *Strategies for Empirical Research in Writing*, New York: Addison Wesley Longman.

- Martin, R., Guillaume, Y., Thomas, G., Lee, A. and Epitropaki, O. (2015) 'Leader-Member Exchange (LMX) and Performance: A Meta-Analytic Review', *Personnel Psychology*, pp.1-55.
- Pearce, C.L. and Manz, C. C. (2005) 'The New Silver Bullets of Leadership: The Importance of Self-and Shared Leadership in Knowledge Work', *Organizational Dynamics*, Vol. 34, No.2, pp. 130-140.
- Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P and Lee. J.Y. (2003) 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.
- Prieto, L., Salanova, M., Martinez, I. and Schaufeli, W. (2008) 'Extension of the Job Demands- Resources Model in the Prediction of Burnout and Engagement Among Teachers over Time', *Psicotherma*, Vol. 20, No. 3, pp. 354-360.
- Robinson, D., Perryman, S, and Hayday, S. (2004). *The Drivers of Employee Engagement*. Institute for Employment Studies, Brighton
- Saks, A.M, (2006) 'Antecedents and Consequences of Employee Engagement'. *Journal of Managerial Psychology*. Vol. 21, No. 7, pp. 600-619.
- Salanova, M., Agut, S. and Peiro, J. M. (2005) 'Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate', *Journal of Applied Psychology*. Vol. 90, pp. 1217–1227.
- Schaufeli, W. and Bakker A.B.(2004) 'Job demands, job resources and their relationship with burnout and engagement: a multi sample study', *Journal of Organizational Behavior*. Vol. 25, pp. 293-315.
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002) 'The Measurement of Engagement and Burnout: A Two Sample Confirmatory Analytical Approach', *Journal of Happiness Studies*, Vol. 3, pp. 71-92.
- Schaufeli, W.B, Taris, T.W and Van Rhenen, W. (2008) 'Workaholism, Burnout, and Work Engagement: Three of a Kind or Three Different Kinds of Employee Well-being?', *Applied Psychology: An International Review*, Vol. 57, No. 2, pp. 173–203.
- Schyns, B. and Day, D. (2010) 'Critique and review of leader–member exchange theory: Issues of agreement, consensus, and excellence', *European Journal of Work and Organizational Psychology*. Vol. 19, No. 1, pp 1-29.
- Sejts, G.H. and Crim, D. (2006) 'What engages employees the most, or The Ten C's of employee Engagement', *Ivey Business Journal*. March/April p. 1-6.
- Shifren, K. and Hooker, K. (1995) 'Stability and change in optimism: A study among spouse caregivers', *Experimental Aging Research*, Vol. 21, No. 1, pp. 59-76.
- Shuck, B. (2011) "Four Emerging Perspectives of Employee Engagement: An Integrative Literature Review, *Human Resource Development Review*, Vol. 10 No. 3 pp. 304-328.

Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011) 'Do transformational leaders enhance their followers' daily work engagement?', *The Leadership Quarterly*, Vol. 22 pp. 121-131.

Tuckey M.R., Dollard M.F. and Bakker, A.B., (2012). Empowering Leaders Optimize Working Conditions for Engagement: A Multilevel Study. *Journal of Occupational Health Psychology*. 2012, Vol. 17, No. 1, 15–27.

Wang, H., Law, K.S., Hackett, R.D., Wang D. and Chen, Z.X (2005) 'Leader Member Exchange as a Mediator of the Relationship between Transformational Leadership and Follower's Performance and Organisational Citizenship Behaviour', *The Academy of Management Journal*, Vol. 47, No. 3, pp. 420-432.

Youssef-Morgan, C. M. and Luthans, F. (2013) 'Positive leadership: Meaning and application across cultures', *Organizational Dynamics*, Vol. 42, No. 3, pp.198-208.

Xanthopoulou, D., Bakker, A.B., Demerouti, E. And Schaufeli W.B. (2009b) 'Work Engagement and Financial Returns : A diary study of the role of job and personal resources', *Journal of Occupational and Organizational Psychology*, Vol. 82, pp. 183-200.

Xanthopoulou, D., Bakker, A. B., Demerouti, E. and Schaufeli, W. B. (2007) 'The role of personal resources in the job demands-resources model', *International Journal of Stress Management*, Vol. 14, pp. 121–141.

SECTION 2: CUMULATIVE PAPER SERIES

Preface 1

1. Overview

I presented the initial version of CPS Paper 1 to the DBA Examination Panel in October, 2014. The panel made a number of minor recommendations to inform the development of the Conceptual Paper and I subsequently discussed these with my research supervisor.

On the basis of these discussions I submitted my revised paper which incorporates a more detailed discussion on the constructs of interest and an enhanced conceptual framework for the study. This revised, approved paper is presented overleaf.

CPS Paper 1

Conceptual Paper | DBA | Class of 2017

The Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector: A Conceptual Review

Aislinn Brennan- WIT 20061745

January 12th, 2015

Abstract

Employee engagement is recognised as a facilitator of positive work performance and greater employee wellbeing. The connection between leadership and employee engagement has been identified, however the role of the leader in fostering employee engagement has received limited research attention. For employee engagement to occur, the leader needs to move from an individualistic perception of leadership focused on the characteristics and attributes of the leader to a more relational and social processes view of leadership. Understanding leadership as a dyadic relationship based on exchanges between the leader and the employee serves as a useful theoretical framework to frame the current study's research problem. The significance of this paper lies in this particular focus on the perceived impact of the relationship between the leader and the follower on employee engagement levels. This paper offers a review of the literature on employee engagement and leadership before presenting the potential organisational and personal benefits that employee engagement can yield and the conditions that determine its occurrence. A conceptual framework determined as the most suitable and effective map to underpin the research process is presented. The research problem and its associated hypotheses are detailed in conjunction with the research philosophy and proposed research methodology, while the paper concludes with an outline of matters to be resolved at the next research stages.

Keywords: Leadership, Employee Engagement, Burnout, Dyadic Leader Follower Relationship

1. Introduction

Work performance and positive wellbeing benefits are linked to employee engagement (Halbesleben and Wheeler, 2008; Schaufeli *et al.*, 2008; Xanthopoulou *et al.*, 2009; Bakker and Bal, 2010), justifying its position as a strategic priority for management practitioners across a broad range of industries. The connection between leadership and employee engagement has also been identified (Amabile and Kramer 2011; Bakker *et al.*, 2011; Tuckey *et al.*, 2012; Breevaart and Bakker 2013), however ‘the role of the leader in fostering work engagement has received limited research attention’, (Bakker *et al.*, 2011, p. 13; Tims *et al.*, 2011, p. 121) and there are calls in the literature to address this research gap (Saks, 2006; Tims *et al.*, 2011).

In the post-financial crisis environment (2012-2014), employee engagement has become even more relevant for organisations as employees grapple to navigate challenges presented by continuous change, job uncertainty and increasing workloads (Breevaart and Bakker, 2013; Rus, 2013). Employees working in the Irish not for profit (NFP) sector¹ are experiencing such challenges, compounded by the implementation of government policy on cohesion and alignment (Putting People First, 2012); the labour market activation agenda (Pathways to Work, 2012); an emphasis on measurable performance outcomes linked to a pay per performance funding model, and the new requirements to compete in an open market tendering process for programme funding previously allocated under non-competitive service level agreements arrangements (Local Government Reform Act 2014). NFP leaders need to counteract the negative impact of this climate on employee wellbeing, motivation, and performance (Rus, 2013), and this element of NFP employee engagement is the focus of this paper.

As a manager in the Irish not for profit sector, this practitioner/ researcher has observed a notable lack of employee engagement which she views as a significant problem for the continued viability and sustainability of the sector. As a conscientious leadership practitioner, this researcher is committed to the development of the organisation; the improvement of organisational outcomes and the personal development and growth of the individuals that make up the NFP workforce. In order to transform this commitment into a practical reality in

¹ NFP includes organisations that might otherwise be described as charities, community and voluntary organisations, non-governmental organisations. See: <http://www.irishnonprofits.ie/wp-content/uploads/2013/08/Inkex-More-about-nonprofits-Irish-charity-regulation-tax-relief-for-charities-and-the-Irish-Nonprofits-Database.pdf>

the context of changing organisations, it is a strategic imperative for leaders to consciously create conditions and climates that foster and nourish increased employee engagement. This experience in conjunction with the identified gap in the literature concerning the link between leadership and employee engagement (Saks, 2006; Tims *et al.*, 2011) has informed the development of this research study, which is focused on exploring this link and building upon the extant literature. The key contribution of this research to practice will be to produce outcomes to inform leadership and employee practices in the NFP sector and thus contribute to the practice and theory on leadership and employee engagement in context.

This paper commences with a review of the literature on employee engagement and leadership. The review offers a discussion on employee engagement as a unique construct; the potential organisational and personal benefits that it can yield and the conditions that determine its occurrence. It explores the leadership literature, beginning with a discussion on ways in which the leader may influence the predictors of employee engagement. Theories and models of leadership are discussed, forming a rationale for the selection of Leader Member Exchange as the most appropriate and relevant leadership theory to inform this research. Based on an analysis of the literature, a conceptual framework to underpin the research on ‘The Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector’, is presented. This research problem and its associated hypotheses are detailed, in conjunction with the research philosophy and proposed approach. The paper concludes with an outline of matters to be resolved at the next research stages.

2. Literature Review

Employee engagement is a unique construct with cognitive, emotional and behavioural components (Kahn, 1990; Maslach *et al.*, 2001; Schaufeli *et al.*, 2001; Salanova, *et al.*, 2005; Saks, 2006; Halbesleben and Wheeler, 2008; Macey and Schneider, 2008; Bakker and Bal, 2010; Shuck, 2011), defined by Schaufeli *et al.*, as a “positive, fulfilling, work related state of mind, characterised by vigor, dedication and absorption” (2002, p. 74). Vigour is characterised by high energy levels and strong mental resilience; dedication by strong work involvement, enthusiasm and pride while absorption denotes an employee fully concentrating on the work (Breevaart *et al.*, 2012, p.305). An engaged employee is committed, involved, passionate and enthusiastic (Sejits and Crim, 2006; Macey and Schneider, 2008) with such aspects contributing to full or extra role performance at work (Kahn, 1990; Harter *et al.*, 2002; Saks, 2006; Macey and Schneider, 2008).

The literature makes a clear case highlighting the organisational and personal benefits of employee engagement (Sejts and Crim, 2006; Greguras and Diefendorff, 2009; Amabile and Kramer, 2011; Breevaart *et al.*, 2012; Breevaart and Bakker, 2013). Specific personal benefits include: better psychological health (Schaufeli *et al.*, 2008; Xanthopoulou *et al.*, 2009), fewer psychosomatic complaints (Demerouti *et al.*, 2001; Schaufeli and Bakker, 2004), and better physical and mental health (Breevaart and Bakker, 2013). The improvement of each of these conditions for employees translates to them being in a stronger position to bring their energies to the role that they occupy and the organisations in which they work. Organisational gains from engaged employees include: job performance, (Halbesleben and Wheeler, 2008; Bakker and Bal, 2010), client satisfaction (Salanova *et al.*, 2005); financial returns (Xanthopoulou *et al.*, 2009b) reduced employee absenteeism (Breevaart and Bakker, 2013) and a reduced intention to leave the organisation (Schaufeli and Bakker, 2004). Such documented gains depict employee engagement as a construct worthy of active pursuit by leaders.

2.1 The Predictors of Employee Engagement

An engaged employee has a “positive, fulfilling, work related state of mind” (Schaufeli *et al.*, 2002, p. 74) and is motivated and willing to invest their cognitive, emotional and physical resources in their work. Employee attitudes and behaviours in the work place are influenced by the structural conditions of the organisational environment (Kanter, 1997; Cho *et al.*, 2006) and there are a variety of factors that can motivate the employee to personally invest themselves in their work, exhibit extra role behaviour and a willingness to “expend discretionary effort to help their employer” (Macey and Schneider, 2008, p. 7). An employee’s personal identification with and positive attachment to an organisation is also noted as a predictor of engagement in the organisational fit literature. The perception of work outcomes and organisational membership as being important to the employee’s identity translates to a willingness to personally invest themselves in the work (Sejts and Crim, 2006; Macey and Schneider, 2008; Greguras and Diefendorff, 2009). Therefore, there is a tangible link between engagement and performance in the literature.

It is suggested that the fulfilment of the three psychological needs of meaningfulness (work elements), safety (social elements, including management style, process and organisational norms) and availability (individual distractions) (Kahn, 1990; Welch, 2011) act as a catalyst for motivation and action on the part of the employee resulting in engagement (Robinson,

2006; Macey and Schneider, 2008). Kahn (1990) describes meaningfulness as the “sense of return on investments of self in role performance”; (p. 705); safety as feeling “able to show and employ one's self without fear of negative consequences to self-image, status, or career” (p. 708) and availability as the “sense of possessing the physical, emotional and psychological resources necessary” (p. 705).

Economic and socio-emotional resources are identified as predictors of employee engagement (Saks, 2006; Bakker *et al.*, 2007; Macey and Schneider, 2008; Bakker and Xanthopoulou, 2009; Halbesleben, 2010; Demerouti and Bakker, 2011; Barbier *et al.*, 2012). Job resources create a more favourable working environment; help employees to cope with difficult situations and provide a means to attain goals (van den Heuvel *et al.*, 2010; Barbier *et al.*, 2012). Personal resources, defined by Prieto *et al.*, (2008) as “people’s mental characteristics which reduce the negative impact of demands on psychological well-being” (p. 355) include self-efficacy, organisational based self-esteem and optimism (Xanthopoulou *et al.*, 2007) and have been linked to the resilience of an employee (Hobfoll *et al.*, 2003). Job resources are extrinsic and organisationally driven whilst personal resources are intrinsic to the employee (Bakker and Demerouti, 2008). Both types are necessary for engagement and their absence in meeting workplace demands promotes cynicism (Demerouti and Bakker, 2011; Breevaart and Bakker, 2013), exhaustion and a lack of professional efficacy (Maslach *et al.*, 1996), which are the three dimensions of burnout. Burnout is the antipode of engagement and Barbier *et al.*, (2013), describe a burned out employee as being, “emotionally, mentally and physically exhausted” (p. 533).

2.1.2 The role of the leader in influencing Employee Engagement

Employee attitudes and behaviour in the work place are influenced by the structural conditions of the organisational environment, (Kanter, 1997; Cho *et al.*, 2006) and the relationship the individual has with the leader (Gerstner and Day, 1997; Sparrowe and Liden, 1997; Ilies *et al.*, 2007; Nahrgang *et al.*, 2009). The leader, particularly in their position of power (French and Raven, 1959; Gerstner and Day, 1997; Rus, 2013;) has the capacity to control and influence the employee experience and optimise their working environment and conditions thus enabling them to positively or negatively impact employee engagement in the organisational setting (Bakker *et al.*, 2011; Tuckey *et al.*, 2012; Breevaart and Bakker, 2013; O’Donohoe, 2013). The level of control and influence that a leader has over the employee’s experience of their work is influenced by the structural conditions of the organisational

environment and the nature of the role and relationships that they develop with their co-workers (Gerstner and Day, 1997; Tuckey *et al.*, 2012; O Donohoe, 2013; Rus, 2013). Therefore the structural conditions and the employee relationship with the leader/organisation are two critical factors in informing the role of the leader in influencing employee engagement.

An employee's relationship with their leader determines their perception of the entire work experience (Gerstner and Day, 1997). Advices to organisational leaders are firstly not to cause harm to the employee (Amabile and Kramer, 2011) such as creating psychological distress, taking the meaning from work and adopting a generic approach to meet the resource needs of employees, each of which could impact negatively on employee engagement (Saks, 2006; Amabile and Kramer, 2011; Tuckey *et al.*, 2012). A positive relationship between the employer and employee builds a climate of cognitive, emotional and behavioural trust and enables employees to feel safe in their understanding of what is required from them and in their knowledge that their personal engagement will not present any threat or disadvantage for them at work (Kahn, 1990; Shuck, 2011). Relationships of trust also help to create a better fit between the employee and their work; causing "a positive affective cognitive experience of work" (Tuckey *et al.*, 2012, p.15); increased employee behavioural engagement and reduced propensity to burnout (Maslach and Leiter, 1997; Cho *et al.*, 2006; Macey and Schneider, 2008).

A leader can positively influence employee engagement by allocating work in a way that creates meaningful work opportunities, enabling an employee to bring more of themselves to each of their roles and build interactions with colleagues and clients (Kahn, 1990; Saks, 2006; Amabile and Kramer, 2011; Rus, 2013). They can identify the resources that are most relevant to the employee; effectively meet these specific resource needs and create a sense of reciprocal engagement for the employee (Schaufeli and Bakker, 2004; Saks, 2006; Breevaart and Bakker, 2013). A leader who inspires and stimulates the employee can boost the employee's personal resources (Tims *et al.*, 2011) and meet their needs for self-determination and control (Ryan and Deci, 2000; Tuckey *et al.*, 2012) and thus predict their levels of engagement in the workplace. The literature highlights the central role of the leader in influencing employee engagement at work.

2.2 Leadership Theories and Employee Engagement

This section provides a review of leadership theories from the literature, beginning with a discussion on the traditional leader centric models and their associated limitations for the purpose of this research. Relational dyadic models, grounded in social constructivism and determined by people's perceptions are explored in relation to the potential of such models to provide a relevant framework to underpin this research.

2.2.1 Defining Leadership

There are numerous definitions of leadership in the literature offering insight into the nature of the role and process (Bass, 1985; Yukl, 1989; Bass and Avolio, 1996; Goodnight, 2011). With specific reference to employee engagement and for the purposes of this study, leadership is viewed as a dynamic process (Barker, 1997; Northouse, 2004) involving an intentional influence relationship (Rost, 1993; Yukl, 2002). This process is reciprocal amongst leaders and followers who wish to effect changes that reflect a common purpose or achieve a common goal (Graen and Scandura, 1987; Brower *et al.*, 2000; Uhl Bien, 2006). There are a number of theories that impact on the leader- follower relationship; the traditional view, the vertical dyad linkage model and leader member exchange (LMX) theory. As each theory offers a different lens through which to view the leader-follower relationship, these are considered in order.

2.2.2 Traditional Leadership Theory

Laissez faire, transactional and transformational (or charismatic) leadership approaches dominate the traditional literature. Adopting a top-down approach laissez faire is driven by punishments based on failure to meet the defined standards (Goodnight, 2011) while transactional leadership is based on an exchange between the manager and the employee which is based on reward and punishment (Papalexandris and Galanaki, 2009). Neither of these approaches have the power to motivate or inspire the employee which is necessary to build employee engagement (Tims *et al.*, 2011).

The primary focus of these leader centric theories is on the characteristics; traits and behaviours of an omnipotent charismatic leader (Pearce and Manz, 2005) and their influence on employees and organisational outcomes (Bass, 1985; Yukl, 1989). The lack of inclusion of the follower in such leadership theories; their unidirectional nature and the promotion of a single vision has led to their criticism in the literature (Cunliffe and Erikson, 2011; Rus, 2013) with conclusions reached that such approaches do not contribute to enhancing

employee engagement in an organisation (Tims *et al.*, 2011). This research study requires a move beyond the limitations of leader centric approaches.

A compelling case is made in the literature for a more relational model of leadership (Bass, 1985; Yukl, 1989; Pearce and Manz, 2005; Wang *et al.*, 2005; Papalexandris and Galanaki, 2009; Tims *et al.*, 2011; Cunliffe, and Erikson, 2011; Thorpe *et al.*, 2011; Grint, 2005a; Bolden, 2011; Rus, 2013) and a shift in focus from leaders to leadership. A view of leadership through a social constructivist lens, acknowledges both the importance of employee perceptions in the process and the influence of others on such perceptions (Grint, 1997, 2005). This represents a move from the traditional perception of the leader as being the source of all wisdom for the organisation, (Pearce and Manz, 2005) towards an acknowledgement and recognition of the complex interrelationships and social processes inherent in organisational leadership (Bolden, 2011; Thorpe *et al.*, 2011).

Transformational leadership (also known as charismatic) involves the leader sharing their organisational vision with employees; acknowledges the differences in employees and provides intellectual stimulation (Yammarino and Bass, 1990; Bass and Avolio, 1996) in an effort to motivate workers to exceed their own expectations (Yukl, 1989). While transformational leadership falls within the domain of leader centric models, the behaviours of a transformational leader may assist in the development of employee engagement if used as social currency in conjunction with a more relational model of leadership which is relevant for this study.

2.2.3 The Vertical Dyad Linkage Model

The Vertical Dyad Linkage Model, (Dansereau *et al.* 1975) one of the first leadership models to include the follower as a component in the leadership process provided a basis for subsequent views of leadership as a multifaceted construct comprising the leader, follower and their dyadic relationship. It offered an alternative to the Average Leadership Style models, acknowledged the differing relationships held by leaders with different followers (Graen and Uhl Bien, 1995) and paved the way for the development of more follower inclusive, relational models of leadership.

2.2.4 Leader Member Exchange Theory

Leader Member Exchange Theory, underpinned by Social Exchange Theory, is one such relational model, encapsulating a taxonomy of leadership which effectively incorporates the

leader; the follower and the relationship between the two (Graen and Uhl Bien, 1995). The dyadic relationship between the leader and the follower is central (Wang *et al.*, 2005, Schyns and Day, 2010) with leaders developing a unique relationship with each employee that is socially constructed and based on rules of role making, agreement, reciprocity and equity (Danserau *et al.*, 1975; Graen, 1976; Deluga, 1994; Graen and Uhl Bien, 1995). The quality of the dyadic exchange between leaders and followers and the relationship that develops (Graen and Uhl-Bien, 1995) is determined and maintained, through the reciprocal social exchanges between the two parties (Wang *et al.*, 2005; Schyns and Day, 2010). A variety of resources are brought to the relationship by the leader and the follower with exchanges occurring at different levels from basic and transactional levels to a high quality LMX exchange (Graen, 1976; Liden *et al.*, 1997) which takes place when the resources offered are valued and the exchange is perceived as fair by both the leader and the follower (Schyns and Day, 2010). Such high quality relationships result in the establishment of trust between the leader and the employee (Wang *et al.*, 2005).

Transformational leadership behaviour is viewed as social currency which can nourish high quality LMX and as such is positively associated with task performance and Organisational Citizenship Behaviour as linked to high quality LMX relationships (Wang *et al.*, 2005). It is predicted that transformational leadership will enhance employees' work engagement through the mediation of self-efficacy and optimism on a day to day level" (Tims *et al.*, 2011, p.14; Wang *et al.*, 2005).The literature highlights that it is likely that the behaviour of the leader will differ depending on the follower. A high quality LMX relationship from the perspective of leader and follower can result in increased engagement. LMX has much to offer this researcher as a theoretical construct to examine the impact that a leader has employee engagement in the workplace.

For the purposes of this research study, the leader centric models are rejected due to their limited focus on the characteristics and behaviours of leaders and instead leadership is examined through the LMX lens and viewed as a socially constructed, dyadic relational influencing process involving the leader and the employee.

Table 1: Predictors of Employee Engagement and Leadership Influence

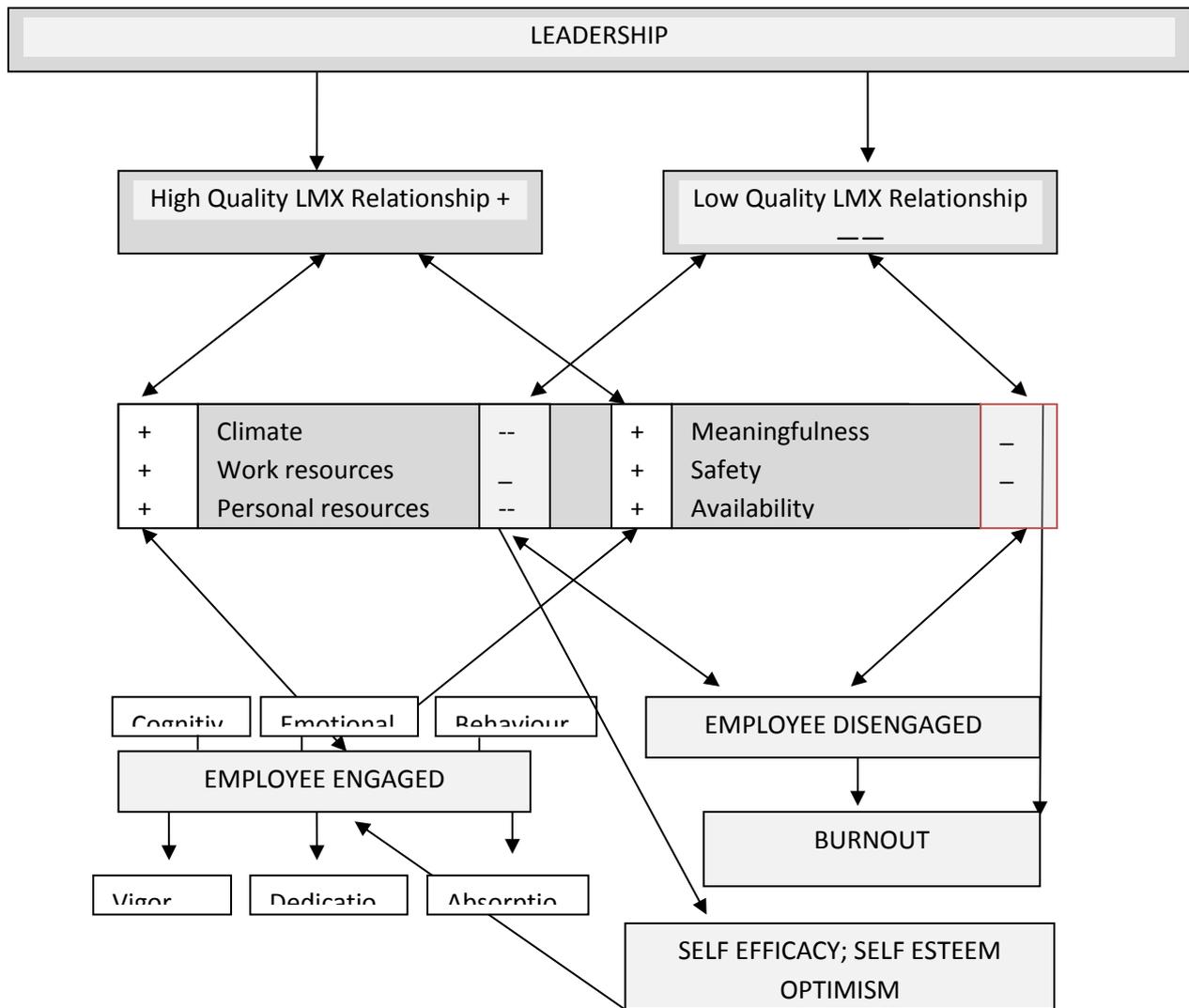
Key Concepts	Employee Engagement/Burnout	Authors
<p>Climate/Organisational Environment</p> <p>Organisational Fit</p> <p>Leader Influence</p>	<p>Employee attitudes and behaviours in the work place are influenced by the structural conditions of the organisational environment</p> <p>An employee who personally identifies with and is positively attached to the organisation will be engaged</p> <p>An employee's relationship with their leader determines their perception of their entire work experience</p> <p>A leader can optimise working environment and conditions enabling them to positively or negatively impact employee engagement in the organisational setting</p>	<p>Kanter, 1997; Cho et al., 2006</p> <p>Macey and Schneider, 2008; Sejits and Crim, 2006; Greguras and Diefendorff, 2009</p> <p>Gerstner and Day, 1997</p> <p>Breevaart and Bakker, 2013; Bakker <i>et al.</i>, 2011; Tuckey <i>et al.</i>, 2012; O Donohoe, 2013</p>
<p>Psychological Model</p> <p>Leader Influence</p>	<p>Fulfillment of the three psychological needs of meaningfulness, safety and availability act as a catalyst for motivation and action on the part of the employee resulting in engagement</p> <p>Relationships of trust result in employee engagement and reduced propensity to burnout</p> <p>Leader causing psychological distress, taking the meaning from work and, each of which could impact negatively on employee engagement and lead to burnout</p>	<p>Kahn, 1990; Welch, 2011 Robinson, 2006; Macey and Schneider, 2008</p> <p>Kahn, 1990; Shuck, 2011</p> <p>Tuckey <i>et al.</i>, 2012; Amabile and Kramer, 2011; Saks, 2006</p>
<p>Jobs Demands Resources</p> <p>Physical resources</p> <p>Personal resources</p>	<p>Linked to employee engagement and burnout</p> <p>Extrinsic and organisationally driven – linked to employee engagement</p> <p>Intrinsic: Self Efficacy, Self Esteem and Optimism and are linked to employee resilience</p>	<p>Bakker and Demerouti, 2008; ; Xanthopoulou <i>et al.</i>, 2007; van den Heuvel <i>et al.</i>, 2010; Barbier <i>et al.</i>, 2012</p> <p>Prieto <i>et al.</i>, (2008; Xanthopoulou <i>et al.</i>, 2007; Hobfoll <i>et al.</i>, 2003</p>

<p>Leader Influence</p>	<p>A leader who inspires and stimulates the employee can boost the employee's personal resources and meet their needs for self-determination and control</p> <p>Access to the resources necessary enables an employee to fulfil their role promotes employee engagement</p> <p>Adopting a generic approach to meet the resource needs of employees leads to burnout</p> <p>Low access to resources coupled with high demands leads to cynicism and burnout, the antipode of employee engagement</p>	<p>Tims <i>et al.</i>, 2011; Ryan and Deci, 2000; Tuckey <i>et al.</i>, 2012</p> <p>Barbier <i>et al.</i>, 2012; Demerouti and Bakker, 2011; Bakker <i>et al.</i>, 2007; Saks, 2006; Bakker Xanthopoulou, 2009; Halbesleben, 2010; Macey and Schneider, 2008</p> <p>Tuckey <i>et al.</i>, 2012; Amabile and Kramer, 2011; Saks, 2006</p> <p>Bakker and Demerouti, 2008; Bakker and Leiter, 2010; Bakker <i>et al.</i>, 2013; Demerouti and Bakker, 2011; Maslach <i>et al.</i>, 1996; Breevart and Bakker, 2014</p>
<p>VDL Model</p>	<p>Dyadic relationship between the leader and follower in a taxonomy of leadership. Signifies a move from leader centric model to the inclusion of the follower</p>	<p>Dansereau <i>et al.</i>, 1975; Graen and Uhl Bien, 1995</p>
<p>Leader Member Exchange</p>	<p>Unique dyadic relationship Positive relationship between employer and employee results in Stronger employee engagement</p> <p>Relationships of trust</p>	<p>Graen and Uhl Bien, 1995; Wang <i>et al.</i>, 2005, Schyns and Day, 2010; Graen, 1976; Deluga, 1994 Liden <i>et al.</i>, 1997</p> <p>Maslach and Leiter, 1997; Cho <i>et al.</i>, 2006; Macey and Schneider, 2008</p>

3. The Conceptual Framework, Research Question and Hypotheses

The conceptual framework emerging from the literature review offers an overarching hierarchy used to introduce order to the thinking and knowledge production process (Leshem and Trafford, 2007).

Figure 1: Conceptual Framework for Research Study



An employee can be considered as engaged when they approach their work with vigour, dedication and are fully absorbed in their roles (table 1.1 above). Employee engagement is depicted in the Conceptual Framework as a construct comprising of cognitive, emotional and behavioural aspects. Burnout, its antipode contains dimensions of exhaustion, cynicism and lack of professional efficacy. Based on the framework, as informed by a review of the extant literature, the proposed research question is “What is the perceived impact of leadership on employee engagement in the Irish not for profit sector?”

Taking the research question into account, and considering the dynamics presented in framework 1.1, the proposed hypotheses are:

Hypothesis 1: The leader can influence the structural conditions to promote employee engagement or propensity to burnout in work.

Both engagement and burnout are determined by the structural conditions in the organisation such as climate; physical resources and conditions. A leader can positively influence the structural climate within the organisation and facilitate access to resources to enable the employee to fulfil their role.

Hypothesis 2: The leader through their dyadic relationship with the employee can influence the psychological conditions necessary to promote employee engagement or propensity to burnout in work.

The satisfaction of employees' psychological conditions of meaningfulness, safety and availability are predictors of engagement and the failure to satisfy these conditions leads to exhaustion, cynicism and lack of professional efficacy, the three dimensions of burnout. A high quality LMX relationship predicts a positive climate, and encourages the psychological conditions of meaningfulness, safety and availability in work. The two directional arrows between these aspects and the quality of the LMX highlight the dual nature of the capacity of these conditions to help build, strengthen and reinforce the dyadic relationship.

Hypothesis 3: Employee self efficacy, self- esteem and optimism can act as a buffer, minimising the impact of a negative experience of the LMX relationship on Employee Engagement. The personal resources of self-efficacy, self-esteem and optimism are presented as moderating variables in the framework denoting the employee who in spite of a negative or low quality LMX may remain resilient and engaged as their personal resources of self-efficacy, optimism and self- esteem minimise the impact of the low LMX.

Hypothesis 4: A leader can use the leader follower relationship to boost the personal resources e.g. self- efficacy, self- esteem and optimism of the employees and reduce propensity to burnout at work.

A leader can use transformational behaviours to build a high quality LMX and boost the personal resources of the employees.

4. The Research Approach

The selection of the most effective research approach for this study is based on my own philosophical perspectives (Usunier, 1998) concerning reality (ontology) and the nature of knowledge (epistemology) (Kuhn, 1970; Lincoln and Guba, 1985; Goia and Pitre, 1990; Creswell, 2003; Holden and Lynch, 2004) and the research philosophy deemed most appropriate to address this particular research question (Holden and Lynch, 2004).

There is a need to produce knowledge from this research that is validated by sufficient statistical and published evidence. On consideration of the philosophical underpinning of the research question and hypotheses presented above, the objective, positivist approach (Burrell and Morgan, 1979; Holden and Lynch, 2004) is considered to most accurately reflect this researcher's philosophical predilections and is well positioned to generate such knowledge and facilitate the application of the research outcomes in other similar organisations.

The employee engagement and leader member exchange literature offers the researcher a variety of predesigned and tested survey tools with good internal consistencies, proven validity, and retest reliability (stability) based on Cronbach's Alpha. In determining the most effective research approach for this study this researcher has taken account of the two main criticisms of LMX research noted in the literature. Firstly the focus of some LMX research on a traditional unidimensional view of the construct which was neither theoretically nor empirically founded (Dienesch and Liden, 1986) and secondly the exclusive focus on some LMX research on the subordinate. In response to these criticisms this researcher will select measures with capacity to measure LMX as a multidimensional construct with dimensions of affect, loyalty, contribution and professional respect. The 12 items from the LMX-MDM (Liden and Maslyn, 1998) scale is a measure with such capacity.

Measurement of LMX would be incomplete without due regard to the perspectives of both the leader and follower (Scandura and Schriesheim, 1994; Gerstner and Day, 1997; Schriesheim *et al.*, 1998; Greguras and Ford, 2006). The SLMX-LDM is a measure targeted specifically at Leaders (Greguras and Ford, 2006) and having regard to such criticisms it is intended to use the SLMX –LDM (Appendix 1) to ensure appropriate measurement from the perspective of the leader in this study.

In determining the most effective quantitative measures of employee engagement the instrument must have capacity to address engagement as state and trait; recognise that fluctuations occur in state engagement and measure the potential positive and negative aspects of employee engagement (Albrecht *et al.*, 2010; Tims *et al.*, 2011). The Utrecht Work Engagement Scale (UWES), (Schaufeli and Bakker, 2003) has been utilised to effectively research the construct of Employee Engagement adopting a 17, 15 or 9 subscale. The UWES-9 (Appendix 2) is a nine item version of this measurement scale, with three items addressing each of the Employee Engagement dimensions of vigor, ‘When I get up in the morning, I feel like going to work’, dedication ‘I am enthusiastic about my job’ and absorption ‘I am immersed in my work’.

A measure of Employee Engagement would be incomplete in the absence of measuring burnout, its antipode, placed on the same continuum (Maslach and Jackson, 1981, 1986; Maslach *et al.*, 1996; Demerouti and Bakker, 2007). The MBI /MBI-GS (Maslach and Jackson, 1981, 1986; Maslach *et al.*,1996) and the OLBI, introduced as an alternative to address the perceived limitations of the MBI-GS model (Demerouti *et al.*, 2003) were the two main survey instruments considered as potential research techniques to generate this knowledge. Having regard to the one dimensional focus of the MBI model, the inclusion of negatively and positively worded items on the OLBI ensuring that both ends of the engagement and burnout continuum are sufficiently addressed, i.e. ‘the exhaustion and disengagement subscales include items that refer to their opposites, namely vigour and dedication, respectively’ (Demerouti and Bakker, 2007, p. 6), the OLBI is considered to be the most appropriate at this stage. Its test-retest reliability has been confirmed for time lags of four months (Halbesleben and Demerouti, 2005) and studies have clarified its factorial validity Demerouti *et al.*, 2001; (Demerouti *et al.*, 2002; Halbesleben and Demerouti, 2005).

Table 2: Measures from the LMX and Engagement Literature

Aspect	Measure
Quality LMX Relationship	12 Item LMX-MDM (Liden and Maslyn, 1998) and SLMX-LDM (Greguras and Ford, 2006)
Engagement	The Utrecht Work Engagement Scale (Schaufeli and Bakker, 2003)UWES-9
Burnout	MBI /MBI-GS (Maslach and Jackson, 1981, 1986; Maslach <i>et al.</i> ,1996) OLBI- (Demerouti, Bakker, Vardakou and Kantas, 2003)
Self Efficacy	General Self Efficacy Scale (GSE) Schwarzer and Jerusalem (1995)

5. Conclusion

This paper presents a proposed conceptual review for the research study of the Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector. It was noted that although the leader considerably influences an employee's experience of the workplace their role in fostering employee engagement has received limited research attention to date. Employee engagement is presented as a facilitator of positive work performance and greater employee wellbeing, making it worthy of active pursuit by leadership practitioners. The need to move from an individualistic perception of leadership to a more relational model in order to foster employee engagement in the workplace is identified. Viewing leadership as a dyadic relationship based on exchanges between the leader and the employee is presented as an effective theoretical framework to frame the current study's research problem. A conceptual framework, informed by a review of the concepts on leadership and engagement presented in the literature and determined as most effective for the purposes of this research study is developed and presented. The proposed research approach to the problem is outlined. The next stages to strengthen and progress this study include: drawing further upon the literature to determine the most effective research methodologies used in employee engagement and LMX literature and the application of those considered most relevant to this study; further consideration to the most effective measures of self-efficacy, self-esteem and optimism and addressing the ethical and sampling considerations informed by the final selection of the methodologies.

References

- Amabile T. and Kramer, S.J. (2011) *The Progress Principle: Using small wins to ignite joy, engagement, and creativity at work*. Boston, MA: Harvard Business Review Press.
- Bakker A.B., Albrecht S.L and Leiter M.P. (2011) , 'Key questions regarding work engagement', *European Journal of Work and Organizational Psychology*, Vol. 20, No.1, pp. 4-28.
- Bakker, A.B. and Bal P.M. (2010) 'Weekly Work Engagement and Performance: A study Among Starting Teacher', *Journal of Occupational and Organizational Psychology*, Vol. 83, pp. 189-206.
- Bakker, K. and Demerouti E. (2008) 'Towards a model of Work Engagement', *Career Development International*, Vol. 13, pp. 209-223.
- Bakker, A.B., Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. (2007) 'Job Resources Boost Work Engagement, Particularly When Job Demands are High', *Journal of Educational Psychology*, Vol. 99, pp.274–284.
- Bakker A.B. and Schaufeli W.B. (2008) 'Positive organizational behavior: Engaged employees in flourishing organizations', *Journal of Organizational Behavior*. Vol. 29, pp. 147–154.
- Bakker, K., Demerouti E. and Schaufeli W.B. (2002) 'The validity of the Maslach Burnout Inventory—General survey: An Internet study', *Anxiety, Stress, and Coping*, Vol. 15, pp. 245–260.
- Bakker, A. B. and Xanthopoulou, D. (2009) 'The crossover of daily work engagement: Test of an actor-partner interdependence model', *Journal of Applied Psychology* Vol. 94, No. 6 pp.1562-1571.
- Barbier, M., Dardenne, B. And Hansez, I. (2012) 'A Longitudinal Test of the Jobs-Demands Resources Model using Perceived Stigma and Social Identity', *European Journal of Work and Organisational Psychology*, Vol. 22, No. 5, pp. 532-546.
- Barker, R. A. (1997). How can we train leaders if we do not know what leadership is? *Human Relations*, Vol. 50, No. 4 pp. 343-362.
- Bass, B. M. (1985) *Leadership and performance beyond expectation*, New York: Free Press.
- Bass, B.M. and Avolio, B.J. (1996), *Postscripts: Recent Developments for Improving Organisational Effectiveness*, London: Sage.
- Breevaart, K. and Bakker, A.B. (2013) 'How leaders influence their followers' work engagement', *European Work and Organizational Psychology in Practice*, Vol. 5, pp. 31-35.
- Breevaart, K., Bakker A.B., Demerouti E. and Hetland J. (2012) 'The Measurement of State Work Engagement: A Multilevel Factor Analytic Study', *European Journal of Psychological Assessment*, Vol. 28, No. 4, pp.305–312.

- Bolden, R. (2011) 'Distributed Leadership in Organizations: A Review of Theory and Research', *International Journal of Management Review*, Vol.13, No. 3, pp. 251-269.
- Brower, H.H., Schoorman, D.F., Tan, H.H. (2000) 'A model of relational leadership: The integration of trust and leader-member exchange', *The Leadership Quarterly*, Vol.11, No.2, pp.227-250.
- Burrell, G. and Morgan, G. (1979) *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*, London: Heinemann.
- Cho, J., Laschinger, H.K. and Wong, C. (2006) 'Workplace Empowerment, Work Engagement and Organizational Commitment of New Graduate Nurses', *Nursing Research*, Vol. 19, No. 3, pp.44-60.
- Creswell, J.W. (2003) *Research design: qualitative, quantitative, and mixed methods approaches*, 2nd Edn. Thousand Oaks, CA: Sage Publications.
- Cunliffe A.L. and Erikson M. (2011) 'Relational Leadership', *Human Relations*, Vol. 64, No. 11, pp.1425-1449.
- Dansereau, F., Graen, G.B. and Haga, W. (1975) 'A vertical dyad linkage approach to leadership in formal organizations', *Organizational Behavior and Human Performance*, Vol.13, pp. 46-78.
- Deluga, R.J. (1994) 'Supervisor Trust Building, Leader Member Exchange and Organizational Citizenship Behaviour', *Journal of Occupational and Organizational Psychology*, Vol. 67, pp. 315-326.
- Demerouti, E., Bakker, A.B., Vardakou, I. and Kantas, A. (2003) 'The convergent validity of two burnout instruments: A multitrait-multimethod analysis', *European Journal of Psychological Assessment*, Vol. 18, pp. 296-307.
- Demerouti, E. and Bakker AB. (2011) 'The Jobs Demands Resource Model: Challenges for Future Research', *SA Journal of Industrial Psychology*, Vol. 37, No. 2, pp.1-9.
- Demerouti, E. and Bakker, A. (2007) 'The Oldenburg Burnout Inventory: A Good Alternative to Measure Burnout (and Engagement)', Source: Utrecht University
- Demerouti, E., Bakker, A.B., De Jonge, J., Janssen P.P.M. and Schaufeli W.B (2001) 'Burnout and Engagement at Work as a Function of Demands and Control', *Scandinavian Journal of Work Environment and Health*, Vol. 27, pp. 279-286.
- Demerouti, E., Bakker, A.B., Nachreiner, F., and Ebbinghaus, M. (2002) 'From Mental Strain to Burnout', *European Journal of Work and Organizational Psychology*, Vol. 11, pp. 423-441.
- Department of the Environment, (2012) *Putting People First: Action Programme for Effective Local Government*, Dublin: Government Publication Office.
- Department of the Environment (2014) *Local Government Reform Act*, Dublin: Government Publication Office.
- Department of Social Protection (2012) *Pathways to Work: Government Policy Statement on Labour Market Activation*, Dublin: Government Publication Office.

- Dienesch, R.M. and Liden R.C. (1986) 'Leader-Member Exchange Model of Leadership: A Critique and Further Development', *The Academy of Management Review*, Vol. 11, No. 3, pp. 618-634.
- French, J. R. P. and Raven, B. (1959) 'The bases of social power', in D. Cartwright and A. Zander, *Group Dynamics*, New York: Harper and Row, pp. 150-167.
- Gerstner, C.R. and Day, D.V. (1997) 'Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues', *Journal of Applied Psychology*, Vol. 82, No.6, pp. 827-844.
- Gioia, D. A. and Pitre, E. (1990) 'Multiparadigm perspectives on theory building', *Academy of Management Review*, Vol. 15, No. 4, pp. 584-602.
- Gonzalez- Roma, V., Schaufeli, W.B., Bakker, A.B. and Lloret, S. (2006) 'Burnout and Work Engagement, Independent Factors or opposite poles?' *Journal of Vocational Behavior*, Vol. 68, pp. 165-174.
- Goodnight, R. (2011) 'Laissez Faire Leadership', *Encyclopedia of Leadership*, Vol.16, pp. 820-823.
- Graen, G.B. (1976). Role making processes within complex organizations, *In: M.D. Dunnette (ed.) Handbook of Industrial and Organizational Psychology*, Chicago: Rand-McNally, pp. 1201-1245.
- Graen, G.B., and Scandura, T. (1987) Toward a psychology of dyadic organizing, *In: B. Staw and L.L. Cumming (eds.) Research in Organizational Behavior*, Greenwich, CT: JAI Press, pp. 175-208.
- Graen, GB. and Uhl Bien, M. (1995) 'Relationship-Based Approach to Leadership Development of Leader-Member-Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Domain Perspective', *Leadership Quarterly*, Vol. 6, No.2 pp. 219-247.
- Greguras G.J, and Diefendorff J.M. (2009) 'Different Fits Satisfy Different Needs: Linking Person- Environment Fit to Employee Commitment and Performance Using Self Determination Theory' *Journal of Applied Psychology*, Vol. 94, No.2, pp. 465-477.
- Greguras, G. J. and Ford, J. M. (2006) 'An examination of the multidimensionality of supervisor and subordinate perceptions of leader member exchange', *Journal of Occupational and Organizational Psychology*, Vol.79, pp. 433-465.
- Grint, K. (1997) *Leadership: Classical, contemporary, and critical approaches*, Oxford: Oxford University Press.
- Grint, K. (2005) *Leadership Limits and Possibilities*, Basingstoke: Palgrave Macmillan.
- Halbesleben, J.R.B. and Demerouti, E. (2005) 'The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg burnout inventory', *Work and Stress*, Vol. 19, No.3, pp. 208-220.

- Halbesleben, J.R.B. and Wheeler A.R. (2008) 'The relative role of engagement and embeddedness in predicting job performance and turnover intention', *Work and Stress*, Vol. 22, No. 3, pp. 242-256.
- Halbelsleben, J.R.B. (2010) 'A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources and Consequences', in A.B. Bakker and M.P Leiter (eds.) *Work Engagement: A handbook of essential theory and research*, New York: Psychology Press, pp. 102-117.
- Harter, J. K., Schmidt, F. L. and Hayes, T. L. (2002) 'Business-Unit-Level Relationship between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-analysis', *Journal of Applied Psychology*, Vol. 87, pp. 268–279.
- Hobfoll, S.E., Johnson, R.J., Ennis, N. and Jackson, A.P. (2003) 'Resource Loss, Resource Gain, and Emotional Outcomes Among Inner City Women', *Journal of Personality and Social Psychology*, Vol. 84, No. 3, pp. 632-643.
- Holden, M. T. and Lynch, P. (2004) 'Choosing the Appropriate Methodology: Understanding Research Philosophy', *The Marketing Review*, Vol. 4, No. 4, pp. 397-409.
- Ilies, R., Nahrgang, J.D. and Morgeson, F.P. (2007) 'Leader–Member Exchange and Citizenship Behaviors: A Meta-Analysis', *Journal of Applied Psychology*, Vol. 92, No. 1, pp. 269–277.
- Kahn W.A (1990) 'Psychological Conditions of Personal Engagement at Work', *Academy of Management Journal*, Vol. 33, No. 4, pp. 692-724.
- Kanter, R.M. (1997) *Rosabeth Moss Kanter on the Frontiers of Management*, Boston: Harvard Business School Press.
- Kuhn T. S. (1970) *The Structure of Scientific Revolutions*, Chicago: Chicago University Press.
- Leshem, S. and Trafford, V. (2007) 'Overlooking the conceptual framework', *Innovations in Education and Teaching International*, Vol. 44, No. 1, pp. 93–105.
- Liden, R. C., Sparrowe, R. T. and Wayne, S. J. (1997) 'Leader-Member Exchange Theory: The Past and Potential for the Future', *Research in Personnel and Human Resources Management*, Vol. 15, pp. 47–119.
- Liden R.C. and Maslyn J.M. (1998) 'Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development', *Journal of Management*. Vol. 24, No. 1, pp. 43-72.
- Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic Inquiry*, London: Sage Publications Inc.
- Macey, W, and Schneider, B. (2008) 'The Meaning of Employee Engagement', *Industrial and Organisational Psychology*, Vol. 1, pp. 3-30.
- Maslach, C., and Jackson, S.E. (1981) 'The Measurement of Experienced Burnout', *Journal of Occupational Behaviour*, Vol. 2, pp. 99-113.

- Maslach, C., Jackson, S.E. and Leiter, M.P. (1996) *Maslach Burnout Inventory Manual*, 3rd Edn. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., and Leiter, M.P. (1997) *The Truth About Burnout*. San Francisco: Jossey-Bass.
- Maslach, C., Schaufeli, W.B. and Leiter, M.P. (2001) 'Job Burnout', *Annual Review of Psychology*, Vol. 52, pp. 397-422.
- Nahrgang, F.P., Morgeson and Ilies R. (2009) 'The development of leader-member exchanges: Exploring how personality and performance influence leader and member relationships over time', *Organizational Behavior and Human Decision Processes*, Vol.108, pp. 256-266
- Northouse, P. (2004) *Leadership: Theory and Practice*. London: Sage Publications Ltd.
- O Donohoe, A. (2013) 'Exploring the Impact of Destructive and Constructive Leadership on Employee Self Conscious Emotions and Wellbeing at Work', *Paper presented at the Irish Academy of Management Conference, 2nd-4th September in Waterford Institute of Technology, Waterford*.
- Papalexandris, N. and Galanaki, (2009) 'Leadership's Impact on Employee Engagement: Differences Among Entrepreneurs and Professional CEOs', *Leadership and Organization Development Journal*, Vol. 30, No. 4, pp.365-385.
- Pearce, C.L. and Manz, C. C. (2005) 'The New Silver Bullets of Leadership: The Importance of Self-and Shared Leadership in Knowledge Work', *Organizational Dynamics*. Vol. 34, No. 2, pp. 130-140.
- Peterson, C. (2000) 'The future of optimism', *American Psychologist*, Vol. 55, No. 1, pp 44-55.
- Prieto, L., Salanova, M., Martinez, I. and Schaufeli, W. (2008) 'Extension of the Job Demands- Resources Model in the Prediction of Burnout and Engagement Among Teachers over Time', *Psicotherma*, Vol. 20, No. 3, pp. 354-360.
- Robinson, D., Perryman, S, and Hayday, S. (2004). *The Drivers of Employee Engagement*. Institute for Employment Studies, Brighton
- Rost, J. C. (1993) 'Leadership Development in the New Millennium', *The Journal of Leadership Studies*, Vol. 1, No. 1, pp. 92-110.
- Rus, D. (2013) 'Leading for Engagement and Performance', *European Work and Organizational Psychology in Practice*, Vol. 5, pp. 26-30.
- Ryan, R.M., and Deci, E.L. (2000) 'Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions', *Contemporary Educational Psychology*, Vol. 25, pp. 54-67.
- Scandura, T.A., and Schriesheim, C.A. (1994) 'Leader-Member Exchange and Supervisor Career Mentoring as Complementary Constructs in Leadership Research', *The Academy of Management Journal*, Vol. 37, No. 6, pp. 1588-1602.

- Schriesheim, C. A., Neider, L. L. and Scandura, T. A. (1998) 'Delegation and Leader-Member Exchange: Main Effects, Moderators, and Measurement Issues', *Academy of Management Journal*, Vol. 41, pp. 298-318.
- Salanova, M., Agut, S. and Peiro, J. M. (2005) 'Linking Organizational Resources and Work Engagement to Employee Performance and Customer Loyalty: The Mediation of Service Climate', *Journal of Applied Psychology*, Vol. 90, pp. 1217-1227.
- Saks, A.M. (2006) 'Antecedents and Consequences of Employee Engagement', *Journal of Managerial Psychology*, Vol. 21, No. 7, pp. 600-619.
- Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002) 'The Measurement of Engagement and Burnout: A Two Sample Confirmatory Analytical Approach', *Journal of Happiness Studies*, Vol. 3, pp. 71-92.
- Schaufeli, W. and Bakker A.B. (2004) 'Job Demands, Job Resources and their Relationship with Burnout and Engagement: a Multi Sample Study', *Journal of Organizational Behavior*, Vol. 25, pp. 293-315.
- Schaufeli, W. and Bakker, A. B. (2003) *UWES Preliminary Manual*. Occupational Health Psychology Unit. Utrecht University
- Schaufeli, W.B, Taris, T.W and Van Rhenen, W. (2008) 'Workaholism, Burnout, and Work Engagement: Three of a Kind or Three Different Kinds of Employee Well-being?' *Applied Psychology: An International Review*, Vol. 57, No. 2, pp. 173-203.
- Schwarzer, R. and Jerusalem, M. (1995) Generalized Self-Efficacy scale, In J. Weinman, S. Wright, and M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs*, Windsor, UK: NFER-NELSON, pp. 35-37.
- Schyns, B. and Day, D. (2010) 'Critique and Review of Leader-Member Exchange Theory: Issues of Agreement, Consensus and Excellence', *European Journal of Work and Organizational Psychology*, Vol. 19, No. 1, pp 1-29.
- Shuck, B. (2011) 'Integrative Literature Review: Four Emerging Perspectives of Employee Engagement: An Integrative Literature Review', *Human Resource Development Review*, Vol. 10, No. 3, pp. 304-328.
- Sejts, G.H. and Crim, D. (2006) 'What Engages Employees the Most, or The Ten C's of Employee Engagement', *Ivey Business Journal*, pp. 1-6.
- Sparrowe, R. T. and Liden, R. C. (1997) 'Process and Structure in Leader Member Exchange', *Academy of Management Review*, Vol. 22, pp. 522-552.
- Thorpe, R., Gold, J. and Lawler, J. (2011) 'Locating Distributed Leadership', *International Journal of Management Reviews*, Vol.13, pp. 239-250.
- Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011) 'Do Transformational Leaders Enhance their Followers' Daily Work Engagement?', *The Leadership Quarterly*, Vol. 22 pp. 121-131.

Tuckey, M.R., Dollard M.F. and Bakker, A.B. (2012) 'Empowering Leaders Optimize Working Conditions for Engagement: A Multilevel Study', *Journal of Occupational Health Psychology*, Vol. 17, No. 1, pp.15–27.

Uhl-Bien, M. (2006) 'Relational Leadership Theory: Exploring the Social Processes of Leadership and Organising', *Leadership Quarterly Yearly Review of Leadership*, Vol. 17, No.6, pp. 654-676.

Usunier, J.C. (1998) *International and Cross-Cultural Management Research: SAGE Series in Management Research*, London: SAGE

Wang, H., Law, K.S., Hackett, R.D., Wang D. and Chen, Z.X. (2005) 'Leader Member Exchange as a Mediator of the Relationship between Transformational Leadership and Follower's Performance and Organisational Citizenship Behaviour', *The Academy of Management Journal*, Vol. 47, No. 3, pp. 420-432.

Welsh, M. (2011) 'The Evolution of the Employee Engagement Concept: Communication Implications', *An International Journal*, Vol. 16, No. 4, pp. 328-346.

Xanthopoulos, D., Bakker, A.B., Demerouti, E. and Schaufeli W.B. (2007) 'The Role of Personal Resources in the Jobs- Demands Resource Model', *International Journal of Stress Management*, Vol. 14, No. 2, pp. 121-141.

Xanthopoulos, D., Bakker, A.B., Demerouti, E. and Schaufeli W.B. (2009a) 'Reciprocal Relationships between Job Resources, Personal Resources and Work Engagement', *Journal of Vocational Behavior*, Vol. 74, pp. 235-244.

Xanthopoulos, D., Bakker, A.B., Demerouti, E. And Schaufeli W.B. (2009b) 'Work Engagement and Financial Returns: A Diary Study of the Role of Job and Personal Resources', *Journal of Occupational and Organizational Psychology*, Vol. 82, pp. 183-200.

Yammarino, E.Y. and Bass, B.M. (1990) Long Term Forecasting of Transformational Leadership and its Effects Among Naval Officers: Some Preliminary Findings, in Clark, K and Miriam B. (eds) *Measures of Leadership*, West Orange, NJ, US: Leadership Library of America, pp. 151-169.

Yukl G. (1989) 'Managerial Leadership: A Review of Theory and Research', *Journal of Management*, Vol. 15, pp. 251–289.

Yukl, G. (2002) *Leadership in Organizations*. Upper Saddle River, NJ: Prentice Hall Inc.

Appendices

Appendix 1: LMX-MDM and SLMX-MDM

Subordinate perspective

Affect dimension

- (1) I like my supervisor very much as a person.
- (2) My supervisor is the kind of person one would like to have as a friend.
- (3) My supervisor is a lot of fun to work with.

Loyalty dimension

- (4) My supervisor defends my work actions to a superior, even without complete knowledge of the issue in question.
- (5) My supervisor would come to my defence if I were ‘attacked’ by others.
- (6) My supervisor would defend me to others in the organization if I made an honest mistake.

Contribution dimension

- (7) I do work for my supervisor that goes beyond what is specified in my job description.
- (8) I am willing to apply extra efforts, beyond those normally required, to meet my supervisor’s work goals.
- (9) I do not mind working my hardest for my supervisor.

Professional respect

- (10) I am impressed with my supervisor’s knowledge of his/her job.
- (11) I respect my supervisor’s knowledge of and competence on the job.
- (12) I admire my supervisor’s professional skills.

Supervisor perspective

Affect dimension

- (1) I like my subordinate very much as a person.
- (2) My subordinate is the kind of person one would like to have as a friend.
- (3) My subordinate is a lot of fun to work with.

Loyalty dimension

- (4) My subordinate defends my decisions, even without complete knowledge of the issue in question.
- (5) My subordinate would come to my defence if I were 'attacked' by others.
- (6) My subordinate would defend me to others in the organization if I made an honest mistake.

Contribution dimension

- (7) I provide support and resources for my subordinate that goes beyond what is specified in my job description.
- (8) I am willing to apply extra efforts, beyond those normally required, to help my subordinate meet his or her work goals.
- (9) I do not mind working my hardest for my subordinate.

Professional respect

- (10) I am impressed with my subordinate's knowledge of his/her job.
- (11) I respect my subordinate's knowledge of and competence on the job.
- (12) I admire my subordinate's professional skills.

Appendix 2: Work and Well-being Survey

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the '0' (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

Almost never	Rarely	Sometimes	Often	Very often	Always
0	1	2	4	5	6
A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

1. _____ At my work, I feel bursting with energy* (VII)
2. _____ I find the work that I do full of meaning and purpose (DE1)
3. _____ Time flies when I'm working (AB1)
4. _____ At my job, I feel strong and vigorous (VI2)*
5. _____ I am enthusiastic about my job (DE2)*
6. _____ When I am working, I forget everything else around me (AB2)
7. _____ My job inspires me (DE3)*
8. _____ When I get up in the morning, I feel like going to work (VI3)*
9. _____ I feel happy when I am working intensely (AB3)*
10. _____ I am proud on the work that I do (DE4)*
11. _____ I am immersed in my work (AB4)*
12. _____ I can continue working for very long periods at a time (VI4)
13. _____ To me, my job is challenging (DE5)
14. _____ I get carried away when I'm working (AB5)*
15. _____ At my job, I am very resilient, mentally (VI5)
16. _____ It is difficult to detach myself from my job (AB6)
17. _____ At my work I always persevere, even when things do not go well (VI6)

* Shortened version (UWES-9); VI= vigor; DE = dedication; AB = absorption
 © Schaufeli and Bakker (2003). The Utrecht Work Engagement Scale is free for use for non-commercial scientific research. Commercial and/or non-scientific use is prohibited, unless previous written permission is granted by the authors

Appendix 3: The General Self Efficacy Scale

(Scwharzer and Jerusalem – 1995)

Response Format: 1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

1. I can always manage to solve difficult problems if I try hard enough.
2. If someone opposes me, I can find the means and ways to get what I want.
3. It is easy for me to stick to my aims and accomplish my goals.
4. I am confident that I could deal efficiently with unexpected events.
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
6. I can solve most problems if I invest the necessary effort.
7. I can remain calm when facing difficulties because I can rely on my coping abilities.
8. When I am confronted with a problem, I can usually find several solutions.
9. If I am in trouble, I can usually think of a solution.
10. I can usually handle whatever comes my way.

Preface 2

Conceptual Developments
Between
CPS Paper 1 and CPS Paper 2

1. Change of Study Setting

I started the DBA in 2013 and at that point I worked as a management practitioner in the NFP sector and CPS Paper 1 discussed this study as being situated in that context. In 2014 I changed career and assumed a role in the School of Lifelong Learning and Education in Waterford Institute of Technology. This role involved management and lecturing to students who were FET practitioners and I had previously worked for over seven years in an FET management role. In this role, I managed a team of FET teachers and held responsibility for the implementation of the Back to Education Initiative (BTEI) programme in County Carlow. I discussed this new working context with my supervisor and explored the FET context. Subsequently I decided that the study would be better positioned in the Irish FET sector whose staff were experiencing very similar challenges to those in the NFP sector as follows:

In the post-financial crisis environment (2012-2015), FET employees grappled to navigate the challenges of change, job uncertainty and increasing workloads (Breevaart and Bakker, 2011; Rus, 2013) and these challenges were compounded by developments, specific to the sector as previously discussed in Section 1 of this thesis. Such challenges included: amalgamation of the 33 Vocational Educational Committees (VECs) and former FAS education centres into 16 Education and Training Boards (ETBs); the labour market activation agenda (Pathways to Work, 2012) and a change resulting in more mandated learners and an emphasis on measurable performance outcomes linked to a pay per performance funding model. Employee engagement was critical in this sector, as organisations needed staff who were fully invested in their roles to ensure delivery of statutory obligations and a quality experience for the learners. Thus I proceeded with the next stages of the study in the context of the Irish FET sector and their need to identify the factors leading to engaged employees and counteracting the negative impact of their operating climate on employee wellbeing, motivation, performance (Rus, 2013).

2. Rationale for Continued Relevance of LMX to Frame Study

In 2014, CPS Paper 1 established the limitations of leader centric theories for this study. I provided a rationale for the use of Leader Member Exchange Theory (LMX) and presented hypotheses to examine LMX quality as a predictor of employee engagement. This approach and rationale was approved by the examination panel in CPS Paper 1 and I progressed with CPS 2 exploring the methodology most suited to examine the hypotheses. At the

presentation of CPS Paper 2, the new examination panel expressed uncertainty concerning the continued relevance of LMX as a theoretical frame to underpin the study.

In determining LMX as the theoretical lens most suited to frame this study, I examined previous studies using it to examine employee outcomes. LMX was described by Barling *et al.*, as “one of the most studied concepts in the field of leadership” (in Joseph *et al.*, 2011, p. 91); however at that point in time (2013/2014) to the best of my knowledge, the influence of LMX on Employee Engagement had not yet been examined.

At the time of the Presentation of CPS Paper 2, in October 2015, the literature continued to support the use of LMX as a useful theory to frame an examination of leadership influence on employee outcomes (Agarwal *et al.*, 2012; Breevaart *et al.*, 2015; Martin *et al.*, 2015). In addition, the research had progressed with the emergence of three new studies examining the influence of LMX on work engagement (Agarwal *et al.*, 2012; Burch and Guarana, 2014; Breevaart *et al.*, 2015). Breevaart *et al.*'s, (2015) suggestion that this was possibly the first time that this approach was undertaken supported my views concerning the research gap existing at the time (2013/2014). Argawal *et al.*'s 2012 study, set in the service sector in India examined LMX as a mediator in the relationship between LMX, innovative work behaviour (IWB) and intention to quit; Burch and Guarana's (2014) study was set in industry, with data collected in a large multinational technology firm in Brazil, while Breevaart *et al.*, (2015) set their study within the public sector in the Netherlands, collecting data from Dutch police officers.

Having revisited the literature to explore the continued relevance of LMX to frame this study and on the basis of discussions with my supervisor, I decided to proceed with the study using LMX. I was of the view that this was the approach most suited to this study and through it I could build upon the extant research, and offer a unique practice and theoretical contribution.

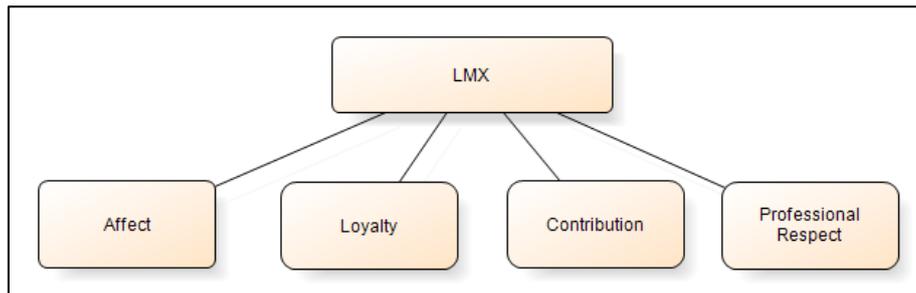
3. Hypotheses Development and Change

Examiner feedback at CPS Paper 2 suggested that the hypotheses could benefit from further refinement. This section of the Preface explores how I developed each hypothesis in response:

Hypothesis 1:

I revisited meta- analyses (Gerstner and Day, 1997; Joseph *et al.*, 2011) revealing the focus of many prior employee outcome studies on LMX as a unidimensional construct only. In my CPS Paper 1, I discussed my approach to LMX (consistent with Liden and Maslyn’s, 1998 multidimensional conceptualisation of the construct) as containing sub dimensions of affect, loyalty, contribution and professional respect (Figure 1).

Figure 1: Multidimensional LMX model for this study



The quality of the LMX relationship can be based on any or all of the dimensions which are described in more detail in Table 1 below:

Table 1: LMX Dimension Definitions

Affect	The mutual affection members of the dyad have for each other based primarily on interpersonal attraction, rather than work or professional values. Such affection may be manifested in the desire for and/or occurrence of a relationship which has personally rewarding components and outcomes (e.g., a friendship).
Loyalty	The expression of public support for the goals and the personal character of the other member of the LMX dyad. Loyalty involves a faithfulness to the individual that is generally consistent from situation to situation
Contribution	Perception of the current level of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad. Important in the evaluation of work-oriented activity is the extent to which the subordinate member of the dyad handles responsibility and completes tasks that extend beyond the job description and/or employment contract; and likewise, the extent to which the supervisor provides resources and opportunities for such activity.
Professional Respect	Perception of the degree to which each member of the dyad has built a reputation, within and/or outside the organization, of excelling at his or her line of work. This perception may be based on historical data concerning the person, such as: personal experience with the individual; comments made about the person from individuals within or outside the organization; and awards or other professional recognition achieved by the person. Thus it is possible, though not required, to have developed a perception of professional respect before working with or even meeting the person

Source: Liden and Malsyn (1998 p. 50)

On this basis, I developed Hypothesis 1 and CPS Paper 2 focused on the selection of an appropriate methodology to examine:

Table 2: Hypotheses under Examination

Hypothesis 1A	Overall LMX quality predicts employee engagement
Hypothesis 1B	Quality of affect predicts employee engagement
Hypothesis 1C	Quality of loyalty predicts employee engagement
Hypothesis 1D	Quality of contribution predicts employee engagement
Hypothesis 1E	Quality of professional respect predicts employee engagement

Hypotheses 2 and 3:

In CPS Paper 1, I presented self -efficacy, self- esteem and optimism as having an influence on the relationship between LMX and employee engagement. Following discussions with the examination panel and supervisory team in relation to the timeframe of the DBA, I decided to concentrate on an examination of the personal resource of optimism.

The definition of optimism as “people’s mental characteristics which reduce the negative impact of demands on psychological well-being” (Prieto *et al.*, 2008, p. 355) and “the current expectancy that positive outcomes will occur in the future’ (Shifren and Hooker 1995, p. 61) along with its link to organisational outcomes led me to consider its role in LMX and employee engagement. Optimism was linked to outcomes including job satisfaction, organisational commitment, work happiness and performance (Youssef and Luthans, 2007; Kluemper, *et al.*, 2009) and I reviewed studies confirming its link to employee engagement (Xanthopoulou *et al.*, 2007; Halbesleben 2010). I felt that as optimists are “less likely to dwell on negative or stressful situations, less likely to give up amidst stress, and [are] more likely to maintain a positive outlook and to develop plans of action to deal with stressful situations”. (Shifren and Hooker, 1995 p. 61) that this might play a role in helping employees to offset negative effects of low LMX quality on employee engagement.

As such, I refined Hypotheses 2 and 3 and framed them to test whether the direct association between LMX and employee engagement, would be moderated by optimism. The hypotheses were refined before turning my attention to the methodology in CPS Paper 2 as follows:

- Hypothesis 2: Optimism can offset the negative effects of poor LMX quality on employee engagement
- Hypothesis 3: Optimism can boost the LMX relationship quality and lead to increased employee engagement

These developments meant that I moved into the next stage of the study with a revised working title: “The Role of Leader Member Exchange in Influencing Employee Engagement and the Moderating Role of Optimism, in the Irish Further Education and Training Sector”.

References

Breevaart, K., Bakker, A.B., Demerouti, E. and Van den Heuvel. M. (2015) 'Leader-Member Exchange, Work Engagement and Job Performance', *Journal of Managerial Psychology*, Vol. 30, pp.753-770.

Burch, T.C. and Guarana, C.L. (2014) 'The Comparative Influences of Transformational Leadership and Leader-Member Exchange on Follower Engagement', *Journal of Leadership Studies*, Vol. 8, No.3, pp. 6-25.

Department of Social Protection (2012) *Pathways to Work: Government Policy Statement on Labour Market Activation*, Dublin: Government Publication Office.

Gerstner C.R. and Day, D.V. (1997) 'Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues', *Journal of Applied Psychology*. Vol. 82, No.6, pp. 827-844.

Halbelsleben, J.R.B. (2010) 'A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources and Consequences', in A.B. Bakker and M.P Leiter (eds.) *Work Engagement: A handbook of essential theory and research*, New York: Psychology Press, pp. 102-117.

Joseph, D.L., Newman, D.A. and Sin, H.P. (2011) 'Leader-Member Exchange (LMX) Measurement: Evidence for Consensus, Construct Breadth, and Discriminant Validity', in Donald D. Bergh, David J. Ketchen (eds.) *Building Methodological Bridges (Research Methodology in Strategy and Management, Volume 6)* Emerald Group Publishing Limited, pp.89 – 135.

Kluemper, D. H., Little, L. M., and DeGroot, T. (2009) 'State or trait: effects of state optimism on job-related outcomes', *Journal of Organizational Behavior*, Vol.30, No. 2, pp. 209-231.

Liden R.C. and Maslyn J.M. (1998) 'Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development', *Journal of Management*. Vol. 24, No. 1, pp. 43-72.

Martin, R., Guillaume, Y., Thomas, G., Lee, A. and Epitropaki, O. (2015) 'Leader-Member Exchange (LMX) and Performance: A Meta-Analytic Review', *Personnel Psychology*, pp.1-55.

Prieto, L.L., Soria, M.S., Martínez, I. and Schaufeli, W. (2008) 'Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time', *Psicothema*, Vol. 20, No. 3, pp. 354-360.

Rus, D. (2013) 'Leading for Engagement and Performance', *European Work and Organizational Psychology in Practice*, Vol. 5, pp. 26-30.

Shifren, K. and Hooker, K. (1995) 'Stability and change in optimism: A study among spouse caregivers', *Experimental Aging Research*, Vol. 21, No. 1, pp. 59-76.

Xanthopoulou, D., Bakker, A. B., Demerouti, E. and Schaufeli, W. B. (2007) 'The role of personal resources in the job demands-resources model', *International Journal of Stress Management*, Vol. 14, pp. 121–141.

Youssef-Morgan, C. M. and Luthans, F. (2013) 'Positive leadership: Meaning and application across cultures', *Organizational Dynamics*, Vol. 42, No. 3, pp.198-208.

CPS Paper 2
Methodology Paper | DBA | Class of 2017

**The Influence of Leader Member Exchange on Employee
Engagement and the Moderating Role of Optimism: A
Methodology**

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Professional Doctorate in Business Administration

Abstract

This paper presents a methodology for the research study examining the role of Leader Member Exchange (LMX) in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training Sector. Fostering employee engagement is of significant interest to FET organisational leaders, as they seek a competitive advantage in the sector. The outcomes of this study will contribute to an enhanced understanding of the ways in which leaders can influence employees' engagement, which will inform leadership and employee practice in context. This is the first study of LMX as a predictor of employee engagement in the FET sector and the first to examine the independent influence of each of the sub dimensions of the construct. It is also the first study to examine optimism as a moderator in this context, thus making a key contribution to LMX theory. The research variables and hypotheses under examination are presented, in conjunction with the research approach and a rationale for its selection. The operational elements of the data collection and sampling strategy and the actions to mitigate against limitations are discussed.

Keywords: Methodology, Employee Engagement, Leader Member Exchange, Optimism, Positivist, Quantitative, Data Collection, Sampling

1. Introduction

CPS Paper 1 presented a conceptual review on the Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector. Preface 2 presented a rationale for the adjustment of the study setting into the Further Education and Training Sector and the refinement of the research title to “The Role of Leader Member Exchange (LMX) in Influencing Employee Engagement and the Moderating Role of Optimism, in the Irish Further Education and Training Sector.” Employee engagement is confirmed as a strategic imperative for the Irish further education and training (FET) sector² based on the needs of the sector and the significant socio economic benefits linked to employee engagement. The aim of this research study is to illuminate leaders understanding of their influence on employee engagement through the quality of the leader member exchange relationship and the moderating role played by employee optimism. For the purpose of clarity for this study, a number of research variables were identified and defined as summarised in Table 1.

Table 1: Definitions of research variables

Construct	Definition
<i>Employee Engagement</i>	A “positive, fulfilling, work related state of mind, characterised by vigor, dedication and absorption” (Schaufeli, 2002: 74)
<i>Leader Member Exchange</i>	A taxonomy of leadership incorporating the leader; the follower and the relationship between the two (Graen and Uhl Bien, 1995) containing sub dimensions of affect, loyalty, contribution and professional respect
<i>Optimism</i>	A psychological resource, defined as, “the current expectancy that positive outcomes will occur in the future.” (Shifren and Hooker ,1995; p. 61)

1.1 Study Objectives

In order to realise the aims of the study, objectives were developed into hypotheses originally presented in CPS Paper 1. These were refined in Preface 2 and presented on a Conceptual Framework. The finalised hypotheses under examination for this study are summarised below:

² FET is delivered by the 16 Education and Training Boards in Ireland who have a statutory remit to provide education for young people and adults

1.1.1 LMX Quality as a predictor of Employee Engagement

LMX Quality is proposed as a predictor of employee engagement. This study will examine overall LMX quality as a predictor of employee engagement and then, in alignment to calls in the literature, it will examine each of the sub dimensions as independent variables rather than an exclusive focus on LMX as one higher order factor (Martin *et al.*, 2015).

Table 2: Hypotheses 1A-1E

Hypothesis 1A	Overall LMX quality predicts employee engagement
Hypothesis 1B	Quality of affect predicts employee engagement
Hypothesis 1C	Quality of loyalty predicts employee engagement
Hypothesis 1D	Quality of contribution predicts employee engagement
Hypothesis 1E	Quality of professional respect predicts employee engagement

1.1.2 Optimism as a moderator between LMX and employee engagement

Optimism can “affect the nature of the relationship between” LMX and employee engagement and as such is proposed as a moderating variable in this study. (Howell *et al.*, 1986, p. 89). As a moderator, optimism impacts the relationship in two different ways; firstly optimism may act as a “neutralising moderator” in that it may help employees to offset the negative effects of low LMX quality on employee engagement. Optimism may also act as an “enhancer” strengthening the high quality LMX relationships thus leading to higher levels of engagement. (Howell *et al.*, 1986, p. 89) The moderating roles of optimism are outlined in Table 3 below:

Table 3: Hypotheses 2 – 3

Hypothesis 2	Optimism can offset the negative effects of poor LMX quality on employee engagement
Hypothesis 3	Optimism can boost the LMX relationship quality and lead to increased employee engagement

1.2 Paper Outline

This paper aims to build on the work to date, by presenting a methodology for this study. To achieve this purpose, section two discusses the research approach and methodology selected to underpin this study and a rationale for its selection. Section three discusses the selected data collection instrument and its design. Scales successfully used to gather data in prior research studies are considered and their suitability for this study is assessed. A summary of those that will be used to collect the data for this study is provided. Section four focusses on

the practicalities of administering the questionnaire, the population sample under study, the sampling strategy that will be used to select the participants and how the survey will be distributed and managed. Ethical issues associated with the methodology are identified and plans to mitigate against them are outlined. The limitations of the approach selected are identified in conjunction with the ways in which these can be minimised. Section five outlines the plans to analyse the data once collected. This paper concludes with a summary of the next stages in this research study.

2. Selected Research Approach and Methodology

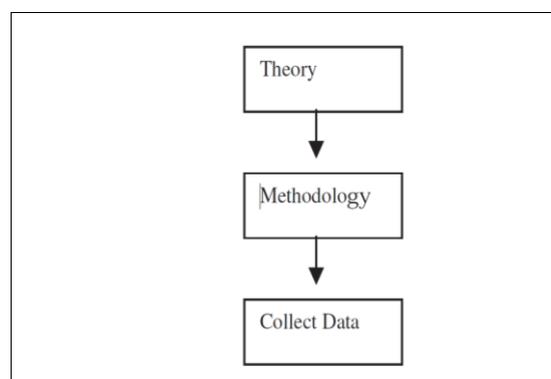
This section introduces the research approach and methodology selected to investigate the hypotheses outlined in Section 1 of this paper and discusses the underpinning research paradigm.

2.1 A Deductive Approach

In this study, I am adopting a deductive research approach, depicted by Balnaves and Caputi (2001) as having three stages in Figure 1 below. Stage 1 of this approach began in CPS Paper 1 and Preface 2 with the development of a literature review, which was refined into hypotheses depicting the influence of independent variables on dependent variables and moderating variables.

Stage 2 is the subject of this paper in which I present the methodology and selected techniques determined as most appropriate to collect and analyse the data driven by the goal and purpose of the study, as informed by the hypotheses. I intend to address stage three in CPS Paper 3 and 4 in which I will present the findings from the data collection and analysis.

Figure 1: Deductive Approach



Source: Balnaves and Caputi, 2001, p.104

A quantitative research data collection technique, grounded in a positivistic paradigm is selected as being most appropriate for this study. The rationale for this decision is twofold. Firstly such an approach and methodology is aligned with those that have proven effective in prior studies predicting employee outcomes from LMX. In addition, this approach conforms to Edmonson and McManus' concept of 'methodological fit' for mature theories (2007).

2.1.1 Prior LMX Studies

Baruch and Holtom (2008) note that the majority of research in management and behavioural science use quantitative methods and Antonakis *et al.*, suggest that such methods ought to be used when measuring phenomenon, testing hypotheses and “when generalizations need to be made that are beyond chance occurrences” (2004, p. 54). A review of prior studies examining LMX as a predictor of employee outcomes, from 2005 to date, (Table 4) highlights the consistency and relevance of a quantitative approach, grounded in positivism, using survey questionnaires as a data collection technique.

Table 4: Research Approaches in Prior Studies on LMX as a Predictor of Employee Outcomes

Author	Year	Outcome	Approach	Technique	Analysis
Breevaart, Bakker, Demerouti and Van den Heuvel	2015	Job Performance	Positivist Theory testing	Online Questionnaire	SEM
Burch and Guarana	2014	Follower Engagement OCB and Turnover Intentions	Positivist Theory Testing	Online Questionnaire	SEM using AMOS 19
Buch, Kuvaas and Dysvik	2014	Follower Work Effort	Positivist Theory Testing	Online survey	Hierarchical Linear Modelling
Harris, Ning and Kirkman	2014	OCB and turnover intention	Positivist Theory Testing	Questionnaire	Hierarchical Linear Modelling
Zhang, Wang and Shi	2012	Job Satisfaction, Effective Commitment and Performance	Positivist Theory Testing	Questionnaire	Cross level polynomial regressions
Walumbwa, Cropanzano and Goldman	2011	Effective Work Behaviours	Positivist Theory Testing	Questionnaire	SEM
Huang, Chan, Lam and Nan	2010	Burnout and work performance	Positivist Theory Testing	Questionnaire	Regression Analysis
Harris, Wheeler, Kacmar	2009	Job satisfaction,	Positivist Theory Testing	Questionnaire	Hierarchical regression

		turnover intentions and performance			
Atwater and Carmeli	2009	Energy and Involvement in Creative work		Survey 2 points in time	SEM and regression analysis
Wang, Law and Chen	2008	Employee Performance and Work Outcomes	Positivist Theory Testing	Questionnaire	SEM
Harris, Harris and Eplion	2007	Job Satisfaction, Organisational Feedback and Supervisor Feedback	Theory Testing	Questionnaire	Regression Analysis
Chen, Lam and Zhong	2007	Negative Feedback as a mediator between LMX and obj./subj. in-role performance	Theory Testing	Questionnaire	Hierarchical multilevel analysis
Bhal	2006	2 dimensions of LMX on OCB and mediating impact of justice		Questionnaire	Regression and mediation analysis
Wang, Law, Hackett, Wang and Chen	2005	Followers task performance and OCB	Theory Testing	Questionnaire	Regression and mediation Analysis

2.1.2 The Archetype of Methodological Fit

Edmonson and McManus (2007) discuss nascent, intermediate and mature theory as the three theory research archetypes worthy of consideration in determining the methodological fit of a research study. They suggest that each classification of the archetypes under study makes a significantly different research contribution, determined by its unique research goals and questions and as such it is necessary to use different approaches to collect and analyse the relevant data.

The theoretical contribution of nascent theory tends to be suggestive and invite further research in the area, as it proposes “tentative answers to novel questions” (2007, 1155). The constructs under study are new and data collection methodologies are mainly qualitative. Intermediate theories suggest links between existing and new constructs, making a provisional theoretical contribution. Mixed data collection methodologies are generally used to approach an intermediate archetype. Mature, theories are described by Edmonson and

McManus as having “well developed constructs and models that have been studied over time” (2007, p.1158), involving hypotheses “that may add specificity, new mechanisms or new boundaries to existing theories” (2007, p.1160). LMX is a mature theory and the hypotheses outlined in Section 1, of this paper propose relationships between these well-established constructs. The goal of the data analysis is to test the hypothesised theory.

The table below is an adaptation of Edmonson and McManus’ description of the mature archetype of methodological fit, which illustrates the alignment of the research and methodological approaches in this study to those recommended for mature theory.

Table 5: The Mature Archetype of Methodological Fit in Research

Area	Recommended Approach	This Study
“Research Questions”	“Focused questions and/or hypotheses relating existing constructs”	H1a-H1e, H2-H4 (Figure 6, p. 10)
“Types of Data Collected”	“Quantitative Data: focused measures where extent or amount is meaningful”	Quantitative Data
“Data Collection Methods”	“Surveys; interviews or observations designed to be systematically coded and quantified; obtaining data from field sites that measure the extent or amount of salient constructs”	Web based survey designed to be systematically coded and quantified
“Constructs and Measures”	“Typically relying heavily on existing constructs and measures”	Relying on existing constructs of employee engagement, LMX and optimism (See Section 2)
“Goal of Data Analyses”	“Formal hypothesis testing”	Testing hypotheses H1a-H1e, H2-H4 (Figure 6, p. 10)
“Data Analysis Methods”	“Statistical inference, standard statistical analyses”	SPSS and SEM
“Theoretical Contribution”	“A supported theory that may add specificity, new mechanisms or new boundaries to existing theories”	Adding LMX Quality as a predictor of Employee Engagement and adding optimism as a moderator between LMX Quality and Employee Engagement

Adapted from Edmonson and McManus, 2007 p. 1160

2. 2 A Positivist Paradigm

The use of a survey to collect data is grounded in a positivist paradigm and from this paradigmatic perspective, I will carry out the research working from the assumption that truth is ‘out there’, existing independently of me and my perceptions, (Hudson and Ozanne, 1998;

Adcroft and Willis, 2008). The aspects of positivism that will influence my approach to data collection include adopting a “passive, neutral role”, (Doolin 1996, p. 22) to research at a distance or “inquire from the outside” (Evered and Louis, 1981; Adcroft and Willis, 1998) in order to examine LMX as a predictor of employee engagement and the moderating role of optimism.

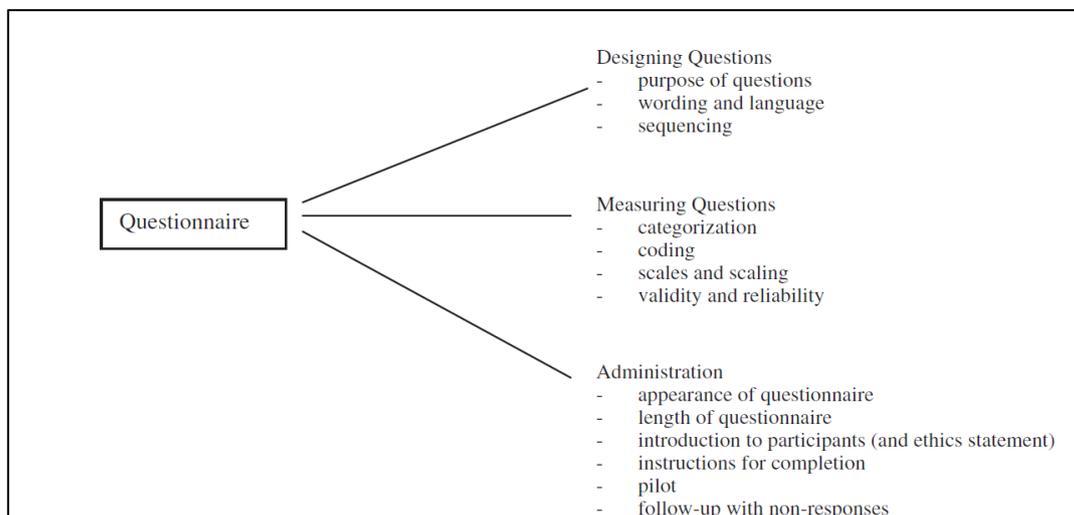
3. Data Collection Technique: Survey Based Questionnaire

A survey based questionnaire will be used to facilitate data collection from respondents concerning who they are, what they believe in relation to the quality of their relationship with their immediate manager, their engagement in work and their optimism and how they behave (Balnaves and Caputi, 2001, p. 76).

3.1. Questionnaire Design

The questionnaire design is informed by Balnaves and Caputi’s, (2001) Checklist for Questionnaire Design addressing the three areas of: designing questions, measuring questions and administration. (Figure 2)

Figure 2: Checklist for Questionnaire Design



Source: Balnaves and Caputi, 2001, p. 88

3.1.1 Existing Measures for Designing and Measuring Questions

There are a number of predesigned and tested survey tools that have proven effective to measure the three constructs of employee engagement, optimism and LMX in prior studies. A discussion is offered on some of the most popular measures, relating to each of the three

constructs under examination in the study. The outcome is the selection of a robust measure for each construct, based on internal consistencies, validity and retest reliability. These scales are selected to design a questionnaire that will be most suited to eliciting the data required for this study.

3.1.2 Employee Engagement Measures

A review of the literature on employee engagement highlights the use of a number of scales and techniques to measure the variable. The Utrecht Work Engagement Scale (UWES); The Oldenburg Burnout Inventory (OLBI) and the Q12 are three scales that dominate the literature.

The Oldenburg Burnout Inventory

Although originally designed to measure burnout the OLBI, (Demerouti and Bakker, 2007) has been used to measure work engagement. This tool assesses exhaustion and dedication, the two dimensions of burnout and recoded version, framing those negative items as vigor and dedication has been to measure engagement. Studies have clarified its factorial validity (Demerouti *et al.*, 2001; 2002; Halbesleben and Demerouti, 2005) and confirmed its good psychometric properties (Bakker *et al.*, 2008; Demerouti and Bakker, 2008). A limitation of this scale for this study is that it does not contain a measure of absorption which is an aspect of the engagement construct.

Gallop Q12

Designed in 1998, The Gallop Q12 was developed to support managers to implement change in their work setting, and as such is a management tool. Schaufeli and Bakker (2004) and Macey and Schneider (2008) suggest that the Q12 measure is not a measure of employee engagement but rather addresses the antecedents of engagement, in that it measures the perceived level of resources in a person's job. Schaufeli and Bakker also suggest that the concept of employee engagement measured by the Q12 is "virtually identical with overall job satisfaction". (2004, p.16) The limitations of this measure mean that it is not suitable to measure engagement in this study.

Utrecht Work Engagement Scale

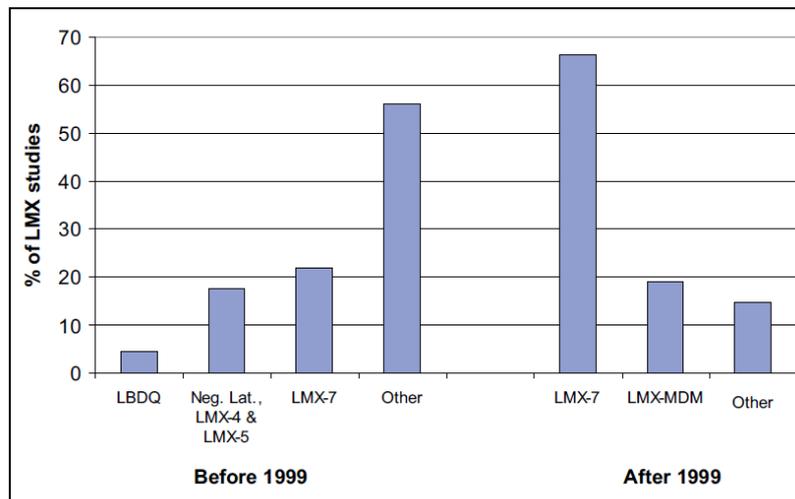
The Utrecht Work Engagement Scale (UWES), (Schaufeli and Bakker, 2003) has been utilised to effectively research the construct of Employee Engagement adopting a 17, 15 or 9 subscale. The UWES-9 (Appendix 2) is a nine item version of this measurement scale, with three items addressing each of the Employee Engagement dimensions of vigor, "When I get

up in the morning, I feel like going to work”, dedication “I am enthusiastic about my job “and absorption “I am immersed in my work”. Each aspect is scored on a 7-point scale ranging from 0 (“never”) to 6 (“always”). Tests (Schaufeli Bakker 2003; Schaufeli, Bakker and Salanova, 2006) confirm the UWES-9 as a measure with validity and reliability with both good internal consistencies and retest reliability (stability) based on Cronbach’s Alpha (.90). The survey instrument takes approximately ten minutes to complete and in an effort to minimise the possibility of answering bias the term Employee Engagement is generally not used as part of the survey title, instead the title [UWES] “Work and Wellbeing Survey” is used (Schaufeli and Bakker, 2003). This scale has been selected as the most appropriate to measure engagement in this study.

3.1.3 Leader Member Exchange Measures

A review of the literature on LMX measures indicates little consensus on measurement techniques throughout the 1990’s. Schriesheim’s (1999) meta- analysis identified the use of at least twelve different measurement scales comprising of one, four, five, six, seven, eight, twelve, thirteen, fourteen, sixteen, seventeen and twenty four items attributing this in part to “the need for improved theorization about LMX” (p. 102). In their meta -analysis Joseph *et al.*, (2011) found that the two approaches to LMX measurement dominating the literature since 1999 are the LMX-7 (Scandura and Graen, 1984) and the LMX-MDM, (Liden and Maslyn, 1998), (Figure 4). They attribute this to the influence of the meta-analyses carried out by Gerstner and Day, (1997) Schriesheim *et al.*, (1999) and the introduction of the LMX-MDM.

Figure 3: Use of LMX Measures before and after 1999



Source Joseph et al., 2011, p.93

LMX -7

Earlier studies on LMX conceptualised the construct as being unidimensional and in their meta –analysis, Gerstner and Day (1997) recommended the use of the LMX -7 measurement scale (Scandura and Graen, 1984). This seven item scale focuses on the work based relationship between the leader and the employee addressing aspects including the effectiveness of the working relationship, understanding of job problems and needs, recognition of potential, and willingness to support the other. This scale was confirmed to be the scale with the soundest psychometric properties at the time. This measure is limited in its application to this study as it focuses on LMX as a unidimensional construct and focuses only on the work based relationship.

LMX-MDM

Liden and Maslyn (1998) developed a measurement instrument with capacity to measure LMX as a multidimensional construct. The LMX- MDM is a 12 item scale with four sub scales which measures the quality of the leader-member exchange based on the dimensions of affect, contribution, loyalty and professional respect. This scale can be used to effectively measure hypotheses 1a-1e, predicting the influence of LMX as a unified construct on employee engagement and predicting the influence of each of the sub dimensions on employee engagement.

3.1.4 Optimism Measures

A review of the literature on optimism reveals the dominance of two scales to measure the construct, the Life Orientation Test and the Generalised Expectancy of Success Scale. Both are considered for the purposes of this study below:

Life Orientation Test - Revised

The Life Orientation Test (LOT-R) is a ten item measure of optimism versus pessimism (Scheier, Carver and Bridges, 1994) and is a revised version of the original 12 item LOT (Scheier and Carver, 1992). Three items measure optimism, 3, measure pessimism, and 4 items serve as fillers. The respondents are asked to rate each items such as “In uncertain times, I usually expect the best” and “It's easy for me to relax”, on a 4-point scale: “0 = strongly disagree to 4= strongly agree”. This scale has internal consistency with a Cronbach’s alpha of .78.

Generalised Expectancy of Success Scale- Revised

The Revised Generalised Expectancy of Success Scale (GESS-R) is a 25-item measure of optimism. Respondents are asked to rate items such as “achieve recognition in my profession”, “attain the career goals that I set for myself”, on a scale of “1= highly improbable to 5 =highly probable”. It is considered to have acceptable reliability over time and a high level of internal consistency (.92), good discriminant and convergent validity (Hale *et al.*, 1992). The GESS-R has generally been used to measure trait optimism however this study, views optimism as a malleable state. Previous studies have successfully used the GESS-R to ask survey respondents to answer on the basis of their current thoughts and feelings about the future (Kluemper *et al.*, 2009; Higgins *et al.*, 2010) and measure the construct as a state. The survey questions are preceded by “In the future I expect that I will”. The GESS-R has a higher Cronbach’s Alpha than the LOT-R and has “a low correlation with social desirability” (Mearns 1989 in Hale *et al.*, 1992). The GESS-R is selected to measure optimism in this study and takes approximately 5-10 minutes to complete.

3.1.5 Summary of Selected Measures

Table 6 provides a summary of each measure selected for inclusion in this questionnaire. Each has a Cronbach alpha's above the recommended level of .75 (Hair *et al.*, 1995)

Table 6: Summary of measures selected for this questionnaire

Construct	Definition	Measure	Consistency and Reliability	Time
<i>Employee Engagement</i>	A “positive, fulfilling, work related state of mind, characterised by vigor, dedication and absorption” (Schaufeli, 2002: 74)	9 Item UWES-9 The Utrecht Work Engagement Scale (Schaufeli and Bakker, 2003)	Reliability (.90)	10 Min.
<i>Leader Member Exchange</i>	A taxonomy of leadership incorporating the leader; the follower and the relationship between the two (Graen and Uhl Bien, 1995) containing sub dimensions of affect, loyalty and contribution	12 Item LMX-MDM (Liden and Maslyn, 1998)	Reliability (.90)	
<i>Optimism</i>	“the current expectancy that positive outcomes will occur in the future.” (Shifren and Hooker ,1995; p. 61)	25 item GESS-R	Reliability (.92)	5-10 Min.

The survey will be separated into two questionnaires. Questionnaire 1 will focus on the LMX relationship while Questionnaire 2 will examine Optimism and Employee Engagement. Each will be administered to employees in the target organisations, with a time lag of one month in between. Demographic questions including age, gender, education level, type of work role, and length of time in work role will precede the measurement scales selected for inclusion in the questionnaires.

4. Administration

This section of the paper considers the practicalities of administering the questionnaire and discusses the population sample under study; the practicalities of ensuring that the data collection methods have regard to ethics, best practice and have potential to yield the best possible response rates. The plans for data analysis are outlined.

4.1 Population Sample

The research population are employees in the Irish FET sector who work in Solas, the new further and education authority in Ireland, established under the Further Education and Training Act (2013). No study of this nature has been undertaken in this sector. The survey wishes to gather their views and opinions on the quality of their relationships with their immediate manager, their engagement in work, and their optimism. As it is not possible to survey the entire research population a non- probability, purposive sampling strategy will be used to collect data from a representative sample of this research population. This approach will facilitate the elimination of those people who are not suited to answer the research question, and ensure the inclusion of those who are best placed to respond. The purposeful sampling approach is an effective option from both a cost and time perspective.

The research will focus on the 16 ETB's in Ireland (Appendix 5). The survey will target employees working in centres and on programmes in each ETB that provide delivery and support of adult, further education and training provision. Specifically, the survey will be targeted at employees from Vocational Training Opportunities Scheme, Back to Education Initiative, Adult Literacy Schemes Youthreach, Adult Educational Guidance Service and former FAS Training Centres who are working in excess of 10 hours per week. Roles will include administrators, information officers, guidance counsellors, trainers, resource workers, co-ordinators, centre managers and centre directors. Employees in night classes and Community Education provision will not be included, as this employment is very casual and as such there tends to be limited interaction between these employees and the managers. The sample will be restricted to those employees who have been working in their role for at least one year and as such have had the time to develop a working relationship with their manager. The parameters for sample selection are based on this researcher's "own knowledge of the population, its elements, and the nature of [this study's] research aims" (Babbie, 1990, p. 97).

4.2 Web Based Survey

It is intended to administer the questionnaire, using web based survey tool, Survey Monkey. This is a cost effective approach and it is hoped that it will result in a fast turnaround of the data which will be collected in a format that lends itself to analysis. Although Baruch and Holtom, note that this approach results "in response rates as high as or higher than traditional mail methodology for a questionnaire (2008, p.1139), Nulty suggests that the web based approach is "much less likely to achieve response rates as high as surveys administered on paper" (2008, p. 302).

4.2.1. Strategies to Promote Participation

The literature on web based surveys suggests a number of strategies that have proven successful in yielding effective response rates when using a web based approach which will be applied in the administration of this survey.

Informing Stakeholders and Potential Participants

Potential survey respondents will be made aware of the survey and the purpose of the study in a number of ways. A letter of introduction outlining the purpose and aim of the study and the contribution that it will make to the sector will be sent to Education and Training Boards Ireland (ETBI), the Chief Executives, Adult Education Organisers (AEO's); VTOS Co-ordinators; ALO's; Youthreach Co-ordinators; BTEI Co-ordinators and Centre Managers in each of the sixteen Education and Training Boards (ETBs). In parallel, groups representing the FET sector including National Adult Literacy Agency (NALA), the Adult Literacy Organisers Association (ALOA) and the Adult Education Officers Association (AEOA) will be contacted and asked to promote the study on their websites.

Pre testing Questionnaire

In an effort to ensure the survey is user friendly, it will be pre tested with colleagues. This will ensure that it is suited to the purposes of the study. Pilot respondents will be asked to comment on the structure, clarity and presentation of the questions and the length of the survey.

Monitoring Non Responses

Responses and non- responses will be monitored and reminder E Mails will be sent to those who do not participate initially.

4.3 Ethical Issues

The approach to ethical considerations in this study is consistent with the view that ethics are best managed as an integral part of all management research studies as opposed to being on the periphery or an exception to the norm (Lee and Renzetti, 1990; Bell and Bryman, 2007). Participation in this study is voluntary and Salant and Dillman's (1994) principle of informed consent will be applied. The data generated from this study will be delicate in its nature as it pertains to opinions and views of employees in the FET sector about their managers and it is possible that some survey respondents may also be students in the Literacy Development Centre in Waterford Institute of Technology, a project managed by the researcher.

Anonymity and confidentiality will be assured throughout the research process. Each individual respondent will be assigned a case number and then matched with the case number for the second stage survey. Individual responses will not be identifiable and all data collected will be collated and presented in aggregate. All efforts will be made to ensure that there is no harm, wrongdoing or risk to the research participants involved in this study. As manager of a project which supports the FET sector the researcher was conscious to protect her own professional reputation and minimise any potential for harm, wrongdoing or risk in managing the study. An Ethics Statement will be prepared as part of next stage of survey development and will be circulated to all prospective participants.

4.4 Limitations

There are a number of challenges involved in using this purposive sampling strategy, including sampling bias, non-response and coverage error. Efforts will be made to ensure that the responses received are aligned with Dillman's (2007) Formula (Appendix 4) to determine suitable sampling sizes, thus ensuring that the needs of this investigation are satisfied (Hussey and Hussey, 1997).

All of the variable measures in this survey are reliant on self-report data and two potential difficulties associated with this approach are Common Method Bias and Social Desirability Bias. While Spector (1994) suggests that such problems may be overrated and that the use of validated scales should mitigate against the difficulties, in an effort to take account of potential risks this survey is deliberately being administered as two questionnaires in two separate stages with a time lag of one month in between.

5. Data Analysis

Following the data collection stage, analysis will begin. Items from the demographic data will be assessed as controlling variables. Optimism will be analysed to ensure that it is not closely correlated to employee engagement. In line with the mature theory archetype and methodological fit (Table 5) Structural Equation Modelling (SEM) will be used to test the hypotheses.

6. Conclusion

This paper has built on the research concepts presented in CPS Paper 1 and Preface 1 by presenting the methodology selected for this study and a rationale for its suitability. The operational elements involved in using a survey based questionnaire to gather the data from

employees in the FET sector to test the hypotheses have been presented. In order to progress this research to the next stage, further consideration will be given to a number of matters including: calculating the sample size to ensure that coverage, non-response, measurement and sampling error are mitigated against based on Dillman's Formula (2007) and the development of an ethics statement for the study. Subsequent papers in this series will address these matters, design the questionnaires discuss the data collection and analysis and present the research findings.

References

- Adcroft, A. and Willis, R. (2008) 'A snapshot of strategy research 2002-2006', *Journal of Management History*, Vol. 14, No. 4, pp. 313-33.
- Antonakis, J., Schriesheim, C. A., Donovan, J. A., Gopalakrishna-Pillai, K., Pellegrini, E. K., and Rossomme, J. L. (2004) 'Methods for studying leadership', in J. Antonakis, A. Cianciolo, and R.J. Sternberg (eds), *The Nature of Leadership*, Thousand Oaks: Sage Publications, pp.48-70.
- Atwater, L. and Carmeli, A. (2009) 'Leader-member exchange, feelings of energy and involvement in creative work', *The Leadership Quarterly*, Vol. 20, pp. 264-275.
- Babbie, E. (1990) *Survey Research Methods*, 2nd Edn. California: Wadsworth Publishing Company.
- Bakker, A.B., Schaufeli, W.B., Leiter, M.P. and Taris, T.W. (2008) 'Work engagement: An emerging concept in occupational health psychology', *Work and Stress*, Vol. 22, pp. 187-200.
- Balnaves M. and Caputi, P. (2001) *Introduction to Quantitative Research Methods. An Investigative Approach*, Sage: London.
- Baruch, Y. and Holtom, B.C. (2008) 'Survey response rate levels and trends in organizational research', *Human Relations*, Vol. 61, No. 8, pp. 1139-1160.
- Bell, E. and Bryman, A. (2007) 'The Ethics of Management Research: An Exploratory Content Analysis', *British Journal of Management*, Vol. 18, pp. 63-77.
- Bhal, K.T. (2006) 'LMX-citizenship behavior relationship: justice as a mediator', *Leadership and Organization Development Journal*, Vol, 27, No. 2, pp. 106-117.
- Breevaart, K. Bakker, A.B. Demerouti and Van den Heuvel. M. (2015) 'Leader-member exchange, work engagement and job performance', *Journal of Managerial Psychology*, Vol. 30, pp.753-770.
- Buch, R., Kuvaas, B., Dysvik, A. and Schyns, B. (2014) 'If and when social and economic leader-member exchange relationships predict follower work effort: The moderating role of work motivation', *Leadership and Organization Development Journal*, Vol. 35, No. 8, pp.725 - 73.
- Burch, T.C. and Guarana, C.L. (2014) 'The Comparative Influences of Transformational Leadership and Leader-Member Exchange on Follower Engagement', *Journal of Leadership Studies*, Vol. 8, No.3, pp. 6-25.

Chen, Z., Zhong, J.A. and Lam, W. (2007) 'Leader–Member Exchange and Member Performance: A New Look at Individual-Level Negative Feedback-Seeking Behavior and Team-Level Empowerment Climate', *Journal of Applied Psychology*, Vol. 92, No. 1, 202–212.

Department of Education and Skills (2013) *Further Education and Training Act 2013*, Dublin: Government Publications Office

Demerouti, E. and Bakker, A. (2007) 'The Oldenburg Burnout Inventory: A Good Alternative to Measure Burnout (and Engagement)', Source: Utrecht University.

Demerouti, E., Bakker, A.B., De Jonge, J., Janssen P.P.M. and Schaufeli W.B. (2001) 'Burnout and Engagement at Work as a Function of Demands and Control', *Scandinavian Journal of Work Environment and Health*, Vol. 27, pp. 279-286.

Demerouti, E., Bakker, A.B., Nachreiner, F. and Ebbinghaus, M. (2002) 'From mental strain to burnout', *European Journal of Work and Organizational Psychology*, Vol. 11, pp. 423-441.

Doolin, B. (1996) 'Alternative views of case research in information systems', *Australasian Journal of Information Systems*, Vol. 3 No. 2, pp. 21-29.

Edmondson, A. C., and S. E. McManus (2007) 'Methodological Fit in Management Field Research', *Academy of Management Review* Vol. 32, No. 4, pp. 1155-1179.

Evered, R. and Louis, M. R. (1981) 'Alternative perspectives in the organisational sciences: 'enquiry from the inside' and 'enquiry from the outside'', *Academy of Management Review*, Vol. 6, No. 3, pp. 385-395.

Gerstner C.R. and Day, D.V. (1997) 'Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues', *Journal of Applied Psychology*, Vol. 82, No.6, pp. 827-844.

Graen, G.B. and Uhl Bien, M. (1995) 'Relationship-Based Approach to Leadership Development of Leader-Member-Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Domain Perspective', *Leadership Quarterly*, Vol. 6, No.2, pp. 219-247.

Hair, J. F. J., Anderson, R. E., Tatham, R. L., and Black, W. C. (1995) '*Multivariate data analysis*', 4th Edn. Saddle River, NJ: Prentice Hall.

Hale, W.D., Fiedler, L.R. and Cochran, C.D. (1992) 'The Revised Generalized Expectancy of Success Scale: A Validity and Reliability Study', *Journal of Clinical Psychology*, Vol 48, No. 4, pp. 516-521.

- Halbesleben, J.R.B. and Demerouti, E. (2005) 'The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg burnout inventory', *Work and Stress*, Vol. 19, No.3, pp. 208-220.
- Harris, T.B., Ning, L. and Kirkman, B.L. (2014) 'Leader-member exchange (LMX) in context: How LMX differentiation and LMX relational separation attenuate LMX's influence on OCB and turnover intention', *The Leadership Quarterly*, Vol. 25, pp. 314-328.
- Harris, K.J., Wheeler, A.R., and Kacmar, K.M. (2009) 'Leader-member exchange and empowerment: direct and interactive effects on job satisfaction, turnover intentions, and performance', *The Leadership Quarterly*, Vol. 20, pp. 371-382.
- Harris, K.J., Harris, R.B. and Eplion, D.M. (2007) 'Personality, Leader-Member Exchanges, and Work Outcomes', *Institute of Behavioral and Applied Management*, Vol. 8, pp.92-107.
- Higgins, M., Dobrow, S.R. and Roloff, K. S. (2010) 'Optimism and the boundaryless career: The role of developmental relationships', *Journal of Organizational Behavior*, Vol. 31, No.5, pp. 749-769.
- Howell, J.P., Dorfman, P.W. and Kerr, S (1986) 'Moderator Variables in Leadership Research', *The Academy of Management Review*, Vol. 11, No. 1, pp. 88-102.
- Huang, X., Chan, S.C., Lam, W. and Nan, X. (2010) 'The joint effect of leader-member exchange and emotional intelligence on burnout and work performance in call centers in China', *The International Journal of Human Resource Management*, Vol. 21, No. 7, pp.1124-1144.
- Hudson, L.A., and Ozanne, J.L. (1998) 'Alternative Ways of Seeking Knowledge in Consumer Research', *Journal of Consumer Research*, Vol. 14, No. 4, pp. 508-52.
- Joseph, D.L., Newman, D.A. and Sin, H.P. (2011) 'Leader-Member Exchange (LMX) Measurement: Evidence for Consensus, Construct Breadth, and Discriminant Validity', in Donald D. Bergh, David J. Ketchen (eds.) *Building Methodological Bridges (Research Methodology in Strategy and Management, Volume 6)* Emerald Group Publishing Limited, pp.89 - 135.
- Kluemper, D. H., Little, L. M. and DeGroot, T. (2009) 'State or trait: effects of state optimism on job-related outcomes', *Journal of Organizational Behavior*, Vol.30, No. 2, pp. 209-231.
- Lee, R.M. and Renzetti, C.M. (1990) 'The problems of researching sensitive topic', *American Behavioral Scientist*, Vol. 33, No. 5, pp. 510-5128.

- Liden R.C. and Maslyn J.M, (1998) 'Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development', *Journal of Management*. Vol. 24, No. 1, pp. 43-72.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A. and Epitropaki, O. (2015) 'Leader-Member Exchange (LMX) and Performance: A Meta-Analytic Review', *Personnel Psychology*, pp.1-55.
- Nulty, D.D. (2008) 'The adequacy of response rates to online and paper surveys: what can be done?', *Assessment and Evaluation in Higher Education*, Vol. 33, No. 3, pp. 301–314.
- Salant, P. and Dillman, D.A. (1994) *How to Conduct Your Own Survey*. New York: Wiley and Sons.
- Scandura, T. and Graen, G.B. (1984) 'Moderating effects of initial leader-member exchange status on the effects of a leadership intervention', *Journal of Applied Psychology*, Vol. 69, pp. 428-436.
- Schaufeli, W.B., Bakker, A.B. and Salanova, M. (2006) 'The measurement of work engagement with a brief questionnaire: A cross-national study', *Educational and Psychological Measurement*, Vol. 66, pp. 701-716.
- Schaufeli, W.B. and Bakker, A.B. (2004) 'Job demands, job resources and their relationship with burnout and engagement: A multi-sample study', *Journal of Organizational Behavior*, Vol. 25, pp. 293-315.
- Schaufeli, W.B. and Bakker, A.B. (2003) 'The Utrecht Work Engagement Scale (UWES) Test Manual. *The Netherlands: Department of Social and Organizational Psychology*.
- Scheier, M. F. and Carver, C. S. (1992) 'Effects of optimism on psychological and physical well-being: The influence of generalized outcome expectancies', *Health Psychology*, Vol. 16, pp. 201–228.
- Scheier, M. F., Carver, C. S., and Bridges, M. W. (1994) 'Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test', *Journal of Personality and Social Psychology*, Vol. 67, No. 6, pp.1063-1078.
- Schriesheim, C. A.,Castro, S.L. and Cogiser, C.C. (1999) 'Leader-Member Exchange (LMX) Research: A Comprehensive Review of Theory, Measurement and Data Analytic Practices', *Leadership Quarterly*, Vol.10, No. 1, pp, 63-113.
- Shifren, K. and Hooker, K. (1995) 'Stability and change in optimism: A study among spouse caregivers', *Experimental Aging Research*, Vol. 21, No. 1, pp. 59-76.

Spector, P.E. (1994) 'Using self-report questionnaires in OB research: A comment on the use of controversial method', *Journal of Organizational Behaviour*, Vol. 15, pp. 385-392.

Wang, H., Law, K.S. and Chen, Z.X. (2008) 'Leader-member exchange, employee performance and work outcomes: An empirical study in the Chinese context', *International Journal of Human Resource Management*, Vol. 19, pp.1809-1824.

Wang, H., Law, K.S., Hackett, R.D., Wang D. and Chen, Z.X (2005) 'Leader Member Exchange as a Mediator of the Relationship between Transformational Leadership and Follower's Performance and Organisational Citizenship Behaviour', *The Academy of Management Journal*, Vol. 47, No. 3, pp. 420-432.

Walumbwa, F.O., Cropanzano, R. and Goldman, B.M. (2011) 'How leader-member exchange influences effective work behaviors: social exchange and internal-external efficacy perspectives', *Personal Psychology*, Vol. 64, pp. 739-770.

Zhang, Z., Wang, M. and Shi, J. (2012) 'Why (not) change? Effects of leader-follower congruence in proactive personality on LMX and work outcomes', *Academy of Management Journal*, Vol. 55, pp. 111-130.

Appendices

Appendix 1: Work and Well-being Survey

Work and Well-being Survey (UWES) ©

“The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the ‘0’ (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

<i>Never</i>	<i>Almost never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Often</i>	<i>Very often</i>	<i>Always</i>
	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
0	1	2	3	4	5	6

1. _____ At my work, I feel bursting with energy* (VII)
2. _____ At my job, I feel strong and vigorous (VI2)*
3. _____ I am enthusiastic about my job (DE2)*
4. _____ My job inspires me (DE3)*
5. _____ When I get up in the morning, I feel like going to work (VI3)*
6. _____ I feel happy when I am working intensely (AB3)*
7. _____ I am proud on the work that I do (DE4)*
8. _____ I am immersed in my work (AB4)*
9. _____ I get carried away when I’m working (AB5)*

* Shortened version (UWES-9); VI= vigor; DE = dedication; AB = absorption
 © Schaufeli and Bakker (2003). The Utrecht Work Engagement Scale is free for use for non-commercial scientific research. Commercial and/or non-scientific use is prohibited, unless previous written permission is granted by the authors”

Appendix 2: LMX-MDM

LMX-MDM

Subordinate perspective

Affect dimension

- (1) I like my manager very much as a person.
- (2) My manager is the kind of person one would like to have as a friend.
- (3) My manager is a lot of fun to work with.

Loyalty dimension

- (4) My manager defends my work actions to a superior, even without complete knowledge of the issue in question.
- (5) My manager would come to my defence if I were 'attacked' by others.
- (6) My manager would defend me to others in the organization if I made an honest mistake.

Contribution dimension

- (7) I do work for my manager that goes beyond what is specified in my job description.
- (8) I am willing to apply extra efforts, beyond those normally required, to meet my work goals.
- (9) I do not mind working my hardest for my manager

Professional respect

- (10) I am impressed with my manager's knowledge of his/her job.
- (11) I respect my manager's knowledge of and competence on the job.
- (12) I admire my manager's professional skills"

Appendix 3: GESS-R

GESS-R

“Items on the Revised Generalised Expectancy of Success Scale (GESS-R)”

In the future I expect that I will...

succeed at most things I try

be listened to when I speak

carry through my responsibilities successfully

Get the promotion I deserve

Have successful close personal relationships

Handle unexpected problems successfully

Make a good impression on people I meet for the first time

attain the career goals I set for myself

experience many failures in my life

have a positive influence on most of the people with whom I interact

be able to solve my own problems

acquire most of the things that are important to me

find that no matter how hard I try, things just don't turn out the way I would like

be a good judge of what it takes to get ahead

handle myself well in whatever situation I am in

reach my financial goals

have problems working with others

discover that the good in life outweighs the bad

be successful in my endeavours in the long run

be unable to accomplish my goals

be very successful working out my personal life

succeed in the projects I undertake

discover that my plans don't work out too well

achieve recognition in my profession

have rewarding intimate relationships”

Appendix 4: Dillman's Formula

“Dillman's Formula to estimate desirable sample sizes

$$N_s = \frac{(N_p) (p) (1-p)}{(N_p - 1)(B/C)^2 + (p) (1-p)}$$

where:

N_s = completed sample size needed (notation often used is n)

N_p = size of population (notation often used is N)

p = proportion expected to answer a certain way (50% or 0.5 is most conservative)

B = acceptable level of sampling error (0.05 = ±5%; 0.03 = ±3%)

C = Z statistic associate with confidence interval (1.645 = 90% confidence level;
1.960 = 95% confidence level; 2.576 = 99% confidence level)”

Appendix 5: ETB List for Purposeful Sample

Cavan and Monaghan ETB	Cork ETB
City of Dublin ETB	Donegal ETB
Dublin and Dunlaoghaire ETB	Galway and Roscommon ETB
Kerry ETB	Kildare and Wicklow ETB
Limerick and Clare ETB	Laois and Offaly ETB
Louth and Meath ETB	Longford and Westmeath ETB
Tipperary ETB	Mayo, Sligo and Leitrim ETB
Kilkenny and Carlow ETB	Waterford and Wexford ETB

Preface 3

Developments between CPS Paper 2 and CPS Paper 3

1. Introduction

The transition between examiner approval of CPS Paper 2 and the finalisation and approval of CPS Paper 3 necessitated two CPS Paper 3 presentations. At the first presentation (April 2016), the examiners recommended further work and more detailed analysis at Pilot Stage. They indicated that initial findings were required and recommended that I develop my knowledge and skills around the use of the statistical software packages, essential to the analysis in CPS Paper 4. It was considered that these elements were necessary prior to approval, to ensure that I proceeded to CPS Paper 4 with an enhanced and more robust quantitative study. I was allocated an additional internal supervisor to support this work.

1. Developments in CPS Paper 3

Over the months between the first and second presentation of CPS Paper 3, I used the feedback from the examination panel and worked with my supervisors to build on the previous work as follows:

- i) Collect new pilot data from a larger sample group
- ii) Present an approach to minimise potential for CMV
- iii) Using SPSS and Hayes Process Macro (agreed as more suited to the analysis than SEM as initially proposed) to analyse the data and presentation of:
 - a. Demographic Findings
 - b. Reliability of Scales
 - c. Hierarchical Linear Regression examining LMX as a Predictor of Employee Engagement
 - d. Hierarchical Linear Regression to Examine CMV Control of Counterbalancing Questionnaire
 - e. Initial analysis of optimism as a moderator of the LMX and employee engagement relationship
 - f. Initial analysis of optimism as a mediator of the LMX and employee engagement relationship

I addressed each of these in the revised CPS Paper 3, submitted the work in July 2016 and the paper as now presented was approved by the Examination Panel in August 2016.

CPS Paper 3
Survey Design Paper | DBA | Class of 2017

**The Influence of Leader Member Exchange on Employee
Engagement and the Moderating Role of Optimism: Survey
Design and Pilot Study**

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Professional Doctorate in Business Administration

Abstract

This paper presents the design of the survey instrument and pilot study for the overall research study, examining the role of Leader Member Exchange in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training (FET) Sector. The outcomes of this study will contribute to an enhanced understanding of the ways in which leaders can influence employees' engagement, which will inform leadership and employee practice in context. Pilot study data are analysed using SPSS, a statistical software package. Analysis of the Cronbach's Alpha confirm that the LMX MDM, UWES and GESS-R measurement scales and are valid and fit for purpose to measure the constructs of LMX, employee engagement and optimism. Analysis of descriptive statistics, split- group statistics and correlations reveal interesting relationships between the demographic variables and each of the three constructs. A hierarchical linear regression analysis reveals support for some hypothesised relationships between the constructs and suggests that optimism is contributing as a moderating or mediating variable. These findings bode well for the next stage of this study.

Keywords: Survey Design, Employee Engagement, Leader Member Exchange, Optimism, Pilot

1. Introduction

This paper is the third in a series of four cumulative papers in fulfilment of the DBA requirements. The first paper in this series presented a conceptual review on, ‘The Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector’ and a rationale to change the study context to the FET Sector and refine the study title was provided in Addendum Paper. 1. The second paper in this series focused on the methodology to examine “The Role of Leader Member Exchange (LMX) in Influencing Employee Engagement and the Moderating Role of Optimism, in the Irish Further Education and Training Sector” and offered a discussion on the selection of a deductive, quantitative approach and the use of a questionnaire for data collection.

This paper aims to build on the work to date by presenting the survey instrument design and pilot study. To achieve this purpose, section two of this paper addresses the design of the most appropriate pilot questionnaire to collect the data. This section presents the scales selected to measure the constructs of LMX, employee engagement and optimism and considers controls for common methods variance. Section three discusses the pilot study and addresses elements including pilot sample selection, ethics, and maximising response rates. The administration of the pilot study is presented, followed by an analysis of the findings and their implications for the full study. The paper concludes with a summary and an outline of the next stages in the research study.

2. Survey Design

The rationale for the selection of the questionnaire provided in CPS Paper 2 is grounded in its proven effectiveness as a data collection tool in prior studies, examining the influence of LMX on employee related outcomes (See Appendix 1). The purpose of this questionnaire (full document available in Appendix 2a and 2b) is to gather opinions from employees in the FET sector surrounding their LMX, employee engagement and optimism. Paper two provided a definition for each construct and presented a rationale for the selection of pre-existing measurement scales, with proven validity and reliability in prior studies for inclusion in the questionnaire. These are summarised on Table 1 below:

Table 1: Construct Definition and Scale Selection

Construct	Definition	Measure	Author
<i>Leader Member Exchange</i>	A taxonomy of leadership incorporating the leader; the follower and the relationship between the two (Graen and Uhl Bien, 1995) containing sub dimensions of affect, loyalty, contribution and professional respect.	12 Item LMX-MDM	Liden and Maslyn, 1998
<i>Employee Engagement</i>	A “positive, fulfilling, work related state of mind, characterised by vigor, dedication and absorption” (Schaufeli, 2002: 74)	9 Item UWES-9 The Utrecht Work Engagement Scale	Schaufeli and Bakker, 2003
<i>Optimism</i>	“the current expectancy that positive outcomes will occur in the future.” (Shifren and Hooker ,1995 p. 61)	25 item GESS-R	Hale, Fiedler, and Cochran,1992

It was decided to incorporate each of these scales into the questionnaire in the following ways:

- The question on Leader Member Exchange is addressed in the questionnaire through Liden and Maslyn’s (1998) twelve item LMX-MDM scale. Respondents are invited to select a rating ranging from ‘Strongly Agree’ to ‘Strongly Disagree’ for statements about their relationship with their manager. Three scale items address each of the sub dimensions of affect (1,2,3), loyalty (4,5,6), contribution (7,8,9) and professional respect (10,11,12). The original scale has been slightly modified with the word ‘supervisor’ substituted with the word ‘manager’ in order to make the questions more relevant to the specific context in which the questionnaire is being used. No other changes were made to the original instrument.
- The question on employee engagement uses Schaufeli and Bakker’s (2003) nine item Utrecht Work Engagement Scale (UWES-9), measuring vigour (1, 2, and 5), dedication (3, 4, and 7) and absorption (6, 8, and 9). Respondents are asked to select one rating from a selection of 7, ranging from ‘Never’ to ‘Always’ for statements considering the cognitive, emotional and behavioural aspects of their work

engagement. The scale was used verbatim as it is felt that these questions can be applied to employees in the FET sector without any amendments being made.

- The 25 item GESS-R is being used in the question measuring optimism. Respondents are asked to rate statements concerning their current expectations for the future. This scale addresses aspects including: career optimism (1,3,4,8,16,22,24), interpersonal (5,21,25), life outlook (11,12,18,19), self-efficacy (2,6,14,15), pessimism (9,13,20,23) and social interaction (7,10,17). The original scale wording was used verbatim, it is felt that these questions can be applied to employees in the FET sector without any amendments being made.

In addition to questions measuring the constructs, the questionnaire includes questions that establish suitability to participate, confirm voluntary participation and capture the demographics. The demographic questions address respondent age, gender, education and types of roles held and are included to elicit data that will help the researcher to contextualise the responses and identify subgroups within the overall sample.

2.1 Controls for Common Methods Variance in the Survey Design

All of the variable measures that have been used to inform the construct questions in this questionnaire are reliant on self-report data. Two potential difficulties associated with this approach are Common Method Bias which occurs as a result of the measurement method selected and Social Desirability Bias based on a desire by the respondents to reply to the questions in a way that they think others may view favourably. Spector (2004) suggests that such problems may be overrated and considers that the selection of validated measurement scales should mitigate against the difficulties. Although each of the scales selected for inclusion in this questionnaire have been validated in prior studies, the researcher has reviewed further controls to help minimise any potential bias.

Podsakoff *et al.*, (2003) suggest procedural and statistical controls to help minimise such biases. At this stage of the process, in the design of the questionnaire, consideration was given to procedural controls. One such control is to ensure that the scales used to measure the constructs each have different formats and anchor points. Each of the scales selected for inclusion in this questionnaire have different anchor points and formats. In the LMX MDM scale measuring LMX the selection options range from ‘Strongly Agree’ to ‘Strongly Disagree’; the UWES 9 asks respondents to select a rating ranging from ‘Never’ to ‘Always’

and the GESS-R optimism measure offers selection options ranging from, ‘Highly Improbable’ to ‘Highly Probable’.

A second procedural control suggested by Podsakoff *et al.*, (2003) is counterbalancing the order of the questions. On this basis, a decision was made to develop two versions of the questionnaire for the purposes of the pilot study. A summary of the procedural controls integrated into the questionnaire design in an effort to control for bias is provided on Table two below.

Table 2: Procedural Controls in Questionnaire

Procedural Control	Author	Area Addressed in Questionnaire
Use validated Scales	Spector (2004)	12 Item LMX-MDM 9 Item UWES-9 The Utrecht Work Engagement Scale 25 item GESS-R
Different format and anchor points for each scale	Podsakoff <i>et al.</i> , (2003)	LMX - ‘Strongly Agree’ to ‘Strongly Disagree’ UWES -9 ‘Never’ to ‘Always’ GESSR ‘Highly Improbable’ to ‘Highly Probable’
Counterbalancing Question order	Podsakoff <i>et al.</i> , (2003)	Division of questionnaire into two types for pilot study 3A: Variable Order 1. Leader Member Exchange 2. Employee Engagement 3. Optimism 3B: Variable Order 1. Employee Engagement 2. Optimism 3. Leader Member Exchange

At the data analysis stage, the questionnaire types 3A and 3B, as outlined in Table 2 above will be examined as a covariate in regression models to establish whether the order in which the questions are posed has a significant impact on the results. Further consideration will be given to statistical controls recommended by Podsakoff *et al.*, (2003) in the data analysis stages of the full study.

3. Pilot Study

Bell and Waters, (2014) suggest that it is good practice for researchers to pilot a questionnaire in order to ascertain whether the instrument will work. Through the pilot study, a researcher can establish the adequacy of the questionnaire and determine whether there are any questions or question sequences that pose particular challenges for the respondents. The pilot presents an opportunity to verify the validity and reliability of the selected scales in the specific context that they are being applied.

3.1. Pilot Study Sample Selection

The research population for the full study are employees working in excess of ten hours per week in adult and further education centres and programmes, in the sixteen Education and Training Boards (ETBs) having been in their role for at least one year (see map of all ETBs in Appendix 3). Each of the sixteen ETBs, have programmes and centres dispersed across a variety of locations in the geographical areas that they serve. Such programmes include Vocational Training Opportunities Scheme (VTOS), Back to Education Initiative (BTEI), Adult Literacy Schemes (ALS), Youthreach, the Adult Educational Guidance Service (AEGS) and former FAS Training Centres. Roles held by respondents will include administrators, information officers, guidance counsellors, tutors, resource workers, co-ordinators, centre managers and centre directors.

A non- probability, purposive sampling strategy was considered most suitable to collect pilot data from a representative sample of this research population. Babbie describes this approach as sample selection based on “your own knowledge of the population, its elements, and the nature of your research aims” (1990, p. 97). Using such an approach in the pilot study enabled the researcher to easily eliminate those people who were not suited to answer the research question, and to ensure the inclusion of those she considered as best placed to respond (MacNealy, 1999).

Key contacts in three ETBs agreed to circulate the questionnaire as an online survey to employees working in specific programmes and centres. The questionnaire was also distributed to former graduates from postgraduate programmes in the Department of Education at the School of Lifelong Learning and Education in Waterford Institute of Technology (WIT) who graduated between 2013 and 2016 and were currently employed in the FET sector. The pilot sample selection is illustrated on Table Three along with the programmes that were specifically targeted.

Table 3: Pilot Study Sample

ETB Name	Programmes
Limerick Clare ETB	Adult Literacy Service
Waterford, and Wexford ETB	BTEI, Community Education, VTOS
Tipperary ETB	Adult Literacy Service, Back to Education Initiative and Adult Educational Guidance Services
Initial Data Collected from WIT Graduates	Adult Literacy Service, Back to Education Initiative, VTOS, Youthreach, Former FAS

Adopting the purposeful sampling approach brought a number of advantages including ease of access; representation of a range of ETB programmes; representation of a range of roles of potential respondents and minimising the contextual issues to account for in the analysis.

3.2. Ethical Considerations for Pilot Study

An application for ethical approval for the pilot study was made to the Ethics Committee in the School of lifelong Learning and Education in WIT (Appendix 4) and approval was granted to pilot the questionnaire. Informed consent was the main ethical issue that needed to be managed in relation to the pilot study. Salant and Dillman’s (1994) principle of informed consent was applied to this pilot and an Information Sheet for Pilot Participants (Appendix 5) was sent with the Invitation to Participate (Appendix 6) in the study, to ensure that any participation in the process was voluntary. This documentation described the full research study and the nature of the pilot study and clearly stated that any participation in the study was on a voluntary basis and gave assurance that there were no repercussions for either opting out of the pilot or taking part. The questionnaire design addressed the matter of consent (as detailed in section 2 above) and required respondents to confirm their understanding that their participation was voluntary.

3.3. Pilot Study Administration

A decision was made to administer the questionnaire as an online survey based on the cost and time advantages and Baruch and Holtom’s finding that this approach results “in response rates as high as or higher than traditional mail methodology (2008, p.1139). On May 12th 2016, an email was circulated to those who had agreed to distribute the questionnaire, inviting their colleagues to participate in the pilot study (Appendix 4). It contained an attachment of the Information Sheet for Pilot Participants (Appendix 5) and an embedded web link to the questionnaire which was set up online through SurveyMonkey. Half of the emails contained a link to questionnaire 2A and remaining half to questionnaire 2B to

facilitate counterbalancing the questions. Different versions of the questionnaires were sent to each centre.

Nulty (2008) suggests sending reminder emails to boost response rates and in an effort to maximise responses a follow up email was sent on the 17th of May in advance of the closing date May 20th. This reminder proved to be effective in boosting responses and a total of 48 complete responses to the survey were received by the closing date.

3.4 Pilot Study Analysis

This section of the paper offers an analysis of the data from the forty eight respondents (a response rate of 48%) using SPSS software. A discussion of the reliability of each of the scales is presented followed by the descriptive statistics and correlations between the variables. The demographics are presented, along with their relationships with the three constructs of employee engagement, Leader Member Exchange and optimism. Hierarchical linear regression is used to control for the effects of covariates and to test the effects of each variable as a predictor of engagement and a series of hierarchical models are presented. Finally the effectiveness of the procedural control of counterbalancing the questions by administering two questionnaire types was analysed by entering the types as covariates in regression models.

3.4.1 Scale Reliability

The Cronbachs' Alphas for each of the three scales used to measure the constructs (see Table Four below) are in excess of Hair *et al.*'s recommended level of .7 (1995). The alpha of .931 for LMX MDM and .902 for UWES are both in excess of .90 which is recommended by Hair *et al.*, as an excellent reliability (1995). In the overall study it is intended to examine each of the sub dimensions of LMX and as a predictor of engagement and its sub dimensions and it is reassuring to find alphas in excess of .7 for each of these subscales at pilot stage.

Table 4: Pilot Study Finding-Scale Reliability

Construct	Scale	Cronbach's Alpha	Hair <i>et al.</i> 's Reliability Recommendation
Leader Member Exchange (LMX)	LMX MDM	.931	Excellent
LMX Sub Dimensions:			
<i>Affect</i>		.895	Very Good
<i>Loyalty</i>		.744	Good
<i>Contribution</i>		.758	Good
<i>Professional Respect</i>		.951	Excellent
Employee Engagement	UWES	.902	Excellent
Employee Engagement Sub Dimensions:			
<i>Vigour</i>		.878	Very Good
<i>Dedication</i>		.841	Very Good
<i>Absorption</i>		.724	Good
Optimism	GESS-R	.736	Good
	GESS-R (Recoded)	.836	Very Good

The 25 Item GESS-R Optimism initially showed a Cronbach's Alpha of .736. This scale contained a number of negatively worded items and these were recoded (see detail for recoded items and approach in Table five below). This recoding resulted in an increase from .736 to .836 and although this is the lowest reliability of the three scales, it is still falls into Hair *et al.*'s, 'very good' reliability category of greater than .80 and less than .9.

Table 5: GESS-R Optimism Items Recoded

Scale Number	Scale Item: In the future I expect that I will	Rating	Recoding
9	Experience many failures in my life	1. Highly Improbable	1. Highly Probable changed to 5. Highly Probable
13	Find that no matter how hard I try things just don't seem to turn out the way I would like	2.Improbable	2. Improbable changed to 4. Probable
17	have problems working with others	3.Neither improbable nor probable	3.Neither improbable nor probable- No change
20	be unable to accomplish my goals	Probable	Probable changed to 2.Improbable
23	discover that my plans don't work out too well	Highly Probable	Highly Probable changed to 1. Highly Improbable

3.4.2 Descriptive Statistics and Intercorrelations

The mean (M), standard deviation (SD) and correlation coefficients (r) statistics are presented in Table six. The mean scores depict a positively minded group who have relatively good quality LMX relationships (average LMX score of 3.89 out of a maximum of 5), are engaged (average engagement score of 5.63 out of a maximum of 7) and relatively optimistic (average optimism score of 3.60 out of a maximum of 5). The mean scores for the LMX sub dimensions show contribution as having the highest mean (4.28), followed by Professional Respect (3.94), Affect and Loyalty at 3.60 and 3.73 respectively (Appendix 7).

Table 6: Descriptive Statistics and Intercorrelations

Variable	Mean	SD	Gender	Education	Age	Occupation	Tenure	Mgt. Resp.	LMX	Optimism	Employee Engagement
Education	4.60	.893	-.230								
Age	2.48	.945	-.395**	-.073							
Occupation	2.54	2.42	.244	.042	-.097						
Tenure	5.40	2.01	.051	-.160	.223	.082					
Mgt. Resp.	1.58	.498	.225	-.044	.072	-.585**	-.044				
LMX	3.89	.803	-.357	-.176	.209	-.121	.060	.152			
Optimism Uncoded	3.74	-.063	.298	-.050	.026	-.315*	.155	.040	.026	.557**	
Optimism Coded	3.60	.340	.215	.181	-.030	-.204	-.007	.012	-.12		
Employee Engagement	5.63	.883	.067	-.156	.189	-.106	.336*	.148	.172	.293*	

SD: Standard Deviation; Mgt. Rsp: Management Responsibility; LMX: Leader Member Exchange, N=48

*Correlation is significant at the 0.05 level;** Correlation is significant at the .01 level;*** Correlation is significant at the .001 level. Note: Gender coding: 1=Male; 2=Female Education coding: 1=QI5; 2= QII6; 3= QII7; 4= QII8;5=QII9,6=QII10, 7=Other; Age Coding 0=18-25, 1=26-35,2=36-45, 3=46-55, 4=56-65, 5=65+; Occupation: 1=Tutor, 2= Administration, 3= Resource Worker, 4= Centre Co-ordinator, 5= Project Co-ordinator, 6=Information Officer, 7= Guidance Counsellor, 8=Other; Tenure Coding: 1=Less than 1 year, 2=Between 1 and 2 years, 3= between 2 and 4 years, 4= between 4 and 6 years, 5= between 6 and 8 years, 6= between 8 and 10 years and 7= 10+ years.

An analysis of the interscale correlations reveals a correlation of 0.172 between LMX and employee engagement, indicating a relationship which was expected. This relationship is not significant although it would under Cohen's (1988) framework be considered a small effect (variance explained of 0.03 (3%)). The correlations show a statistically significant positive correlation of 0.327 between employee engagement and optimism (recoded) - this would be classed as a medium effect under Cohen (1988) with a variance explained of 0.11 (11%). A statistically significant correlation of 0.557 is shown between employee engagement and the uncoded version of optimism- this would be classed as a large effect under Cohen (1988) with a variance explained of 0.31 (31%). . The data shows a somewhat unexpected negative relationship of -0.114 between LMX and optimism (recoded), however a positive correlation of 0.026 exists between employee engagement and the uncoded version of optimism. Whilst interpreting this is limited due the nature of a pilot study sample size, it is worth considering whether this may be attributed to the recoding of the scale.

Demographic Variables and their Relationship to the Main Constructs

The demographic variables examined in this pilot study include: gender, education, age, occupation, tenure and management responsibility. 79% of the respondents are female with the remaining 21% being male. 77% of respondents are qualified at QQI level 8 and above and 75% are aged between 36 and 55 years. 63% are employed as tutors and 44% have been in their roles for over ten years. 40% of respondents also have some type of management responsibility within their current role. The relationships between each of these demographic variables and the three constructs under examination in this study are depicted on Table Seven below using mean scores. Although this is a pilot study and as such the sample size is relatively small at 48, it is possible at this stage to draw the following inferences from the data.

- ***Gender:*** It is interesting to note that LMX appears to be significantly (P Value of 0.013) stronger for men with a mean of 4.44 compared to a mean of 3.74 for women. Women are slightly stronger on engagement with a mean of 5.65 compared to 5.51 for males and also on optimism, with a mean of 3.63 compared to 3.46 for men.
- ***Education:*** The data on education reveals that both LMX and employee engagement is lower for those with a higher educational level. Although any conclusions are limited by the fact that there are only 7 respondents under QQI level 8, this may need to be further examined in the full study.

- **Age:** LMX appears to improve with age. Respondents aged 65+ are the most engaged and optimistic, although conclusions are limited by the number of respondents in this category.
- **Occupation:** Respondents working as tutors were the most engaged and ranked second highest on optimism.
- **Tenure:** Respondents who were highest in LMX were those who were working less than 1 year and those who were working between 4 and 6 years (4.00). The next highest in LMX were those who were working in excess of 10 years. The most engaged respondents were those working between 1 and 2 years (6.33) and 8-10 years (6.17). Those working between 1 and 2 years were the most optimistic (4.00). The correlations on Table 6 reveal a significant relationship between tenure and engagement $r(34) = .46, p < .05$
- **Management Responsibility:** Respondents with management responsibility scored lower on LMX and higher on engagement than those without. Optimism scores were the same for both groups.

Table 7: Relationship between Demographic Variables and the Main Constructs

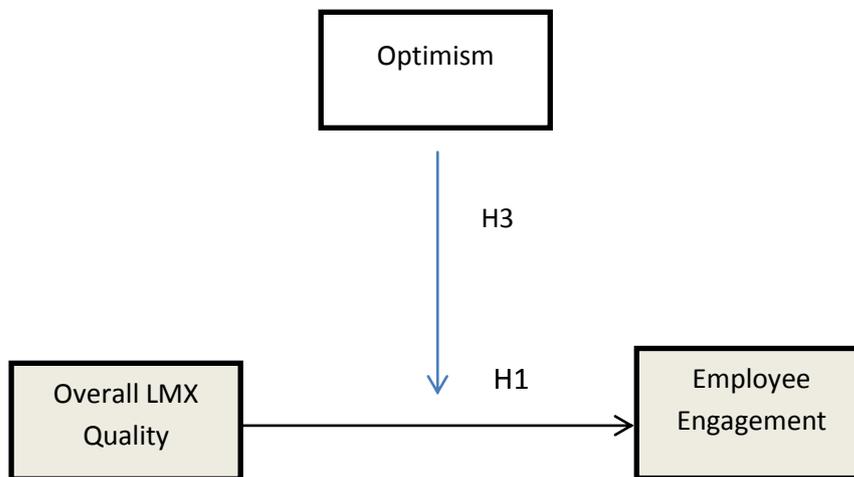
Gender	No. of Respondents	LMX	Engagement	Optimism	P Value
Male (10)	10 (21%)	4.44	5.51	3.46	.013
Female (38)	38 (79%)	3.74	5.65	3.63	
Education					
QQI Level 5	1 (2%)	4.67	6.22	3.52	.434
QQI Level 7	6 (13%)	4.25	6.02	3.53	
QQI Level 8	4(8%)	3.73	5.25	3.21	
QQI Level 9	36 (75%)	3.80	5.59	3.66	
QQI Level 10	1 (2%)	4.75	5.44	3.40	
Age					
26-35	6 (13%)	3.75	5.07	3.53	.635
36-45	20 (40%)	3.80	5.65	3.63	
46-55	17 (35%)	3.90	5.76	3.64	
56-65	3 (6%)	4.22	5.44	3.29	
65+	2 (6%)	4.62	6.11	3.66	
Occupation					
Tutor	30 (62%)	3.89	5.76	3.67	.556
Administrator	1 (2%)	4.42	4.78	3.30	
Resource Worker	5 (10%)	3.95	5.20	3.39	
Centre Co-ordinator	3 (6%)	4.55	5.74	3.53	
Project Co-ordinator	3 (6%)	3.58	5.19	3.88	
Other	6 (12%)	3.54	5.59	3.40	
Tenure					
Less than 1 year	4 (8%)	4.00	4.58	3.56	.979
Between 1 and 2 years	2 (4%)	3.92	6.33	4.00	
Between 2 and 4 years	5 (10%)	3.58	4.89	3.56	
Between 4 and 6 years	1 (2%)	4.00	5.00	3.20	
Between 6 and 8 years	5 (10%)	3.15	5.73	3.57	

Between 8 and 10 years	10 (21%)	3.86	6.17	3.56	
10+ years	21 (44)	3.98	5.68	3.63	
Management Responsibility					
Yes	20 (40%)	3.75	5.47	3.60	.302
No	28 (60%)	5.40	5.70	3.60	

3.4.3 Regression Analysis

This study seeks to examine the influence of Leader Member Exchange relationships on employee engagement and the moderating role of optimism (see conceptual diagram in Figure 1 below)

Figure 1: Conceptual Diagram



The hypotheses presented in previous papers for the full study, have been slightly adjusted for the pilot study and as such not all of the hypotheses as previously presented are fully addressed at this stage. The hypotheses under examination and the analysis methods for the pilot are depicted on Table Eight.

Table 8: Hypotheses for Analysis

Hypotheses		Analysis
Hypothesis 1	High LMX quality is positively related to employee engagement	Interscale correlations Hierarchical Multiple Regression
Hypothesis 2	High LMX quality is positively related to optimism	Interscale correlations Hierarchical Multiple Regression
Hypothesis 3	Optimism moderates the positive relationship between high LMX quality and employee engagement	Interscale correlations Hierarchical Multiple Regression

A four stage hierarchical multiple regression, predicting employee engagement was conducted depicted on Table 9 below. In step one gender, education, age, occupation, tenure and management responsibility were entered as covariates. LMX was entered in stage two and optimism was added in stage three. At stage 4 an interaction variable, optimism*LMX was entered. The assumption of multicollinearity was met as the Tolerance and VIF (Variance Inflation Factor) fell within the accepted limits and the scatterplots and residuals (see Appendix 8) confirm that linearity, normality and homoscedasticity are met (Hair *et al.*, 1998).

The results from the hierarchical multiple regressions reveal that at step 1 the six control variables explain 17.6% of the variance in employee engagement. At step 2 LMX with the control variables explains 19.9% of the variance in employee engagement while at Step 3 30.07% of the variance in employee engagement is explained by the control variables, LMX, and optimism. Step 4 reveals the strongest model with 31% of the variance in employee engagement explained by the control variables, LMX, optimism and the interaction variable of optimism*LMX.

In step 2 when the demographic variables are controlled for LMX explains 5.9% of the variance in employee engagement. Step 3 when the demographic variables and LMX, are controlled, optimism explains 16.5% of the variance in employee engagement. In step 4 when the demographic variables, LMX, and optimism are controlled for LMX*optimism explains 14.7% of the variance in employee engagement. The addition of each covariate adds to the predictive power of the model and the Model in Step 4 (which approximates to a test of the conceptual diagram with optimism as a moderator of the relationship between LMX and employee engagement) is encouraging, based on the small sample involved in this pilot study.

In terms of the slope coefficients (betas) it is interesting to note that the positive slopes between LMX and employee engagement in Models 2 and 3 reverse to a negative slope in model 4. It is clear that the introduction of optimism as a moderated variable has altered the predicted relationship between LMX and employee engagement.

Table 9: Hierarchical Regression Analysis Predicting Engagement

Steps	Variables	B	P Value	R2	AR2	F
Step 1 Gender , Education, Age, Occupation, Tenure, Management Responsibility.	Gender Education Age Occupation Tenure Mgt. Resp.	.328 -.053 .152 -.024 .130 .252	.011 .370 .726 .322 .054 .423	.176	.056	1.464
Step 2 LMX	Gender Education Age Occupation Tenure Mgt. Resp. LMX	.474 -.009 .148 -.026 .127 .233 .187	.266 .954 .332 .692 .058 .460 .290	.199	.059	1.423
Step 3 Optimism	Gender Education Age Occupation Tenure Mgt. Resp. LMX Optimism	.155 -.118 .110 .023 .124 .305 .175 .956	.690 .440 .449 .717 .050 .309 .294 .019	.307	.165	2.157
Step 4 LMX*Optimism	Gender Education Age Occupation Tenure Mgt. Resp. LMX Optimism LMX*Optimism	.118 -.122 .087 .024 .122 .315 -.674 .023 .239	.769 .432 .574 .716 .057 .29 .742 .992 .678	.310	.147	1.896

3.4.4. Optimism as a Moderator of the LMX and Employee Engagement Relationship

In an effort to delve further into optimism as a moderator, the pilot data was split into high/low optimism groups and preliminary regression was carried out with these groups to ascertain whether high/low optimism had a different impact on the predictive power of LMX on employee engagement. This analysis confirmed low or high in optimism was making a difference. The data on Table 10 below shows a LMX slope of almost zero for those with low levels of optimism. By contrast, for those high in optimism, LMX has a stronger impact on engagement with a 1 unit increase in LMX leading to an increase of almost 7 in engagement. The results of this analysis clearly show that optimism is impacting on the LMX-engagement relationship and may possibly play a moderating role. However given the fact that the betas are not significant, it is not possible to state with certainty that the variable is a moderator. This led the author to consider a possible mediating role of optimism in the LMX-engagement relationship.

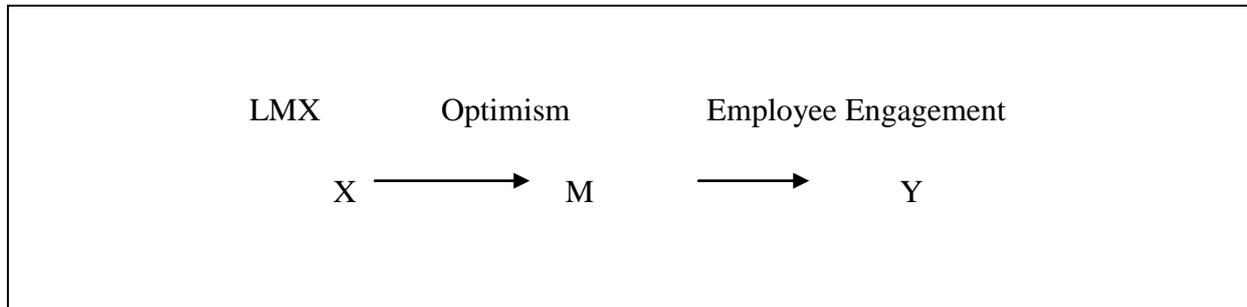
Table10: Optimism as a Moderator-Split Sample Analysis

Split	β LMX	P Value	β Optimism	P Value	β Optimism*LMX	P Value
Group 1 (Low Optimism)	.015	.998	1.925	.785	.048	.977
Group 2 (High Optimism)	6.894	.255	6.322	.268	-1.725	.272

3.4.5. Optimism as a Mediator of the LMX and Employee Engagement Relationship

The role of optimism as a mediator depicted on Figure 2 below is that LMX drives optimism which in turn drives engagement.

Figure 2: Optimism as a Moderator



To explore whether optimism might play a mediating role, Barron and Kenny’s (1986) 4 stage approach (depicted on Table 11) was explored. This approach involves proceeding to step 4 only if the P-values for steps 1-3 are significant. The findings reveal that the only significant step found is step 3 (i.e. Optimism has a significant positive impact on engagement). This lack of significance for steps 1 and 2 suggests that support for optimism as a mediating variable is not confirmed, however, the significant relationship between optimism and engagement added to the fact that this relationship is still significant in step 4 (when LMX is added) may be indicative of some support for optimism as a mediator of the LMX-Engagement relationship.

Table 11: Baron and Kenny's Model to Establish a Mediation Variable

Step	β X	P Value
1. Regress Y on X	.187	.290
2. Regress M on X	.013	.850
3. Regress Y on M	.956*	.019
4. Regress Y on X and M	β X. 175	.294
	β M.956*	.019

3.4.6 Effectiveness of Procedural Control

Section 2.1 discussed potential procedural controls for Common Methods Variance in the Survey Design stage and notes the decision to administer two questionnaire types as part of this pilot study. The influence of this approach was analysed using hierarchical regression and entering the questionnaire types as covariates in regression. The results of this comparison are depicted on Table 12 below and show that the r^2 for each step in the regression are slightly higher when questionnaire type is controlled. Although these findings are not significant, they bode well for adopting this approach in the overall study.

Table 12: Comparative Results of Question Counterbalancing for Common Method Variance Control

Not controlling for Questionnaire Type	R2	Controlling for Questionnaire type	βType	P Value	R2
Step 1 Education, Age, Occupation, Tenure Management Responsibility	.176	Step 1 Questionnaire Type, Education, Age, Occupation, Tenure Management Responsibility.	.059	.310	.177
Step 2 LMX	.199	Step 2 LMX	.136	.273	.202
Step 3 Optimism	.307	Step 3 Optimism	.126	.020	.309
Step 4 LMX*Optimism	.310	Step 4 LMX*Optimism	.148	.643	.313

3.4.7 Summary of Pilot Findings

A summary of the pilot findings in relation to scales being used, relationships between the demographic variables and each of the three constructs under examination and the relationships between the constructs are presented on Table 13 below.

Table 13: Summary of Pilot Findings

Area	Finding	Supported by
Scales	All valid in the Context being applied GESS-R feedback to state it was quite personal in parts Current thoughts about the future	Cronbach's Alpha: Table 4 Pilot data
Demographic Findings	Men score higher on LMX Women score higher on engagement and optimism LMX and employee engagement is lower for those with a higher educational level LMX improves with age Tutors are most engaged Most engaged tenure group= >1 year and 4-6 years Holders of management responsibility score higher on engagement and lower on LMX	Split Group Descriptives-SPSS analysis
Construct Findings	Average respondent has relatively good quality LMX relationships is engaged and relatively optimistic	Means
	A positive relationship exists between LMX and employee engagement	Positive Correlation coefficients*
	A significant positive relationship exists between optimism and employee engagement and optimism	Significant Correlation coefficients
	A negative relationship between LMX and optimism	Negative Correlation coefficients*
Hypotheses Findings	Finding	
H1	High LMX quality is positively related to employee engagement-Confirmed*	Positive Coefficient
H2	High LMX quality is positively related to optimism-Not confirmed*	Negative Coefficient
H3	Optimism moderates the positive relationship between high LMX quality and employee engagement (possibility of a mediating role)	Increase in R2 when variables are added to regression model

Overall these findings present a positive picture for the continuity of this research study. The researcher is satisfied that each of the scales selected to measure the constructs “do so in an accurate and consistent manner” (Hair *et al.*, 2007, p. 240). The relationship between the demographic variables and the constructs highlight some interesting influences of gender, education, age, occupation, tenure and management responsibility that may be explored in the overall study. It is assuring that the hypotheses are mainly supported and while a negative relationship exists between employee engagement and the recoded optimism it is reassuring to note that this disappears when using the uncoded optimism. The optimism variable is having an impact on the model and may act as a moderator or mediator.

4. Considerations for the Full Survey

On the basis of the pilot findings a number of decisions have been reached that will influence the full survey:

- **Sample group:** The intention to collect data from a national sample has been reviewed and consideration is being given to using a smaller sample group comprising of tutors in two or three ETB’s.
- **Survey Design:**
 - *Common Method Variance:* The pilot findings provide initial support to the idea of counterbalancing the questions and creating two questionnaire types and additional controls will be explored for inclusion at data analysis stage.
- **Analysis of Hypotheses:** In section 3.4.3 it was noted that the hypotheses presented in prior papers were adjusted slightly for the purposes of this pilot. The hypotheses in the previous papers alluded to the examination of each of the components of LMX and their influence as independent variables on employee engagement and the tentative explorations completed using SPSS are depicted in Appendix 9a. More in-depth levels of analysis will be conducted in the overall study based on the hypotheses presented on Table 14 below:

Table 14: Hypotheses for Full Study

Hypothesis 1A	High LMX quality positively predicts employee engagement
Hypothesis 1B	High affect positively predicts employee engagement
Hypothesis 1C	High loyalty positively predicts employee engagement
Hypothesis 1D	High contribution positively predicts employee engagement
Hypothesis 1E	High professional respect positively predicts employee engagement
Hypothesis 2	Optimism can offset the negative effects of poor LMX quality on employee engagement
Hypothesis 3	Optimism can boost the LMX relationship quality and lead to increased employee engagement

5. Conclusion

This paper has built on the research concepts presented in Paper 1 and Addendum 1 and the selected methodology described in Paper 2 to design a survey instrument which has proven effective at pilot study stage to examine the role of Leader Member Exchange (LMX), in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training Sector. The next stage involves data collection and analysis for the full research study.

References

- Babbie, E. (1990) *Survey Research Methods*, 2nd Edn. California: Wadsworth Publishing Company.
- Baruch, Y. and Holtom, B.C. (2008) 'Survey response rate levels and trends in organizational research', *Human Relations*, Vol. 61, No. 8, p. 1139–1160.
- Bell, J., and Waters, S. (2014) *Doing Your Research Project: A Guide for First Time Researchers*, 6th Edn. UK: OU Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, (2nd Edn.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Graen, G.B. and Uhl Bien, M. (1995) 'Relationship-Based Approach to Leadership Development of Leader-Member-Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Domain Perspective', *Leadership Quarterly*, Vol. 6, No.2, pp. 219-247.
- Hair, J. F. J., Anderson, R. E., Tatham, R. L. and Black, W. C. (1995) *Multivariate data analysis*, 4th Edn. Saddle River, NJ: Prentice Hall.
- Hair, J. F. J., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998). *Multivariate data analysis*, 5th Edn. Saddle River, NJ: Prentice Hall.
- Hale, W.D., Fiedler, L.R. and Cochran, C.D. (1992) 'The Revised Generalized Expectancy of Success Scale: A Validity and Reliability Study', *Journal of Clinical Psychology*, Vol. 48, No. 4, pp. 516-521.
- Higgins, M., Dobrow, S.R. and Roloff, K. S. (2010) 'Optimism and the boundaryless career: The role of developmental relationships', *Journal of Organizational Behavior*, Vol. 31, No.5, pp. 749–769.
- Liden, R.C. and Maslyn, J.M. (1998) 'Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development', *Journal of Management*, Vol. 24, No. 1, pp. 43-72.
- MacNealy, M. S. (1999) *Strategies for Empirical Research in Writing*, New York: Addison Wesley Longman.
- Nulty, D.D. (2008) 'The adequacy of response rates to online and paper surveys: what can be done?', *Assessment and Evaluation in Higher Education*, Vol. 33, No. 3, pp. 301–314.

Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P and Lee. J.Y. (2003) 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.

Salant, P. and Dillman, D.A. (1994) *How to Conduct Your Own Survey*, New York: Wiley and Sons.

Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002) 'The Measurement of Engagement and Burnout: A Two Sample Confirmatory Analytical Approach', *Journal of Happiness Studies*, Vol. 3, pp. 71-92.

Schaufeli, W.B. and Bakker, A.B. (2003) 'The Utrecht Work Engagement Scale (UWES) Test Manual. *The Netherlands: Department of Social and Organizational Psychology*.

Shifren, K. and Hooker, K. (1995) 'Stability and change in optimism: A study among spouse caregivers', *Experimental Aging Research*, Vol. 21, No. 1, pp. 59-76.

Spector, P.E. (1994) 'Using self-report questionnaires in OB research: A comment on the use of controversial method', *Journal of Organizational Behaviour*, Vol. 15, pp. 385-392.

Appendices

Appendix 1: Prior Studies Examining LMX on Employee Related Outcomes

Author	Year	Outcome	Technique
Breevaart, Bakker, Demerouti and Van den Heuvel	2015	Job Performance	Online Questionnaire
Burch and Guarana	2014	Follower Engagement OCB and Turnover Intentions	Online Questionnaire
Buch, Kuvaas and Dysvik	2014	Follower Work Effort	Online survey
Harris, Ning and Kirkman	2014	OCB and turnover intention	Questionnaire
Zhang, Wang, Shi	2012	Job Satisfaction, Effective Commitment and Performance	Questionnaire
Walumbwa, Cropanzano, Goldman	2011	Effective Work Behaviours	Questionnaire
Huang, Chan, Lam and Nan	2010	Burnout and work performance	Questionnaire
Harris, Wheeler, Kacmar	2009	Job satisfaction, turnover intentions and performance	Questionnaire
Atwater and Carmeli	2009	Energy and Involvement in Creative work	Survey 2 points in time
Wang, Law and Chen	2008	Employee Performance and Work Outcomes	Questionnaire
Harris, Harris and Eplion	2007	Job Satisfaction, Organisational Feedback and Supervisor Feedback	Questionnaire
Chen, Lam and Zhong	2007	Negative Feedback as a mediator between LMX and obj./subj. in-role performance	Questionnaire
Bhal	2006	2 dimensions of LMX on OCB and mediating impact of justice	Questionnaire
Wang, Law, Hackett, Wang and Chen	2005	Followers task performance and OCB	Questionnaire

Appendix 2a: Survey Document

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

* 1. *Before commencing the survey, please read each of the following statements and indicate whether you understand them.*

- I have received a written document regarding the purpose and nature of this pilot study (PDF documents attached to email).
- My participation is voluntary.
- It is possible to leave this site at any time and I am not obliged to complete the questionnaire or submit my responses.
- Once the responses are submitted, they cannot be withdrawn from the pilot results.
- I understand that the data obtained from my participation in this research will be used to inform the development of the final survey instrument for this study.
- I understand that the data obtained from my participation in this research will NOT be included in the data analysis or in the final doctoral thesis.
- I understand that my anonymity will be ensured.

* 2. Please indicate whether you agree to participate in this study.

- I agree
- I do not agree

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

* 3. How many hours per week do you work in the Further Education and Training (FET) sector

- Average less than 10 hours per week
- Average more than 10 hours per week
- I am not working in the Further Education and Training Sector

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

Quality of your relationship with your manager

This section explores the quality of your relationship with your current manager.

Please read each of the following statements carefully and consider your answer based on your current direct line manager. If you report to more than one manager please answer this in relation to the manager to whom you are responsible for the majority of your work or hours.

* 4. Please select a rating for each of the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I like my manager very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is the kind of person one would like to have as a friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is a lot of fun to work with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager defends my work actions to a superior, even without complete knowledge of the issue in question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would come to my defence if I were 'attacked' by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would defend me to others in the organisation if I made an honest mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do work for my manager that goes beyond what is specified in my job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to apply extra efforts, beyond those normally required, to meet my work goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not mind working my hardest for my manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am impressed with my manager's knowledge of his/her job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect my manager's knowledge of and competence on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I admire my manager's professional skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Employee Engagement

* 5. The following 9 statements are about how you feel at work.

Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by selecting the description that best matches how frequently you feel that way.

	Never	Almost never (A few times a year or less)	Rarely (Once a month or less)	Sometimes (A few times a month)	Often (Once a week)	Very often (A few times a week)	Always (Every day)
1. At my work, I feel bursting with energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. At my job, I feel strong and vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am enthusiastic about my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job inspires me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I get up in the morning, I feel like going to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel happy when I am working intensely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am proud of the work that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am immersed in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I get carried away when I am working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

Optimism

Please read each of the following statements carefully and rate each.

* 6. *In the future* I expect that I will...

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
succeed at most things I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
be listened to when I speak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
carry through my responsibilities successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
get the promotion I deserve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have successful close personal relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle unexpected problems successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make a good impression on people I meet for the first time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attain the career goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
experience many failures in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a positive influence on most of the people with whom I interact.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be able to solve my own problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
acquire most of the things that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
find that no matter how hard I try, things just don't turn out the way I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be a good judge of what it takes to get ahead.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle myself well in whatever situation I am in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
reach my financial goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems working with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that the good in life outweighs the bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
be successful in my endeavours in the long run.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be unable to accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be very successful working out my personal life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
succeed in the projects I undertake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that my plans don't work out too well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
achieve recognition in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have rewarding intimate relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

Participant Profile

* 7. Are you?

- Male
 Female

* 8. What age are you?

- 18-25
 26-35
 36-45
 36-45
 46-55
 56-65
 65+

* 9. What is the highest level of education you have completed?

- QQI Level 5
- QQI Level 6
- QQI Level 7
- QQI Level 8
- QQI Level 9
- QQI Level 10

Other (please specify)

* 10. Where in the Further Education and Training (FET) sector do you work?

- Youthreach
- BTEI (Back to Education Initiative)
- Adult Literacy Service
- VTOS (Vocational Training Opportunities Scheme)
- Community Education
- PLC (Post Leaving Course)
- Self-financing classes
- Private Provider delivering Solas funded programmes
- Not currently working in the Further Education and Training (FET) sector
- Other (please specify)

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

Respondent's Role

* 11. Please identify your current role(s).

- Tutor (also known as instructor, trainer, teacher, facilitator)
- Administrator
- Resource Worker
- Centre Co-ordinator
- Project Co-ordinator
- Information Officer
- Guidance Counsellor
- Other (please specify)

* 12. How long have you been in the particular role(s)?

- Less than 1 year
- Between 1 and 2 years
- Between 2 and 4 years
- Between 4 and 6 years
- Between 6 and 8 years
- Between 8 and 10 years
- 10+ years

* 13. Have you responsibilities for managing others in your current role?

- Yes
- No

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2A

Thank you for your time and effort in completing this survey.

If you have any questions or concerns, please contact the researcher, Ms. Aislinn Brennan via email: abrennan@wit.ie

Appendix 2b: Survey Document

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

* 1. *Before commencing the survey, please read each of the following statements and indicate whether you understand them.*

- I have received a written document regarding the purpose and nature of this pilot study (PDF documents attached to email).
- My participation is voluntary.
- It is possible to leave this site at any time and I am not obliged to complete the questionnaire or submit my responses.
- Once the responses are submitted, they cannot be withdrawn from the pilot results.
- I understand that the data obtained from my participation in this research will be used to inform the development of the final survey instrument for this study.
- I understand that the data obtained from my participation in this research will NOT be included in the data analysis or in the final doctoral thesis.
- I understand that my anonymity will be ensured.

* 2. Please indicate whether you agree to participate in this study.

- I agree
- I do not agree

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

* 3. How many hours per week do you work in the Further Education and Training (FET) sector

- Average less than 10 hours per week
- Average more than 10 hours per week
- I am not working in the Further Education and Training Sector

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

Employee Engagement

* 4. The following 9 statements are about how you feel at work.

Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by selecting the description that best matches how frequently you feel that way.

	Never	Almost never (A few times a year or less)	Rarely (Once a month or less)	Sometimes (A few times a month)	Often (Once a week)	Very often (A few times a week)	Always (Every day)
1. At my work, I feel bursting with energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. At my job, I feel strong and vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am enthusiastic about my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job inspires me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I get up in the morning, I feel like going to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel happy when I am working intensely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am proud of the work that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am immersed in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I get carried away when I am working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

Optimism

Please read each of the following statements carefully and rate each.

* 5. *In the future* I expect that I will...

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
succeed at most things I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
be listened to when I speak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
carry through my responsibilities successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
get the promotion I deserve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have successful close personal relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle unexpected problems successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make a good impression on people I meet for the first time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attain the career goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
experience many failures in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a positive influence on most of the people with whom I interact.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be able to solve my own problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
acquire most of the things that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
find that no matter how hard I try, things just don't turn out the way I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be a good judge of what it takes to get ahead.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle myself well in whatever situation I am in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
reach my financial goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems working with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that the good in life outweighs the bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
be successful in my endeavours in the long run.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be unable to accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be very successful working out my personal life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
succeed in the projects I undertake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that my plans don't work out too well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
achieve recognition in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have rewarding intimate relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

Quality of your relationship with your manager

This section explores the quality of your relationship with your current manager.

Please read each of the following statements carefully and consider your answer based on your current direct line manager. If you report to more than one manager please answer this in relation to the manager to whom you are responsible for the majority of your work or hours.

* 6. Please select a rating for each of the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I like my manager very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is the kind of person one would like to have as a friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is a lot of fun to work with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager defends my work actions to a superior, even without complete knowledge of the issue in question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would come to my defence if I were 'attacked' by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would defend me to others in the organisation if I made an honest mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do work for my manager that goes beyond what is specified in my job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to apply extra efforts, beyond those normally required, to meet my work goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not mind working my hardest for my manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am impressed with my manager's knowledge of his/her job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect my manager's knowledge of and competence on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I admire my manager's professional skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

Participant Profile

* 7. Are you?

- Male
 Female

* 8. What age are you?

- 18-25
 26-35
 36-45
 46-55
 56-65
 65+

* 9. What is the highest level of education you have completed?

- QQI Level 5
 QQI Level 6
 QQI Level 7
 QQI Level 8
 QQI Level 9
 QQI Level 10

Other (please specify)

* 10. Where in the Further Education and Training (FET) sector do you work?

- Youthreach
- BTEI (Back to Education Initiative)
- Adult Literacy Service
- VTOS (Vocational Training Opportunities Scheme)
- Community Education
- PLC (Post Leaving Course)
- Self-financing classes
- Private Provider delivering Solas funded programmes
- Not currently working in the Further Education and Training (FET) sector
- Other (please specify)

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

Respondent's Role

* 11. Please identify your current role(s).

- Tutor (also known as instructor, trainer, teacher, facilitator)
- Administrator
- Resource Worker
- Centre Co-ordinator
- Project Co-ordinator
- Information Officer
- Guidance Counsellor
- Other (please specify)

* 12. How long have you been in the particular role(s)?

- Less than 1 year
- Between 1 and 2 years
- Between 2 and 4 years
- Between 4 and 6 years
- Between 6 and 8 years
- Between 8 and 10 years
- 10 year +

* 13. Have you responsibilities for managing others in your current role?

- Yes
- No

The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments. 2B

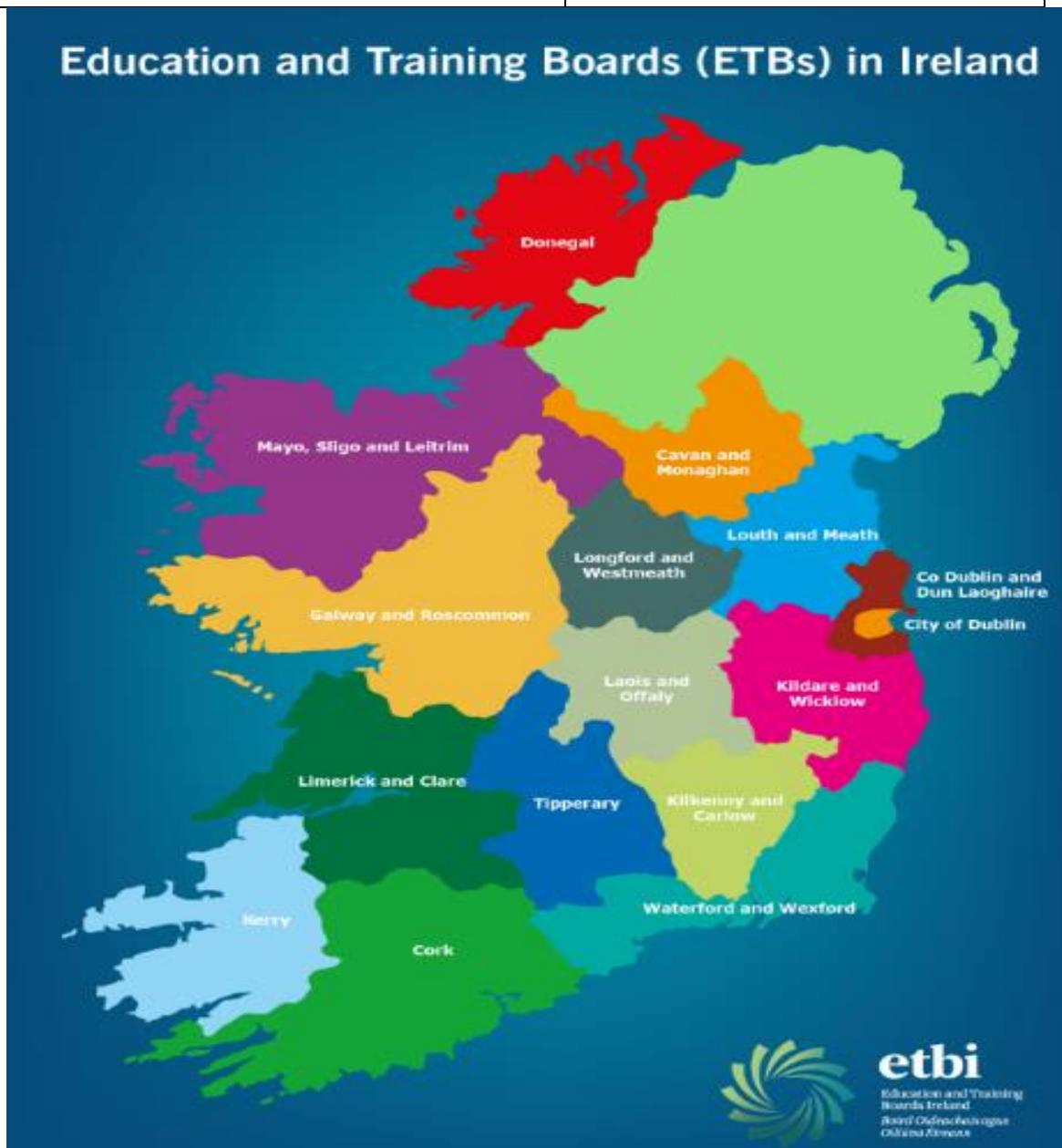
Thank you for your time and effort in completing this survey.

If you have any questions or concerns, please contact the researcher, Ms. Aislinn Brennan via email: abrennan@wit.ie

14. Please note that this survey is in piloting stage. I would appreciate any feedback that would help to finalise the survey for the main study. Please feel free to comment on any questions that you found difficult to answer or make suggestions.

Appendix 3: ETBs in Ireland

16 ETB's	
Cavan and Monaghan ETB	Cork ETB
City of Dublin ETB	Donegal ETB
Dublin and Dunlaoighaire ETB	Galway and Roscommon ETB
Kerry ETB	Kildare and Wicklow ETB
Limerick and Clare ETB	Laois and Offaly ETB
Louth and Meath ETB	Longford and Westmeath ETB
Tipperary ETB	Mayo, Sligo and Leitrim ETB
Kilkenny and Carlow ETB	Waterford and Wexford ETB



Appendix 4: Application for Ethical Approval

Waterford Institute of Technology
 INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

Applicant's Name (include title Dr/Ms/Mr) (Please note that the applicant must be available to attend the meeting)	Ms. Aislinn Brennan
Applicant's Position Postgraduate <input checked="" type="checkbox"/> Staff <input checked="" type="checkbox"/> Research Assistant <input type="checkbox"/> Other <input type="checkbox"/> Please specify other: _____	
Please state if this research is for an award: Masters <input type="checkbox"/> DBA <input type="checkbox"/>	
Applicant's Student Number (if applicable)	
Principal Investigator:	Aislinn Brennan
Supervisor(s):	Prof. Tom Garavan
Department:	Graduate Business, WIT
Research Group:	n/a
Phone Number:	0892494810
e-mail Address:	<u>abrennan@wit.ie</u>
Please list any others involved in the research (including research assistants and students, other collaborators or partner institutions): n/a	

Project Title: Pilot Study: To test the survey instrument developed to examine the influence of Leader Member Exchange (LMX) on employee engagement and the moderating role of optimism in the FET sector	
Location of Research	
1. WIT (Campus & Room)	WIT Cork Rd. Campus. WIT College Street Campus CL5
2. External Components	Online Survey
Commencement Date:	Late January/February 2016 (Pending ethics approval)
Estimated Duration of the Project:	3 months
Source of Funding for the Research: Is there any possibility of conflict of interest between the funding agency and the publication of the research results? If so, please explain: I am a staff member in WIT and the costs of the DBA are being paid by WIT The proposed pre test/pilot element of the study will be based on graduates of WIT programmes	
Plan & Design of Project 1. Brief rationale for research In the post-financial crisis environment (2012-2015), employees grapple to navigate the challenges of change, job uncertainty and increasing workloads (Rus, 2013; Breevaart and Bakker, 2013). In the Irish FET context, such challenges are further compounded by developments, specific to the sector including: amalgamation of the 32 VECs and former FAS education centres into 16 ETBs; the labour market activation agenda (Pathways to Work, 2012) which has resulted in mandated learners; and an emphasis on measurable performance outcomes linked to a pay per performance funding model. Employee engagement is critical to ensure that the sector delivers on its statutory obligations and delivers a quality experience for the learners. This application refers exclusively to a pilot study phase of this research in order to assess the reliability, validity and suitability of the survey instrument for the overall study. The overall study is a response to the need for FET leaders to identify the factors that lead to engaged employees to counteract the negative impact of this climate on employee wellbeing, motivation and performance.	
2. Aims The aim of the pilot study is to ensure that the survey instrument used in the overall research study is suitable for the purposes intended. The survey instruments are being developed to examine the role of Leader Member Exchange (LMX) in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training Sector. The overall research study proposes LMX quality as a predictor of employee engagement examining overall LMX quality as a predictor of employee and then, in alignment to calls in the literature, examining each of the sub dimensions as independent variables rather than an exclusive focus on LMX as one higher order factor (Martin <i>et al.</i> , 2015).	

Hypotheses 1A-1E

Hypothesis 1A	Overall LMX quality predicts employee engagement
Hypothesis 1B	Quality of affect predicts employee engagement
Hypothesis 1C	Quality of loyalty predicts employee engagement
Hypothesis 1D	Quality of contribution predicts employee engagement
Hypothesis 1E	Quality of professional respect predicts employee engagement

Optimism as a moderator between LMX and employee engagement

Optimism can “affect the nature of the relationship between” LMX and employee engagement and as such is proposed as a moderating variable in this study. (Howell, *et al.*, 1986, p. 89). As a moderator, optimism impacts the relationship in two different ways; firstly optimism may act as a “neutralising moderator” in that it may help employees to offset the negative effects of low LMX quality on employee engagement. Optimism may also act as an “enhancer” strengthening the high quality LMX relationships thus leading to higher levels of engagement. (Howell, *et al.*, 1986, p. 89) The moderating roles of optimism are outlined in Table 3 below:

Hypotheses 2 – 3

Hypothesis 2	Optimism can offset the negative effects of poor LMX quality on employee engagement
Hypothesis 3	Optimism can boost the LMX relationship quality and lead to increased employee engagement

3. Population of Interest

Pilot Study: The research population for the pilot study are SOLLE graduates from 2014-15, 2013-14 and 2012-13. The population includes those who have graduated from the following programmes:

- PG Diploma in Teaching in Further Education
- MA in Management in Education
- MA in Teaching and Learning in Further and Higher Education
- MA in Education

Overall Study: employees in the Irish FET sector who work in Solas, the new further and education authority in Ireland, established under the Further Education and Training Act.

4. Sampling Methods

Overall Study: A letter will be sent to 162 graduates from the aforementioned programmes inviting participation in the pilot study research.

5. Procedures

Pilot Study: As per the population of interest section above

6. Main Data Collection Procedures

LMX is a mature theory, with “well developed constructs and models that have been studied over time” (Edmonson and McManus 2007, p.1158). As such the proposed methodology for this research is a web based survey. The pilot study will use two online questionnaires with a time lag of one month in between each to mitigate against Common Method or Social Desirability biases. Questionnaire 1 will focus on the LMX relationship while Questionnaire 2 will examine optimism and employee engagement

There are a number of predesigned and tested survey tools that have proven effective to measure the three constructs of employee engagement, optimism and LMX in prior studies that will inform the design of the two questionnaires.

Ethical Issues

Please state what you believe are the main ethical issues in relation to your project.

The two main ethical issues that need to be managed in this process are informed consent and power relations.

Informed Consent

To ensure that any participation in the process is voluntary, an Invitation Sheet (Appendix 4) and Information Sheet (Appendix, 3) will be sent to potential respondents on the pilot. This documentation will highlight the fact that participation in this study is voluntary. The invitation will clearly state that participation in the study is on a voluntary basis and there are no repercussions for not taking part in the study or for taking part in the study.

All respondents will be required to sign a Consent Form relating to the pilot study (Appendix 2) and the letter inviting participation will give alumni an opportunity to opt out of receiving any further correspondence in relation to the pilot study.

Power Relations

The matter of power relations does not present a challenge in relation to the pilot study, as although I work in the School of Lifelong Learning and Education, I have not had any involvement with graduates from the level 9 programmes as part of my role.

Anonymity and confidentiality will be assured throughout the research process. Each individual respondent will be assigned a case number and then matched with the case number for the second stage survey. Individual responses will not be identifiable and all data collected will be collated and presented in aggregate. All efforts will be made to ensure that there is no harm, wrongdoing or risk to the research participants involved in this study.

Any disks or files used to store data will be destroyed once the results are finalised. Data will be stored on my PC and will be backed up using web based file storage (dropbox). These areas will be password protected with both alpha and numeric characters.

Risks to Persons

If the project involves any test or procedure which might carry any risk to the health or well-being of any person, please describe the risks and explain how you intend to minimise the risks.

N/A

Qualifications

Explain how the qualifications and experience of the researchers on this project qualifies them to deal with the ethical issues.

The researcher has experience in conducting and managing research projects through her current role in WIT and previous roles held in County Carlow Development Partnership and Co. Carlow VEC. The researcher is completing a DBA and has attended modules on research methods, the content of which included ethical considerations. As per the requirements of the DBA Cumulative Paper Series, a research methodology paper, approved by Professor Thomas Garavan has been submitted and presented at Colloquium to an External Examination Panel.

Commercial Partners

If the project involves any commercial entity, please complete this section.

n/a

Name of the company:

Name of contact person:

Are agreements required by the Company:

Please attach details.

If the researchers can anticipate any conflict of interest between the company and the research results, how will this be dealt with? Please attach any relevant correspondence.

Research on Animals

If the project involves animal subjects, please complete this section. Please attach any relevant licences.

n/a

Are you aware of and have you understood the legislation relating to experiments involving animals?

Type and source of animals:

Number to be used:

Facilities and expertise required for animal care and disposal of waste:

Research involving Human Participants

If the project involves human participants, please complete this section.

Source: Pilot: WIT Level 9 Department of Education Graduates

Age range: Over 18 years to approx. 65 years

Selection criteria: Purposeful Sample, Self selection

Exclusion criteria: Anyone under 18 and as above

How participants will be recruited?

Pilot: Email with letter inviting participation and providing information on the pilot study

Will you obtain informed consent? Yes

Attach a copy of any information sheets and consent forms to be used.

Please see attached

How will you protect privacy and confidentiality rights?

The privacy and confidentiality rights of the pilot participants will be protected. Data will be used exclusively to inform the survey instrument.

Chemical and Biological Agents

If the project involves the use of any chemical or biological agents which might be hazardous to health or environment, please complete this section.

1. Name the agents involved and explain how they could affect the environment.
2. Explain how you will limit any risks during the project.

3. Explain how these agents will be stored.
4. Explain how they will be disposed of after the project.

n/a

Data Management

Have you read and understood the Data Protection Act 1998 & 2003? Yes

What aspects of the Data Protection Act 1998 & 2003 are relevant for this study?

- Section 2: Data will be gathered for a specified, explicit and legitimate purpose, and consent will be sought from the respondents to process this data.
- Section 6: A respondent may object to the processing of data that is likely to cause damage or distress
- Section 7: The researcher's duty of care

Describe your arrangements for the storage and control of confidential data.

All data will be stored on PC, Laptop in my securely locked office in WIT. Data will also be stored on Dropbox. All of this will be password protected with alpha and numeric characters

Who will have access to the data?

The researcher and research supervisor, Professor Thomas Garavan

How long will it be stored?

Data from the pilot study research will be destroyed upon finalising the survey instruments for the overall study. It is estimated that this will be April/May 2016

Intellectual Property

Should this research generate any intellectual property, please describe any agreements you have made with colleagues or external partners and attach copies.

All intellectual property rights will be assigned to the researcher

Publication and Dissemination of Results

This section is applicable to every project and must be completed.

Outline your plans to deal with any external limitations, such as company agreements, versus academic freedom to publish (if applicable).

n/a

Attach copies of publication agreements – this should include the names which will appear on

publications and the order in which these will appear and explain how the input of all those involved will be recognised.

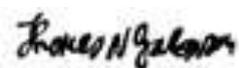
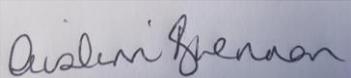
The candidate and her supervisors have agreed an authorship process for shared and non-shared authorship, whereby the chronology of authors will be determined based on the level of individual contribution in each publication.

Other Ethical Implications

If there are ethical implications of your research which are not requested in this form, please provide details

n/a

Signatures of all investigators involved in this research

<i>Signature:</i>		<i>Date:</i>	15/01/16
<i>Signature:</i>		<i>Date:</i>	15/01/16

Checklist

BEFORE YOUR APPLICATION CAN BE CONSIDERED PLEASE ENSURE YOU HAVE INCLUDED THE FOLLOWING WITH YOUR APPLICATION FORM:

1. Formal description of your project including the aims and methodology for the project	<input checked="" type="checkbox"/>
2. CVs for all researchers involved including your own CV and CV of your supervisor(s).	<input checked="" type="checkbox"/>
3. Copies of any questionnaires.	<input checked="" type="checkbox"/>
4. Topic guides.	<input checked="" type="checkbox"/>
5. Consent forms.	<input checked="" type="checkbox"/>
6. Written publication agreement.	N/A

Appendix 5: Information Sheet for Pilot Participants

Researcher: Aislinn Brennan

Institution: WIT, DBA Programme

Research Supervisor: Professor Thomas Garavan

Research Title: The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector: Pilot of the Survey Instruments

Purpose of the pilot study: This pilot study seeks to establish the suitability of the proposed survey instrument to gather the data for the overall research study

What is the purpose of the overall research study?

The main purpose of this study is to examine the role of Leader Member Exchange (LMX) in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training Sector. This research is being carried out in fulfilment of the requirements for a DBA at Waterford Institute of Technology.

Who will be involved in overall research study project?

Employees in the Adult and Further Education Sector within the 16 ETB's in Ireland.

Do you have to take part in this pilot study?

No. Participation in this research is voluntary

Will your participation in this pilot study be kept confidential?

Yes. Any use of data from this research will ensure the anonymity of the participants

What will happen to the information which you give?

The information will be used to ascertain the effectiveness of this survey instrument for the purposes of this study. The aggregate information will be used to ensure that the proposed instrument is valid, reliable and suited to gather the required information.

What will happen to the results?

The results will be used to inform the survey instrument design for the study and ensure the validity and reliability of the survey instrument

Are there any possible disadvantages of taking part?

Apart from the time investment I do not foresee any disadvantages as a result of participating in this research.

What if there is a problem?

In the event that participants experience any difficulties with the research process Dr. John Wall (jwall@wit.ie) has agreed to be the designated contact person.

Who has reviewed this study?

This study has been reviewed by Professor Thomas Garavan and the Ethics Committee in the School of Lifelong Learning and Education in WIT.

Further queries

Should you require any further information you can contact me, Aislinn Brennan on 051 845584 or alternatively via email abrennan@wit.ie

Appendix 6: Invitation to Participate in Pilot Study

Dear Colleague,

My name is Aislinn Brennan and I am employed in Waterford Institute of Technology as Manager of the Literacy Development Centre in the School of Lifelong Learning and Education. I am currently carrying out research in the Irish Adult and Further Education Sector in fulfilment of a Doctorate in Business Administration in WIT. My area of interest is employee engagement and in particular I am examining the influence of workplace managers on employees' engagement. My thesis title is: 'The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector'

I would like to invite you to participate in a pilot study for this research. The pilot study involves the completion of an online survey. There is limited research in this area and your participation in this study can make a valuable contribution to building research in the field. Please see the attached Information Sheet for further information on the pilot study.

I would be very grateful if you would consider sharing your experiences by engaging in this research. Please click the following link to access the survey:

<https://www.surveymonkey.com/r/empengagement2A>

This survey will close on May, 20th, 2016

Thanking you

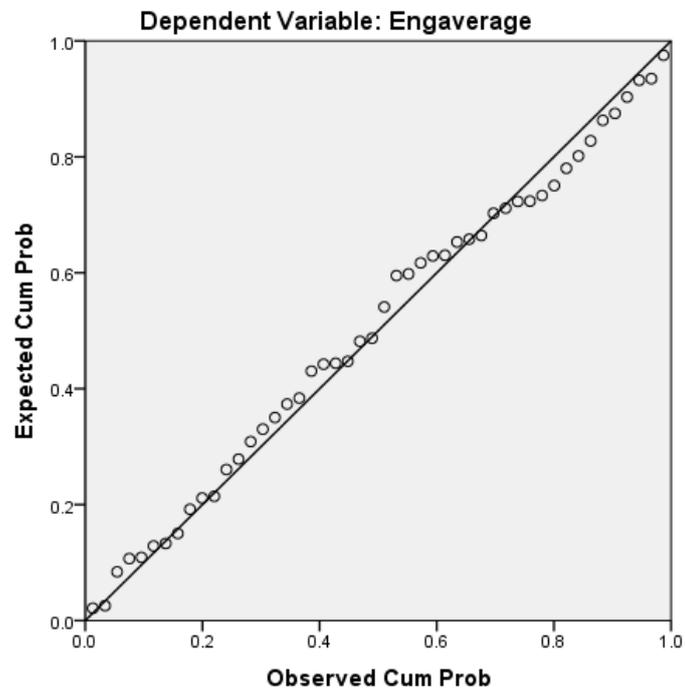
Aislinn Brennan

Appendix 7: Mean Scores of LMX Sub dimensions:

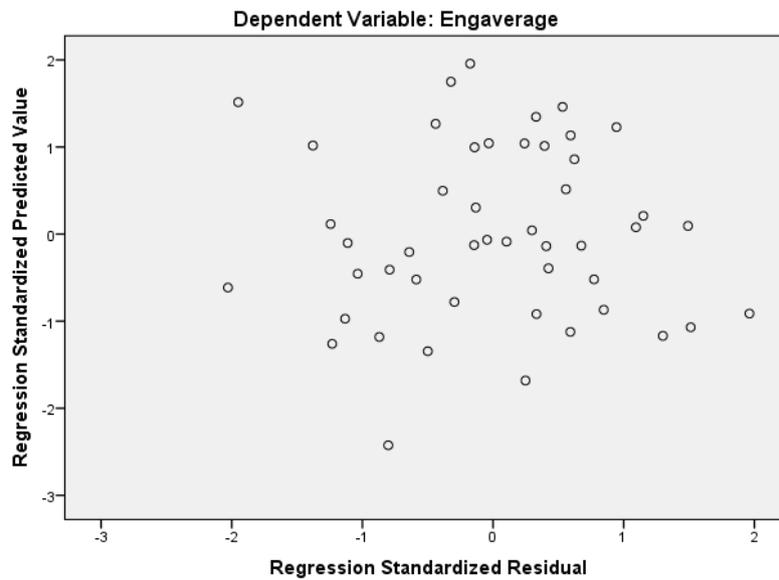
Sub dimension	Mean Score
Affect	3.60
Loyalty	3.73
Contribution	4.28
Professional Respect	3.94

Appendix 8: Scatterplots and Residuals

Normal P-P Plot of Regression Standardized Residual



Scatterplot



Appendix 9: Additional Analyses

LMX: Inter-Item Correlation Matrix

Inter-Item Correlation Matrix												
	LMX1	LMX2	LMX3	LMX4	LMX5	LMX6	LMX7	LMX8	LMX9	LMX10	LMX11	LMX12
LMX1	1.000											
LMX2	.721	1.000										
LMX3	.749	.787	1.000									
LMX4	.316	.225	.326	1.000								
LMX5	.513	.651	.731	.428	1.000							
LMX6	.475	.590	.615	.225	.820	1.000						
LMX7	.264	.321	.286	.261	.233	.378	1.000					
LMX8	.556	.464	.460	.241	.387	.369	.441	1.000				
LMX9	.499	.567	.583	.274	.539	.471	.473	.619	1.000			
LMX10	.567	.696	.594	.273	.733	.653	.213	.440	.521	1.000		
LMX11	.725	.684	.643	.384	.737	.664	.250	.544	.574	.902	1.000	
LMX12	.675	.784	.726	.244	.724	.638	.337	.516	.609	.818	.891	1.000

Employee Engagement-Inter-Item Correlation Matrix

Inter-Item Correlation Matrix									
	E1	E2	E3	E4	E5	E6	E7	E8	E9
Correlation									
E1	1.000								
E2	.775	1.000							
E3	.799	.694	1.000						
E4	.561	.527	.666	1.000					
E5	.667	.760	.730	.689	1.000				
E6	.631	.605	.653	.494	.699	1.000			
E7	.459	.461	.604	.693	.751	.537	1.000		
E8	.177	.233	.309	.482	.479	.439	.637	1.000	
E9	.243	.169	.255	.308	.380	.377	.466	.610	1.000

LMX: - Pilot Findings

Sub Dimension		LMX: MDM	Strongly Disagree (1)	Disagree (2)	Neither Agree/ Disagree (3)	Agree (4)	Strongly Agree(5)	Mean
Affect	1	I like my manager very much as a person	1 (2.1%)	1 (2.1%)	10 (20.8%)	16 (33.3%)	20 (41.7%)	4.1042
	2	My manager is the kind of person one would like to have as a friend	3 (6.3%)	8 (16.7%)	12 (25%)	14 (29.2%)	11 (22.9%)	3.4583
	3	My manager is a lot of fun to work with	2 (4.2%)	7 (14.6%)	21 (43.8%)	13 (27.1%)	5 (10.4%)	3.2500
Loyalty	4	My manager defends my work actions to a superior, even without complete knowledge of the issue in question	1 (2.1%)	9 (18.8%)	14 (29.2%)	16 (33.3%)	8 (16.7%)	3.4375
	5	My manager would come to my defence if I were 'attacked' by others	2 (4.2%)	5 (10.4%)	9 (18.8%)	19 (39.6%)	13 (27.1%)	3.7500
	6	My manager would defend me to others in the organisation if I made an honest mistake	2 (4.2%)	2 (4.2%)	5 (10.4%)	24 (50%)	15 (31.3%)	4.0000
Contribution	7	I do work for my manager that goes beyond what is specified in my job description	0	3 (6.3%)	6 (12.5%)	15 (31.3%)	24 (50%)	4.2500
	8	I am willing to apply extra efforts, beyond those normally required, to meet my work goals	1 (2.1%)	1 (2.1%)	3 (6.3%)	13 (27.1%)	30 (62.5%)	4.4583
	9	I do not mind working my hardest for my Manager	0	2 (4.2%)	11 (22.9%)	14 (29.2%)	21 (43.8%)	4.1250
Professional Respect	10	I am impressed with my manager's knowledge of his/her job	4 (8.3%)	4 (8.3%)	7 (14.6%)	10 (20.8%)	23 (47.9%)	3.9167
	11	I respect my manager's knowledge of and competence on the job	2 (4.2%)	4 (8.3%)	7 (14.6%)	12 (25%)	23 (47.9%)	4.0417
	12	I admire my manager's professional skills	4 (8.3%)	3 (6.3%)	5 (10.4%)	19 (39.6%)	17 (35.4%)	3.8750

Employee Engagement- Pilot Findings

	Never (1)	Almost Never (2)	Rarely (3)	Sometimes (4)	Often (5)	Very often (6)	Always (7)	Mean
1. At my work, I feel bursting with energy			2 (4.2%)	7 (14.6%)	12 (25%)	23 (47.9%)	4 (8.3%)	5.4167
2. At my job, I feel strong and vigorous			2 (4.2%)	8 (16.7%)	14 (29.2%)	18 (37.5%)	6 (12.5%)	5.3750
3. I am enthusiastic about my job			1 (2.1%)	5 (10.4%)	7 (14.6%)	18 (37.5%)	17 (35.4%)	5.9375
4. My job inspires me		1 (2.1%)	4 (8.3%)	7 (14.6%)	9 (18.8%)	16 (33.3%)	11 (22.9%)	5.4167
5. When I get up in the morning, I feel like going to work			7 (14.6%)	6 (12.5%)	7 (14.6%)	16 (33.3%)	12 (25%)	5.4167
6. I feel happy when I am working intensely			3 (6.3%)	3 (6.3%)	9 (18.8%)	20 (41.7%)	13 (27.1%)	5.7708
7. I am proud of the work that I do.				4 (8.3%)	6 (12.5%)	17 (35.4%)	21 (43.8%)	6.1458
8. I am immersed in my work.			1 (2.1%)	7 (14.6%)	8 (16.7%)	15 (31.3%)	17 (35.4%)	5.8333
9. I get carried away when I am working.	2 (4.2%)	1 (2.1%)	1 (2.1%)	9 (18.8%)	7 (14.6%)	19 (39.6%)	9 (18.8%)	5.3125

Optimism-Pilot Findings

	Measure In the future I expect that I will:	Highly Improbable (1)	Improbable (2)	Neither Improbable nor Probable (3)	Probable (4)	Highly Probable (5)	Mean
1.	Succeed at most things I try			4 (8.3%)	24 (50%)	20 (41.7%)	4.3333
2.	Be listened to when I speak		1 (2.1%)	3 (6.3%)	31 (64.6%)	13 (27.1%)	4.1667
3	carry through my responsibilities successfully			1 (2.1%)	19 (39.6%)	28 (58.3%)	4.5625
4	Get the promotion I deserve	5(10.4%)	11 (22.9%)	11 (22.9%)	20 (41.7%)	1 (2.1%)	3.0208
5	Have successful close personal relationships		2 (4.2%)	9 (18.8%)	25 (52.1%)	12 (25%)	3.9792
6	Handle unexpected problems successfully			4 (8.3%)	25 (52.1%)	19 (39.6%)	4.3125
7	Make a good impression on people I meet for the first time			2 (4.2%)	27 (56.3%)	19 (39.6%)	4.3542
8	attain the career goals I set for myself	1 (2.1%)	5 (10.4%)	7 (14.6%)	24 (50%)	11(22.9%)	3.8125
9	Experience many failures in my life	6 (12.5%)	10 (20.8%)	16 (33.3%)	15 (31.3%)	1 (2.1%)	2.8958
10	have a positive influence on most of the people with whom I interact			3 (6.3%)	34 (70.8%)	11(22.9%)	4.1667
11	be able to solve my own problems			1 (2.1%)	27 (56.3%)	20 (41.7%)	4.3958
12	acquire most of the things that are important to me		1 (2.1%)	7 (14.6%)	25 (52.1%)	15 (31.3%)	4.1250
13	find that no matter how hard I try, things just don't turn out the way I would like	7 (14.6%)	19 (39.6%)	13 (27.1%)	9 (18.8%)		2.5000
14	be a good judge of what it takes to get ahead		2 (4.2%)	8 (16.7%)	27 (56.3%)	11 (22.9%)	3.9792
15	handle myself well in		2 (4.2%)		33 (68.8%)	13 (27.1%)	4.1875

	whatever situation I am in						
16	reach my financial goals	3 (6.3%)	7(14.6%)	8(16.7%)	24 (50%)	6 (12.5%)	3.4792
17	have problems working with others	13 (27.1%)	16 (33.3%)	13 (27.1%)	5 (10.4%)	1 (2.1%)	2.2708
18	discover that the good in life outweighs the bad		1 (2.1%)	8 (16.7%)	22 (45.8%)	17 (35.4%)	4.1458
19	be successful in my endeavours in the long run			2 (4.2%)	28 (58.3%)	18 (37.5%)	4.3333
20	be unable to accomplish my goals	13 (27.1%)	20 (41.7%)	8 (16.7%)	6 (12.5%)	1 (2.1%)	2.2083
21	be very successful working out my personal life		1 (2.1%)	7 (14.6%)	31 (64.6%)	9 (18.8%)	4.0000
22	succeed in the projects I undertake			3 (6.3%)	29 (60.4%)	16 (33.3%)	4.2708
23	discover that my plans don't work out too well	4(8.3%)	23 (47.9)	15 (31.3%)	4(8.3%)	2 (4.2%)	2.5208
24	achieve recognition in my profession		9 (18.8%)	11 (22.9%)	20 (41.7%)	8 (16.7%)	3.5625
25	have rewarding intimate relationships	1 (2.1%)	1 (2.1%)	9 (18.8%)	27 (56.3%)	10 (20.8%)	3.9167

Appendix 9a: Correlations of LMX Sub dimensions and Employee Engagement and Optimism

	Employee Engagement	Vigour	Dedication	Absorption	Optimism	Optimism Recorded
LMX Overall	.172	.197	.252	.015	.026	-.012
LMX Affect		.137	.158	.052	.035	-.200
LMX Loyalty		.234	.293*	.002	.069	-.035
LMX Contribution		.226	.216	.102	-.026	.004
LMX Professional Respect		.116	.184	-.067	.007	-.142

Appendix 9b: Correlations between Overall LMX and Dimensions of Optimism

	Overall Optimism	Career	Interpersonal	Life	Self	Pessimism	Social
LMX Overall	.026	-.166	-.018	.028	.143	.146	.076

Preface 4
Developments Between
CPS Paper 3
And
CPS Paper 4

1. Introduction

Preface 4 offers a discussion on the developments in the study between the approval of CPS Paper 3 in August 2016 and the final submission of CPS Paper 4 in February 2017. In this preface, I will discuss those emerging in advance of CPS Paper 4 commencement and then I will address those arising from the examiner review and feedback of CPS Paper 4 prior to final paper submission.

2. Post CPS Paper 3 in Advance of CPS Paper 4

At this stage of the study, I had a number of discussions with the supervisory team, having regard to examiner feedback in August 2016. These discussions led to me taking a number of key decisions prior to commencing the Paper.

2.1 Sample Group

The first decision related to my sample group. In earlier papers, I had indicated my intention to use a purposive sample of FET Teaching Staff working for ten hours or more in the 16 ETBs. I decided to approach this using a sample from three ETBs chosen on the basis of facilitated access and as I considered these to be representative of the overall sample.

2.2 Controls for CMV

The second main decision prior to commencement concerned the implementation of controls to minimise potential for CMV bias. It was agreed to adopt a two phased approach to collect the data for analysis as presented in Table 1 below:

Table 1: Data Collection Approach

Phase 1: Data Collection		Phase 2: Data Collection	
Questionnaire 1A Order	Questionnaire 1B Order	Questionnaire 2	
1. Engagement	1. LMX	Employee Engagement	
2. Optimism	2. Optimism		
3. LMX	3. Engagement		

In the first collection phase, each of the three constructs of employee engagement, optimism and Leader Member Exchange (LMX) was measured using two separate questionnaires. While each questionnaire contained identical questions, these questions were presented in different order. Fifty percent of the sample group (randomly) received Questionnaire 1A and

the remaining 50% received Questionnaire 1B. In the second phase of data collection respondents received one survey containing a repeat measure of employee engagement at a second point in time. The rationale for adopting this approach to data collection was based on a number of considerations discussed with the Supervisory Team including:

- i) Minimising potential CMV associated self-report surveys (Podsakoff *et al.*, 2003)
- ii) Determining whether there was fluctuations in engagement (Bakker *et al.*, 2011; Tims *et al.*, 2011)

3. Post CPS Paper 4 Submission and Pre Approval of Final Submission

A number of minor recommendations were made by the Examiner Panel prior to the final approval of CPS Paper 4. These recommendations related to the use of data collected at one point only, combining these data with data collected at pilot for final analysis and a final revision of the Conceptual Framework to exclude moderation. These recommendations were discussed with my Supervisory Team and are now presented with the responses that informed the development of the finalised CPS Paper 4.

3.1 Recommendation 1: Data Used for Final Analysis

My original approach to data collection as outlined in Section 2.1 above revealed the following:

- i) Non-significant results of Survey Type indicated that CMV was not an issue
- ii) Little difference in the employee engagement data collected at the first point and that collected at the second confirming no fluctuations
- iii) Responses had fallen from point 1 to point 2 (108 to 86)

On the basis of this analysis, the Examination Panel in discussion with the researcher and Supervisory Team recommended adapting this approach for the final submission of Paper 4 as follows:

- i) Using data collected at Point 1 for analysis in the final submission
- ii) Collating Point 1 data with Pilot data for analysis

3.2 Recommendation 2: Exclusive Focus on Optimism as a Mediator

In the original submission of CPS Paper 4 prior to revisions, the researcher had considered the possibility of a moderating role for optimism on the LMX-Employee Engagement relationship. A deeper investigation of the literature e.g. Tims *et al.*, 2011 revealed that a

mediating relationship would be more appropriate in that it would allow for LMX to directly impact on employee engagement and also to indirectly influence it through optimism. It was recommended that the final model be refined to focus on optimism as a mediating variable only. The recommendations relating to the two issues identified above have been incorporated into CPS Paper 4.

References

Bakker A.B., Albrecht S.L and Leiter M.P. (2011) , 'Key questions regarding work engagement', *European Journal of Work and Organizational Psychology*, Vol. 20, No.1, pp. 4-28.

Podsakoff, P.M., MacKenzie, S.B.,Podsakoff, N.P and Lee. J.Y. (2003) 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.

Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011) 'Do Transformational Leaders Enhance their Followers' Daily Work Engagement?', *The Leadership Quarterly*, Vol. 22 pp. 121-131.

CPS Paper 4
Analysis Paper | DBA | Class of 2017

**The Mediating Role of Optimism on the Relationship between
Leader Member Exchange and Employee Engagement: Evidence
from the Irish Further Education and Training Sector
Data Collection and Analysis Paper**

Aislinn Brennan- WIT 20061745

14th February, 2017

Professional Doctorate in Business Administration

Abstract

This paper presents the data collection and analysis to examine Leader Member Exchange (LMX) and each of its sub dimensions as independent predictors of Employee Engagement considering the mediating role of optimism in the Irish Further Education and Training (FET) Sector. The outcomes of this study will contribute to an enhanced understanding of the ways in which leaders can influence employees' engagement, which will inform leadership and employee practice in context. The data were collected from a purposive sample of 156 teaching staff in three Education and Training Boards (ETBs) using an online survey. Data was analysed using SPSS, a statistical software package and Hayes Process Macro Plug In. Analysis of the Cronbach's Alpha confirms that the LMX MDM, UWES (engagement) and GESS-R (optimism) measurement scales are valid. Analysis of descriptive statistics, split-group statistics and correlations reveal interesting relationships between the demographic variables and each of the three constructs. Hierarchical linear regression analyses reveal support for overall LMX and each of its sub dimensions as predictors of employee engagement. Mediation analysis reveals that optimism is mediating between LMX and employee engagement at the 95% level. In addition, optimism is also found to mediate between the sub dimensions of LMX and employee engagement. The implications of these findings mean that organisational leaders seeking to improve employee engagement in FET need to consider the important influence of the LMX relationship, mediated through the vehicle of optimism.

Keywords: Data Collection, Data Analysis, Employee Engagement, Leader Member Exchange, Optimism, Hierarchical Linear Regression and Hayes Process Mediation

1. Introduction

This paper is the fourth in a series of cumulative papers in fulfilment of the DBA requirements. A conceptual review on, ‘The Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector’ was presented in Paper 1, (January, 2015) and a rationale to change the study context to the FET Sector was offered in Addendum Paper 1. Paper 2 (December, 2015) focused on the methodology to examine “The Role of Leader Member Exchange (LMX) in Influencing Employee Engagement and the Moderating Role of Optimism, in the Irish Further Education and Training Sector”. This paper offered a discussion on the selection of a deductive, quantitative approach and the use of a questionnaire for data collection for the refined research study. Paper 3 (July, 2016) presented the design of the survey instrument and the findings from the implementation of a pilot study examining the role of LMX in influencing employee engagement and optimism as a moderator and mediator in this relationship.

This paper aims to build on the cumulative work to date. Section One describes the developments since the submission of Paper 3 to set the context in which to frame the current paper. Section two discusses the sample group selected; the process used to access potential respondents, survey administration and details the response rates. Section three presents a discussion on the initial data analysis concerning scale reliability, demographic variables and their relationship to the main constructs. Descriptive Statistics and Intercorrelations between the main constructs and their sub dimensions are also presented. Section four offers a discussion of the SPSS Hierarchical Regression Analyses and explores the possible mediating role of optimism on the LMX –Employee Engagement relationship. The paper concludes with a summary of the findings.

1.2 Issues Arising from Pilot Study and Examiner Feedback

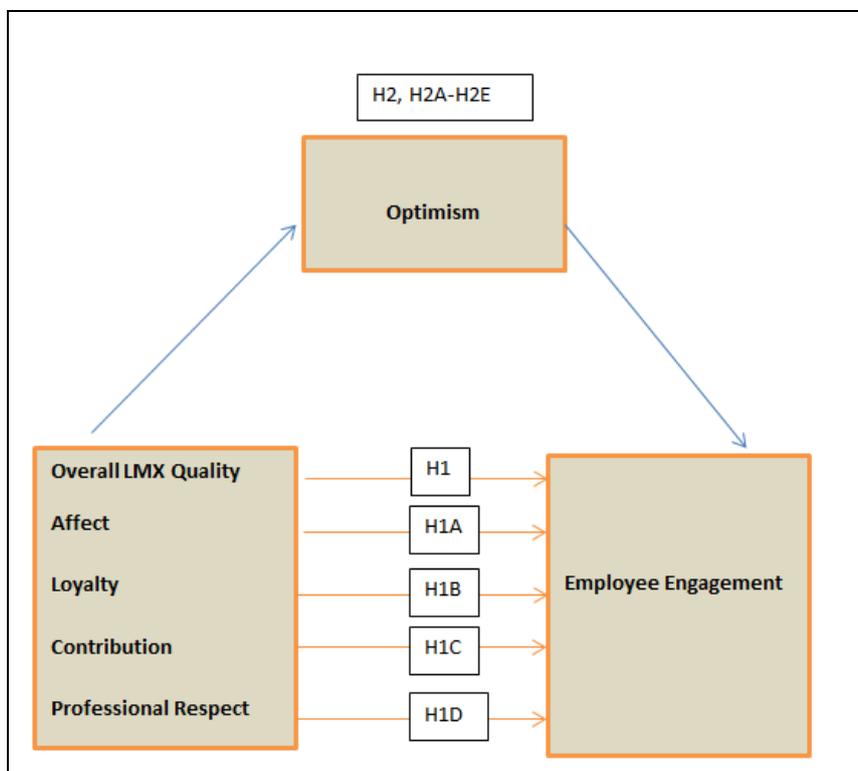
Arising from the pilot study and its examiner commentary, a number of areas were identified for further consideration. These included the conceptual framework; adopting an approach to survey administration to effectively address common method variance issues; the implication of pilot reliability scores and sampling concerns. Examiner commentary post Paper 4 presentation (pre minor changes phase) advocated two adjustments for the revised paper submission. The first related to collating the pilot data with the data gathered at data collection stage for the purpose of analyses and the second involved proceeding with optimism as a mediator based on the moderation and mediation findings in the first

submission. These recommendations have been incorporated into this revised paper four submission.

1.2.1 The Conceptual Framework and Hypotheses

Paper 3 presented the Pilot Study that set out to examine Leader Member Exchange as a predictor of employee engagement in the FET sector and explore the role of optimism on this relationship. Pilot analyses confirmed support for overall LMX as a predictor of engagement and there was significant evidence to support further examination of the LMX sub dimensions (Affect, Loyalty, Contribution and Professional Respect) as independent predictors in this model. It was clear that optimism was influencing the LMX-Engagement relationship and there was tentative support for optimism as a mediating variable in the model. The conceptual model was thus refined to encompass i) Overall LMX as a predictor of employee engagement with optimism mediating this relationship and ii) LMX sub dimensions as independent predictors of employee engagement with optimism mediating these relationships. The refined conceptual model is depicted on Figure one below:

Figure 1: LMX as a Predictor of Employee Engagement and the Mediating Role of Optimism



Optimism is being examined as a mediating variable as it is being suggested that LMX quality may influence employee engagement via the mediation of optimism. This idea of

using the leader relationship to boost optimism and enhance engagement is discussed in Paper One, where a number of studies supported the role of personal resources (including optimism) as mediating between i) Job resources and work engagement (Xanthoupoulou *et al.*, 2009) and ii) transformational leadership and work engagement (Tims *et al.*, 2011).

The hypotheses drawn from this Conceptual Framework are depicted on Table One below:

Table 1: Hypotheses under Examination

Hypotheses		Proposed Method of Analysis
Hypothesis 1	High LMX quality positively predicts employee engagement	Hierarchical Regression
Hypothesis 1A	High affect positively predicts employee engagement	Hierarchical Regression
Hypothesis 1B	High loyalty positively predicts employee engagement	Hierarchical Regression
Hypothesis 1C	High contribution positively predicts employee engagement	Hierarchical Regression
Hypothesis 1D	High professional respect positively predicts employee engagement	Hierarchical Regression
Hypothesis 2	Optimism mediates the relationship between Overall LMX and Employee engagement	Baron and Kenny Hayes Process Macro Mediation Analysis- Bootstrapped CI's
Hypothesis 2A	Optimism mediates the relationship between LMX affect and employee engagement	Hayes Process Macro Mediation Analysis- Bootstrapped CI's
Hypothesis 2B	Optimism mediates the relationship between LMX loyalty and employee engagement	Hayes Process Macro Mediation Analysis- Bootstrapped CI's
Hypothesis 2C	Optimism mediates the relationship between LMX contribution and employee engagement	Hayes Process Macro Mediation Analysis- Bootstrapped CI's
Hypothesis 2D	Optimism mediates the relationship between LMX professional respect and employee engagement	Hayes Process Macro Mediation Analysis- Bootstrapped CI's

Hypotheses (H1, A-E and H2 A-E) are shown graphically on Figure One above and Table One highlights the modes of analyses used to test each one of these.

1.2.2 Consideration of Scales and Correlations for the Full Survey

The findings from the Pilot Study in Paper Three confirmed good reliability scores indicating the suitability of the scales selected to measure the three constructs of employee engagement, optimism and Leader Member Exchange for the full study. This included reliability for each of the sub dimensions of LMX depicted in Figure 1 above. Analysis of the interscale correlations at Pilot Study stage revealed the following relationships between the variables:

- i) A relationship between LMX and employee engagement (0.172). This was expected, however it was not found to be significant.
- ii) A statistically significant positive correlation between employee engagement and optimism (0.327).
- iii) An unexpected negative correlation between LMX and optimism (-0.114)

Findings (i) and (ii) bode well for this study and although significance was not confirmed in the relationship between LMX and engagement, it was anticipated that this was an issue with sampling size in the pilot. It was also considered likely that the negative correlation between LMX and optimism would fall away with the bigger sample group in the overall research study. Consequently the main scales were left unaltered for this paper.

1.2.3 Approach to Survey Administration

Paper three discussed the reliance of the survey questionnaire on self –report data and the potential risk of Common Methods Variance (CMV) with this approach. Spector’s (2004) view of these problems being overrated and his suggestion that the use of validated measurement scales ought to mitigate against any difficulties was presented. Although each scale being used in this survey has been validated in prior studies, controls suggested by Podsakoff *et al.* (2003) to minimise potential biases were applied in the Pilot Study. Two questionnaires were developed, each contained the same questions to examine the variables of interest, however the order of the questions in each was different (see Table Two). It was discovered at paper presentation stage that this experimentation with question order ended up as a proxy for the different centres involved due to the mode of survey distribution. Nonetheless, the counterbalancing approach to address CMV was considered worthy of further development and application in the overall study. Consequently it was decided to counterbalance the questions and administer each questionnaire randomly.

Table 2: Data Collection Approach

Data Collection	
Questionnaire 1A Order	Questionnaire 1B Order
1. Engagement	1. LMX
2. Optimism	2. Optimism
3. LMX	3. Engagement

The two separate questionnaires each containing identical questions, presented in different order (See Appendix 1, for Questionnaire 1A and 1B) were randomly distributed to the sample group. Fifty percent of respondents received Questionnaire 1A and the remaining 50% received Questionnaire 1B.

2. Research Population and Data Collection

This section offers a discussion on the sample selection for the study and the approach used by the researcher to gain access to potential respondents. The administration of the surveys is explored.

2.1 Study Sample Selection

This study targeted teaching staff working in excess of ten hours per week in adult, further education and training provision having been reporting to their managers for at least one year. As with the pilot study, a non- probability, purposive sampling strategy was deemed to be the most suitable approach to collect data from a representative sample of the research population. This approach enabled the researcher to include people that were best placed to respond (MacNealy, 1999) and access the population aligned with the nature of the research aims (Babbie, 1990). This approach facilitated ease of access; representation of both full-time and part-time programmes; and minimised the contextual issues to account for in the analysis.

2.2 Access to Potential Respondents

In September 2016, a letter describing the research study was sent via email to the Chief Executive and Director of Adult and Further Education in four ETBs known to the researcher. Two ETBs (Wexford and Waterford ETB and Laois and Offaly ETB) agreed to participate in the study, the third agreed but was uncontactable thereafter within the timeframe of this paper and the fourth declined.

2.3. Data Collection

The data collection process is illustrated on Table 3 below. The researcher sent two separate Invitation to Participate emails (one contained a link to survey 1A and the other to survey 1B) to the stakeholders (Appendix 2). The stakeholders then forwarded these emails to their management team along with a request that the first mail be sent to the first 50% of their teaching staff and the second mail to the remainder.

Many teaching staff received the Invitation to Participate and the survey link in October 2016. Initially, response rates were quite low and after a period of two weeks, the researcher contacted the management teams to establish whether the emails had been disseminated to the relevant staff. Not all managers had distributed the survey and they confirmed they would redistribute the email. At the end of October 2016, the key stakeholders asked management to send email reminders to their teaching staff in an effort to promote participation. Participation was fully dependent upon whether or not teaching staff wished to participate. Weekly response rates for the data collection between September and December 2016 are in appendix three.

Table 3: Data Collection Process

Data Collection	
Laois Offaly ETB and Waterford Wexford ETB	
Month	Activity
September	<ul style="list-style-type: none"> • Email Invitations sent to gatekeepers with Survey Link to 1 A and 1B
October	<ul style="list-style-type: none"> • Gatekeepers sent the link to 1A to 50% of eligible staff and 50% received 1B • Follow up contact made with gatekeepers and potential respondents • Email reminder circulated by Gatekeepers at end of October
November	<ul style="list-style-type: none"> • Follow up phone calls and emails with Gatekeepers at a number of intervals in early November • E Mail reminders sent to potential respondents • Phone calls to Gatekeepers • Receipt of 141 surveys (108 usable)

By November 28th 2016, a total of 141 respondents had participated in the research. However some respondents opted out of the survey prior to completion and a total of 108 usable surveys were gathered for analysis.

2.3.1 Amalgamation of Pilot Data with Data Collected in 2016

A total number of 48 complete responses were collected from participants at Pilot Study stage. On the recommendation of the Examination Panel, these were collated with the 108 usable surveys, giving a total of 156 completed responses for analysis.

3. Data Analysis

This section of the paper presents and offers discussion on the findings from the full survey. Scale reliability is initially discussed and the demographics, along with their relationships with the three constructs of employee engagement, Leader Member Exchange and optimism. Descriptive statistics and intercorrelations are then presented.

3.1 Scale Reliability

The LMX-MDM scale was used to measure LMX. Employee Engagement was measured using the Utrecht Work Engagement Scale (UWES) and Optimism was measured using the 25 Item GESS-R Scale. The GESS-R contained a number of negatively worded items which were recoded prior to running the Cronbach's Alpha test for scale reliability (Appendix 4).

Test results reveal (see Table Four below) Alphas in excess of 0.90 for the LMX MDM Scale and the UWES. These scores are recommended by Hair *et al.*, (1995) as having excellent reliability. GESS-R results show alphas in excess of the 0.80 recommended by Hair *et al.*, for 'very good reliability'.

Table 4: Cronbach's Alpha Scale Reliability

Construct	Scale	Cronbach's Alpha	Hair <i>et al.</i> 's Recommendation
Leader Member Exchange (LMX)	LMX	.932	Excellent
LMX Sub Dimensions:			
<i>Affect (LMX 1,2,3)</i>		.904	Excellent
<i>Loyalty (LMX 3,4,5)</i>		.860	Very Good
<i>Contribution (LMX 6,7,8)</i>		.671	Under
<i>Contribution (LMX 6,8)</i>		.714	Good
<i>Professional Respect (LMX 10,11,12)</i>		.961	Excellent
Employee Engagement	UWES	.913	Excellent
Employee Engagement Sub Dimensions:			
<i>Vigour (UWES 1,2,5)</i>		.853	Very Good
<i>Dedication (UWES 3,4,7)</i>		.843	Very Good
<i>Absorption (UWES 6,8,9)</i>		.771	Good
Optimism GESS-R (Recoded)		.889	Very Good
Optimism Sub Dimensions:			
<i>Career Optimism (1,3,4,8,16,22,24)</i>		.767	Good
<i>Interpersonal Optimism (5,21,25)</i>		.672	Just under
<i>Life Outlook Optimism(11,12,18,19)</i>		.749	Good
<i>Self Efficacy optimism(2,6,14,15)</i>		.706	Good
<i>Pessimism(9,13,20,23)</i>		.661	Under
<i>Social Interaction Optimism (7,10,17)</i>		.556	Under

3.1.1 Scale Reliability of Sub Dimensions

LMX reliability results reveal alphas in excess of 0.9 for LMX Affect and LMX Professional Respect and an alpha in excess of 0.8 for LMX Loyalty. LMX Contribution was falling slightly under Hair *et al.*'s., recommended minimum of 0.7 at 0.671. Consideration was given to dropping Item 7, "I do work for my supervisor that goes beyond what is specified in my job description", due to its similarity to the UWES measures of engagement. The item was deleted and this resulted in an increased alpha of .714 for this subscale.

Engagement results show alpha coefficients for Vigour and Dedication in excess of 0.8 and a score of absorption scores over 0.7 for Engagement Absorption. Results for Optimism sub dimensions show alphas in excess of the 0.7 recommendation for Career, Life Outlook and Self Efficacy. Interpersonal optimism falls slightly short of the 0.7 recommendation while Pessimism and Social Interaction are low at 0.661 and 0.556 respectively. The removal of scale items from these three sub dimensions will not increase the alphas and as such they will not be used as separate mediators in the regression analysis.

3.2 Demographic Variables and their Relationship to the Main Constructs

The demographic variables examined in this study include: gender, education, age, tenure management responsibility (See Appendix 5 for the mean scores and relationships between the demographic variables and the main constructs). The overall mean scores depict a positively minded group who have relatively good quality LMX relationships (average LMX score of 3.71 out of a maximum of 5), are relatively optimistic (3.79 out of a maximum of 5) and are engaged (average engagement score of 5.61 out of a maximum of 7). It is possible to make the following comments from the data:

- **Gender:** Almost three quarters of the respondents were women (74%) while the remaining 26% were men. It is interesting to note that LMX appears to be stronger for men with a mean of 3.96 compared to a mean of 3.65 for women. Women are stronger on engagement with a mean of 5.65 compared to 5.48 for males and also on optimism with a mean of 3.82 compared to 3.72 for men.
- **Education:** The majority (59%) of respondents hold QQI Levels 9 and 10 qualifications, 22% hold level 8 qualifications and the remaining 19% are qualified between QQI5 and 7.
- **Age:** Almost 72% of respondents are aged between 36 and 55.
- **Tenure:** It is interesting to note that almost half of the respondents are working in their roles for over 10 years.
- **Management Responsibility:** 38% of respondents have management responsibility and both engagement and optimism are all higher for those people.

The only results with statistical significance are for those with management responsibility whose engagement is higher than for those who have no responsibility (significant at $p < 0.05$).

3.3. Descriptive Statistics and Intercorrelations

The mean (M), standard deviation (SD) and correlation coefficients (r) statistics for the three main constructs are presented in Table five below. LMX sub dimensions are being examined as independent predictors of Employee Engagement and the descriptive statistics are presented for these on Table six.

3.3.1 Correlations between LMX and Employee Engagement

Table five depicts the correlations between the three main constructs including Employee Engagement. An analysis of the interscale correlations reveals a significant positive correlation (.252, $p < .01$) between LMX and employee engagement, which was expected. This is classified as a small effect by Cohen (1998) with a variance of 0.06 (6%). The data supported the idea that high quality LMX values are associated with higher levels of engagement and led to an analysis of the correlations between the LMX sub dimensions and Employee Engagement.

Table 5: Descriptive Statistics and Intercorrelations

Variable	Mean	SD	Gender	Education	Age	Mgt. Resp.	Tenure	Survey Type	LMX	Optimism	Employee Engagement
Education	4.39	1.00	-.005								
Age	2.56	.931	.041	-.079							
Mgt. Rsp.	1.61	.490	-.070	.046	.099.						
Tenure	3.53	1.89	.253**	-.052	.331**	.037					
Survey Type	1.61	.488									
LMX	3.71	.837	-.161*	.195*	.002	.010	.168*	.116			
Optimism	3.79	.442	.098	-.048	-.100	-.089	-.062	-.020	.186*		
Employee Engagement	5.61	.937	.080	-.052	.146	-.109	.042	.093	.252**	.279**	1

SD: Standard Deviation; Mgt. Rsp: Management Responsibility; LMX: Leader Member Exchange, N=108

*Correlation is significant at the 0.05 level;** Correlation is significant at the .01 level;*** Correlation is significant at the .001 level

Note: Gender coding: 1=Male; 2=Female Education coding: 1=QQI5; 2= QII6; 3= QQI7; 4= QQI8;5=QQI9,6=QQI10, 7=Other; Age Coding 0=18-25, 1=26-35,2=36-45, 3=46-55, 4=56-65, 5=65+; Coding: 1=Less than 1 year, 2=Between 1 and 2 years, 3= between 2 and 4 years, 4= between 4 and 6 years, 5= between 6 and 8 years, 6= between 8 and 10 years and 7= 10+ years.

Table six below shows the LMX sub dimension mean scores. In comparison to the overall LMX mean score of 3.71, contribution has the highest mean (4.27); followed by Professional Respect (3.68), Affect (3.53) and Loyalty (3.51). There is a positive significant correlation between each of the LMX sub dimensions and employee engagement, which was as expected. LMX Contribution has the strongest significant positive relationship with engagement (0.373, $p < .01$), which is classified by Cohen (1998) as a medium effect.

Table 6: LMX Sub Dimension Statistics and Inter Item Correlation

LMX Sub Dimension	Mean	SD	Employee Engagement	Cohen's (1998) Effect Sizes
LMX Affect	3.53	.991	.200*	.04 (4%)
LMX Loyalty	3.51	1.01	.162*	.03 (3%)
LMX Contribution	4.27	.699	.373**	.14 (14%)
LMX Professional Respect	3.68	1.22	.196*	.04 (4%)

3.3.2 Correlations between Overall LMX and Optimism

Table five shows a significant positive correlation between overall LMX and optimism (0.186). This supports the idea that high quality LMX values are associated with higher levels of optimism and led to an analysis of the correlations between the LMX sub dimensions and optimism. Analysis of the data presented on Table 7 below depicts the correlations between each of the four LMX sub dimensions and overall optimism. LMX Contribution is significantly correlated with optimism (0.257**).

Table 7: LMX Sub Dimensions and Optimism Statistics and Inter Item Correlation

LMX Sub Dimension	Optimism
LMX Affect	.128
LMX Loyalty	.149
LMX Contribution	.257**
LMX Professional Respect	.133

3.3.3 Correlations between Optimism and Employee Engagement

The correlations on Table 5 show a statistically significant positive correlation between optimism and employee engagement, (.252, $p < .01$). This effect of .06 (6%) is classified by Cohen (1998) as a small effect size. These data support the idea that high optimism is associated with higher levels of engagement.

3.3.4 Consideration of Optimism and Employee Engagement Sub Dimensions

Although not part of the Conceptual Framework, some analysis was carried out on the sub dimensions of both optimism and engagement. An analysis of: i) the correlations between i) Overall LMX and the Employee Engagement sub dimensions ii) Overall LMX and the Optimism sub dimensions Employee Engagement iii) optimism sub dimensions and overall engagement (iv) Overall Optimism and Engagement sub dimensions. Summarised findings are presented on Table eight below.

Table 8: Summary Findings: Correlations between Optimism and Employee Engagement and Optimism Sub Dimensions

Correlations	Findings	Cohen's (1998) Effect Sizes	Full Results
Overall LMX and the Employee Engagement sub dimensions	Positive correlation between all sub dimensions of employee engagement and overall LMX. Vigour (.257**) and Dedication (.304**) are significant ($< .01$). Absorption not significant (.123)	.07 (7%) Small .09 (9%) Medium .02 (2%) Small	Appendix 6
Overall LMX and the Optimism sub dimensions	Statistically significant correlations between overall LMX and Career (.241**), Life Outlook (.186*) and Self Efficacy (.241**) sub dimensions of Optimism. The strongest correlation is between Career Optimism and LMX.	.06 (6%) Small .03 (3%) Small .06 (6%) Small	Appendix 7
Overall Optimism and Engagement sub dimensions	Statistically positive correlations between optimism and Vigour (.248**), Dedication (.296**) and Absorption (.211**).	.06 (6%) Small .09 9(%) Medium .04 (4%) Small	Appendix 8
Optimism Sub dimensions and Engagement	Statistically significant positive correlations between Career Optimism (.386**), Self Efficacy (.211**) and Employee Engagement. Career Optimism has the strongest correlations.	.15 (15%) Medium .04 (4%) Small	Appendix 9

4. Regression and Mediation Analysis

The next stage of findings involved regression and mediation analyses. Firstly a two stage hierarchical multiple linear regression, was used to control for the effects of covariates and to test the effects of each variable as a predictor of employee engagement (Hypotheses 1 and 1A-1D in Table 1). It was decided not to include tenure as a covariate as it was found to be significantly correlated with age (.383**) with both essentially measuring experience.

4.1 Regression: High Overall LMX quality positively predicts Employee Engagement

In step one gender, education, age, and management responsibility were entered as covariates (Table 9). Step one results reveal that the demographic variables explain 3.5% of the variance in employee engagement. The positive slopes for gender and age, suggest that females and older people have higher engagement while the negative slope for management responsibility suggests that those who have responsibility for managing others have lower engagement. None of these results are statistically significant.

Table 9: Hierarchical Regression Analysis Predicting Engagement

<i>Step 1-Hierarchical Regression Analysis Predicting Engagement</i>						
Steps	Variables	B	PValue	R2	ΔR2	F
Gender , Education, Age, Management Responsibility	Gender	.126	.470	.035	.	1.350
	Education	-.041	.588			
	Age	.130	.115			
	Mgt. Resp.	-.181	.248			
	.	.	.			

In step 2, LMX is added to the model with the covariates are controlled (Table 10). This reveals that LMX explains 9.4% of the variance in engagement.

Table 10: Step 2-Hierarchical Regression Analysis Predicting Engagement

<i>Step 2-Hierarchical Regression Analysis Predicting Engagement</i>						
Steps	Variables	B	P Value	R2	ΔR2	F
Step 2 Add LMX as an IV	Gender	.233	.177	.102	.067	3.353
	Education	.009	.908			
	Age	.139	.080			
	Mgt. Resp.	-.185	.224			
	LMX	.310	.001			

This step reveals that LMX has a significant positive slope, which is consistent with the statistically positive correlation in Table 5 above. Controlling for the covariates it can be confirmed that each one unit increase in LMX leads to a .310 rise in engagement. The increase in R2 and R2 change .067 between step 1 and 2 confirms that LMX is a relevant variable in the model.

In summary the results of the regressions confirm Hypothesis 1: Overall High Overall LMX quality positively predicts employee engagement.

4.1.1 LMX Sub Dimensions as predictors of Employee Engagement

Hypotheses 1A-1D are concerned with each LMX sub dimension as a predictor of employee engagement. A separate regression was run for each sub dimension and the covariates (Table 11) as the initial analysis revealed high correlations, VIF and Condition Indexes between the sub dimensions. This approach ensured the avoidance of multicollinearity issues in the examination of these hypotheses.

Table 11: Hierarchical Regression Analysis Predicting Engagement (H1A-H1D)

<i>Hierarchical Regression Analysis Predicting Engagement Hypotheses 1A-1E</i>							
Hypothesis	Variable	B	P	R2	ΔR2	F	Sig.
1A	Covariates and Affect Only	.194	.014	.074	.043	2.356	Yes
1B	Covariates and Loyalty Only	.177	.023	.069	.033	2.165	Yes
1C	Covariates and Contribution Only	.468	.000	.167	.132	5.912	Yes
1D	Covariates and Professional Respect Only	.155	.015	.073	.038	2.332	Yes

Analysis of the regression data for each hypothesis reveals support for Hypothesis 1A, 1HB, 1HC and 1HD (positive slopes with p values of <0.05)

4.1.2 Regression to Assess Approach to Common Methods Variance

Section 2.3 above discussed the use of two questionnaires for data collection to mitigate against Common Methods Variance. A separate regression analysis was run using Gender, Age, Education, Managing Others and Survey Type (Full results in Appendix 10) in order to test whether the Survey Type was significant to the findings. The insignificant Beta for survey type in Model 1 (β 0.245, p, 0.123) suggests that there is no significant difference in

the data received from respondents who answered Questionnaire 1A and those who answered 1B. These findings support the idea that CMV is not an issue (Spector, 1994).

4.2 Exploring Optimism as a Mediator of the LMX - Employee Engagement Relationship: Mediation Analyses

Two approaches were used to explore the mediating role of Optimism in the LMX-Employee Engagement Relationship. Baron and Kenny’s (1986) 4 stage approach was initially used and as it usually used as a supplementary test, further mediation tests were carried out using Hayes Process Macro in SPSS. The models under examination include:

- i) Overall Optimism as a Mediator between Overall LMX and Employee Engagement
- ii) Overall Optimism as a Mediator between significant LMX Sub Dimensions and Employee Engagement

4.2.1 Optimism as a Mediator between Overall LMX and Employee Engagement

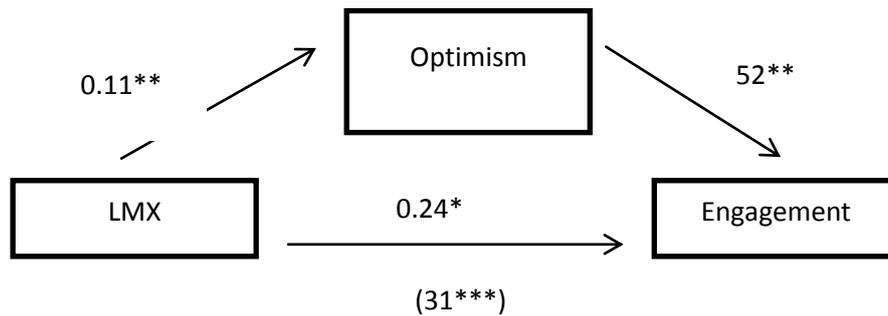
Using Baron and Kenny’s four step test revealed a significant positive relationship with Engagement (Table 12) when i) Optimism was regressed on LMX, ii) Optimism was regressed on Employee Engagement iii) Employee Engagement was regressed on LMX and Optimism iv) LMX was regressed on Employee Engagement. These results suggest initial support for optimism as a mediating variable in the LMX-Engagement relationship. However these results need to be interpreted with caution as Baron and Kenny is a supplementary test (MacKinnon, 2015).

Table 12: Mediation Analysis Overall LMX and Employee Engagement

Mediation Analysis Overall LMX	β X	P Value
LMX predicts Optimism	.1245	.0050
Optimism LMX predicts Engagement	.5179	.0023
LMX Optimism predicts Engagement	.2433	.0084
LMX predicts Engagement	.3078	.0009

Proceeding to Hayes Process Macro analysis, the test confirmed LMX (β . 0.11, p .005) as a significant predictor of optimism and Optimism|LMX as a significant predictor of (β .0.52, p .002). Analysis also revealed that LMX|Optimism (β . 0.24, p .008) is a significant predictor of engagement while LMX is a significant predictor of engagement (β .0.31, p .001) The results illustrated are on Figure 2.

Figure 2: Optimism as a Mediator between LMX and Engagement



The indirect effect of Overall LMX on Employee Engagement through Optimism $ab=.06$. BCa CI [02, 14] was significant when tested at 95% Confidence Interval. The bootstrapped confidence intervals do not contain zero confirming that mediation is occurring. The mediator could account for just under a fifth of the total effect. $PM=.21$. A summary of the mediation results, including the bootstrapped confidence intervals is shown below on Table 13.

Table 13: Results Summary for Optimism as a Mediator between Overall LMX and Employee Engagement

Confidence Interval	Effect	BootSE	Boot LLCI	Boot UCLI	P Value of Indirect Effect
95%	.0645	.0289	.0166	.1416	.0411

4.2.2 Optimism as a Mediator between LMX Sub Dimensions and Employee Engagement

Hayes Process Macro was then used to examine Optimism as a mediator between each of the LMX sub dimensions, Affect, Loyalty, Contribution and Professional Respect as Independent Variables with Employee Engagement. Optimism was confirmed as mediating between Affect, Loyalty and Professional Respect at 95% CI. Optimism was confirmed to mediate between LMX Contribution and Engagement at a 90% CI level. The results are presented in Table 14 and discussed below (See Appendix 11 for diagrams).

Table 14: Optimism as a Mediator between LMX Sub Dimensions and Engagement

LMX Affect	β X	P Value
LMX Affect predicts Optimism	.0750	.0405
Optimism LMX Affect predicts Engagement	.5625	.0009
LMX Affect Optimism predicts Engagement	.1521	.0492
LMX Affect predicts Engagement	.1943	.0116
LMX Loyalty		
LMX Loyalty predicts Optimism	.0830	.0224
Optimism LMX Loyalty predicts Engagement	.5640	.0010
LMX Loyalty Optimism predicts Engagement	.1325	.0779
LMX Loyalty predicts Engagement	.1793	.0295
LMX Contribution		
LMX Contribution predicts Optimism	.1707	.0004
Optimism LMX Contribution predicts Engagement	.4295	.0101
LMX Contribution Optimism predicts Engagement	.3943	.0001
LMX Contribution predicts Engagement	.4676	.000
LMX Professional Respect		
LMX Professional Respect predicts Optimism	.0612	.0385
Optimism LMX Professional Respect predicts Engagement	.5628	.0009
LMX Professional Respect Optimism predicts Engagement	.1211	.0461
LMX Professional Respect predicts Engagement	.1555	.0123

Optimism as a Mediator between LMX Affect and Engagement

Hayes Process Macro analysis confirmed LMX Affect (β .0750, p .0405) as a significant predictor of optimism and Optimism|LMX Affect is a significant predictor of engagement (β .5625, p.0009). Analysis also revealed that LMX Affect |Optimism (β .1521, p.0492) is a significant predictor of engagement while LMX Affect is a significant predictor of engagement (β .1943, p.0116). The indirect effect of LMX Affect on Employee Engagement through Optimism $ab=.04$ BCa [.01, .10] was significant (as zero was not passing through the confidence intervals) when tested at 95% Confidence Interval. The mediating effect PM .22 may account for over 1/5 of the total effect.

Optimism as a Mediator between LMX Loyalty and Engagement

Hayes Process Macro analysis confirmed LMX Loyalty (β 0.0830, p .0224) as a significant predictor of optimism and Optimism|LMX Loyalty is a significant predictor of engagement (β 0.5640, p.0010). Analysis also revealed that LMX Loyalty |Optimism (β 0.1325, p.0779) is

not a significant predictor of engagement while LMX Loyalty is a significant predictor of engagement ($\beta=0.1793$, $p=0.0295$). The indirect effect of LMX Loyalty on Employee Engagement through Optimism $ab=0.05$ BCa [.01, .10] (as zero was not passing through the confidence intervals) was significant when tested at 95% Confidence Interval. The mediating effect PM .26 may account for over 1/5 of the total effect.

Optimism as a Mediator between LMX Contribution and Engagement

An examination of LMX Contribution at 95% CI confirmed that Optimism was not mediating between it and employee engagement. However when the analyses was run at 90% CI the results confirmed mediation. LMX|Optimism ($\beta =0.1701$ P, 0004); Optimism|LMX ($\beta=0.4295$, $p=0.0101$); LMX| Optimism ($\beta=0.3943$, $p=0.0001$) and LMX were revealed as a significant predictors of engagement ($\beta=0.4674$, $p=0.000$). The indirect effect of LMX Contribution on Employee Engagement through Optimism $ab=0.07$. BCa [-.0, .15] was not significant when tested at 95% Confidence Interval, however it was significant [.02, .14], at the 90% CI level. The mediating effect was PM .16,

Optimism as a Mediator between LMX Professional Respect and Engagement

The test confirmed LMX Professional Respect ($\beta=0.0612$, $p=0.0385$) as a significant predictor of optimism and Optimism|LMX Professional Respect is a significant predictor of engagement ($\beta=0.5628$, $p=0.0009$). Analysis also revealed that LMX Professional Respect |Optimism ($\beta=0.1211$, $p=0.0461$) is a significant predictor of engagement while LMX Professional Respect is a significant predictor of engagement ($\beta=0.1555$, $p=0.0123$). Testing at 95% revealed a significant indirect effect of LMX Professional Respect on Employee Engagement through Optimism $ab=0.06$ BCa [.01, .08]. The mediating effect PM .22, could account for almost 1/5 of the total effect.

A summary of the mediation results for LMX Sub Dimensions with Employee Engagement, including the bootstrapped confidence intervals is shown below on Table 15.

Table 15: Results Summary for Optimism as a Mediator between LMX Sub Dimensions and Employee Engagement

LMX Sub Dimension	Confidence Interval	Effect	BootSE	Boot LLCI	BootUCLI	PValue Indirect Effect
Overall LMX	95%	.0645	.0289	.0166	.1416	.0411
LMX Affect	95%	.0422	.0232	.0059	.1002	.0873
LMX Loyalty	95%	.0468	.0225	.0117	.1042	.0645
LMX Professional Respect	95%	.0344	.0185	.0059	.0811	.0849
LMX Contribution	95%	.0733	.383	-.0003	.1533	.0385
LMX Contribution	90%	.0733	.383	.0157	.1392	.0385

4.2.3 Optimism Sub Dimensions as a Mediator between Overall Employee Engagement

It was decided to carry out sub analyses on the three sub dimensions of optimism that scored above .7 in the Cronbach’s Alpha analyses presented in Section 3. Although not part of the Conceptual Framework, the researcher was interested in whether Career Optimism, Life Outlook Optimism and Self Efficacy were mediating in the LMX-Employee Engagement relationship and used Hayes Process Mediation Analyses to explore this in more detail. Career Optimism and Self Efficacy Optimism were confirmed as mediators in the LMX-Employee relationship. The results are presented in Table 16 and are discussed in detail below (See Appendix 12 for diagrams of confirmed mediators).

Table 16: Optimism Sub Dimensions Mediating the LMX -Employee Engagement Relationship

Optimism Dimension	β X	P Value
Career Optimism		
LMX predicts Career Optimism	.1771	.0011
Career Optimism LMX predicts Engagement	.5862	.000
LMX Career Optimism predicts Engagement	.2040	.0237
LMX predicts Engagement	.3078	.0009
Life Outlook Optimism		
LMX predicts Life Outlook	.1456	.0059
Life Outlook LMX predicts Engagement	.1310	.3646
LMX Life Outlook predicts Engagement	.2287	.0025
LMX predicts Engagement	.3078	.0009
Self Efficacy Optimism		
LMX predicts Self Efficacy	.1511	.0028
Self Efficacy Optimism LMX predicts Engagement	.2912	.0530
LMX Self Efficacy Optimism predicts Engagement	.2638	.0053
LMX predicts Engagement	.3078	.0009

Career Optimism as a Mediator between LMX and Engagement

Career Optimism was revealed as a mediator in the LMX- Employee Engagement relationship: $ab=.10$ BCa CI [04, 20]. The test confirmed LMX (β 0.1771, $p.0011$) as a significant predictor of Career Optimism and Career Optimism|LMX is a significant predictor of engagement (β 0.5862 $p.0000$). Analysis revealed that LMX|Career Optimism (β 0.2040, $p.0237$) as a significant predictor of engagement while LMX is a significant predictor of engagement (β 0.3078, $p.0009$). The mediator could account for over one third of the total effect $PM=.34$ and the Indirect Effect is significant at $p.0089$.

Life Outlook Optimism as a Mediator between Overall LMX and Employee Engagement

Analysis confirmed that Life Outlook was not mediating at 95% with the Confidence Interval passing through 0 [-.03, 08]. At the 90% levels the Confidence Intervals were also passing through 0 [-.02, 07] indicating that mediation was not occurring.

Self Efficacy as a Mediator between Overall LMX and Employee Engagement

Analysis confirmed that Self Efficacy was mediating the LMX- Employee Engagement relationship at the 90% CI Level: $ab=.04$ [004, 11]. The test confirmed LMX ($\beta=.1511$, $p=.0028$), as a significant predictor of Self Efficacy and Self Efficacy | LMX is a significant predictor of engagement ($\beta=.2912$, $p=.0530$) Analysis revealed that LMX| Self Efficacy, ($\beta=.2638$, $p=.0053$) is a significant predictor of engagement while LMX is a significant predictor of engagement ($\beta=.3078$, $p=.0009$). The mediating effect PM. 14 may account for almost one sixth of the total effect. These results are summarised in Table 17.

Table 17: Results Summary of Optimism Sub Dimensions as Mediators between LMX and Engagement

Optimism	Confidence Interval	Effect	BootSE	Boot LLCI	BootUCLI	PValue Indirect Effect
Career Optimism	95%	.1038	.0404	.0396	.2047	.0089
Life Outlook	95%	.0191	.0274	-.0282	.0828	.3735
Life Outlook	90%	.0191	.0277	-.0166	.0729	.4129
Self Efficacy	95%	.0440	.3306	-.0032	.1243	
Self Efficacy	90%	.0440	.0316	.0042	.1074	.1138

5. Summary of Findings

A summary of the findings from data analysis are presented on Table 18 below

Table 18: Summary of Findings

Area	Finding	Supported by
Scales	All valid in the Context being applied	Cronbach's Alpha: Table 4
Construct Findings		Means Table 5
Average respondent has relatively good quality LMX relationships, is relatively optimistic and is engaged		
A significant positive relationship exists between LMX and employee engagement		(0.252, p. <.01)
A significant positive relationship between LMX and optimism		(0.186, p. <.05)
A significant positive relationship exists between optimism and employee engagement		(0.279, p.<.01)
A significant positive relationship exists between LMX Affect, Loyalty, Contribution and Professional Respect and Engagement		Affect (.200, p. <.05), Loyalty (.162, p. <.05) Contribution (.373, p.<.01) and Professional Respect (.196, p. <.05)
A significant positive relationship exists between LMX Contribution and overall optimism		(.257 p. <.01).
Significant positive relationship between LMX and Engagement Vigour		Vigour (.257, p.<.01) Dedication (.304, p.<.01)
A significant positive relationship exists between LMX and Career, Life Outlook and Self Efficacy		Statistically significant positive correlations between Career Optimism (.386, p.<.01), Self Efficacy (.211, p.<.01)
A significant positive relationship exists between, Contribution, and Optimism		(.257, p. <.01).
A significant positive relationship exists between Career, and Self Efficacy Optimism and Engagement		Career Optimism (.386, p.<.01) Self Efficacy (.211, p.<.01)
Hypotheses Findings	Finding	
H1	High LMX quality is positively related to employee engagement	(β 0.310, p .001)
H1A	High affect positively predicts employee engagement	(β 0.194, p .014)
H1B	High loyalty positively predicts employee engagement	(β 0.177, p .023)
H1C	High contribution positively predicts employee engagement	(β 0.468, p .000)
H1D	High professional respect positively predicts employee engagement	(β 0.155, p .015)

H2	Optimism Mediates the Relationship between Overall LMX and Employee Engagement	ab=.06. BCa CI [02,14], PM=.21Supported (95% CI)
H2A	Optimism Mediates the Relationship LMX Affect and Employee Engagement	ab=.04 BCa [.01,.10] , PM .22 Supported (95% CI)
H2B	Optimism Mediates the Relationship LMX Loyalty and Employee Engagement	ab=.05 BCa [.01,.10], PM .26,Supported (95% CI)
H2C	Optimism Mediates the Relationship between LMX Contribution	ab=.07, [.02,14], PM .16 Supported (90% CI)
H2D	Optimism Mediates the Relationship LMX Professional Respect	ab=.06 BCa [01, 08]. PM .22 Supported (95% CI)
H2 Sub Analyses	Career Optimism Mediates the Relationship between LMX and Employee Engagement	ab=.10 BCa CI [04, 20]. PM=.34 Supported (95% CI)
	Self Efficacy Mediates the Relationship between LMX and Employee Engagement	ab=.04 [004,11], PM. 14.Supported (90% CI)

In short the regression and mediation analyses of 156 responses from the Irish Further Education and Training Sector reveals that optimism is mediating between LMX and Employee engagement at the 95% level. In addition, optimism is also found to mediate between components of LMX and Employee Engagement. The implications of these findings mean that organisational leaders seeking to improve employee engagement in FET need to consider the important influence of the LMX relationship, mediated through the vehicle of optimism.

6. Conclusion

This Data Collection and Analysis paper has built on the research concepts presented in Paper One and Addendum One, the selected methodology and survey design in Paper Two and pilot administration in Paper Three to examine the mediating role of optimism on the relationship between Leader Member Exchange and Employee Engagement in the Irish Further Education and Training Sector. The next stage in this study will build on the work to date by revisiting the existing theory, prior research and the conceptual framework in order to frame a discussion on the theoretical and practical implications of the results from the analyses presented in this paper.

References

- Babbie, E. (1990) *Survey Research Methods*, 2nd Edn. California: Wadsworth Publishing Company.
- Bakker A.B. , Albrecht S.L. and Leiter M.P. (2011) ‘Key Questions Regarding Work Engagement’, *European Journal of Work and Organizational Psychology*, Vol. 20 No.1, pp. 4-28.
- Baron, R. M. and Kenny, D. A. (1986) ‘The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations’, *Journal of Personality and Social Psychology*, Vol. 51, pp. 1173-1182.
- Hair, J. F. J., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998) *Multivariate data analysis*, 5th Edn. Saddle River, NJ: Prentice Hall.
- Hale, W.D., Fiedler, L.R. and Cochran, C.D. (1992) ‘The Revised Generalized Expectancy of Success Scale: A Validity and Reliability Study’, *Journal of Clinical Psychology*, Vol 48, No. 4, pp. 516-521.
- Howell, J.P., Dorfman, P.W. and Kerr, S. (1986) ‘Moderator Variables in Leadership Research’, *The Academy of Management Review*, Vol 11, No. 1, pp. 88-102.
- Kenny, D.A. (2015) ‘Measurement of Moderation’, [online] Available at <http://davidakenny.net/cm/moderation.htm> (Accessed 2016)
- Liden, R.C. and Maslyn, J.M., (1998) ‘Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development’, *Journal of Management*. Vol. 24, No. 1, pp. 43-72.
- MacNealy, M. S. (1999) *Strategies for Empirical Research in Writing*, New York: Addison Wesley Longman.
- MacKinnon, S.P. (2015) ‘Mediation in Health Research: A Statistics Workshop using SPSS’, [online] Available at www.slideshare.net/smackinnon/introduction-to-mediation (Accessed 2016/2017)
- Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P and Lee. J.Y. (2003) ‘Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies’, *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.
- Schaufeli, W.B. and Bakker, A.B. (2003) ‘The Utrecht Work Engagement Scale (UWES) Test Manual’, *The Netherlands: Department of Social and Organizational Psychology*.
- Spector, P.E. (1994) ‘Using self-report questionnaires in OB research: A comment on the use of controversial method’, *Journal of Organizational Behaviour*, Vol. 15, pp. 385-392.
- Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011) ‘Do Transformational Leaders Enhance their Followers’ Daily Work Engagement?’, *The Leadership Quarterly*. Vol. 22 pp. 121-131.

Xanthopoulos, D., Bakker, A.B., Demerouti, E. and Schaufeli W.B. (2009a) 'Reciprocal Relationships between Job Resources, Personal Resources and Work Engagement', *Journal of Vocational Behavior*, Vol. 74, pp. 235-244.

Appendices

Appendix 1: Survey Document 1A and 1B

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

* 1. *Before commencing the survey, please read each of the following statements and indicate whether you understand them.*

- I have received a written document regarding the purpose and nature of this study (PDF documents attached to email).
- My participation is voluntary.
- It is possible to leave this site at any time and I am not obliged to complete the questionnaire or submit my responses.
- Once the responses are submitted, they cannot be withdrawn from the survey results.
- I understand that the data obtained from my participation in this research will be included in the aggregate data analysis for the final doctoral thesis
- This is part one of a two part survey. My email address will be used to match the second survey responses to the first set. Once the surveys are matched my email address will not be used in the data analysis.
- I understand that confidentiality is assured

* 2. Please indicate whether you agree to participate in this study.

- I agree
- I do not agree

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

* 3. How many hours per week do you work in the Further Education and Training (FET) sector

- Average less than 10 hours per week
- Average more than 10 hours per week
- I am not working in the Further Education and Training Sector

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Employee Engagement

* 4. The following 9 statements are about how you feel at work.

Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by selecting the description that best matches how frequently you feel that way.

	Never	Almost never (A few times a year or less)	Rarely (Once a month or less)	Sometimes (A few times a month)	Often (Once a week)	Very often (A few times a week)	Always (Every day)
1. At my work, I feel bursting with energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. At my job, I feel strong and vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am enthusiastic about my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job inspires me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I get up in the morning, I feel like going to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel happy when I am working intensely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am proud of the work that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am immersed in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I get carried away when I am working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Optimism

Please read each of the following statements carefully and rate each.

* 5. *In the future* I expect that I will...

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
succeed at most things I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be listened to when I speak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
carry through my responsibilities successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
get the promotion I deserve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have successful close personal relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle unexpected problems successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make a good impression on people I meet for the first time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attain the career goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
experience many failures in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a positive influence on most of the people with whom I interact.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be able to solve my own problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
acquire most of the things that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

find that no matter how hard I try, things just don't turn out the way I would like.	<input type="radio"/>				
be a good judge of what it takes to get ahead.	<input type="radio"/>				
handle myself well in whatever situation I am in.	<input type="radio"/>				
reach my financial goals.	<input type="radio"/>				
have problems working with others.	<input type="radio"/>				
discover that the good in life outweighs the bad.	<input type="radio"/>				
be successful in my endeavours in the long run.	<input type="radio"/>				

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
be unable to accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be very successful working out my personal life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
succeed in the projects I undertake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that my plans don't work out too well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
achieve recognition in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have rewarding intimate relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Quality of your relationship with your manager

This section explores the quality of your relationship with your current manager.

Please read each of the following statements carefully and consider your answer based on your current direct line manager. If you report to more than one manager please answer this in relation to the manager to whom you are responsible for the majority of your work or hours.

* 6. Please select a rating for each of the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I like my manager very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is the kind of person one would like to have as a friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is a lot of fun to work with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager defends my work actions to a superior, even without complete knowledge of the issue in question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would come to my defence if I were 'attacked' by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would defend me to others in the organisation if I made an honest mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do work for my manager that goes beyond what is specified in my job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am willing to apply extra efforts, beyond those normally required, to meet my work goals

I do not mind working my hardest for my manager

I am impressed with my manager's knowledge of his/her job

I respect my manager's knowledge of and competence on the job

I admire my manager's professional skills

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Participant Profile

* 7. Are you?

- Male
- Female

* 8. What age are you?

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 65+

* 9. What is the highest level of education you have completed?

- QQI Level 5
- QQI Level 6
- QQI Level 7
- QQI Level 8
- QQI Level 9
- QQI Level 10

Other (please specify)

* 10. Where in the Further Education and Training (FET) sector do you work?

- Youthreach
- BTEI (Back to Education Initiative)
- Adult Literacy Service
- VTOS (Vocational Training Opportunities Scheme)
- Community Education
- PLC (Post Leaving Course)
- Self-financing classes
- Private Provider delivering Solas funded programmes
- Not currently working in the Further Education and Training (FET) sector
- Other (please specify)

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Respondent's Role

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Respondent's Role

* 11. Please identify your current role(s).

- Tutor (also known as instructor, trainer, teacher, facilitator)
- Teacher
- Trainer
- Facilitator
- Instructor
- Other (please specify)

* 12. How long have you been in the particular role(s)?

- Less than 1 year
- Between 1 and 2 years
- Between 2 and 4 years
- Between 4 and 6 years
- Between 6 and 8 years
- Between 8 and 10 years
- 10 year +

* 13. Have you responsibilities for managing others in your current role?

- Yes
- No

* 14. Please insert your email address below. This will be used by the researcher to match your 2 surveys. This information will then be destroyed and confidentiality is assured.

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1a)

Thank You

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

* 3. How many hours per week do you work in the Further Education and Training (FET) sector

- Average less than 10 hours per week
- Average more than 10 hours per week
- I am not working in the Further Education and Training Sector

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Quality of Relationship with your Manager

This section explores the quality of your relationship with your current manager.

Please read each of the following statements carefully and consider your answer based on your current direct line manager. If you report to more than one manager please answer this in relation to the manager to whom you are responsible for the majority of your work or hours.

* 4. Please select a rating for each of the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I like my manager very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is the kind of person one would like to have as a friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager is a lot of fun to work with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager defends my work actions to a superior, even without complete knowledge of the issue in question	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would come to my defence if I were 'attacked' by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My manager would defend me to others in the organisation if I made an honest mistake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do work for my manager that goes beyond what is specified in my job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<hr/>					
I am willing to apply extra efforts, beyond those normally required, to meet my work goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not mind working my hardest for my manager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am impressed with my manager's knowledge of his/her job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respect my manager's knowledge of and competence on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I admire my manager's professional skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Optimism

Please read each of the following statements carefully and rate each.

* 5. *In the future* I expect that I will...

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
succeed at most things I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be listened to when I speak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
carry through my responsibilities successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
get the promotion I deserve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have successful close personal relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle unexpected problems successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make a good impression on people I meet for the first time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attain the career goals I set for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
experience many failures in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have a positive influence on most of the people with whom I interact.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be able to solve my own problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
acquire most of the things that are important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
find that no matter how hard I try, things just don't turn out the way I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be a good judge of what it takes to get ahead.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
handle myself well in whatever situation I am in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Highly improbable	Improbable	Neither improbable nor probable	Probable	Highly probable
reach my financial goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have problems working with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that the good in life outweighs the bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be successful in my endeavours in the long run.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be unable to accomplish my goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
be very successful working out my personal life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
succeed in the projects I undertake.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
discover that my plans don't work out too well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
achieve recognition in my profession.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
have rewarding intimate relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Employee Engagement

Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by selecting the description that best matches how frequently you feel that way.

Please read each statement carefully and decide if you ever feel this way about your job. If you have had this feeling, indicate how often you feel it by selecting the description that best matches how frequently you feel that way.

	Never	Almost never (A few times a year or less)	Rarely (Once a month or less)	Sometimes (A few times a month)	Often (Once a week)	Very often (A few times a week)	Always (Every day)
1. At my work, I feel bursting with energy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. At my job, I feel strong and vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am enthusiastic about my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job inspires me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I get up in the morning, I feel like going to work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel happy when I am working intensely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am proud of the work that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am immersed in my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I get carried away when I am working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Participant Profile

* 7. Are you?

- Male
- Female

* 8. What age are you?

- 18-25
- 26-35
- 36-45
- 46-55
- 56-65
- 65+

* 9. What is the highest level of education you have completed?

- QQI Level 5
- QQI Level 6
- QQI Level 7
- QQI Level 8
- QQI Level 9
- QQI Level 10

Other (please specify)

* 10. Where in the Further Education and Training (FET) sector do you work?

- Youthreach
- BTEI (Back to Education Initiative)
- Adult Literacy Service
- VTOS (Vocational Training Opportunities Scheme)
- Community Education
- PLC (Post Leaving Course)
- Self-financing classes
- Private Provider delivering Solas funded programmes
- Not currently working in the Further Education and Training (FET) sector
- Other (please specify)

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Respondent's Role

* 11. Please identify your current role(s).

- Tutor
- Teacher
- Trainer
- Facilitator
- Instructor
- Other (please specify)

* 12. How long have you been in the particular role(s)?

- Less than 1 year
- Between 1 and 2 years
- Between 2 and 4 years
- Between 4 and 6 years
- Between 6 and 8 years
- Between 8 and 10 years
- 10 year +

* 13. Have you responsibilities for managing others in your current role?

- Yes
- No

* 14. Please insert your email address below. This will be used by the researcher to match your 2 surveys. This information will then be destroyed and confidentiality is assured.

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part 1b)

Thank You

Appendix 2: Invitation to Participate in Research Study and Study Information Sheet

Dear Colleague,

My name is Aislinn Brennan and I am employed in Waterford Institute of Technology as Manager of the Literacy Development Centre, in the School of Lifelong Learning and Education. I am currently carrying out research in the Irish Further Education and Training Sector in fulfilment of a Doctorate in Business Administration in WIT.

My area of interest is **employee engagement, optimism and relationships** between managers and employees in the Further Education and Training Sector.

If you are working **for over 1 year** in your role and **delivering tuition for at least 10 hours per week, I would like to invite you to participate in this research.** Participation involves the completion of two online surveys, with a time lag of 3 weeks in between Survey 1 and Survey 2.

Participation involves the completion of two online surveys, with a time lag of 3 weeks in between Survey 1 and Survey 2.

All participation is completely voluntary and I am the only person who will have access to the completed online surveys.

The first survey can be accessed directly via the following link:

<https://www.surveymonkey.com/r/FETL1A>

Further Education and Training Survey: Employee Engagement, Leadership and Optimism. (Part L1a)

www.surveymonkey.com

Web survey powered by SurveyMonkey.com. Create your own online survey now with SurveyMonkey

Please note I will send a link to the second survey directly to all respondents.

I have attached a Study Information Sheet to this email and if you have any queries in relation to this research, please feel free to contact me on 089 2494810.

Thanks again,

Aislinn Brennan

Respondent Study Information Sheet

Research Title: The Influence of Leader Member Exchange on Employee Engagement and the Moderating Role of Optimism in the Further Education and Training Sector

Researcher: Aislinn Brennan

Institution: WIT, DBA Programme

Research Supervisor: Professor Thomas Garavan

What is the purpose of the research?

The main purpose of this study is to examine the role of Leader Member Exchange (LMX) in influencing employee engagement and the moderating role of optimism, in the Irish Further Education and Training Sector. This research is being carried out in fulfilment of the requirements for a DBA at Waterford Institute of Technology.

Who will be involved in the project?

Employees in the Adult, Further Education and Training Sector

What will be involved if you take part in this project?

Should you wish to take part in this project you will be invited to complete 2 online surveys.

Do you have to take part?

No. Participation in this research is voluntary

Will your participation in this project be kept confidential?

Yes. Any use of data from this research will ensure the anonymity of the participants

What will happen to the results of the research project?

The data obtained from this research will be used in the final thesis, associated articles, and at conferences. Respondent anonymity is assured.

Who has reviewed the research project?

This study has been reviewed by Professor Thomas Garavan and an Ethics Committee

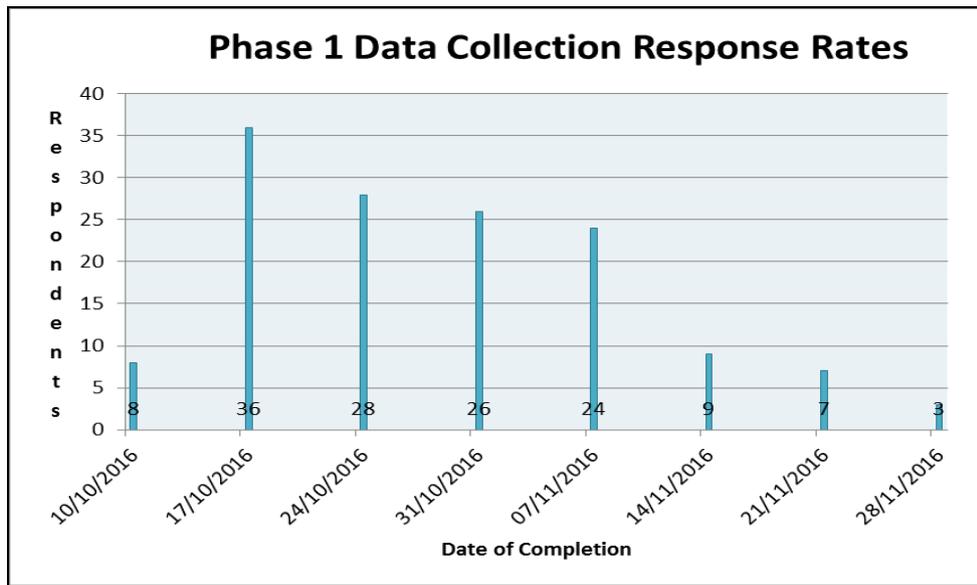
Are there any possible disadvantages of taking part?

Apart from the time investment I do not foresee any disadvantages as a result of participating in this research

Further queries

Should you require any further information you can contact me, Aislinn Brennan on 0892494810 or alternatively via email abrennan@wit.ie

Appendix 3: Data Collection –Weekly Response Rates



Appendix 4: Optimism GESS- R Scale Items Recoded

Scale Number	Scale Item: In the future I expect that I will	Rating	Recoding
9	Experience many failures in my life	1. Highly Improbable	1. Highly Probable changed to 5. Highly Probable
13	Find that no matter how hard I try things just don't seem to turn out the way I would like	2.Improbable	2. Improbable changed to 4. Probable
17	have problems working with others	3.Neither improbable nor probable	3.Neither improbable nor probable- No change
20	be unable to accomplish my goals	Probable	Probable changed to 2.Improbable
23	discover that my plans don't work out too well	Highly Probable	Highly Probable changed to 1. Highly Improbable

Appendix 5: Relationship between Demographic Variables and Main Constructs

Overall Mean Scores				
Variable	Respondents	LMX 3.73	Engagement 5.61	Optimism 3.79
<i>Gender</i>				
Male (30)	40 (26%)	3.96	5.48	3.72
Female (78)	116 (74%)	3.65	5.65	3.82
<i>Education (4.39)</i>				
QQI Level 5	3(2%)	4.03	6.18	3.91
QQI Level 6	4 (2%)	3.81	4.89	3.84
QQI Level 7	22 (14%)	4.17	5.84	3.84
QQI Level 8	34(22%)	3.75	5.66	3.79
QQI Level 9	86 (55%)	3.59	5.51	3.77
QQI Level 10	7 (4%)	3.69	6.01	3.90
<i>Age (2.56)</i>				
26-35	20 (13%)	3.90	5.42	3.82
36-45	54 (35%)	3.60	5.50	3.80
46-55	58(37%)	3.82	5.67	3.87
56-65	22(14%)	3.57	5.82	3.58
65+	2(1%)	4.62	6.11	3.66
<i>Tenure (5.53)</i>				
Less than 1 year	10 (6%)	4.12	5.33	3.83
1 and 2 years	6(4%)	3.99	6.33	4.00
2 and 4 years	12(8%)	3.62	5.42	3.79
4 and 6 years	7(4%)	4.11	5.22	3.74
6 and 8 years	22(14%)	3.92	5.55	3.82
8 and 10 years	21(13%)	3.73	5.87	3.77
10+ years	75(49%)	3.60	5.62	3.77
Undisclosed	3 (2%)	4.12	5.33	3.83
<i>Management Responsibility</i>				
Yes	60(38%)	3.73	5.75*	3.84
No	93(60%)	3.74	5.53*	3.76
Undisclosed	3(2%)			
<i>Survey Type</i>				
1A	60(38%)	3.61	5.50	3.80
1B	96 (62%)	3.81	5.67	3.79

Appendix 6: Mean Scores and Correlations between Overall LMX and Employee Engagement Sub Dimensions

A comparison of the sub dimension mean scores to the overall Employee Engagement mean score of 5.61 reveals that Dedication has the highest mean at (5.88) followed by absorption (5.53) and then vigour (5.40) There is a positive correlation between each of the sub dimensions of employee engagement and overall LMX. Vigour (.257) and Dedication (.304) are significant (<.01). Dedication has the strongest correlation.

Table 1: Engagement Sub Dimension Statistics and Inter Item Correlation

Engagement Sub Dimension	Mean	SD	LMX
Vigour	5.40	1.08	.257**
Dedication	5.88	.973	.304**
Absorption	5.53	1.09	.123

Appendix 7: Mean Scores and Correlations between LMX and Optimism Sub Dimensions

The table below reveals statistically significant correlations between overall LMX and Career, Life Outlook and Self Efficacy sub dimensions of Optimism. The strongest correlation is between Career Optimism and LMX.

A comparison of the sub dimension mean scores indicates scores in excess of overall optimism mean (3.79) for Self Efficacy (4.07) and Life Outlook (4.20) .

Table 1: Correlations between Overall LMX and Optimism Sub Dimensions

Optimism Sub Dimension	Mean	SD	LMX
Career	3.79	.551	.241**
Life Outlook	4.20	.532	.186*
Self Efficacy	4.07	.502	.241**

Appendix 8: Correlations between Engagement Sub Dimensions and Optimism

The table below depicts the correlations between overall optimism and the sub dimensions of employee engagement. There are statistically positive correlations between optimism and Vigour, Dedication and Absorption.

Table 1: Optimism Sub Dimensions Statistics and Inter Item Correlation

Engagement Sub Dimension	Optimism
Vigour	.248**
Dedication	.296**
Absorption	.211**

Appendix 9: Correlations between Optimism Sub Dimensions and Employee Engagement

The table below depicts the correlations between optimism sub dimensions and employee engagement. There are statistically positive correlations between Career Optimism, Interpersonal Optimism, Social Interaction and Employee Engagement. Career Optimism has the strongest correlations.

Table 1: Optimism Sub Dimension Statistics and Inter Item Correlation

Optimism Sub Dimension	Employee Engagement
Career	.386**
Life Outlook	.124
Self Efficacy	.211**

Appendix 10: Hierarchical Regression for Survey Type

Step 1-Hierarchical Regression Analysis Predicting Engagement using Survey Type

Steps	Variables	B	P Value
Gender , Education, Age, Management Responsibility Survey Type	Gender	.121	.486
	Education	-.052	.492
	Age	.136	.097
	Mgt. Resp.	-.217	.170
	Survey Type	.245	.123

Appendix 11: Mediation Results for Optimism between LMX Sub Dimensions and Employee Engagement

Figure 1: Optimism as a Mediator between LMX Affect and Engagement

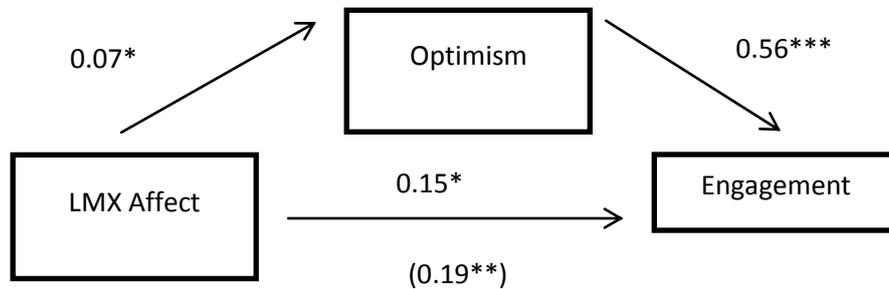


Figure 2: Optimism as a Mediator between LMX Loyalty and Engagement

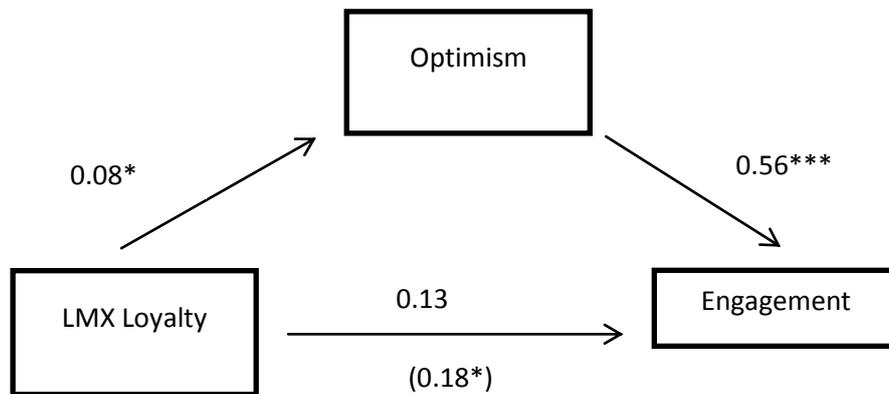


Figure 3: Optimism as a Mediator between LMX Contribution and Engagement

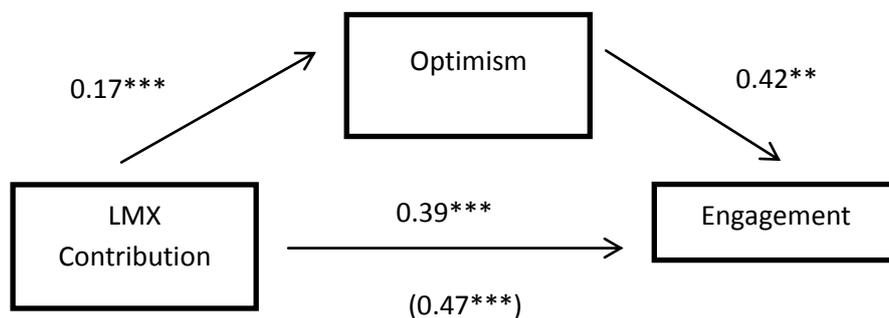
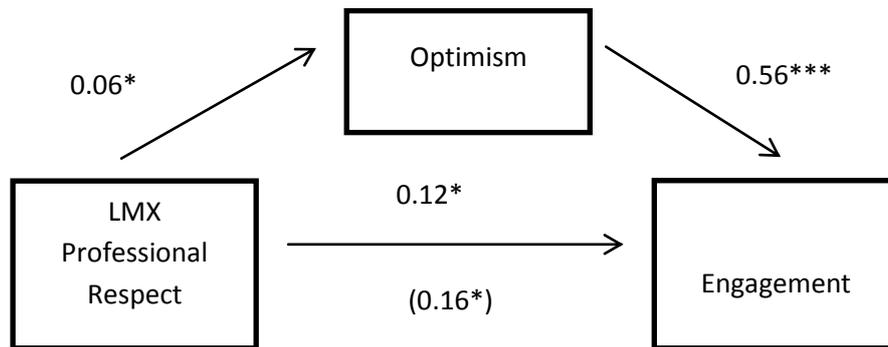


Figure 4: Optimism as a Mediator between LMX Professional Respect and Engagement



Appendix 12: Career and Self Efficacy Optimism as Mediators between the LMX- Employee Engagement Relationship

Figure 1: Career Optimism as a mediator in the LMX- Employee Engagement relationship

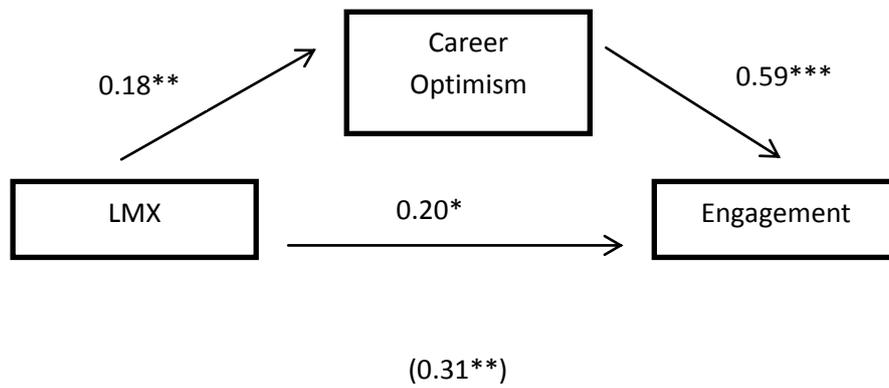
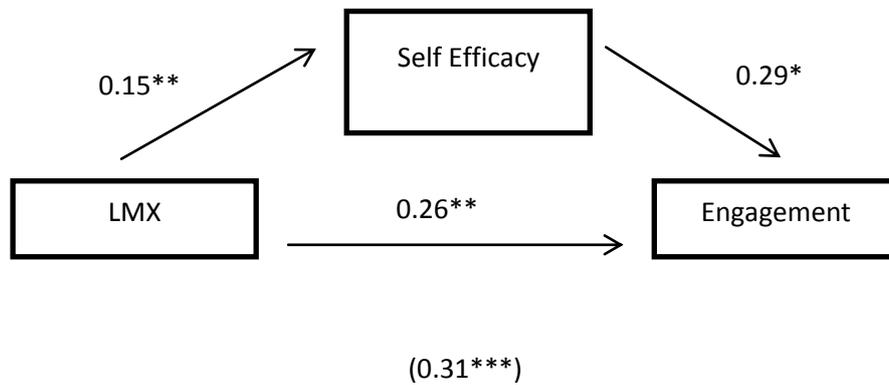


Figure 2: Self Efficacy Optimism as a mediator in the LMX- Employee Engagement relationship



SECTION 3: Conclusions and Recommendations

1. Introduction

This research thesis is divided into three overall sections; this third and final section builds on the cumulative work from June 2013 to date. Section one of this thesis offered an introduction to the overall study, setting out the research context, a rationale for the study and the research objectives. Section two encompassed a series of four cumulative papers which were submitted and examined between 2014 and 2017 in partial fulfilment of the DBA requirements. This section also contained a number of preface papers which outlined any developments between each cumulative paper and were underpinned by the feedback received from the DBA Examination Panel at each cumulative paper presentation.

Each of the four cumulative papers addressed a particular element of the overall study commencing with a conceptual review in Paper 1 entitled: ‘The Perceived Impact of Leadership on Employee Engagement in the Not for Profit Sector’ (CPS 1). This paper determined Leader Member Exchange (LMX) as the most appropriate theoretical leadership lens to examine employee engagement and presented the first conceptual framework to frame the research study. Paper 1 was followed by the second preface which discussed the continued relevance of framing the study through the LMX theory and confirmed the researchers’ intention to examine the influences of overall LMX and to consider it as a multidimensional construct with each element of affect, loyalty, contribution and professional respect as independent predictors of employee engagement. The first conceptual framework proposed in Paper 1 was quite complex in nature and referred to the potential moderating and mediating influence of job resources and personal resources (Xanthopoulou *et al.*, 2007) on the LMX and employee engagement relationship. The three personal resources depicted in this framework included self efficacy, self-esteem and optimism.

Having regard to the examiner feedback at Paper 2 presentation stage, the second preface paper presented a more refined and less complex conceptual model with an exclusive focus on optimism as one specific personal resource potentially impacting the LMX-employee engagement relationship. It also provided a rationale to change the study setting from the Not for Profit to the Further Education and Training Sector.

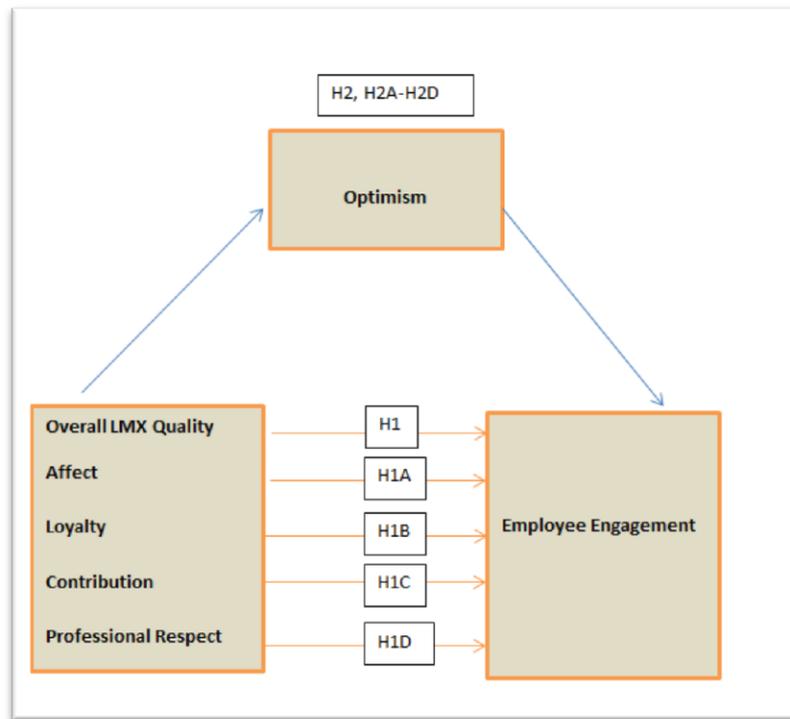
Building on these refinements, Paper 2 addressed the quantitative methodological approach selected for the overall study. It explored potential scales for inclusion in the online survey to measure the constructs of LMX, employee engagement and optimism, and provided a

rationale for those selected. The role of optimism in the LMX-employee engagement relationship was explored in more depth and it was proposed that it may have a moderating effect in one of two possible ways. The first related to optimism as a “neutralising moderator” in that it may help employees to offset the negative effects of low LMX quality on employee engagement and the second related to optimism as an “enhancer” strengthening the high quality LMX relationships and thus leading to higher levels of engagement (Howell *et al.*, 1986, p. 89).

Preface 3 presented the refined hypotheses for the research study, thus setting the context for the next paper. CPS Paper 3 then presented the survey instrument design and the results from its application in a pilot study. The findings discussed in this paper were positive and indicated initial support for LMX as a predictor of employee engagement; however it was not clear from the analyses whether optimism was playing a moderating role. On the basis of the literature explored in CPS Paper 1 which positioned personal resources (including optimism) as mediating between leadership and engagement (Tims *et al.*, 2011), the researcher decided to examine optimism as mediating between the LMX-employee engagement relationship. The findings at pilot stage rendered it unclear as to whether mediation was occurring.

Preface 4 presented the matters raised by the examiner panel prior to the final submission of CPS Paper 4 and the associated changes applied to this study. Such matters included; the use of data collected at one point rather than two; the inclusion of the data collected at pilot stage in the overall data analysis and the exclusion of analysis on the moderating role of optimism. This paper also presented a final revision of the conceptual framework (See Figure One) positioning optimism as a mediating variable in the LMX –employee engagement relationship:

Figure 1: The Final Conceptual Model



This conceptual framework as presented in Preface 4 and CPS Papers 3 and 4 depicts the final research aims for the study. Those in Hypotheses 1 relate to overall LMX as a predictor of employee engagement and each LMX sub dimension including LMX Affect, LMX Loyalty, LMX Contribution and LMX Professional Respect as independent variables predicting employee engagement. This approach represents a move away from the exclusive focus on LMX as one higher order factor as recommended by Martin *et al.*, (2015). This study is unique in its examination of the role of these LMX sub dimensions as independent predictors of employee engagement in the FET sector.

The aims in Hypotheses 2 relate to optimism and its mediating role in the relationship between LMX (and each of its sub dimensions) and employee engagement. Personal resources, including optimism have been confirmed as mediating between transformational leadership and employee engagement (Tims *et al.*, 2011); however this study is unique in its consideration of optimism as a mediator between LMX and employee engagement in the FET setting.

In summary, the Conceptual Framework presented in Paper 3 encompasses i) Overall LMX as a predictor of employee engagement with optimism mediating this relationship (H1 and

H2) and ii) each LMX sub dimension as an independent predictor of employee engagement with optimism mediating these relationships (H1A-H1D and H2A-H2D).

Paper 4 built on the work in the previous cumulative and preface papers by presenting the data collection and analyses. Regression and mediation analyses conducted on data collected from 156 respondents confirmed optimism as i) mediating between overall LMX and employee engagement at the 95% level and ii) mediating between each LMX sub dimension and employee engagement. Thus the analysis revealed support for each of the relationships hypothesised in the Conceptual Framework.

The accumulated work to date leads to this third and final section of the research thesis, in which the researcher draws the study to its conclusion. The next part of this paper will address the key findings from this study contextualised in the work of prior studies examining; leadership as an antecedent of employee related outcomes including employee engagement and the mediating role of personal resources (including optimism).

Subsequently the key theoretical and practical contributions along with their associated implications for scholars and the Irish FET sector are explored. These are followed by recommendations aimed at researchers who wish to build upon this research and FET organisational leaders seeking to drive enhanced employee engagement in their organisations. Finally the limitations of the study are presented and the study draws to a close with the researchers concluding remarks.

2. A Discussion of Key Findings

It was noted earlier that the findings presented in CPS Paper 4 revealed support for all hypotheses depicted on the conceptual framework in Figure 1. This section considers these key findings, discussing each in the context of related prior studies and the operational environment of the Irish FET Sector.

2.1 The Impact of LMX on Employee Engagement

LMX theory suggests that leaders develop unique socially constructed relationships with each employee. These relationships based on rules of role making, agreement, reciprocity and equity (Dansereau *et al.*, 1975; Graen, 1976; Deluga, 1994; Graen and Uhl Bien, 1995) occur at different levels from basic and transactional to a more high quality exchange (Graen, 1976; Liden *et al.*, 1997). The quality of these exchanges between a manager and an employee

determines the quality of the dyadic relationship that develops (Graen and Uhl-Bien, 1995; Wang *et al.*, 2005; Schyns and Day, 2010) between them. High quality relationships tend to occur in situations where the resources offered by both are valued and both parties perceive the exchange to be fair (Schyns and Day, 2010). These high quality LMX relationships help to build trust, respect and mutual obligations between both parties (Graen and Uhl Bien, 1995; Wang *et al.*, 2005).

Employees who experience these high quality LMX relationships with their managers experience multiple positive benefits. They are viewed as being part of the ‘in group’ and as such tend to have greater autonomy; more access to their manager, information and resources than employees in the ‘out group’ or those who are in low quality LMX relationships. In addition, these ‘in group employees’ tend to be assigned more challenging tasks (Graen and Uhl Bien, 1995). They are likely to have high energy levels; strong mental resilience and work involvement, enthusiasm and pride and it is suggested that they apply their full concentration on their work (Graen and Uhl Bien, 1995; Breevaart *et al.*, 2012). These aspects of high quality LMX relationships support the exploration of the idea (hypothesised in Hypothesis One) that high quality LMX relationships, as perceived by teaching staff in ETBs will positively predict their engagement.

Data was collected from 156 teaching staff delivering courses in FET programmes in ETBs. Section 1 of this thesis offered a description of the FET sector, the changing operational context and the multiple challenges experienced by this group. It was noted that the flexible nature of the sector meant that in practice many FET teaching staff work across multiple programmes and in some instances report to more than one manager. It was a requirement of the study that all respondents were working for a minimum of 10 hours per week for one manager and in instances where they reported to multiple managers, they were requested to answer each survey question based on their relationship with one manager and their engagement in that particular workplace. Almost three quarters of the respondents in this study are female, which is a fairly typical representation of the overall sector in Ireland and according to the FET Professional Development Strategy (2017-2019) is reflective of education related sectors in Europe.

Regression analysis confirmed overall LMX as a significant positive predictor of employee engagement. More specifically, when controlling for covariates including gender, age, education and management responsibility, it confirmed that each one unit increase in LMX

resulted in a statistically significant .310 rise in employee engagement levels. The confirmation of Hypothesis 1 in this study is consistent with and builds upon prior studies examining i) leadership as a predictor of employee engagement ii) LMX as a predictor of employee outcomes and more recently iii) LMX as a predictor of employee engagement. These studies are depicted on Table One below:

Table 1: Prior Studies in Leadership, LMX and Employee Related Outcomes

Authors	Leadership Lens	Outcome
Garg and Dhar	LMX	Work Engagement and Job Autonomy
Breevaart, Bakker, Demerouti and Van den Heuvel (2015)	LMX	Employee Engagement
Burch and Guarana (2014)	LMX Transformational Leadership	Follower Engagement OCB and Turnover Intentions
Agarwal, Datta, Blake-Beard and Bhargava	LMX	IWB, Intention to Quit (Mediated through employee Engagement)
Tuckey, Dollard and Bakker (2012)	Empowering Leadership	Work Engagement
Tims, Bakker and Xanthopoulou (2011)	Transformational Leadership	Employee Engagement
Buch, Kuvaas and Dysvik (2014)	LMX	Follower Work Effort
Harris, Ning and Kirkman (2014)	LMX	OCB and turnover intention
Zhang, Wang and Shi (2012)	LMX	Job Satisfaction, Effective Commitment and Performance
Walumbwa, Cropanzano, Goldman (2011)	LMX	Effective Work Behaviours
Huang, Chan, Lam and Nan (2010)	LMX	Burnout and work performance
Harris, Wheeler and Kacmar (2009)	LMX	Job satisfaction, turnover intentions and performance
Wang, Law and Chen (2008)	LMX	Employee Performance and Work Outcomes
Harris, Harris and Eplion (2007)	LMX	Job Satisfaction, Organisational Feedback and Supervisor Feedback
Atwater and Carmeli (2009)	LMX	Energy and Involvement in Creative work

The notion that employee engagement can be influenced by leadership was initially examined in 2011 by Tims and colleagues through the lens of transformational leadership. A questionnaire and 5 day daily survey (diary study) was used to collect data from forty two employees employed in two organisations in the Netherlands. The findings confirmed day-level transformational leadership as positively related to employees' daily work engagement. Agarwal *et al.*, (2012) examined LMX as a predictor of IWB and intention to quit through the mediating mechanism of employee engagement amongst 979 managers working in service sector organisations. Their survey study confirmed LMX as a predictor of employee engagement. , Burch and Guarana (2014) examined the comparative influences of both transformational leadership and LMX on follower engagement. This study used a longitudinal, time lagged survey approach to collect data from 280 employees in a large multinational technology firm in Brazil. Their study confirmed LMX as a predictor of engagement even when controlling for transformational leadership. In 2015, Breevaart *et al.* used an online questionnaire to collect data from 847 Dutch police officers in the Netherlands in what they understood to be the first study examining LMX as a predictor of employee engagement. Although not the first, this study also confirmed LMX as a predictor of employee engagement. In their 2016 study of 294 Indian banking professionals, Garg and Dhar confirmed LMX as positively related to employee service innovative behavior through the mechanism of work engagement. The confirmation of Hypothesis 1, (i.e. overall LMX is a predictor of employee engagement in this current study) serves to build upon the work of Tims *et al.*, (2011), Agarwal *et al.*, (2012) , Burch and Guarana (2014) Breevaart *et al.*, (2015) and Garg and Dhar (2016) by confirming leadership, viewed through an LMX lens, as a predictor of employee engagement.

This finding also builds on those studies conducted prior to Burch and Guarana's 2014 study which examined LMX as a predictor of various employee related outcomes. Such outcomes (depicted in Table One) included employee performance, work outcomes, effective work behaviours, follower effort, Organisational Citizenship Behaviour and job satisfaction. Hypothesis 1 of this study builds on this work through by adding employee engagement as an additional outcome predicted by LMX.

This finding confirming overall LMX as a predictor of employee engagement means that FET managers seeking to drive employee engagement amongst teaching staff in ETBs can do so through focusing their efforts on cultivating high quality LMX relationships with FET

teaching staff. Proactive strategies can be developed and implemented by FET managers to ensure that they provide resources that are valued by FET teaching staff and behave in a way that fosters positive employee perceptions of fairness. These approaches will assist in promoting trust, respect and obligation necessary to support the maintenance of existing high quality LMX relationships and help to build the LMX of those in low quality relationships thus expanding those FET employees in the ‘in group’ and increasing FET employee engagement. This finding is critical for enhanced practice in FET organisations in that it confirms LMX as an effective mechanism to drive employee engagement amongst teaching staff helping them to realise the significant organisational and individual benefits associated with the construct. One of these benefits “client satisfaction” will help FET organisations in their endeavours to ensure that FET students remain their central focus.

2.2 The Impact of LMX Sub Dimensions on Employee Engagement

The multi-dimensional LMX measure LMX-MDM used in this study is that used by the majority of previous researchers examining the construct. The dominant analytical approach across previous research involves analysing LMX as a single order factor only (Joseph *et al.*, 2011); however this approach does not take cognisance of the four dimensions of LMX affect, loyalty, contribution and professional respect as different currencies in the LMX relationship with each causing the LMX relationship to develop in different ways and produce differential outcomes (Dienesch and Liden, 1986; Liden and Maslyn, 1998). Greguras and Ford (2006) suggest that analysing LMX as a single order factor fails to capture the scope of the LMX relationship. Hypotheses 1A-1D in this study were developed to examine the full scope of the relationship by examining the predictive effect of each of the four LMX sub dimensions on employee engagement. Examining LMX sub dimensions as independent predictor variables of employee related outcomes is an approach adopted by a small number of studies including Bhal in 2006 and Wang *et al.*, in 2008. Bhal’s (2006) study examined the impact of LMX contribution and affect on citizenship behaviour. Using a survey to collect data from 306 software professionals working across 30 companies based in India, she confirmed both contribution and affect as predictors of Organisational Citizenship Behaviour (OCB), identifying contribution (β 0.107) as a stronger predictor than affect (β 0.03). Wang *et al.*’s (2008) study examined each LMX dimension as a predictor of employee performance and work outcomes. Using data collected from 168 bank teller supervisor subordinate dyads in China, they confirmed a significant positive relationship between LMX contribution and job dedication (β 0.20) and a significant positive relationship

between LMX affect and task performance (β 0.223), interpersonal facilitation (β 0.32) and job dedication (β 0.26).

The confirmation of the differential influence of LMX sub dimensions on employee related outcomes in these previous studies encouraged the researcher to build upon this work by analysing the LMX sub dimensions as predictors of employee engagement. The researcher believes the findings from the analyses in this study are unique in that they confirm support for each of the LMX sub dimensions as significant predictors of employee engagement in the FET sector. The findings from the analysis of each LMX sub dimension as a predictor of employee engagement (H1-H1D) are presented in Table 2 Below

Table 2: Main Findings LMX Sub dimensions

LMX Dimension and Description Maslyn and Liden (1998, p. 50)	Summary of Main Findings
<p>Affect: The mutual affection members of the dyad have for each other based primarily on interpersonal attraction, rather than work or professional values. Such affection may be manifested in the desire for and/or occurrence of a relationship which has personally rewarding components and outcomes (e.g., a friendship).</p>	<p>H1A: LMX affect (β,0.194, p .014) is the second strongest LMX currency significantly predicting employee engagement in this study For every one unit increase in LMX affect there is a .194 increase in engagement</p>
<p>Loyalty: The expression of public support for the goals and the personal character of the other member of the LMX dyad. Loyalty involves a faithfulness to the individual that is generally consistent from situation to situation</p>	<p>H1B: Loyalty is (β,0.177, p .023) confirmed as a significant predictor of employee engagement. Ranked third in order of predictability For every one unit increase in LMX loyalty there is a .177 increase in engagement</p>
<p>Contribution: Perception of the current level of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad. Important in the evaluation of work-oriented activity is the extent to which the subordinate member of the dyad handles responsibility and completes tasks that extend beyond the job description and/or employment contract; and likewise, the extent to which the supervisor provides resources and opportunities for such activity.</p>	<p>H1C Contribution is confirmed as the strongest predictor of employee engagement (β, 0.468, p .000) of the four LMX currencies.</p> <p>For every one unit increase in LMX contribution there is a .468 increase in employee engagement</p>
<p>Professional Respect: Perception of the degree to which each member of the dyad has built a reputation, within and/or outside the organization, of excelling at his or her line of work. This perception may be based on historical data concerning the person, such as: personal experience with the individual; comments made about the person from individuals within or outside the organization; and awards or other professional recognition achieved by the person. Thus it is possible, though not required, to have developed a perception of professional respect before working with or even meeting the person</p>	<p>H1D Professional respect (β, 0.155, p .015) is confirmed as a significant predictor of employee engagement in this study.</p> <p>This dimension was the lowest LMX dimension predicting employee engagement in the study.</p>

2.2.1 The Impact of LMX Affect on Employee Engagement

Analyses of Hypothesis 1A confirms that the second strongest LMX currency predicting employee engagement in this study is LMX affect (β , 0.194, p .014). Given that LMX contribution, a task and work orientated dimension is the strongest predictor, it is interesting to see that the second most important LMX driver of engagement is more interpersonal in focus. This finding confirms that FET management practitioners can influence their employees' engagement through the quality of their personal relationships outside of their work or professional values. The perception of their manager as a friend or at least a person that they could potentially be friends with strongly determines FET employee engagement. This finding is consistent with those findings by Wang *et al.*'s (2008) confirming LMX affect as a predictor of task performance, interpersonal facilitation and job dedication. From an FET practice perspective, this finding is consistent with the researcher's observations as a manager in the FET setting. It was clear to her that teaching staff who reported into managers with whom there was little affect were less enthusiastic about and engaged in their work than those who had high affect for their managers. The confirmation of Hypothesis 1A in this study highlights the critical need for FET managers to take time to build and develop personal connections with their employees. While this social connection or viewing their manager as a friend (or at least as a potential friend) is central to engagement, in practice managers working with geographically dispersed staff struggle to carve out the time and resources necessary to cultivate this LMX currency. In addition, this is often an aspect of management responsibility afforded lower priority by organisations and managers attempting to drive efficiencies in times of economic challenge.

2.2.2 The Impact of LMX Loyalty on Employee Engagement

This study confirmed that FET employees' engagement was driven by their perception of their managers' loyalty (β , 0.177, p .023) with this LMX sub dimension ranking third out of four LMX currencies. As depicted on Table 2, LMX loyalty refers to the employee's perception of their manager as being publically supportive of their actions. In instances where an employee perceives their manager to be loyal, this triggers a reciprocal exchange by the employee which in turn nourishes the development and maintenance of a high quality LMX relationship between the two parties. From a practice perspective, the researcher has anecdotal evidence of the increasing importance attributed to a perception of managerial loyalty by FET teaching staff. It is an aspect that seems to have increased in importance in a time where FET teachers' perceptions are that they are being asked to implement changes

some of which conflict with their viewpoints and values. FET managers need to understand the role played by employee perceptions of managerial loyalty in driving employee engagement. Using this new knowledge, they can identify opportunities and strategies to drive positive perceptions of loyalty. This will support them to cultivate the trust, respect and reciprocity required to drive enhanced employee engagement.

2.2.3 The Impact of LMX Contribution on Employee Engagement

In this study, contribution was found to be the strongest predictor of employee engagement (β , 0.468, p .000). This LMX dimension is based upon the employee's positive perception of their managers' task/work related behaviours (Table 2). Motivated by this perception, an FET employee may willingly reciprocate or contribute by to the relationship by engaging in behaviours that go beyond the basic or transactional requirements. This in turn provides the impetus for the FET manager to reciprocate by allocating additional resources, increased autonomy or perhaps more challenging tasks. These exchanges help to build and develop a high quality dyadic LMX relationship and according to Hypotheses 1C, in the context of this study, LMX Contribution is the most important exchange currency in the LMX- employee engagement relationship. This pivotal role of LMX contribution in fostering employee engagement in the FET sector is consistent with Bhal's (2006) finding on the role played by LMX contribution in predicting citizenship behaviour and Wang *et al.*'s (2008) finding confirming contribution as a predictor of job dedication. The finding of contribution as the strongest predictor of employee engagement in FET is consistent with this practitioner's experience of FET teachers being motivated by their desire to make a difference and as such their tendency to seek opportunities in which they can make a contribution. FET managers can support this desire through the allocation of meaningful work and associated resources and through this mechanism realise enhanced employee engagement.

2.2.4 The Impact of LMX Professional Respect on Employee Engagement

The findings from this study confirm professional respect as a significant predictor of employee engagement (β , 0.155, p .015) in the FET sector. This sub dimension (described on Table 2 above) relates to the employee's admiration of the manager on the basis of personal experience, external awards or public recognition. As with each of the LMX sub dimensions, the employee's positive perception of professional respect results in a reciprocal response that exceeds transactional or basic requirements. Although this was the lowest predictor of the four sub dimensions examined, it is nonetheless a significant driver of employee engagement

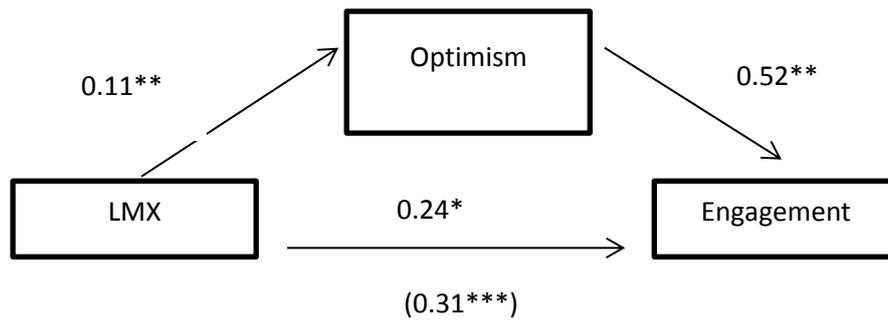
which justifies management attention. As such FET managers need to scope out opportunities to ensure that they foster positive employee perceptions of professional respect and thus drive enhanced employee engagement.

In summary, the findings in this study confirming each of the LMX sub dimensions (affect, loyalty, contribution and professional respect) as differential predictors of employee engagement (H1A-1D) builds upon the extant research. While it is certainly worthwhile cultivating all of these LMX dimensions in the FET working environment, these findings mean that organisational leaders operating with restricted resources and time constraints can prioritise dimensions that will maximise employee engagement.

2.3 The Impact of Optimism on Overall LMX and Employee Engagement

Optimism is defined as “the current expectancy that positive outcomes will occur in the future” (Shifren and Hooker 1995, p. 61). This positive expectation means that optimistic people are “less likely to dwell on negative or stressful situations, less likely to give up amidst stress, and [are] more likely to maintain a positive outlook and to develop plans of action to deal with stressful situations” (Higgins *et al.*, 2010, p.750). Optimistic individuals are flexible, hopeful, motivated and persistent and this optimism is linked to a number of individual benefits including psychological wellbeing, physical health and happiness with life. In addition, it is linked to more success and happiness at work (Seligman, 2006) and a range of desirable organisational outcomes including work performance, job satisfaction and commitment (Youssef and Luthans, 2007; Kluemper *et al.*, 2009). These links mean that optimism is a concept of interest to both scholars and management practitioners. It is the direct link between optimism and employee engagement (Xanthopoulou *et al.*, 2007; Prieto *et al.*, 2008; Halbesleben 2010); its mediating role between leadership and employee engagement (Tims *et al.*, 2011) and job resources and employee engagement (Breevaart *et al.*, 2015) that made it of interest to this researcher and thus led to the development of Hypotheses 2 and the examination of optimism as a mediator in the LMX-employee engagement relationship. The findings from this study, as illustrated on Figure 2 below confirm support for Hypothesis 2, i.e. optimism is mediating in the relationship between overall LMX and employee engagement.

Figure 2: Optimism as a Mediator between Overall LMX and Engagement



The diagram above confirms LMX as a significant direct predictor of optimism (0.11**), which in turn is a direct significant predictor of employee engagement (0.52**). The indirect effect of LMX on employee engagement through optimism is stronger than LMX as a direct predictor of employee engagement confirming that optimism is mediating. Analysis reveals that this indirect effect of overall LMX on Employee Engagement through Optimism of $ab=0.06$ was significant when tested at a 95% Confidence Interval. The bootstrapped confidence intervals [0.02, 0.14] do not contain zero confirming that mediation is occurring. The results from the analysis indicate that optimism could account for just under a fifth of the total effect ($PM=0.21$). This finding is critical in that it confirms that it is not only high quality LMX relationships that determine employees' levels of engagement but rather the effect that this individual differentiation has on each employee's optimism which accounts for just over one fifth of engagement.

This indirect effect of LMX on engagement means that organisations in the FET sector can drive employee engagement by adopting a proactive and deliberate approach to developing high quality, dyadic social exchange relationships between managers and FET teaching staff. Opportunities can be created to facilitate reciprocal social exchanges between the two parties, by ensuring that the resources shared with the employees are valued by them and work allocation and distribution is perceived as fair. Through such exchanges the FET manager can build trust, positive perception, likeability and professional respect. This culmination of a series of positive reciprocal exchanges can help the FET manager to foster a high quality LMX relationship with their employees which in turn will positively influence staff optimism and thus indirectly effect employee engagement.

The confirmation of optimism as a significant direct predictor of engagement in this analysis also has implications for those FET organisational leaders operating in low quality LMX

relationships. Although high quality LMX are desirable in FET practice, it needs to be acknowledged that it is not always feasible for FET managers to have such relationships with all staff and organisations will always have ‘in group’ and ‘out group’ employees. These findings suggest that optimism can provide organisations with alternative avenues to drive engagement for employees who are involved in low quality LMX relationships. In such instances, employee engagement can be pursued through the development and implantation of strategic interventions to boost optimism for existing FET teaching staff. New and fresh approaches could be adopted in the case of new recruits including prioritising those staff who score high on optimism.

2.3.1 Optimism Mediates the Relationship between Each LMX Sub Dimension and Employee Engagement

An examination of the differential influence of each of the LMX sub dimensions on engagement through the mediating mechanism of optimism is depicted in descending order on Table 3 below:

Table 3: Indirect Effects of LMX Sub Dimensions on Employee Engagement

LMX Sub Dimension	Indirect Effect	Indirect PM	Confidence Interval
Loyalty	.05	.26	[.01,.10] (95%)
Affect	.04	.22	[.01,.10] (95%)
Professional Respect	.06	.22	[01,.08] (95%)
Contribution	.07	.16	[.02,.14] (90%)

These findings reveal optimism as mediating robustly across all LMX sub dimensions. From an FET practice perspective, managers need to be cognisant of the role played by LMX affect, loyalty, contribution and professional respect in enhancing employee engagement through the mechanism of optimism. As was noted in Section 2.3 above earlier, to drive engagement in their organisations, FET managers must create opportunities to boost LMX relationships with their existing employees and this can be achieved through facilitating and maximising reciprocal, exchange opportunities.

These findings confirm that all sub dimensions provide currency in the development of the LMX relationship for the purpose of increasing optimism and thus engagement. In practice it means that FET managers need to invest their efforts and resources in developing and nurturing each of the LMX sub dimensions with their existing staff. This finding also has implications for FET recruitment processes. For FET organisations to successfully drive engagement, they need to ensure that newly appointed or promoted FET managers are relational people who can effectively build high quality LMX relationships with their teaching staff.

3. Contribution of the Research

As this is the first study to explore and confirm the relevance of the relationship between LMX and employee engagement through the mediated mechanism of optimism in the Irish FET sector, it makes a unique practical and theoretical contribution which is explored in more detail below:

3.1 Contribution to Practice

Earlier papers in the cumulative series discussed the strategic imperative for FET leaders to drive employee engagement and realise its associated individual and organisational benefits in a time of significant sectoral change. The findings in this study can underpin and inform a fresh strategic approach to realising this FET employee engagement objective. Thus the study is positioned to make a unique, valuable and timely contribution to Irish FET practice.

i) Value of Building and Maintaining High Quality LMX Relationships

This study contributes to a new understanding of the pivotal role of high quality LMX relationships between managers and teaching employees in the Irish FET sector. These high quality LMX relationships drive FET employee engagement directly and indirectly through enhancing employee optimism which in turn effects employee engagement. In practice, FET organisational leaders can use this new information to develop strategic responses to foster high quality LMX relationships and prioritise their resources for this area. FET organisations need to consider whether their current reporting structures for FET teachers (i.e. multiple managers across dispersed locations) impede opportunities to develop high quality LMX and identify new and feasible approaches. In addition, attention needs to be given to recruitment and promotion that has due regard the value of cultivating

LMX relationships. These new approaches and responses will enable FET leaders to realise employee engagement across their organisations.

ii) **Understanding the Differential Value of LMX Currencies**

The differential currencies of each of the four LMX sub dimensions predicting employee engagement revealed in this study means that its contribution is both unique and valuable. These findings are timely as they can be used by FET organisations, operating in a time of limited resources to focus on prioritising those sub dimensions that have a higher influence on employee engagement in planning strategic interventions.

iii) **Understanding Optimism as a Driver of Employee Engagement in FET**

This study makes a practical contribution by offering an alternative route to high quality LMX relationships to drive engagement through employee optimism. It is previously noted that whilst high quality LMX relationships are the ideal in organisations, the practical realities mean that this is not feasible in all situations and there are always those employees who remain in the 'out group'. The findings of this study confirm employee optimism as a direct route to FET employee engagement. Optimism is a malleable state (Seligman, 2006; Kluepfer *et al.*, 2009; Higgins *et al.*, 2010) and from a practical perspective FET organisations can develop strategies to work on boosting employee optimism as a direct predictor of employee engagement. This approach might prove particularly valuable in the public sector in instances of low quality LMX relationships with little chance of improvement.

3.2 Contribution to Theory

The theoretical contribution of this study is grounded in its confirmation of optimism as a mediating mechanism through which LMX influences employee engagement. This key finding enriches the current body of theoretical knowledge concerned with LMX and employee engagement in the following ways:

i) **Extension of Existing LMX Theory**

As discussed in Section 2, previous research has confirmed positive associations between leadership and employee engagement (Tims *et al.*, 2011); high quality LMX and a range of desirable employee and organisational outcomes (See Table 1, Section 2.1) and more recently LMX and employee engagement (Agarwal *et al.*, 2012 Burch and Guarana, 2014; Breevaart *et al.*, 2015; Garg and Dhar, 2016). From a theoretical perspective, this

study builds on the extant literature to extend the theory on LMX. It has achieved this by firstly by confirming LMX as a predictor of employee engagement in the FET sector and secondly through its confirmation of a significant relationship between each LMX sub dimension and employee engagement and ranking the independent influence of each in order of LMX contribution, affect, loyalty, and professional respect.

ii) An Enhanced Understanding of the Mechanisms through which LMX Influences Engagement

In order to gain an enhanced understanding of the mechanisms through which LMX influences engagement, this study has explored the personal resource of employee optimism as a mediator in the LMX-employee engagement relationship. This was in order to establish whether optimism was part of the causal chain in the relationship, helping to explain the influence of LMX on employee engagement. Optimism was also examined as a mediator in the relationship between each LMX sub dimensions. It was noted earlier that optimism is confirmed as a mediator between transformational leadership and engagement (Tims *et al.*, 2011) and Job resources are confirmed as mediating between LMX and employee engagement (Breevaart *et al.*, 2015).

This study extends the theory by confirming the value of LMX as a distal predictor of employee engagement through its influence on the personal resource of optimism. In addition, the study has ranked the strength of the relationship between the LMX sub dimensions and employee engagement mediated through optimism in order of loyalty, affect, professional respect and contribution.

iii) Confirmation of Scale Reliability and Validity

The findings in this study support the reliability and validity of the UWES-9 measure of employee engagement and the GESS-R measure of optimism. This study suggests that the LMX-MDM measure is more reliable when LMX Item number seven is removed. This item related to the LMX Contribution sub dimension and reads '*I do work for my manager that goes beyond what is specified in my job description*'. Future studies using this measure might report on the Cronbach's Alpha of this scale item.

iv) Common Methods Variance

Analyses confirmed that Common Method Variance was not an issue in the data collected for this study. These data were collected using two separate questionnaires to

counterbalance the question order as recommended by Podsakoff *et al.*, (2003). The regression results presented in CPS Paper 4 confirmed that there is no significant difference in the data from respondents who replied to Questionnaire 1A and those who answered 1B (β 0.245, p , 0.123). These findings support the idea that CMV is not an issue (Spector, 1994).

4. Recommendations

This section offers a number of recommendations for researchers and FET practitioners. The first section addresses recommendations to those researchers who wish to build upon this research study in the Irish FET Sector and wider contexts. The final recommendations are aimed at leaders in the FET sector who wish to foster employee engagement in their organisations. Based on the findings in this study, these practitioner recommendations contain practical approaches to develop high quality LMX relationships that will drive engagement through the mediating mechanism of optimism. Alternative suggestions are also discussed for those instances of low quality LMX relationships.

4.1 Recommendations for Researchers

This research study focused on analysing data relating to LMX quality, Employee Engagement and Optimism, collected from FET staff teaching for a minimum of ten hours per week in three ETBs. Future FET research can build on the work in this study by expanding the data sample; examining different groups and adopting different approaches to data collection and it would be interesting to see if the results from these studies are comparable.

i) Examining other ETBs and Staff Categories

There are sixteen Education and Training Boards across the country, each of which houses multiple further education and training offerings. These include PLCs, VTOS, BTEI, Adult Literacy Service, Youthreach, Community Education, and Training Services. This study collected data from three ETBs. Future studies could extend this focus by collecting data in relation to the constructs of interest from other ETBs. There was an exclusive focus on staff teaching for over ten hours per week in FET in this study. The rationale for this selection was based on the need to maintain engagement amongst this group identified through a combination of the researcher's personal knowledge and observations based on professional experience in the sector and direct feedback on the specific challenges experienced by this group in the researcher's capacity of lecturer in the Literacy

Development Centre. This group were those in FET who spent the most time working directly with adult learners and as such had influence over the student experience. Those conducting future research in FET might consider examining different staff groups to those at the centre of this study. Specific examples may include FET administrative staff, resource workers and FET Managers.

ii) Focus on Leader/Management Dyad and Group Level Outcomes

The data in this study was collected exclusively from employees reporting to management. This focus of examining LMX as a predictor of employee outcomes is consistent with most of the research on LMX. However there is substantially less research examining LMX as a predictor of leader/manager outcomes. Future studies might consider the impact of high quality LMX on management engagement and other management outcomes.

All data in this study was collected and analysed at an individual level only and dyadic or group level impact was not examined. There is an increased interest in examining LMX at a dyadic level and there is a value in examining engagement and optimism at both dyadic and group level. Future studies can address this and help to establish whether there is commonality between the constructs in these different levels and groups thus adding an interesting dimension which would serve to build upon the findings in this study.

iii) Collecting Longitudinal Data

This is a cross sectional study, which relies on data on the three constructs of LMX, employee engagement and optimism collected at one point in time from 156 adult teaching staff in the Irish FET sector. Future studies might build on this work by carrying out a study in the FET sector over a longer time period. This will help to clarify whether there are fluctuations and changes in relation to engagement and optimism levels.

iv) Adopting a Different Approach to Data Collection

This study is based on a positivist view of the world and as such a deductive approach, using quantitative data collection methods has been adopted. Further studies might adopt an interpretivist lens underpinned by a view that reality is socially constructed through the way people make meaning from their experiences and interactions with others (Raskin, 2002). Future research can build upon the findings in this study by adopting a phenomenological approach and using qualitative or mixed methods to collect data. This might include focus group studies or action research projects as discussed below.

a. Conducting Focus Group Studies

Building on the idea of further studies adopting a mixed method approach this researcher believes that conducting a number of focus groups would be a worthwhile exercise to further elucidate the findings of this study. It is recommended that such groups are aimed at i) ETB teaching staff and ii) ETB management. Adopting such an approach would facilitate more in depth discussion in relation to each of the findings in this study and help FET organisational leaders to identify particular approaches that have contributed to the development of high quality LMX relationships and employee optimism in the past and those that have scope to nourish the development and maintenance of high quality LMX and employee optimism in the future. Areas for exploration are suggested on Table Four below:

Table 4: Focus Study Suggestions

FET Teaching Staff	FET Management
Examples of interactions with management where FET teaching staff felt that each of the four LMX currencies was being fostered	Exploring the influence that their relationship might have on employees
Examples of interactions with management where FET teaching staff felt that each of the four LMX currencies was being eroded	Identifying opportunities that have arisen and how they might have been used to develop and build relationships with FET teaching staff
Events/Occurrences which employees view as shaping their optimism	Perception of obstacles to building high quality relationships
Perception of obstacles to building high quality relationships	

b. Action Research

Research practitioners might build on the work of this study through the implementation of an action research project situated in an ETB. This project could support i) FET managers to implement initiatives specifically developed to enhance LMX relationships and foster employee engagement through optimism and ii) implement initiatives to boost employee optimism and build engagement.

4.2 Recommendations for Practitioners

This research has revealed unique findings that are valuable to FET organisational leaders and practitioners seeking to foster employee engagement amongst their teaching staff. This section presents a number of practice recommendations grounded in these findings and it is strongly anticipated that the implementation of these recommendations will result in enhanced employee engagement:

i) Adapting FET Recruitment Policies for FET Teaching Staff

This study has confirmed a direct link between optimism and employee engagement for FET teachers. At present optimism measures do not form part of the ETB teaching staff recruitment procedures or practices. It is recommended that mechanisms are developed to incorporate optimism into the recruitment and selection policy and practice. This could be approached on a pilot basis. Practical ways to achieve this might include incorporating the completion of questionnaires such as the GESS-R, or Seligman's Learned Optimism Test to identify employee explanatory styles or those candidates who are most optimistic. The inclusion of competency type questions at interview stage that require concrete examples of an employee's explanatory style in action might also be considered.

ii) Adapting FET Recruitment Policies for FET Management

The findings in this study confirm LMX and each of its sub dimensions as drivers of employee engagement. This finding and the confirmation of optimism as part of this causal chain in the realisation of engagement emphasises the critical role played by FET managers' relationships. FET managers must have the capacity, approach and attitude necessary to nurture relationships using each of the LMX currencies of affect, loyalty, contribution and professional respect. Fostering these currencies and thus developing high quality LMX relationships which boost employee optimism and engagement requires that FET managers transcends task based, transactional exchanges with their teaching staff. The findings of this study particularly emphasise the central role of LMX affect or the FET teachers' perceptions of their manager as being likeable in driving engagement. It is recommended that existing management recruitment policies and procedures relating to the selection and appointment of FET managers needs to be reviewed in light of these findings.

iii) Development of Informed Initiatives to Drive Employee Engagement for Existing FET Managers and Teaching Staff

The findings in this study confirm both high quality LMX and FET employee optimism as drivers of engagement. The hierarchy of influence of each LMX sub dimension as a currency to nurture and build high quality LMX relationships that drive engagement is also confirmed. As in any other organisational context, the reality in ETBs is that managers' experience differentiated relationships with their teaching staff. This means that those 'in group' staff, experience more autonomy and enhanced access to resources including time with their manager than their colleagues who form part of the 'out group'. In order to realise high quality LMX relationships with more FET teaching staff and expand the 'in group' members, regular and meaningful dyadic interactions between managers and teaching staff are necessary. These are the mechanisms through which FET leaders can build employee trust, respect and loyalty leading to a high quality dyadic relationship (Sparrowe and Liden, 1997). It is recommended that FET organisations support managers to develop an enhanced understanding of the pivotal role that their dyadic relationships play in cultivating employee engagement amongst their staff and develop strategic responses to equip their managers to proactively foster high quality LMX relationships with FET teaching staff. Such responses might include management workshops, seminars and one to one coaching. It is also recommended that that organisational initiatives aimed at supporting the development of employee optimism are developed and implemented. Adopting a purposeful approach to influence high quality LMX and employee optimism will help to drive employee engagement. In deciding where to allocate resources FET organisations can specifically target optimism initiatives at employees in low quality LMX relationships.

iv) Minimisation of Multiple Reporting Relationships:

The nature of the FET sector often means that FET employees' work is dispersed across a number of FET schemes, which in turns means that staff members may report to multiple managers. While this study emphasises the importance of LMX in fostering employee engagement this geographical and reporting dispersion poses particular challenges which may impede the development of high quality LMX relationships. It is recommended that this dispersion is reviewed and where possible co-ordinated efforts are made to ensure that FET teachers report to fewer managers. Adopting such an approach ought to drive enhanced engagement for FET employees.

5. Research Limitations

Throughout the course of the Cumulative Papers Series, a number of research limitations have emerged. The researcher has discussed and addressed each in previous papers. These limitations are now revisited below:

- i) This research was time bound and as such it is a cross sectional study, reliant upon data collected at one point in time from 156 adult teaching staff in the Irish FET sector. It depicts a snapshot of the LMX quality employee engagement and optimism of the sample at a particular point in time. The sample size of this study at 156 FET employees (26% male, 74% female) was a relatively small proportion of the population. This limitation poses challenges for the representativeness of this study to the wider FET population; however, it should be noted that the three chosen ETBs comprised a combination of urban and rural settings (similar to the wider population) and that the mix of male and female respondents is largely similar to that of the population. In this way, it is felt that the findings of this study are generalisable to the population although the small sample size may mitigate against statistically significant inferences.
- ii) This research practitioner, supported by two research supervisors, has had sole responsibility for the entirety of this research study and as such the potential for personal bias needs to be acknowledged. All efforts were taken throughout the research process to mitigate against such bias on the basis of perceptions and personal and professional values.
- iii) In CPS Paper 2 it was noted that each of the measures in the survey (LMX-MDM, UWES and GESS-R) used to collect data on the three constructs are reliant on self report data. A discussion was presented on the potential difficulties of Common Methods Bias and Social Desirability Bias associated with this approach along with the views of some authors that such difficulties are overrated and effectively managed through the use of validated measurement scales (Spector, 1994). Subsequently CPS Paper 3 outlined the researchers implementation of recommended procedural controls (Podsakoff *et al.*, 2003) in the Pilot Stage of the study which included: i) using validated scales ii) ensuring that each scale had different anchor points and iii) counterbalancing the question order by having two questionnaires (1A and 1B) to capture the data. As discussed earlier, each of these controls were used at data collection stage and the results of the hierarchical

regression analysis for survey type presented in CPS Paper 4 show an insignificant Beta (β 0.245, p , 0.123). This confirms that there is no significant difference in the data received from those respondents who answered Questionnaire 1A and those who answered 1B. These findings support the idea that CMV is not an issue.

In summary, this section has acknowledged the limitations inherent in this research study and the approaches adopted throughout the research process to address them. Many of these limitations are not unique to this study and rather are reflective of those encountered by other researchers conducting similar type studies in a variety of fields. There is potential for future research in the FET sector, as discussed in Section 4, to address some of these limitations.

6. Concluding Remarks

This closing chapter in the final section of the research thesis aimed to build on the work in the cumulative paper series and prefaces to date and bring the study to its conclusion. The study's key findings were presented in the context of previous literature along with its unique contributions to theory and FET practice. Such theoretical contributions provided impetus for a number of recommendations for scholars, signposting further research opportunities and approaches to build upon this study. In addition to the researcher's wish to make a theoretical contribution, this study was driven by a practitioner's desire to support FET organisations to realise enhanced employee engagement and its' associated organisational and individual employee benefits. The researcher has used the key findings from this study to inform a series of recommendations for FET organisational and leadership practitioners, the implementation of which should lead to the realisation of this desire. This chapter is framed and presented having regard to the limitations of the study and the associated responses to minimise them.

References

- Agarwal, U.A., Datta, S., Blake-Beard, S. and Bhargava, S. (2012) Linking LMX, innovative work behavior and turnover intentions. *Career Development International*, Vol. 17, No. 3, pp. 208-230.
- Bhal, K.T. (2006) 'LMX-citizenship behavior relationship: justice as a mediator', *Leadership and Organization Development Journal*, Vol, 27, No. 2, pp. 106–117.
- Breevaart, K., Bakker A.B, Demerouti E and Hetland J. (2012) 'The Measurement of State Work Engagement: A Multilevel Factor Analytic Study', *European Journal of Psychological Assessment*, Vol. 28, No. 4, pp.305–312.
- Breevaart, K., Bakker, A.B., Demerouti and Van den Heuvel. M. (2015) 'Leader-member exchange, work engagement and job performance', *Journal of Managerial Psychology*, Vol. 30, pp.753-770.
- Buch, R., Kuvaas, B., Dysvik, A. and Schyns, B. (2014) 'If and when social and economic leader-member exchange relationships predict follower work effort: The moderating role of work motivation', *Leadership and Organization Development Journal*, Vol. 35, No. 8, pp.725 – 73.
- Burch, T.C. and Guarana, C.L. (2014) 'The Comparative Influences of Transformational Leadership and Leader–Member Exchange on Follower Engagement', *Journal of Leadership Studies*, Vol. 8, No.3, pp. 6-25.
- Dansereau, F., Graen, G.B. and Haga, W. (1975) 'A vertical dyad linkage approach to leadership in formal organizations', *Organizational Behavior and Human Performance*, Vol. 13, pp. 46-78.
- Deluga, R.J. (1994) 'Supervisor Trust Building, Leader Member Exchange and Organizational Citizenship Behaviour', *Journal of Occupational and Organizational Psychology*, Vol. 67, pp. 315-326.
- Dienesch, R.M. and Liden R.C. (1986) 'Leader-Member Exchange Model of Leadership: A Critique and Further Development', *The Academy of Management Review*, Vol. 11, No. 3, pp. 618-634.
- Garg, S. and Dhar, R. (2016) 'The roles of leader-member exchange (LMX), work engagement and job autonomy', *International Journal of Manpower*, Vol. 38, No. 2, pp.242-258.
- Graen, G.B. (1976). Role making processes within complex organizations, *in*: M.D. Dunnette (ed.) *Handbook of Industrial and Organizational Psychology*, Chicago: Rand-McNally, pp. 1201-1245.
- Graen, G.B. and Uhl Bien, M., (1995) 'Relationship-Based Approach to Leadership Development of Leader-Member-Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Domain Perspective', *Leadership Quarterly*. Vol. 6, No.2, pp. 219-247.

- Gerstner C.R. and Day D.V. (1997) 'Meta-Analytic Review of Leader-Member Exchange Theory: Correlates and Construct Issues', *Journal of Applied Psychology*, Vol. 82, No.6, pp. 827-844.
- Greguras, G. J., and Ford, J. M. (2006) 'An examination of the multidimensionality of supervisor and subordinate perceptions of leader member exchange', *Journal of Occupational and Organizational Psychology*, Vol. 79, pp. 433–465.
- Harris, K.J., Wheeler, A.R., and Kacmar, K.M. (2009) 'Leader–member exchange and empowerment: direct and interactive effects on job satisfaction, turnover intentions, and performance', *The Leadership Quarterly*, Vol. 20, pp. 371–382.
- Halbelsleben, J.R.B. (2010) 'A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources and Consequences', in A.B. Bakker and M.P. Leiter (eds.) *Work Engagement: A handbook of essential theory and research*, New York: Psychology Press, pp. 102-117.
- Higgins, M., Dobrow, S.R. and Roloff, K. S. (2010) 'Optimism and the boundaryless career: The role of developmental relationships', *Journal of Organizational Behavior*, Vol. 31, No.5, pp. 749–769.
- Howell, J.P., Dorfman, P.W. and Kerr, S. (1986) 'Moderator Variables in Leadership Research', *The Academy of Management Review*, Vol 11, No. 1, and pp.88-102.
- Ilies, R., Nahrgang, J.D. and Morgeson, F.P. (2007) 'Leader–Member Exchange and Citizenship Behaviors: A Meta-Analysis. *Journal of Applied Psychology*', Vol. 92, No. 1, pp. 269–277.
- Joseph, D.L., Newman, D.A. and Sin, H.P. (2011) 'Leader–Member Exchange (LMX) Measurement: Evidence for Consensus, Construct Breadth, and Discriminant Validity', in Donald D. Bergh, David J. Ketchen (eds.) *Building Methodological Bridges (Research Methodology in Strategy and Management, Volume 6)* Emerald Group Publishing Limited, pp.89 – 135.
- Kluemper, D.H., Little, L.M. and DeGroot T. (2009) 'State or Trait: Effects of State Optimism on Job- Related Outcomes', *Journal of Organizational Behavior*, Vol. 2, No. 2, pp. 209-231.
- Liden, R.C., Sparrowe, R.T., and Wayne, S. J. (1997) 'Leader-member exchange theory: The past and potential for the future', *Research in Personnel and Human Resources Management*, Vol. 15, pp. 47–119.
- Liden R.C. and Maslyn J.M. (1998) 'Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development', *Journal of Management*. Vol. 24, No. 1, pp. 43-72.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A. and Epitropaki, O. (2015) 'Leader-Member Exchange (LMX) and Performance: A Meta-Analytic Review', *Personnel Psychology*, pp.1-55.

Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P and Lee. J.Y. (2003) 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies', *Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.

Prieto, L., Salanova, M., Martinez, I. and Schaufeli, W. (2008) 'Extension of the Job Demands- Resources Model in the Prediction of Burnout and Engagement among Teachers over Time', *Psicotherma*, Vol. 20, No. 3, pp. 354-360.

Raskin J. D. (2002) 'Constructivism in psychology: Personal construct psychology, radical constructivism, and social constructionism', in Raskin J. D. & Bridges S. K. (eds.) *Studies in meaning: Exploring constructivist psychology*, Pace University Press, New York, pp.1-25.

Schyns, B. and Day, D. (2010) 'Critique and review of leader-member exchange theory: Issues of agreement, consensus, and excellence', *European Journal of Work and Organizational Psychology*, Vol. 19, No. 1, pp 1-29.

Seligman, M. E. P. (2006). *Learned optimism: how to change your mind and your life*, New York: Vintage Books.

Shifren, K. and Hooker, K. (1995) 'Stability and change in optimism: A study among spouse caregivers', *Experimental Aging Research*, Vol. 21, No. 1, pp. 59-76.

Sparrowe, R. T. and Liden, R. C. (1997) 'Process and Structure in Leader Member Exchange', *Academy of Management Review*, Vol. 22, pp. 522-552.

Spector, P.E. (1994) 'Using self-report questionnaires in OB research: A comment on the use of controversial method', *Journal of Organizational Behaviour*, Vol. 15, pp. 385-392.

Tims, M., Bakker, A.B. and Xanthopoulou, D. (2011) 'Do transformational leaders enhance their followers' daily work engagement?', *The Leadership Quarterly*, Vol. 22 pp. 121-131.

Wang, H., Law, K.S., Hackett, R.D., Wang D. and Chen, Z.X (2005) 'Leader Member Exchange as a Mediator of the Relationship between Transformational Leadership and Follower's Performance and Organisational Citizenship Behaviour', *The Academy of Management Journal*, Vol. 47, No. 3, pp. 420-432.

Wang, H., Law, K.S. and Chen, Z.X (2008) 'Leader-member exchange, employee performance and work outcomes: An empirical study in the Chinese context', *International Journal of Human Resource Management*, Vol. 19, pp.1809-1824.

Xanthopoulou, D., Bakker, A.B., Demerouti, E. and Schaufeli W.B. (2009a) 'Reciprocal Relationships between Job Resources, Personal Resources and Work Engagement', *Journal of Vocational Behavior*, Vol. 74, pp. 235-244.

Xanthopoulou, D., Bakker, A.B., Demerouti, E. And Schaufeli W.B. (2009b) 'Work Engagement and Financial Returns : A diary study of the role of job and personal resources', *Journal of Occupational and Organizational Psychology*, Vol. 82, pp. 183-200.

Xanthopoulou, D., Bakker, A. B., Demerouti, E. and Schaufeli, W. B. (2007) 'The role of personal resources in the job demands-resources model', *International Journal of Stress Management*, Vol. 14, pp. 121-141.

Youssef-Morgan, C. M. and Luthans, F. (2013) 'Positive leadership: Meaning and application across cultures', *Organizational Dynamics*, Vol. 42, No. 3, pp.198-208.

SECTION 4: REFLECTIVE LOG

1. Introduction

In this final chapter I describe my DBA journey, from commencement in June 2013 to thesis completion in 2017. This has been an unforgettable and truly transformational journey, filled with opportunities and challenges. Over the past five years I have experienced a spectrum of emotions including joy, disappointment, happiness, dissatisfaction, curiosity, satisfaction, impatience, dismay, disappointment, fulfilment, triumph and pride. I have progressed from confusion to clarity and descended to confusion innumerable times, all in the name of learning! It has been an interesting, challenging and fulfilling experience from which I have truly grown. In this section I will discuss the central themes explored in my Reflective Log, the tool that became an ally on the often rocky road of learning.

Theme 1: The Art of Decision Making

“If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties.” (Frances Bacon, *The Advancement of Learning*)

On arrival at the first DBA workshop in June 2013, I had a fixed idea in my mind about my desire to focus on the area of Emotional Intelligence in Leadership having spent the previous three months exploring the literature in the area. My interests lay in leadership and I was fascinated with the way that an employee’s experience of work and the workplace can be significantly influenced or even determined by their leader. I wanted to understand more about this and questioned whether it was the presence or absence of emotional intelligence in leaders that affected the employees’ experience. I was completely certain that this was the topic for me. This changed on day 1 of Workshop 1 by about 11am!

“I am now in a state of confusion- I was so sure about my topic and yet now I am questioning whether this will get me to heart of the matter that I so passionately want to address.” Log Excerpt July 2013.

I grappled with my research topic selection for a number of months, finding it difficult to reach a firm decision. I drifted in and out of reading and re- reading papers across a variety of areas.

“I want to find a topic that evokes my passion and curiosity.” Log Excerpt July 2013

The first paper due for submission rested on our topic selection and I found myself unable to articulate on paper what I wanted to achieve- I couldn’t get it straight in my own mind and

although I had been certain I found myself falling from certainty to confusion, back to certainty and then plunged into confusion once more. I began to dip into articles on employee engagement, moved to exploring trait leadership, from there to post heroic models and settled my focus on the leader/follower relationship and the impact that this has on engagement.

“I feel so strongly a need to select a topic that is of practical relevance, accessible to me and could positively enhance my career progression. It is difficult to reach a final decision and just when I feel that I am nearly there, I read another article that leads me to question whether my decision in the right one!” Log Excerpt August, 2013

It seemed that the more articles I read the less sure I became, which was a frustrating experience and led me to question my capacity to make a firm decision on the topic.

Insight:

In retrospect, and of course with the benefit of the hindsight that comes with completion, I am glad that I was not rigid and allowed myself to move in and out of potential slants/angles on the topic. I think that my work is stronger as a result of taking my time to really explore before nailing my colours to the mast in terms of topic selection.

Theme 2: Becoming an Academic Writer

“The philosophers have only *interpreted* the world, in various ways. The point, however, is to *change* it” Karl Marx, Eleven Theses on Feuerbach.

From the outset of this journey, it was important to me that I could produce papers and ultimately a thesis that were accessible to both an academic and practitioner audience.

“We all need people who will give us feedback. That’s how we improve.”

– **Bill Gates**

Feedback from DBA lecturers and examiner teams played a critical role in enabling me to develop my skills and become a more proficient writer. However I found at times that my own reactions and responses to receiving this feedback became another challenge!

In the earlier phase of the journey my initial reaction to receiving this feedback was quite linear and I interpreted the many suggestions as being major problems and criticisms.

“I feel deflated after all of the time that I spent preparing for this [paper]. It would appear that it’s full of flaws. I’m questioning myself now and wondering whether my work will be good enough for this level. Really I need to rework the entire assignment.” Excerpt April, 2016

These emotions arose from my failure to recognise and acknowledge any positive feedback and my exclusive focus on what was wrong with my work. This unhelpful perspective led to me pulling entire assignments apart in an attempt to address my misperception of their shortcomings. I felt that I needed to make drastic improvements and that the research proposed lacked the necessary rigor, validity and relevance and in fact was of little use to anyone!

Insight:

Feedback is a valuable learning tool and I now recognise that while it offers scope for further development, it also offers affirmation of that which is being done well. I learned to resist my natural reaction to pull the entire assignments and papers apart when in many instances only minor modifications were necessary.

Theme 3: Presenting Work at Colloquia

“It’s not that I am so smart. It is just that I stay with problems longer” Albert Einstein

There were a total of 4 colloquia on the DBA and the first two were a positive experience with my initial feelings of apprehension followed by a sense of accomplishment that spurred me forward.

“I feel that my early morning sacrifices have paid off and I’m motivated and enthusiastic about the next stage of the process.” Excerpt October, 2015

The third colloquium In April was not a positive experience at all and I was left feeling disappointed and frustrated after the panel advised major changes and the need to present the revised work in August. The experience plunged me into despair with the DBA and made me question whether or not I wanted to continue.

“I am really questioning my will and inclination to continue - I did not have the knowledge around the level of analysis that was actually required for this paper and am now left feeling

that much of my time invested since the last colloquium has been wasted.” (Excerpt May, 2016)

I gathered my resolve and with the support of an additional supervisor I knuckled down and addressed the areas identified by the panel. I immersed myself in the world of SPSS and almost 4 months later, met the panel again. I was quite nervous in advance of the repeat colloquium and while I felt confident that the work had developed and progressed significantly from the submission in April I was still concerned.

“I am quite nervous as to how this is going to progress. I feel that I have come so far since April and yet I know that I have so far to go.” (Excerpt July, 2016)

“I have come a long way since then in terms of my knowledge and capacity to use the software and converse in SPSS terms.” (Excerpt August, 2016)

The Panel were satisfied with the revised paper and recommended it for approval. I received valuable feedback that made me question, examine and reflect on my work in a whole new way.

Insight:

Each colloquium presented an ideal opportunity to get constructive feedback on my work from the panel, DBA team and DBA colleagues. Challenging questions meant that I needed to really delve deeply and examine the substance and content of my work. I feel this approach helped to ensure that any potential difficulties with the research were flagged so that they could be effectively resolved.

Theme 4: Managing Setbacks

"Sheer persistence is the difference between success and failure." *Donald Trump*

“I feel that I have had a bit of a test in resilience over the past couple of months and hopefully I am emerging from it with more knowledge and practical skills that I had in April” (Excerpt August, 2016)

“I need to call on my sheer determination to keep going on this journey” (Excerpt July 2016)

Winston Churchill described success as “the ability to go from one failure to another with no loss of enthusiasm.” There are times that my enthusiasm waned and while I didn’t lose it

completely I must admit that it left on occasion. Surprisingly for me the final push became a tough slog:

“I’m so ready to complete this now and yet I find it hard to remain focused to push it over the line” (Excerpt, March 2017)

Insight:

I have most certainly learned the value of grit, resilience, perseverance and determination throughout the course of this DBA journey. I have drawn on all of these strengths at regular intervals and thus have been afforded the opportunity to enhance these attributes.