



# Teacher Locus of Control and Sense of Self Efficacy as Determinants of Teacher Training Placement Satisfaction

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### ABSTRACT

Teacher job satisfaction is associated with educational outcomes such as performance, teacher burnout, and student success. Job satisfaction is influenced by psychological determinants such as locus of control and self efficacy. The present study used a correlational questionnaire design to investigate the relationship between locus of control and self efficacy on teacher training placement satisfaction. The participants were trainee teachers from Manchester Metropolitan University aged 18 - 38 (N = 81). Participants completed the Teacher Job Satisfaction Questionnaire (Lester, 1987), the Teacher Locus of Control Scale (Rose and Medway, 1981) and the Teachers' Sense of Efficacy Scale (Moran and Hoy, 2001). Responses were recorded and analysed using SPSS via Pearson's correlation coefficient and regression analysis. Contrary to previous research, no relationship was found between teacher locus of control and job satisfaction. However, there was a significant relationship between self efficacy and job satisfaction. The findings suggest that trainee teachers with a higher sense of self efficacy were more satisfied with their teacher training placement. The findings contribute to the greater understanding of what determines teacher placement satisfaction and emphasises the need to promote self efficacy in teacher training programmes. The limitations, future research suggestions, and practical implications are discussed.

<b>KEY WORDS:</b>	<b>SELF EFFICACY</b>	<b>JOB SATISFACTION</b>	<b>LOCUS OF CONTROL</b>	<b>TRAINING TEACHERS</b>	<b>JOB PERFORMANCE</b>
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## **Introduction**

Given that teacher performance has been identified as the most important influence on student achievement (Chamundeswari, 2013), schools should pay attention to the factors that may affect it (Aldridge and Fraser, 2016). The present study was inspired by teacher performance but an ascendant of this, teacher job satisfaction, was examined. Teacher job satisfaction is the affective reaction to the role teachers play within education (Skaalvik and Skaalvik, 2010). Past research found that teacher job satisfaction is influenced by locus of control (Basak and Ghosh, 2011) and self efficacy (Skaalvik and Skaalvik, 2010). Locus of control is considered to be an indication of what factors you believe attribute success and failure (Akca and Yaman, 2010). Those with a more internal locus of control orientation have a greater level of job satisfaction (Judge and Bono, 2001, Akkaya and Akyol, 2016). While self efficacy is the extent to which individuals believe they can carry out a particular action (Bandura, 1977). Those with a higher sense of self efficacy have a greater level of job satisfaction (Caprara et al., 2006, Aldridge and Fraser, 2016).

## **Teacher Locus of Control**

The construct of Locus of Control arose from the Social Learning Theory advanced by Rotter in 1954 (Hou et al, 2017). Rotter (1966) differentiated between two groups of people: those with internal and external locus of control. Those with an internal orientation believe that they have control over their behaviour outcomes. (Cook, 2012). While externals perceive that they do not have control over the outcomes of their behaviour and attribute it to external factors such as chance and luck (Cook, 2012). Teacher Locus of Control (TLOC) developed out of recognition that Rotter's internal-external scale was not designed to be applied to a professional context, such as teaching (Cook, 2012). TLOC is the teacher's personal responsibility for their students' academic success and behavioural outcomes (Rose and Medwey, 1981). Cook (2012) found that teachers with internal TLOC engaged in teaching practise that enhanced students learning. They exhibit a positive job attitude, self motivation, and experience less stress while teaching (Cook, 2012). Teachers with an external TLOC experienced high levels of stress, low self esteem (Cheng, 1994) and were less flexible in their use of teaching materials (Cook, 2012).

In terms of job satisfaction, teachers with an external TLOC do not take control of finding recourses that effectively deal with their job requirements and thus feel overwhelmed and dissatisfied (Pavalache-Illie and Ursu, 2016). Akkaya and Akyol (2016) carried out a mixed methods analysis to determine the relationship between TLOC and job satisfaction. The findings showed a significant relationship between TLOC and teacher job satisfaction. They found that teachers with a more internal TLOC were more satisfaction with their job. However, this study used a sample of Turkish teachers so consequently the findings cannot be generalised to teachers in England. While the present study will be conducted on student teachers in England. Furthermore, Pavalache-Illie and Ursu (2016) administered a three-part questionnaire to hundred and thirteen school teachers and used a correlational study design. The results showed that teachers with a more internal TLOC were significantly more satisfied on certain job dimensions, such as communication, work and co-workers, compared to those with a more external TLOC. The methodology used was the most appropriate for determining a

relationship between two variables (Creswell, 2012) and was implemented in the current study. However, only a relationship between the variables was outlined and not how predictive the variables were of one another. This was remedied in the current study by carrying out a regression analysis in order to produce a multiple regression model. This highlights the extent a response variable is predictable for an explanatory variable (Colin and Windmeijer, 1997). Overall, the research above that showed a positive correlation between internal TLOC and job satisfaction is consistent with other research carried out by Judge and Bono (2001), Basak and Ghosh (2011), and Kamdron (2015).

### **Sense of Self Efficacy**

Self efficacy is a theoretical element of the Social Cognitive Theory that highlights the extent to which individuals believe they can carry out an action successfully (Bandurra, 1977). Teacher self efficacy is the teachers' judgment of their ability to influence and promote student learning in the classroom (Hoy and Spero, 2005). It has been found to significantly influence student motivation and overall achievement (Tschannen-Moran and Woolfolk Hoy, 2001, Skaalvik and Skaalvick, 2007). Due to the affect of teachers' self efficacy on teaching and learning, researchers are interested in exploring the origin and outcome of self efficacy (Hoy and Spero, 2005). Hemric et al. (2010) suggested that schools wanting to improve student achievement would do so by focussing on teacher self efficacy.

Teachers with high self efficacy display greater levels of enthusiasm (Hoy and Spero, 2005), set more ambitious student standards (Somech and Zahavy, 2000), and are more willing to meet the needs of their students (Cousins and Walker, 2000). Alternatively, teachers with low self efficacy have a greater level of job-related stress, experience greater teaching difficulties (Betoret, 2006), and ultimately a lower level of job satisfaction (Klassen et al., 2009).

Previous research has reported that teachers with high self efficacy are more satisfied with their job (Caprara et al., 2003, Caprara et al., 2006). Skaalvik and Skaalvik (2010) distributed an adapted Norwegian self efficacy scale and a measurement of job satisfaction to a large sample of two thousand, two hundred and forty-six teachers. The structural equation modelling showed a weak but direct relationship between the variables suggesting that high teacher efficacy was a predictor of high job satisfaction. A limitation of this study is that it tested only five elements of job satisfaction: time pressure, autonomy, parent relations, discipline problems, and supervisory support. However, this study did not measure other school context variables that could have impacted the findings and testing more is encouraged (Skaalvik and Skaalvik, 2010). Therefore, this current research will expand upon this limitation by testing seven components of job satisfaction. A more recent study by Akomolafe and Ogunmakin (2014) showed a significant relationship between self efficacy and teacher job satisfaction. They suggested that teachers with higher self efficacy behave more positively. This is because self efficacy determines how an individual becomes motivated (Akomolafe and Ogunmakin, 2014). The research presented provides evidence that self efficacy positively influences the job satisfaction of teachers.

## **Job Satisfaction and Performance**

Job satisfaction is the evaluative conclusion that people make about their job, either positive or negative (Aldridge and Fraiser, 2016). The overall evaluation is associated with job motivation and productivity (Noe et al., 2009). Past research has suggested that job satisfaction influences enthusiasm (Chen, 2007), teacher attitude (Caprara et al., 2003), teacher burnout (Skaalvik and Skaalvik, 2010), and job performance (Judge et al., 2001). Teachers that show greater satisfaction with their jobs show greater performance while at work (Journal et al., 2016). Despite some research finding a moderate positive link (Brown and Peterson, 1993) or even a weak correlation (Iffaldano and Muchinsky, 1985) between the two variables more recent research has suggested otherwise. Chamundeswari (2013) investigated the relationship between job satisfaction and performance of five-hundred and eighty-eight teachers. The findings showed a significant and positive relationship between job satisfaction and performance in teachers. Job performance was also measured using performance appraisals which is an effective evaluative method (Rankin and Kleiner, 1988).

Teachers with a high level of job satisfaction show greater levels of performance which in turn increases students' educational success (Demirtas, 2010). Thus, teachers play a critical and direct role in the educational moulding of their pupils (Chamundeswari, 2013). Teachers provide standards for their students' attainment which suggests that it is crucial to understand the factors that teachers can control which contribute to their student's success (Caprara et al., 2006). Heck (2009) used a multi-level cross classified model to investigate student achievement in a large sample size of nine thousand, one hundred and ninety-six students. The findings state that the effectiveness of teachers and their performance was positively related to student achievement. These findings are consistent with studies that have found that teacher performance positively correlates with student success (Wright et al., 1997, Seidel and Shavelson, 2007). However, the impact of teacher performance can also depend on the type of student outcome and the context that the students learn in (Seidel and Shavelson, 2007). Due to the relationship found between job satisfaction, ultimately job performance, on student's academic achievements it is a potential area that can be further researched to enhance the current education system (Iqbal et al., 2016).

## **Training Teachers**

The teacher training programme is a unique time in a teacher's professional development (Fives et al., 2007). Research into this area is beneficial because it can help to further develop and improve teacher training programmes (Fives et al., 2007) which is why trainee teachers were selected as a sample for this current research. Teacher training is a crucial time for the formation of self efficacy beliefs in trainee teachers (Hoy and Spero, 2005). This area is of great interest to research because once these beliefs have been established they appear somewhat resilient to change (Tschammen-Moran et al., 1998). Hoy and Spero (2005) carried out research measuring self efficacy before teacher training, during training, and after their first year of teaching. The findings showed that self efficacy increased during teacher training but decreased after a year of actual teaching. This suggests that newly qualified teachers do not feel capable of exercising the strategies learnt in student-teaching.

Alternatively, research into teacher locus of control showed inconsistent findings. Research conducted by Shakut and Iqbal (2013) found no change in TLOC orientation over student teachers first, second and third semesters. However, Cook (2012) identified through mixed methods a positive correlation between teaching experience and internal TLOC. This suggests that with teaching experience the orientation of the perspective trainee teachers should eventually become more internal. The teacher training programme has been found to influence both self efficacy and TLOC of trainee teachers (Fives et al., 2007) therefore it is important to examine the extent to which they may serve to enhance or hinder teacher training placement satisfaction. Overall, training teachers are relatively under researched, particularly within the area of job satisfaction, despite it being the beginning of both their personal and professional development in the education field.

### **Current Study**

Although researchers have examined teacher job satisfaction by studying the determinants teacher locus of control and self efficacy, few have proposed using trainee teachers as their sample. The current study is being conducted as an extension of the research into teacher job satisfaction but will be focussing on trainee teachers. This is because the teacher training programme is a critical period when efficacy beliefs develop (Shakut and Iqbal, 2000). Efficacy beliefs such as locus of control and self efficacy have been found to influence teacher job satisfaction (Caprara et al., 2003, Basak and Ghosh, 2011) which ultimately affects job performance (Caprara et al., 2006) and therefore student success (Heck, 2009). Thus, considering previous research, the present study has two aims. The first aim is to determine if teacher locus of control and sense of self efficacy influence teacher training placement satisfaction. The second aim is to then apply the findings to educational policy. The findings could be used to offer suggestions for improving locus of control and self efficacy in teacher training programmes. The research question being addressed is to what extent does teacher locus of control and self efficacy impact teacher training placement satisfaction.

Hypothesis 1 (H1): A more internal TLOC orientation will be associated with a greater level of teacher training placement satisfaction.

Hypothesis 2 (H2): A higher sense of self efficacy will be associated with a greater level of teacher training placement satisfaction.

## **Method**

### **Design**

A quantitative research design was selected because it provides opportunity to represent abstract ideas in the form of empirical data (Neuamn, 2014). The education sector, particularly job satisfaction, has a limited amount of empirical data (Saiti Yiannis Papodopoulis, 2015). Correlational studies seek to explore the relationship between two or more variables (Thompson, 2014). This was a correlational study measuring the relationship between two explanatory variables and a response variable, using a natural variation survey design. The explanatory variables were teacher locus of control and self efficacy, with age and gender as co-variants. The response variables were seven areas of job satisfaction: responsibility, work, recognition, colleagues, condition, security and supervisor satisfaction.

### **Participants**

An opportunity sample of individuals completing the undergraduate teacher training course at Manchester Metropolitan University was carried out. They were selected because they were undergoing placement in a school as part of their undergraduate degree. After completion of the degree they will have qualified teacher status. An invitation letter (appendix 1) was emailed to those who meet the inclusion criteria of being an undergraduate primary education student at Manchester Metropolitan University. The sample size was eighty-one participants. This is an appropriate sample as according to Harris (1985) the minimum sample size should exceed the number of predictor variables by fifty. This study has four predictor variables: teacher locus of control, self efficacy, age and gender. There were twelve males and sixty-nine females with ages ranging from eighteen to thirty-eight.

### **Materials**

Teachers' Sense of Efficacy Scale was a self report survey designed to understand what difficulties teachers face in the classroom (Moran and Hoy, 2001). It focussed on how much confidence teacher have in their ability to resolve an issue (Hoy and Spero, 2005). The questionnaire contained 12 items rated on a 9 point Likert scale (1-nothing, 3- very little, 5-some influence, 7-quite a bit, 9- a great deal). Participants respond according to how much they believe they can do to resolve a classroom scenario. When answering they were asked to provide answers based on their own teaching experience. A score was calculated in student engagement (4 items), instructional strategies (4 items), and classroom management (4 items). Possible range of scores for the efficacy scale was 12 to 108, higher scores indicated a higher teacher efficacy. Acceptable internal consistency had been reported with Cronbach's Alpha values between .81 and .86 for teacher efficacy across the three areas (Moran and Hoy, 2001). Reasonable construct validity had also been reported (Moran and Hoy, 2001). An example question includes 'How much can you do to control disruptive behaviour in the classroom?'

The Teacher Locus of Control Scale is a widely used measure of internal – external locus of control in individuals within the teaching profession developed by Rose and Medway (1981). It was used to measure teachers' beliefs in their control over the student's success and failures (Cook and Bastick, 2009). It consisted of 25 items containing a scenario and two explanations for the scenario in which the participant selected the most likely. One explanation attributed the positive outcome internally to the teacher while the other assigns responsibility outside the teacher, usually to the student. Such as 'When a student gets a better grade on his report card than he usually gets, is it because a. the student was putting more effort into his schoolwork, b. you found better ways of teaching that student.' Possible range of scores for the teacher locus of control scale ranged from -14 to +11, with a positive score indicating internal locus of control and a negative score indicating external locus of control. Cronbach's alpha for the teacher locus of control ranged from 0.71 (Cook, 2012). Cronbach's alpha 0.7 or above is acceptable (Pallant, 2003).

Teacher Job Satisfaction Questionnaire was an instrument used to measure job satisfaction of teachers (Lester, 1987). It contained 66 items rated on a 5 point Likert scale ranging from 1 – strongly disagree to 5 – strongly agree for favourable items. For unfavourable statements the scoring system was reversed. An example question includes 'Working conditions in my school are good.' A low score indicated a low job satisfaction and a high score represented a high job satisfaction. Participants responded to the questionnaire according to how satisfied they felt within each area of their most recent teacher training placement. A score was calculated based on the satisfaction of nine sections: supervisor (14 items), colleagues (10 items), work conditions (7 item), Pay (7 items), responsibility (8 items), work itself (9 items), promotion (5 items), security (3 items), and recognition (3 items). The revised questionnaire which was used in this research involved the removal of sections pay and promotion as they were not relevant to a teacher training placement. Thus 12 items were removed. Cronbach's alpha scores were considered acceptable .93 (Lester, 1987). The scale coefficients ranged from .71 for security up to .92 for supervisor satisfaction (Lester and Bishop, 1993). Construct validity was obtained via factor analysis (Lester and Bishop, 2000).

## **Procedure**

Data was collected via a questionnaire method which places the results in numerical form in order to identify a relationship after analysis (Marshall, 2005). The questionnaire method allowed for a large number of participants to be assessed (McLeod, 2014) especially as it was placed online (Shaugnessy et al., 2015).

Survey packs (appendix 6) containing the Teacher Locus of Control Scale, the Teacher Sense of Efficacy Scale, and the Teacher Job Satisfaction Questionnaire were placed online via Qualtrics.com. They were selected because they were developed with respect to common teaching tasks (Fives and Buehl, 2010) making them specific to a teaching context (Rose and Medway, 1981). The Questionnaires were scored on a Likert Scale which allows the participant to be able to display their degree of opinion or if they do not have an opinion on the matter at all.



Possible participants were emailed an invitation letter (appendix 1) which contained the link to the questionnaire. The individuals could then choose if they wanted to participate or not. First they read the information sheet (appendix 2) and gave their consent to take part in the study (appendix 3). Taking the individuals ten to fifteen minutes to complete the questionnaire. After completion of the questionnaire the participants read the debrief sheet (appendix 4) and formed their anonymous personal code in order to maintain confidentiality (appendix 5).

The data was entered into SPSS and a bivariate correlation was constructed in order to assess the degree of association between the variables (Ferguson, 2014). The data was also analysed using regression analysis which is used to make predictions (Sen and Srivastava, 1990) and judge the strength of relationships between variables (Montgomery et al, 2012). This was appropriate because this study involved the evaluation of the relationship between three different variables and two co-variants which could be determined via analysis. The results produced a table showing mean and standard deviations for the explanatory and response variables, bivariate correlations, and multiple regression models.

### **Ethics**

Full BPS (British Psychological Society, 2009) and Manchester Metropolitan ethical approval was accepted (Appendix 7). Informed consent was given as participants were provided with an information sheet (appendix 2). They were made aware that they had the right to refuse participation and withdraw throughout. They could withdraw by providing their personalised code (appendix 5) which they formed at the end of the questionnaire to ensure anonymity and confidentiality (Martindale et 2009). Participants were also debriefed (appendix 4) informing them that their data would be stored on a secure computer and only seen by the researcher according to the Data Protection Act (1988).

## Results

### (i) Descriptive Statistics

Table 1 shows the means and standard deviations for job satisfaction, teacher locus of control, and self-efficacy ( $N = 81$ ).

*Table 1: Mean and standard deviation of job satisfaction, teacher locus of control and self efficacy*

	Female (N = 69)		Male (N = 12)	
	M	SD	M	SD
Job Satisfaction	198.33	3.43	191.5	4.67
Teacher Locus of Control	-1.26	0.37	-1.75	0.52
Self Efficacy	86.39	1.66	69.83	6.12

### (ii) Pearson's r Correlations

Correlation coefficients were produced to assess the degree of association between teacher locus of control, self efficacy and job satisfaction. Testing research hypothesis 1 and 2. The output revealed some significant correlations (Table 2).

*Table 2: Correlation Coefficient Score for Predicting Job Satisfaction*

	Job satisfaction	Teacher locus of control	Self efficacy	Age
Job satisfaction	-	.122	.414**	.090

Teacher locus of control	-	.001	.600
Self efficacy	-		.363**

\*\* Correlation significant at the 0.01 level (2-tailed).

These results are represented in the form of scatterplots below showing correlations between the predictor variables and response variable.

**Teacher Locus of Control and Job Satisfaction**

Non-significant correlation was found between teacher locus of control and job satisfaction. Higher teacher locus of control score was associated with higher job satisfaction score. As this correlation was not significant it does not support hypothesis 1. Illustrated in figure 1 below ( $r(79) = .028, p = .801$ ).

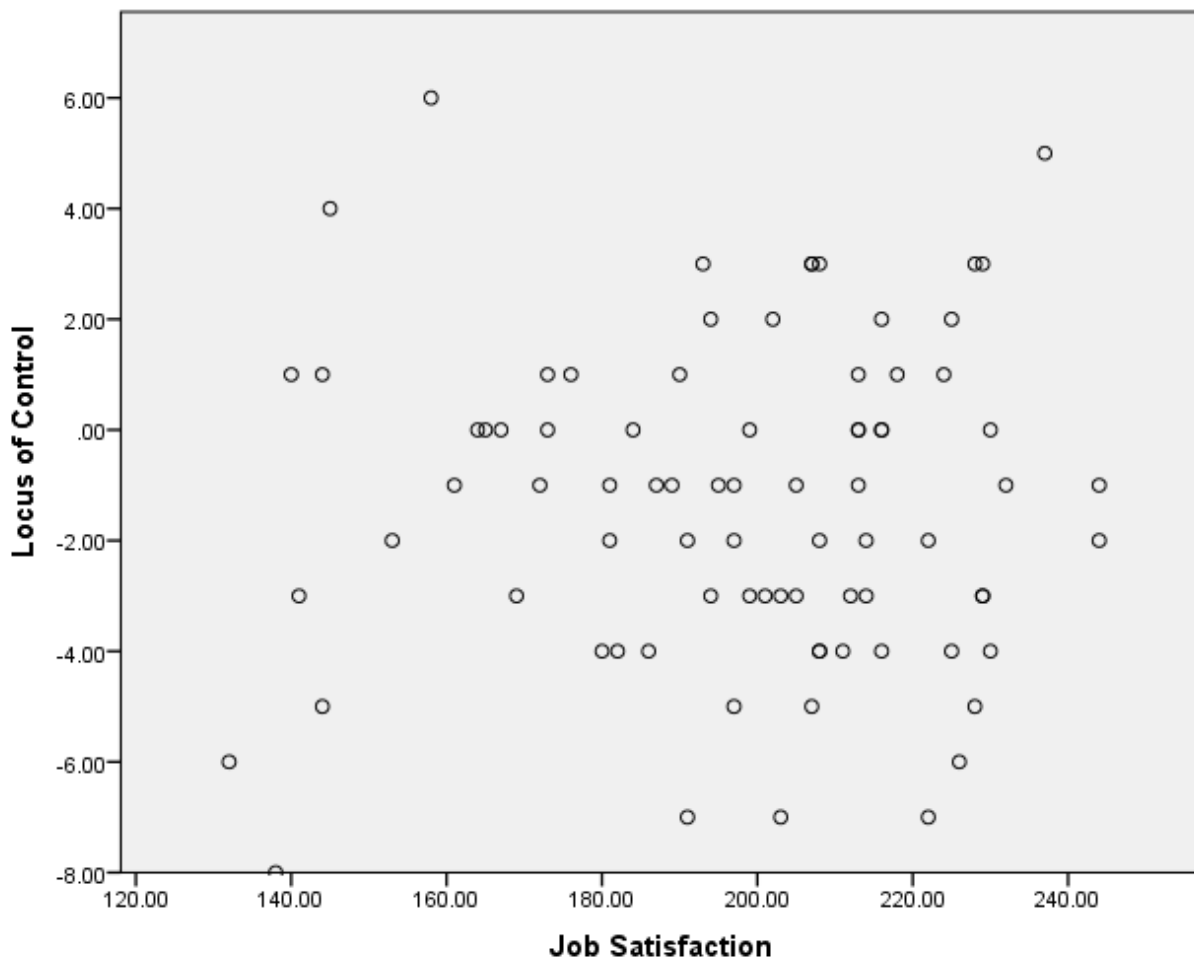


Figure 1: Scatterplot of job satisfaction and teacher locus of control

### **Self Efficacy and Job Satisfaction**

Statistically significant, positive correlation was observed between self efficacy and job satisfaction. Higher levels of self efficacy scores were associated with higher job satisfaction scores. This supports hypothesis 2 and is illustrated in figure 2 ( $r(79) = .414, p < .001$ ).

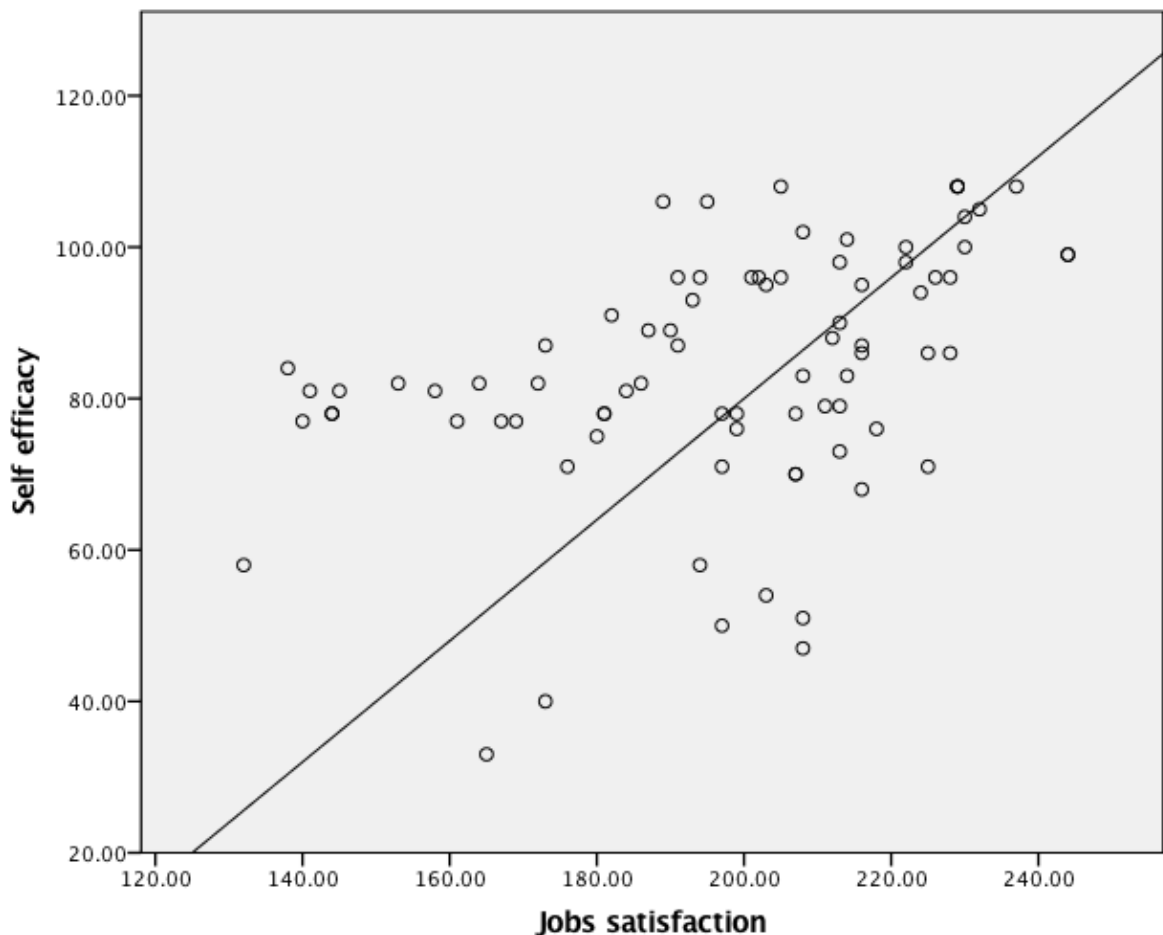


Figure 2: Scatterplot of job satisfaction and sense of self efficacy

### **(iii) Regression Analysis**

Multiple regression analysis was carried out to test the extent to which predictor variables teacher locus of control and self-efficacy account for the variance in job satisfaction, after controlling for age and gender. A step wise model was conducted. Model 1 included age and gender and model 2 included teacher locus of control and self efficacy. Model 2 was significant ( $F(4,76) = 4.266, p = .004$ ) and explained 18.3% (adjusted  $R^2 = 0.14$ ) of the variance in job satisfaction. According to Cohen (1992) this suggests a small effect size.

Table 3 below shows the value for each variable in the regression analysis. This determines which one of the variables was the strongest predictor of job satisfaction. Self efficacy was a significant predictor variable for job satisfaction ( $t = 3.982, p < .001$ ). As self efficacy increased by 0.78, job satisfaction increased by 1. However, teacher locus of control ( $t = -.410, p = .683$ ) was not significant.

*Table 3: Summary of Multiple Regression Analysis for Predicting Job Satisfaction*

Variable	B	SE B (std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher Locus of Control	0.40	0.97	.04	.683
Self Efficacy	0.78	0.19	.45	.000
Age	-5.74	0.73	-.08	.432
Gender	-6.02	8.47	-.08	.480

Note:  $R^2 = .14$

Job satisfaction can be further broken into 7 components: responsibility, work, recognition, colleagues, condition, security and supervisor.

### **Responsibility**

The model testing the extent to which locus of control and self efficacy account for responsibility was not significant ( $F (2,78) = 1.557, p = .217$ ). Teacher locus of Control and self efficacy explained 43.2% (adjusted  $R^2 = .418$ ) of the variance in responsibility.

Table 4 shows the multiple regression analysis. Teacher locus of control ( $t = -.182, p = .856$ ) and self efficacy ( $t = 1.755, p = .083$ ) were not a significant predictors of responsibility.

*Table 4: Summary of Multiple Regression Analysis for Predicting Responsibility Satisfaction*

Variable	B	SE B (std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	-.077	.423	.020	.856
Self efficacy	.135	.077	.195	.083

## Work

The model testing the extent to which locus of control and self efficacy account for work was significant ( $F(2,78) = 17.211, p < .001$ ). Teacher locus of Control and self efficacy explained 30.6% (adjusted  $R^2 = .288$ ) of the variance in work.

Table 5 shows the multiple regression analysis. Teacher locus of control was not a significant predictor of work ( $t = 1.219, p = .226$ ) but self efficacy was a significant predictor ( $t = 5.738, p < .001$ ). As self efficacy increased by .190, work satisfaction increased by 1.

*Table 5: Summary of Multiple Regression Analysis for Predicting Work Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	.223	.183	.115	.226
Self efficacy	.190	.033	.541	.000

## Recognition

The model testing the extent to which locus of control and self efficacy account for recognition was significant ( $F(2,78) = 6.261, p = .003$ ). Teacher locus of Control and self efficacy explained 13.8% (adjusted  $R^2 = .116$ ) of the variance in recognition.

Table 6 shows the multiple regression analysis. Teacher locus of control was not a significant predictor of recognition ( $t = -.374, p = .709$ ) but self efficacy was a significant predictor ( $t = -3.518, p = .001$ ). As self efficacy decreased by .70, recognition satisfaction increased by 1.

*Table 6: Summary of Multiple Regression Analysis for Predicting Recognition Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	-.041	.110	-.039	.709
Self efficacy	-.070	.020	-.370	.001

## Colleagues

The model testing the extent to which locus of control and self efficacy account for colleague was significant ( $F(2,78) = 3.410, p = .038$ ). Teacher locus of Control and self efficacy explained 8% (adjusted  $R^2 = .057$ ) of the variance in colleagues.

Table 7 shows the multiple regression analysis. Teacher locus of control was not a significant predictor of colleagues ( $t = .272, p = .786$ ) but self efficacy was a significant predictor ( $t = 2.597, p = .011$ ). As self efficacy increased by .129, colleague satisfaction increased by 1.

*Table 7: Summary of Multiple Regression Analysis for Predicting Colleague Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	.075	.275	.030	.786
Self efficacy	.129	.050	.282	.011

## Conditions

The model testing the extent to which locus of control and self efficacy account for conditions was not significant ( $F(2,78) = 2.668, p = .076$ ). Teacher locus of Control and self efficacy explained 6.4% (adjusted  $R^2 = .040$ ) of the variance in conditions.

Table 8 shows the multiple regression analysis. Teacher locus of control was not a significant predictor of conditions ( $t = -.130, p = .897$ ) but self efficacy was a significant predictor ( $t = 2.306, p = .024$ ). As self efficacy increased by .114, condition satisfaction increased by 1.

*Table 8: Summary of Multiple Regression Analysis for Predicting Conditions Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	-.035	.272	-.014	.897
Self efficacy	.114	.049	.253	.024

## Security

The model testing the extent to which locus of control and self efficacy account for security was not significant ( $F(2,78) = .546, p = .581$ ). Teacher locus of Control and self efficacy explained 1.4% (adjusted  $R^2 = -.011$ ) of the variance in security.

Table 9 shows the multiple regression analysis. Teacher locus of control ( $t = .935, p = .353$ ) or self efficacy ( $t = -.468, p = .641$ ) were not significant predictors of security.

*Table 9: Summary of Multiple Regression Analysis for Predicting Security Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	.107	.115	.105	.353
Self efficacy	-.010	.021	-.053	.641

## Supervisor

The model testing the extent to which locus of control and self efficacy account for supervisor was not significant ( $F(2,78) = 1,557, p = .217$ ). Teacher locus of Control and self efficacy explained 3.8% (adjusted  $R^2 = .014$ ) of the variance in supervisor

Table 10 shows the multiple regression analysis. Teacher locus of control ( $t = -.182, p = .856$ ) or self efficacy ( $t = .083, p = .083$ ) were not significant predictors of supervisor.

*Table 10: Summary of Multiple Regression Analysis for Predicting Security Satisfaction*

Variable	B	SE B(std. error)	$\beta$ (beta score)	Sig. ( $p$ )
Teacher locus of control	-.077	.423	-.020	.856
Self efficacy	.135	.077	.195	.083



## **Discussion**

This research intended to examine whether teacher locus of control and self efficacy impact teacher training placement satisfaction. As previously discussed there was a no relationship found between the variables teacher locus of control and job satisfaction, therefore hypothesis 1 was not supported. Research findings revealed a significant relationship between self efficacy and job satisfaction which is consistent with hypothesis 2.

### **Teacher Locus of Control and Job Satisfaction**

An interesting finding from this study highlighted no correlation between teacher locus of control and job satisfaction in perspective teachers. The findings contradict recent research carried out by Akkaya and Akyol (2016) and Pavalache-Illie and Ursu (2016) who found a significant relationship between teacher locus of control and job satisfaction. Whereby those with a more internal locus of control orientation were more satisfied with their teaching jobs than those with an external orientation. Job satisfaction was also broken down into seven domains but no relationship between these and teacher locus of control was found. This contradicts Basak and Ghosh (2011) who carried out a multiple regression equation and found that teacher locus of control was a significant predictor of all tested domains of job satisfaction.

As the findings into teacher locus of control and job satisfaction contradict previous research it is of interest to understand why this may be. The Teacher Locus of Control Scale by Rose and Medway (1981) was the third and final questionnaire in the survey pack. According to Cape and Phillips (2015) participants spend more time on questions asked earlier in the survey pack. They also reported that respondents behave differently as the survey continues in long survey situations. Future research could further test this hypothesis by randomly changing the order of which questionnaire is presented first for each participant. It could also be argued that training teachers have not yet had sufficient experience in their teaching role to establish a consistent set of beliefs regarding the influence that they can exert (Maes and Anderson, 1985).

### **Self Efficacy and Job Satisfaction**

Sense of self efficacy had the strongest correlation with job satisfaction. This is consistent with previous research carried out by Caprara et al. (2006), whereby a high sense of self efficacy resulted in a high level of job satisfaction. This correlation also supports Akomolafe and Ogunmakin (2014) who found that individuals with high self efficacy tend to behave more positively resulting in a higher teaching satisfaction. Future studies can use this relationship to predict job satisfaction in trainee teachers via their sense of self efficacy, however the causal relationship is not made clear. The research findings also support Skaalvik and Skaalvik (2010) who stated that high teacher self efficacy was a predictor of high job satisfaction.

A regression analysis of self efficacy and the seven components of job satisfaction was carried out. The findings showed that self efficacy was a significant predictor of work, recognition, colleagues, conditions, and supervisor satisfaction, but not responsibility or security satisfaction. A suggestion for why this finding occurred could be because the teacher job satisfaction questionnaire (Lester, 1987) was originally designed to test teachers and not training-teachers. The responsibility component tested the desire to be accountable for your own work and take part in decision making policies (Lester, 1987). While the security component was concerned with job stability, retirement, and seniority (Lester, 1987). Both of these areas may not be applicable to all areas of student teacher placements. Furthermore, all of the significant correlations found were positive except recognition. Whereby a decrease in self efficacy increased recognition satisfaction. This could be because those with lower confidence in their own ability had a greater appreciation for the recognition expressed by their supervisor.

Gender differences were also observed in relation to self efficacy, showing that female teachers expressed a higher sense of self efficacy than male teachers. This is consistent with previous research carried out by Arslan (2013) and Ongogo and Hungi (2014). The mean score for females was 7.2 and for males 5.8. The mean score for females is similar to that found by Moran and Hoy (2001) of 7.1. Moran and Hoy (2001) being the researchers who formed the Teachers' Sense of Self Efficacy Scale.

### **Evaluation and Future Direction**

Numerous limitations were evident in this study but they provide useful suggestions that can be applied to future research. A limitation of this research is the gender bias as the sample included sixty-nine females compared to just twelve males. Therefore, the ratio of males to females was not equal. As the survey packs were placed online via Qaltrics.com gender preference could only be seen after completion of the questionnaires. However, due to the time constraints of data collection gender equality was not a priority for this research. Teaching is also a female dominant occupation (Gonzalez-Morales et al., 2010) so having a sample with more females than males was to be expected. In terms of future improvements, a larger sample and distributing the survey packs in person would have facilitated a more equal male to female gender sample.

The sample also contained trainee-teachers from Manchester Metropolitan University only. Therefore, the findings cannot be generalised to training teacher placement satisfaction outside of this institution. This is because the schools in which the participants were placed in for their teacher training placement may have different job stresses, teaching methods, and values to schools outside of Manchester. In terms of future direction, it would be beneficial for the sample to contain a more diverse range of participants from multiple institutions in order to improve the generalisability of the findings.

In terms of methodology, caution must be taken when interpreting data from a self report method because social desirability bias may occur. Social desirability is viewed as the tendency for individuals to present themselves in a favorable light regardless of their true feelings about a certain topic or situation (Podsakoff et al., 2003). This is problematic as it may mask the true nature of the relationship between the variables (Ganster et al., 1983). Furthermore, quantitative research does not explain the reasons behind the participants' answers. Future research

can benefit from adding a qualitative element, such as interviews or a focus group, in order to gain an insight into why the participants feel the way they do about their teacher training placement. Despite this, as previously discussed, a quantitative questionnaire method was selected because this research aimed to investigate whether there was a relationship between the predictor variables and an explanatory variable. A questionnaire method enables the collection of numerical data (Marshall, 2005) in order to test a relationship between variables (Thompson, 2014). Therefore, the method selected most successfully complies with the research aims of the study.

In terms of future research as a significant relationship was found between self efficacy and placement satisfaction it would be of great interest to look at teacher placement performance. Demitris (2010) suggested that as job satisfaction increases so does teacher performance. Therefore, by recording a numerical mark or carrying out interviews with the placement supervisor it would have formed a performance score. This would investigate the relationship between their placement satisfaction and performance success in order to greater our understanding of the influence of job satisfaction of teachers.

The addition of a question to find out which year of study the participant was currently in could have been beneficial. However, this research intended to determine whether there was a relationship between predictor variables locus of control and self efficacy on job satisfaction. Hence, an additional variable taking into account the year of study was not established. However, this variable would have highlighted if there was a relationship between locus of control, self efficacy, or job satisfaction on year of study. With regards to studying this topic further, it would also be useful if the research was replicated to test the participants after their first, second and third year of study. This would allow the researcher to identify if the participants' beliefs remained stable or whether there were significant changes across different years of study. According to Ashton (1984) the purpose of teacher training is to build self confidence and self efficacy beliefs for an effective classroom environment. Therefore, it would be expected that the findings would show an increase in sense of self efficacy and therefore placement satisfaction as the students moved through teacher education.

### **Implications of the Findings**

As no relationship between teacher locus of control and job satisfaction was found the implications of this research will focus on the role of self efficacy. This study demonstrated the importance of self efficacy on trainee teachers' placement satisfaction. In particular, the components work, recognition, colleagues, conditions and supervisor satisfaction. The results can provide evidence to suggest that the job satisfaction components above are effected by the extent to which the trainee teachers believe they can carry out an action successfully (Bandurra, 1977).

The implications of the findings provide useful information for leaders of teacher training who may have a significant influence on their trainees' self efficacy beliefs. Gaining a greater understating of the impact of these beliefs we can suggest that they should be promoted in teacher training. The present study suggests that developing a teacher training programme that promotes self efficacy, trainees can foster a more positive placement experience. Shakut and

Iqbal (2013) stated that student teacher programmes should encourage their students to observe and be involved in a variety of teaching experiences.

Self efficacy beliefs in trainee teachers develop throughout the teacher training programme (Hoy and Spero, 2005) and once formed are resistant to change (Tschammen-Moran et al., 1988). This suggests that the self efficacy beliefs developed throughout the teacher training programme remain similar when entering the teaching profession. Therefore, the individuals' self efficacy beliefs will not only effect their student placement but also their job satisfaction. Due to previous research highlighting the effect of job satisfaction on job performance (Iqbal et al., 2016), student engagement (Huang et al., 2016), and teacher burnout (Wei-Cheng et al., 2008) it further reinforces the importance of the teacher training programme on the personal development of each trainee.

As a significant relationship was identified between self efficacy and teacher training placement satisfaction the findings can be used to emphasis the importance of self efficacy in current teachers already trained. Schools might encourage support groups or reinforce the concept of self efficacy in training days. Increasing their ability to believe they can influence student success (Hoy and Spero, 2005). School leaders are also in a position whereby they can identify teachers with low self efficacy and help them to implement strategies to achieve their teaching goals (Weig-Cheng et al., 2008). School leaders and teacher training leaders should have an understanding of what influences job satisfaction and the impact that satisfaction can have upon the success of the current education system (Wei-Cheng et al., 2008).

## **Conclusion**

Overall, the present study sought to clarify the impact of teacher locus of control and self efficacy on placement satisfaction. The finding showed no relationship between the predictor variable teacher locus of control and job satisfaction but provided evidence for a significant relationship between self efficacy and job satisfaction. The present study has predominantly enhanced our knowledge surrounding the contributory factors that may determine job satisfaction in teachers. In terms of future research, the direction suggested includes exploring self efficacy beliefs after each year of study and investigate the relationship between them scores and their placement satisfaction. As the teaching profession continues to impact student success it is vital to understand the factors that can further enhance the development of the teacher. Research into this area may provide potential applications that would benefit current and future teachers and therefore their students, thus making training teacher placement satisfaction an important area for future research.

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