The components of trustworthiness for higher education: a transnational perspective

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The Components of Trustworthiness for Higher Education: A Transnational Perspective

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Abstract

Despite the strong theoretical foundation for the role of trustworthiness in building buyer-seller relationships, a lack of empirical evidence exists to validate the importance of trustworthiness in the Higher Education (HE) sector. Our research examines the drivers of trustworthiness across two distinct cultures – the United Kingdom and India, providing a significant contribution to the body of knowledge by understanding the role and nature of trustworthiness within HE.

The results of the proposed model offer important insights into the process of understanding trustworthiness within the HE sector. Firstly we establish the importance for HE institutes of building trustworthiness. Next, we empirically validate trustworthiness using data from two countries, and finally we confirm the proposed model using two sampling points, and provide directions for practitioners and theorists alike.

**Keywords**: Trustworthiness, trust, higher education, structural equation modelling, education development
The Components of Trustworthiness for Higher Education Institutions: A Transnational Perspective

Introduction

In recent years, the UK Higher Education (hereafter HE) sector has undergone dramatic changes, largely as a corollary of the decrease in funding to the sector, which has forced Higher Education Institutions (hereafter HEIs) to revise their course offerings and fee structures (Foskett, Roberts and Maringe 2006). Although there is a drive to further develop HEIs’ tangential offerings, mainly in the form of applied research and knowledge exchange, knowledge dissemination to students is still the primary focus of their business and the main source of their income (Geuna and Muscio 2009). The changes in the sector have positioned students as customers with preformed expectations, where historically they were viewed as learners, and HEIs need now to compete with each other to attract students (Palmer and Koenig-Lewis 2011; Gunn and Hill 2008). Thus, in order to attract students we argue that a HEI that has a trustworthy image is more likely to achieve greater market capitalisation, because students will trust them to meet their expectations.

As a consequence of the changes, building strong ties with students has become one of the central functions of HEIs (Adcroft, Teckman and Willis 2010), and is seen as an outcome that leads to several advantages, most notably enhancing student satisfaction (Jyh-Shen and Droge, 2006) and ultimately increasing student retention (see Ghosh, Whipple and Bryan 2001). A good relationship with students can mean that they become a HEI’s most powerful advocates as to why future students should study at a particular HEI. These advocates provide an effective word-of-mouth description of their respective HEIs, for example, through social media (Trusov, Bucklin and Pauwels 2009), which is deemed to embed a greater level of trust than traditional methods (Gillin, 2007). Thus, Carvalho and de Oliveira Mota (2010) argue that, given the nature of the relationship between the student and the HEI, an examination of trust in the sector is warranted.

In helping understand trust in the HE sector, Bowden (2011) positions loyalty as an outcome of trust when engaging students, however, Hardin (2002) argues that trust is an
abstract concept that is informed by trustworthy behaviours, thus before reaching the point of loyalty the nature of trustworthiness as a priori of trust must be understood. While there is much to admire in Bowden’s (2011) contribution it does not take into consideration what determines trust upstream, which we argue to be trustworthiness and we propose that in order to build trust a HEI has to show it is worthy of being trusted (see also Gibbs 2001).

A review of leading HE orientated journals reveals a great deal of commendable research. However, it also reveals a dearth of research into trust and trustworthiness in the HE sector. Our research takes the position that HEIs are more able to influence perceptions of trustworthiness (compared to directly building trust), and that these perceptions can be enhanced through specific strategic decisions. Thus, the likelihood of building students’ trust is enhanced when HEIs exhibit trustworthy behaviours. This view reflects Vargo and Lusch’s (2004) service dominant logic, where customers (in our case students) are viewed as co-producers in a highly interactional setting, with the HEI and students dependent upon each other, and in our estimation trustworthiness is a key element to the exchange. The conclusion of our work provides compelling directions for the practices and policies of HEIs, in order for them to demonstrate they are worthy of being trusted (Jarvis 2000).

To make our contribution, and to complement the existing body of knowledge, the remainder of this paper is organised as follows. We start by discussing the differences between trust and trustworthiness, and then we present our theoretical model showing the components of trustworthiness for a HEI. Following this, we present our methods for developing the research instrument, how the measurement model was developed and how the survey data was captured. Lastly, we present our findings and their implications for HEIs.

Literature Review

Despite the fact that the concepts of trust and trustworthiness are discrete, the terms are often used interchangeably in the existing literature (Greenwood and Buren 2010). Trust is defined as the “…extent to which [students] have confidence and faith in … a [HEI]” (Harris, Ogbonna and Goode 2008:145). Morgan and Hunt (1994) view trust as a key element in the development of marketing relationships, while other researchers find that trust increases
student loyalty and satisfaction (Buttle and Burton 2002; Jyh-Shen and Droge 2006). Fundamentally, trust is an abstract concept and, as Hardin (2006) suggests, it describes the idea that the trustor (in this case, the student) expects the trustee (in this case, the HEI) to fulfil some type of future obligation with an outcome. Therefore, whether or not to trust is a decision that is reached by the student based on prior knowledge of the HEI.

For trust to emerge, the trustor has to make a judgment that the trustee can fulfil its obligation(s), and the basis for this judgment is the trustee’s trustworthiness. Intuitively it follows that the adversary of trust is a lack of evidence to show a trustee is trustworthy. Consequently, trustworthiness is centred on the premise of a subjectively determined set of value judgments made of the trustee by the trustor (Bews and Rossouw 2002; Caldwell and Clapham 2003; Ennew, Kharouf and Sekhon 2011). In other words, the basic distinction between trust and trustworthiness is that trust is the student’s psychological state, while trustworthiness is a characteristic of the HEI (Corritore, Kracher and Wiedenbeck 2003). Significantly, without trustworthiness there would be no place for trust (Colquitt and Rodell 2011; Glaeser et al. 1999).

Although there are exceptions to the norm, whereby trust decisions may be made prior to evaluating trustworthiness (Colquitt, Scott and Le Pine 2007), usually trustworthiness is acquired after a series of interactions. These interactions provide a basis of accumulated experiences (Glaeser, et al. 1999), knowledge or cues (Dietz and Hartog 2006) about the HEI on the part of the student. The conclusion is that as a result of the interactions, trust becomes the property of the student (Kim, Dirks and Cooper 2009) influenced by the behaviour of the HEI.

Mayer, Davis and Schoorman (1995) and Colquitt, Scott and Le Pine (2007) postulate that the factors that lead to the formation of trust in one party by another party in a relationship depends on the attributes of the trustee. Owing to the risk of uncertainty involved in such interactions, establishing that the HEI is worthy of being trusted is of utmost importance. Colquitt, Scott and Le Pine (2007) in their meta-analysis review, found that the trustworthiness of a trustee (including the attributes of ability, benevolence and integrity) has
a positive and significant impact on the trust which the trustor has in the trustee. Further, Mayer, Davis and Schoorman (1995), McKnight et al. (2002) and Bart et al. (2005) found that trust has a positive impact on the trustor’s behavioural intentions. Trust will create a belief that the other party will only perform actions which result in positive outcomes for both parties (Anderson and Narus 1990).

According to the ‘Social exchange theory’ (Blau 1964), trust leads the parties involved in a relationship to have positive motivations to initiate and maintain the relationship. Therefore, trust has been positioned as a central phenomenon in relationship formation and maintenance in a variety of relational exchanges. In psychology, organizational behaviour and marketing literature trust is shown to play an important role in affecting the future behavioural intentions of the trustor. Taking the various discussions together, it can be concluded that students will select a HEI provided the HEI is able to generate a feeling of trust in them by projecting a trustworthy image. Ways in which HEIs could signal their trustworthiness to potential students in a competitive market include a commitment to CSR strategies, signifying shared societal values, and continuous improvement in teaching, which demonstrates a high level of competence (Larrán et al. 2012).

**Proposed Model**

Owing to the fundamental difference between trust and trustworthiness, a demonstration of the latter may be managed by a HEI in a way in which trust cannot Hardin 2002). We posit 6 hypothesised components of trustworthiness (consistency, competence, integrity, benevolence, shared values and communication) as shown in our proposed model in Figure 1. Our model deals with the hypothesised components that capture the multi-faceted nature of trustworthiness for HEIs, effectively a HEI’s ‘grammar of trustworthiness’. As well as being used for building trustworthiness, these components and their associated activities and characteristics can also be used to repair trust when a breach of it has happened between the student and the HEI.

---Take in Figure 1 about here--
In the next section, we develop our research hypotheses and provide rationale for the model’s development.

**Consistency**

Trust is a bet on the future (Sztompka 1999) and we posit that consistent behaviour helps trustworthiness to emerge, because it relates to future expectations. Butler and Cantrell (1984) propose that consistency is calibrated with the approximations of honesty and promise. McKnight (2005) refers to consistency as predictability and reliability, in which predictability relates to the extent to which an HEI can be relied upon to act in a predictable manner. Thus, by acting in a predictable way a HEI can affect the perceptions of consistency (see also McKnight et al. 2002).

In the case of a HEI we affirm that consistency relates to factors such as ‘service standards’, for example, academic staff in a HEI responding to telephone calls or email requests in a prompt manner, even if they are last minute issues. Consistency also relates to staff providing timely feedback on coursework, although students may be taught by staff from different parts of the HEI, where different practices might be in place. As well as the preceding points, we assert that consistency is aligned with the HEI acting in a consistent manner, for example meeting its deadlines, and so facilitates building trustworthiness in students’ minds; hence we advance the following hypothesis:

\[ H_1: \text{Consistency has a positive effect on trustworthiness} \]

**Competence**

The second component we identify as being important is competence, which relates to the HEI demonstrating that it has the skills to meet the students’ expectations (Mayer, Davis and Schoorman 1995; Vidovich and Currie 2011; Roy and Shekhar 2010). Competence in essence captures the knowledge and skills needed to do a specific job along with the interpersonal skills and general wisdom needed to succeed in an HEI (Colquitt 2007:910). In
the case of HE services, students have to show a willingness to accept that their institution is capable of delivering what has been promised, therefore, the idea of competence is analogous with expertise. Competence as a trustworthiness-building component is congruent with the notion that a HEI’s staff has the expertise to deliver the appropriate service (Ennew, Kharouf and Sekhon 2011).

Finally, competence in HE is not only associated with direct classroom teaching, but also with the ability of the institution to deliver on its practices and policies, for example, designing courses which meet students’ needs (Burrows 1999), providing adequate support services and acting in a competent manner. We estimate that competence may also relate to the extent to which HEIs are compliant with regulatory frameworks. Burrows (2005) proposes five key competencies in the education sector (managing self, belonging, thinking, relating to others and making meanings), and argues that HEIs should apply these competencies in the design of their curricula. Based on the above we advance the following hypothesis:

\( H_2: \) Competence has a positive effect on trustworthiness

**Integrity**

Integrity presents a rational reason why trust should develop and is an important component for signalling that the HEI is worthy of being trusted, as integrity entails that a HEI will fulfil agreements that have been promised honestly (Tigelaar et al. 2005; Schoorman Mayer and Davis 2007; Colquitt, Scott and Le Pine 2007). Fundamentally, integrity is about the confidence the trustor has that the trustee is honest. The underlying idea is that integrity is about the HEI’s reliability (Butler 1991), and this implicitly means that the HEI treats its students fairly and honestly, a view echoed later by Lind (2001), who notes that integrity is about fairness and it is a key factor in reducing uncertainty when entering a new relationship. For a HEI to signal integrity it must demonstrate honesty in all of its dealings with students, hence we hypothesise the following:

\( H_3: \) Integrity has a positive effect on trustworthiness

**Benevolence**
Benevolence, as a component of trustworthiness, relates more to the affective aspect of the student's view of the HEI and can help build an emotional attachment on the part of the student (Mayer, Davis and Schoorman 1995; Leslie 2004). Benevolence is different from integrity in that a benevolent HEI demonstrates a willingness to benefit the student for reasons other than to gain the students' custom. A benevolent HEI helps students even though the HEI is not required to be helpful and there is no reward for the HEI (Mayer et al., 1995). Benevolence has three main dimensions: consideration, sensitivity and acting in a manner that protects the interests of others, and which refrains from exploiting others (Sirdeshmukh, Singh and Sabol 2002). A HEI that is able to display benevolent behaviour is demonstrating that it will not exploit the student's vulnerability and that it is focussed on the welfare of the other party (Sheppard and Sharman 1998).

For a HEI to show that it is benevolent, it must deliver on its promises as well as being honest with students. Furthermore, benevolent behaviour also means that the HEI will not act in an opportunistiastic manner, this is particularly important given the asymmetrical power balance in the relationship between a HEI and its students. Based on the above we propose the following hypothesis:

**H4: Benevolence has a positive effect on trustworthiness**

**Shared Values**

The creation of shared values enhances trust (Morgan and Hunt 1994). A HEI that appears to work towards creating mutual values with students will be perceived as being trustworthy. For example, understanding the different cultural backgrounds of a particular ethnic group or a particular nationality will allow the HEI to create specific mutual values with these groups. Morgan and Hunt (1994) view shared values as the extent to which a HEI and students have beliefs in common about what behaviours, goals, and policies are central to both parties.

A growing number of HEIs are embarking on efforts to create shared values by redefining the interface between societal needs and HEI performance (Heilmayr 2005). In this
regard, Porter and Kramer (2011) contend that the transformative power of shared values is still in its early development stages. Nonetheless, HEIs need to develop newer skills and knowledge, such as deeper appreciation of societal and stakeholder needs (both external and internal stakeholders) in order to compete. The purpose of a HEI has to be redefined in terms of creating shared values, and so reshapes its relationship with society. Perhaps the most important way of legitimising the trustworthiness of a HEI is by creating shared values (Porter and Kramer 2011).

Bui and Baruch (2012) conceptualise shared vision as an antecedent of several HEI functions, such as teaching performance, research performance and work-life balance. We agree with Bui and Baruch (2012) on the point that a shared vision inside a HEI must not only be created from the top down, but it should come also from the bottom up and horizontally. We conceptualise shared values from the perspective that a HEI’s values have to be formed in collaboration with its customer (in this case students) and adopted and demonstrated by the entire organisation.

Shared values entail the HEI understanding students’ core values and demonstrating general alignment between their values and those of their students, in order to create a long-term relationship in which alumni can still relate to their alma mater and its intrinsic values (Doney and Cannon 1997). The lack of shared values can lead to a deterioration of trust (Sitkin and Roth 1993). Thus, the focus on creating aligned values during the process of developing relationships with the students is vital for HEIs (Dwyer, Schurr and Oh 1987; Ennew, Kharouf and Sekhon 2011). Although not exhaustive, activities that help foster shared values can include organising alumni activities that lead on from recruitment, or preventing certain companies (e.g. tobacco companies) from promoting themselves to students on campus, or building relationships with companies that support a common cause (for instance, sustainable energy organisations). Hence we put forward:

**H5: Shared values have a positive effect on trustworthiness**

*Communication*
An open and honest dialogue is an indicator of a healthy relationship (Kumar 1996), because it enhances relationship development between a HEI and its students. Communication is an important component of trustworthiness and is fundamental to the development of the relationship between a HEI and its students. Mukherjee and Nath (2007) argue that the underlying principle is that communication provides clarity to specific roles that the HEI and students are expected to adopt throughout the exchange process. Córcoles, Penalver and Ponce (2011) go further and note that HEIs should have more open communication with their stakeholders and should provide information in order to satisfy their stakeholders’ new information demands, they categorised the information into three tangible element (human capital, structural capital and relational capital). These categories cover a range of information a HEI should provide to their stakeholder. For example, publish information on: the latest innovations and improvements related to the HEI, information on teaching quality and information about graduate employability.

We argue that communication should be a two way, open dialogue with students, and that communication should not begin when a student enters a formalised relationship with the HEI when they enrol, but rather it should start during the earlier stages of the development of the relationship such as during the recruitment cycle, and should then be managed throughout the duration of the relationship. To ensure high quality performance HEIs must encourage greater communication with external and internal stakeholders. The aim of a socially responsible HEI is to communicate with, and listen to, its different stakeholders (Heilmayr 2005).

To become socially responsible HEIs needs to improve the communication between different departments as well as with external stakeholders, including the local community, employers and research partners. Since external stakeholders are not capable of determining the intent of a HEI, official reporting provides a powerful tool to the HEI for the development and communication of sustainable policies. Practical implementation and use of information gathered from external and internal stakeholder consultation has a positive impact on the performance of the HEI (Heilmayr 2005).
In the case of HEIs, the communication comes from staff and is received by students, meaning that communication needs to be consistent, clear and frequent, reducing confusion and sharing relevant information, if the HEI is to portray itself as trustworthy. Therefore, we propose the following hypothesis:

\[ H_6: \text{Communication has a positive effect on trustworthiness} \]

In summary, the preceding discussion draws attention to the components of trustworthiness for HEIs and activities HEIs need to engage in to build it. Our position, which is both implicitly and explicitly expressed, is that the components of trustworthiness are not simply restricted to the role of front-line academics who may be seen as the main representatives of a HEI, but are also about the policies and practices that are embedded inside a HEI. We argue that in order to ensure a high quality of student experience, the way that these policies are communicated to students is critical.

**Methodology**

To draw our comparisons and make our contribution, data were collected from two countries; UK and India. The reasons for selecting the two sampling points are as follows: 1) this allows us to better understand the main components of trustworthiness for a HEI across two cultures 2) it enables UK HEIs to be in a better position to identify the needs of international students, prior to their arrival as customers of UK HEIs, 3) the UK has been selected because it has been through significant changes and will endure a further period of change, with students viewing themselves more as customers, and 4) our model will enable Indian HEIs to better understand how to retain Indian students and to attract overseas students to Indian HEIs.

**Scale Development**

To develop the measurement scale, a structured approach as advocated by Churchill (1979) was followed. To begin, 100 items were identified from the relevant literature as being applicable to measure trustworthiness and its components. From this initial item pool, a reduction of the items took place and the 100 items were reduced to 47; a task
undertaken by a panel of expert judges (five academics). Following this step, in-depth interviews were conducted with 25 students. The in-depth interview stage ensured that our understanding of trustworthiness and the components of trustworthiness was consistent.

Once the final items for the measurement instrument were established $n=27$, the survey research instrument was also developed in English, which meant that there was no need for forward and back translation for the Indian sample. This also did not affect the validity of the questionnaire because, although there are 38 recognised languages in India, English is widely accepted as a common language and is used for teaching purposes at HEI level. Moreover, by having the questionnaire in the same language for both Indian and UK students’ equivalence was maintained so our work may be generalised.

For the final survey instrument, some of the items were reverse coded so that the issue of sample member fatigue could be dealt with. All the items were measured using a five point Likert type scale ranging from ‘strongly agree’ to ‘strongly disagree’. For reference, the final research instrument is included as Appendix A.

**Sample**

Data were gained from students in the UK and India during 2010/2011 academic year from three HEIs in each country. The UK sample consisted of $n=236$ while the Indian element comprised of $n=209$ usable responses. The students’ education level consisted of: 58% undergraduate students and 42% postgraduate students for the UK, while in the Indian sample the split was 65% postgraduate and 35% undergraduate students. In both cases the students undertook a range of courses.

The data was gained from students by a combination of a paper and on-line surveys. Previous studies have shown that offline and online surveys produce almost equivalent results in mixed-mode studies (Deutskens, de Ruyter and Wetzel 2006). The paper copies of the questionnaires were distributed in classes for returning later. An email link was also sent as a second method for completing the survey.

**Analysis and results**
The scale items were put forward to measure the proposed model's components shown in Figure 1. The complexity and multi-dimensional nature of the model's components required the use of multiple items to capture each component. According to DeVellis (1991), this method increases the reliability and validity of the research findings.

The scale items were tested using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to examine the factor loadings of each item (Churchill 1979), and, as Bearden and Netemeyer (1999) argue, to validate the scales measurements. Appendix A provides a list of the remaining set of the items after the measure validation process. CFA was conducted using covariance-based structural equation modelling as implemented in AMOS 18.0. We started by assessing the multicollinearity of the data through the Variable Inflation Factors (VIF) method and tolerance values (see Table 1). Hair, et al. (2010) recommends that VIF values of 10.0 and above suggest a high level of multicollinearity and a value of 0.10 as a cut-off threshold for tolerance level. As a result, if tolerance levels are under 0.1, multicollinearity might be a problem, the results in Table 1 shows that figures in both of the datasets, UK and India, are within the recommended threshold and that there are no multicollinearity problems.

--Take in Table 1 about here--

As part of our evaluative approach common methods bias testing was carried out to mitigate the risk of common methods bias in our sample. Harman’s one-factor test was conducted through entering all the dependent and independent variables into an exploratory factor analysis using SPSS (Podsakoff, et al. 2003). The sample would have a common methods bias problem if a single construct explains more than 50% of the extracted variance (Podsakoff, et al. 2003). The results indicated that the emerged factor only attained 17.3% of extracted variance for the UK sample and 14.8% for the Indian sample.
To ensure this result is consistent we applied common latent factor test using AMOS 18. We added a latent variable and correlated the variable to every observed item in the proposed model by adding regression relationship. The results showed that common variance was 2% for UK and 3% for the Indian sample, which is a positive indication that our data does not suffer from common methods bias.

When examining the correlations between HEI trustworthiness and its antecedents for both countries, in the UK, the correlations are in general high and significant ranging from .04 for communication and shared values to .035 p<.01 for benevolence and consistency. Trustworthiness correlations with consistency 0.19 p<.01, competence 0.28 p<.01, integrity 0.11 p<.05, benevolence 0.13 p<01, shared value 0.09 p<05 and communication 0.4 p<.01 was high and significant. Shared values had the lowest correlation with trustworthiness, while the constructs of communication and competence had the highest correlations with trustworthiness. For the Indian sample, trustworthiness correlations were generally higher than the UK sample with consistency scoring a value of 0.37 p<.01, competence 0.36 p<.01, integrity 0.18 p<.05, benevolence 0.24 p<01, shared value 0.29 p<01 and communication 0.4 p <.01. Compared with the other constructs competence had low correlation with other constructs with a value of 0.08 p<05 with consistency and .04 with integrity. In general, the Indian sample had higher correlations with trustworthiness in comparison to the UK, but still, all the constructs were positive and significant.

Based on Anderson and Gerbing's (1988) two-step method, we first assessed the measurement model, to establish the reliability validity of our constructs, followed by the test of hypotheses using Structural Equation Modelling (SEM) for both countries (Fornell and Yi 1992).

**Measurement model**

Trustworthiness and the model's components scored higher than 0.7 for their composite reliabilities, which is above Bagozzi and Yi's (1988) recommended threshold of 0.6. Their Average Variances Extracted (AVE) scores were all above or within a few decimal points of Bagozzi and Yi's (1998) recommended 0.5 level (see Table 2). The AVE for the UK
sample ranged from 0.7 for trustworthiness and 0.58 for integrity. The AVE for Indian sample was slightly lower than the UK and ranged from 0.67 for communication and .53 for integrity. Hence, we have convergent validity for our measurement model.

Discriminant validity results verified the proposed model of trustworthiness and its components by ensuring that the square of any correlation between two measures was less than the AVE of each of the measures (Fornell and Larker 1981). The results indicated an accepted level of reliability and validity which led to take all the measures for further analysis.

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---Take in Table 2 about here---

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The fit indices for the trustworthiness model, for both countries were initially moderate, yielding for the UK sample (CFI = 0.91, NFI = 0.87 and RMSEA = 0.09) and the Indian sample CFI = 0.89, NFI = 0.85 and RMSEA = 0.11). Based on items’ loadings and correlations with their constructs, nine items were deleted to refine the CFA results for both countries. Two items were deleted from competence; ‘I believe my University is capable of designing academic programs that meet students’ needs’ and ‘I believe staff at my University are experts in the positions that they hold’. One item was deleted from consistency; ‘my University lecturers are prompt in replying to my queries’.

Two items were deleted from benevolence ‘I believe that my University is honest when dealing with me’ and ‘I believe that my University will always be honest in its associations with me’. Shared values had the most deleted items with four items removed; ‘my University is not sympathetic to my needs’, ‘I believe that my University is a friendly university’, ‘In general, I like the attitude of staff at my University’ and ‘my University treats me in a friendly manner’. No items were deleted from integrity, communication and trustworthiness.
The improved pool of items resulted a better model fit for the UK sample ($\chi^2 = 361.6$, d.f. = 324, CFI = 0.94, NFI = 0.92, RMSEA = 0.022) and India ($\chi^2 = 376.4$, d.f. = 324, CFI = 0.96, NFI = 0.91, RMSEA = 0.028) both CFAs were deemed to be acceptable (Schumacker and Lomax 2004). In addition all the indicators loaded significantly on the latent constructs. Overall, the statistics shows a good fit for our measurement model (Table 3).

---Take in Table 3 about here---

---Take in Table 4 about here---

**Structural model**

SEM was used to extricate the relationships between the trustworthiness and its components. The structural model presented in Figure 1 was tested separately for each country. Fit indices for the UK ($\chi^2 = 337.2$, d.f. = 303, p < 0.001; CFI = 0.96, NFI = 0.93, PGFI = 0.92, GFI = 0.96, RMR = .02 and RMSEA = 0.03) and India ($\chi^2 = 352.1$, d.f. = 303, p < 0.001; CFI = 0.95, NFI = 0.92, PGFI = 0.94, GFI = 0.97, RMR = .02 and RMSEA = 0.028), hence the model fits the data for both countries (Schumacker and Lomax, 2004). Path coefficients are summarised in Table 4.

Based on the path coefficients all of our hypotheses were supported, more specifically; $H_1$ was supported for both groups (UK: 0.37, p<0.05 and India: 0.54, p<0.05). Thus, the competency of a HEI positively predicts trustworthiness. $H_2$ was supported: Consistency positively predicted HEI trustworthiness (UK: 0.2, p<0.05 and India: 0.47, p<0.05). $H_3$ was supported: Integrity positively predicted a HEI's trustworthiness (UK: 0.32, p<0.5 and India: 0.28, p<0.05).
H₄ was supported: (UK: 0.31, p<0.05 and India: 0.26, p<0.05) for both the groups indicating that benevolence predicts HEI trustworthiness positively. H₅ was supported: shared values affects HEI trustworthiness positively (UK: 0.43, p<0.05 and India: 0.24, p<0.05). Finally, H₆ was also supported: (UK: 0.49, p<0.05 and India: 0.33, p<0.05) which indicates that communication affects HEI trustworthiness positively.

Discussion and Conclusion

Our results provide empirical evidence that trustworthiness is developed through the perceptions of six antecedents in students’ HEI relationships across our sample. In addition, this research has provided both theoretical and empirical implications for HE research by conceptually establishing the importance of trustworthiness as a central construct for building strong relationships. Furthermore, our data has been drawn from two countries, the UK and India, which provides an international and cross-cultural validation for our results.

Based on our empirical findings, we make the following observations. First, our results are consistent with previous studies since there is a distinct overall trend in which HEIs compete on the level of provided service to attract and satisfy new and existing students (Ghosh, Whipple and Bryan 2001; Glaeser, et al. 1999). Second, cross cultural differences between the two countries have a minimal impact on cross model validation and the path loadings for the proposed constructs. However, the components had different weightings in each country; for example, in the UK sample communication had higher path loading than integrity, while in India, students perceived competence to be of a higher importance than shared values. Indian students seem pragmatic in that as long as HEIs can deliver the basic contract students are not concerned if values are not aligned, while students in the UK want the HEI to communicate and involve them in the educational process. For example, in the UK students want a form of collaboration with the HEI, while in India, students are on the receiving end of a service and as long as the HE is performing competently they do not expect too great an input. This in itself is an interesting finding in that an argument is often positioned that Indian students often go abroad to study because of quality standard associated with HEIs in India. Our finding might be reflecting a lower state of expectation
amongst Indian students in India who are simply expecting the core product to be of a high enough level for them to develop trust.

Furthermore, our study finds both similarities and differences in the perception of trustworthiness in the UK and in India. For instance, there is a strong indication, in both countries, that students believe that they can rely on their HEI. We take this further and argue that trustworthiness is a central factor for successful relationship building between HEIs and students. Both countries’ HEIs are trustworthy in their own way, by maintaining local standards.

Another notable outcome is that students in the UK sample believe that their HEI is interested in more than simply making a profit from their relationship. This view differs significantly from that of the Indian sample. This can be linked to the ongoing funding issues in the UK which have forced HEIs to focus on added value activities in order to enhance the student experience. This is also evident from the item "the HEI employees act as if they value the students" which had significantly higher value in the UK sample than in the Indian sample. The perception of students in the Indian sample is that they can rely on their HEI, and they are confident that their HEI will offer them something that their families cannot provide – this sentiment is shared by the UK sample.

Existing trustworthiness research has typically used trustworthy behaviours, or distinct dimensions of trustworthiness, as indicators of trustworthy perceptions. For example, Sirdeshmukh, Singh and Sabol (2002) capture consumer perceptions of competence, benevolence and problem solving orientation of service providers; Xie and Peng (2009) capture consumer perceptions of integrity, competence and benevolence; and in an intra-organisational setting, Joshi (2010) captures salesperson trustworthiness using managers’ perceptions of salesperson ability, benevolence and integrity.

The approach from the current research is guided by the conceptualisation of trustworthiness in organisational behaviour and marketing literature, in which we proposed a trustworthiness-building model that affects the amount of trustworthiness placed in a HEI by a student (Mayer, Davis and Schoorman 1995; McKnight and Chervany 2001; Caldwell and
Clapham 2003; Tigelaar, et al. 2005). Furthermore, we encourage researchers to extend our findings and examine trustworthiness perceptions in other countries and settings, for example, in online education and/or in other higher education institutions.

From a managerial perspective, our findings show that trustworthiness is a distinct construct that is important during the development of a relationship between a HEI and its student. HEIs would be well served in designing strategies to build students’ perceptions of their trustworthiness.

Specifically, we find that communication and shared values, in the UK, do have a significant impact on perceptions of trustworthiness. However, in India consistency and competence were more significant than the other components. Overlooking trustworthiness might result in HEIs not communicating effectively with students. This approach could lead to lost opportunities to build perceptions of trustworthiness, which in turn may have a negative impact on other aspects of the relationship, such as satisfaction.

Although we set out to analyse the components of trustworthiness in the HE sector, our sample only consisted of information from a limited number of HEIs in each country. We note, however, that future research can build on our findings and include more HEIs. In India, for instance, future research can replicate our study to capture the differences in trustworthiness perceptions in private and public HEIs.

Despite the limitations, our findings provide an overall picture for HEIs by presenting the drivers of trustworthiness and their role within the sector. Our research shows that it is important to account for the development of trustworthiness. HE researchers should include trustworthiness perceptions in models of student relationships, and managers should strategically plan to develop trustworthiness with their students, failure to do so can lead to missed opportunities. We encourage future researchers to build on this by examining the differential effects of trustworthiness on other relational outcomes, in addition to expanding the research scope to include other countries from different continents, where there is a large export of students, for example West Africa, Malay Peninsula and China. Future research should consider the inclusion of other stakeholders for HEIs, for example knowledge transfer.
partners, in order to gain a more holistic view on trustworthiness that covers all HEIs stakeholders.

----------The End---------

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References


Total number of words: 6134

Abstract: 136

References: 1704
Table 1: Multicollinearity diagnostics

<table>
<thead>
<tr>
<th>Construct</th>
<th>VIF level</th>
<th>Tolerance Level</th>
<th>VIF level</th>
<th>Tolerance Level</th>
</tr>
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<tr>
<td>Competence</td>
<td>4.64</td>
<td>.15</td>
<td>3.21</td>
<td>.25</td>
</tr>
<tr>
<td>Consistency</td>
<td>5.31</td>
<td>.17</td>
<td>3.58</td>
<td>.24</td>
</tr>
<tr>
<td>Communication</td>
<td>5.35</td>
<td>.13</td>
<td>4.34</td>
<td>.26</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4.51</td>
<td>.18</td>
<td>2.89</td>
<td>.22</td>
</tr>
<tr>
<td>Integrity</td>
<td>6.28</td>
<td>.24</td>
<td>5.22</td>
<td>.23</td>
</tr>
<tr>
<td>Shared Values</td>
<td>3.49</td>
<td>.27</td>
<td>5.38</td>
<td>.19</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>4.58</td>
<td>.21</td>
<td>5.73</td>
<td>.18</td>
</tr>
</tbody>
</table>

Table 2: Average variance, composite reliability, means and standard deviations

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE¹</th>
<th>C.R²</th>
<th>Mean-SD³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK</td>
<td>India</td>
<td>UK</td>
</tr>
<tr>
<td>Competence</td>
<td>0.61</td>
<td>0.55</td>
<td>0.77</td>
</tr>
<tr>
<td>Consistency</td>
<td>0.67</td>
<td>0.64</td>
<td>0.69</td>
</tr>
<tr>
<td>Communication</td>
<td>0.59</td>
<td>0.67</td>
<td>0.75</td>
</tr>
<tr>
<td>Benevolence</td>
<td>0.64</td>
<td>0.60</td>
<td>0.81</td>
</tr>
<tr>
<td>Shared Values</td>
<td>0.62</td>
<td>0.54</td>
<td>0.82</td>
</tr>
<tr>
<td>Integrity</td>
<td>0.58</td>
<td>0.53</td>
<td>0.78</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>0.70</td>
<td>0.66</td>
<td>0.75</td>
</tr>
</tbody>
</table>

1 - Average Variance Extracted 2- Composite Reliability 3- Mean and Standard Deviation.
Table 3: Goodness of fit indices for the measurement model (CFA)

<table>
<thead>
<tr>
<th>Model</th>
<th>(n)</th>
<th>(\chi^2)</th>
<th>d.f.</th>
<th>RMSEA</th>
<th>NFI</th>
<th>CFI</th>
<th>PGFI</th>
<th>GFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>236</td>
<td>361.6</td>
<td>324</td>
<td>.022</td>
<td>.92</td>
<td>.94</td>
<td>.94</td>
<td>.97</td>
</tr>
<tr>
<td>India</td>
<td>204</td>
<td>376.4</td>
<td>324</td>
<td>.028</td>
<td>.91</td>
<td>.96</td>
<td>.93</td>
<td>.95</td>
</tr>
</tbody>
</table>

Table 4: Path coefficients for the proposed model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Total Effect</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Effect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>UK</td>
</tr>
<tr>
<td><strong>H_1</strong></td>
<td>Competence → Trustworthiness</td>
<td>.54**</td>
</tr>
<tr>
<td><strong>H_2</strong></td>
<td>Consistency → Trustworthiness</td>
<td>.47**</td>
</tr>
<tr>
<td><strong>H_3</strong></td>
<td>Integrity → Trustworthiness</td>
<td>.28**</td>
</tr>
<tr>
<td><strong>H_4</strong></td>
<td>Benevolence → Trustworthiness</td>
<td>.26**</td>
</tr>
<tr>
<td><strong>H_5</strong></td>
<td>Shared Values → Trustworthiness</td>
<td>.24**</td>
</tr>
<tr>
<td><strong>H_6</strong></td>
<td>Communication → Trustworthiness</td>
<td>.33**</td>
</tr>
</tbody>
</table>

**: significant at P<.05. NB: all coefficients are standardised.

Uk: \(\chi^2=337.2\), d.f. = 303; RMSEA = .03; CFI = .97; GFI = .96; NFI = .92
India: \(\chi^2=352.1\), d.f.=303; RMSEA = .028; CFI = .96; GFI = .95, NFI = .93
**Appendix A : Factor Loadings**

<table>
<thead>
<tr>
<th>Construct/item</th>
<th>Factor Loading</th>
<th>UK</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competence</strong> (adapted from: Sirdeshmukh et al., 2002, Ghosh, et al 2001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Those in authority at my University make wise judgement about when to allow students to do things their way.</td>
<td>0.72</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>People with relevant work experience are employed in all areas at my University.</td>
<td>0.71</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>My University does things poorly. (reversed item)</td>
<td>0.58</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Staff at my University perform their tasks with skill.</td>
<td>0.56</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td><strong>Consistency</strong> (adapted from: Cummings and Bromiley 1996, Ghosh, et al 2001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff at my University return emails and phone calls promptly.</td>
<td>0.72</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>My University is punctual in meeting important deadlines.</td>
<td>0.71</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>I find the staff at my University meet course deadlines.</td>
<td>0.70</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong> (adapted from: Ghosh, et al 2001, Ball et al., 2004)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My University uses its knowledge and experience to minimise any confusion about the education process.</td>
<td>0.66</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>My University shares relevant information with me.</td>
<td>0.65</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>My University keeps information from me. (reversed item)</td>
<td>0.60</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Staff at my University know how to deal with sensitive issues without offending those people involved.</td>
<td>0.62</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td><strong>Benevolence</strong> (adapted from: Bhattacherjee 2002 Ghosh, et al 2001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keeping promises is a problem for this university. (reversed item)</td>
<td>0.75</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>My University delivers on its promises to students.</td>
<td>0.82</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>My University follows through on promises made to me.</td>
<td>0.56</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td><strong>Shared Values</strong> (adapted from: Doney and Cannon 1997; Morgan and Hunt 1994)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My University shares my values.</td>
<td>0.67</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>My University has strong ethical values.</td>
<td>0.65</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>My University is interested in more than just making profit out of students.</td>
<td>0.81</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>The University employees act as if they value the students.</td>
<td>0.80</td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td><strong>Integrity</strong> (adapted from: Doney and Cannon 1997; Cummings and Bromiley 1996, Ghosh, et al 2001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This University does not value academic integrity. (reversed item)</td>
<td>0.55</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>My University strives to be a great academic organisation.</td>
<td>0.56</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>My University deals honestly with me.</td>
<td>0.51</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>At my University, administration, faculty, staff and students do not work together to achieve the common goal of making the university a better place. (reversed item)</td>
<td>0.53</td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td>Since I am unable to personally monitor all of my University's activities, I rely on the employees of the university to get the job done.</td>
<td>0.79</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>I am confident that university employees do those things that relate to my education at the University that my family cannot do for me.</td>
<td>0.61</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>In general, I do not have confidence in my University. (reversed item)</td>
<td>0.61</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>I believe my University is a credible organisation.</td>
<td>0.81</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>I feel that I can rely on my University.</td>
<td>0.59</td>
<td>0.72</td>
<td></td>
</tr>
</tbody>
</table>