INTRODUCTION

In an increasingly competitive higher education sector, universities face significant challenges when it comes to recruiting new students. Recruitment is only the beginning of a long-term relationship that higher education institutions (HEI) need to cultivate, not only while students attend the programs, but also beyond graduation. Previous studies highlight the need for research in relation to the power that comes from successful branding and the implications for HEIs (Dholakia and Acciaro 2014). This paper aims to contribute to an underdeveloped area in the literature related to brand attributes and their importance in the context of the higher education sector (Chapleo 2010). Specifically, the research objective is to examine the influence of HEIs’ brand identity, brand meaning, and brand image on brand equity as a result of forming strong attachment, commitment, trust and overall satisfaction from the vantage points of students and graduates; representing major research gaps identified in contemporary literature. Specifically, the first main aim of this work is to investigate whether universities’ positioning strategies should continue focusing on building prestige or whether strategies aimed at improving student satisfaction could have more positive effects on brand equity. The second aim of this work is to examine whether the perceived by the students brand equity of an institution is different for students and graduates. The third main aim of the paper is to examine the relationship between attachment strength and satisfaction.

BACKGROUND

The conceptual framework builds upon the work of Jillapalli and Jillapalli (2014), who proposed a customer-based brand equity and relationship marketing framework in order to enhance understanding of the brand equity of professors. This study extends and makes the framework more general and relevant to the context of HEIs and only the professors. The perceived quality of a higher education institution can affect one’s perceptions of an institution’s brand characteristics, namely HEI’s image, identity and meaning. These constructs can influence the strength of the attachment the student and graduates have with the institution, which in turn affects relationship factors such as commitment, trust and satisfaction. Finally, the relationship factors can have an impact on an institution’s brand equity. Not surprisingly, perceived quality and reputation of an institution are among the strongest influences on student choice of institution (Chen and Hsiao 2009). A brand needs to develop a positive reputation in order to become successful and in turn profitable. Having a positive institutional reputation can be of critical importance for crowded and competitive markets as prospective students may attend a
leading university because of the overall reputation, even though a school or department may not be perceived as strong (Melewar and Akel 2005). The reputation and the quality of an institution may be related, but they do not need to be identical, which is why institutions may try to influence their external images in many ways, and not only by maximizing their quality (van Vught 2008). Perceived quality and reputation act as a first step towards selecting and enrolling at a HEI before someone can start developing an internal, closer and personal view of the brand. On the other hand, as assessing quality before enrolling is impossible and judging reputation is becoming increasingly difficult, branding can act as a shorthand measure of the whole range of criteria that inform student decision making (Jevons 2006).

**H1. Perceived quality has a positive effect on HEI (a) brand image, (b) brand meaning, and (c) brand identity.**

**H2. Reputation has a direct effect on HEI (a) brand image, (b) brand meaning, and (c) brand identity.**

To be enduring within a changing HE environment, brand identity needs to be dynamic and flexible to meet consumers’ expectations (da Silveira et al. 2013). The core identity can act as a timeless essence of the brand that remains unchanged as the brand moves to new markets and new products, while the extended identity elements can provide brand texture and completeness, and focus on brand personality, relationship, and strong symbol association (Bhimrao 2008). For HEIs such an approach can be very useful when operating within a global environment that sees universities often venture beyond their traditional geographical base, but also into providing services to enhance student experience. Brand image will depend on the type of institution that will command a different approach to marketing the university to potential students (Ivy 2001). Park et al. (2010) define brand attachment as the strength of the bond connecting the brand with the self. Students can form and maintain such an attachment while studying for a degree, but also after graduating. The higher the brand relationship quality the stronger the attachment will be. Such an attachment could have a significant role in explaining consumer attitude and even intention under certain conditions (Ilicic and Webster 2011). Hence,

**H3. HEI (a) brand identity, (b) brand meaning, and (c) brand image have a positive significant effect on attachment strength between a student or graduate and the institution.**

The second part of the model examines the impact of brand characteristics and attachment strength on satisfaction, trust, commitment and brand equity. Student satisfaction results when actual performance meets or exceeds the student’s expectations. Mourad et al. (2011) suggest that that universities should focus on activities which enhance their brand image rather than simply create awareness, as brand image has a more significant effect on brand equity compared to brand awareness. Hence, brand image can have an effect on the strength of the attachment that students and graduates feel with the university. An extension of this argument is that the stronger the attachment to the institution the higher the commitment and satisfaction. HEI brand image, meaning, identity and attachment strength could also have an effect on trust in the institution. Caceres and Paparoidamis (2007) argue that commitment
towards a brand develops based on the repurchase of the brand, resistance to modifications generated from the competing universe and resistance to negative feelings generated by specific dissatisfactions. In the current context, such intentions could potentially manifest themselves in terms of participating in events and activities organized by the HEI and donating money. Trust can make managing a relationship more efficient, which could have a positive effect on satisfaction (Andaleeb 1996) and commitment (Garbarino and Johnson 1999). Finally, satisfaction with a university, trust in a university, and commitment to a university should affect the institution’s brand equity, as if students or graduates are satisfied with the institution, feel committed and consider the university as trustworthy, which will result in a favorable brand equity (Keller 2001). These considerations lead to:

H4. **HEI brand image has a positive effect on (a) satisfaction, (b) trust, and (c) commitment.**
H5. **HEI brand identity has a positive effect on (a) satisfaction, (b) trust, and (c) commitment.**
H6. **HEI brand meaning has a positive effect on (a) satisfaction, (b) trust, and (c) commitment.**
H7. **Attachment strength has a positive effect on (a) satisfaction, (b) trust, (c) commitment and (d) brand equity.**
H8. **Trust has a positive effect on (a) satisfaction and (b) commitment.**
H9. **(a) Satisfaction, (b) trust, and (c) commitment have a significant effect on brand equity.**

Being a student can be a rich and transformative period in someone’s life. Within a relatively short period of time students set the foundations for their future careers. At the same time, being a student is a great opportunity to enjoy what may appear to be a last care-free period in one’s life. Upon graduation students have to compete for a job, often within very harsh market conditions. Personal and career commitments can make people romanticize about their student days. As time goes by and an individual completes a course and becomes an alumnus, the relationship and the attachment with the brand can potentially fade off. Therefore, the strength of the relationship with the institution may be different for current students and for alumni. Hence, the education status may moderate the strength of the attachment with the institution.

H10. **Current education status (i.e. being a student or a graduate) moderates the relationships in hypotheses H1-H9.**

**METHODOLOGY**

The study employed an online survey in the US. A market research company recruited participants in order to control quotas of gender, age, and area of residence, providing 605 valid responses. The sample consisted of students currently studying for an undergraduate degree either full time or part time and recent university graduates. The analysis revolves around the model: brand characteristics and relationship factors. A structural equation model examines the relationships between brand meaning, brand identity, brand image and their connection with attachment strength, and brand equity. Respondents answered on seven-point scales for all constructs. An analysis of the moderation effect of the current educational status was also carried out in order to examine how this status influences the relationship with the
attachment and the satisfaction with the university as these perceptions may fade off with time after graduation.

RESULTS AND DISCUSSION

The paths from perceived quality to brand image, brand meaning, and brand identity are positive and significant. The same applies to the paths from reputation to brand image, brand meaning, and brand identity. Brand meaning has a significant positive effect on attachment strength. However, the paths from brand image and brand identity are not significant. Brand image also significantly influences satisfaction and trust, but not commitment. However, brand identity has a significant effect only on satisfaction and trust, but not on commitment. The effect of brand meaning on satisfaction and commitment is also positive and statistically significant. In contrast, there is a weak negative effect of brand meaning on trust. Attachment strength has a positive significant effect on trust, commitment, and brand equity whereas it has a negative effect on satisfaction. Trust in an HEI has a positive effect on satisfaction and commitment to the university. Finally, satisfaction and trust have positive, statistically significant effects on brand equity, whereas the path from commitment to brand equity was not significant. The next step in the analysis was to examine whether current educational attainment moderates the relationships described above. The analysis started by establishing metric invariance between the groups. The models demonstrate acceptable fit between the groups. Brand identity positively affects satisfaction and the effect is stronger for those students who are currently studying for an undergraduate degree. Brand meaning has a strong effect on commitment and this effect is stronger for graduates. Attachment strength has a negative effect on satisfaction, and this effect is more negative for graduates. Finally, attachment strength has a positive effect on brand equity and this effect is stronger for graduates. The remaining relationships were not moderated by current educational attainment.

The empirical results indicate the importance of brand image, identity and meaning (and their antecedents, perceived quality and reputation); attachment strength; and commitment, trust, and satisfaction in the formation of university brand equity in the minds of students and graduates. Hence the work addresses relevant research gaps in the literature. More importantly, this work has examined the role of brand attachment and its antecedents in brand equity, loyalty, engagement and donation intentions in higher education, contributing to the literature of branding HEIs in a number of important ways. For example, the work suggests that universities' positioning strategies may be focusing too much on building prestige, whereas strategies aimed at improving student satisfaction could have more positive effects on brand equity. The second major contribution arises from examining the extended customer-based brand equity model in a comparison of the models of brand equity for students vs graduates. Satisfaction with practical brand characteristics, such as the courses, plays a strong role for students, whereas the influence of brand meaning and commitment is stronger for graduates. To the authors' knowledge, this represents another unique contribution to the current branding literature and the subsequent theoretical implication needs to be taken into consideration by scholars. The third major contribution relates to attachment strength which is influenced by various attributes (e.g. perceived quality) but, surprisingly, attachment strength has a negative effect on satisfaction. This work aims to generate numerous implications for managers and practitioners. Specifically, HEIs can strengthen their brands in the perceptions of students by...
developing their perceived quality and reputation. Marketers aiming to attract students to HEIs may be well advised to aim for improved customer orientation, focusing attention on the practical things that matter to students, such as the quality of the courses (and perhaps also the social life). This might be achieved, for example, by investing in courses, student services, clubs and societies, and competing to have these courses and facilities highly-ranked and validated or accredited by awards where possible. The work also highlights the role of specific attributes. Brand identity positively affects satisfaction and this effect is stronger for current undergraduate students. Similarly, brand meaning has a stronger effect on commitment and this is stronger for graduates. Attachment strength has a negative effect on satisfaction and a positive effect on brand equity and both effects are stronger for graduates. Hence, managers and practitioners need to appreciate that university students do not represent a homogeneous group and tailor-made, segmentation-based strategies need to be developed when targeting undergraduate vs. graduate students. Examining causal relationships by employing a survey may be a potential limitation of this study.

REFERENCES

References available upon request