Target Group Segmentation in the Horse Buyers’ Market against the Background of Equestrian Experience

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Whereas in former times horses were reserved primarily for people involved in agriculture, elite equestrians or the military, nowadays equestrian sport has become an activity for people with a wide variety of backgrounds. However, as more and more people become involved with equestrian sport today, the knowledge concerning animal husbandry in general is diminishing due to an alienation from agricultural themes in modern societies. As a consequence, this development affects both riding ability and the appraisal of horses, especially with respect to the purchase of horses. In order to analyse which factors influence purchase decisions in the horse market in conjunction with equestrian experience, 739 horse riders were surveyed on their purchase behaviour in this study. Using cluster analysis, a typology was generated that provides a differentiated picture of the preferences of the various rider groups. Three clusters were distinguished: the “amateurs”, the “experienced” and the “experts”. Taking personal horse riding proficiency into account, it could be concluded that especially the “amateur” group required objective criteria for the evaluation of a horse they are considering purchasing. Alongside “measurable” qualities, such as previous showing success or the level of training of the horse, also other attributes such as the simple handling of the horse should be taken into consideration. As particularly the “amateur” group in equestrian sport is increasing in numbers, it is therefore advisable when preparing a horse for sale to align oneself to the needs of this customer segment in order to ensure an effective and targeted marketing of horses.

Key words: cluster analysis, experience, horse purchase, target group segmentation

The behaviour of consumers when purchasing comprises not only the execution of the purchase decision, but is the result of a complex interplay of cultural, social, personal and psychological factors [6, 9]. Of the many purchase decisions a consumer can make, buying a horse is one of the most difficult. It involves judging a living creature whose external characteristics (exterior) alone are extremely complex, but can be assessed either directly or through the animal’s sporting successes. In addition, the inner qualities (interior) of a horse such as character, temperament and willingness need to be taken into consideration as these are crucially important for determining the suitability of a horse; however, they are difficult to evaluate and only become apparent after extended contact [8].

Particularly for the numerous beginners or those returning to equestrian sport, it is difficult to evaluate which horse fits their personal riding skills. The interior of a horse is especially important for these amateurs to enable them to practise equestrian sport safely and in a relaxed manner. A composed, controllable horse provides the owner, rider or driver with a significantly high degree of safety. This is particularly necessary for most leisure riders, as the members of this group often have a lower level of riding experience and so require calm and easy-to-ride horses [1].

Additionally, the motivations influencing the purchase of a horse are variable and depend on its intended use (breeding, participation in tournaments, terrain riding, etc). Therefore, the buyer has to make a
decision which is complicated by the abundance of horses with many different characteristics. Buyers also need to take into account that the level of education/training of their horse should correspond with their own level of skill.

The aim of this empirical investigation is, therefore, to evaluate which specific factors are of primary relevance during the purchase of a horse, and if different priorities exist depending on the level of knowledge and experience of the (potential) buyer. Particular attention will be focused on the “interior” characteristics of the horse, which as stated before are difficult to measure. The factors influencing consumers during the purchase of a horse have not until now been studied to any great extent. Moreover, the demands of the increasing number of people that ride as a leisure activity or have resumed riding after many years have so far been neglected in the literature. This paper intends to analyze the factors influencing the purchase of a horse in practice according to different target groups.

### Material and Methods

This empirical study is based on an online survey undertaken during the period of January to February 2009, resulting in 739 valid responses which were used in the analysis. The questions used were formed on the basis of a literature study and interviews with experts prior to the investigation, in which 38 riders in both competitive and leisure riding categories were surveyed. The resulting questionnaire contained various questions on the requirements for the exterior of a horse, its level of training, showing success, breed and parentage. In addition, details about the image of riding in Germany and the leisure horse, customer service and guidance during purchase, involvement of the rider as well as further items were asked about.

The statements and characteristics were mostly evaluated on a five- (from –2 to +2) or seven- (–3 to +3) level scale [3] (Table 1). Furthermore, image dimensions were recorded using a semantic differential. The online questionnaire was created using the programme EFS Survey, and the subsequent analysis was carried out with the statistical programme SPSS (Version 17.0), using uni-, bi- and multivariate analyses. A cluster analysis was used for the multivariate analysis. The comparison of means was carried out using a variance analysis. The differences between the individual groups were compared using a post-hoc test. In the following, the questionnaire results will be presented and discussed in conjunction with the findings from the literature and the interviews with the experts.

### Sample description

Riding is a female-dominated sport [7], thus only a small proportion of the respondents in this study were male, while the proportion of female respondents (92.5%) was extremely high. The age of the respondents ranged from 13 to 90 years, with an average of 27 years. The largest group of respondents (35.4%) were educated to an advanced technical certificate level and 20.1%, the second largest group, were those with a secondary school certificate. Those with university degrees (12.5%) were also well represented. Around 50% of the respondents had a monthly net household income of over €2,000, identifying this consumer group as being particularly solvent (range: €500 –> €4,500).

### Theoretical model

With increasing competition, the business strategy for horse marketing as in other sectors becomes increasingly focused on customer orientation. Through the classification of buyers into consumer groups (market segments) with similar ways of thinking and behaving, not only can customer demands be better identified but also segment-specific offers and influencing strategies can be developed [10]. The assortment of appropriate criteria for the segmentation is thereby of eminent importance. It is generally recognized in the literature that there are various ways of segmenting a market; each approach has its merits and limitations depending on the target market being considered [4]. In this analysis, riding experience has been chosen in order to segment the horse buyers’ market with regard to the different needs of the riders due to their personal skills [11]. The illustration in Fig. 1 can serve as an appropriate model for the target group segmentation of the horse buyers’ market related to the buyer’s riding experience background.

In addition to riding experience, which served as the cluster-forming criterion in the cluster analysis of the study, other information about the consumers which was assumed to affect consumer behaviour was taken into consideration, particularly their personal preferences related to horse purchasing, such as outward appearance (exterior), showing success, or the horse’s level of education. Furthermore, the buyers’
seeking information (e.g. the need for consultant services) was also considered important vis-à-vis personal experience in order to determine which service strategies would be expedient for the different consumer segments.

Cluster analysis

The aim of the cluster analysis was to group the respondents into clusters so that the members within each group were as homogeneous as possible, but as heterogeneous as possible between groups. By fixing the proximity measures, the next step of the cluster analysis was to numerically express the distances between the objects to be grouped [5]. In this investigation, the hierarchical clustering method using an agglomerative algorithm was applied to identify the clusters. Firstly, using the single linkage procedure, the objects with the smallest distances between them were combined. Two outliers were removed from the data set, following this step. The difference between the total number of surveys and the respondents used in the cluster analysis is due to those responses with missing data.

For the final group formation, the Ward method was used, whereby the goal is to combine those objects (groups) that increase the variance within a group the least and through which the most homogeneous clusters can be formed. The number of clusters is determined through the heterogeneity measure (error sum). The Ward algorithm, thus, firstly calculates the initial partition in order to then optimise the outcome using the K-means method (partitioning procedure).

The result of the cluster analysis was finally checked using a discriminant analysis. For this, a discriminant function was estimated on the basis of the cluster solution that allowed the maximum separation of the clusters and then the objects were reordered following the constraints of the discriminant function. The final consensus between the grouping results of the discriminant and cluster analysis can be used as a relative validity criterion. The three-cluster solution outlined in Table 1 was confirmed at 92.5% by a discriminant analysis and thereby meets the requirements of a valid measurement [5].

Results

Three questions about the experience of the customers were chosen as cluster-forming variables: the number of years of riding, the number of horses already purchased, and the self-assessed level of knowledge about horse buying. Alongside these cluster-forming variables, additional variables were drawn upon to describe the clusters.

The clusters were then named as follows:
Cluster 1: The amateurs
Cluster 2: The experienced
Cluster 3: The experts

The results of the cluster analysis are displayed in Table 1.

Cluster 1: The amateurs

With 47.5% of all respondents, the “amateurs” formed the largest cluster of horse buyers. Although with an average of 8.94 years of riding experience, these respondents were not true beginners, they nevertheless formed a cluster of the least experienced riders with a highly significant difference to the other two clusters. These were also the youngest of the three groups, with an average of 24 years of age. The amateur riders participated more frequently in tournaments than the experienced riders.

Despite several years of riding experience, these respondents on average had only previously purchased one horse and for this reason were the least accomplished at buying horses. This is further reflected in the amateurs’ self-assessed level of knowledge about buying horses: with a value of $\mu=0.12$ the respondents of this cluster were very significantly less experienced than those of the other clusters.

When purchasing a horse, this group paid the least attention to the exterior of the horse ($\mu=1.62$). They considered the level of training as the utmost criterion, in addition to ease of handling when riding in general and specifically when hacking out (i.e. stable manners...
and behaviour. This group was the most inclined to trust the opinion of an advisor or the seller. With a highly significant difference to the other groups, they were also most likely to use the (paid) advice of professionals ($\mu=-0.51$). In contrast to the experienced riders, they were not predisposed to pay a fair price for a well-trained horse. Objective sources of information on judging interior, such as the serenity test, provided this group with the relatively greatest purchasing reliability. With an average of $\mu=0.55$, it is highly significant that this group relied the least on their own gut feeling.

**Cluster 2: The experienced**

This cluster contains a large proportion of all the participants (41.8% of 600 respondents). It is characterised in the cluster-forming variables by its members having an intermediate level of riding experience of 17 years on average, which significantly differentiates this cluster from the other two. This cluster also lies between the other two in terms of the number of previously purchased horses (approximately two), as well as in the members’ own assessment of their level of knowledge about buying horses ($\mu=0.46$). This position as “middle cluster” is also reflected in the other cluster-describing variables. Notably, this cluster differs very highly from the others in that its respondents participated in the most horse shows and consequently viewed “showing” success as a more important purchase criterion than the other groups.

**Cluster 3: The experts**

The “expert” cluster with 10.7% of all respondents is by far the smallest of the three. With an average age of nearly 40 years, this cluster has the oldest respondents and thus, also significantly those with the most riding experience (30.38 years). The members of this cluster also judged themselves as the most experienced in buying horses, and accordingly had bought more horses (an average of three) than the members of the
other clusters. The fact that this cluster shows a high level of experience is also demonstrated by the respondents more frequent participation in horse-related courses and seminars than in the other clusters in order to augment their knowledge. In contrast to the other two clusters, this group relied above all on their gut feeling when purchasing a horse. Criteria such as level of training ($\mu = -0.25$) or previous showing success ($\mu = -1.77$) were the least important (with a highly significant difference).

**Discussion and Recommendations for Practice**

It was assumed that due to the broadening of equestrian sport to include new and mostly inexperienced target groups, such as adult beginners or "weekend leisure riders", a segmentation of the horse buyers’ market against the background of their personal knowledge about horses and their purchase would be expedient. Taking into consideration the background of personal experience in equestrianism, three clusters, the “amateurs”, the “experienced” and the “experts”, could be determined in this study. Highly significant differences could be seen in the evaluation of some of the criteria influencing horse purchasing behaviour among the three clusters. It could be confirmed that especially among the “amateurs”, who made up almost half of all the participants, there was a need for objective criteria for the evaluation of the horse for sale. As well as “measurable” qualities such as previous showing success or the training level of the horse, other qualities such as the easy handling of the horse are particularly important, but which are difficult to measure and quantify. Combined within the term “interior”, these qualities appeared to lose importance with time, similar to the measurable attributes. Horse buyers can form their own “image” of the desirable horse on the basis of their acquired personal experience and are thus less dependent on external sources of information.

In the practice of buying a horse, it can be concluded that a large proportion of horse buyers are interested in qualitative advice during purchase and seek objective sources of information for the evaluation of what is, as a rule, a very costly investment. New tests, such as serenity tests [2], are a convenient means of providing potential buyers with added assurance in the choice of a suitable horse. This investigation found that the “amateur” group assigned the highest value to uncomplicated handling of the horse from the ground or from the saddle; “showing” success was, in contrast, unimportant. In the training and preparation of a horse for sale, it is therefore advisable, alongside purely technical aspects such as schooling, to invest time in improving interior attributes or to use options such as the serenity test in order to market the horse effectively and efficiently. In particular, for the majority of riders the enjoyment of being in contact with their horse is of primary importance and they only take part in competitive riding at an amateur level [7]; therefore, such requirements can be effectively targeted to increase the chance of making a sale.

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