A comprehensive summary of the scientific literature on Horse Assisted Education in Germany

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<u>Declaration of Independence</u>

Hereby I, Franziska Bogner, declare that I hav	ve authored this bachelor thesis independently,
that I have not used other than the declared	d sources / resources, and that I have explicitly
marked all material which has been quote	ed either literally or by content from the used
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(date)	(signature)

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"I can no other answer make, but, thanks, and thanks."
(William Shakespeare)

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but that also 'fed' me with many resources which were so fundamental for the success of this study.

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and teaching me, that communication can be a lot of fun!

G&K HorseDream Gmbh -

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Hang in there - you will find a 'horsey touch' every once in a while.

Yours sincerely, Franziska Bogner.

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III. Preface

In this research, the horses in executive seminars are referred to as "coach" or "animalistic coach". The actual contractors of HAE are referred to as "human coaches".

As two of the interviewees were not able to schedule an appointment with the researcher, their interviews were turned into questionnaires which were sent via E-Mail. Nonetheless does the researcher of this thesis refer to those questionnaires as 'interviews'.

The footnotes on the bottom of each page are just an indication of which reference to look for in the reference chapter. They do not include a full reference regarding to the Harvard System. A complete reference list can be found in chapter 9.

IV. List of Abbreviations

Abbreviation	Explanation
EAHAE	European Association for Horse Assisted Education
e.g.	Exempli gratia / for example
focuses	Meant are here the different backgrounds, from which Horse Assisted Education has been examined.
HAE	Horse Assisted Education
p.	Page

V. Abstract

"There is something about the outside of a horse that is good for the inside of a man."

~Winston Churchill

Aim of this thesis was to comprehensively summarize and compare twenty one scientific papers on HAE that were written in Germany. Resulting from this investigation, future research impulses are given at the end of this study. The scientific papers that were in the focus of this thesis consist of seven diploma theses, five master theses, three bachelor theses, two published books, one article and three reports written on own behalf.

For that matter, a qualitative research was carried out, in which the researcher summarized those scientific papers and additionally held telephone interviews with nine of the twenty one authors. The results were evaluated via categorizing and graphs were developed within Microsoft Excel.

The results show, that the most common focus of the scientific papers on HAE has been the pedagogical with 22%. The most frequent outcome of the investigations was a successful transfer after the seminar. Furthermore, the biggest opportunity for research on HAE was the openness of the contractors and their support during the researches. Whereas a limited data set and missing literature on HAE was named as the biggest constraints.

When comparing the outcomes of both data collections, namely the scientific papers and the telephone interviews, two analogies between the similar named arguments could be found. Meaning, that two of the authors mentioned an argument they had stated in their papers in the interviews again.

Following hypothesis was compiled and could be proved with the findings of this thesis: The effectiveness of Horse Assisted Education cannot be proved scientifically.

The advice of the researcher for contractors of HAE therefore is, to developing scientific parameters to be able to scientifically measure the effectiveness of this service.

VI. Abstract in German

"Es gibt etwas am Äußeren eines Pferdes, was dem Inneren eines Menschen gut tut."

~Winston Churchill

Gegenstand dieser Bachelorarbeit war es, einundzwanzig wissenschaftliche Arbeiten zum Thema HAE zusammen zu fassen und zu vergleichen. Daraus resultierend wurden zum Ende dieser Studie Impulse für zukünftige Untersuchungen geliefert. Die wissenschaftlichen Arbeiten, welche im Fokus dieser Studie standen waren sieben Diplomarbeiten, fünf Masterarbeiten, drei Bachelorarbeiten, zwei Bücher, ein Artikel und drei Berichte, welche für den Eigenzweck verfasst wurden.

Innerhalb dieser qualitativ durchgeführten Studie wurden die benannten wissenschaftlichen Arbeiten zusammengefasst, Telefoninterviews mit neun der Autoren geführt und die daraus resultierenden Ergebnisse miteinander verglichen. Dafür wurden die Aussagen bzw. Zitate mit Hilfe von Microsoft Excel kategorisiert und folglich entsprechend der Anzahl an Wiederholungen nach Häufigkeiten gelistet.

Die Resultate dieser Studie zeigen, dass mit 22% der gesamten Studien der pädagogische Blickwinkel der Häufigste war, von welchem HAE beleuchtet wurde. Das meist genannte Ergebnis der untersuchten Studien war der erfolgreiche gelungene Transfer nach einem Seminar. Des Weiteren ist die größte Möglichkeit, welche die Autoren in ihren Untersuchungen sahen, die Offenheit und Unterstützung der Anbieter HAE's. Am schwersten schien hingegen eine angemessene Menge an Daten zu sammeln, beziehungsweise auf das Thema bezogene Literatur zu finden.

Bei dem Vergleich beider Datenerhebungen zeigte sich, dass nur zwei Analogien zwischen den gemeinsam genannten Argumenten in den wissenschaftlichen Arbeiten und den Interviews gefunden worden konnte. Das heißt, dass nur insgesamt zwei Autoren im Interview ein gleiches Argument nannten, wie sie zuvor schon in ihren Untersuchungen beleuchteten.

Resultierend aus der Literaturrecherche und den Ergebnissen dieser Studie, wurde folgende Hypothese aufgestellt und bewiesen: Die Effektivität von HAE kann nicht wissenschaftlich belegt werden.

Die Empfehlung des Autors dieser Bachelorarbeit ist das Entwickeln von wissenschaftlichen Parametern, an Hand dessen die Wirksamkeit von HAE bewiesen werden kann.

1. Introduction

"Success is often more about how gracefully one manages the hurdles than how quickly one gets to the finish line." (E.T. Calvo et al.)

Managing and overcoming hurdles is an integral part of Horse Assisted Education (HAE) - a service that "[...] suits those seeking to enhance their current practice with programs that emphasize conscious awareness and impact behaviour change" (Krebs, 2011)¹. Upon the 149 German contractors of HAE, there are also many different approaches and seminar offers. In most cases, HAE specializes on the self-perception of a person and the image of how others see us. The horses are hereby referred to as co-workers or coaches and are said to give immediate and incorruptible feedback on the participant's non-verbal communication (Neuse, 2011)². Knowing, how people and in particular people in leading positions affect others by their actions can be an integral part of their careers and influence their leadership styles.

People's communication usually consists of 20% verbal actions and 80% non-verbal communication, which is hard to be aware of and what is therefore referred to as the unconscious (Zimbardo & Ruch, 1977)³. Aim of HAE is to make the seminar participants aware of their non-verbal behavior with the horses as a 'communication mirror'.

The author of this research was able to visit such a seminar with horses and that was the crucial point which made her believe, that HAE definitely is worth a study. As HAE 'only' exists in Germany for thirteen years now, it has to be noticed, that it has already been researched for the past ten years. This bachelor thesis consequently is meant to bring together all the scientific papers on HAE in Germany. Furthermore is the researcher of this thesis aiming for an evidentiary and conclusive summary that especially high lightens the opportunities and constraints, researchers faced during their investigations and to point out further research impulses. Therefore the target of this research is an all embracing summary that guarantees an objective evaluation of the scientific work that is done on that topic so far. It is not an evaluation of the effectiveness of HAE.

To systematically lead the reader through the topic, it is first explained what the actual aim of this research is and what the researcher wants to achieve. After that, the reader gets background knowledge of experiential learning and horse assisted education and also an insight in the history of both. With that, a foundation is laid and this thesis is continued with the methods that are used to collect the data and how it is processed. Subsequently, a description of the findings is presented and the results are evaluated within the discussion part of this thesis. To sum up the research project, all findings are high lightened again in the conclusion.

¹ http://www.horsedream-international.com/index.html

 $^{^2\} http://www.die-pferdeakademie.de/die-pferdeakademie/das-konzept/trainer-pferd.php$

³ Zimbardo, P.G.; Ruch, F.L. (1977) Psychology and Life.

2. Aim of the Research

Within the past ten years in the existence of HAE, twenty one known of papers were scientifically written but never summarized or compared. Aim of this research is therefore, to make an inventory of the different researches carried out in Germany and to comprehensively summarize the scientific findings. Hereby the twenty one papers will be analyzed in detail and the findings compared. Of special interest this research project is also to detect still unproved matters of HAE and to specifically name those areas in order to allow later researchers to tie in with this topic in a timeframe of the next five years.

The main research question for this research is 'What type of research on HAE needs a specific focus within the next five years, resulting from an all-embracing summary?'. And to widen the research, following sub questions are formulated: 'What are the different focuses from which HAE has been examined?' and 'What are the opportunities and constraints of research on HAE?'.

3. Literature Review

The pioneer of HAE in Germany was G&K Horse Dreams GmbH – the first company to professionally offer personality coaching and executive training with horses since 1998⁴. The owner, Gerhard Krebs, is also founder of the umbrella organization EAHAE (European Association for Horse Assisted Education) which exists since 2004 and now embraces a total of 149 members all over the world, whereby 90 of them are located in Germany.⁵ The vision of the EAHAE is "to establish and develop HAE as a general form of personal and professional development in (not only European) enterprises, organizations, institutions, societies, and for personal purposes."⁶ (Krebs, 2011) Whether this vision is reasonable or not has to be verified in the future and cannot be forecasted yet, but there definitely is an increasing tendency towards HAE and a growing number of contractors (Krebs, 2011).⁷

In chapter one, a definition of HAE was given. Now, a detailed classification of this service will be given as well as a critical review on the literature related to experiential learning, leadership and horses.

Neuse (2011)⁸ states that leadership trainings with horses are not meant to replace traditional theoretical seminars and coaching's, but that they are a reasonable addition.⁹ Krebs (2011) generally states, that HAE is about experiencing and enhancing soft skills, not about being teached theory: "Working with our horses you will see that attitude is nearly everything. Experience how important trust, respect, honesty, humility, integrity, and authenticity are in effective communication and in getting results."¹⁰ Even though, Krebs's wording is not the same as Neuse's, they both seem to agree on the fact that HAE is no 'traditional' coaching method, but an addition designed for the enhancement of soft skills. As HAE is a service "that emphasize[s] conscious awareness and impact[s] behaviour change" (Krebs, 2011)¹¹, it can therefore be classified as a branch of experiential learning, which is defined as "a business curriculum-related endeavor which is interactive (other than between teacher and pupil) and is characterized by variability and uncertainty" (Carter et al, 1986)¹². It can be stated, that the seminars with horses are definitely never certain, as animals in general act differently even in the same situations, depending on the influencing surroundings, their moods and the people who handle them. This is at least what Neuse (2011) states.

The philosophy of experiential learning goes all the way back to the fourth century before Christ, when Aristotle¹³ said: "Their using the language of knowledge is no proof that they possess it". What Aristotle was saying at that time already can be translated into the fact, that the topic somebody might talk about in a smart words does not necessarily mean, that he has also internalized the same. Going back to the idea of experiential learning, which is about experiencing things rather than just learn them, it can be said that Aristotle was already referring to this learning style.

Another famous 'figure' when talking about experiential learning is Pestalozzi, who is known for his trinity 'head, heart and hand' - a system he used when "he wrote about people, their potential, their upbringing and

⁴ http://www.horsedream-international.com/about_horsedream.html

http://www.eahae.org/EAHAE_Qualified_Members.htm

⁶ http://www.eahae.org/index.htm

http://www.horsedream.de/WB_Sonderdruck_2_2011_web.pdf

 $^{^{8}\} http://www.die-pferdeakademie.de/die-pferdeakademie/das-konzept/philosophie.php$

⁹ http://www.die-pferdeakademie.de/die-pferdeakademie/das-konzept/philosophie.php

¹⁰ http://www.horsedream-international.com/

¹¹ http://www.horsedream-international.com/

¹² Carter, P. et al. (1986) Memorandum on Applied and Experiential Learning Curriculum Development

¹³ http://www.experientiallearning.ucdavis.edu/tlbx-links.shtml

education."14 (Brühlmeier, 2010). Roughly explained, this trinity refers to three components that have to be combined in order to be able to 'experience' something. Those are the thoughts that are involved in a learning process, possible feelings that come up while experiencing something and actions, an individual has to take in order to succeed. These three components make up the trinity of Pestalozzi, but have originally already been established in the ancient Greece (Brühlmeier, 2010). When referring that to HAE, it can be concluded that the 'human coach' only has minor influence on two of the three components, namely the action and the thoughts. The action of a participants can be influenced by an assignment given by the coach, that has to be mastered. When assuming, that the participants of executive or leadership trainings are willing to participate as they paid a lot of money, it can definitely be said that the coach thereby has influence on the actions of those. The thoughts of the participants however, are harder to influence but can be manipulated as well as the 'human coach' often 'steers' the evaluating discussion at the end of one exercise in a direction that he wants the participants to go in order to get most out of the seminar. It would be pretentious to say, that the coach has major influences on the thinking processes of the participants, but he can at least minorly give little hints every now and then to guide their thoughts in a certain direction. The feelings however, cannot be controlled in an HAE seminar. Hereby lots of factors play an important role, such as the history, personal issues and the emotional tolerance of the participants. Nevertheless, all three components can be present and have to be present in a seminar of HAE if, recording to Pestalozzi, an experiential learning process takes place.

Another quote, experiential learning is defined with is a statement, that describes the active character of this branch: "Tell me and I'll forget. Show me and I'll remember. Involve me and I'll understand." (Carter et al, 1986) ¹⁵. This statement clearly is a climax which points out that people who are actively involved in processes will benefit most of this experience, rather than having been told or shown something. All of the exercises within HAE include such an active participation by the people taking part of a seminar. This similarity would proof once more, that HAE can be considered as a branch of experiential learning.

The three most present contractors of HAE (G&K HorseDreams GmbH, DIE PFERDEAKADEMIE Training & Coaching and HorseSense Training & Coaching) all offer HAE for executives, thus also relate to leadership. If leadership can be coached in HAE will be clarified in the following. First of all, a definition for leadership is needed in order to discuss whether this can be trained with horses or not. The Longman Dictionary of American English defines "leadership" this way: "the quality of being good at leading a team, organization, country, etc." In this definition the phrases "quality", "being good" and "leading a team [...]" pop up. Quality is a subjective term as well as being good at something. Both are dependent on factors such as the own demands, the professional needs and the personal and career related surroundings. Whether leading a team of employees or family members, requires experience. As HAE was earlier declared as a branch of experiential learning, it can be assumed that HAE can also give its participants the opportunity to 'learn' leadership. However, as Neuse (2011) states, HAE is meant to be an effective addition to 'traditional' coachings and therefore is not designed to teach, but to give impulses of what could be improved in somebody's leadership style. 18 Being open minded and willing to explore the own capabilities but also weaknesses is an integral requirement for the participation in HAE and resulting from that, is the precondition of improving quality and the ability of being good. Looking at "leading a team" and whether this part of leadership is covered in HAE, the set up of the trainings have to be considered again. As stated before, all exercises within HAE are related to horses and in most of the cases more than one, which would make a team. Even if only one participant 'works' with one horse, both of them build a team. And even though the dictionary does not in particular define how

 $^{^{14}}$ Brühlmeier, A. (2010) Head, Heart and Hand. Education in the spirit of Pestalozzi. (p.47)

 $^{^{15}}$ Carter, P. et al. (1986) Memorandum on Applied and Experiential Learning Curriculum Development

 $^{^{16}}$ Annex 1 includes an explanation of the main exercises with horses done at DIE PFERDEAKADEMIE

¹⁷ Longman, P. (2004) 3rd Edition. Longman Dictionary of American English. (p.516)

¹⁸ http://www.die-pferdeakademie.de/die-pferdeakademie/das-konzept/philosophie.php

many parties are necessary to form a team [("a group of people ...")("several people or things...")], it can be assumed that at least two of them are needed, which would make a horse and a human also a team. This can lead to the conclusion, that also the phrase "leading a team [...]" is covered within HAE. All in all, the three phrases could be brought in relation with the definition of leadership and therefore could proof the ability of HAE to enhance peoples or executives' leadership.

Going back to the definition of experiential learning, Neuse's statement about how horses act depending on the given situation, can be challenged with the concern that horses might develop routines within the trainings, because they do have a memory and are able to connect certain moments to a memory they have (Parker, 2003)¹⁹. Resulting from that statement, it can be thought of that the uniqueness of the moment in a seminar of HAE could be lost or the learning effect of the participants influenced or even falsified. The question that therefore arises is, why using horses for leadership trainings which in today's times are held as companion animals and to a certain extend are expected to develop some kind of daily routines, even if it is just the feeding or riding time. The answer might be the same statement, as given above: horses are flight animals and are therefore always aware of their surroundings and conclusively also detect only minor changes in the set up of a seminar. This could be a different group of participants, weather changes or simply the mood of the people surrounding the horses. Those minor changes make the horses react individually all the time.

The encyclopedia of applied animal behavior and welfare states, that "The principles of flight behaviors are similar in horses, cattle, sheep, deer, antilope and other grazing animals." (Mills et al., 2010)²⁰ With this statement it can now be assumed, that either kind of flight animal could be used in leadership trainings, such as HAE, as they all have similar flight principles and therefore all monitor their surroundings closely, which makes them an appropriate coach in leadership trainings. At this point, other factors also influence the decision on which animal to use. In antilope and deer for example it can be said, that they would be rather useless for leadership trainings as they are both still not domesticated and their natural instincts are more distinctive than in the other three. That would also mean, that the keeping and handling conditions of those two are rather hard to realize for a business that wants to earn money with them but want to keep the efforts for that as low as possible. So, why not using cattle or sheep in executive seminars or leadership trainings? When reading further in the encyclopedia, following statement can be found: "Small, fine-boned grazing animals, such as antelope, avoid predators by fleeing, but animals such as cattle, with heavier bones and bodies, will also turn and fight a predator instead of running." ²¹ Therefore the reason of not using cattle or sheep is found. That leaves the matter, if horses can be referred to as rather delicate or rather heavy animals. This probably is dependent on the breed of the horse, but generally the evolution and the resulting body shape of horses (long legs, large nostrils, small volume of the intestines, large volume of the lungs) state, that horses are not suited for fights as they additionally do not have any 'fight instruments' such as the horns in cows and sheep.

Another factor that could speak for horses being the right choice of 'coaches' is the fact, that they are animals that live in herds and are therefore dependent on a hierarchy. "Horses are herd animals, forming bonds of mares and foals guarded by a stallion, who battles other stallions for the privilege." (Bowers et al., 2004)²²
This can be of advantage, whenever a participant of a training gets in contact with a horse. Horses are continuously seeking for leadership and if this cannot be 'found' in the opponent, the horse will take on the lead itself. Neuse (2011) therefore states, that horses will follow a human, if he persuades the horse of his authenticity, confidence and strength in purposes.²³ A contrary point of that is, that working with herd animals

¹⁹ Parker, R. (2003) 2nd Edition. Equine Science.(p.492)

 $^{^{20}}$ Mills, D.S. et al (2010) The encyclopedia of Applied Animal Behaviour and Welfare (p.266)

 $^{^{21}}$ Mills, D.S. et al. (2010) The encyclopedia of Applied Animal Behaviour and Welfare (p.266)

²² Bowers, N.; Bowers, R.; Kaufman K. (2004) Mammals of North America (p.172)

 $^{^{23} \} http://www.coach-pferd.de/die-pferdeakademie/das-konzept/trainer-pferd.php$

like horses, can carry a risk. "[...] horses are more social than humans, because for them, the company of their own kind is perceived as an issue of life and death." (Becker, 2007) That means, if more than one horse is present in the riding arena – the scene where the training usually takes place – chances are high, that they build a small herd and show no interest at all for the participants who are trying to 'work' with them.

Lastly, horses communicate majorly on a non-verbal level, which is also what HAE is seeking for. Namely, to enhance a person's own perception of his body language apart from knowledge, titles or dress code (Neuse, 2011). People, as well as horses, have a broad variety of non-verbal signals and this kind of communication takes up about 80% of a person's overall communication, whilst verbal interactions only take up about 20%. This model, which in today's times is called "The Iceberg Model", was introduced for the first time by Sigmund Freud and was then extended by Ruch and Zimbardo. They state, that within this model the 20% of verbal communication also equal what a person knows about himself. The 80% on the other hand consist of a fraction that refers to the preconscious of a person, but at the same time a fraction that is the unconscious and is not known by a person self. Those parts are the ones, others might see as they are expressed in the non-verbal communication which that person itself might not even be aware of. This preconscious and unconscious part of a humans psyche equals the non-verbal behavior and thus might be seen by others or the horses rather than the person that is of concern.

Now that some of the reasons for using horses as coaches or co-trainers in leadership trainings were discussed, the welfare of the horses should now be the focus, as certain criteria are necessary for the horses to have a quality life and for HAE, to 'function properly'. Because without the horses, HAE would not work the way it does. Welfare aspects are always dependent on the specific horse and its history but as Dallas (2006) states, there are 'Five Freedoms', "that [...] are essential for quality of life" 25. Those Five Freedoms include: the freedom from hunger and thirst, the freedom to express normal behavior, the freedom from discomfort, the freedom from pain, injury and disease and the freedom from fear or distress. This in particular would mean (listed in the way the freedoms are), that horses firstly have sufficient and appropriate feeding and enough water. Furthermore, that they are allowed to express their behaviors in a herd. The third point refers to horses that have to be kept comfortably, which includes enough space, good bedding and an appropriate temperature. The fourth freedom speaks for itself and the fifth is related calm and regular surroundings of the horse. If those five freedoms can be met by every single contractor of HAE in Germany is hard to assess and if not, there is no real authority in Germany that would take care of that. But it should at least give the contractors a guideline of how to keep their co-workers or trainers in order for them to 'perform' during the seminars.

Resulting from the above literature review, the explanations on experiential learning with the enhancement of soft skills within HAE and the delimitation of HAE from traditional trainings, following hypothesis is set up:

The effectiveness of Horse Assisted Education cannot be proved scientifically.

Becker, M. et al. (2007) Why do horses sleep standing up?: 101 of the most perplexing questions answered about equine enigmas, medical mysteries & befuddling behaviors. (p.71)

²⁵ Dallas, S.E. (2006) 2nd Edition. Animal Biology and Care. (p.87)

4. Methods

4.1 Research Design

Deriving from the research questions, a qualitative study is set up that seeks to discover relationships between different publications on HAE in Germany and to summarize them. Resulting from that, further research impulses are supposed to be found, that scientists of HAE can concentrate on within the next five years to increase the respectability of this service.

This thesis ends with an examination of the hypothesis, set in chapter 3 of this research. It also searches for patterns within the scientific papers on HAE. In order to get the most out of the information provided, the literature is summarized in a scheme (see Annex 2)²⁶ that can be applied on all the analyzed scientific papers, which consist of seven diploma theses, five master theses, three bachelor theses, two published books, one article and three other reports out of the years 2001 until 2010.

In order to gain a broad understanding of the authors' intends, their experiences during the research phase and their associations regarding the future of HAE, semi-structured telephone interviews were held with the authors of seven scientific papers. Another two authors have answered the same questions via E-Mail, as both of them were really busy and not able to fit the telephone interviews in their schedules. With the help of the interviews, the researcher is trying to seek for differences and similarities between the statements made in the scientific papers and the answers given in the telephone interviews. Overall, nine interviews were used for the total evaluation, which is about half of the total amount of the collected scientific papers.

The interviewees were chosen upon the actuality of their scientific papers and on their level of research. To get a trustworthy 'sample' out of the whole spectrum of papers, the researcher paid big attention to interview authors of all different levels of research and of different actualities. Resulting, the interviews were held with people of two bachelor theses, three master theses, three diploma theses and one book out of the years 2001, 2006, 2008, 2009 and 2010.

As this thesis is written in behalf of DIE PFERDEAKADEMIE, a German institution for HAE, seven scientific papers from following authors were made available through this company: Beuschlein (2010), Ott (2010), Duric-Kripahle (2010), Reichardt (2010), Fricke (2009), Brandau (2008) and Constantin (2006). The reasons for the researcher to cooperate with particularly this company were the professional background of DIE PFERDEAKADEMIE, the fact that it is member of the first hour in the EAHAE and the open mindedness of the owner.

4.2 Data Collection

4.2.1 Scientific Papers

In order to get access to the scientific papers of the past ten years in which HAE has been researched, it was absolutely necessary for the researcher to get in touch with contractors of this service as most of those papers were written in behalf of either one of them under the umbrella organization EAHAE. Seventeen scientific papers could be collected through the companies G&K HorseDreams GmbH, DIE PFERDEAKADEMIE Training & Coaching and HorseSense Training & Coaching. The other 87 contractors of HAE in Germany are mainly sideline offerers, who do not gain their main income from trainings in HAE. Therefore, they also did not house scientists yet that worked on HAE in their behalf.

To make sure that no scientific paper is left out of this research, an internet search was also conducted, which did not result in more material of research on HAE. Next to that, the local library was also comprised and the researcher here aimed to find specific articles and papers on HAE in Germany. This way, another four scientific papers could be detected that were then interlended by the library from different universities in Germany.

 $^{^{26}}$ Annex 2: Original lay-out of the scheme used by the researcher to evaluate one scientific paper at the time.

In total, an amount of twenty one publications could be detected and following collected. Those consist of seven diploma theses, five master theses, three bachelor theses, three reports of own interest, two books and one published article and were written in the years 2001 until 2010. The authors are listed in the Resource section at the end of the research.

4.2.2 Interviews

The interviewees were chosen upon the actuality and level of their acts. Only minor changes were done to one of the E-Mail filled in questionnaires (see chapter 4.1), as the interviewee is by now a professional in this field, so the question about if she could imagine herself as a coach for HAE was dropped. During the interviews, the researcher purposely chose not to use a recording machine²⁷ during the telephone interviews, but parallel took notes in headwords. Furthermore, the interviewees were asked to not review their scientific papers beforehand in order to preserve spontaneity.

The interviews were held in German and on average had a timeframe of twenty minutes. In the later categorization of the answers, the researcher translated the contents of the German statements into English. One example of such a note sheet of the interviews is included in Annex 4.

Once the interviews were done, the researcher offered to accord the interviewees her findings. Furthermore, they will be named at the annual EAHAE conference, as far as they agreed.

4.3 Data Processing

4.3.1 Scientific Papers

After studying the scientific papers on HAE, summaries were written down by the researcher. Those were necessary to be able to high lighten every scientific paper and to then compare the individual acts with another. In order to do so, the relevant data is transcribed into a Microsoft Excel file²⁸ that consists of seven sheets, namely: general overview, aim of the research, outcomes, angles from which HAE has been researched, opportunities, constraints and further research impulses.

Within those Excel sheets, all relevant data gained from the scientific papers was inserted and then categorized, as "[...] all qualitative research involves categorizing [...]"(Morse & Richards, 2002)²⁹. After the first 'round' of categorizing, a second one followed to make sure, that no category exists twice in different formulations. Now it was counted, how many statements belong to each category. This way, the different categories could be ranked depending on the amount of statements and the most present category was determined. This procedure was done with six of the seven Excel sheets, excluding the general overviews as this was just a helping aid for the researcher to retain the overview. Furthermore, two graphs were developed within the Microsoft Excel file.

4.3.2 Interviews

The telephone interviews were evaluated and then categorized in the same Microsoft Excel file as the summaries of the scientific papers. The interviews however, are categorized separately from the summaries, even though they are kept in the same Microsoft Excel file. The reason for that is the aim of the researcher, to find parallels between the statements made during the interview and information within the papers of each interviewee.

Furthermore, the graphs of both data collections (scientific papers and interviews) were designed within Microsoft Excel.

See Annex 3 for explanation of the reasons.

²⁸ See Annex 5 for screenshots of the Microsoft Excel File. The complete data set is too complex to be printed, but can be looked at on the digital version.

Mores, J.M.; Richards, L. (2002) Readme first for a user's guide to qualitative methods. (p.131)

5. Results

5.1 Detailed description of the findings within the individual scientific papers

The first known research on HAE was done by B. Kolzarek (2001). Aim of her investigations was to develop a seminar based on the lay-out of an HAE seminar. Cooperating with two horse specialists and a communication professional, she succeeded in that plan and also affirmed that HAE is suitable to establish, improve and develop the learning process of leadership skills. Similar to this research is an analysis done by S.Gries (2004), who actually tested such a seminar in praxis for the first time and following published a book about her experiences and the competences someone needs in order to offer HAE.

C. Behr (2006, university assignment) analyzed, if offering HAE seminars would be cost effective for a breeding barn. She based her conclusion on a financial dissection and stated that for this particular breeding barn offering HAE seminars would bring financial and social advantages.

M.C. Jäger (2007) concentrated her diploma thesis on the issue whether or not HAE is suitable to be introduced to the assortment of employees in assessment centers. As an example for her study she chose the German contractor Horse Sense Training & Coaching that already cooperates with assessment centers in Germany. Her research was based on a comparison on 'traditional' assessment centers and the ones that are supported by HAE. Therefore she visited both faculties and interviewed the participants of either event beforehand and afterwards. With the help of that data she came to the conclusion, that horse training is a friendlier method of assessing a participant's ability than usual assessment centers.

Aim of the report of L. Gerken and F. Dueholm (2010) was, to develop quality criteria for the service HAE. Therefore, standardized questionnaires, filled in by 34 contractors of HAE, were used to refine the ideas of how to set standards and what kind of standards to set. Resulting from their research, three competencies were defined that are meant to assure the quality of HAE contractors. Those are horse related knowledge, leadership related knowledge and didactics.

K.C. Hiller (2010) developed in her qualitative diploma thesis a concept of extension studies for teachers. Thereby she was investigating, if horses can be included in those extension studies. With the help of an intensive literature analysis, she came up with a two-day seminar that she would like to have tested by other researchers, to approve its effectiveness.

A whole different approach was taken by M. Broich and J. Eppler (2009, diploma thesis). Those two researchers concentrated their study on the matter of Appreciative Inquiry (AI) and whether this concept is suitable to be combined with seminars of HAE. Even though, the combination of both has boundaries, the two researchers stated, that it makes sense to include HAE in the concept of AI, as they conclude that employees that take part in an HAE seminar are also more open minded to the AI process.

J. Duric-Kripahle (2010, master thesis), J. Berger (2008, bachelor thesis), K. Reichhardt (2010, diploma thesis), F. Riehl (2009, master thesis), A. Beuschlein (2010, bachelor thesis), M.O. Niemann (2005, Masterthesis) and R. Götz (2006, diploma thesis) dedicated their investigations to the behavioral changes and improvements that can be made with the help of HAE and therefore the effectiveness of this service. Duric-Kripahle used 64 already existing questionnaires that were filed at DIE PFERDEAKADEMIE and evaluated them. Berger on the other had 20 participants monitored by six external observers. Reichhardt asked five participants to fill in a questionnaire. Riehl observed the behavior of the participants of a two-day-training and interviewed them

afterwards. Resulting from that, she established six hypotheses. Beuschlein concluded in her bachelor thesis that the effectiveness of HAE can best be evaluated when interviewing third parties that are in daily contact with the participants. Niemann interviewed fourteen participants in three stages (before the seminar, directly after and 5 weeks after). Götz had eleven questionnaires filled in within her research phase and concluded, that good leadership also motivates a leader's employees. All in all, the seven researchers concluded that HAE does initiate an improvement in the non-verbal behavior of executives. Niemann in particular stated, that most improvements were made on a social and emotional level. N.C. Constantin (2006) concluded the same outcomes in her diploma thesis, but used a qualitative, theoretical approach. The same aim, but a different background has H. Ott (2010, master thesis) who evaluated the improvements in non-verbal communication from a cultural perspective. Ott came to the conclusion, that communication can only be authentic, if the non-verbal and the verbal part are congruent and that external feedback is therefore inevitably necessary. The horses in HAE seminars are suitable coaches due to their social and highly sensitive nature.

A more transfer based approach chose I. Brandau (2008) in her master thesis, N. Schüller in her bachelor thesis and L. Fricke (2009) in her final report. The three investigated how HAE transfers possible improvements of the non-verbal behavior into the job life. Brandau interviewed four former participants from different seminars. Schüller on the other hand had 43 questionnaires filled in by participants. Brandau, Schüller and Fricke concluded that with a proper after-coaching, a transfer is possible.

B. Binnewies (2003) aimed in her diploma thesis for an evaluation of the importance, development and control of team processes within HAE. Therefore she interviewed G. Krebs (G&K HorseDreams GmbH) and concluded, that team work gains of importance in today's job life and that HAE is able to enhance team spirit.

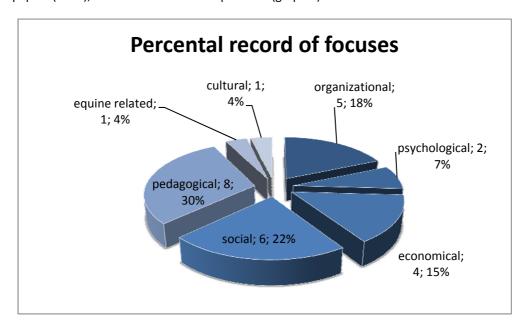
A published article written by S. Pfefferle in 2009, critically reviews the whole concept of HAE as such.

The 21 investigations were therefore written in the years: 2001, 2003, 2004, 2005, 2006 (three times), 2007, 2008 (two times), 2009 (four times) and 2010 (seven times). Within those years an increased tendency can be noticed, especially in the years 2008, 2009 and 2010.

5.2 Evaluation of the reports

5.2.1 Focuses from which HAE has been examined

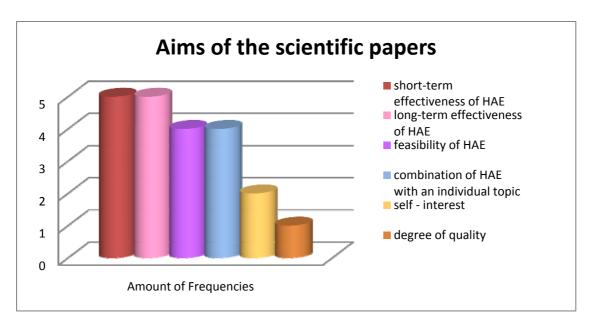
Seven focuses within the 21 scientific papers could be determined (see table 1 below) deriving from the topic of the research, the aim of the research and the field of study of each publication. In some cases, more than one approach was detected and therefore the number of frequencies (n=27) exceeds the total number of scientific papers (n=21), as it can be seen in the pie chart (graph 1) below.



Graph 1: The percental record of the different focuses within the scientific papers on HAE

5.2.2 Aims of the scientific papers

Six approaches were aimed for in the different scientific papers, which are listed in the following table. They are listed in the amount of which they occurred, starting with the most frequent to the less frequent from left to right.



Graph 2: The aims of the scientific papers ranked in the amount of frequencies they occurred

As it can be seen, the two most named aims are the short-term and the long-term effectiveness of HAE. Totally, ten scientific papers were dedicated to those matters, which is 48% of the total amount of investigations. With each four researches, the aims regarding the feasibility of HAE and the combination of HAE with an individual topic take up another 38%, whilst the self-interest and the degree of quality were only of little interest.

5.2.3 Outcomes of the scientific papers

The amount of outcomes (N=71) of the scientific papers varies again from the total number of papers (N=21), as several authors came to more than one conclusion.

No. of categories	Outcomes	Frequencies	Ranking	
1	successful transfer after the seminar	16	1	
2	horses are suitable for executive seminars	12	2	
3	improved soft skills	9	3	
4	unsuccessful transfer after the seminar	6	4	
5	success of the seminar also depends on participants	5	5	
6	theory is less memorable than exercises and feedback	4	6	
7	combining HAE with other concepts is feasible	4	6	
8	learning surrounding influences the process	4	6	
9	improved self-perception	3	7	
10	communication depends on many factors	3	7	
11	HAE coaches have to be `all-rounder'	2	8	
12	good leadership is vital	2	8	
13	transfer cannot be promised	1	9	
	TOTAL:	71		

Table 1: A ranking of the outcomes of the scientific papers

As it can be seen in table 1, the most frequent outcome of research on HAE was the successful transfer of the seminar. However, none of the scientific papers included a significant outcome.

5.2.4 Opportunities of research on HAE

Opportunities of research on HAE, that the researchers listed in their scientific papers were the overall openness of the contractors and the development of quality standards (n=1) and the novelty of HAE, which allowed the researcher to also use literature which was not specialized on HAE only (n=1).

5.2.5 Constraints of research on HAE

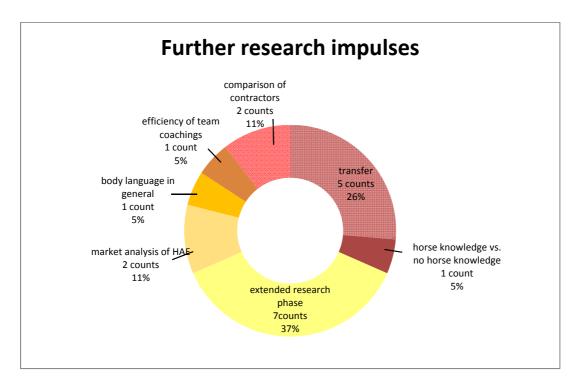
Constraints during the research phase that are listed within the scientific papers are ranked in table 2 and were allocated in nine categories.

No. of categories	Constraints of research on HAE	Frequencies	Ranking
1	limited data set	9	1
2	self limitations of the researcher	4	2
3	missing literature / scientific proof	3	3
4	falsification	2	4
5	lack of quality warranty in HAE	1	5
6	hindrance of contractors	1	5
7	observational limitations	1	5
8	reluctance of authors	1	5
9	flabbiness of the topic	1	5
	TOTAL:	23	

Table 2: A ranking of the contraints listed in the scentific papers

5.2.6 Further research impulses given within the scientific papers

Research impulses that were given within the scientific papers can be seen in Graph 3. Those are matters, the scientists came across during their studies and that left an interest in further investigations.



Graph 3: Further research impulses named within the scientific papers

5.3 Evaluation of the interviews

Belonging to this evaluation are the statements of nine interviewees, which were categorized within a file of Microsoft Excel.

5.3.1 Opportunities named in the interviews

Graph 4 visualizes the four opportunities of research on HAE that were named by the scientists during the interviews. The most frequent named opportunity was the openness of the contractors and their support during the research phases.



Graph 4: The opportunities named in the interviews ranked according to the frequency

5.3.2 Constraints named in the interviews

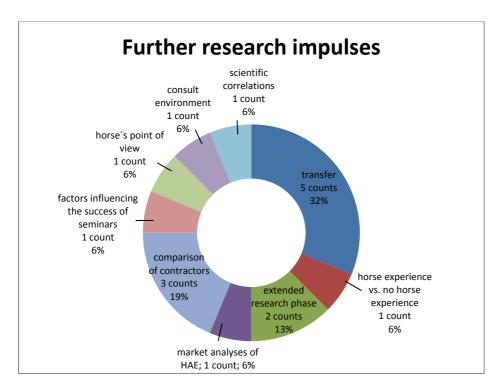
Resulting from the 20 statements of the researchers on constraints during the research phase, five categories could be determined that are ranked in Table 3. The most frequent named constraint was missing literature or missing scientific proof on HAE.

No. of categories	Constraints of research on HAE	Frequencies	Ranking
1	missing literature / scientific proof	8	1
2	organizational issues	7	2
3	self limitations of the researcher	3	3
4	limited data set	1	4
5	reluctance of interviewees	1	4
	TOTAL:	20	

Table 3: Ranking of the constraints named in the interviews

5.3.3 Further research impulses

During the scientists research on the different topics related to HAE, further research impulses evolved which the authors consider as worth another study. Those impulses are listed in the following graph (graph 5).



Graph 5: Further research impulses given in the interviews

5.3.4 Future perspectives of HAE

The closing question of the interviews was about what they think might be future perspectives for the service HAE. Table 4 illustrates the categorized answers, given during the interviews.

No. of categories	Future perspectives of HAE	Frequencies	Ranking
1	increased demand	5	1
2	increased number of contractors	3	2
3	no change	3	2
4	increased demand in soft skills	2	3
5	more professionalism	1	4
6	developed conception of contractors	1	4
	TOTAL:	15	

Table 4: Future perspectives of HAE named in the interviews

The most named future perspective was the increased demand on HAE. Three interviewees additionally forecasted an increased number of contractors. Contrary to that, another three interviewees forecasted no change at all but a constant remain of contractors and demand.

5.4 Comparison of the findings

As it can be seen in chapter 5.2 (p.19) and chapter 5.3 (p.22), three topics were covered once in each chapter. Those are opportunities, constraints and further research impulses of HAE. All three matters were first covered within the evaluation of the scientific papers and following in the evaluation of the interviews. Background of that is the try to find similarities, differences or both.

5.4.1 Comparison of the opportunities

Both data collections named the openness of the contractors as an opportunity. In the interviews, this argument was the most frequent with an amount of five listings out of the total ten listings, which means 50%. However, this argument was in the interview not mentioned by the same person as in the scientific papers, but by someone else. The novelty of HAE, which was stated in the paper as an opportunity cannot be relocated in the interviews. Instead, the cooperation of the participants, the large number of contractors and the dedication of the contractors to their career were seen as opportunities in the interviews.

5.4.2 Comparison of the constraints

When comparing the constraints that were mentioned in the scientific papers as well as interviews, three similar arguments can be found. The first one is the limited data set, which was mentioned nine times in the scientific papers and one time in the interviews. Secondly, the self limitations of the researcher were mentioned four times in the papers and three times in the interviews. The third constraint mentioned alike was the missing literature /scientific proof on HAE, which had three counts within the papers and eight in the interviews.

In order to find out, whether or not the same researchers have mentioned the same argument twice and therefore in their interviews remembered their statements made in their reports, following table is set up:

	Constraints:		
	Limited data set	Self limitations of the researcher	Missing literature / scientific proof
Mentioned in scientific paper of:	21, 4, 14, 4, 15, 1, 10, 18, 21	9, 19, 21, 14	18, 5, 19
Mentioned in interview by:	9	9, 10, 17	1, 1, 5, 6, 6, 10, 13, 21

Table 5: Comparison of the constraints named in both data collections

Every number in this table equates one of the twenty one researchers, who are renamed due to confidence matters. Some of the numbers occur more than once in a cell, which is an indication that they had more than one argument which fitted in this particular category.

As it can be seen in table 5 above, there was no analogy within the constraint of the limited data set. However, within the constraint of the self limitations there was one researcher that also stated in the interview what she had written in her scientific paper. Within the third constraint, namely the missing literature / scientific proof, there was again one analogy.

5.4.3 Comparison of the further research impulses

Within the comparison of the further research impulses that were stated in the reports as well as in the interviews, five similarities could be detected that are now to be taken under detailed consideration (table 6), in order to find out, if a statement was given twice by one researcher.

	Further research impulses:				
	Transfer	Extended research phase	Market analysis of HAE	Comparison of contractors	Horse experience vs. no horse experience
Mentioned in scientific paper of:	15, 4, 18, 19, 20	9, 18, 10, 1, 15, 5, 19	19, 19	15, 19	19
Mentioned in interview by:	1, 6, 9, 17, 21	13, 17	1	5, 13, 21	21

Table 6: Comparison of the further research impulses named in both data collections

Regarding the impulse of further researching the transfer of HAE, no statement was given twice by the same researcher. The same counts for the impulse of having an extended research phase. The categories that include a market analysis related to the demand of HAE and a comparison of different contractors also did not contain a statement mentioned twice by one researcher. And lastly, the impulse of investigating if there is a difference in horse experienced participants and non-experienced participants is also the same statement but mentioned by two different researchers. Concluding it can be said, that none of the similar research impulses were given twice by the same author of a scientific paper.

5.5 Other findings

The researcher also discovered, that there are two main approaches, the authors usually chose for their introduction. On the one hand a start-off point for their publications was the history of the horse and the similarities to humans. Both are creatures that like to be in company with others of primarily their own species, but are not averse to a different species in certain situations (Duric-Kripahle, 2010). The second approach that was often used as an introduction is the fact, that the economy changes and executives in these days not only need skills and knowledge in order to be a successful leader, but also certain soft skills, which are determined by their personality (Brandau, 2008).

Furthermore, fifteen of the publications were qualitative which equates 71,4%, whereby six publications were quantitative, which equates 28,6%.

6. Discussion

This study aimed for an all-embracing summary of the existing literature on HAE and the detection of gaps in the scientific approaches which can be filled by further researches in order to completely proof the effectiveness and professionalism of HAE in Germany. As there has not been a summary like this before on HAE, this study can unfortunately not be compared to other all embracing evaluations. Nevertheless, many facts of interest could be determined and will now be discussed.

First thing that was of importance for this study is the tendency of which research on HAE has evolved over the years. When looking at the dates of the scientific papers named at the bottom of chapter 5.1, a gradually increasing tendency can be observed, especially in the last three years. This could be an indication of the increased interest in HAE and further, the growing importance of experiential learning thus soft skills within the different careers.

The definition of HAE, given in chapter 1, was to be brought back into memory. Krebs (2011) stated, that HAE is a service that "[...] suits those seeking to enhance their current practice with programs that emphasize conscious awareness and impact behavior change". Even though, the three leading contractors of HAE in Germany offer this service especially for executives and people in leading position, it still seems to be a service that concentrates on social interactions. When now comparing the first findings of this study (graph 1) with this assumption, it is conspicuous, that the two most frequent focuses from which HAE has been examined in the scientific papers, are the pedagogical (30%) and the social (22%) focus. As in leading positions within a career majorly 'numbers' and rates of success seem to count, the question arises whether or not, executives see the need of 'socially' development. Riehl (2009) stated in her master thesis that the ability 'to lead' is especially dependent on the ability of an executive to be organized, helpful, understanding and motivating. ³⁰Those are soft skills and underline the need of executives to not only exhibit theoretical knowledge on the content, but also to have soft skills, which then is a pro-argument for HAE targeting executives. The other focuses from which HAE has been examined though, speak for the increasing distribution of HAE even in areas they are not primarily involved with, such as the cultural focus.

Regarding the second inquest about the aims of the scientific papers (graph 2) it is once more demonstrated, that a lot of effort is put into the try of demonstrating and comprehending the effectiveness of HAE. And even though the most frequent outcome (table 1) of the investigations done was the 'successful transfer after the seminar' with a frequency of sixteen mentioning's, are most of the evaluations (71,4%) qualitative and could not definitely and significantly proof this matter. Furthermore, the constraints (table 2; table 3) in both – scientific papers and interviews – state, that it was the missing literature and scientific proof of HAE that scored third and first and therefore was a big limitation on the studies that have been done on HAE. When now also looking at the discovery of only 21 scientific papers in Germany by the researcher of this thesis and following observing the total of 90 contractors of HAE in Germany (chapter 3), the amount of scientific proof seems rather small. To phrase that in percentages, only 0,23 scientific papers can be distributed on one contractor. The 'degree of quality' within the trainings was only evaluated once by Gerken & Frithjof (2010)³¹, which is surprising, because chances are high that the effectiveness of a seminar (which had been evaluated in 48% of the cases) is closely related to the degree of quality within the seminar. If the quality of a contractor is bad, the

.

Riehl, F. (2009) Pferde als Medium für die Persönlichkeits- und Führungskräfteentwicklung – Unmittelbare Auswirkungen eines pferdegestützten Trainings auf die Teilnehmer am Beispiel der G&K Horsedream GmbH. (p.20)

³¹ Gerken, L.; Frithjof D. (2010) Nachhaltig lernen mit Pferden - Entwicklung von Qualitätskriterien und Standards von pferdegestützten Trainingskonzepten und Fortbildungen.

surroundings untended or the horses poorly cared for, it is likely that the effectiveness of the seminar is influenced negatively as well.

Apart from the outcome 'successful transfer after the seminar', which has been debated about in the above paragraph, it can be recorded, that another often mentioned outcome was the fact, that 'horses are suitable for executive seminars'. That supports the thoughts from the literature review (chapter 3) about how experiential learning is dependent on three components, from which only two can be influenced by the 'human coach' but where the horses are the activators of all three components and therefore are the active part that influence the learning experience of the participants. Furthermore, with this outcome of the study the earlier concerns whether or not horses should be used after all, could also be eliminated. However, the argument that 'horses are suitable for executive seminars' was mentioned 12 times (table 1), but was by none of the researchers scientifically proven. Instead, the fact that 'horses are suitable for executive seminars' was based on conclusions drawn from the literature (Ott, 2010) or an outcome of questionnaires filled in by participants (Götz, 2006). The reason why the researcher of this study kept apart the 'successful transfer after the seminar' and 'improved soft skills' as two individual categories is that the transfer rather relates to improvements made within the job in a complex manner under inclusion of influencing factors. Those factors could be related to team work, perception and acceptance of feedback but especially parallels, which are drawn between the faced situations within the seminar and the daily job routine. The soft skills on the other hand are meant to rather refer to the individual and personal improvements a person made without taking into account other factors except for only the own ability.

The next matter that was high lightened in the results, were the opportunities that were named within the papers (chapter 5.2.4). Only a total of two opportunities could be found within the 21 papers, which might be reasoned with the argument that this matter belongs more or less to the researchers' opinions and therefore does not necessarily fit into such a scientific paper. One of the two opportunities that were mentioned was the 'novelty of HAE', which can in a different manner also be interpreted as a constraint. Namely, the already mentioned missing literature and scientific proof in table 2, which is a direct progression of the novelty of HAE was ranked third within the total constraint of the scientific papers. In order to clarify for sure, that this statement is still up-to-date, it has to be said that this opportunity was mentioned in a report of 2010. However, the word 'novelty' is a matter of own interpretation.

Constraints, the researchers faced during their investigations on HAE were listed in the second table of the results. On top of everything was the limited data set with a frequency of nine counts. This was partly due to the reasons that the seminar was too short for a proper transfer (Schüller, 2010), not all questionnaires were filled in (Niemann, 2005) or the interviewees did not cooperate as wanted (Broich & Eppler, 2009). Very interesting is also the fact, that 'self-limitations of the researcher' were seen as such a big constraint, that they placed second. Examples for such constraints were the too complicated design of the questionnaires (Berger, 2008) or the literature review was not done in depth enough (Hiller, 2010). Questionable about the named constraints is, why the lack of quality warranty was only named once in all the 21 papers. As said before, there is a big tendency that the quality of the service is related to the effectiveness, therefore the lack of quality warranty should be of bigger concern to the rest of the researchers. However, this could also be a positive indication, meaning that the other 20 researchers simply did not experience this lack of quality warranty.

When looking at the further research impulses given within the scientific papers (graph 3), investigations with an extended research phase were ranked first with a distribution of 37%. Ranked seconded was the transfer issue (26%), which is closely related to an extended research phase. Because the more time and data, the better the transfer can be investigated.

After discussing the results related to the scientific papers, the nine telephone interviews were evaluated as well and then compared with the findings of the scientific papers. This comparison contained three topics, namely the opportunities, the constraints and the further research impulses. The aim of this comparison was to identify, where the focuses of both laid and is some of the interviewees repeated facts, that they had already mentioned in their papers before.

Within the opportunities, only one argument could be found which was not only named within a scientific paper, but also in an interview. This argument was the openness of the contractors and their support during the research phase. As this argument was in the interviews mentioned by someone else than the one who mentioned it within the scientific paper, conclusions regarding the importance of that argument cannot be drawn. It is more likely, that the repetition of this argument happened rather accidental.

Contrary to the comparison of the opportunities, three similar constraints could be detected in both data collections – the scientific papers and the interviews (table 5). Within two of the constraints it could even be detected, that they were named twice by the same person. That would mean, that these two researchers either have a very good memory, because they were of the years 2006 and 2008, or that this constraint was a real issue within their research and they would have liked to eliminate it. The first constraint named twice was the self limitation of the researcher. The second constraint named twice was the missing literature and scientific proof.

Lastly, the further research impulses given in both data collections were compared (table 6) and five similarities could be found. However, none of those five similar research impulses was mentioned twice by the same researcher. This fact could be substantiated by the conclusion, that people involved in the topic HAE still have many ideas of how to better proof the effectiveness of HAE and therefore have so many ideas for future research projects. Here it was surprising for the researcher that only one interviewee mentioned the 'observation of the environment' as a further research impulse and that it was not mentioned at all in the scientific papers, because as said in the introduction does HAE enhance a person's self-perception and the image of how others see us (Neuse, 2011) ³². Especially because of Neuse's statement and the resulting importance of feedback by others it is incomprehensible that only one researcher out of 21 mentioned this research impulse. Another impulse, which was only mentioned once in an interview is the observation of a seminar from the horse's point of view, meaning how does their heart rate or respiration change during trainings and to what extend are horses able to learn patterns. This concern of developed routines does relate to the argumentation in chapter 3, where the use of horses was reasoned with its herd instinct, flight behavior and the way of communicating.

A topic that was of special interest for this study was the already discussed research impulses. However, another relevant input for the forecast of the future of HAE could be gained from the interviews. Namely a question about what the researchers think of the future perspectives of HAE (table 5). The most frequent answer on that question was that the demand of HAE will increase within the next five years. This statement encourages the vision of the umbrella organization EAHAE, which was named at the beginning of chapter 3 and is "to establish and develop HAE as a general form of personal and professional development in (not only European) enterprises, organizations, institutions, societies, and for personal purposes" (Krebs, 2011).

What was also of conspicuity is the fact, that more opportunities of research on HAE were named in the interviews than in the publications. And the other way around, why there were named more constraints in the publications than in the interviews. The reason therefore could be that in the moment of researching and publishing an act, the negative things – therefore the constraints – are often more present than the positive

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³² http://www.die-pferdeakademie.de/die-pferdeakademie/das-konzept/trainer-pferd.php

things. It is imaginable, that people who publish acts want to do this as good as possible and are disappointed when things do not go the way they intended them to go. Resulting, those limitations rather stay in mind. When thinking about a project or experience that was made way back in time on the other hand, the more positive things stay in mind – therefore the opportunities. As most of the taken interviews were held with authors that had published their acts a year or longer ago, it is very likely, that the positive memories therefore stayed in mind better than the constraints.

6.1 Confirmation of the hypothesis and the resulting advice

With the evaluation of the results and the discussed findings, the in the literature review (chapter 3) compiled hypothesis can be confirmed. Even though the most common outcome of the researches was the effectiveness of the seminars, none of the papers could scientifically or significantly state that. Therefore the issue of developing scientific parameters for the measurement of the effectiveness persists and can be named as a recommendation for contractors of HAE, who might want to think about scientifically proving the effectiveness. However, contractors could also decide to not do so, as HAE was defined before as a branch of experiential learning and concentrates on the enhancement of soft skills rather than the concrete measurement of improvements.

Furthermore, the researcher of this study, advices future researchers to evaluate the quality of the different contractors, as this is closely related to the transfer and effectiveness of HAE.

7. Conclusion

The above research shows, that HAE has been research in the past ten years with an increasing tendency within especially the last three years. By now, there are a total of 21 known-of scientific papers which were written in from seven different focuses. The evaluation of further research impulses however, indicates that there is still a long way to go and that research ideas do not decline.

The biggest opportunity researchers faced during their investigations on HAE was the openness of the contractors of HAE and their support. The in the scientific papers mostly listed constraint was the limited data set of the studies and the biggest constraint named by the interviewees was missing literature to support the literary parts of the studies.

Regarding the different aims the authors wanted to achieve, it was conspicuous and also surprising for the researcher of this thesis that about half of the scientific papers were written on the short- and long term effectiveness of HAE, whilst the quality of this service was only once in the center of attention. Another relevant finding of this thesis was that a successful transfer of the seminar was the most frequent outcome, closely followed by the fact, that horses are definitely suitable as coaches or co-trainer for executive seminars.

Furthermore, about three fourth (3/4) of the total scientific papers were of qualitative nature, whereby only one fourth (1/4) was quantitative. Advisable here is to introduce more scientific parameters to this service and consequently allow researchers a more concrete analysis of HAE and its options of transfer, as this was one of the most present research impulses given by the researchers, next to a more extended research phase for which the same advice can be applied.

The by the researcher of this thesis formulated hypothesis could be proved and advice was given in the discussion (chapter 6).

To come full circle, the aim of HAE is to improve an executive's perception of his self-image and the way others see us. But it also seeks for a revelation of the inner mindset, unconscious behavior patterns and an honest confession of who you are and what your leadership style is. The horses might have been able to detect and bring those things forward, which for executives can be a great start of an authentic and effectual career.

8. Resources

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Annex 1: How does an executive seminar with horses at DIE PFERDEAKADEMIE look like?

To begin with, there usually are two different kinds of executive seminars in HAE. The following explanations of different exercises however, refer to the routines at DIE PFERDEAKADEMIE.

The first type summarizes all company-internal coachings that can be booked by only one company. Those seminars often consist of a large number of participants, as most of the companies that book HAE have more than one office and consequently have many employees. Those seminars are mostly concentrated on only one particular issue that all participants work on. Another possibility is also, that the company plans to expand or change basic structures, which can also be worked on in HAE. A third option for those internal seminars is for chief executives to find out what kind of leadership qualities their executives or employees have. Regulated by the number of participants in a company-internal coaching, the fees diversify. In a group larger than six people, a second or third human coach has to be added to make the seminar valuable for everyone.

The second type of seminars is the so called open seminar, which is meant for single executives that want to achieve things on their own, for self-employed people with only a little or no amount of employees or for managers that want to 'test' the quality of the seminar first, before sending the entire staff. Open coaching sessions often consist of only a few participants (the maximum is six people) to preserve privacy, make them feel more comfortable in a little group as they do not know each other very well and also because the investment for this seminar is made by those persons themselves instead of a company paying the fee.

Depending on the needs, wishes and 'hot topics' of the participants, the set up of a seminar differs and the exercises with the horses vary. While in a company-internal seminar group exercises will be the major focus to strengthen the team spirit, single exercises will take up the majority of time in open seminars.

As open executive seminars are more common, the key-points of a typical two-day open coaching are in the following roughly highlighted. Within those two days, six practical exercises with the horses are scheduled.

The first one is called "Watch and Judge" and is about watching the horses as they enter the arena and begin to play. The participants hereby fill out a short questionnaire about what they see.

Explanation: This exercise is a tool for the coach to get a better insight in how the different participants watch and judge and how much of an interpretation they do while looking at the 'team' of horses.

The second exercise is called "Meet and Greet" in which the participants as a group enter the arena and get to touch the horses the first time.

Explanation: This exercise gives a first insight in the participants' different approaches when being 'thrown' in new situations.

The third challenge that has to be managed with the horses is called "Handel Complexity". In this situation, only one participant enters the riding arena and gets handed over hoops, which he has to divide between the horses. The other participants take notes.

Explanation: The horses at this juncture symbolize the co-workers or employees of the executive (the participant) and the hoops symbolize tasks, the executive is required to hand out to his employees.

The fourth practice is about "Leading and Following". That means that the participants master several constellations – leading one horse from the front, from the hind, without any lead rope at all and leading two horses at the same time.

Explanation: The aim of "Leading and Following" for the participant, who is an executive, is to experience very directly, what leadership from the front on the one hand and leadership from behind on the other hand, feels

like. This enables a manager, who for example has never guided from behind, to decide whether that works for him or not.

Fifth, the participants get the chance to see how much "Respect and Trust" others have when being instructed by them. Therefore, the horse of the participant's choice has to be directed through the arena with only a flag as a supporting tool. After that, the horse has to follow the executive without a lead rope.

Explanation: The goal of this exercise is for the participants to find out how much pressure is necessary and reasonable to get the horse (or comparably the employee or co-worker) to do what the executive wants him to do without destroying any trust-based relationship.

The sixth and always last exercise with the horses is called "The Path and the Goal". The participants here have to maneuver their chosen horse through a complex course and choose the path they want to go in order to reach the desired goal.

Explanation: This last exercise is meant to encourage the participants to set themselves goals that in reality can be reached and to try out several paths to get where they want to be.

Every single exercise is orally evaluated, once the participants have completed them. This reflection round is of big importance to the participants. Even though they already got immediate and honest 'feedback' from the horses, some participants have difficulties to draw parallels between the just made experience and the normal job life. Therefore, Verena Neuse 'translates' the behavior of the horses where needed but pays particular attention to not overwhelm the participants with too much of a horse view, as this is not the main focus.

After the participants have gotten the opportunity to answer questions about the horses' behavior, it is now their turn to explain how they felt during the exercise. In return, the other participants now get their turn to ask questions and in a way 'interview' the participants that just completed the exercise and therefore gain important experience material themselves.

The last stage of reflection is the video analysis. During the whole seminar, a video camera records the participants within the exercises and their communication within the group. At the end of the day, this video material is watched in the seminar room with all participants and helps them to monitor their own behavior and communication during the day. This method often reveals a lot of unexpected moments of truth, as seeing yourself from a bird's perspective can be different to having been in the same situation before.

Annex 2: The original lay-out of the scheme used to summarize the findings of the individual scientific papers

Name:	Sort of scientific paper:
Year of publication:	Client:
Focus from which the research has been examined:	
1) Aim of the research	
2) Research Method	
Literature review:	
Practical Part:	
3) Outcome of the research (opportunities and cons	straints)
Literature review:	
Practical Part:	
4) Weaknesses vs. Opportunities that have been fac	ed during research phase
Weakness	Opportunity
5) <u>Conclusion:</u>	
6) Opinion based conclusion:	

7) Further research impulses:

Annex 3: Reasons for not using a recording machine during the telephone interviews

Firstly, recording an interview automatically influences the atmosphere during the conversation and aim of those telephone interviews is to get an honest opinion, which is not well thought through but spontaneously.

Secondly, it is not absolutely necessary as the pretest has shown, that the researcher is able to take notes with ease while interviewing.

Thirdly, using gadgets always carries a risk of technical failures and the researcher did not want to take that

Fourth, the importance of the conversation lies within the context and not the exact formulation of the interviewee.

Fifth, the interviewee may casually say things in common and informal language that are not meant for the transcript. If the researcher then writes down the exact formulation which is not meant for the paper, the interviewee could regret having done the interview at all.

Sixth and most importantly, recording a conversation may create the feeling of a 'police questioning' and puts interviewee and researcher on two different levels – namely the one that has control and the other one who has to 'watch' his words. However, as this interview is supposed to be comfortable and pleasant for both sides, a recording machine is not used.

Annex 4: Example of a note sheet used for the telephone interviews

Einleitung:

- HAE = Kurzform, welche ich für dieses Interview verwenden werde
- Studentin → Bachelorarbeit
- Habe es mir zur Aufgabe gemacht herauszufinden, wo genau weitere Nachforschungen von Nöten sind, um Skeptiker von HAE zu überzeugen
- Per E-Mail die Ergebnisse schicken, Veröffentlichungen bei EAHAE

In general:	Allgemein:	Answer / Antwort:
How came, you chose HAE for your research?	Wie bist du auf das Thema gekommen?	durch Zufall, im Internet
Did you know about HAE, before you were doing your research on it?	Hattest du vor deinen Nachforschungen zu HAE schon einmal von dieser Dienstleistung gehört?	Nein
What kind of positive experiences did you make during your research on HAE?	Auf welche positiven "Überraschungen", unerwarteten Situationen bist du gestoßen?	Wie gut das tatsächlich funktioniert, die trainings
What were problems or trouble you faced during your research on HAE?	Was gab es für Probleme oder Schwierigkeiten während deiner Nachforschungen? → Ganz allgemein	Das Thema einzugrenzen, ohne dass es den Rahmen sprengt
Did you have a certain moment when you thought that your research is going in another direction than first intended?	Gab es während deiner Recherchen einen Moment, an dem du das Gefühl hattest, dass du eine ganz andere Richtung eingeschlagen hast, als zuerst geplant?	Nein, Theorieteil von vorne herein klar
Does HAE in your opinion make sense?	Findest du HAE eine sinnvolle Dienstleistung?	Ja
If you were able to, what would you change or add to the offers within HAE?	Wenn du könntest, was würdest du am Angebot von HAE ändern oder hinzufügen?	Echtes business, keine esotherik oder pferdethemen, zielgruppen von Verena gut aber könnten mehr sein
Would being an HAE coach an option for you? Why/why	Käme es für dich in Frage, deine Dienste als HAE Coach	Ja, Thema ist interessant, wenn möglichkeiten vorhanden

not?	anzubieten? Warum?	
Which future perspectives do you see in HAE within the next 5 years?	Was für Zukunftsperspektiven siehst du in HAE in den nächsten 5 Jahren?	Wenn mehrere wie Verena, dann Steigerung, soft skills immer mehr gefragt
What should be further researched on HAE in your opinion?	Was sollte man deiner Meinung nach im Bereich HAE noch einmal genauer unter die Lupe nehmen?	Wirksamkeit testen, quantitative Recherche mit möglichst vielen Teilnehmern, Angebote noch zu unterschiedlich
How was your research assessed? Were you satisfied with the mark?	Wurde die Arbeit zu deiner Zufriedenheit bewertet?	"Jein", Note 2
If you would have to do the same research again, what would be things that you would do differently?	Wenn du die gleiche Nachforschung jetzt noch einmal machen müsstest, was würdest du anders machen?	Nichts gravierendes, nochmal genauso

Annex 5: Screenshots examples of the Microsoft Excel File

	А	В	С	D	Е	F	G	Н
1			Cat	egor	ies:			
2	Author No.	Aim of the Research explained	self - interest	short-term effectiveness of HAE	feasibility of HAE	combination of HAE with an individual topic	long-term effectiveness of HAE	degree of quality
17	13	to explain the correlation between HAE and an improvement of leadership skills		٧				
18	15	to investigate the short term effectiveness of HAE		V				
19	16	to investigate, how HAE can improve the nonverbal communication		٧				
20	17	to investigate the possibilities and boundaries of HAE		٧				
21	3	made up a seminar herself and tried it for the first time, purely descriptive	٧					
22	12	to document the experiences made during the seminar "Trainer for HAE"	٧					
23	20	to develop quality criteria for HAE						V
24		TOTAL	2	5	4	4	5	1
25		RANKING	3	1	2	2	1	4
26 ⋈ ◀	-	General Overview Aim of the research Outcome Focuses of the researches	Opport	tunitie	es 🔏	Cor	nstrai	nts

egory No.	Cate 1	egori 2		4	5	6	7	8	9	10	11	12	13
egory No.	1	2	3	4	5	6	7	8	9	10	11	12	13
Outcome Statements:	improved self-perception	horses are suitable for executive seminars	unsuccessful transfer after the seminar	successful transfer after the seminar	good leadership is vital	theory is less memorable than exercises and feedback	improved soft skills	combining HAE with other concepts is feasible	success of the seminar also depends on participants	learning surrounding influences the process	communication depends on many factors	transfer cannot be promised	HAE coaches have to be "all-rounder"
icipants learned how to better evaluate the own behaviour patters	٧											- 50.	
horse was definately sees as a very good mirror		٧											
discussions and feedback sessions were a big help			٧										
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