Diplomarbeit

How to dress as a pediatrician
Machen Kleider Leute?

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Graz, Datum …….. (Unterschrift)

Eidesstattliche Erklärung

Ich erkläre ehrenwörtlich, dass ich die vorliegende Arbeit selbstständig und ohne fremde Hilfe verfasst habe, andere als die angegebenen Quellen nicht verwende habe und die den benutzten Quellen wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht habe.

Graz, am …… Unterschrift

Foreword

I decided on writing a thesis in Leoben at the end of 2008, after working at the pediatric ward for a month. I thought about different topics to write about, interesting patient cases I had seen in the last couple of weeks, but then Prof.Kerbl suggested a few topics and I couldn‘t get this one out of my mind. I always thought that the way we dress is important to our patients. The white coat syndrome is something I have heard about and I have to admit I prefer to go to doctors with a more casual way of clothing, so I thought I have to find out in what way parents and their children think about this. When I started thinking about the outfits I wanted to try out I really wanted a big difference between the three of them. I wanted to make sure they we‘re not the most common ways Pediatricians dress anyway.

So I started thinking about different styles I could put on my test person and ended up with three very different ways for a Pediatrician to dress. There are not many opportunities in life when you are allowed to tell your boss what to put on for work, one of the doctors told me. I decided that he was right and so I ended up getting all started for this topic. I love working with children, which I had not realized before because I never really had little children in my surroundings. But the whole team in Leoben integrated me so well and I really enjoyed being part of this team.

Acknowledgement

At this point I really want to thank the whole team on the 4th and 5th floor at the LKH Leoben, Dr. Judmaier, Dr. Grassmugg and Dr. Spiess for making my work very easy and fun and especially Prof. Kerbl, for having no problem dressing up in different outfits, wearing every single one as if it would be his favourite and for being a very good advisor.

I never thought about studying Medicine because I have a family background in Economics so up until two months before I started studying I thought about doing Business Studies. I changed my mind from one day to the other, so it was quite surprising for everyone in my family. But nobody found a negative point or even tried to convince me to get that idea out of my mind. I am really thankful that my family always made me feel like I could become anything I wanted and I haven‘t regretted my decision to break ranks at any point of my studies.

Special thanks to my boyfriend Mag. Georg Jillich who had to bear with all my ups and downs during this thesis and always knew what to say when I was close to losing my nerves.

I would also like to mention my best friend Mag. Maria Fiausch, who was always a good listener and who helped me with all her good advices on how to write a thesis.

Zusammenfassung

Kleidung beeinflusst die Wahrnehmung von Menschen im täglichen Leben und betrifft auch die Arzt- Patienten- Eltern Beziehung.
Das Ziel dieser Studie war herauszufinden, ob die Kleidung des Kinderarztes Einfluss auf die Wahrnehmung von Kindern und Eltern auf einer Kinderstation hat. Untersucht wurde unter anderem, ob bunte Kleidung einen Kinderarzt sympathischer für die Kinder macht und ob Eltern einem leger gekleideten Arzt dasselbe Vertrauen schenken.
Drei Kleidungsstile wurden ausgewählt (förmlich, halbförmlich, informell) und ein Arzt stellte sich als Testperson zur Verfügung. Es wurden zwei verschiedene Fragebögen ausgearbeitet, einer für Eltern und einer für Kinder zwischen 6 und 18. Weiters wurde ein Beobachtungsbogen für Kinder unter 6 Jahren erstellt. Die Datenerhebung fand in den Monaten Mai und September 2009 im LKH Leoben statt. Die Befragung erfolgte im Anschluss an die Visite, wo der Arzt eines der drei Outfits trug. Insgesamt wurden 179 Personen (48 Kinder unter 6 Jahren, 59 Kinder zwischen 6 und 18 Jahren und 72 Eltern) befragt. Bei den Eltern wurde das informelle Outfit in allen drei Gruppen als bevorzugtes ausgesucht (70,83% in der „halbförmlichen“, 53,85% in der „förmlichen“ und 95,45% in der „informellen“ Gruppe). Bei der direkten Frage nach der getragenen Kleidung wählten die Eltern in der „informellen“ bzw. „halbförmlichen“ Gruppe in 95,45 % und 58,3% die Höchstnote, aber nur 30,77% in der „förmlichen“ Gruppe. In allen drei Gruppen meinten die Eltern, dass Kinderärzte bunte Kleidung tragen sollten (75% in der „halbförmlichen“, 80,77% in der „förmlichen“ und 100% in der „informellen“ Gruppe). In der „informellen“ Gruppe wählten 95,45% der Befragten höchstes Vertrauen (im Vergleich zu 84,6% in der „förmlichen“ Gruppe). Bei den 6 bis 18-jährigen wählten 100% der Kinder die das „informelle“ Outfit gesehen hatten die beste Note für dieses Outfit aus (11,76% in der „halbförmlichen“ und 41,17% in der „förmlichen“). Das „informelle“ Outfit wurde in der „halbförmlichen“ Gruppe in 52,9% als bestes Outfit gewählt, in der „förmlichen“ Gruppe in 41,17% und in der „informellen“ Gruppe in 85,7%. Die Mehrheit der Kinder unter 6 Jahren zeigten in der „halbförmlichen“ Gruppe das „bravste“ Verhalten (68,75% im Vergleich zu 41,66% in der „förmlichen“ und 41,6% in der „informellen“ Gruppe.

Abstract

Clothes have an influence on the perception of people in daily life and also affect the patient- doctor- parent relationship.

The aim of this study was to find out whether the clothes of a pediatrician have an influence on the perception by parents and children at a pediatric ward. The research included whether colourful clothes make a pediatrician more sympathetic to the children and whether parents still have trust and confidence in a casually dressed doctor.

Three different outfits were chosen (formal, semiformal and casual) and one doctor was chosen as test person. In order to answer the above mentioned questions, two sets of questionnaires were developed. A separate set of questions was used for children aged 6 to 18 and for the parents. For children under the age of 6, an observation sheet was prepared.

The empirical data analysis took place at the regional hospital of Leoben during the months May and September 2009. The questioning was annexed to the ward round in one of the three outfits.

Altogether, 179 people were either questioned or observed (48 children under the age of six, 59 children aged 6 to 18 and 72 parents). 95,45% of the parents in the „casual“ outfit group, 58,3% in the „semiformal“ group and 30,77% in the „formal“ outfit group chose the highest mark for the seen outfit. In all three groups the majority of parents said that colourful outfits should be chosen in the pediatric setting (75% in the group shown the „semiformal“, 80,77% of parents that saw the „formal“ and 100% of the parents that saw the „casual“ outfit). In the „casual“ group 95,45% chose the highest amount of trust (compared to 84,6% in the „formal“ group). For the children aged 6 to 18 years, 100% of the children that had seen the „casual“ outfit chose the best mark for this outfit. This only happened for 11,76% of children shown the „semiformal“ outfit and 41,17% shown the „formal“ outfit. The preferred outfit in the three groups was the „casual“ one in 52,9% of the cases in the „semiformal, 41,17% of the cases in the „formal“ and 85,7% in the „casual“ group. For the children under the age of 6 years, the majority of children in the „semiformal“ outfit group tolerated the examination „willingly“ (68,75% compared to 41,66% in the „formal“ and 41,6% in the „casual“ group).

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Introduction

The white coat of a doctor is anchored in modern medicine in terms of hygiene and possibly as a borderline between the doctor and the patient. But medicine is always subject to changes and the model of the doctor as being a half-god in white has changed to a more interactive doctor- patient relationship. The most important result of this relationship should be trust and confidence of patients in their doctors since without trust there is also little compliance. And without compliance, we cannot guarantee the best treatment for our patients. So our main objective should be gaining trust and confidence in order to assure a best possible doctor- patient relationship. I think the way people approach a doctor has a lot to do with experiences they had in their childhood. When examining a child, the parents‘ fear and anxiety often conveys to the children because they feel that something horrible must be happening. This is why I think that one of the most special relationships is the one between pediatricians, their patients and the parents. I think it is very important to be able to achieve the trust of all the parties, in order to have a sufficient interaction in this special setting.

So in my investigations I wanted to find out whether different attitudes of pediatricians change the way parents and children feel about their doctor. Does it make a difference for children or parents if their doctor dresses more suitable for children? Does he look more trustworthy for parents if he wears a white coat, shirt and tie? Or is it better to stay somewhere in between formal and informal? What is the favorite outfit chosen by children and parents? Do children always choose the informal option? Can we make a difference for the way patients think about us just by changing our outfits? Are they less scared and more cooperative if we don‘t wear a white coat? There is not much literature about doctors‘ attire, especially not in the pediatric setting. It was therefore intention of my study to answer the above mentioned question by own investigations.

1. The pediatric patient

1.1. Development of Pediatrics in the German- speaking region

The development of German-speaking Pediatrics is based on the so-called „School of Vienna“ of the early 19th century. The third European hospital (after St. Petersburg and Paris) was founded in 1837 in Vienna and the St. Anna Children‘s hospital, the first University hospital in the German-speaking region, was established in 1849. In Germany, a mortality rate of over 30% of live births concerned politicians and they decided to appoint Otto Heubner to take the first chair of pediatrics. At that time Pediatrics became a separate medical discipline. The scientific bloom started with the fight against infectious diseases and malnutrition. Names such as Mauthner, Piquet, Czerny, Finkelstein, Moro and von Pfaundler remind of the founding of the fundamentals of curative and preventive Pediatrics and knowledge about the physiology of nutrition, vaccinations, rickets, rhesus factor incompatibility etc. With the downfall of Pediatrics in the National Socialism, only Switzerland was able to continue the German-speaking pediatric tradition in order to maintain the international level. With the help of the Swiss colleagues, German and Austrian doctors were able to compete with international pediatricians. While developing countries still struggled with infectious diseases and malnourishment, European pediatrics became more and more specialized. Rare and often prenatally determined developmental disorders became a main focus of attention and high end technology found its way into medicine. The computer appeared in hospitals, and the number of well known diseases increased with every year. Progress especially in intensive care and pre- and perinatal medicine made it possible for very small premature babies to have a good chance of survival. Furthermore, the attendance and treatment of disabled children and chronically ill patients became a new spectrum in Pediatrics. Because of the growth of Pediatrics, specialisation became a natural step and Pediatrics without specialisation has become unimaginable. The strict distinction between in- and outpatient care became a characteristic and still remains a key feature of modern German- speaking Pediatrics. [1]

1.2 Pediatric health care in Austria and Styria

In Austria, patients between birth and the age of 18 have access to pediatric care facilities. Looking at table 1 shows that of the total 2.520.992 hospital stays in Austria, 35.322 (1,4%) were attributed to children <1 year, 159.349 (6,3%) to children aged 1-14 and 270.673 (10,7%) to adolescents and young adults aged 15 to 29.

Looking at Styria shows that out of the total of 319.072 hospital stays (12,6% of all the hospital stays in Austria) 3.698 (1,2%) are attributed to children < 1 year, 18.616 (5,8%) to children aged 1 to 14 and 36.263 (11,4%) to the group 15-29 years. Looking at these figures shows that pediatric patients are a large group in the total of hospital stays in Styria. [2]

There are two pediatric hospitals in Styria, the University Childrens‘ hospital in Graz and the Department of Pediatrics and Adolescent Medicine at the Leoben Hospital. In Graz there are about 9,000 pediatric inpatients and approximately 90,000 outpatients every year.[3] The regional hospital in Leoben is visited by about 15,000 pediatric outpatients every year and has about 7,700 inpatients.[4]

But the ambulatory care is not only provided by the hospitals. About 153 of the 1135 Austrian general pediatricians are located in Styria.[5] In 1999, 1.366.100 Austrian children aged 0 to 14, 57.3% never saw a pediatrician. In Styria, these numbers were even higher with 60.5% of children that never attended a pediatrician. Of those children, the pre-school children had a relatively high frequency of visits at a pediatrician (55.8%).

figure 1: Hospital stays in Austria in 2008 sorted by age and gender

2. The patient-parent-pediatrician relationship

2.1. The bio-psycho-social concept of disease

The Medical University of Graz has extended the conventional biomedical view on illness to the biopsychosocial concept of illness. Students get biopsychosocial education throughout their studies. Egger writes: „The biopsychosocial model of illness is now regarded as the most significant theory to describe the relationship between body and mind, thus somewhat satisfactorily resolving the centuries old logical and empirical scientific problem of „psychosomatics“ on a systematic theoretical basis. According to this model of a biopsychosocial (holistic) understanding of illness there can be no psychosomatic illnesses – just as there are no non-psychosomatic illnesses. Illness arises in when the organism cannot sufficiently provide the autoregulative competency on various different levels of the human system in order to cope with disorders arising and relevant control cycles for the functional efficiency of human beings are overtaxed or fail. Due to the parallel interconnection of system levels it is not as significant on which level or

area a disorder is generated or currently taking place, but which damage can be caused to the relevant system. Illness and health are not defined as a condition in the biopsychosocial model, but as dynamic occurrence. Thus health must be „created“ during every second of life.“ [6]

2.2. Patient-doctor communication

Considering the biopsychosocial concept of illness, the role of the doctor in terms of communication becomes obvious. Since not only the physical circumstances of the patient are of primary importance, but also the social background and psychological characteristics, the ability to communicate is a major tool of a physician. There are four main columns of medical conversation.

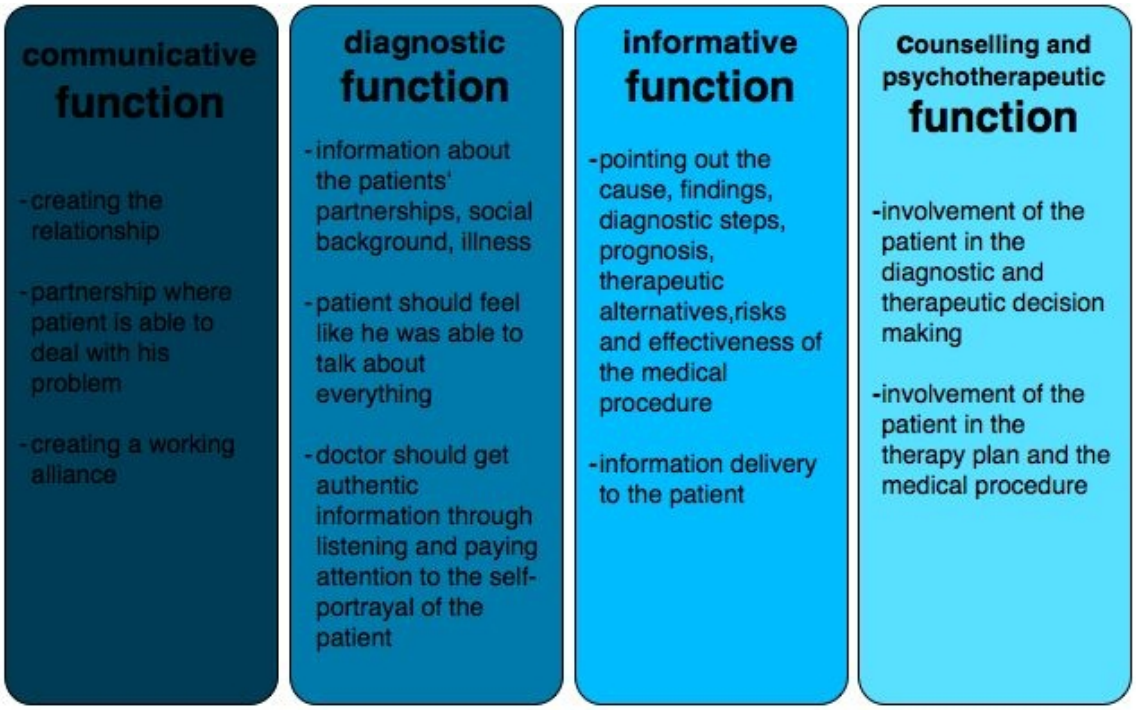

figure 2. The four columns of the medical conversation[7]

It is of major importance that doctors follow these rules of communication in order to create trust and confidence for the sake of the patients‘ compliance. There are many criteria for a good conversation between doctors and patients to reach the goal of every therapeutic dialogue which is mainly the creation of a good

relationship based on politeness, gaining information for the therapeutic decisions and trying to convey capacity to understand the nature of the problem. The main criteria for a good way of negotiation are

- verbal characteristics (e.g. patient centered initiation of the conversation, patient centered ending of the conversation, repeating the patients‘ statements, summarizing things discussed so far, asking open- end questions in order to get other answers than „yes“ and „no“;
- non-verbal characteristics (e.g. listening and watching the patients‘ appearance, posture, facial expression, gestures, voice; eye contact, speaking loudly, clearly, slowly, bearing lulls in conversation, not interrupting the patient, reinforcing what the patient stated by nodding and commenting with „yes“ and „mm hmm“)
- situational characteristics (e.g. being undisturbed, comfortable atmosphere for the patient, sitting position not opposite each other but in a right angle, defined time, preparing record papers and writing utensils ahead of the conversation)[8]

2.3. The special setting in Pediatrics

There is no doubt that the setting in pediatric practice is very special. Children and adolescents are an extraordinary group of patients because of divergence in age, behavior, body and verbal skills, only to name a few. There is no such patient collective in any other medical branch and this is what challenges pediatricians‘ communication abilities. Environmental factors are another important part that should be considered in terms of patient satisfaction. The arrangement of the examination room for example should be targeted on children in terms of furnishing and decoration. Because of the age range covered by pediatricians, separate rooms for children and adolescents should be provided. The room

should be childproof so that the kids can explore this new territory without being watched by their parents and the pediatrician all the time. Medical equipment can be kept in the background in order to keep the level of fear as low as possible. The examination couch which clearly does not look very attractive to children is also available with playground elements and thus does not scare children in the same way. [9]

Of course, there are a lot of factors influencing the patient- parent- pediatrician relationship. Van Dulmen found „The child's age and the pediatrician's experience were related to the communication pattern.“[10] This communication pattern also changes with the age of the children. The older children get, the more they tend to communicate with their pediatrician. [11] In addition especially female pediatric patients tend to prefer seeing a female doctor. [12]

But the communication techniques of pediatricians are not only challenged by the child, but also by the attending parent. Doctors in general want their patients to follow their instructions in order to get better, but are aware of the fact that patients as medical laymen are overcharged with information and often block out this fact. So they automatically pretend comprehension even though they are aware of their lack of understanding. [13] This is especially important in the pediatric setting because the parents are the ones explaining the instruction to their child or carrying out the instructions given by the pediatrician. There are a lot of conditions influencing their recall. Heffer et al found: „more previous appointments with a given pediatrician were associated with greater parental satisfaction and recall of instructions, and more previous appointments and more time spent with the pediatrician were related to fewer forgotten instructions. Parental characteristics, such as age, number of children, and occupational status, were associated with satisfaction and accurate recall.“[14] So not only the time spent communicating with the parents and patients is important, but also factors mentioned above such as age of the parents and number of children are important for the outcome of the visit. As these factors cannot be changed, pediatricians have to work out a a way of communication which satisfies both the patients and the parents.

3. The pediatrician‘s role in prevention

3.1. Prevention

One of the main objectives in pediatrics is the early recognition of diseases in childhood and youth. Medical checkups are a key feature of prevention in pediatrics and should be attained by children and adolescents of every age group.

Primary prevention

The objective of primary prevention is the prevention of diseases and the preventive measures are taken in order to minimize risk factors in healthy people (e.g. avoidance of prenatal risk factors, rickets - and caries prophylaxis, vaccinations).[15]

Secondary prevention

Existing diseases should be identified as early as possible and eventually treated with promising methods of treatment (e.g. screening examinations to identify congenital metabolic disorders).[9]

Tertiary prevention

Resulting conditions of diseases should be eliminated or improved (e.g. rehabilitation after an accident).[9]

3.2. Prevention in pediatrics

Every country has varying structures and recommendations for preventive examinations. In 1974, Austria implemented the so- called „mother and child passport“ which includes examinations from the 16th week of pregnancy up to the 5th birthday of the child. If you attend less than five examinations during pregnancy and less than five checkups with your child you do not get paid the full

amount of child benefit after the child's‘ second birthday. [1]

In Germany, there are eleven non- mandatory preventive examinations during childhood (called U 1 - U 11) and two consultations during adolescence (J 1 and J 2). The results are registered in a yellow booklet, similar to the mother child passport in Austria. [15]

In Austria, the participation rate in the first and second year of life is 85%, in the third year of life 80%, in the fourth year 65% and in the fifth year 35%. [16]

Statistics show that the older children get, the less they attend the examinations. But because adolescent morbidity and mortality is often linked to health risk behaviour, better health behaviour in adolescents could be increased by implementing training programs and screening in this age group.[17] Surprisingly, adolescents chose their health care provider in terms of the providers‘ characteristics such as cleanliness, honesty, friendliness and respectfulness.[18] Maybe a change in attitude could change the way adolescents think about their health care provider as well.

4. Fine feathers make fine birds

„...then he must be clean in person, well dressed, and anointed with sweet-smelling unguents that are beyond suspicion“ (Hippocrates)

4.1. The impact of clothing on the perception of people

The influence of clothing on how people perceive others is indisputable but there exists not much literature about the way it influences peoples‘ attitude towards others. Johnson et al investigated the effect that clothing had on the impression of a person in ways of sociality. Male and female college students were asked whether they preferred a female fellow student wearing fashionable clothing or one wearing out- fashion clothing. They found a statistically significant preference for the woman wearing in- fashion clothing.[19]

Another study dealing with the impact of clothing on attributes such as intelligence, competence, knowledgeability, honesty, and reliability showed that „males generally believed proper clothing can enhance occupational attributes and this belief was influenced by perceptions of their own attributes and clothing interests. Females did not believe many attributes could be enhanced by manipulation of clothing, and their belief was not influenced by perceptions of occupational attributes or clothing interests.“[20] Edna L. Bell compared four different male clothing styles (daring, conservative, formal and casual) and their influence on the association with different characteristics. The male foreigner wearing daring style got the attributes unattractive, not intelligent, but very popular. The formally dressed man was associated with the terms attractive, intelligent, and popular. The casual dress was linked to the characteristics unattractive, not intelligent, and not popular. The conservatively dressed male was labelled attractive and intelligent, but not popular. Persons that had a great interest in clothing styles related the conservatively dressed person to a more sociable character than the man wearing the daring and casual clothes and overall favored the conservatively dressed person.[21]

4.2. The history of the white coat

The white coat worn by doctors is very common throughout the western world and is also found on the rest of the globe. But hardly anyone knows where the white coat comes from and when doctors started wearing white clothes. Blumhagen found three major origins for the white coat. [22]

The white coat in the operating room

The white coat in the operating room seems to have originated with the concept of aseptic surgery. In order to prevent contamination from the patients to the doctor and vice versa, doctors started wearing white coats on top of their normal clothes. [22] The image of the doctor in the white coat was adopted by the film industry and this contributed to the heroic image of surgeons and physicians.[23]

The white coat in the laboratory

In the late nineteenth century, science and medicine grew closer together and the white laboratory coat worn by scientists started to be adopted by hospital physicians. This is also the origin for the term „lab coat“, an expression still used in the Anglo-American region. [22] The late-nineteenth-century hospitals showed the adoption of science in medicine not only through the change in clothing but also in terms of tools such as electrical lighting, telephones, autoclaves and x-ray machines. [24]

The white coat in the hospital

During the same period there was also a change from caring for the ill in their homes to treating them in hospitals. This was accompanied by the beginning of aseptic surgery, modern diagnostic and new therapeutic methods. With these modifications hospitals became places where sick people were treated in order to improve their health in contrary to the previous image of the hospital which used to be a place for terminally ill people to die. So overall the concept changed from death to life. This change could also be observed in the way people working in the

hospitals dressed themselves. The common practice of the religious nurses was wearing black when treating patients. Black has always had an association with death and mourning and fitted the image of the hospital as a place to die. But now with the change of hospitals, white emerged as a sign for life and purity. So the black gowns became white clothes not only for the doctors, but also for the modern nurses. [22] In 1913 Hornsby wrote in his book „The modern hospital“ that not only the physicians and nurses had to wear white dresses and gowns, but also the visitors and surgeons were supposed to wear white.[25]

Changes over the time

There were not too many changes in clothing over the decades. As we can see in the modern hospital nowadays white is still the dominating color. The only thing that really changed was the fact that surgeons and the rest of the staff in the operating rooms started using green and blue operating clothes because the white clothes glared in the bright lights and made it unbearable for their eyes to perform surgeries. They used those pastel shades because they did not collide with the value system behind the white clothes as much as black and red, for example would have. [22]

4.3. The white coat in terms of hygiene

So if we look at the history of the white coat, the term hygiene is not really mentioned. The white coat emerged in terms of science meets medicine and was a kind of recognition feature for medical staff in the hospital. But if you ask people they will always come up with hygiene as one of the reasons for doctors‘ wearing white coats. In the UK for example, there are certain dress codes telling doctors „In order to facilitate good hand and forearm washing when carrying out clinical activity, medical staff must be “bare below the elbows” i.e. roll up long sleeves/wear short sleeves, remove wrist watches and any jewellery below the elbows except for a single plain ring. Ties, if worn, should be tucked in. Clinical coats should not be worn during patient contact.“ [26]

Wong D et al found „the cuffs and pockets of the coats were the most highly

contaminated areas. The level of bacterial contamination did not vary with the length of time a coat had been in use, but it increased with the degree of usage by the individual doctor. Staphylococcus aureus was isolated from a quarter of the coats examined, more commonly from those belonging to doctors in surgical specialties than medical specialties. White coats that were judged to be dirty did not differ in the level or type of microbial contamination from the clean white coats. There is little microbiological reason for recommending a more frequent change of white coat than once a week. However, there is potential for cross infection with Staphylococcus aureus, particularly among the surgical specialties. During clinical examinations the cuffs of white coats come into frequent close contact with patients' coats with close fitting cuffs might help to reduce this problem, although it may be better to remove the white coat and put on a plastic apron before examining wounds.“[27]

With distinct findings like the ones mentioned above Llloyd and Bowen asked „With the potentially fatal threat of postoperative wound infections lurking on most wards, why do doctors continue to wear bacteria-laden clothes?“ They found „patients have overwhelmingly shown that it is the individual doctor and cleanliness and not the shirt, suit or tie that is important.“ [28] Another study showed that the white coats were not only contaminated with Staphylococcus aureus but even with MRSA. They also figured that white coats may be an important vector for patient-to-patient transmission of Staphylococcus aureus.[29]

So basically these findings are telling us to get rid of the white coat, the tie, the long sleeves and the bacteria and make the attitude towards our patients, the cleanliness in whatever short- sleeved clothes be the main characteristics of a good practitioner.

4.4. Influence of the doctor‘s attire on patients

When looking through literature, there are very diverging findings on how pediatricians or physicians in general should dress in order to look trustworthy, competent and sympathetic to patients. When asking doctors they can‘t really tell a reason for wearing the white coat. Mostly they name „easy recognition by patients and colleagues“, „good for carrying items in the pockets“ and „keeping

clothes clean“ as their main reasons for wearing a white coat. [30] On the contrary, Armstrong notes that „so many people other than doctors wear white coats that it has lost any significance.“ [31] Final year medical students named some other reasons for wearing a white coat in addition to the ones named above. They mentioned the fact they felt like gaining the respect more and being more of an authority when wearing the white coat.[32] Such reasons do not seem to be the right ones in the concept of modern medicine, where the paternal model of medicine should be replaced by the biopsychosocial concept of medicine.
So with these reasons and the fact that the always mentioned hygienic purpose disproved, the downfall of the white coat may start.

In opposition to the findings stated above, several studies have showed the preference of a formally dressed doctor. Marino et al for example found that especially parents mostly preferred the formally dressed female or male doctor and least liked the informal dressed one. In this study children also reacted negatively to informal attire.[33] Other attributes that have been mentioned as negative are open- toed sandals, clogs and shorts. A name tag and the white coat were mentioned as being adequate for a physician. [34]
In the pediatric emergency department Gonzalez del Rey et al found that not even the severity of illness had a statistical effect on the most preferred attire and that parents chose the formal attire with the white coat as the most liked one and the doctor who wore no white coat and tennis shoes as the least liked one. They did not associate these preferences with the professional skills of the doctor. In this study 69% of the parents stated that it did not matter what their doctor was wearing. During the night shift, the parents showed less interest in the formal attire. [35] Investigating the influence of nursing attire on the contrary showed that 58% of children aged 3, 4 and 5 years preferred a photo of a nurse wearing a colorful smock top and that the traditional white uniform was said to be frightening in 41%.[36]
There is more literature to be found on the effect of the physicians‘ attire on adults than on children. In the podiatric setting, 96% of the patients found doctors wearing white coats most trustful so they concluded the traditional attire provides

confidence.[36]

On the contrary, Ikusaka et al observed the fact that the white coat increased the emotional strain their patients had during their visits. Even though they found that patients older or equal to 70 years said to prefer the white coat, their satisfaction with the doctor did not interfere with this fact. [37]

Another study showed the preferences patients showed in terms of choosing a male or female doctor on photos which they would prefer attending as their family physician. Even though 75 % stated that the clothes of their real family doctor was unimportant for choosing him, 52% preferred the doctor dressed in the traditional white coat. Like the study mentioned before, the same influence of age on the choice was shown. The older the patients, the higher the preference for the doctor in the white coat. A name tag and formal attire also scored high for the male and female physician. Long hair, earrings and sandals were considered improper for the male physician and mini dress, shorts and tight clothes were referred to as out of place for the female doctor. [38]

Similar findings again in the family practice setting showed the younger the patients, the more accepting they tended to be in terms of casual attire.[39] In the obstetrics setting, research showed even though most patients said the physicians‘ clothing did not change the way they feel during their visit, their perceptions of trust were highest for the doctor wearing surgical scrubs and a white coat on top.[40] Another examination of this issue demonstrated that patients felt that the white coat made communication with the doctor easier. They also thought the white coat made the doctors more hygienic, scientific, skillful, well-informed and made them feel safer. [41] The importance of a name tag was confirmed in several studies.[34,37,39,40]

Other than all the above studies, which mainly show that the white coat still has its place in the hospital setting, Lill shows the effect a smile has on the outfit chosen by patients. They tended to chose the one with the smile in semiformal attire to the one without a smiling doctor. This study shows similarly to some of the ones above - that the necessity of a name badge is confirmed and that again older people tended to chose the more formal option of clothing style.[43]

Summing up these findings, it sounds as though the white coat is still - especially

in older people - the proper way for a doctor to dress. [35,39,41,42]

Some argue it increases tension [37], others find the white coat makes communication easier and doctors seem more trustworthy. [41] In the pediatric setting most parents tend to prefer the white coat to casual attire, but semiformal attire has rarely been tested. [33,34,35] Children seemed to like the white coat as well, but one study showed their preference for nurses in colorful clothes. [36]

Altogether the results vary widely and more research, especially testing semiformal attire in the pediatric setting is required.

5. Materials and methods

At the beginning of the process of writing a diploma thesis stands the choice of the topic. There were a few topics that Prof. Kerbl suggested, but one caught my attention more than the others did. „How to dress as a pediatrician?“ sounded like an interesting question and the fact that I have always been a supporter of colourful clothing in the hospital setting instead of the unexpressed „all-white“ dresscode. So the focus of the study was the question: „Do children prefer a colourful outfit?“ „Are they less scared when a doctor has a funny or even comic character on his shirt?“ „Do parents think a doctor in a white coat with shirt and tie is more qualified than a doctor in a comic t-shirt?“. With these questions in mind I started the research process.

After having chosen the topic I made up my mind what the outfits should be in order to really cover the three different styles „formal“, „semiformal“ and „casual“ without exaggerating it into a ridiculous outfit. The three outfits had to be chosen in advance to the study. After the terms „formal“ „semiformal“ and „casual“ were predetermined, the outfit had to be matched with these terms. For the formal version a tie, white shirt and white coat were clearly the favourite options. For the semiformal outfit Professor Kerbl‘s usual dresscode, being a white polo shirt and white pants but no white coat, was selected. Previous to the selection of the informal outfit, different comic shirts and colourful shirts were looked up on the internet and presented to Professor Kerbl for inspiration. Finally he organized a similar colourful t-shirt with a yellow bird known as „Tweety“ from the Looney Tunes dressed as a pirate on a dark blue background as shown in figure 2.

figure 3: The three different outfits of the test person
from left to right „formal“, „semiformal“, „casual“

The next step was to create the questionnaire, so the next focus was looking for other questionnaires on the internet. I started searching for terms like „questionnaire“ and „questionnaire for children“ on www.google.com and found a very helpful guideline for creating questionnaires for children by Eric Hultsch.[44] This manual gave me the idea to use a smiley rating scale for children and the school marks for adults. It also gave me an idea of how to ask children properly. With using the search term „screening kids“ the homepage of the project „kidscreen“ at www.kidscreen.de. This homepage shows examples of a questionnaire used for a large study about children's quality of life. This was very helpful finding possibilities how to create questions specifically addressing children.

The process of creating the questionnaire started with a mindmap including different topics related to the subject that could be included in the questions. For the parents‘ questionnaire these were as follows: competency, empathy, expertise,

interaction with children, style of clothing, children‘s behaviour and overall impression of a doctor. The children‘s questionnaire included fear, comfort, fear of the examination, good doctor/ bad doctor impression, looks of a doctor and overall impression. Out of these keywords relevant questions were developed. Prof. Kerbl was very supportive at this stage and gave me very helpful suggestions for additional questions.

For the adults, a school grade rating was applied but for the smaller children a smiley rating scale was used. So I scanned the internet for different looking smileys which turned out to be quite tricky. I started looking up the search term „smiley“ on www.google.com, but could not really use any of the smileys that were mainly laughing ones incorporated in websites. So the next step was looking for the term „laughing smiley“, „neutral smiley“ and „angry smiley“ at the picture search tool at images.google.com. After distorting a lot of downloaded smileys the final choice was made. I showed Prof. Kerbl the smiley rating scale and he discussed the laughing smiley showing teeth with a colleague and they ended up with the opinion that this smiley might look scary to children. So I exchanged this specific smiley with a laughing one not showing teeth.

figure 4: smiley rating scale as used in the questionnaire children aged 6-18

In advance to the study, the questionnaires had to be prepared and the outfits were chosen. The program Pages from the iWork for Mac was used to create the questionnaires. The sample „test“ was used to create the questionnaires. For 7 out of the 15 questions the parents were asked, by use of a scale ranging from 1 to 6. 1 meaning „highly right“, 5 representing „not right“ and 6 standing for „I don‘t know“. 5 of the questions had „Yes“, „No“ and „I don‘t know“ as possible answers. The questionnaire also included the description of the attending parent (mother, father or both) and the reason for the hospital stay. The intention of this was to find out whether the severity of the illness of the child had anything to do with the

opinion of the parents. The first question was about former hospital stays and asked: „How many hospital stays did you have with your child previous to this one?“ For this question answers starting with „This is the first hospital stay“ to „3 or more previous hospital stays“ and also included the answer „I don‘t know“. The intention was to find out whether the behaviour and opinion of children and parents were influenced by previous hospital stays in terms of bad experience or on the contrary by a high level of familiarity. Question 2 asked the parent: „Do you know what kind of doctor just examined your child?“. If parents answered this question with yes, they were asked what they were thinking and if they answered with „no“ they were suggested four different ranks in hospital, ranging from the head of staff to the resident. The fifth option was „I don‘t know“. The reason for this question was to find out whether the worn outfit had anything to do with the association with a certain rank (e.g. the doctor wearing the white coat is thought to be the head of staff more often than the doctor in the colourful shirt). The next question was : „How did you perceive the examination of your child by the doctor?“. This and the next six questions had the school grade rating mentioned before. This question was followed by „Did you perceive the doctor as qualified in his field?“ and „How high is your amount of trust in this doctor?“ The reason for these questions was to find out whether the conservatively dressed doctor made the parents sense more competence and trustworthiness. The next questions were about the interaction between the doctor and the children: „In your opinion, was the doctor friendly to your child?“, „Was his attitude suitable for children/adolescents?“, „Do you think your child was scared of the doctor?“. The objective for these questions was finding out whether parents perceive more casually dressed doctors as being more friendly and having a better access to children and adolescents. These questions were followed by a set of questions about the main objective of the study: „What do you think about the dress style of the doctor?“. When asking the next question, parents were shown the three pictures of the doctor in the different clothing styles mentioned and shown above. Then they were asked: „Which one of these dress styles do you find most appropriate for a pediatrician?“ The following four questions had „Yes“, „No“ and „I don‘t know“ as possible answers. The questions were as follows: „Do you think that the clothing of a pediatrician should be

colourful/bright?“ „Do you think white clothes may frighten children?“ „Do you think that clothes have an influence on the attitude and fear of your child?“, „Do you think that clothes have an influence on your personal estimation?“. The last question asked the parents „Do you have a special opinion about how pediatricians should be dressed?“. This was an open question and the parents were asked whether they had any suggestions for a dress code for pediatricians.

For the second questionnaire, especially created for children aged 6 to 18 years, the program Pages was used, too. Instead of the school grade ranking system, smileys with different expressions ranging from a smiling one over a neutral facial expression to an angry looking smiley were applied (see figure 1). The older children were asked to use the smileys like school grades and the younger ones were shown the smileys on an A4 page and were asked to point their finger at the appropriate smiley. The questionnaire started with collecting the age, sex and reason for the hospital stay. This was written down prior to the visit and was taken from the fever chart. The first question was „Were you scared during the examination?“. This question had „Yes“ „No“ and „I don‘t know“ as possible answers. The following five questions had the smiley scale as the possible answers. The first question was about the overall grading of the doctor. When talking to smaller children, they were asked to give the doctor an emblem by pointing their finger at the smiley that he „deserved“. The next question was similar but more focussed on the examination. The children were asked „How was the examination for you?“ It was explained to the children that the laughing smiley stood for „Very good“ and the angry smiley stood for „Very bad“. The following questions asked „Do you think the doctor was nice to you?“ and „Do you think this is a good doctor?“. The last two questions were about the dress style of the doctor asking „What do you think about the doctor‘s clothes?“ and „What kind of doctor would you prefer?“. For the last question, the children were shown the three previously mentioned pictures of the doctor in the three different outfits and were asked to point at the one they liked most.

The third evaluation sheet was not a questionnaire, but a monitoring sheet where certain behavioural aspects were intended to be ticked according to the behaviour of the child. The sheet again included the age, sex and reason for hospital stay in

order to find out whether the severity of the illness had an influence on the cooperation of the children. The first two questions had four possible answers which had to be marked after the examination. In order to be able to follow the ward round without having to carry a stack of paper, a sheet with the names of all the children younger than six years was prepared and the behaviour was written down and transferred on the prepared sheets at the end of the ward round. The items recorded were as follows: „Did the child tolerate the examination?“ and the possible answers were „Willingly“, „With discrete restraint“, „After a certain period“ and „Not at all“. The second question „How did the child behave during the examination?“ could be answered by „friendly/cheerful“, „cautious“, „lightly fending it off“ and „crying/screaming/defensive“. These two questions were followed by the more precise description of the child‘s behaviour.

Equally for all forms used in the evaluation process was the fact that the outfit worn by the doctor was noted on top of the sheet in order to be able to sort sheets later for the statistical analysis. The sheets were numbered in an order that made it easy to connect the parents‘ questionnaire with the children's questionnaire as well as descriptive behaviour analysis. The sheet used for children was numbered, e.g. 1/1 or 2/1 and the associated parents‘ questionnaire got (for the above examples) the numbers 1/2 or 2/2. In one case there was a family with two children undergoing different surgical procedures with the same parent staying with them. So these were numbered (using the above examples) 1/1 for the first child, 1/2 for the parent and 1/3 for the second child. The first number was always marked by a circle in order to make it easier to link the different questionnaires. Another goal during the questioning process was getting the groups that saw each outfit to a similar size, so that every outfit had a fair amount of participants. For this purpose, randomization by day of the week was performed.

After preparation of the questionnaires the empirical data analysis took place at the regional hospital of Leoben (Styria, Austria) in the months May and September 2009. This study design was chosen in order to have the opportunity to see the reaction of children and parents and to be able to talk to them about their opinion and ask further questions if needed. Children receiving inpatient treatment and

their accompanying or visiting parents were included in the study. They were asked questions using age- appropriate questionnaires in order to identify their opinion about the attending doctor, their general preference for doctors‘ attire and their trust and sympathy in the examining doctor. Then they were shown three pictures of the head of the department in three different clothing styles (formal, semiformal, casual). In order to make answering easier for children, they were shown a scale with different smiley faces, ranging from a laughing one to an angry one as described above. Children under the age of 6 years were excluded from questioning, but were observed instead and the findings were recorded on a prepared sheet. All patients who were present at the ward round were asked to take part in the study. Exclusion criteria included lack of German language skills, children in a postoperative or preoperative state under medication attenuating consciousness, parents with psychiatric conditions and parents not present during the doctor‘s visit. In advance to the interrogation, parents and children were informed about the voluntariness of their participation, the anonymity of the questionnaires, and the fact that this was part of a thesis in order to acquire the medical degree.

All investigations were annexed to the ward round of the head of the department. In order to blind parents for his rank, he wore a name tag only with his name, but not his title. Furthermore he introduced himself only by name without the title. This was important because one of the questions asked the parents whether they knew the position of the visiting doctor. The chief physician introduced himself, spoke with the parents about the medical condition of their children, talked to the children and examined them according to their illness. Other staff present at the ward round were the nurse in charge of the children, the senior physician responsible for the visited ward, the intern of the ward and myself. During the examination of the children, the behaviour of the children under the age of six was noted on a print out of the bed occupancy of the ward in order to recall the behaviour for pasting it on the prepared sheets. After the ward round the required amount of questionnaires was prepared for parents and their children. For the children under the age of six the form was filled out according to their behaviour. First of all, those children and parents being discharged on the day of the visit were questioned in

order not to miss the chance of questioning them.

The next step after finishing the questioning was looking for a theoretical base for the study. I searched the library catalogue of the University Library of the Karl-Franzens- University Graz and the Medical University Graz with the terms „children in hospital“, „parents“, „interpersonal perception“, „history of Medicine“, „history of the white coat“, „white coat“, „prevention“, „doctor-patient- relationship“, „doctor and society“, „adolescent health“ and found some books to help creating the theoretical part. Most of the books turned out to be located at special institutes and not at the library of the Medical University. These included the library at the Institute of Medical Psychology at the University Clinic and the Institute for Social Medicine at the Medical University. I started searching, and while looking for books which seemed useful for my thesis other books showed up including issues not looked up in the catalogues. Most of the books ended up not being useful for my specific needs, but especially the medical history books helped a lot because there is hardly anything usable on the internet on this issue. Also textbooks of general Pediatrics helped especially for the chapter about prevention in Pediatrics. One WHO study about teenagers and health behaviour appeared to be helpful when just looking at the title, but turned out to be about specific health related behaviour. This happened with various books which appeared to be perfect for a chapter, but turned out to be of little interest to my relevant questions only by looking through the table of contents. More helpful were the searches on www.pubmed.com and scholar.google.de with similar terms like the ones mentioned above. Also the website books.google.com which is a tool that searches books for the specific topic or finds search terms in scanned books was great when looking for books which were cited in papers. The papers found also lead to other papers and made the literature research easier for every new part of the theoretical chapters of the thesis. Saving the searches on a „pubmed“ (http://www.ncbi.nlm.nih.gov/sites/entrez?db=pubmed) account made it easier to relocate the previously cited papers and books. Also borrowed diploma theses of other students of medicine and one diploma thesis from the Institute of Sports at the Karl-Franzens University helped creating the theoretical part in terms of layout

and general division of captions and headings.
Especially the chapter about the influence of the doctors‘ attire on patients was a significant focus of the research at www.pubmed.com because it was basically an analysis about what had been found out in this field so far. The search terms included „white coat“, „attire“, „pediatrician“, „impact attire“, „clothing doctor“, „physician attire“, „appearance“, „dress“ and „dress code“. After the search results had been filtered by relevance, the full text articles were downloaded whenever possible. Another helpful tool was the website www.statistik.at, a website useful for finding official statistics of Austria. I looked up statistics including numbers of hospitalised people per year, health care providers sorted by state and kind of healthcare provider. I also looked through various other statistics to get an idea about health care in Austria and especially Styria.

After finishing the theoretical chapters the analysis of the study outcomes was started. First of all, all the questionnaires were sorted by number. After that, the questionnaires were separated in three stacks according to the outfit worn by the pediatrician. This made it easier to type the results in an excel sheet which was the next step. The answers to the questions were numbered to ease the analysis. After typing everything in an excel sheet, the function „quantity“ was used to count the given answers of the participants. The result was divided through the number of answers and the percentage was calculated. In order to make the results more vivid, I wanted to create graphs. In the beginning, I tried to use the programs Excel and Data Graph, but soon realised that the graphs do not look very scientific with the program Excel and I could not handle the program Data Graph very well. So I asked friends that had finished their diploma theses and they recommended the program Adobe Illustrator. In the beginning, it was not easy to create the graphs but the help function in the program finally helped me a lot. The choice of graph was quickly made because bar graphs are good in showing differences between groups. So all the bar graphs were created with the program Adobe Illustrator showing the percentage of given answers. The same colours were used for the same answers in the diagrams in order to be able to compare the results visually.

6. Results

The results of the study are analyzed in this chapter. The goal of this chapter is finding out whether the questions asked in the introduction can be answered by the findings of the study. First of all the group size and characteristics of the questioned parents will be analyzed. Altogether, 179 persons were either questioned or observed. Of those 179, 48 were children under the age of six which were observed, however only 40 observations could be disposed for various reasons. Of the eight excluded children, 5 were sleeping during the ward round and another 3 were in a postoperative state and still not totally recovered from anaesthesia. In the second group of children aged 6 to 18, the answers of 55 out of the 59 visited children could be used for the study. Two kids had to be excluded because of postoperative state. One child was sleepy after the injection of a pain reliever and one child was sleepy from the sedation he had received as a preoperative measure for the upcoming surgery he had to undergo. In the third group, which are the parents, 72 were questioned and all of the results could be used for the study. In the next chapters, the results of the study will be analyzed and visualized in graphs.

6.1. Results of the parents‘ questionnaires

First of all the group of the parents will be evaluated. Out of the 72 questioned parents 65 were mothers, 4 were fathers. For 3 questionnaires both mother and father of the child were present. They only filled in one questionnaire and chose the answers together so they were valued as one questioned participant.
In the first question where parents were asked about the amount of hospital stays, 33 (45,8%) answered that this hospital stay was their child‘s first one, 21 (29,2%) said it was their second one, for 9 (12,5%) it was the third one and another 9 said they had been to a hospital with their child three times and more prior to the current stay. When asking the second question („Do you know who just examined your child?“) 36 (50%) answered with a „Yes“ and 36 (50%) answered with a “No“.

Of the parents that answered „Yes“ to the above question in the group that had seen the „semiformal“ outfit 9 (37,5%) said they thought the doctor to be the one with the highest rank, so did 12 (46,15%) in the group shown the „formal“ outfit and 6 (27,27%) in the „casual“ group. 10 (41,67%) in the first group thought it was the doctor with the second highest rank and 5 (20,83%) said to be unable to answer this question. In the second group 12 (46,15%) attributed the highest rank to the doctor and 2 (7,69%) said „I don‘t know“. In the „casual“ group 9 (40,9%) stated they thought it was the doctor with the second highest rank and 7 (31,8%) could not decide which rank to select. The answers to this question are shown in table 1.

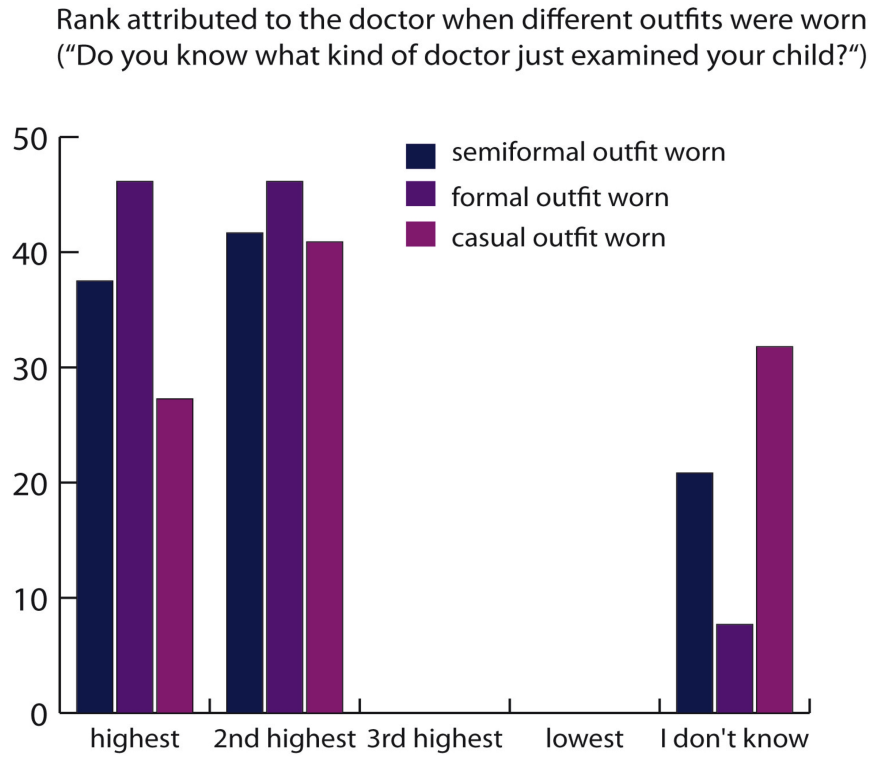

Table 1: Rank attributed to the doctor when different outfits were worn

The results of the following questions will also be split up in the three outfit groups, one being the „semiformal outfit“, two being the „formal“ outfit, and three standing for the „informal“ outfit. Question four („How did you perceive the examination of your child by the doctor“) for the group that had seen outfit one was answered with the school grade one meaning „excellent“ by 20 (83,3%), grade 2 by 2 (8,3%) and „I don‘t know“ by another 2 (8,3%). In the group that had been visited with outfit

number two („formal“) 3 children did not receive an examination so the parents could not answer the question. 19 (73,1%) gave the examination mark 1, 1 (3,8%) gave the mark 2 („good“) , 2 (7,7 %) gave the mark 3 and 1 (3,8%) gave the mark 5 meaning „poor“. In the third group („informal“) 2 (9,1%) did not receive an examination, 17 (77,3%) gave the mark 1 and 3 (13,6%) gave the mark 2. The fifth question („Did you perceive the doctor as qualified in his field?“) as shown in table 2 was answered with school grade 1 by 22 (91,7%), with school grade 2 by 2 (8,3%) in the group which had seen the „semiformal“ outfit. In the group that had seen the „formal“ outfit 22 (84,6%) answered with 1 and 4 (15,4%) answered with „I don‘t know“. In the third group which had seen the „casual“ outfit all of the 22 questioned parents answered with school grade 1.

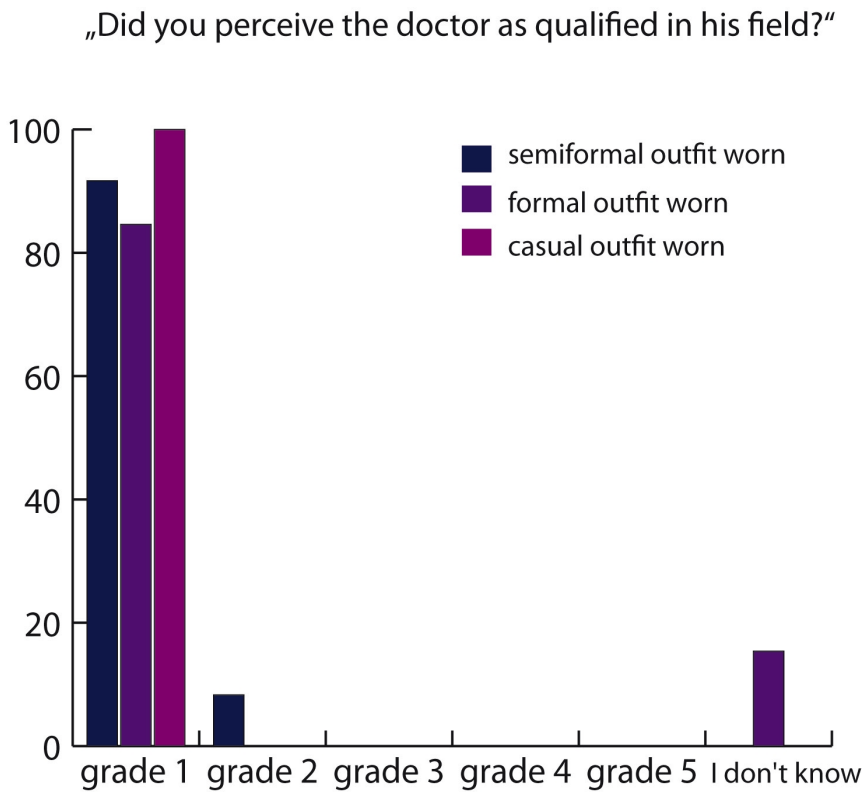

Table 2: Perception of the doctor in terms of qualification in his field

For the next question („How high is your amount of trust in this doctor?“) in the „semiformal“ group 23 (95,8%) chose school grade 1 and 1 (4,2%) gave grade 3. In the „formal“ group 22 (84,6%) chose the grade 1, 1 (3,8%) picked grade 2 and 3

(11,5%) answered with „I don‘t know“. In the „casual“ group, 21 (95,45%) chose school grade 1 and 1 (4,5%) parent picked „I don‘t know“. The question „In your opinion, was the doctor friendly to your child?“ was answered by the parents in the „semiformal“ group with school grade one meaning „very friendly“ by 23 (95,8%) and one parent (4,2%) answered „I don‘t know“. In the second group („formal“) 22 (84,6%) gave the school grade 1, 1 (3,9%) gave grade 2 and 1 (3,8%) answered with „I don‘t know“. In the „informal“ group 19 (86,36%) gave the answer „very friendly“, and 1 (4,54%) answered „I don‘t know“. Some participants could not answer the questions because the question was not applicable for these parents (e.g. sleeping child, postoperative state...). This was the case for 2 (7,69%) in the second and 2 (9,09%) in the third group. The results are summarized in the table below (table 3).

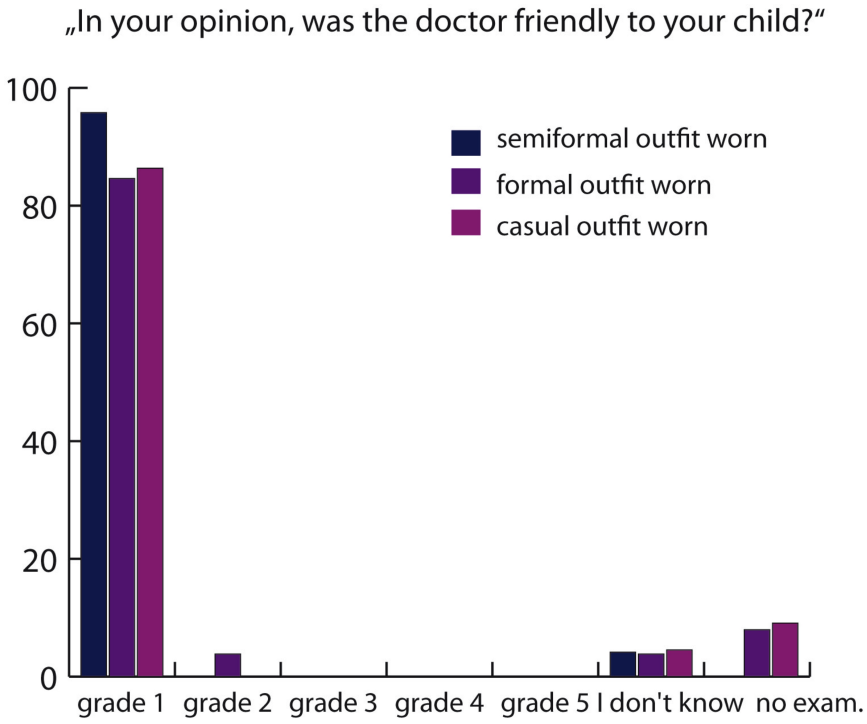

Table 3: Friendliness of the doctor

„Was his attitude suitable for children/adolescents?“ was answered with „Very suitable“ by 22 (91,6%) in the first group, 21 (80,77%) in the second group and 21 (95,45%) in the third group. In the second group, one participant (3,85%)

answered with school grade 3 meaning „indifferent“. In outfit groups one and two the answer „I don‘t know“ was given by two of the participants meaning 8,3% in the first group and 7,69% in the second group. Again, some of the parents could not answer the question, this time 2 (7,69%) in the second group and 1 (4,5%) in the third group. The following question („Do you think your child was scared of the doctor?“) had „Not scared at all“ as the answer given in 18 (75%) cases in the first group, 18 (69,2%) in the second group and 14 (63,64%) in the third group. The answer matchable with school grade 2 („not scared“) was given by 4 parents (16,6%) in the first group and by one (4,55%) in the third group. The answer matched with school grade 3 was given by 2 (7,69%) in the second group and 1 (4,55%) in the third group. One parent (4,55%) in the third group answered the question with school grade 4. Two parents in groups one (8,3%), four parents (15,38%) in group two and another two parents (9,09%) in group three answered the question with „I don‘t know“. Again two of the parents in group two (7,69%) and three (13,64%) in group three could not answer the question for different reasons. For the next question „What do you think about the dress style of the doctor?“ the parents responded (as shown in table 4) with the following answers: „very good“ being matched with school grade one was chosen by 14 (58,3%) parents in the „semiformal“ group, 8 (30,77%) in the „formal“ group and 21 (95,45%) in the „casual“ group. School grade two was given to the doctor by 5 (20,8%) in group one, 1 (3,85%) in group two and 1 (4,55%) in group three. School grade three was chosen by 3 (12,5%) in the first group and 7 (26,9%) in the second group. School grade 4 was picked by 6 (23,1%) in the „formal“ group but no one in the other groups. School grade 5 matchable with „disliked the clothing style“ was chosen by one parent (3,85%) in the „formal“ group. „I don‘t know“ was selected by 2 (8,3%) in the „semiformal“ and 3 (11,54%) in the „formal“ group.

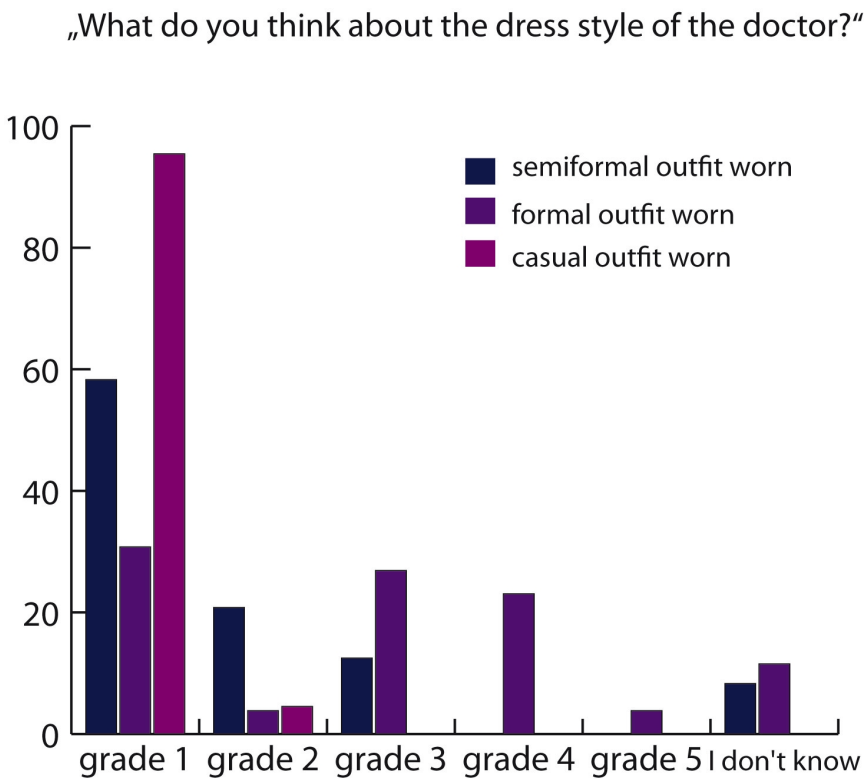

Table 4: Opinion about the dress style

The question illustrated in table 5 „Which one of these dress styles do you find most appropriate for a pediatrician“ was combined with showing the pictures of the three clothing styles to the parents. In the „semiformal“ group 6 (25%) chose the „semiformal“ outfit as their favorite. None of the parents in this group chose the „formal“ outfit and 17 (70,83%) chose the „casual“ outfit as their favourite. In the „formal“ group 9 (34,6%) chose the „semiformal“ outfit as their preferred outfit, 2 (7,69%) chose the worn outfit and 14 (53,85%) chose the „casual“ outfit. In the third group, being the group where the „casual“ outfit was worn 1 (4,55%) chose the „semiformal“ outfit as a favourite and the other 21 (95,45%) parents picked the „casual“ outfit. One (4,17%) in the first group and one (3,85%) in the second group could not decide about the preferred outfit.

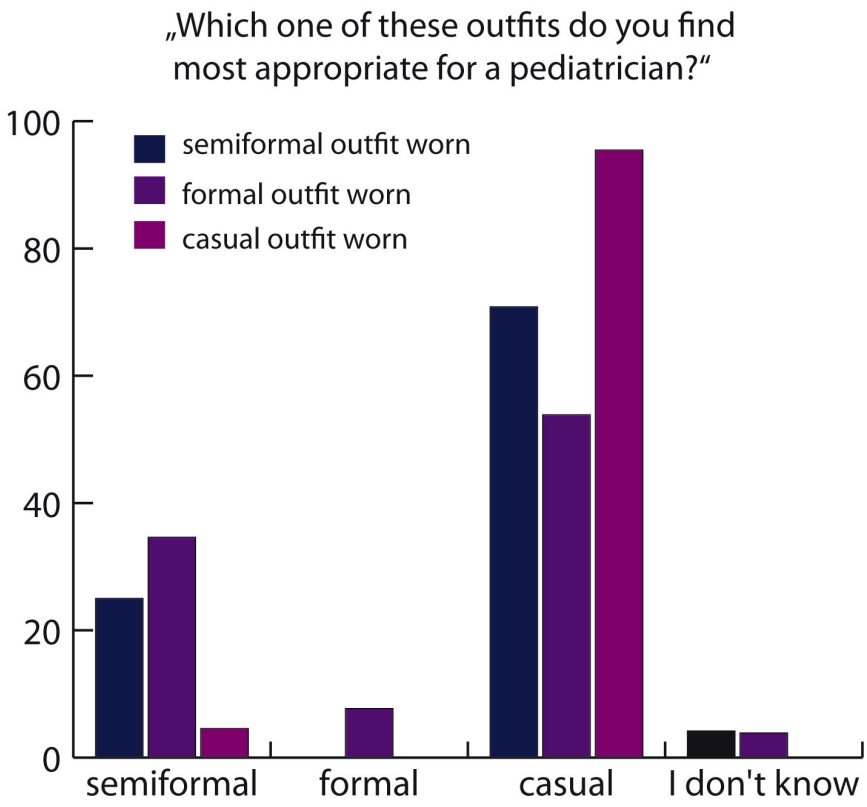

Table 5: Most appropriate outfit for a pediatrician

The next four questions had „Yes“, „No“ and „I don‘t know“ as the three possible answers and were answered as follows. The first of this set of questions was „Do you think that the clothing of a pediatrician should be colourful/bright?“ and is shown below in table 6. In the first group 18 (75%), 21 (80,77%) in the second group and all the 22 (100%) parents in the third group answered with „Yes“. „No“ was picked by 4 (16,6%) in the first and 5 (19,23%) in the second group. 2 (4,16%) parents in the first group said they would not know.

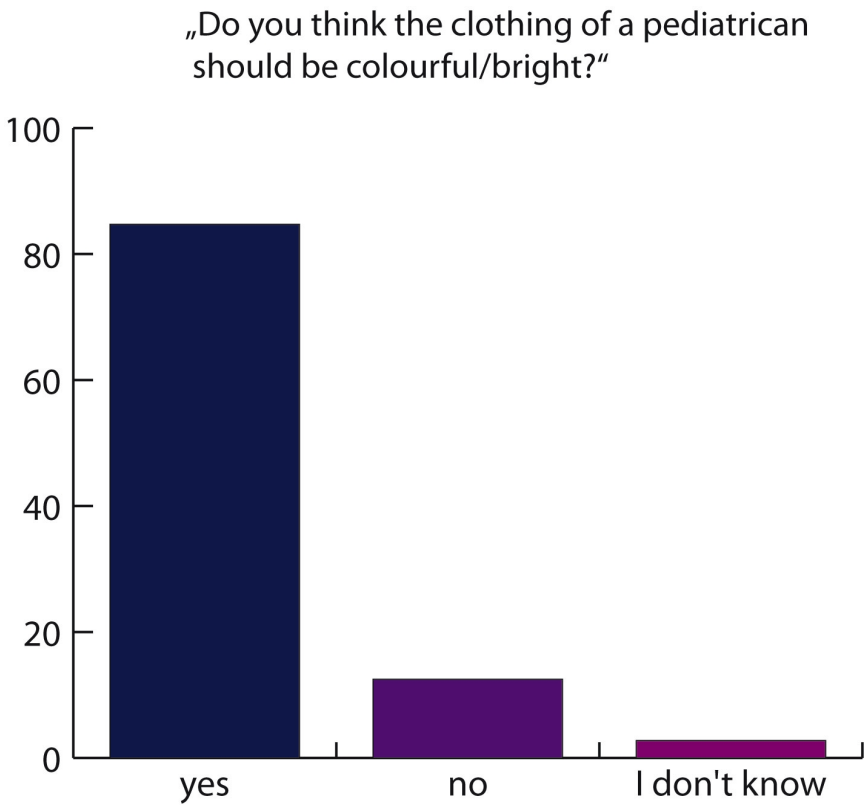

Table 6: Colourful clothing

„Do you think white clothes may frighten children?“ was the following question (as shown in table 7) and was answered with „Yes“ by 13 (54,16%) parents in the first group, 16 (61,54%) in the second and 19 (86,36%) in the third group. 8 (33,3%) in the first group, 9 (34,62%) in the second group and 3 (13,64%) in the third group chose „No“ as the answer to this question. „I don‘t know“ was picked by 3 (12,5%) in the first and 1 (3,85%) in the second group.

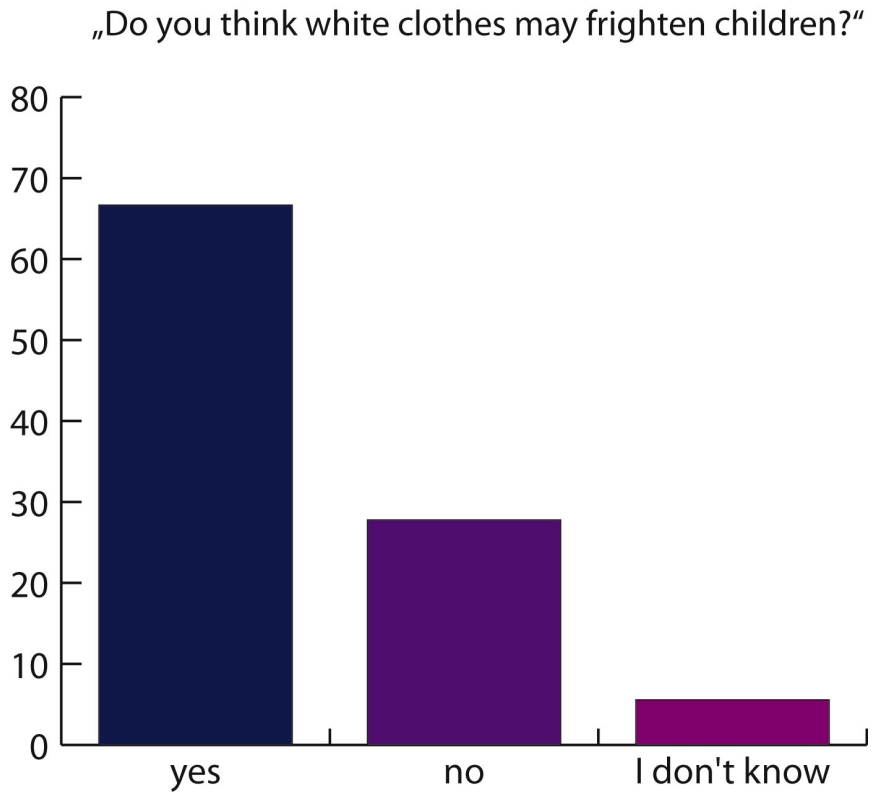

Table 7: Children‘s perception of white clothes

The next question asked parents „Do you think that clothes have an influence on the attitude and fear of your child?“ and they answered with „Yes“ in 17 (70,83%) of the cases in the „semiformal“ group, 19 (73,08%) in the „formal“ group and 17 (77,27%) in the „casual“ group. 7 (29,16%) in the first, 6 (23,08%) in the second and 3 (13,64%) in the third group chose „No“ as the answer. „I don‘t know“ was selected by 1 (3,85%) in the „formal“ group and 2 (9,09%) in the „casual“ group (see table 8).

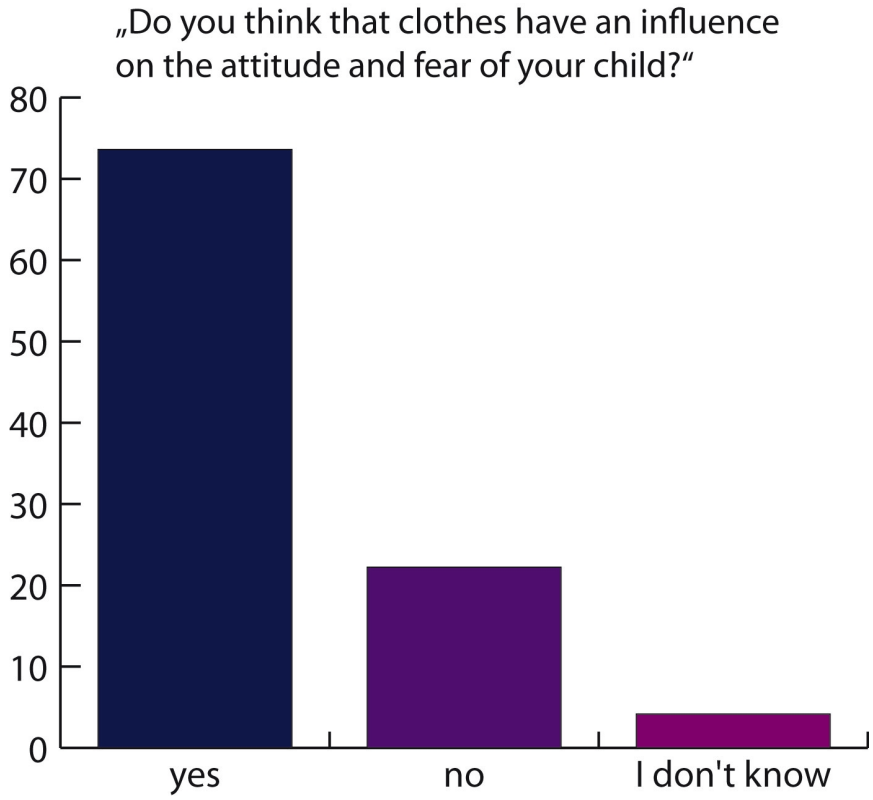

Table 8: Influence of clothes on children

The next question was „Do you think clothes have an influence on your personal estimation?“ and was answered with „Yes“ by 18 (75%) of the parents that were shown the „semiformal“ outfit, by 10 (38,64%) of the parents that were shown the „formal“ outfit and by 12 (54,55%) of the parents who met the doctor in the „casual“ outfit. „No“ was picked by 6 (25%) in group one, 15 (57,69%) in group two and 10 (45,45%) in group three. „I don‘t know“ was the choice of one parent in the „formal“ group. The last question was „Do you have a special opinion about how pediatricians should be dressed?“, and various answers were given. One mother stated that she likes the „Cliniclowns“, so she reckons that pediatricians should be dressed like clowns. On the contrary, another parent said that the doctor should not look like a clown but should wear colourful tops. The same parent stated that it depends on the doctor whether an outfit looks authentic on him. One parent stated that white trousers, a colourful shirt, slippers and a neat overall look are a good combination. 21 of the parents said they prefer a pediatrician to be dressed colourful and bright. One of the parents said that a name tag is very important.

One mother said that the comic character on the shirt was great and that others like Winnie Pooh and Sponge Bob would be great alternatives to the Tweety shirt. One mother said she really disliked the tie, and another mother found the colourful and funny shirt was good and a red nose could be worn sometimes because „...that is what children really like“. Another parent mentioned that the outfit should be age appropriate for the children, but „Disney“ characters would always be popular. A few parents said that it depends on the child and that not everyone prefers the same sort of outfit. One mother said that the white coat is too formal for children and if it has to be white, a t-shirt should be chosen instead of the coat. Six of the parents said they prefer white outfits for doctors. Some parents mentioned that they still associate white with a doctor and one parent said children should get used to the white clothes because other doctors can‘t wear colourful outfits. One parent stated that the white coat for doctors is too formal but that this is not the case for the nurses‘ white clothes. On the other hand, one mother said it would be great for nurses to wear colourful outfits because the children see them more often than they see doctors. One mother said she would not estimate a doctor in a too colourful outfit as serious and she stated that the coat is ok for the head of staff, but there could be something colourful on the back of the coat. One mother told the story of her niece, who starts screaming as soon as she sees a person dressed in white. She thinks that the focus on white would not be as bad if doctors would wear different colours and have comic characters on their t-shirts. A couple of parents said their pediatricians at home wear jeans and t-shirts and they think this is great because children realize „he is not going to hurt me, it is just a normal person“. A few parents said the outfit should not be too childish, but colourful would be ok. One parent stated that white means respect and the colourful outfit is too „informal“ because the border between doctors and their patients should be kept. Some parents said they personally would have no problem with the white clothes of doctors, but still think it should be the pediatricians that are allowed to wear bright colours and that adult medicine should stick to the white clothes. One parent mentioned hygiene as a reason for the preference of a white outfit for a doctor. She said that it is easier to recognize whether a doctor has worn his white outfit for the last three or four days or whether it is still clean.

6.2. Results of the children‘s questionnaires

The next questionnaires to be evaluated were the ones answered by children aged 6 to 18 years. The average age of the questioned children was 11,9 years (6-17 years). Of the 59 children visited by the ward round, 55 were able to answer the questions. The four that were not able to answer the questions were either sleepy and in a postoperative state (two children), had been given pain relievers (one child) or had been given a sedative as preparation for the upcoming surgery (one child). Of the questioned children and adolescents 30 were girls and 29 boys. The children were hospitalised for different reasons shown in figure 5.

Figure 5: overview of reasons for hospital stay

The first question children and adolescents were asked was: „Were you scared during the examination?“ and is illustrated in table 9. In the group of children that were visited by the doctor in the „semiformal“ outfit all 17 (100%) children answered „No“. In the group that was shown the „formal“ outfit one child (5,88%) answered „Yes“, 15 (88,23%) answered „No“ and one (5,88%) answered with „I

don‘t know“. In the third group visited by the doctor in the „casual“ outfit, all the 21 (100%) questioned children said they were not scared during the examination.

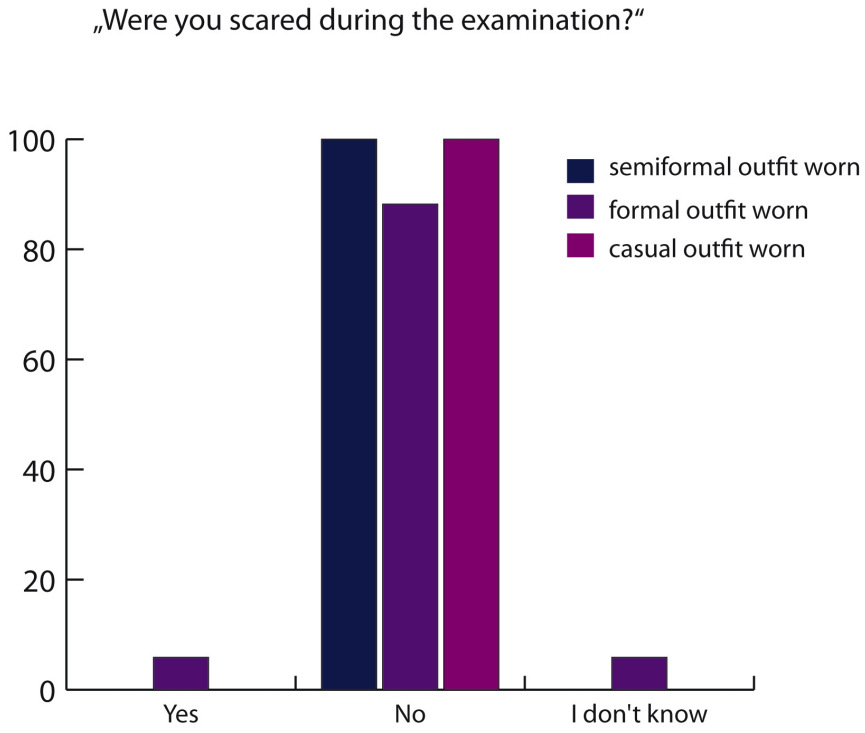

Table 9: Fear of the children during the examination

For the next question, children and adolescents were asked to give the doctor an emblem according to the smiley scale they were shown or matched to a school grade. They were asked „In your opinion, what emblem does the doctor deserve?“ 14 (82,35%) of the children in the first group chose grade one or the most friendly smiley and 3 (17,64%) chose grade 2 or the second best smiley. In the second group, 14 (82,35%) chose grade 1, 2 (11,76%) chose grade 2 and one (5,88%) chose „I don‘t know“. In the „casual group 17 (80,95%) chose the friendliest smiley and 4 (19,05%) chose the second best smiley emblem (see table 10).

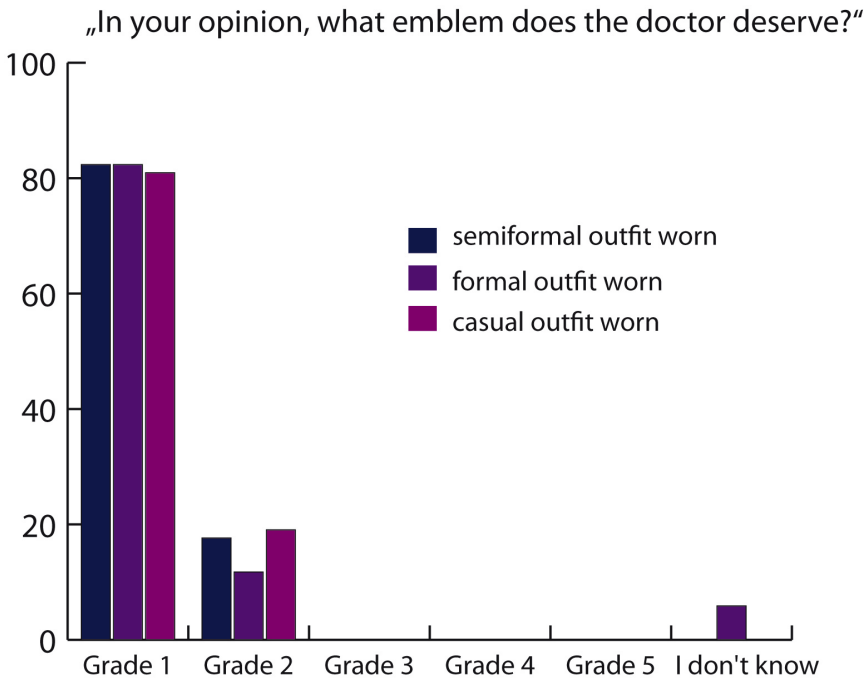

Table 10: Overall impression of the doctor

The next question asking for „How was the examination for you?“ the school grades given to the doctor were as follows: In the first group all 17 (100%) picked school grade one meaning „very good“ or the first smiley in the smiley scale shown in the last chapter. In the second group 14 (82,35%) picked grade 1, 1 (5,88%) picked grade 2, another one (5,88%) picked grade 3 and one picked „I don‘t know“. In the last group 20 (95,24%) chose grade 1 and one (4,76%) chose grade 2. The following question asked „Do you think the doctor was nice to you?“ is shown in table 11 and was answered with „very nice“ by all 17 (100%) of the children in the „semiformal“ group, 15 (88,23%) in the „formal“ group and 19 (90,84%) in the „casual“ group. In the second group one child (5,88%) chose „nice“ as did 2 (9,52%) in the third group. In the second group („formal“) one child (5,88%) chose „I don‘t know“.

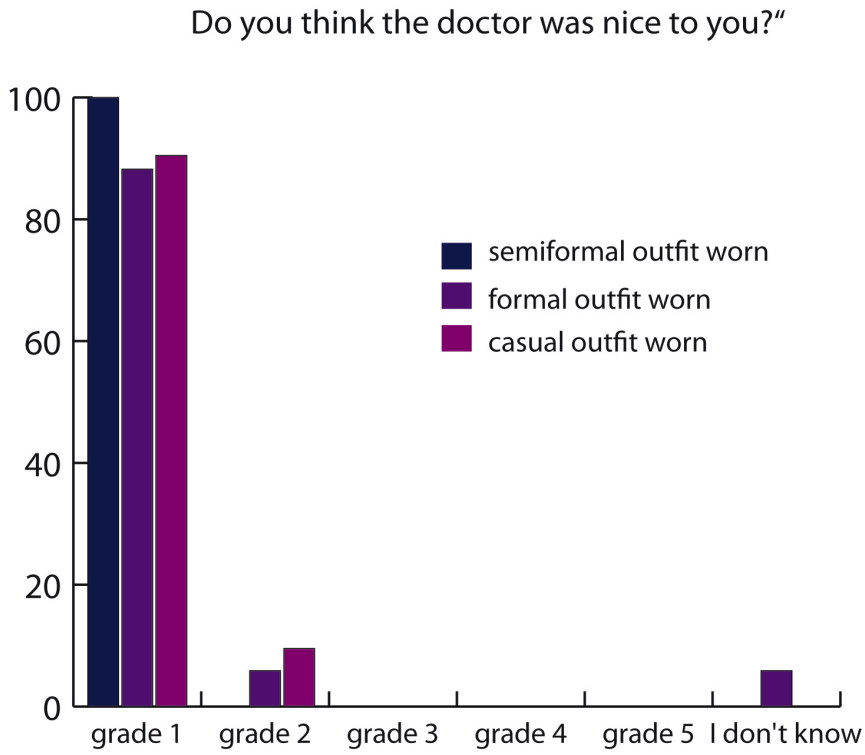

Table 11: Friendliness of the doctor

„Do you think this is a good doctor?“ was answered with school grade 1 by all the 17 (100%) children in the first group, 16 (94,1%) in the second group and 20 (95,24%) in the third group. The second group contained one (5,88%) child that picked grade 2 and in the third group one child picked „I don‘t know“. The next question asked „What do you think about the doctor‘s clothes?“ and was answered as follows: In the group that had been shown the „semiformal“ dress style 2 (11,76%) chose school grade one meaning „very good“, 5 (29,41%) chose grade 2, 9 (52,9%) chose grade 3 meaning „ok“ and one chose „I don‘t know“. In the group that had been shown the „formal“ outfit 7 (41,17%) picked grade 1, 5 (29,4%) picked grade 2, 3 (17,6%) chose grade 3, one (5,88%) picked grade 4 meaning („bad“) and one picked „I don‘t know“. In the group that had been visited by the doctor in the „casual“ outfit all 21 (100%) chose school grade 1 meaning „very good“ or the nicest smiley. The results are illustrated in the table below.

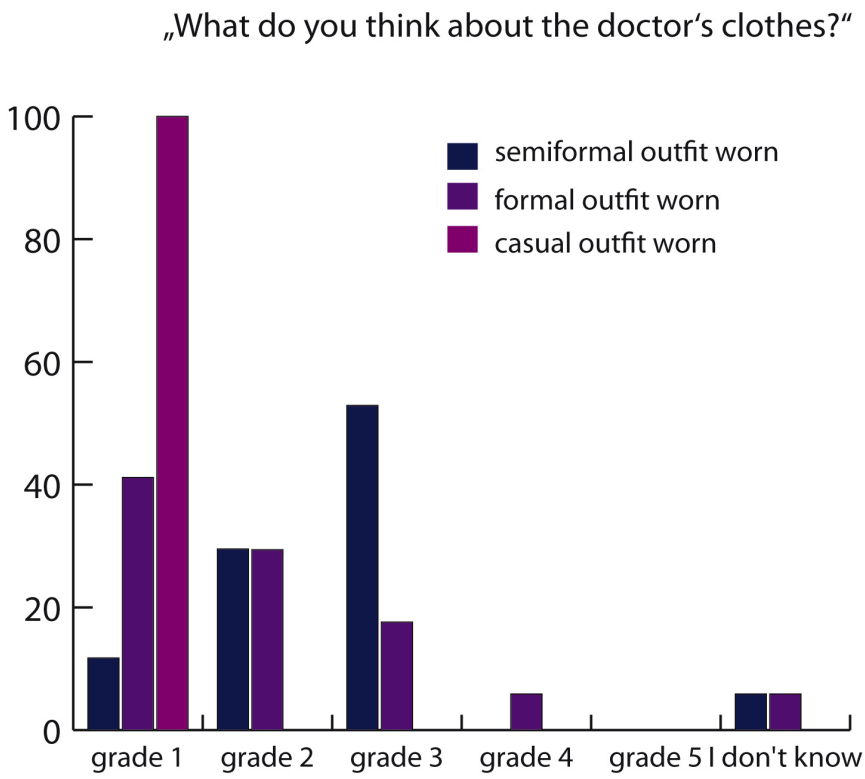

Table 12: Approval of the clothing style

For the last question, children and adolescents were shown the three pictures of the doctor in the different outfits and were asked „What kind of doctor would you prefer?“ and is illustrated in table 13. In the first group 3 (17,6%) children chose the „semiformal“ doctor, as did 4 (23,5%) in the second group and 1 (4,76%) in the third group. Another 3 (17,6%) in the first group chose the „formal“ doctor like 4 (23,5%) in the second and 2 (9,52%) in the third group. The „casual“ doctor was picked by 9 (52,9%) of children in the first group, 7 (41,17%) in the second group and 18 (85,7%) in the third group. In group one 2 (11,76%) of the children could not decide one a favorite, as another 2 (11,76%) in the second group.

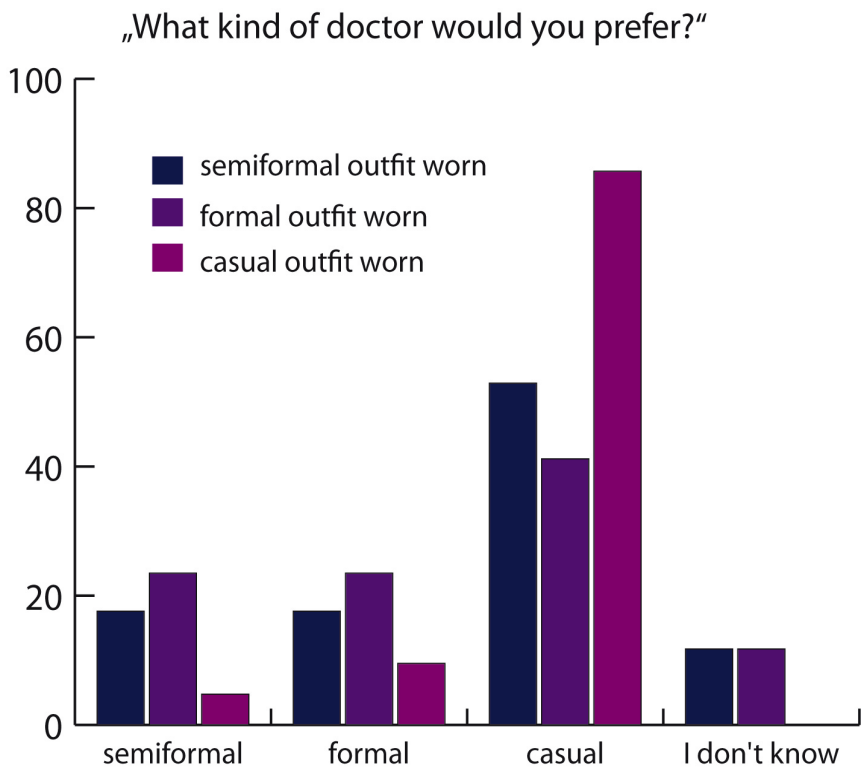

Table 13: Preference in the clothing of the doctor

6.3. Results of the observation of children under the age of six

The third group that was observed were children under the age of six. 48 children were observed, but only 40 could be analyzed. The reason for that was that five of the children were sleeping and three were in a postoperative state. The average age was 2,58 years (1 week to 5 years). 26 of the 48 children were girls and 22 were boys. The reasons for hospital stay are shown in figure 6.

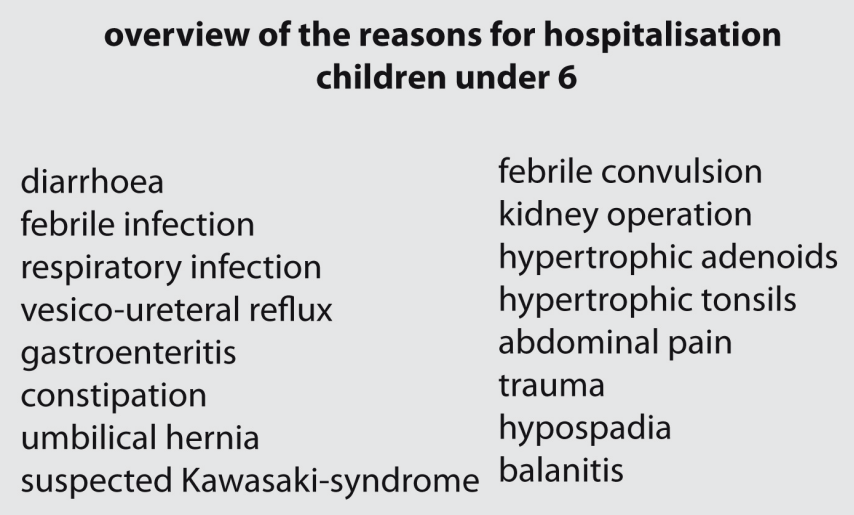

figure 6: overview of reasons for hospital stay

The first item recorded was whether the child tolerated the examination and is shown in table 14. In the group where the doctor was dressed in the „semiformal“ outfit 11 (68,75%) of the children tolerated the examination „willingly“. 5 (41,66%) in the group shown the „formal“ outfit and 5 (41,6%) in the group shown the „casual“ outfit had the same attitude. In the first group, 4 (25%) of the children tolerated the examination „with discrete restraint“, so did 6 (50%) in the second and 3 (25%) in the third group. One child (6,25%) in the first group tolerated the examination „after a certain period“, as one child (8,3%) in the second and 3 (25%) of the children in the third group did. One of the children in the third group cried throughout the examination because of dyspnea and therefore the observation was biased.

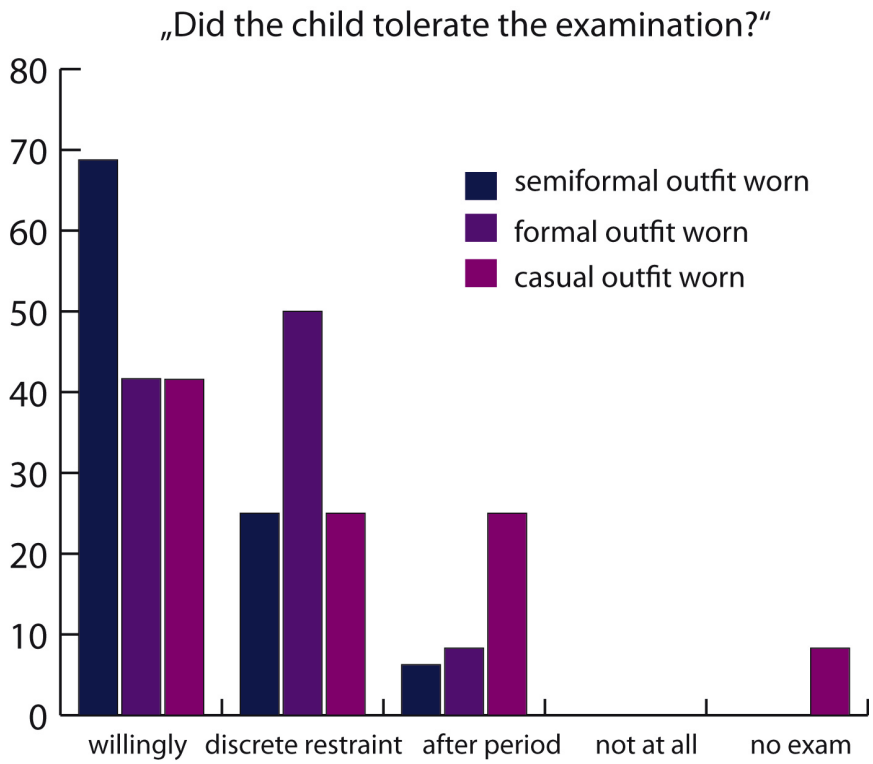

Table 14: Toleration of the examination

The second point on the observation sheet was „How did the child behave during the examination?“ and is illustrated in table 15. In the first group 9 (56,25%) of the children behaved friendly/cheerful, as 7 (58,3%) in the second and 6 (50%) in the third group did. 6 (37,5%) of the children in the first group, 4 (33,3%) in the second and 3 (25%) of the children in the third group were „cautious“ during the examination. In the second group one child (8,3%) was „lightly fending off“ the examination. One child (6,25%) in the first group and 3 children (25%) in the third group were „crying/screaming/defensive“.

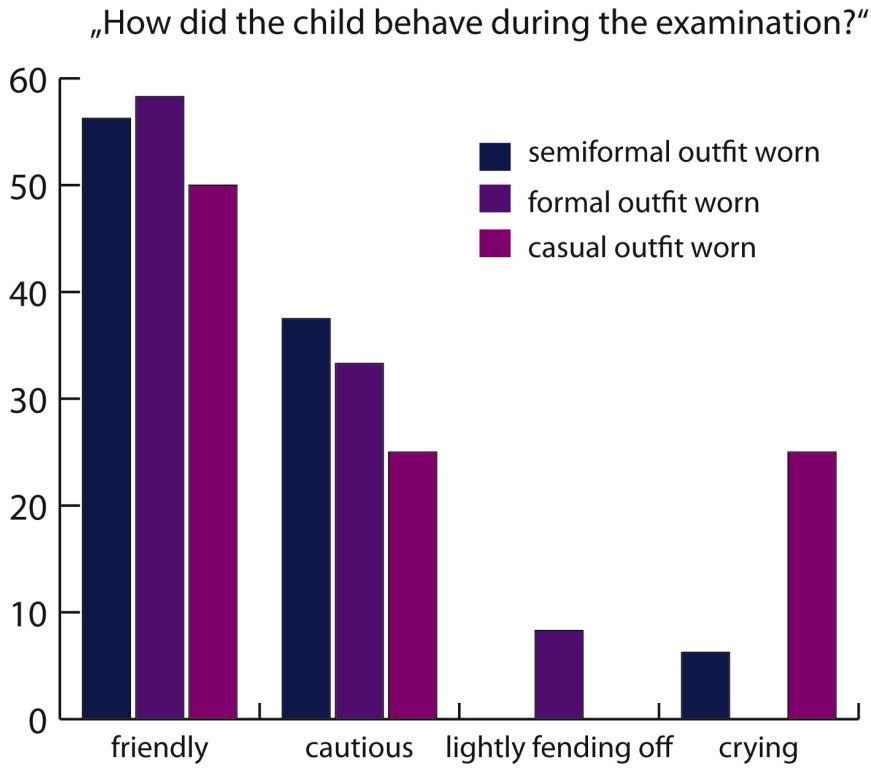

Table 15: Behaviour during the examination

The third point on the observation sheet was a more precise description of the child‘s behaviour. In the „semiformal“ group the taken notes were as follows: one child was very interested in the examination; one was a bit skeptical, but let the examination happen without crying; another child had tears in the eyes and was a little ashamed; four children were very cooperative and friendly; one child even pointed at the picture where the doctor was wearing the „casual“ outfit and said „...this is the best“; another child said „..the examination was not bad at all...“; one child was in pain and crying throughout the examination. In the „formal“ group, three of the children were sleeping; one looked quite scared; one child was a bit weepy but did not refuse the examination; one child was a bit shy but did not cry which was a surprise to the mother; four children were very cooperative and friendly; one child even said „...this is a good and nice doctor...“; one child was in a postoperative state; another child was sitting in his pram and played with a mini-computer throughout the examination and looked a bit frightened; one child was

quite shy and weeny but the visiting brother said „...the Tweety shirt is the best...“. In the last group two of the children were sleeping; one was crying because of dyspnea; six of the children were very cooperative and friendly; one child was in a postoperative state; one was a bit weeny because of an injury; one child was looking very skeptical and did not say a word - the mother said he never talks to strangers; two children were crying but one father mentioned that this is always the case with strangers; two children mentioned that the colourful shirt is there favorite; one child stated: „I was not scared at all.“.

The results have partly shown that the theory that children and parents prefer pediatricians in colourful outfits rather than a white coat and tie is correct. The results will be discussed in detail in the next chapter and will be compared to the present literature about this topic.

7. Discussion

In this chapter, the results of the study will be discussed and reviewed in comparison to the literature cited in the theoretical chapter.

7.1. Discussion of key data discovered by the study

A short summary of the major findings of the study will help to compare findings of the study to related literature. One of the hypotheses stated at the beginning of the study was that a doctor may look more trustworthy when wearing a white coat, tie and shirt. One of the reasons for asking the question about the rank associated with the doctor was the hypothesis that a doctor in a white coat wearing a tie looks like he is in a higher position and is more trustworthy and qualified.

As for the rank, in the group that had seen the „formal“ outfit 46% thought the doctor to be in the highest position, while only 37,5% in the group shown the „semiformal“ outfit thought that the doctor was the one with the highest rank and only 27,27% in the casual group. A problem when asking this question was that a lot of the patients do not know what the ranks in the hospital system exactly are and may be biased by the „general appearance“ of the doctor chosen for the study.

Also in terms of qualification, the hypothesis was that the formally dressed doctor looks more professional to parents. However, the results differed from the hypothesis. In the „casual“ group which according to the hypothesis would have been the group where the qualification could be doubted, all of the questioned parents associated the doctor with the highest amount of qualification.

In terms of trust, there was no association found with the outfit chosen. In the „casual“ group, where trust could have been lower than in the „formal“ group, 95,45% chose the highest amount of trust when asked about the doctor (compared to 84,6% in the „formal“ group).

Concerning friendliness, the hypothesis was that colourful outfits convey a higher grade of friendliness. There was however no difference between the „formal“ and the „casual“ group (84,6% compared to 86,36%) and only the „semiformal“ group performed slightly better (95,8%). This is another point where the choice of doctor

appears to be an important factor. Being friendly seems to be more important than the outfit.

Whether the attitude of the doctor was suitable for children was also questioned and the „semiformal“ and „casual“ groups had a better performance than the „formal“ group (highest grade given to 95% and 91,6% compared to 86%). So there could be an association with the perception of the attitude in different outfits.

When directly asked about the dress style, parents preferred the „casual“ and „semiformal“ outfits to the „formal“ one (95,45% and 58,3% gave the doctor the highest grade compared to 30,77% in the „formal“ group). Also the appropriateness of the „formal“ outfit has to be reconsidered in the pediatric setting because the „casual“ outfit was chosen by the majority of parents in all of the three groups (70,83% in the first, 53,85% in the second and 95,45% in the third group).

These findings are confirmed by the choice of answers to the questions whether outfits of pediatricians should be colourful and whether parents think that „white“ frightens children. In all the three groups the majority of parents said that colourful outfits should be chosen in the pediatric setting (75%, 80,77% and 100%). This time the parents that had seen the white coat with tie and shirt even had a clearer preference for colours than did the parents shown the white polo shirt.

The majority of parents in all the three groups stated they think that „white“ frightens children (54,16%, 61,54% and 86,36%). In accordance to these findings, the majority of parents stated that they think clothes have an influence on the fear of their children (70,83%, 73,08% and 77,27%) and not to the same extent have an influence on their personal estimation (75%, 38,64% and 54,55%).

The results of the children‘s questionnaires will be discussed below. The hypothesis was whether children always chose the „casual“ option and whether they are less scared when a doctor wears a colourful outfit.

When asking the children aged 6 to 18 whether thy were scared during the examination, the majority answered with „No“. So did 100% in the „semiformal“ and „casual“ group but only 88,23% in the „formal“ group. So the only doctor that scared a few of the children was the one in the „formal“ outfit. This would agree with the hypothesis that a doctor in more casual outfits is more appropriate for

examining children. The other questions about the examination were similar to the findings above. The examination was judged as being „not bad at all“ (school grade 1) in 100% in the first, 82,35% in the second and 95,24% in the third group. So once again, the „formal“ doctor did not receive the same extent of acceptance.
In terms of the overall perception of the doctor, the three groups were quite similar with their answers. The emblem given to the doctor was the best smiley in 82,35% in the „semiformal“ and „formal“ group and in 80,95% in the „casual“ group. Also the overall estimation in terms of „good doctor“, „not that good“ was similar in all the three groups („very good“ given to 100% in the first, 94,1% in the second and 95,24% in the third group).
When directly asked about the clothes, there is a clear preference for the „casual“ outfit visible. 100% of the children that had seen the „casual“ outfit chose the best mark for the outfit. This only happened for 11,76% of children shown the „semiformal“ outfit and 41,17% shown the „formal“ outfit. Similar to these findings, the preferred outfit in the three groups was the „casual“ one in 52,9% of the cases in the first, 41,17% of the cases in the second and 85,7% in the third group.
These findings show the preference for children of various age groups for a colourful dressed doctor, or in other words they did not favour the „formal“ doctor.

The findings of the observation of children under the age of six was difficult. Only for the first observed issue (the tolerance of the examination) a slight difference in the groups could be found. The majority of children in the first group („semiformal“ outfit) tolerated the examination „willingly“ (68,75% compared to 41,66% and 41,6% in the other two groups).
The second item recorded did not show a significant difference between the three observed groups (56,25%, 58,3% and 50%).

Overall, the findings in this group are difficult to interpret. Not only because of the young age of the children observed, but also because of the variation in interpretation of behaviour and finally by the limited number of patients investigated.
The connection between the children‘s behaviour and the worn outfit is not clear,

but in my opinion is of less importance than the behaviour and attitude of the doctor. What the process of this study has however shown is the fact that smaller children do not really show a preference for colourful clothes.

7.2. Comparison of the findings of this study to present literature

In this chapter the literature found to the topic will be reviewed and compared to the findings in this study. In Edna L. Bell‘s study where the clothes of male strangers were judged, the casual outfit was linked to a non-intelligent person. [21] This cannot be confirmed by my study, in contrast the association with a high amount of qualification was highest for the doctor in the casual outfit. Maybe the casual outfit in the study of Bell was more exaggerated than the moderately casual outfit in this study, so maybe further research is needed with e.g. open toed sandals and shorts. In the present study there was a focus on the „wearability“ of the outfits in terms of everyday use.

In accordance to the opinion of Armstrong [31] who states that the white coat in terms of recognition has lost its significance because so many people other than doctors wear white coats, the study shows that the rank associated with the outfit still is the highest in the „casual“ group in almost 30% of the cases. Also the trust in the doctor is not the highest when the white coat is worn. Interestingly it is higher in both the „semiformal“ and the „casual“ outfit groups.

In the last section of the questionnaire, where parents were asked about their opinion one mother stated that she thinks the white coat is important in terms of hygiene. On the contrary several studies have shown that the white coat is not very hygienic at all. [27,29]

In contrast to a lot of studies cited in the theoretical chapters, this study does not show a preference for a formal outfit. For example, Marino et al showed that parents preferred the formally dressed doctor to the casually dressed one.[33] In the same study, children reacted negatively to the informal dressed doctor, but this was not the case for the present study. [33] There were another couple of studies, that did not test a semiformal outfit, showing a preference of the formal outfit, [33, 34,35] but our study showed that the parents and children tend to prefer the casual and semiformal outfit to the formal one. Gonzalez del Rey found a preference for the

formal outfit, but similar to our study did not associate these preferences with the professional skills of the doctor. [35] Another study about the nurses‘ attire showed that children aged 3, 4 and 5 years preferred a picture of a nurse in a colourful top. [36] Further research where the children actually see the nurse and are not only shown a picture is needed. Some of the parents in our study mentioned they would like nurses in colourful tops because they spend more time with the children than the doctors do. The findings of Ikusaka et al coincide even more with the present study, because they found that patients dislike the white coat because in their case younger patients stated that it increases their emotional strain during the visit. [38] In our study, parents even stated that the white coat is „old school“ and should be restricted to adult medicine.

In the same section where the opinion of the parents was required one parent said that the name tag was very important in analogy to the literature. [34,37,39,40] Because of the importance of a name tag, a question about it should have been asked and should be included in other studies.

Menahem et al showed that the older the patients, the more they prefer the traditional white coat. [39] This cannot really be compared to our study because the age of the parents was not evaluated and grandparents were not questioned, however this could be an aspect worth to be investigated by future studies.

The level of trust was very high in the casual group in our study (highest mark for 95,45%) compared to the findings of Cha et al who found that the amount of trust was highest in the group where the doctor was wearing surgical scrubs and a white coat on top. [41] Lill et al included a very interesting item to their study, the smile. They found that the smile of a doctor had a great influence on the choice of picture of the preferred doctor. [43] This should also be considered for the next study, but might be hard to accomplish in the pediatric setting. In our case, the doctor was smiling in all the different outfits, but I think it would be hard to find a doctor who visits children and tries not to smile.

7.3. Suggestions for future research

After finishing the study, the process of reflecting about the way it was done and the items that could have been included start. I think for further research, maybe

not in the context of a thesis, more patients, doctors and outfits should be considered. If the study is undertaken by more than one person, or in more than one hospital a larger number of participants could be accomplished. More doctors is a point that is double- edged. On the one hand, the comparability is not the same when it is done by more than one doctor. One the other hand, different ages of doctors and different characters could be focussed. As for the different outfits, maybe also a change of the trousers could be considered. For example the most casual outfit could be a colourful t-shirt with jeans or other trousers and sports shoes and the most formal doctor could be dressed in a suit with shirt and tie and the white coat on top.

Concerning questions that could be added to the study, the previously noted question about the worn name tag should be considered. As it is of important value, the parents and maybe also the children should be asked whether they liked the fact that the doctor was wearing a name tag. Also the literature has shown that the age of the questioned persons coincided with the preference for a formal dress style, so maybe the grandparents of the children could be included. This would probably not be that easy because of the setting of the study and the fact that grandparents are rarely present at the time of the ward round. So maybe a different setting could be chosen.

Another question that could be included in further research is the description of the dress style of the family doctor and/ or pediatrician of the family. This could, for instance, give information about the doctor the family is used to and compare it to their opinion about the doctor at hospital that may be dressed similar or very different.

A reviewed study showed that the nurses‘ clothes would be preferred colourful and a parent in our study stated a similar opinion, so maybe a study about nurses in different colourful outfits could also be of interest for a future study.

8. List of literature

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Appendix- Questionnaires

Fragebogen Eltern

LKH Leoben-Eisenerz
Abt. für Kinder- und
Jugendheilkunde

Befragte Person:

Mutter/ Vater/ andere

Grund der Aufnahme:

1.Das wievielte Mal sind Sie mit Ihrem Kind in einem Krankenhaus stationär?

(1) Das erste Mal
(2) Das zweite Mal
(3) Das dritte Mal
(4) Das vierte Mal oder öfter
(5) weiß nicht

2. Wissen Sie von wem Ihr Kind gerade untersucht wurde?

(1) Ja
(2) Nein

wenn (2) -

Was ist Ihre Vermutung?

(1) Primararzt
(2) Oberarzt
(3) Assistenzarzt
(4) Turnusarzt
(5) weiß nicht

3.Wie haben Sie die Untersuchung durch den Visite führenden Arzt empfunden?

(1) (2) (3) (4) (5) (6)

(Schulnotensystem; (6) = keine Antwort)

4.Haben Sie den Arzt als fachlich kompetent empfunden?

(1) (2) (3) (4) (5) (6)

5.Wie groß ist Ihr Vertrauen zu diesem Arzt?

(1) (2) (3) (4) (5) (6)

6.War der Arzt Ihrer Meinung nach Ihrem Kind gegenüber freundlich?

(1) (2) (3) (4) (5) (6)

7.War das Verhalten des Arztes Kinder- / Jugendgerecht?

(1) (2) (3) (4) (5) (6)

8.Glauben Sie, dass Ihr Kind vor dem Arzt Angst hatte?

(1) (2) (3) (4) (5) (6)

9.Was halten Sie vom Kleidungsstil des Arztes?

(1) (2) (3) (4) (5) (6)

10.Welchen der folgenden Kleidungsstile halten Sie für einen angemessenen?

Bild (1) (2) (3)

11.Glauben Sie, dass die Kleidung eines Kinderarztes bunt/freundlich sein sollte?

- Ja
- Nein
- Weiß nicht

12.Glauben Sie, dass weiße Kleidung Kinder verschreckt?

- Ja
- Nein
- Weiß nicht

13.Glauben Sie, dass die Kleidung Einfluss auf das Verhalten/ die Angst Ihres Kindes hat?

- Ja
- Nein
- Weiß nicht

14.Glauben Sie, dass die Kleidung Einfluss auf Ihre persönliche Einschätzung hat?

- Ja
- Nein
- Weiß nicht

15.Wie sollte Ihrer Meinung nach ein Kinderarzt gekleidet sein?

Fragebogen Kinder und Jugendliche 6-16

LKH Leoben- Eisenerz
Abt. für Kinder- und Jugendheilkunde

Alter:

Geschlecht:

Grund der Aufnahme:

1. Hast Du bei der Untersuchung Angst gehabt?

   - Ja
   - Nein
   - Weiß nicht

2. Mit welchem Smiley würdest Du den Doktor beurteilen?

(Schulnotensystem Smileys 1-5, leer= keine Antwort)

3. Wie war die Untersuchung für Dich?

4. Findest Du, dass der Arzt nett zu Dir war?

5. Glaubst Du dass es ein guter Arzt ist?

6. Wie findest Du die Kleidung des Arztes?

7. Wie würdest Du Dir Deinen Arzt wünschen?

Bild (1) (2) (3)

objektive Beobachtung

LKH Leoben-Eisenerz
Abteilung für Kinder- und Jugendheilkunde

Kinder ≤6

Alter:

Geschlecht:

Grund der Aufnahme:

1.Hat das Kind die Untersuchung zugelassen?

- bereitwillig
- mit vorsichtiger Zurückhaltung
- erst nach gutem Zureden
- gar nicht

2.Verhalten des Kindes während der Untersuchung:

- freundlich/ fröhlich
- zurückhaltend
- leicht abwehrend
- Weinen/ Schreien/ Abwehr

3.Genaue Beschreibung des Verhaltens:

Curriculum vitae

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1991- 1995	Volksschule Kammern im Liesingtal

Famulaturen:

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Teilzeitjob beim Raika Watersoccer Cup 2009 (Organisation und Durchführung von Fußballturnieren)
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Hobbies:

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