



## Introduction:

Spectacle lenses are rated very high and still dominate the optical market in Germany. Contact lenses are considered to be a secondary business for many German opticians. Therefore it is not surprising, that there are only 4.9% [1] of the population (age 16+) wearing contact lenses. In comparison with the major European countries Germany has the lowest penetration of contact lens wearers (see figure 1). The potential is enormous, because the share of the German population with a corrected refractive error is 61.7% [2]. Although for many years this potential is not used and strategies are necessary to achieve a greater uptake of contact lenses in the German market.

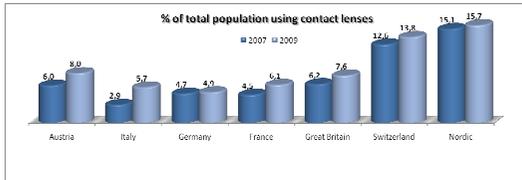


Figure 1: Contact lens penetration in Europe

## Purpose:

Aim of the study was to prove the benefit of using contact lenses for selecting spectacles for the German market based on the „EASE“ study [3], which was implemented in Great Britain in 2009. According to this, the primary objectives were the fitting success, the response to the contact lenses, the purchase value of the spectacles as well as a subsequent purchase of contact lenses.

## Methods:

26 optician outlets throughout Germany and 468 subjects\* in total participated in this multicentre, randomized study. The subjects were randomly assigned into a control group (n=162) or a test group (n=306) if they complied with the inclusion criteria shown in table 1.

Table 1: Inclusion criteria

### Inclusion criteria

- age between 18 and 60 years
- no history of contact lens wear and no contraindications for contact lenses
- intent to buy new spectacles
- constantly wearing spectacles
- refractive error: sph. +6.00dpt to -10.00dpt; cyl. maximum -1.50 dpt and not more than the half of the spherical refraction

These subjects which were assigned into the test group, according to a randomization table, received the offer to try contact lenses as an aid to choose their spectacle lenses, whereas the control group chooses their spectacles as usual. Thereby the contact lenses just serves as an aid for spectacle selection, not as long-term correction. The subjects purchase experiences, the purchase value of spectacles and a subsequent purchase of contact lenses were assessed and compared for both groups.

\*demographics not evaluated

## Results:

94.8% of the test group subjects agreed to use contact lenses for choosing new spectacles and 82.4% of them were successfully fitted.

Before and after spectacle selection an inquiry was implemented for both groups. The results are shown in figure 2 and 3.

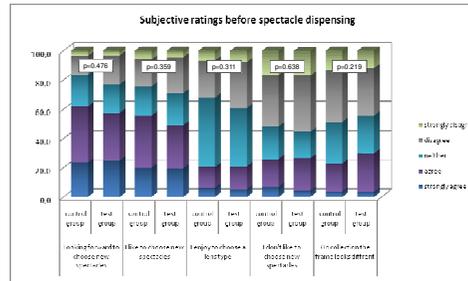


Figure 2: Results of the inquiry before spectacle dispensing

In all of the five questions the difference is not statistically significant for an statistical significance level of 0.05 (Mann-Whitney U-Test), so the results of the inquiry before spectacle selection were approximately similar for both groups. Both groups had the same expectations to the impending purchase.

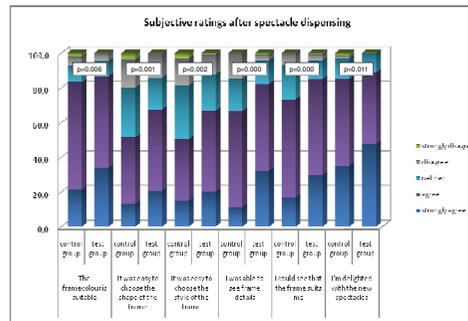


Figure 3: Results of the inquiry after spectacle dispensing

After choosing their spectacles the test group rated the purchase experience considerably better than the control group.

The difference of the purchase value was statistically significant between the two groups (p=0.04; variance analysis). The test group spend on average 546.60€ for the spectacles, compared to 481.40€ in the control group.

Within the next three month after spectacle dispensing 52.0% of the test group and 22.8% of the control group purchased contact lenses.

Table 2: Results of an inquiry especially for the test group

Question	Frequency of „strongly agree“ and „agree“
Vision was comfortable with contact lenses	75,8%
The contact lenses were more comfortable than expected	76,5%
The contact lenses were helpful for choosing spectacles	75,5%
It is to be recommended to try contact lenses for spectacle dispensing	76,1%
Next time would also choose spectacles with the aid of contact lenses	80,1%
I will try contact lenses in the future	63,4%

Table 2 shows the first experiences of the test group with contact lenses. In general, the responses were very positive. Many subjects were surprised, how comfortable the contact lenses have been and most of them are willing to try contact lenses in the future again.

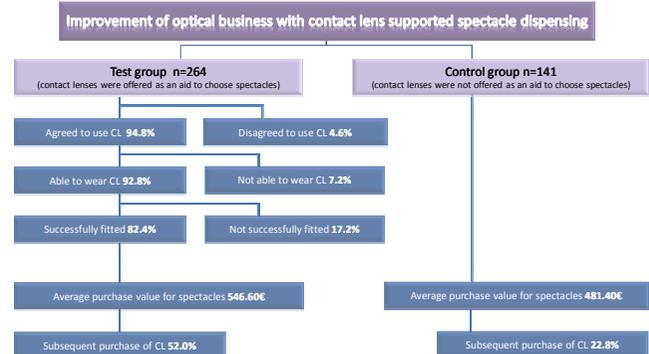


Figure 4: Summary of the study results

## Conclusion:

The study showed clearly that the use of contact lenses for choosing spectacles can improve both, purchase experience for patients and the purchase value of spectacles as well as contact lenses. The results point out, that the interest of ametropes in contact lenses in Germany and also the willingness to try contact lenses is very high. The optical business can be improved with contact lens supported spectacle dispensing.

## References:

- [1] CL Incidence Survey 2009 (TNS)
- [2] GfK 2009
- [3] Atkins, N.P.; Morgan, S. L.; Morgan P. B.: Enhancing the approach to selecting eyewear (EASE): A multi-centre, practice-based study into the effect of applying contact lenses prior to spectacle dispensing. Contact Lens & Anterior Eye 32 (2009) 103-107

## Acknowledgements:

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