## **ODG WTP - Evaluation Brief**

# Willingness to pay for ODG glasses

Eliciting prices for glasses in the rural community of Kaya



### **Key points**

- Willingness to pay (WTP) for glasses in rural areas is low, representing 20% of the current market price.
- Knowledge and awareness can increase the WTP. In the study, a video message increased WTP by about 14%.
- Deferred payment does not increase WTP.
- Subsidized end-user prices can be considered if cross-financed through sales at higher prices in urban areas

#### **Background**

Defective vision is one of the most common disabilities worldwide. According to recent estimates, about 4.5 billion people live with defective vision (Essilor, 2015). Of these, 2.5 billion people live with poor vision unnecessarily because they need, yet do not have, glasses. About 80% of these, i.e. an estimated 2 billion, live in less developed countries and mostly in rural areas (World Economic Forum, 2016).

#### **Study location**

The study interviewed 412 participants in the rural community of Kaya. Kaya is located 100km north of Ouagadougou, the capital city of Burkina Faso.



The implications of impaired vision and particularly the effects of glasses has thus far been an issue which remained neglected in health policy and research in developing countries. Therefore, this study is among the

first to shed light on the potential to distribute glasses through the market in a poor rural context. To this end the willingness to pay (WTP) for eye glasses is elicited through the Becker–DeGroot–Marschak (BDM) method.

#### Acceptance and productive effects of glasses

The style of the ODG glasses was very much appreciated by the study population. Participants expect that the glasses would last over two years on average. Furthermore, glasses are generally perceived to be well accepted in their nuclear environment. Only 9% think that glasses are embarrassing and only 3% think that they can have negative effects. The participants also see productive effects in using glasses. 63% agree that the quality of their work is affected by their vision problems. Furthermore, 58% also agree that the speed with which tasks are done is reduced by their vison problems. On the benefits side, 68% agree that it would be possible to work longer hours with glasses due to better vision in the dark. 77% also think that they would make less errors if they had glasses. 50% find it difficult to concentrate on detailed tasks.

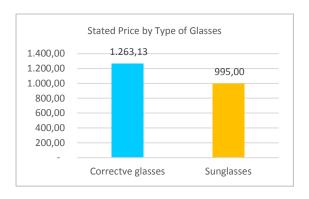
#### Method

With the Becker–DeGroot–Marschak (BDM) method participants are invited to bid a price for glasses. Only if that bid is equal or higher than a randomly drawn price, they get the glasses at the cost of the drawn price. In contrast to simple survey questions where the reported WTP is without consequence for the respondent and may even invite voluntary misreporting, the BDM method confronts the respondent with a real purchase decision and is hence incentive compatible. The more a respondent values eye glasses, the higher will be the bid.

#### The price in rural areas

People in rural areas are willing to pay on average 1,136 CFA F (2 USD) for ODG glasses. This represents only 20% of the current market price. During the study also price statements at the market price were received, however no prices beyond the 5,000 CFA F mark. Hence, the current market price really marks the upper limit.

Participants were prescribed different kinds of glasses depending on vison impairment. The standard was corrective glasses, but participants suffering from cataract were offered sunglasses. The average WTP for corrective glasses lies at 1,263 CFA F, the average WTP for sunglasses at 995 CFA F. 75.2% of the study participants did bid above the randomly drawn price and received glasses.



87% of the study participants were aware of their vision problem prior to arriving at the testing centre. Yet, the average stated price is not different for those who knew and those who did not know. There is also no relationship between the elicited WTP and the severity of the vison problem.

Research Team

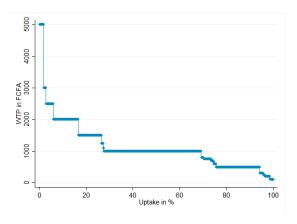
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The results also show that the stated price is strongly influenced by the literacy level of the participant and the market price he or she estimated for the product. Illiteracy reduces the WTP by about 30%. A 1% increase in the estimated market price increases the WTP by 0.28%.

The study further shows that showing the participant a video illustrating the benefits of the glasses prior to the price statement increases the WTP for corrective glasses by 14%. Extending the payment period however does not increase the WTP by relaxing a potential liquidity constraint.



If 90% of all respondents in need of glasses would have to be catered through the 'market', the price would have to be as low as 600 CFA F (or 1.08 USD), i.e. about 12% of the actual market price. Or put differently with the current market price, subsidies of 4,400 CFA F would be necessary to reach at least 90% of those in need of eye glasses.

#### References

Essilor (2015). See Change: Our Contribution to Sustainable Development.

Grimm, M., R. Hartwig and F. Schießl (2016), Eliciting the Willingness to Pay (WTP) for Glasses in Rural Burkina Faso, University of Passau.

World Economic Forum (2016). Glasses for Global Development: Bridging the Visual Divide (June 2016)

#### **Further Information:**

https://www.onedollarglasses.org/