Spectacle wear compliance

Marc Farmer discusses the social influences that have a negative impact on compliance of spectacle wear in children

recurring concern for parents visiting the practice is the difficulty in getting their child to wear their spectacles. Some parents are not sure why their child needs spectacles and are not convinced that wearing a correction is important. Although non-compliance in spectacle wear can be due to poorly fitting frames, or not liking the prescription given, social factors also have a negative influence on spectacle wear.

Peer pressure

The opinions of the child's peers play an important role in spectacle compliance and as a child gets older, neutral comments on their appearance from friends and non-friends decrease. and in the case of non-friends these neutral comments become negative. 1 This trend is found to be most prominent around the ages of five and six where the positive comments decline and the negative comments increase. This is possibly the age when children are becoming more socially aware and influences from peers about spectacles are heightened.² There is also an indirect influence upon non-compliance from the parents of children requiring spectacles.1 Negative opinions voiced by the parent's peers have an impact on the compliance and frequency of spectacle wear in their own children's views.

A longitudinal study in the UK found that children wearing spectacles or an eye patch were more likely to be victims of physical or verbal bullying.³ The study divided peer victimisation into overt bullying (such as name calling and being physically hit) and relational bullying (such as peers not allowing a child to play with them). Children who require a spectacle correction were more likely to be victims of overt bullying as opposed to relational bullying; however, there was no discrimination found between boys and girls in relation to peer victimisation.

It has been hypothesised that overt bullying towards those requiring



Children who wear spectacles are more likely to be victims of bullying according to a UK study³

correction is due to the idea that wearing a patch for a squint or wearing spectacles shows a physical weakness which triggers an overtly aggressive response in children of an inclined disposition.⁴ It was also noted that the lack of binocular eye contact in children with uncorrected strabismus and those requiring eye patches could hinder certain social developments. This form of discrimination can prove detrimental to non-compliant children who require a refractive correction during a critical period in the development of vision.

Peer victimisation is difficult to assess when it comes to the impact it has on a child. A study by Mishna and Alaggia claimed that a third of the victims of bullying do not come forward until some time has passed and the incident is over.⁵ In some cases the child may never disclose any information of incidence of victimisation at all. These researchers found that disclosing any scenarios of victimisation is avoided due to several factors. One factor is that the victim is afraid that the bullying will get worse if they admit to any form of victimisation. Another aspect that inhibits admission of bullying is if the child feels that they are being victimised by a friend, as it is easier to be non-compliant in spectacle

wear than to disclose any negative comments about a fellow peer to a parent or authority figure.

Interestingly, this study also mentions that the victim may feel that they deserve the bullying or feel responsible. ^{5,6} There is a possibility that the child believes the victimisation is to be expected as they have a weakness to exploit, ² which highlights the need to raise awareness and understanding of the importance of spectacle wear among children.

Self perception

The perception of whether a child thinks spectacles make them feel victimised was investigated by Walline *et al.*⁷ The study used the self perception profile of children (SPPC) questionnaire designed by Harter in 1985 to analyse the personal perception of wearing spectacles in comparison to contact lenses. The subjects in this study were aged between eight and 11. The study found that social acceptance and physical appearance improved when the participants were not wearing their spectacles. This could be due to the cultural importance of conformity and acceptance desired by peers as stated by Rich-Harris, where the child's characteristics and values are shaped by social interactions.8

The study by Walline et al is

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supported by Dias *et al* who also noted that the magnitude of the prescription does not in itself affect self perception, more that a correction requirement in itself conveys a negative influence.⁹ This would imply that those children with a lower prescription who can still see fairly well without correction may be inclined to avoid wearing their spectacles.

This was a randomised controlled study, a highly valid one according to Concato et al. 10 Munis et al also state that the SPPC questionnaire is considered a reliable method of tested self perception in children irrespective of age.¹¹ However, it could be argued that using contact lenses is not comparable to not wearing spectacles, as the participant has the visual correction as well as the desire not to show they need this requirement which is perceived as the most positive outcome fulfilling all social requirements. However, it does reinforce the idea that to the child, the dependency upon spectacles is not desired. The study also poses the question as to whether contact lenses are a valid alternative to visual correction in non-compliant patients.

Parental influence

Rich-Harris discusses the theory of the nurture assumption which states that parents can influence the attitudes of children.⁸ This suggests that if a parent has a negative opinion of spectacle correction, this opinion will be adopted by the child through observation. However, it conversely supports the idea that positive reinforcements from the parent can aid in spectacle compliance just as much as negative opinions devalue the importance for spectacle correction. An article by Axinn and Thornton supports the idea that exposure to the parental view conditions a child to share similar attitudes and values, whether positive or negative. 12 This highlights the importance of educating the parent about the importance of spectacle wear.

However, Rich-Harris' group socialisation theory states that any views the child inherits via parental influence are superseded by the views of their peers. This is an elaboration of Bandura's social learning theory based on observation and imitation formulated in 1977. Irrespective of the relevance of the socialisation theory, this is not an aspect that can be influenced by a dispensing optician, as opposed to educating the parents. Therefore, while this theory



Positive support from a well-informed parent helps to counter negative opinions

makes a point of the strength of peer influence over parental values, it does not completely rule out the positive reinforcement a parent can make on a child's compliance.

Brand value

Fischer *et al* found in a study using a convenience sample of 229 children¹³ that the media is an influence. Children as young as three years old are capable of recognising a logo. This shows that advertising can promote spectacles in a favourable light if endorsed by a designer brand. This is supported by Rich-Harris who noted that the nurture aspect in a child's environment increases the influential power advertising has.⁸

Advertising could be used to counter negative perceptions of why children wear spectacles. Providing information to the family and those who supervise the child outside of the home on the importance of spectacle wear could raise awareness of the social factors that need to be addressed to aid successful compliance.

Explanation of the importance of spectacle wear could be presented in the form of a leaflet to a parent, such as that produced by Dr Margaret Woodhouse, a senior lecturer at Cardiff University. ¹⁴ The American Association for Paediatric Ophthalmology and Strabismus (AAPOS) also produces a guide which highlights that a positive attitude from parents can lead to a higher chance of compliance. ¹⁵ It also explains why a child may require spectacles and why

non-compliance may have an adverse effect on the development of the child's vision.

Having the information in the form of a written document reinforces a verbal message and leads to a higher success rate, as found by Johnson *et al.*¹⁶ The information should also be presented in a clear and concise way that avoids technical jargon which may alienate the reader.¹⁷

One online blog gives examples of how a child interprets certain phrases during frame selection. The information is not verified, but it does provide some interesting arguments on attitudes to spectacle wear. This information might not only be aimed at parents, but also used in staff training, encouraging better communication with the child patient.

Aside from providing information at the point of dispense or collection, making schoolchildren aware of the importance of spectacles could help. McGregor-Read talks about visiting schools and discussing with teachers the importance of spectacle compliance.¹⁹ One idea could be to arrange seminars and class discussions, raising awareness of vision and correction. This could be done via school projects or visits from dispensing opticians. Interactivity and participation rather than a formal clinical treatment of the message is likely to be more successful. Such a child-centred method is recommended by Oliver and Candappa.²⁰ This approach could lead to a more positive attitude to those who require

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spectacles, with care taken to ensure that those requiring correction are not categorised as different to their peers.

To enhance the aesthetic appeal of the spectacle frame, it is important to consider a range of styles that reflect the culture of children today. Designer brand manufacturers are starting to appreciate this and companies such as French Connection and Bench supply spectacle frames targeted at younger wearers. The impact advertising can have on children has already been established, and when done in a positive way can present spectacles as a desired commodity.¹³ Jambheshwar found that when done correctly, celebrity endorsement can have a positive impact on perceptions of a product.²¹ It is therefore a possible option for an optical practice to request celebrities to promote frame choices in store and use pictures of them in their practice marketing. This has already been done to some extent by TV personality Gok Wan promoting his range of spectacle frames in Specsavers' stores and celebrities attending spectacle awards ceremonies wearing the latest designs.

Best practice

Spectacles are an important part of a child's life. An optical practice can aid with selecting spectacles for a child and fit them appropriately, as well as discuss with the parent the reason why the prescription is needed, but, as has been discussed, it need not stop there. When it comes to dispensing spectacles to children, it is usual to provide the correction required, explain the best methods of aftercare and consider the consultation as complete.

With so many different influences and values surrounding every child, it is easy to see how interactions within their environment can be counterproductive in the promotion of spectacle wear. Although these factors cannot be predetermined at the time of the dispense, measures can be put in place to ensure that the child and the parent are given all the information necessary to avoid negative connotations surrounding spectacle wear. Written material can ensure that both the child and the parent understand fully the importance of spectacles.

Instigating spectacle awareness campaigns in schools and community centres can ensure that those working there are aware of the importance of spectacle wear and the risks of non-compliance. They will also be

better equipped to look out for the signs of peer victimisation and deal with it appropriately.

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