

HANDLING EVALUATION OF A SELF-ADHESIVE UNIVERSAL RESIN CEMENT BY UK DENTAL PRACTITIONERS

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Program number 1279

INTRODUCTION

Manufacturers and suppliers require "feedback" from practising dentists in order to determine the limitations and advantages of their products.

In 1993 saw the establishment of a group of practising dental practitioners, the PREP (Product Research and Evaluation by Practitioners) Panel¹, prepared to complete evaluations of new materials and techniques in the practice environment.

To date, over 30 evaluations, including handling evaluations and clinical trials^{2,3}, have been completed. The PREP panel presently has 26 members with an average time since graduation of 16 years. The Panel has a UK-wide distribution and a wide range of dental interests facilitating the assessment of a full range of products and techniques.

This evaluation assessed the handling properties of the resin-based luting material (RelyX Unicem, 3M ESPE, Seefeld, Germany) in clinical use in 13 UK dental practices.

METHOD

The thirteen practitioners were selected at random from the PREP panel and supplied with a pack of RelyX Unicem, full written instructions and a questionnaire. Two of the practitioners were female and the average time since graduation was 19 years, with a range of 9 to 34 years.

The 21 question questionnaire was designed to provide background information on the use and choice of luting materials, the handling and ease of use of RelyX Unicem and the comparison of this material with pre-study cementation materials.

The majority of answers were given on a visual analogue scale (VAS).

MATERIAL

RelyX Unicem is a novel encapsulated, self-adhesive, dual cure resin-based material indicated for the cementation of all inlays (porcelain, composite & metal), onlays, crowns and bridges as well as cast posts.

BACKGROUND INFORMATION

The evaluators stated they placed the following number of resin-retained/bonded & other indirect restorations in a typical month:

	Number of Evaluators	
	Resin-retained and bonded restorations	Other indirect restorations
>5	3	1
6-10	6	3
>10	4	9

The main reasons for the choice of both resin-based & conventional luting materials were consistent good results and ease of use.

The evaluators rated the pre-study luting materials for ease of use by a VAS (where 5 = easy to use & 1 = difficult to use) as follows:

1. Resin-based cements



2. Conventional cements



THE EVALUATION OF RELYX UNICEM

A total of 144 restorations were placed using RelyX Unicem

The evaluators rated on a VAS the following aspects of RelyX Unicem:

1. Presentation (5=excellent and 1=poor)



4.6 Evaluator quote - "Computes not large enough for multiple restorations"

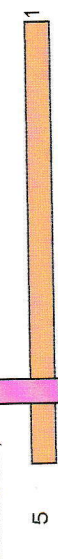
2. Instructions (5=excellent and 1=poor)



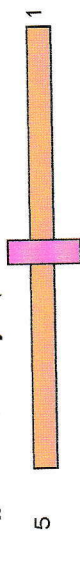
4.3 Evaluator quote - "Laminate, with pictures please"

Remark: Only preliminary instructions provided

3. Dispensing (5=convenient and 1=inconvenient)



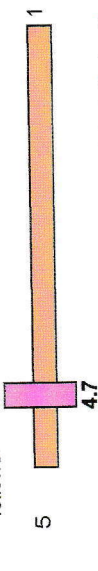
4. Viscosity (5= too viscous and 1 = too thin)



3.0 92% (n=12) of the evaluators stated that it was a very advantageous not to need to etch and bond prior to luting.

15% (n=2) evaluators would like to see further studies on the material especially with regard to bond strength.

The evaluators rated the ease of use of the material on a VAS (5 = easy to use and 1 = difficult to use) as follows:



All 100% (n=13) of the evaluators stated that they would purchase RelyX Unicem if available at average cost and also would recommend the material to colleagues.

CONCLUSION

This new self-adhesive universal resin-cement received high ratings when evaluated by 13 UK general dental practitioners. Ease of handling of materials may be considered helpful to achieving good results, and the new material achieved ratings for ease of use superior to the pre-study resin-based and conventional luting materials.

ACKNOWLEDGEMENT

The support of 3M ESPE (Seefeld, Germany) is acknowledged. The authors also wish to thank the participating practitioners.

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