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Therapy toy for spider phobics

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ABSTRACT. Past research has shown that watching computer images or watching another person contact spiders is effective for desensitisation but neither is as good as contacting real spiders, and neither gives the client control over the stimuli. From this single-case study with replication, two women with spider phobias assembled and disassembled wooden spider models in their own homes but in a manner which kept anxiety levels low. Comparison with three other spider phobic clients given no models but asked to spend a comparable time drawing pictures of spiders show a 20-30% reduction in time spent with the therapist, more cost-efficient therapy with the model. I suggest the realism of the model and control over the stimuli enable the client to adapt to the spider in a step-wise manner.

KEYWORDS. Therapy. Phobia. Homework. Research methods in Psychology. Single-case study with replication.

RESUMEN. La investigación previa ha mostrado que ver imágenes en la computadora o a otra persona en contacto con arañas es efectivo para la desensibilización, pero ni es tan efectivo como el contacto real con arañas, ni tampoco proporciona al cliente control sobre el estímulo. En este estudio de caso único con réplica, dos mujeres con fobia a las arañas montaron y desmontaron maquetas de arañas de madera en sus casas, de tal forma que mantenían niveles de ansiedad bajos. La comparación con otros tres clientes con fobia a las arañas a los que no se les daban las maquetas, pero que dedicaban un tiempo similar a dibujar arañas, muestra una reducción entre el 20-30% del periodo con el terapeuta, resultando más eficiente la terapia con maquetas. El autor sugiere que el realismo del modelo-maqueta y el control sobre el estímulo permiten al cliente adaptarse a la araña de forma progresiva.

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PALABRAS CLAVE. Terapia. Fobia. Tarea para casa. Métodos de investigación en Psicología. Estudio de caso único con réplica.

RESUMO. A investigação prévia tem mostrado que ver imagens em computador ou ver outra pessoa em contacto com aranhas é eficaz para a dessensibilização, mas nem é tão efectivo como o contacto real com aranhas, nem proporciona ao cliente controlo sobre o estímulo. Neste estudo de caso único com replicação, duas mulheres com fobia a aranhas montaram e desmontaram maquetas de aranhas de madeira nas suas casas, de tal forma que mantinham níveis de ansiedade baixos. A comparação com outros três clientes com fobia a aranhas aos quais não se davam maquetas, mas que dedicavam tempo similar a desenhar aranhas, mostra uma redução entre 20-30% do período com o terapeuta, resultando mais eficaz a terapia com maquetas. O autor sugere que o realismo do modelo-maquete e o controlo sobre o estímulo permite ao cliente adaptar-se à aranha de forma progressiva.

PALAVRAS CHAVE. Terapia. Fobia. Tarefa para casa. Métodos de investigação em Psicologia. Estudo de caso único com replicação.

Introduction

With increasing demand for psychology therapy time as more people realise the benefits of psychology, methods are being developed to reduce face-to-face interaction. Homework has been one of these developments (Kazantzis and Deane, 1999; Trautwein and Koeller, 2003), and has been shown to improve outcomes (Kazantzis, Deane, and Ronan, 2000; Leung and Heimberg, 1996; Park, Mataix-Cols, and Marks, 2001). For spider phobias copies of spiders such as computer images (Garcia-Palacios, Hoffman, and Carlin, 2002; Gilroy, Kirkby, and Daniels, 2003) and watching another person contact spiders (Goetestam, 2002) are more effective than no therapy, but not as good as contacting real spiders.

Homework should have a favourable cost/benefit ratio and face validity. For phobias, a titration methodology is commonly used (Gilroy *et al*., 2003), going forward until anxiety is perceived, then going backward until it disappears, and so on. Here, in this single replication of a single-case experimental study (Montero and León, 2005; Ramos-Álvarez, Valdés-Conroy, and Catena, 2006), we try such a technique using a readily-available spider model which can be assembled and disassembled, intermediate between virtual copies of spiders and real spiders.

Method

Two female clients came to a clinical psychology clinic in Scotland when referred by their GP. They were in their 30s and lived locally.

After the initial meeting which included an offer of up to ten therapy sessions (Chamove, McKenzie, Jerrom, and Power, 1991) and one desensitisation session, a model was given to each of two women reporting phobias of spiders. Two versions of a wooden spider-construction model[2] had been purchased locally. Views on the packaging

[2] Hidden Kingdom, Giant Spider 29 X 29 X 18 cm. NZ$ 14, US$ 8, UK £ 5; or Woodcraft Construction Kit, Black Widow Spider 39 X 39 X 17 cm high. NZ$ 7.20, US$ 3.60, UK £ 2.60

of the finished spider were cut, so that only parts of the construction were visible, but enough views were left to show how to assemble the wooden model.

Therapist and client agreed that the client would spend about 30 minutes 3 times a week assembling the model; the client would go as far as they could in the model's construction; but *if they felt at all anxious*, they should disassemble the model until *they no longer felt any anxiety at all*, then reassemble the model until the half hour had passed. If they completed construction, they were told to disassemble the model and build it up again, a total of three times, when there was no accompanying anxiety. After three completions, therapist and client agreed the latter would then go to toy shops and purchase items to add to the spider to make it more spider-like, and add them to the model. The client would then go to a fabric shop and purchase a black fur-fabric to add to the wooden model to make it more spider-like, as close to the clients' image of a fearful spider as possible. Total instructional time concerning the construction of the model was about 15 minutes.

At weekly meetings, clients were asked about their experience with the model for about ten minutes per session. No attempt was made to assess either quality or quantity of compliance due to the negative effects of such questioning (*e.g.*, Hoelscher, Lichstein, and Rosenthal, 1984), nor to verbally reward the client for progress with the spider model because of the negative effects of such rewarding (Warkentin, 1956; Wood and Chamove, 1991).

The comparison group was three women previously also seen for spider phobias. They were treated similarly except for their homework assignments. These women agreed to spend about 30 minutes 3 times per week sketching pictures of spiders on a sheet of paper, trying to progressively add detail to the sketch to make the drawing more realistic and more frightening. As anxiety was perceived, the client agreed she would throw the drawing away and start again.

Results

The two model-spider women both reported anxiety when constructing the spider model, so it was repeatedly stressed that the goal was to keep anxiety levels to a minimum. After three weeks both women had built the toy spider and were adding items to it. They reported no anxiety with the toy model. When adding black fur fabric, both reported an increase of anxiety and were told to disassemble the toy and glue the fabric to the wooden parts before reassembling it.

The women said they enjoyed the spider toy, enjoyed the mental activity of constructing it, and one says proudly that she displays it in her living room. When comparing the number of weekly sessions with the three women previously treated, it was found that there was a 20%-30% reduction in the number of days seen by the therapist until discharge. At that time all five clients could hold a bottle with a live spider inside.

Discussion

This study confirmed that a mental exercise leads to improvement in behaviour (Brown and Chamove, 1993; Chamove, 1986; Chamove, 1989) when it is combined with a task-specific exercise. The toy spider model involves a small monetary cost, a

cost in time explaining the procedure to the client, and some cost to the client in purchasing additional material. The benefit is a reduction in overall cost equivalent to 2 to 3 therapy sessions compared with the 10-session norm.

It is known that aversive stimulation can lead to an increase in "exploratory behaviour from a *safe distance*" (Cautill, 2004, p. 130). It is hoped that the novel and thus uncertain stimuli sets the stage for exploration and curiosity within a safe environment.

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