Belief in the paranormal and suggestion in the seance room

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Abstract

In Experiment One, participants took part in a fake seance. An actor suggested that a table was levitating when, in fact, it remained stationary. After the seance, approximately one third of participants incorrectly reported that the table had moved. Results also showed a significant relationship between the reported movement of the table and belief in the paranormal, with a greater percentage of Believers than Disbelievers, reporting that the table had moved. Experiment Two varied whether the suggestion was consistent, or inconsistent, with participants' belief in the paranormal. Results again showed that Believers were more susceptible to suggestion than Disbelievers, but only when the suggestion was consistent with their belief in the paranormal. Approximately one fifth of participants believed that the fake seances contained genuine paranormal phenomena.

> The method of the seance is precisely adapted to produce illusions and hallucinations, and it strains credulity to imagine that any trustworthy observations come from it..
> *Coover, The Case For and Against Psychical Belief, 1927.*

Introduction

For over a century people have held seances in an attempt to contact the dead (see, e.g., Pearsall, 1972). In a typical seance, a group of people (referred to as 'sitters') sit around a table with a medium, turn out the lights, hold hands and attempt to communicate with the spirit world. In some seances, the medium appears to enter into a trance and delivers messages from the sitters' deceased friends and relatives. In another type of seance (referred to as 'physical seances'), objects that have been treated with luminous paint are placed in the centre of the table, and the spirits apparently cause these objects to levitate and move. Although physical seances were at their most popular during the Victorian period, groups of sitters and mediums still hold physical seances today, often reporting the same type of seemingly inexplicable phenomena that were described by eyewitnesses attending such events at the turn of the last century (see, e.g., Stemman, 1975: Solomon & Solomon, 1999).

Many writers have questioned the reliability of testimony for seance phenomena, arguing that witnesses may have been the victims of trickery and self-deception (see, e.g., Lewis, 1886, Fraser-Harris, 1935; West, 1982). A small number of researchers have also carried out studies demonstrating how sitters can be fooled by fake mediums, and the difficulties involved in accurately observing and remembering the events that take place during a seance. Hodgson and Davey (1887) held fake seances for unsuspecting sitters and asked them to write a description of the seance. They reported that many sitters omitted important events, recalled others in an incorrect order and often believed that they had witnessed genuine paranormal phenomena. In 1898, Lehmann (cited in Jahoda, 1969) conducted a similar experiment and again described how participants' accounts of a fake séance were often wildly inaccurate. Besterman (1932) had sitters attend a mock seance and then answer questions relating to various phenomena that had occurred. Besterman reported that sitters had a tendency to underestimate the number of persons present in the seance room, failed to report major disturbances that took place (e.g., the experimenter leaving the seance room) and experienced the illusory movement of objects. Most recently, Wiseman, Smith and Wiseman (1995) carried out a study to examine the reliability of modern day eyewitness accounts of seance phenomena. Participants attended one of three fake seances. They were shown into a darkened room, sat in a large circle, held hands and attempted to psychically move luminous objects that had been placed in the centre of the circle. Through trickery, two of the objects (a pair of maracas) were made to move during the seance. After the seance, participants completed a questionnaire about their experiences. Results revealed that participants' testimony was often unreliable, with, for example, one in five participants incorrectly stating that the maracas had been examined beforehand, thus misremembering a fact that was fundamental to the working of the trickery.

Although this previous research has demonstrated the unreliability of eyewitness testimony for seance phenomena, none of this work has investigated the degree to which such

testimony could be influenced by the medium's verbal suggestions. Indeed, Besterman explicitly avoided this issue in his study, writing 'It must be noted that neither in the sitting nor in the questions was any experiment made with such misleading suggestions as fraudulent physical mediums often know how to use.'. This is rather unfortunate, as both magicians and fraudulent mediums have written extensively about how they often attempt to use suggestion to deceive sitters into believing, for example, that the seance room has suddenly become cold, that stationary objects are moving, and that there is an unusual sense of presence in the room (Carrington, 1907: Abbott, 1912: Burger, 1986). The experiments reported in this paper present the first systematic examination of the impact that such suggestions have on the reliability of eyewitness for séance phenomena.

Experiment One involved participants taking part in one of eight fake seances. An actor, playing the role of a medium, asked them to sit in a large circle and hold hands. The lights were extinguished and participants were asked to try and psychically move various luminous objects that had been placed in the centre of the circle. Simple forms of trickery were used move two of the objects. The actor then suggested that a small table was levitating when, in reality, it remained stationary. As a control, the actor also asked participants to attempt to psychically move a handbell that had been placed on the table. The handbell remained stationary and the actor did not suggest that it had moved. Two weeks later, participants were asked whether the table and handbell had moved during the seance. It was predicted that the actor's suggestions would cause many participants to report that the table had moved during the seance.

The experiments also examined the possible relationship between participants' belief in the paranormal and the degree to which they were influenced by the actor's suggestion. Researchers have carried out a great deal of work into the psychology of belief in the paranormal (see, e.g., reviews by Irwin, 1993, 1999; French, 1992). Much of this work has examined whether such beliefs correlate with a range of factors, including, intelligence, reasoning ability, critical thinking ability, levels of childhood trauma and creativity. A small amount of this work has also examined the possible relationship between belief in the paranormal and suggestibility. Haraldsson (1985) found a significant positive correlation between paranormal belief and the Gudjonsson Suggestibility Scale. Likewise, Dafinoiu (1995) reported a significant relationship between participants' levels of paranormal belief and their scores on a suggestibility questionnaire, with people who believed in the paranormal exhibiting higher suggestibility scores than disbelievers. The experiments reported here extend this work by examining whether these findings generalise to the more naturalistic context of the séance room.

Prior to the fake séances in Experiment One, participants were asked to indicate whether they believed that genuine paranormal events could occur during seances. Based upon the previous research outlined above, it was predicted that there would be a significant relationship between participants' prior belief in the paranormal and the reported movement of the table, with a greater percentage of Believers than Disbelievers incorrectly reporting that the table had moved.

EXPERIMENT ONE

Method

Participants

Participants were self-selected delegates attending the 1996 Fortean Times Convention. This is a large, two day, event that attracts a wide cross section of the public who are interested in a variety of unusual phenomena including parapsychology, UFOs, cryptozoology, etc.. 152 people attended one of eight seances. Two weeks after the experiment, everyone who attended a seance was sent a questionnaire. 110 participants returned these questionnaires (response rate: 72.3%).

Equipment and room lay-out

Four objects were used during the seance; a table (18 inches high with a 10inch by 10inch top) a handbell (6 inches high), a maraca (7 inches long) and a ball (6 inches in diameter). All of these were chosen as they are the type of objects typically used during seances. All of the objects had been treated with luminous paint to ensure that they could be seen in the dark. Approximately the same amount of paint had been placed on the table and handbell to ensure that they would be equally visible during the seance. The experiment took place in a large room. The room had no windows and its doors were sealed and blacked out. Twenty five chairs were arranged into rows on one side of the room and another twenty five arranged into a large circle on the opposite side. The table was placed in the middle of the circle and the other objects were placed on top of it. To ensure that the table and handbell remained stationary during the seance (i.e., were not moved by psychic forces, spirit intervention or mischievous participants) an infra-red light and videocamera was used to record all of the seances.

Questionnaires

Questionnaire One asked participants to note their name and address. The questionnaire explained that, for the purposes of this experiment, the term 'paranormal' was being defined as being any phenomena which were beyond normal explanation. Participants were then asked to respond to the question 'Do you believe that paranormal phenomena sometimes occur during seances' on a scale from 1 (Definitely yes) to 7 (Definitely no). Participants circling either '1', '2' or '3' were classified as 'Believers' (N=36), '4' as 'Uncertain' (N=35), and '5', '6' or '7' as 'Disbelievers' (N=39).

Questionnaire Two presented participants with several statements about the seance (e.g., 'The objects were handed around for examination prior to the seance', 'The medium placed the objects onto the table'), and asked them to rate their level of agreement to each item on a scale from 1 (Definitely correct) to 7 (Definitely incorrect). Responses to just two of the statements ('During the seance, the table moved' and 'During the seance, the handbell moved') were examined. For these items, responses of '1', '2' or '3' were classified as 'Yes', '4' as 'Uncertain', and '5', '6' or '7' as 'No'.

Procedure

Approximately twenty five people attended each fake seance. At the start of each session,

participants sat in the rows of chairs on one side of the room. The room lights were lowered into semi-darkness, and the first author (RW) gave a brief talk about the aims of the project and the nature of the forthcoming seance. He explained that he was interested in the psychology of seances and was conducting research into the topic. He also explained that, for ethical reasons, the seance would not involve trying to contact the dead, but would instead consist of participants attempting to psychically move luminous objects in complete darkness. RW did not mention that any of the seance phenomena would be faked, or that there would be any attempt at verbal suggestion. However, neither did he state or suggest that any of the phenomena would be genuine paranormal effects. Instead, he invited participants to take part the seance and make up their own minds about what they had experienced. Finally, RW explained that participants would be sent a questionnaire about their experiences during the seance two weeks after the event. Any participants not wanting to take part were then given an opportunity to leave. All participants remained.

Participants then completed Questionnaire One and were asked to take a seat in the circle of chairs on the opposite side of the room. RW introduced the actor playing the part of the medium and left the room. The actor explained that he did not claim to possess any mediumistic powers, and that his role was to simply guide the group through the seance. He then switched on a small torch, turned off the room lights, took his seat in the circle of chairs and asked everybody to join hands. The actor then turned off his torch and held the hands of the people either side of him. To allow time for participants to become adapted to the dark, the actor spent a few minutes reiterating the purpose of the experiment and reminding people that they were free to leave at any point (all participants remained during all seances). The actor then directed the group's attention towards the maraca. After a few minutes the maraca rolled across the table top and fell to the ground. Participants were then asked to concentrate on the ball. The ball rose approximately 18 inches into the air and then fell to the floor. Both of these phenomena were caused by a hidden assistant moving the objects with a long stick. This simple form of trickery was frequently used by fraudulent mediums during Victorian times, and is described in several texts on faking seance phenomena (see, e.g., Carrington, 1907; Burger, 1986). The removal of both of these objects from the table top allowed all participants a clear view of the table and handbell. The actor then asked participants to try to psychically move the handbell. The handbell remained stationary and the actor did not suggest that it had moved. Finally, the actor asked participants to attempt to psychically move the table. The table remained stationary, however, the actor suggested that it was levitating by using phrases such as 'That's good, the table's lifting up now, that's good' etc.. Each seance lasted approximately fifteen minutes.

Two weeks after the seance, all participants were sent Questionnaire Two and, three weeks after that, a report outlining the method and results of the study. This report also provided the contact details of RW in case any participants wanted to discuss the experiment. No participants contacted RW.

Results

The infra-red film revealed that both the table and handbell had remained stationary throughout all eight seances.

Reported movement of the table

Almost 31% of participants incorrectly reported that the table had moved during the seance (see Table 1). There was a significant relationship between participants' prior belief in the paranormal and the reported movement of the table (Chi square=9.43, df=4, p=.05), with a larger percentage of Believers than Disbelievers reporting that the table had moved.

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Table 1 here

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Reported movement of the handbell

10% of participants incorrectly reported that the handbell had moved during the seance (see Table 2). There was a nonsignificant relationship between participants' prior belief in the paranormal and the reported movement of the handbell (Chi square=2.72, df=4, p=.61).

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Table 2 here

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Discussion

Approximately 31% of participants reported that the table had moved during the seance, compared to only 10% reporting that the handbell had moved. This indicates that the actor's suggestions had a considerable impact on participants' testimony, and supports the notion that verbal suggestion can be used to deceive sitters into reporting the movement of objects that, in reality, remained stationary during the seance.

Also, as predicted, there was a significant relationship between participants' prior belief in the paranormal and the reported movement of the table, with a greater percentage of Believers than Disbelievers reporting that the table had moved. This effect could be due to a general tendency on the part of Believers to report the movement of objects during the seance. However, the nonsignificant relationship between participants' prior belief in the paranormal and the reported movement of the handbell does not support this hypothesis. Instead, these findings suggest that the Believers were more susceptible to the actor's suggestions than the Disbelievers.

The authors decided to build upon these initial findings by examining the degree to which the effectiveness of the suggestion depended upon whether it was consistent with participants' prior belief in the paranormal. In Experiment One, Believers may have been influenced by the actor's suggestions, in part, because his comments (i.e., that the table was levitating) were consistent with their belief in paranormal phenomena. Experiment Two examined this issue by having the actor make two different types of suggestion. In one part of the seance, referred to as the 'pro-paranormal' condition, the actor suggested that a stationary object (a handbell) was moving. In another part of the seance, referred to as the 'anti-paranormal' condition, he suggested that a moving object (a slate) was stationary.

Believers may be more susceptible to suggestion than Disbelievers regardless of whether the actor's suggestions are consistent or inconsistent with their belief in the paranormal. If so, results would indicate a significant relationship between participants' prior belief in the

paranormal and the reported movement of objects in both conditions. However, a greater percentage of Believers than Disbelievers would report that the handbell had moved in the pro-paranormal condition, whilst a greater percentage of Believers than Disbelievers would report that the slate had remained stationary in the anti-paranormal condition.

Alternatively, participants may only be influenced by suggestions that are consistent with their belief in the paranormal. This would also result a significant relationship between participants' prior belief in the paranormal and the reported movement of objects in both conditions. However, a greater percentage of Believers than Disbelievers would report that the handbell had moved in the pro-paranormal condition, whilst a greater percentage of Disbelievers than Believers would report that the slate had remained stationary in the anti-paranormal condition.

Finally, it is also possible that Believers would only be influenced by suggestions that are consistent with their belief in the paranormal, whilst Disbelievers would not be influenced by the suggestions in either condition. Such findings would provide general support for the results of a previous study into a broadly similar topic. Jones & Russell (1980) asked both Believers and Disbelievers to observe a staged demonstration of extra-sensory perception (ESP). In one condition the demonstration was successful (i.e., ESP appeared to occur) whilst in the other it was not. All participants were then asked to recall the demonstration. Believers who saw the unsuccessful demonstration distorted their memories of it and often stated that ESP had occurred. Disbelievers tended to correctly recall the demonstration, even if it appeared to support the existence of ESP. In Experiment Two, such findings would result in a significant relationship between prior belief and reported movement in the pro-paranormal condition, with a greater percentage of Believers than Disbelievers reporting movement of the handbell. There would, however, be a nonsignificant relationship between prior belief and the reported movement of the slate in the anti-paranormal condition.

Both conditions also used control objects to help assess the general effect of suggesting that a stationary object was moving, and a moving object was stationary. In the pro-paranormal condition, the actor asked participants to psychically move a tambourine. The tambourine remained stationary and the actor did not suggest that it had moved. In the anti-paranormal condition, the actor asked participants to psychically move a candlestick. The candlestick moved the same distance as the slate, but the actor made no suggestions about it remaining stationary.

There was also one minor methodological difference between Experiments One and Two. In Experiment One, Questionnaire Two presented participants with statements such as 'During the seance, the table moved', and asked them to rate their level of agreement on a seven point scale. Responses of '1', '2' or '3' were then classified as 'Yes', '4' as 'Uncertain', and '5', '6' or '7' as 'No'. As some participants may not have interpreted the scale in the way intended by the experimenters (e.g., participants may have circled '4', but not meant to indicate that they were uncertain about the movement of the table), the possible response options in Questionnaire Two were simplified to 'Yes', 'No' and 'Uncertain' .

EXPERIMENT TWO

Method

Participants

Participants were self-selected delegates attending the 1999 Fortean Times Convention. 198 people attended one of twelve seances. Two weeks after the seance, all attendees were sent Questionnaire Two. 125 participants returned these questionnaires (response rate: 63.1%).

Equipment and room lay-out

Five objects were used in this seance: a handbell (6 inches high), a candlestick (9 inches high), a slate (8 inches long, 6 inches wide), a tambourine (12 inches in diameter) and ball (6 inches in diameter). All of the objects were treated with luminous paint to ensure that they could be seen in the dark. Approximately the same amount of paint had been placed on the handbell and tambourine, and the slate and candlestick, to ensure that they were equally visible during the seance. Also, only the base of the candlestick was treated with luminous paint to ensure that it created a similar visual image as the slate (i.e., luminious dots close to the surface of the table) when in complete darkness. The experiment took place in a large room. The room had no windows and its doors were sealed and blacked out. Twenty five chairs were arranged a circle around a large table (approximately 5 feet in diameter). The luminous objects were placed on top of the table. It was not possible to film the seances in this experiment due to technical problems.

Questionnaires

Questionnaire One was identical to that employed in Experiment One.

Questionnaire Two presented participants with statements about the seance, and asked them to rate their agreement to each item by marking one of three responses ('Yes', 'Uncertain', 'No'). Responses to four of these statements ('During the seance, the bell moved', 'During the seance, the slate moved', 'During the seance, the tambourine moved' and 'During the seance the candlestick moved') were analysed. The questionnaire also asked participants whether they had attended one of the seances in Experiment One (possible responses: 'Yes' or 'No'), as any participants who had attended a previous seance were to be removed from all analyses.

Procedure

Approximately twenty five people attended each fake seance. RW again gave an initial talk to participants, covering the same points as those described in the procedure section of Experiment One. Participants were given an opportunity to leave the experiment at this point, but all remained. Participants then completed Questionnaire One. In this experiment, RW played the role of the 'medium', but again explained that he did not claim to have any mediumistic or psychic abilities. The objects were then arranged on the table in such a way as to ensure that all of the participants had a clear line of vision to all of the objects. RW turned off the room lights, took his seat in the circle of chairs and asked everybody to join hands. RW then reminded participants that they could leave at any point in the seance (all participants remained). RW asked participants to concentrate on the ball. After a few moments the ball rose into the air and then slowly returned to the table. RW then asked

participants to focus their attention on the tambourine. The tambourine failed to move and RW made no suggestion concerning its movement. Next, RW had the group concentrate on the handbell. Although the handbell remained stationary, RW suggested that it was moving by using phrases such as 'That's good, the bell is moving now, lift the bell up, that's good' etc.. Participants were then asked to try to psychically move the candlestick. The candlestick moved approximately two inches, but RW made no suggestions about its movement. Finally, participants were asked to observe the slate. The slate moved also moved approximately two inches, however, RW suggested that it was not moving by using phrases such as 'it's not working, not to worry, don't be disappointed' etc.. As in Experiment One, the movement of the ball, candlestick and slate were performed by a hidden assistant. Two weeks later, all participants were sent Questionnaire Two and, three weeks after that, a report describing the methods and results of the experiment. No participant contacted RW after receiving the report.

Results

Due to technical problems in the first two seances (wherein the slate and candlestick failed to move in the desired way), data from participants attending these sessions were not included in the analyses (N= 20). In addition, data from participants who had attended a seances in Experiment One were also discarded (N=5). The procedure used to classify participants as 'Believers', 'Uncertain' and 'Disbelievers' in Experiment One was used to classify participants in this experiment.

Pro-paranormal condition: Perceived movement of the handbell

11% of participants incorrectly reported that the handbell had moved during the seance (see Table 3). There was a significant relationship between participants' belief in the paranormal and the reported movement of the handbell (Chi square= 9.101, df=4, p=.05), with a greater percentage of Believers than Disbelievers reporting that the handbell had moved.

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Table 3 here

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Pro-paranormal condition control: Reported movement of tambourine

10% of participants incorrectly reported that the tambourine had moved during the seance (see Table 4). There was nonsignificant relationship between participants' prior belief in the paranormal and the reported movement of the tambourine (Chi square= 4.10, df=2, p= .39).

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Table 4 here

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Anti-paranormal condition: Reported movement of slate

86% of participants incorrectly reported that the slate had remained stationary during the seance (see Table 5). There was a non significant relationship between participants' prior belief in the paranormal and the reported movement of the slate (Chi square= .95, df=4, p= .92).

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Table 5 here

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Anti-paranormal condition control: Reported movement of the candlestick

9% of participants incorrectly reported that the candlestick had remained stationary during the seance (see Table 6). There was a non significant relationship between participants' prior belief in the paranormal and the reported movement of the candlestick (Chi square=4.41, df=4, p = .35).

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Table 6 here

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Discussion

In Experiment Two, RW suggested that a stationary handbell was moving during the seance, but did not suggest that a stationary tambourine was moving. 11% of participants incorrectly reported that the handbell had moved, whilst 10% reported that the tambourine had moved. This does not provide support for the notion that RW's suggestions influenced the degree to which participants reported that a stationary object was moving, and thus failed to replicate the results obtained in Experiment One. However, 86% of participants incorrectly reported that the slate had remained stationary during the seance, compared to just 9% of people indicating that the candlestick hadn't moved. This large difference may have been due to RW's suggestion, and/or may have simply reflected that the candlestick was easier to see due to its shape.

As predicted, there was a significant relationship between participants' prior belief in the paranormal and the reported movement of the handbell, with a greater percentage of Believers than Disbelievers reporting that it had moved. Again, this finding cannot be explained in terms of a general tendency for Believers to endorse the movement of objects, as there was a nonsignificant relationship between participants' prior belief in the paranormal and the reported movement of the tambourine. This result, combined with the findings from Experiment One, strongly supports the notion that in the seance room, Believers are more suggestible than Disbelievers for suggestions that are consistent with the existence of paranormal phenomena.

There was no significant relationship between participants' prior belief in the paranormal and the reported movement of either the slate or candlestick. These findings suggest that Believers are no more suggestible than Disbelievers for suggestions that are inconsistent with the existence of paranormal phenomena.

Many different mechanisms could underlie these effects. For example, the verbal suggestions may have influenced participants' perception and/or memory of the movement of the objects. Alternatively, participants may have been influenced by the demand characteristics of the situation. That is, they may have found it difficult to judge whether the luminous objects were actually moving, and simply relied upon the comments of the person leading the seance. Or, some may have simply endorsed the statements on Questionnaire Two because they were positively phrased (e.g., 'During the séance, the table moved'). Previous work into the psychology of suggestion have not, for the most part, supported the notion that these types of findings are due to demand characteristics (see, e.g., Rantzen and Markham, 1992). However, future work could tease apart these competing interpretations by, for example,

asking participants whether they actually saw the objects move, or were simply being guided by the comments of the person leading the seance.

Both Experiments also provided strong evidence that many other types of phenomena frequently reported at 'genuine' seances may also be illusory. One of the items on Questionnaire Two asked participants if they had experienced any unusual phenomena (other than the movement of objects) during the seance (possible responses; 'Yes', 'Uncertain' or 'No'). In Experiment One, 20% of participants indicated that they had experienced these phenomena, with a significantly greater percentage of Believers (30%) than Disbelievers (8%) reporting such experiences (Chi square=6.36, df=4, p=.04). In Experiment Two, 21% of participants reported such experiences. In addition, the relationship between participants' prior belief in the paranormal and the reporting of such experiences was in the same direction as Experiment One, and approached significance (Chi square=8.78, df=4, p=.07). The Questionnaire also asked participants to describe their experiences. Many people reported the type of quite dramatic phenomena often associated with 'genuine' seances, including being in an unusual psychological state (e.g., 'Feeling of depersonification and elation when the objects moved'); changes in temperature (e.g., 'Cold shivers running through my body when I concentrated hard on moving the objects'); an energetic presence (e.g., 'A strong sense of energy flowing through the circle which increased'), and unusual smells (e.g., 'A smell of hot plastic, combination of sweet and acrid smell'). Thus, the fake seances caused participants to report many of the experiences described by those attending 'genuine' seances, suggesting that such effects are the result of psychological processes (e.g., psychosomatic experiences brought about by participants' heightened expectations or strong beliefs), rather than being caused by paranormal, psychic or mediumistic mechanisms. Future work could examine the factors that enhance and disrupt the reporting of such experiences.

Questionnaire Two also asked participants whether they believed that they had witnessed any genuine paranormal phenomena during the seance (possible responses: 'Yes', 'Uncertain' and 'No'). In Experiments One and Two, approximately 16% and 11% of participants indicated that they believed that some of the phenomena were paranormal. In both experiments there was also a significant relationship between participants' prior belief in the paranormal and whether they believed that the seance had contained genuine paranormal phenomena, with a greater percentage of Believers than Disbelievers indicating that this was the case (Experiment One: Chi square=40.60, df= 4, p=.0001: 40% of Believers vs 3% of Disbelievers in 'Yes' category: Experiment Two: Chi square=24.32, df=4, p = .0001; 24% of Believers vs 3% of Disbelievers in 'Yes' category). Interestingly, many participants indicated that they were convinced that the 'suggested' phenomena (i.e., the 'movement' of the table in Experiment One, and the handbell in Experiment Two) were paranormal.

It is difficult to know the extent to which these findings will generalise to other groups of participants and other settings. The participants in both experiments were self-selecting individuals attending a convention about strange phenomena. As such, their responses may not be typical of a wider, and more representative, cross-section of the general public. In addition, there were several major differences between the seances held during these experiments and most 'genuine' seances. Many sitters at 'genuine' seances may be far more

motivated to believe that they are witnessing genuine paranormal phenomena than the participants in our experiments because, for example, they may have recently suffered a bereavement and want to see evidence that the spirit of their friend or relative has survived bodily death. Also, during our fake seances, participants were not told that the seance would contain genuine paranormal phenomena, nor did the person leading the seance claimed to be a medium. In a 'genuine' seance, sitters are explicitly told that the seance will involve contact with the spirit world, and that the person in charge of the seance has genuine mediumistic abilities. Finally, 'genuine' seances often last for many hours, whereas our fake seances only lasted approximately fifteen minutes. It is highly likely that the conditions associated with a 'genuine' seance could greatly enhance many of the psychological effects obtained in the fake seances, thus resulting in even more unreliable and inaccurate testimony.

For over a century people have attended physical seances and reported witnessing seemingly inexplicable phenomena. Experiments conducted around the turn of the last century revealed that many of these accounts were unreliable. The experiments reported here have shown that modern day witnesses also produce inaccurate testimony of séance phenomena. In addition, these experiments represent the first attempt to systematically examine verbal suggestion within the context of the seance. They have demonstrated that such suggestions have the potential to cause sitters to incorrectly report that stationary objects were moving, and that moving objects were stationary. The studies have also produced strong evidence that within the context of a seance, Believers are significantly more susceptible to verbal suggestion than Disbelievers, but only when the suggestion is consistent with the existence of paranormal phenomena. Both experiments also revealed that during the fake seances many participants reported experiencing the type of unusual phenomena often associated with 'genuine' seances, including, for example, sudden changes in temperature, a sense of unusual energy and odd smells. Finally, results also showed that about a fifth of participants believed that the fake seance contained genuine paranormal phenomena, and that a significantly greater percentage of Believers than Disbelievers believed this to be the case.

In the same way that other types of magic tricks have provided interesting insights into attentional, perceptual and memorial processes (see, e.g., Lamont & Wiseman, 1999), so these experiments have demonstrated how the seance room can provides psychologists with a naturalistic way of examining verbal suggestion, thus overcoming the concerns of those researchers who have questioned the ecological validity of laboratory based studies involving only students and relatively unrealistic stimulus material, such as slides and videotapes (see, e.g., Spiegel, 1995). It is hoped that the findings will encourage other investigators to venture out of their laboratories and into the seance room.

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Tables

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	13 (36.1%)	8 (22.8%)	13 (33.3%)	34 (30.91%)
Uncertain	12 (33.3%)	16 (45.7%)	6 (15.4%)	34 (30.91%)
No	11 (30.6%)	11 (31.5%)	20 (51.3%)	42 (38.18%)

Table 1: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the table moved'.

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	2 (5.56%)	3 (8.57%)	6 (15.38%)	11 (10%)
Uncertain	5 (13.89%)	3 (8.57%)	5 (12.82%)	13 (11.82%)
No	29 (80.56%)	29 (82.86%)	28 (71.79%)	86 (78.18%)

Table 2: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the handbell moved'.

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	7 18.92%	0 0%	4 11.76%	11 11%
Uncertain	8 21.62%	3 10.34%	4 11.76%	15 15%
No	22 59.46%	26 89.66%	26 76.47%	74 74%

Table 3: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the handbell moved'.

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	2 5.41%	4 13.79%	4 11.76%	10 10%
Uncertain	4 10.81%	4 13.79%	8 23.53%	16 16%
No	31	21	22	74

	83.78%	72.41%	64.71%	74%

Table 4: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the tambourine moved'.

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	2 5.41%	1 3.45%	1 2.94%	4 4%
Uncertain	3 8.11%	4 13.79%	3 8.82%	10 10%
No	32 86.49%	24 82.76%	30 88.24%	86 86%

Table 5: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the slate moved'.

	Believers	**Uncertain**	**Disbelievers**	**Overall**
Yes	27 72.97%	26 89.66%	30 88.24%	83 83%
Uncertain	5 13.51%	1 3.45%	2 5.88%	8 8%
No	5 13.51%	2 6.9%	2 5.88%	9 9%

Table 6: Numbers (and percentages) of Believers, Uncertain and Disbelievers responding Yes, Uncertain and No to the statement 'During the seance the candlestick moved'.