

## **Taking Action on Precognitive Experiences: Why People Act and How Acting Affects Their Worldview.<sup>1</sup>**

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**ABSTRACT:** 190 participants took part in a survey on precognitive experiences. Only those who suspected beforehand that their experience would come true were included. All participants completed Rotter's (1966) locus of control scale, MacDonald's (1970) shortened ambiguity tolerance scale and Eysenck, Eysenck & Barrett's (1985) shortened neuroticism scale. It was found that preventable events were acted on significantly more often than unpreventable ones and that those who scored low on the neuroticism scale would act more often regardless of the type of event foreseen. There was some indication that other ESP experiences (not precognition) inherently prompt action whereas precognitive experiences do not. Foreseeing an event seemed also to affect the way in which the future event was eventually perceived, but it did not appear to change people's view of time. Further work is recommended.

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One of the first questions that people who have premonitions ask is whether there is anything they can do about what they have foreseen. Despite the very basic and obvious nature of this question parapsychologists have only rarely examined this issue. Indeed, although there are many accounts of spontaneous precognitive experiences the only study to date that has focused specifically on whether people can act on their premonitions is Louisa Rhine's (1955) article "Precognition and intervention". This study is now over forty years old.

The leading question behind Rhine's research was whether it is possible for people to intervene in the events they foresee. This issue in turn bears on the question of whether our future is predetermined or open to change. Indeed, it was in the context of these philosophical issues that Rhine presented her research.

Although Rhine recognized that spontaneous cases could not be taken as proof of psychic functioning, she believed that they may have underlying patterns that could be useful for designing future experimental work. Moreover, in respect of the intervention issue in particular, spontaneous cases were the only material available for study. It is virtually impossible to test the intervention hypothesis experimentally because we cannot know whether participants foresee what is prevented or what will actually occur.

Rhine had collected thousands of accounts of spontaneous ESP experiences. The database for her analyses on the intervention issue was a subset of these accounts and comprised only precognitive experiences in which percipients had been convinced that

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their experience would come true (“conviction” cases). Only in such experiences would intervention be possible, for if the person realized only afterwards that their experience had been a premonition, they could not have contemplated intervening in the foreseen event beforehand. After retrieving the “conviction” cases, Rhine removed all accounts of events in which intervention would not have been desired (such as in premonitions of winning the lottery).

Rhine found that in about two-thirds of the remaining cases people had not acted on their precognitions. Of these two thirds the vast majority (77%) were experiences of events that were themselves unpreventable (e.g., floods, illnesses, serious accidents). Conversely, when percipients had tried to intervene (N = 191), most of the foreseen events were preventable (94%) and most attempts at intervention were successful (69%). This suggests that people take action only if the event they foresee is avoidable and if they do try to intervene they are often successful.

However out of all these cases Rhine deemed only 9 (5%) as being good candidates for intervention. All other cases were discarded either (i) because some other form of ESP (e.g., clairvoyance) might have been the psi process involved; (ii) the premonition could have been coincidental; (iii) the consequences of the event were averted but not the foreseen event itself or (iv) the event may have been avoided in normal circumstances anyway. Rhine nevertheless concludes from the remaining nine cases that intervention in precognized events may well be possible.

The aim of the current study was not to see whether intervention in precognized events is possible but to determine why some people act on their precognitive experiences whereas others do not. It is possible that personality characteristics play a role. For example, people who act on their premonitions may simply be those who would normally take action whenever they can. Alternatively, people may have experiences about events which might be avoided because they generally like to think of situations as being ambiguous. Or it could be that those who worry about things will act more often on what they foresee. As a result all participants in the current study were asked to fill out locus of control (Rotter, 1966 from Lefcourt, 1982), ambiguity tolerance (MacDonald, 1970) and neuroticism (Eysenck, Eysenck & Barrett, 1985) scales. Another possibility is that certain types of experience might prompt action more often than others. For instance, previous work (Schouten, 1979, 1981, 1982) had found that intuition experiences were acted on more frequently. These, then, were the types of question that motivated the current survey.

## METHOD

Participants in the survey were elicited over a period of four months from January-April 1998 inclusive. A small pilot study of 20 participants had been conducted the previous year to ensure that the questions in the survey could be understood and to see

whether any crucial questions were missing.<sup>2</sup> The data from the pilot participants are not included in the current database.

Participants were sought by various methods – by placing notices on walls, letters and articles in local and national newspapers, word of mouth, advertisements on the Koestler Parapsychology Unit web page and on the author’s own web pages and by placing requests on a number of e-mail lists on paranormal topics. The questionnaire was available both as a paper copy and in electronic format. After completing the main questionnaire, participants could volunteer to fill out a further four shorter versions of the questionnaire (without the personality scales). Thus participants could offer up to a total of five experiences (one initial experience and four extra); it was thereby hoped that response biases in participants’ choices as to which experience to describe would be overcome. Participants were asked to fill out additional questionnaires only if they thought that their other experiences differed from the ones they had already submitted.

Because the aim of the survey was to see why people act on their precognitive experiences only a very specific set of precognitive experiences were solicited. Namely, participants had to have suspected *before* the event’s occurrence that their experience would come true (because only such people would have the chance to act). Only such experiences were regarded as valid. Experiences were valid even if they were more likely to be due to another form of ESP or due to normal inference. Moreover, the author took a relatively liberal definition of “valid”; if the experiential account did not make it clear whether or not the percipient suspected beforehand that the experience would come true, the author looked at responses to some of the other relevant questions. If the participant answered on another question that they suspected beforehand that the experience would come true, it was assumed that they were being truthful and that they had just failed to mention it in their account. The number of valid experiences totalled 224. These 224 experiences will be referred to henceforth as the VALID database.

Experiences in which the participant had not suspected that their experience would come true were invalid and were not included in the analysis. Experiences were also rejected if the foreseen event had yet to come about or if they had not happened spontaneously (for example, if someone consciously tried to predict something). Participants who filled out a single questionnaire in relation to a number of experiences were also omitted because their responses were generally unusable as a result.

On receiving each questionnaire the author noted whether the experience submitted was valid. The author then photocopied all experiential accounts (omitting the participants’ names or other means of identification) and gave them to two colleagues [CB & AR].<sup>3</sup> CB and AR then coded the experiences in respect of three main

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<sup>3</sup> I would like to thank Claire Brady and Alison Roe for their hard work in coding all the experiences.

characteristics: (i) whether the experience was best described as potentially due to precognition, other ESP or to normal inference; (ii) whether or not the foreseen event was preventable; and (iii) whether or not the percipient tried to take any action on the foreseen event. A full description of the coding criteria can be found in the Appendix and they are discussed in more detail below. CB and AR each coded all experiences independently and then compared their codings. They resolved any disagreements through discussion; after discussion agreements were reportedly fairly easily achieved. CB and AR were blind to the author's hypotheses, the nature of the questionnaire and to participants' responses in the survey.

On the basis of CB and AR's codings about whether any given experience was best described as precognitive the author was able to split the VALID database into three subsets – OTHER, ESP and PCG. The content of these databases is described in more detail in the following three subsections. Naturally, the database divisions are descriptive rather than evidential. That is, it is not assumed that any of the experiences are necessarily due to ESP of any kind (or conversely that cases in the OTHER database are necessarily due to normal explanations). The database descriptions follow below.

#### *OTHER Database*

The OTHER database constituted all experiences that had been coded by CB and AR as "2" in the Database Classification list (see Appendix). These were experiences that people believed to be premonitions of future events but which could also be explained relatively easily as due to normal means. Thus experiences in this database could be due to coincidence, the person making the experience come true or to the participant thinking about something that was relatively likely to happen in any case. A typical example of an experience in this database is as follows:

"I have a mental picture of myself in a situation – it was on some steps leading up to a building – it was a very ordinary situation with nothing untoward or odd about it ... I knew that when I get a picture of this kind with this feeling of not knowing how I've got there that in due course – usually and in this particular one, months later – I will actually be in the situation ... In this case I was actually on the steps in front of the building in the exact situation I'd 'pictured' before." [119]

Here it is quite likely that within a number of months the person will at some point be standing on steps in front of a building. Due to the relatively long time lapse between the experience and the event and the likelihood of such an event happening in any case, it would be problematic to describe the experience as precognitive (although, of course, precognition is not ruled out). A normal interpretation here is relatively easy.

#### *ESP Database.*

The ESP database constituted all experiences that had been coded by CB and AR as either "1" or "3". These were experiences that looked as if ESP (but not precognition)

rather than normal inference might have been at work. An example from this database is below:

“I was coming home from school about 4.10 in the afternoon. I ‘felt’ that an old man who was a friend of mine had returned home from hospital – he was not due home for another week – but I felt he was home. The feeling was so strong I knew he was home. Even though it was supposed to be another week until he came back I went onto his home. He was out a week early. I could not have known about it from any source. I just felt it. At 14 this was my first experience of premonition.” [123a]

Here the event had already happened (the old man had returned home) but there is apparently no normal means by which the 14 year old could have known that the old man had come back a week early. Although ESP could be at work, it is not precognition because the event had already occurred.

Experiences were also included in the ESP database if the event had not yet happened but it seemed as if the person could have got information via ESP (not precognition) and calculated from that what would happen in the future as a result. Such experiences were classified as ESP database cases because of the controversy in parapsychology as to whether all precognition could be due to real-time psi and inference (see e.g., Griffin, 1993; Morris, 1982; Mundle, 1978). By retaining cases in which real-time psi and inference were possible in the ESP database it was hoped that the precognition database – which was the one of prime interest – would be relatively pure. Here is an example of ESP and inference (names and places have been changed to protect anonymity):

“I work for a large organization which employs hundreds of people. Mr B. is much further up the organizational tree than I am. The only reason we know each other is because we both worked in the same office years ago. Our paths very seldom cross, we never contact each other and I have no knowledge of his day to day movements, nor he of mine, but from the nature of his job I would not expect him to visit Littleton more often than any other place and have no reason to believe he would visit there at all.

At short notice my spouse and I decided to have two or three days holiday at Littleton. We had never been there before.

On the way there (by car) I had a peculiar feeling that I would meet Mr B. The feeling continued when I got to Littleton and I kept expecting to bump into Mr B. It was specifically Mr B. that I was thinking about ...

One evening I went to the car park to get something from the car. I saw the figure of a man parking his car and getting out. I knew it would be Mr B. It was. He was surprised to see me but, funnily, I wasn’t surprised to see him! ...

He suggested he probably wouldn’t see me at breakfast the next day because he was planning to get up very early and leave. And so it turned out. I didn’t see him again for months. If I had been five minutes earlier or later in going to the car park I would not have met him.” [76]

Here, the event had not yet happened at the time of the experience – the percipient had not yet bumped into Mr B. It is also unlikely that the percipient could expect to see

Mr B or that the participant would usually think about Mr B. However, it is quite possible that Mr B already had plans to go to Littleton and that this information could have been gained telepathically from the percipient. From this the percipient could have inferred that they would both be in Littleton at the same time and that they might bump into each other. Therefore, this experience might be explicable through real-time psi and inference rather than through precognition.

### *PCG Database.*

Cases in the PCG database were those in which it appeared as if precognition was the most likely explanation. A good example is as follows:

“I had a dream in which I knew that my father had died. I saw myself and my sister in my parents flat. I think my sister went towards my mother first and hugged her – then I did the same. Then we all three hugged. I was very aware that my father was missing from the scene. This happened in our kitchen.

Then I was in a car with my mother and sister going to the funeral. The hearse was in front of us. We were stopped at traffic lights, waiting to make a left-hand turn into ‘Mill Street’. As we sat at the lights with the other cars in the funeral procession behind us – a couple, quite elderly, came round the corner to our left. They stopped at the kerb when they saw it was a funeral and stood with their heads bowed. The man took off the cap he was wearing on his head. They were a conventional, respectable looking couple.

Later, this all happened exactly as in the dream.” [250]

In this case even if it is argued that the person expected their father to die soon (it is not clear from the experiential account), it is highly unlikely that the person could have inferred the actions of the elderly couple at the precise spot and time that it happened. Hence precognition is the best description.

## RESULTS

### *The Databases.*

The final response rate after reminders had been sent out was 75% (190/252). E-mail versions of the 14-page questionnaire gave a slightly lower response rate of 60% (47/78) and constituted 25% of the responses. Postal copies of the questionnaire gave a very high response rate of 82%. The high response rate overall gives some indication of the percipients’ desire to find out more about these types of experiences. There were roughly equal numbers of men (43%) and women (56%) respondents. Further details about the database population are provided in another paper (Steinkamp, submitted).

Because participants could submit up to four additional experiences, the 190 respondents yielded a total of 264 experiences. Of these 224 (85%) could be included in the VALID database. The OTHER database consisted of 20 experiences, the ESP database had 38 experiences and the PCG database comprised 111 experiences. All

remaining experiences in the VALID database had been coded as ambiguous and thus did not belong to any of the subsets.

*Acting and Not Acting – Descriptive Statistics*

A preliminary issue is to know how many respondents did act on their premonitions. For this survey people were defined as having acted on their experience if CB and AR had coded their reaction to the experience as “3”, “4”, “5” or “6” under Act Type (see Appendix). That is, there were four ways in which people could be viewed as acting. Firstly, participants were defined as having acted if they tried to act on the consequences of a foreseen event (e.g. not going on a plane they had foreseen would crash). Secondly they were defined as acting if they had foreseen more than one event and they had tried to prevent at least one of those events from happening. For example, if they foresee their spouse dying in a train crash and they try to stop their spouse from getting on the train, but they don’t try to prevent the train crash. Thirdly, an experiencer was deemed as having acted if they tried to bring about a positive event (e.g., if they bet on the lottery numbers they dreamt they won with). Finally, participants were defined as having acted if they tried to prevent the foreseen event. In all cases people could be defined as having acted without necessarily having been successful. People were defined as *not* having acted on their experience either if they did not take any action at all or if they simply acted out of curiosity without any intention of bringing anything about. Table 1 shows the proportion of cases acted upon in each database.

Table 1  
PROPORTION OF PEOPLE WHO DID AND DID NOT ACT ON THEIR EXPERIENCE

	VALID	PCG	ESP	OTHER
Acted	13% (29)	17% (18)	21% (8)	5% (1)
Did not Act	78% (175)	82% (91)	74% (28)	75% (15)

It is clear that the vast majority of respondents did not act on their experiences, even though this study was designed specifically to include only those cases in which percipients could have taken action. Thus the total number of precognitions in which no action is taken at all is likely to be even greater than the percentages above.

The findings from this database also replicate Rhine’s (1954) findings – in her database too the majority (59%) of people had not attempted to intervene in the events they foresaw. Rhine’s database probably has more people attempting intervention than the current one because she had only the experiential accounts from which to decide whether people suspected beforehand that their experience would come true. Because the current study also used direct questions about this issue, it is likely that this database includes a higher number of low conviction cases. This in turn may result in fewer people acting on their experiences, given that taking action and conviction have been linked in previous work (e.g., Schouten, 1982).

Nevertheless, it is clear that in both this database and in Rhine's (1954) database the majority of people do not act on their experiences. Given that action is often desirable, the question is raised as to why it is that people do not act and why people do act when they do.

### *Personality Scales and Acting on Experience*

One reason why only some people act on their precognitive experiences may be that certain people generally take action whereas others do not. In the current study Rotter's Locus of Control scale (Lefcourt, 1982), MacDonald's (1970) ambiguity tolerance scale and Eysenck, Eysenck & Barrett's (1985) reduced neuroticism scale were used to see whether performance on these scales had any bearing on whether people would act on their experience or on what type of precognitive experience they had. It was preplanned that analyses on individual experiences would be conducted only if that experience had taken place within the last five years. If experiences had taken place longer than five years ago, it seemed possible that the personality scale filled out now may not correspond to the person at the age they actually had the experience. It was also specified in advance that a minimum of 20 cases would be required for an analysis to be conducted. All analyses are preplanned unless otherwise specified.

### *Locus of Control.*

Scores on the locus of control scale were expected to be the best predictor of whether people would act on their premonitions. It seemed intuitively plausible to suppose that those with an external locus of control would be unlikely to act on their precognitive experiences, whereas those with an internal locus of control would take action. For example, if someone generally feels that things in life are predetermined they are generally less likely to act than someone who thinks that they have a real influence on the way things will turn out. The locus of control scale was used only if a minimum of 20 (out of 22) items were completed. Item number 23 in Rotter's locus of control scale ([“Sometimes I can't understand how teachers arrive at the grades they give”][“There is a direct connection between how hard I study and the grades I get”]) had been omitted due to the pilot study revealing that many people felt unable to answer the question. All  $p$  values in this section are one-tailed unless otherwise specified.

Surprisingly, there was no difference in locus of control between those who did and those who did not act on their experiences on either the VALID database ( $N = 68$ ,  $U = 204$ ,  $p = .43$ ) or the PCG database ( $N = 36$ ,  $U = 63.5$ ,  $p = .49$ ). This indicates that people do not act on their experiences simply because they are the type of people who would normally act on events in life in general. Moreover, on the VALID database if people did act on their experience, the amount of effort they reported having expended did not vary in relation to their locus of control either ( $N = 77$ ,  $\rho = 0.0079$ , n.s.). This latter analysis included people who had merely acted on their experience out of curiosity. Thus, rather counter-intuitively, the extent to which people feel they can influence things in their lives does not relate to how much effort they will make to act on their premonitions.



Another possibility was that those with an internal locus of control may be more likely to foresee events in which they can take action, whereas those with an external locus of control may tend to precognize only unpreventable events (because they already feel that the future is fixed). That is, locus of control may have corresponded to the type of events people foresee rather than to whether or not people took action on them. However, again there was no difference on either the VALID (N = 58, U = 330, p = .46) or the PCG database (N = 32, U = 107.5, p = .46) between the locus of control of people who had experienced preventable events and that of those who had experienced unpreventable events. This finding suggests that people's premonitions do not depend in any way on how much they think they have control over their life.

In order to conduct the tests with a larger N, many of the experiences having taken place longer than five years ago, locus of control was tested in relation to whether individuals reported themselves as *ever* having acted on their experiences. This test could be conducted without having to specify that the experience must have taken place within the last five years. In the VALID database this did yield a difference between those who had acted and those who had reportedly never acted; those with an internal locus of control being more likely to claim to have acted on their experiences (N = 139, U = 1838, p = 0.05). The precognition database however was nonsignificant (N = 80, U = 673, p = 0.14). However, even the finding on the VALID database is open to doubt as it may well be that those with an internal locus of control are simply more likely to believe they have acted at some time on their experiences rather than this actually being the case.

These generally non-significant results were surprising. A post-hoc test of the scale's internal reliability gave alpha = 0.78 over a total number of 128 cases with all items completed, indicating that the scale was consistently measuring a particular criterion (putatively locus of control). It therefore seems that although Rotter's locus of control was measuring a relevant personality characteristic, it did not have any bearing at all either on what sorts of events people precognized or on whether they would act on that experience. This is an interesting finding to the extent that it is counter-intuitive.

#### *Ambiguity Tolerance.*

Post-hoc analyses were performed to see if those who acted on their experiences were likely to differ in their tolerance of ambiguity from those who did not act. Those who are happy with ambiguous situations may be more likely to foresee events that are open to change. A minimum of 18 (out of 20) items had to be completed for an individual's score to be deemed usable. All p-values in this section are 2-tailed.

Results showed that people who acted on their experiences did not differ in ambiguity tolerance levels on either the VALID (N = 70, U = 192, p = .30) or the PCG database (N = 38, U = 65, p = .91) from those who did not act. Similarly those with a low ambiguity tolerance were just as likely to have experiences of preventable events as those with a higher ambiguity tolerance (VALID: N = 60, U = 326.5, p = .67; PCG: N = 33, U = 105, p = .71). Thus, like locus of control, ambiguity tolerance appeared to bear no relation to the question of why some people act on their precognitive experiences.

### *Neuroticism.*

Post-hoc analyses were performed to see if scores on the neuroticism scale differentiated those who did or did not act on their experiences. For instance, it might be plausible to think that those who worry a lot would be more likely to act on their premonitions. For the neuroticism scale people had to have completed a minimum of 9 (out of 10) items for their scores to be usable. All p-values for analyses on the neuroticism scale are two-tailed.

Surprisingly, both the VALID database (N = 71, U = 97.5, p = .005) and the PCG database (N = 39, U = 25, p = .04) revealed that those who scored *low* on the neuroticism scale were more likely to have acted on the experiences they submitted. This appears to indicate that people act more often on their precognitive experiences if they are *not* the sort of person who would worry about whether or not they should act.

Nevertheless, it is possible that people become less worried (i.e., less neurotic) because they have taken action on their experiences, rather than the lack of worry being the reason for taking action in the first place. To try to get an indication of the direction of causality a correlation was performed on the VALID database between the number of times people reported themselves as ever having acted on their experiences and their scores on the neuroticism scale. If people's neuroticism scores decreased the more they reported themselves as having acted on their experiences in general, it would appear that people would have become less and less worried the more they made some attempt to act on their experiences. However, the correlation was non-significant (N = 128,  $\rho = 0.036$ , n.s.). Thus it appears that people act on their experiences simply because they are already the type of person who does not worry about whether or not they should do so.

Similar analyses to see whether neuroticism related to the type of event that people precognized were at chance. That is, neuroticism did not correspond to whether or not people foresaw events on which they could act (VALID: N = 60, U = 346, p = .75; PCG: N = 34, U = 105.5, p = .59).

These results indicate that if low neuroticism does not relate to acting on experiences by chance alone, then the relationship is one that is independent of whether or not the experience is of an event in which people can reasonably expect to exert some influence. That is, low neuroticism appears to relate solely to whether people will act on their experiences and not to the type of events they will foresee.

### *Event Type and Acting on Experience*

Another hypothesis is that some people might act on their experience depending on the type of event they foresee. That is, people might act on their experience if the foreseen event is one in which they can act whereas they do not act if the event is one that is unpreventable. This section will examine this hypothesis in some detail.

### *Preventable and Unpreventable Events*

*Descriptive Statistics.* Preventable events were those that CB and AR coded as either “1” or “2” (as preventable or as a positive event requiring action, see Appendix). Positive events requiring action (such as foreseeing the week’s lottery numbers) were included as “preventable” events because the current survey was interested in whether people act on their experiences rather than in whether intervention in foreseen events is possible (which had been the subject of Rhine’s (1954) survey). Unpreventable events were those that CB and AR had coded as either “3”, “4” or “5” (i.e., as events not requiring action such as a welcomed wedding and events such as airplane crashes and earthquakes, see Appendix). Table 2 shows the proportion of preventable and unpreventable events in the databases.

Table 2  
THE PROPORTION OF PREVENTABLE EVENTS IN ALL FOUR DATABASES

	VALID	PCG	ESP	OTHER
Preventable	37% (46)	23% (26)	26% (10)	15% (3)
Unpreventable	58% (129)	56% (62)	63% (24)	60% (12)

In all categories there is a higher proportion of unpreventable than preventable events. This replicates Rhine’s (1954) finding. Although there are fewer unpreventable events (58%) in the current database than in Rhine’s study (77%), this may be because the current database includes positive events requiring action as “preventable” whereas Rhine’s survey did not.

*Acting on Preventable Events.* The main hypothesis of this section was that preventable events would be acted on more often than unpreventable events. This hypothesis was upheld. Preplanned chi-square analyses showed that on both the VALID database (N = 170,  $\chi^2 = 11.74$ ,  $p = .0003$ ) and the PCG database (N = 89,  $\chi^2 = 13.09$ ,  $p = .00015$ ) preventable events were acted on significantly more often than unpreventable ones.

The analyses in the previous section have already shown that none of the personality scales corresponded to people having precognitions of preventable events as such; low neuroticism corresponding only to people acting on their experience and having no relation to whether or not people have experiences of preventable events. As a result it appears that there are two distinct reasons for acting on precognitive experiences. One group is those who score low on the neuroticism scale and who act irrespective of whether or not the experience is preventable and the second group is those who have experiences of preventable events and who act simply because the event can be avoided or made to happen.

Although there were not enough cases to do the appropriate analyses for the ESP database, it is worth noting that the ESP database showed the reverse trend to the PCG database. In the ESP database only 11% (1/9) of preventable events were acted on, whereas unpreventable events were acted upon more than twice as often at a rate of 26% (7/27).

In the PCG database events that were acted upon most frequently were those that involved serious material damage (44%), slight injuries (50%) or positive events (31%). This database also replicated Schouten's (1982) finding that deaths were rarely acted upon (only 14%). However, events involving material damage, slight injuries or positive outcomes are themselves more likely to be preventable than foreseen deaths or serious accidents. Thus, these and Schouten's findings merely lend further support to the hypothesis that people try to act upon events only if those events are preventable.

*Possible Confounding Variables.* Although precognitive experiences appear to be acted on primarily only if they are of preventable events, precognitions of preventable events may have certain experiential characteristics in common. Thus people may act because of relevant experiential characteristics rather than because the foreseen event can be prevented. For instance, if most premonitions of preventable events occurred in the waking state and people tended to act only if they were awake when they had their experience, then people may have acted as a result of having been awake at the time of the experience rather than as a result of the experience being of a preventable event. Consequently, a number of analyses were preplanned to see whether or not such confounding variables were present.

No significant differences in experiential characteristics were found between preventable and unpreventable precognized events in the PCG database. All were tested using the chi-square statistic with 2-tailed  $p$  values.

Preventable and unpreventable precognized events did not differ in terms of whether they were experienced whilst asleep or awake ( $N = 82$ ,  $\chi^2 = 0.90$ ,  $p = .34$ ); this finding puts to rest the possible confounding variable outlined above.

It is also possible that people act primarily on preventable events because they are more convinced in such cases that the foreseen event will happen. Schouten and Rhine had found that people did act more often if they had a strong sense of conviction that the event would occur. However, in the present study preventable and unpreventable events did not differ in relation to the amount of conviction that people reported having felt about their experiences ( $N = 88$ ,  $\chi^2 = 0.33$ ,  $p = .56$ ). Schouten (1979, 1981, 1982) also noted that intuitions were acted upon more frequently than dreams and other waking experiences; however, there were not enough data in the PCG database to investigate this question.

Two other possible confounding variables were examined, but they were both non-significant. The point at which people first suspected that their experience would come true did not differ between precognitions of preventable and unpreventable events ( $N = 76$ ,  $\chi^2 = 1.68$ ,  $p = .20$ ) and premonitions of preventable events were as likely to provoke a physiological response in the percipient prior to the event taking place (such as a rush of excitement or a feeling of nausea) as premonitions of unpreventable events ( $N = 56$ ,  $\chi^2 = 0$ ,  $p = 1$ ). Thus it is neither the case that preventable events are acted on because they were suspected to come true sooner nor the case that a physiological response will prompt a percipient into action.

Therefore, the results from the current database have not revealed any particular experiential characteristics that are confounded with the foreseen event being one that can be prevented. Rather, people take action on their experience quite simply because they can.

*Intrinsically and Effectively Preventable Events.* The survey also investigated whether it may be profitable to make more refined distinctions than just a preventable or unpreventable dichotomy. As a result all experiences were coded into seven categories (see Appendix). The proportion of foreseen events falling under each category for both the ESP and the PCG databases are given in Table 3.

Table 3.  
PROPORTION OF EXTENT OF PREVENTABILITY OF EVENTS  
IN ESP AND PCG DATABASES

	ESP	PCG
Preventable	26% (10)	18% (20)
Positive Event Requiring Action	0% (0)	5% (6)
Positive or Neutral Event Not Requiring Action	29% (11)	15% (17)
Effectively Unpreventable	13% (5)	27% (30)
Intrinsically Unpreventable	21% (8)	14% (15)
More than One Event Foreseen	0% (0)	11% (12)
Unsure	11% (4)	10% (11)
Total Preventable (1 & 2)	26% (10)	23% (26)
Total Unpreventable (3, 4 & 5)	63% (24)	56% (62)

This table shows that the ESP database has a higher proportion of events not requiring action than the PCG database. Events not requiring action include trivial events (perhaps foreseeing the new clothes that someone would wear) or positive events that do not require anybody to do anything to bring them about (such as having a premonition that someone would unexpectedly get promotion). This may indicate that precognitive experiences serve as warnings of what might happen, whereas by not requiring action so often other ESP experiences can often serve just to inform.

The ESP database also contains more intrinsically as opposed to effectively unpreventable events than the PCG database. Intrinsically unpreventable events include natural events such as earthquakes. In such events there is absolutely nothing that a person can do to prevent the event from happening. Effectively unpreventable events, however, are those in which the percipient could theoretically intervene but in which the participant is unlikely to be able to affect the outcome. Premonitions of airplane crashes, for example, fall under this category. Here a person can theoretically phone up and warn the airport but effectively no airport is likely to pay any attention to the warning.

A post-hoc analysis illustrated that this difference between the numbers of intrinsically and effectively unpreventable events in the two databases was significant ( $N = 58$ ,  $\chi^2 = 3.35$ ,  $p = .03$ ). The predominance of effectively as opposed to intrinsically unpreventable events in the precognition database is consistent with the higher number of experiences requiring action in the precognition database. Both findings suggest that premonitions serve to warn. If one were ignorant of social conventions in which people reporting premonitions to the police, airports or to famous people are often ignored (and often not without reason), then the effectively unpreventable events would be understood as preventable. Consequently, the PCG database appears to contain precognitions of events to warn people of what might occur in a way that does not take social norms into consideration.

Although this last finer-grained analysis was post-hoc, findings in this subsection indicate some possibly fruitful lines for future research. Namely, future studies should examine the extent to which an event is preventable and/or the extent to which an event does or does not require action to be taken. These issues will aid in determining the nature and purpose of precognitive and other ESP experiences.

#### *Experiential Characteristics*

Another possibility is that there is something about the experience itself that indicates to the percipient that they should or should not act on what they have foreseen. For instance, when people foresee an event, their premonition might be accompanied either by a feeling that the future event is fixed or by a feeling of a compulsion to act. Table 4 shows how people responded to this question.

Table 4.  
PARTICIPANTS' RESPONSES TO WHETHER THEIR PREMONITION WAS  
ACCOMPANIED BY A FEELING THAT THEY SHOULD OR SHOULD NOT ACT  
ON THE FORESEEN EVENT.

In the premonition the event felt ...	ESP	PCG
Totally fixed	24% (9)	35% (39)
Fixed, but way in which would happen not fixed	11% (4)	14% (15)
As if it would happen and I should act	8% (3)	20% (22)
I acted but did not know why I acted	21% (8)	5% (5)
No specific feeling	18% (7)	12% (13)
Other	18% (7)	11% (12)

Table 4 shows that precognitive experiences tend to feel more fixed than those in the ESP database. This is surprising because experiences in the ESP database focus on events that have generally already happened and will thus be more fixed.

The two databases also differ in terms of how participants felt they should act. The experiences in the ESP database tended to make people feel as if they should act without

any particular reason for it whereas the precognitive experiences were rarely impulses to act but more often a sense that the person had that they should act on whatever information they had. This is intuitively understandable to the extent that the experiences in the ESP database occurred more often in the waking state (see Steinkamp, submitted ; also supported by findings from e.g., Sidgwick, 1885; Rhine, 1954 and Schouten, 1982) and thus participants would be more likely to be able to have such an impulse.

To get a further insight into the idea of whether there is anything inherent in the experience that might prompt people into action, those who had attempted to act on their experience (and for this question participants were asked to include acting out of curiosity as acting) were asked at what point they first thought they should act on their experience. The responses to this question are given in Table 5.

Table 5.  
THOSE WHO ACTED FIRST THOUGHT THEY SHOULD  
TRY TO ACT ON THEIR EXPERIENCE...

	ESP	PCG
During the experience	50% (7)	13% (5)
On waking from the experience	14% (2)	34% (13)
Between the experience and the event	29% (4)	37% (14)
Just before the event	0% (0)	16% (6)
During the event	7% (1)	0% (0)
Other	0% (0)	0% (0)

The most noticeable difference between the precognition and the ESP database here is that those who acted in the ESP database were far more likely to recognize from the experience itself that they should act.<sup>4</sup>

This finding, along with ESP experiences generally feeling less fixed, strongly suggest that when ESP experiences can be acted upon they inherently serve to provoke action, whereas precognitive experiences are primarily informational and only later do people realize that they can act on their experience. Thus precognitive experiences appear simply to prepare the percipient of what might happen, whereas other ESP experiences intrinsically prompt people into action and let people know what is happening immediately in their environment.

These conclusions may appear to be true by definition. That is, experiences in the PCG database refer to events that cannot be deduced from real-time information (and thus often cannot be acted upon immediately), whereas those in the ESP database are of events whose outcomes are informationally present at the time of the experience (and can be acted on immediately). However, it does not necessarily follow that percipients in the PCG database would *not* have had a sensation that they should act on the information in

<sup>4</sup> The high number of people in the PCG database thinking they should act on waking from the experience is probably due solely to the predominance of dreams in the PCG database (see Steinkamp, submitted).

their experience. It is therefore still remarkable that primarily only experiences acted upon in the ESP database should inherently feel to the percipient that they should do something about the event.

In conclusion, then, it appears that people generally make a conscious decision to act on precognitive experiences whereas in other types of ESP experiences people are more likely to act through an impulse given to them during the experience itself. Moreover, because the PCG database had both more events requiring action and a higher proportion of effectively preventable events than the ESP one, events in the PCG database seem to be more likely to be ones in which the percipient can act (if you ignore social constraints). To this extent the underlying purpose of precognitive experiences seems to be to warn the percipient so that they can make a decision if need be, but not to prompt action *per se*. It may be because a larger number of the experiences in the ESP database contain a sense of urgency within them that the PCG experiences felt more fixed. That is, if precognitive experiences do not prompt action, they may feel more fixed as a result.

Another experiential characteristic that may cause people to act on their experiences is the constant repetition of an experience. If an experience is repeated over and over again, this may well make people take that experience more seriously. In the current database recurrent experiences were defined not only as recurrent dreams, but also as dreams followed by a series of intuitions, a series of recurrent intuitions or any combination of types of experience. That is, recurrent experiences were defined by virtue of their repetitiveness and not by the form they took. There was a separate question in the survey asking percipients if they had had a set of recurrent premonitions about the foreseen event. A number of people omitted to describe this aspect of their experience in their actual report; it is therefore recommended that future surveys also include a direct question about whether percipients had a series of premonitions about the event. The ESP database held four cases of recurrent experiences and the PCG database had 26 such cases.

Interestingly, for the ESP database both of the recurrent experiences that were acted upon were of unpreventable events and for the PCG database, three of the six experiences that were acted upon were also of unpreventable events. Thus for recurrent experiences the trend seems to be different from the rest of the database in which preventable events are acted upon significantly more often than unpreventable ones. Moreover, a post-hoc analysis on the PCG database showed that recurrent experiences do not prompt action on unpreventable events because the people who have them are less neurotic (less neurotic people generally taking action regardless of whether the event is preventable) because those who had recurrent experiences had a *higher* mean score on the neuroticism scale (5.57) than the database as a whole (4.92). It is therefore possible that recurrent experiences somehow themselves prompt action more often. A larger database of such experiences would be required, however, to investigate this hypothesis in any depth. Nevertheless, it may well be worth further inquiry.

### *Experiences and Relational Characteristics*



Another reason why people act on their precognitive experiences may be because they have some special relation that the person has to the foreseen event. For example, if people perceive the event they foresee as particularly important, this may prompt them to act on their experience. However the perceived importance of the event (on a scale of 1-4) did not relate to whether or not people acted on their experience ( $N = 104$ ,  $U = 666$ ,  $p = .50$  (2-tailed)).

Two studies by Schouten (1979, 1982) had found that men acted on their experiences more often than women. However, a post-hoc test on the current database to see whether men were more likely to act than women was non-significant ( $N = 106$ ,  $\chi^2 = 1.63$ ,  $p = .10$ ) replicating one of Schouten's (1981) other findings. Thus either the effect of men taking action more often is very weak and requires a larger sample than the one available here or perhaps women nowadays are starting to feel more empowered.

A preplanned analysis on the PCG database investigating whether people are more likely to expend more effort on acting the closer they are to the person the experience is about was almost significant ( $N = 55$ ,  $\rho = 0.26$ ,  $p < 0.1$ ). This suggestive result is in keeping with the finding that people act primarily on preventable events, for the closer you are to a person, the more likely it is that you can exert some influence on what that person does. As a result, such experiences are more likely to be classified as preventable than, for example, events involving famous people which are defined as unpreventable for this survey.

This section therefore merely serves to confirm yet again that the main reason why people act on their experiences is that the events they foresee are preventable. No relational factors such as sex differences or the perceived importance of the event appear to play a role.

### *Being Present at the Event*

Another possibility is that people act on their experiences only if they are present when the event happens. After all, if they are not able to be there at the time, they may have no chance to have any effect on the outcome of that event. In both ESP and PCG databases there was a greater likelihood of people acting if they were present at the event when it happened (ESP 29%, PCG 20%) or if they had discovered that the event had come about from another person (ESP 33%, PCG 21%) than if they heard about the event coming true in the media (ESP 0%, PCG 9%) or by other means (ESP 0%, PCG 0%).

This implies again that preventable events are more likely to be acted upon than unpreventable events – events that are heard about in the media being those that are more likely to be those in which a person cannot reasonably act.

### *The Worldviews*

A final issue was to discover whether people who thought they had had precognitive experiences tended to think differently about the future as a result. The vast majority of respondents (82% from the VALID database) who answered the question ( $N=160$ )

believed that the future was at least to some extent changeable. This is despite the fact that all these people believed they had foreseen a future event and that most of the events they reported as having foreseen were unpreventable.

Most people (55%) who expressed an opinion (N = 163) thought that their view of the future had not changed since they had had a precognitive experience and of those who did feel that their view of the future had changed, only a small number (20%) thought that their view had changed because they had had a precognitive experience. It appears that precognitive experiences tend not to alter the way people think about time.

Moreover, those who did change their view of time because of their precognitive experiences were as likely to think that the future was more fixed as a result as they were to think that the future was more changeable. Thus, even when people do change their view of the future when they have a precognitive experience, this change does not have any particular trend in any one direction.

However, there was a significant tendency for those who had changed to thinking that the future was more changeable after their precognitive experiences also to be those who had claimed to act more often on their experiences (U= 166.5, N = 144, p = 0.05).

In conclusion, then, most people do not change their view of time when they think they have foreseen an event. However, if people do change their view, the way in which their view changes may well depend on how they reacted to their precognitive experience.

## CONCLUSIONS

The results from this study must be treated with some caution given the number of analyses in this paper. No correction for multiple analysis has been performed because the purpose of this survey is at least in part to determine characteristics that may be of interest for future questionnaires to consider.

Nevertheless, this study yielded some surprising conclusions. It had been expected with some confidence that locus of control would play a strong role in whether or not people acted on their experiences. This turned out not to be the case. It is possible that other scales may find a relationship between locus of control and acting on experience, but for this study no such relationship was found.

The correspondence between low scores on the neuroticism scale and acting on experiences was also unexpected. It appears that those who worry less will be more likely to act. A casual observation from taking telephone calls from a number of participants is that many people fear looking foolish if they tell people about what they have experienced. If this fear is carried over into deciding whether or not to act on a precognitive experience, then those who worry less about what other people think or about whether their experience really is precognitive may indeed be more likely to act on their experiences. They may even be more confident to act on unpreventable events. For

example, they may be more likely to warn authorities such as the police or airport control about events they have foreseen.

These hypotheses are strengthened by the fact that in general people acted far more often if the event they foresaw was one in which they could intervene and that those who scored low on the neuroticism scale did not tend to have proportionally more experiences of preventable events. Therefore, those who scored low on the neuroticism scale presumably acted relatively often on unpreventable events.

It was perhaps disappointing that only one other predictor for people acting on their experiences was discovered – the presence of recurrent experiences. Moreover, this finding was post-hoc and there were relatively few cases to work with. However, it is certainly promising area for future research and at the moment there is no indication as to who might have recurrent experiences or when.

A less surprising result was the preponderance of people who acted when the foreseen event was one on which they could act and this finding replicates the results from Rhine's previous study (Rhine, 1955). Nevertheless, the high proportion of unpreventable events even in surveys designed to procure experiences in which people could act (such as this survey and Rhine's (1955) study) may seem to indicate that precognitive experiences do not generally serve as warnings to their percipients.

However, when unpreventable events were divided into intrinsically and effectively unpreventable events, analyses revealed that the PCG database had more effectively unpreventable events than the ESP one. That is, foreseen events in the PCG database may be unpreventable only because of the lack of social acceptance of precognitive experiences. It also indicates that psi may operate independently of social norms (because when functioning as a warning it does not appear to take into account who is likely to cooperate).

These findings were further supported by the PCG database containing more foreseen events requiring the percipient to take action than the ESP database. This too may indicate that precognitive experiences serve to warn people of events that *might* happen unless (or because) the percipient does something about it.

However, of those experiences that were acted upon, those from the ESP database were predominantly immediately recognized by the percipient as requiring action. Those in the PCG database, by contrast, were more often recognized as requiring action only some time after the initial experience. It appears that people might make a rational decision to act on their precognitive experiences – depending in part on the type of person they are – rather than the experience itself prompting action. Other ESP experiences appear to be the reverse – that is, there is often something inherent in the experience itself that prompts people into action. Thus precognitive experiences appear to forewarn percipients of what might happen but they do not serve to make people act on those experiences; acting on premonitions appears to be primarily a conscious decision made in the light of the information the percipient has.

Another point worth noting is that if taking action is redefined so as to include acting out of curiosity (without aiming to bring anything about), the percentages of those who act increase considerably. Using this new definition of acting on experiences, the number of experiences acted upon increases to 71% in the ESP database and to 64% in the PCG database. Thus it may be that precognitive experiences do provoke people to take action; it is just that people might not always take *appropriate* action. To this extent the hypothesis that precognitive experiences merely forewarn but do not prompt the percipient into action must still be treated with some caution.

Although a number of the findings are post-hoc, they raise interesting questions for future investigators to pursue. Will future work also find that precognition databases have more effectively preventable events; that when acted upon only other ESP experiences are immediately recognized as requiring action; and will it find that precognitive experiences are more often of events that require action? These findings also illustrate how difficult some of the conceptual issues are (how do you define an event as preventable and how do you decide what constitutes taking action on an experience?).

As noted before, some of the apparent findings in this paper may be due to multiple analysis. It is also possible that the results are contaminated both by noise from participants' biases in answering the questions, their failure always to provide relevant detail and/or possible coding mistakes and coding criteria ambiguities (see Appendix). However, further research may have a real chance of gaining some insight into what purpose various types of psi experiences have. Moreover, it is possible for the experiences to fulfil the aims I have suggested even if the experiences turn out not to be due to psi (but perhaps due to an acute ability to understand cues from the environment and to extrapolate appropriately).

In sum, although this survey has shown some possible indicators as to why people act on precognitive experiences when they do and the purpose that such experiences may serve, other matters still remain a mystery. For instance, there is still no indication as to why there should be so many types of psi experiences (e.g., recurrent, hallucinatory, auditory, olfactory etc.), who should have what type of experience and why some people should experience preventable events whereas others do not. All these questions still remain to be solved. Nevertheless, this paper has opened up several worthwhile paths and it is hoped that future studies will confirm at least some of these findings.

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## APPENDIX

### *Database Classification*

1. Event had already occurred at the time of the experience and the participant's knowledge of the event cannot easily be explained by normal means. Hence ESP (not precognition) is hence the more likely explanation.
2. The event had not already occurred at the time of the experience but it seems likely that the person either acted in such a way as to make the event happen or that the person just looked for something to correlate with their experience. The experience is best described as due to normal means.
3. The event had not already occurred at the time of the experience, but it seems quite possible that the foreseen event had already been planned (and thus that the event would happen could have been ascertained telepathically) or that relevant pieces of information in respect of the future event could have been available via ESP at the time of the experience and the future event inferred from this information.
4. The event had not already happened and the participant's experience is best described as precognition (it would need to be twisted quite a bit for it to fall under category 2 or 3)
5. Unsure

### *Event as Preventable/Unpreventable*

1. Preventable event
2. Positive event requiring action or in which action is presumably desirable: e.g., lottery number prediction.
3. Positive or neutral event in which action is not required (e.g., of person's (welcomed) wedding).
4. Effectively unpreventable: These are events in which one could theoretically intervene, but which on a practical level cannot be avoided. For example, events concerning famous people (it is unlikely that they would listen to an ordinary person) and airplane crashes (airports are unlikely to pay attention to calls from an unknown member of the public).
5. Intrinsically unpreventable: These are events which one cannot do anything about. For example, most illnesses (you can't stop someone from contracting cancer or from having a heart attack in two weeks time) and large-scale world events (e.g., wars, election results, earthquakes)
6. More than one main event was foreseen in the experience, each event falling under a different category (e.g., wife killed in train crash - train crash would be 4 and wife killed would be 1)
7. Unsure

### *Act Type*

1. None – the person does not try to do anything about their experience; they do not even tell anyone about it.
2. Acting not to change outcome of the foreseen event but just to see if event occurs. For example, the person just tells someone about their experience because it seemed remarkable. If positive event requiring action, person tells people or goes to see if it happens, but does not act on the information. If the foreseen event is a neutral or positive event not requiring action, the person tells someone else about it or they make some kind of effort to see if it happens.
3. Attempting to act on the outcome or the consequences of the foreseen event and not on the event itself. For example, if a person foresees a plane crash and then they decide not go on the plane. Here, the person's death (the consequence of the foreseen event) is avoided, but not the actual crash. Trying to act as best possible on information about the event, but not avoiding the event itself. For example, a person carries a first-aid kit because they had foreseen a train crash that would happen on their way to work.
4. Trying to prevent only one of the foreseen events. For example, if a person foresees both a plane crash and their dying in that crash and the person successfully avoids being in the plane (and thus prevents their own death) but does not avert the plane crash.
5. Trying to bring about a positive event (e.g., placing a bet on winning lottery numbers).
6. Attempting to intervene in the actual event.
7. Unsure