Polygraph Questions and Questionable Questions

By Raymond Nelson[I]

Ending a sentence with a preposition is the sort of nonsense up with which I will not put.

> – attributed to Winston Churchill

Good polygraph questions should be easy to formulate, easy to understand, and easy to interpret. The practical meaning of the test result should be easily understood regardless of whether it is positive or negative. A good polygraph

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I   Raymond Nelson is an experienced field polygraph examiner with a diverse background, having worked for many years in mental health treatment settings with perpetrators and victims of sexual assault and other forms of violence and abuse. Mr. Nelson´s training and education include psychology, counseling, psychometric testing, statistics and data analysis among other things. Mr. Nelson is the director of an accredited polygraph training program, teaches at a number of different polygraph schools, and is a frequent presenter at local, national and international conferences. Mr. Nelson has published a number of papers on many aspects of the polygraph, is one of the developers of the OSS-3 computer algorithm and the Empirical Scoring System, and is an advocate for evidence-based polygraph practices. Mr. Nelson is employed as a researcher for Lafayette Instrument Company, is an elected member of the APA Board of Directors, and has testified in municipal, district, appellate and supreme courts in a number of jurisdictions as an expert in both polygraph and psychotherapy. The views and opinions expressed herein are those of the author and not the APA, Lafayette Instrument Company or any other entity.

question is likely to include some version "did you do it," in which the "do it" part should be some action verb that describes the examinee´s possible involvement in the behavioral concern. The following is a list of commonly held requirements for relevant questions:

- Describe the examinee´s involvement in the behavioral issue under investigation
- Easily answered YES or NO (though no published studies have involved YES answered relevant questions).
- Avoids the use of legal or clinical jargon that is not easily understood by people without specialized training.
- Avoids prior assumption of guilt.
- Simple, direct and easily understood by the examinee.
- Time delimited (date or date range of allegation, or time period for screening).
- Free of references to mental state, memory or motivation. An exception may exist when these are the subject of an examination following an admission of the behavior under investigation.
- Balanced with other questions in terms of length and complexity.

One of the more questionable practices in the formulation of relevant questions is the choice not to describe the behavioral incident or allegation under investigation. For example:

R5   Is any part of Count 1 the truth?

R8   Concerning Count 1 of the Criminal Complaint, is any part of it the truth?

R11   Is any part of the Criminal Complaint filed against you the truth?

These relevant questions are questionable for a number of reasons. The first question is approximately one-half the length and number of syllables as the next

two questions. This alone may have the ability to evoke differences in response due to differences in novelty. The word "count" may cause problems as it may hold different meaning in different contexts. These polygraph questions are oriented around the construct of "truth," a complex and lengthy philosophical discussion. It may seem appealing to some to view the polygraph test as an optimistic form of truth-detection or truth verification. To do so, however, allows the concept of the truth to become a precarious matter of subjective belief. In short, our polygraph definition of truth is probably best if limited to rational epistemological definitions. Rational paradigms regarding truth are independent of belief and are premised on observable and replicable empirical facts.

The greatest deficiency in these relevant questions is they do not directly address the behavioral act(s) under investigation. Polygraph questions are inherently questionable as to whether examinee has correctly thought about the target issue if they neglect to clearly describe the behavioral issue under investigation. A related problem is that without supporting documentation a reader would not know these relevant questions were used in the context of an alleged sexual assault against a male child under age 12; specifically, engaging in oral sex acts with the 5 year-old. Polygraph questions are also questionable if they require the listener to refer to another document to understand their meaning.

Reasons may vary somewhat as to why examiners may sometimes neglect to clearly describe a behavioral issue. Some examiners may experience a sense of unfamiliarity orpersonal discomfort presenting questions about certain topics. Some may succumb to an impulse to engage in mind-reading or clairvoyance around the possibility that an examinee will respond too much to behaviorally descriptive questions. And finally, some may collude with the examinee in attempt to present questions in an easier or softer way that is intended to be less likely to result in a statistically significant response to the test stimuli. Use of these questions indicates either an attempt to manipulate the stimulus and response outcome or a fundamental misunderstanding of how the stimulus and response paradigm forms the basis of the polygraph test: present the stimulus, and measure or observe the response. Polygraph stimuli should describe the behavioral issue under investigation.

There is no great hazard if the examinee reacts significantly to these problematic questions, producing positive results indicative of deception. That examinee would

simply be subject to additional investigation and additional questioning. In the experience of this writer, most examinees who fail polygraph questions about alleged sexual contact with a child most often admit their guilt and are referred for therapy while living under supervision in the community. The example questions presented earlier were provided in the context of a polygraph referral from an attorney. However, it is not likely that police examiners would be satisfied with clearing a suspect with polygraph questions that do not describe the behavioral concern. Similarly, polygraph examiners whose work involves post-conviction supervision of convicted offenders are unlikely to be satisfied with the idea of exculpating or exonerating a person with polygraph questions that do not describe the behavioral allegation. In the same vein, it seems unlikely that government examiners, whose work involves the screening or investigation of matters involving operational or information security, would be amenable to the idea of clearing an alleged issue of concern using polygraph questions that do not describe the behavioral issue under investigation.

If there is such a thing as a best practice method for the formulation of polygraph questions, then it is likely that the same best practice will be satisfactory regardless of the context. In this example, behaviorally descriptive polygraph questions could prove satisfactory to any referring professional, whether attorney, police investigator, child protection worker, community supervision officer or mental health treatment provider. Given the limited information available about the case example, a more satisfactory set of questions might be the following:

R5   Did you ever engage in sexual contact with your step-son?

R8   Did you ever engage in oral sex acts with your step-son <name>?

R10   Did you ever engage in oral sex acts with your step-son at any time?

These questions are also not without some need for discussion. Although it might be preferable to limit the time of reference to the exact time period of the investigation, that information was not previously provided and so the time period was stated more broadly in these example questions. There is no psychological bright-line or reason why the articulation of a date or range of dates would increase or decrease potential response to a behaviorally descriptive stimulus. Use of "time-bars" with relevant questions is a matter of convention and convenience for polygraph field

examiners and referring professionals who seek to increase the signal value of the test stimuli. Expecting psychophysiological responses to conform neatly to verbal logic may be imposing excessive and unrealistic expectations on noisy psychological mechanisms.

Another point for discussion will be the use of the alleged victim´s name in the relevant question. Opinions are abundant on this matter, but it has not been subjected to any published systematic study or analysis. This may need to be the subject of a different discussion. In reality there may be as many different ways to formulate relevant questions as there are examiners and examinees. The important concern here is not whether any particular examiner would, or would not, formulate questions exactly the same way. The important issue is whether the test questions can be reasonably expected to work as intended based on the evidence that we have available and based on what we know about the psychological basis of observed physiological response. A straightforward approach to testing – devoid of mind-reading and clairvoyance – would hold that if the examinee is aware of the behavioral allegation at the time of the polygraph exam, then the examinee is also aware that it is not the examiner who has made the allegation. The role of the examiner is simply to present the test stimuli, parse the source of response, and quantify the margin of uncertainty associated with a categorical conclusion relative to our published knowledge about the normally expected responses from guilty or innocent persons. Good polygraph questions should provide clear interpretable meaning regarding the issue under investigation regardless of whether the test result is positive or negative. Behaviorally descriptive questions will help to achieve the goal of clear interpretable polygraph results. Use of questions that avoid describing the behavioral concern is questionable.