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Search for New Tests

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Widely known sources (Mangan, Armitage, Adams, 2008; Matte, 2012; Raskin & Honts, 2002; Shurany & Chaves, 2010) state that minimum 90% criterion accuracy may be achieved when using Control Question Tests (CQT) in polygraph examinations. Such results can probably only be achieved by polygraphist-superstars. However, we will not perform an analysis of the reasons thereof in this article. As we did not achieve results that were satisfactory for both us and our customers by using CQT in criminal investigations in the past, we have been using the significantly more informative Event Knowledge

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Test (EKT) since 2004 (Saldžiūnas & Kovalenka, 2012a;2012b). The Latvian police have problems when they provide CQT examination results in court (Ivancika, 2012). The polygraphists of the Serbian police achieve only approx. 66% reliability by using CQT (Djurovic & Mijovic, 2011); the polygraphists of the Croatian police detect lies in 45% of cases (Grgurić & Pavlović, 2011). Some examiners experience other CQT-related problems in their practice. (Shurany, 2011;2012). Such results satisfy neither the polygraphists nor the courts. Therefore, polygraphists are continuing to look for ways to ensure more reliable results. The polygraphists of the Serbian police use psychological tests in addition to polygraph tests (Djurovic & Mijovic, 2011). The polygraphists of Russian (Oglobin & Moltchanov, 2004) police use CQT and Concealed Information Tests (CIT) together in order to obtain more reliable results. Matte (1997) also included Fear of Error control and Hope of Error relevant questions in CQT.

Another way to obtain more reliable results of the polygraph examination is to improve the methodologies of the polygraph examination. In our opinion, an original solution was chosen by Korovin (Fedorenko, 2009). This solution is based on the idea that *the criminal knows themself*. Korovin suggested including the following relevant questions in CQT:

- Do you know the name of the mother of the person who participated in the theft of money from the strongbox of the bookkeeping office at all? (We translated this and other questions from Russian and did not edit them.)
- Do you really know the home address of at least one person who participated in the recent theft of money from the company "K"?

In our opinion, such wording of the questions should be analyzed in a matter-of-fact manner. We will not delve deeply into the issue of the wording of these questions here. Fedorenko (2009), a colleague of Korovin, notes that the person (the criminal) may have been brought up in a family without a mother or a father. He also believes that the examinee may know the home address of the person whom he suspects of a crime. In such a case, Fedorenko (2009) suggests the following relevant questions:

- Do you know how one of the people who participated in the theft of money from the strongbox of the bookkeeping office spent yesterday evening?
- Do you really know where the person who really participated in the theft of money from company "K" is at the moment?

Naturally, the question of whether the examinee will personalize these questions arises. This means that, as one is examined by a polygraph – i.e. one is

a suspect already (Ekman, 1992), one will feel fear for these reasons alone and responses may be recorded after these questions. Fedorenko (2009) asserts that he has not recorded such responses during ten years of examinations. We believe that a good lawyer may successfully use this weakness of the questions in court.

As we have already mentioned at the beginning of the article, most examiners do not trust CQT results very much. That is why Fedorenko (2009) recommends additionally using CIT drawn up based on the principle *the criminal knows them self* after application of the CQT. If it is found out during the criminal investigation that the suspect resides in a block of flats, Fedorenko (2009) recommends constructing the question roughly as follows:

Do you know what type of house or flat the criminal resides in?

- 0. Does the criminal reside in a masonry house?
- 1. Does the criminal reside in a yellow brick house?
- 2. Does the criminal reside in a wooden house?
- 3. Does the criminal reside in a block of flats?
- 4. Does the criminal reside in a red brick house?
- 5. Does the criminal reside in a white brick house?

We believe that an examinee who resides in a block of flats may think of their home first of all and a higher or lower response should be recorded after "Does the criminal reside in a block of flats?" regardless of whether they are "guilty" or "innocent". We want to inform readers that a great number of blocks of flats were built in the former Soviet Union. Therefore, the question of whether this item is informative enough, i.e. whether it is useful for the examination, arises.

When we familiarized ourselves with this idea for the first time, we became interested in it. We were thinking of ways to use it when formulating EKT tactics. An idea occurred to us: if the examinee is blond, approx. 180 cm height, owns a dachshund, etc., the following EKT questions/answers may be constructed (Saldžiūnas & Kovalenka, 2008a;2008b;2008c;2009a;2009b;2011):

Can you describe the hair of the murderer of person K?

- 0. Brown
- 1. Black
- 2. Grey
- 3. Blond
- 4. Of different colour
- 5. You do not know the colour of the murderer's hair

Do you know the height of the murderer of person K?

- 0. Approx. 200 cm
- 1. Approx. 150 cm
- 2. Approx. 190 cm
- 3. Approx. 180 cm
- 4. The murderer's height is different
- 5. You do not know the murderer's height

Do you know what breed of dog the murderer of person K owns?

- 0. Boxer
- 51.Bulldog
- 2. Dachshund
- 3. Wolfhound
- 4. Other dog
- 5. You do not know the breed of dog that the murderer owns Very many questions may be constructed in an analogous manner.

Nevertheless, we declined this idea and did not include it in EKT tactics. We believe that:

- The examinee should personalize (identify with them self) the questions to a greater or lesser extent. We have already written that defence lawyers will neutralize these questions in court as unreliable. The rest of the questions may be insufficient for a(definitive) court ruling in such a case or the court may rule that the polygraph examination was performed incorrectly and the conclusions thereof are unacceptable in the court as they are unreliable.
- Although very many questions may be constructed in such a way, they all repeat in terms of their content and do not reveal any new information. We believe that this option may be used in CIT tests. CIT tests (Konieczny, 2009; Krapohl, McCloughan & Senter, 2006; Osugi, 2011) are repeated 3-5 times during the examination. By using the principle described herein, another question from this series may be included instead of repeating a question. We believe that the adaptation process of the examinee may take place more slowly in such a case.
- The objective of EKT is to check the versions of a criminal event (Saldžiūnas V., Kovalenka A.;2012c). These questions do not provide any information for checking the versions. On the other hand, a lot of questions asked during the examination prolong the examination. We agree with the Japanese polygraphists' (Osugi, 2011) statement that only the most significant and necessary questions must be selected for the examination.

We hope that some practising polygraphists will find something rational in these ideas. Generalizing, we want to say that it is great that some polygraphists are putting forward new, daring ideas. By checking them in practice, the best ideas may be selected and polygraph examinations may be made more reliable in this way. We are planning to review other interesting ideas as well in the near future.

References

Djurovic B., Mijovic D. (2011), Исследование эффективности проведения полиграфных проверок в отношении лиц, имеющих психопатические черты характера. In: *Scientific and theoretical approaches and their action-oriented application in practical instrumental lie detection*, Sotchy, 26-36 [text in Russian].

Ekman P. (1992), Telling Lies. New York: Norton and Co.

Fedorenko V. (2009), Преступник знает самого себя, In: Актуальное состояние и перспективы развития метода инструментальной «детекции лжи» в интересах государственной и общественной безопасности, Kazan, 49-52 [text in Russian].

Grgurić Z., Pavlović S. (2011), Polygraph in Croatia, In: *Scientific and theoretical approaches and their action-oriented application in practical instrumental lie detection*, Sotchy, 72-73 [text in Russian].

Ivancika I., (2012), Personal communication.

Konieczny J. (2009), Badania poligraficzne. Podręcznik dla zawodowców, Warszawa, Wydawnictwa Akademickie i Profesjonalne [text in Polish].

Krapohl D., McCloughan J.& Senter S. (2006), How to use the concealed informatikon test, *Polygraph*, 35(3), 123-138.

Mangan D.J., Armitage T.E., Adams G.C. (2008), A field study on the validity of the Ouadri-track zone comparison technique. *Physiology & Behavior*, 95 (1-2), 17-23.

Matte, J. A. (1997), Forensic Psychophysiology Using The Polygraph. Scientific Truth Verification – Lie Detection. Willamsville, New York: Matte Polygraph Service.

Matte J.A. (2012), Critique of meta-analytic survey of criterion accuracy of validated polygraph techniques. *European Polygraph*, 1(19), 19-44.

Oglobin S., Moltchanov A. (2004), Applied "Lie Detection". Jaroslavl: Niuans [text in Russian].

Osugi A. (2011), Daily application of concealed information test: Japan, In Verschuere B., Ben-Shakhar G., Meijer E.(ed.), *Memory detection*. Cambridge university press. 253-275.

Raskin D.C., Honts Ch.R. (2002), The comparison question test. In Kleiner M. (Ed.), *Handbook of polygraph testing*, San Diego, CA: Academic Press.

Saldžiūnas V. and Kovalenko A. (2008a), The event knowledge test, *European Polygraph*, 1(3), 21-29

Saldžiūnas V. and Kovalenko A. (2008b), The event knowledge test (EKT) in Polygraph Examination (in case murder), *European Polygraph*, 2(4), 137-142.

Saldžiūnas V. and Kovalenko A. (2008c), The event knowledge test (EKT) in Polygraph Examination (common notice of tactics), *European Polygraph*, 3-4(5-6), 209-220.

Saldžiūnas V. and Kovalenko A. (2009a), Problems of questions in event knowledge test, *European Polygraph*, 3(2), 69-75.

Saldžiūnas V. (2009b), EKT lub test wiedzy o zdarzeniu, In: *Wykorzystanie wariografu (poligrafu) w badaniach kryminalistycznych oraz kadrowych* (21-23), Wydawnictwo Wyższej Szkoły Policji w Szczytno [text in Polish].

Saldžiūnas V. and Kovalenka A. (2011), A little about memory traces, *European Polygraph*, 1(15), 11-25.

Saldžiūnas V., Kovalenka A. (2012a), From CIT to EKT, *Polygraph*, (in press).

Saldžiūnas V., Kovalenka A. (2012b), Legal regulation and practice of polygraph examinations in the republic of Lithuania, *Polygraph*, (in press).

Saldžiūnas V., Kovalenka A. (2012c), Vantage of EKT, Эксперт-криминалист, No 1, 27-31 [text in Russian].

Shurany T., Chaves F. (2010), The integrated zone comparison technique and ASIT PolySuite algorithm: a field validity study, *European Polygraph*, 2(12), 71-80.

Shurany T. (2011), Polygraph verification test, *European Polygraph*, 2 (16), 61-67.

Shurany T. (2012), The open letter to polygraphers, European Polygraph, 1(19), 69-76.