

Security by psychology

We see things every day that tell us that psychological research is directly applicable to security, but few in the security field really seek to understand and effectively apply the principles or specifics of psychological research to their security programs. But there can be little doubt that psychological factors are closely tied to the effectiveness of security programs. Two of the areas where psychology is most widely applied to security are:

- **Pre-employment:** Psychology is applied in in-depth background checks, reference checks, screening tests, interview processes, and submitted material reviews.
 - In-depth background checks involve interviews of neighbors, past employers, friends, relatives, co-workers, and others and includes evaluation of the views of others toward the potential worker. These often include questions about stability, aggressiveness, use of drugs, family stability, and other related matters that are good indicators of employee reliability and resistance to elicitation.
 - Reference checks involve conversations with and/or written recommendations from people identified by the potential worker. These are often evaluated against the expected backgrounds for references, and the verbiage used is correlated to the professions involved.
 - Psychological screening tests, such as the MMPI, are widely used to evaluate potential workers for the presence of known psychological problems and to identify workers who should be excluded from high risk positions.
 - Interview processes often involve discussions with psychologists or standardized processes, and increasingly interviews include things like hand-written essays which are evaluated for handwriting characteristics or doodles.
 - Submitted written material is sometimes evaluated for sentence structure and word usage relative to similar material provided as samples from others in the same profession or to identify characteristics indicative of disorders.
- **Training and awareness programs:** These programs manage perceptions using psychology in an attempt to control behaviors.
 - Covert awareness programs use planted individuals with specific expressed views to elicit information and induce more secure social behaviors in subjects.
 - Most more direct awareness programs are intended to cause workers to be able to identify situations and react to them in predictable ways.
 - Effective awareness programs rotate between different presentations and technologies to avoid boredom or complacency.
 - The evaluation of feedback by trainees and rate of retraining are tied to the retention time for desired behaviors, and this mandates testing and exercises that provide the feedback required to evaluate the program.

In evaluating how and when to use these methods a number of considerations should be taken into account. A review of a covert awareness program yielded the following factors:

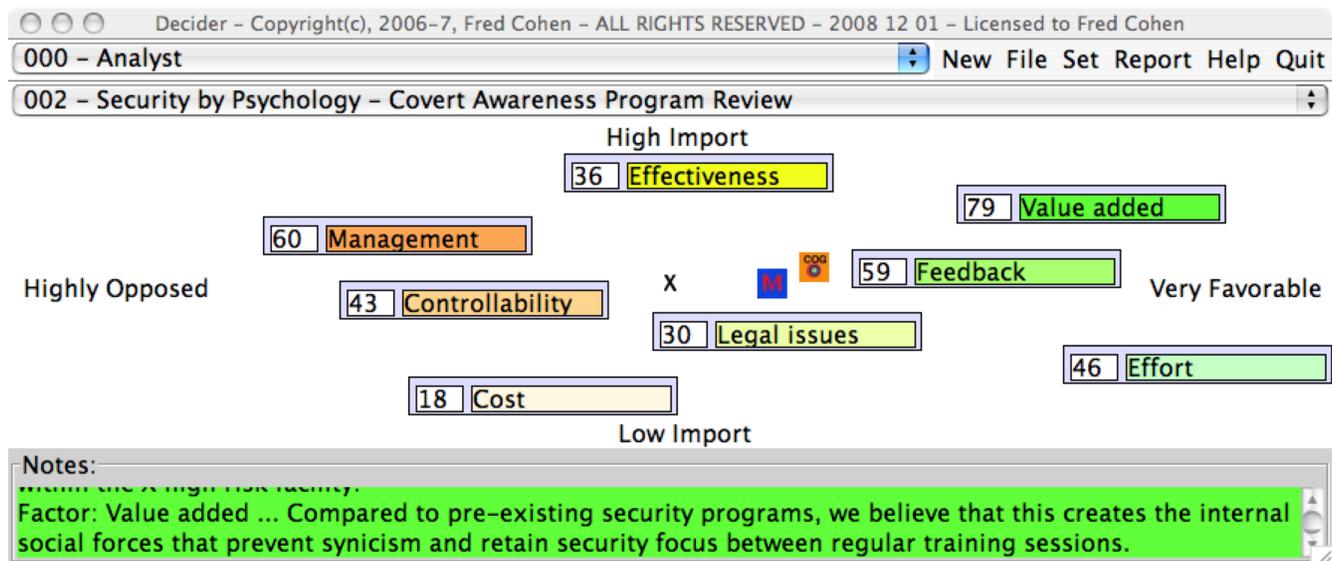


Figure 1: An initial review of a decision regarding a covert awareness program

This proposed program was for high valued targets at a particular facility. The risk of this program was assessed as moderate, and while the decision was not entirely clear based on this analysis, it was considered generally favorable. The lack of clarity and high import of program effectiveness was key to deciding to start with a test program rather than going for immediate and widespread implementation. The presentation went something like this:

Compared to pre-existing security programs, we believe that this creates the internal social forces that prevent cynicism and retain security focus between regular training sessions. We can directly measure the effectiveness by comparing areas where we apply it to those where we do not and holding exercises to test it periodically. The amount of effort is about an hour a month for team meetings for the participants and, since we are using normal workers, it does not take away from their normal duties otherwise. It doesn't fit within our normal management process and may create friction among the managers. There is no real way to control the effort and keep people from going overboard or creating problems under cover of authority other than careful selection of participants and thorough briefing. We don't really know how effective it will be. We need to be careful about making certain that the program does not violate regulations, contracts, or legal mandates regarding employee treatment. The cost impact is minimal at an hour a month for training the participants and some added measurement criteria for our internal human metrics systems.

To summarize, this program has high value added potential, can be readily measured and reasonably controlled. Added effort is low, but some managers may have to be trained and properly prepared for the effort. Effectiveness will be assessed during the test program and legal and HR review will take place at every step of the way. The cost will be covered by existing security overhead.

Psychological issues have always been central to security, but they have not always been widely recognized for their role in the overall protection program. Security by psychology works and necessary in any protection program, but it must be well done to work well.