

SMART[©]

Performance Training



Does Self-Regulation matter?

The Self-Regulation Skills Test

SMART Online SR Training

Example SR Report

psyfactors

Suite 615, 370 St Kilda Rd Melbourne Vic 3004 Australia ph: +613 9645 9800



Pete Rosenweg -
Registered Psychologist
Human Factors

SMART[®] Training

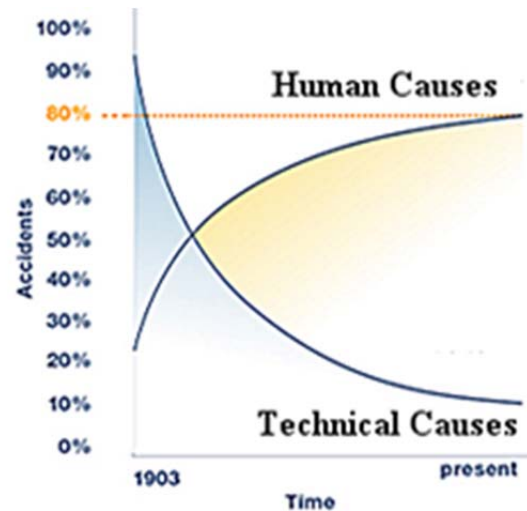
Removing the blocks to performance with unconventional methods

Self Management & Attention Recovery Training

You will already know that the toll of adverse events shows conclusive evidence that unsafe acts outweigh all other causes across all industries in an 80:20 ratio (or more).

A greater awareness of human factors, better training and self-regulation addresses the major source of the problem. Improving the capability of personnel to more easily sustain performance will achieve an even greater reduction in risk.

Note that **SR** is the practical side of motivation.



Change in the source of error over time

A large scale survey and analysis of 54,168 persons from 1040 organisations in 2014 in the Australian region showed that one in five persons were below requirements on all measures.

% of the 54,168 persons reporting

Poor attention recovery & resilience	24%	The numbers show that on the SSA test of adequacy with respect to the four major risk measures, 15.7% of the total sample of 54168 persons tested with the online SSA were significantly below the minimum ON ALL aspects of a productive level of functioning.
Less than normal mental alertness	27%	
Inadequate management of fatigue	48%	
Poor perception of risk	41%	

Industry performance by comparison of the ratio of adverse events

Healthcare	1:57	200,000 infections resulted in 3480 fatalities	ACSQHC, 2014. p44
Transport	1:100	6500 crashes resulted in 65 fatalities	ABS, 2015. BITRE, 2015
Aviation	1:150	5683 serious incidents resulted in 38 fatalities	ATSB, 2015 Quick Counts
Industrial	1:2859	531,800 incidents resulted in 186 fatalities	Safe Work Aus, 2013, p22

What is Positive Self-Regulation?

Self-regulation is a construct that comprises various behaviours, mental and emotional states. Self-regulation can act in a way that can be both explicit and overtly deliberate, involve unconscious decisions and irresistible impulses. Self-regulation can also be reflexive, adaptive or defensive, inescapably mediated by the context, intensity and urgency of the needs of the moment. Additionally, self-regulation can be heavily influenced by social normative and moralistic constraints in deciding behaviour.

Enabling cognitive dependencies



Behavioural Markers

- Can see things others may miss
- Ability to avoid becoming fixated
- Can switch rapidly between demands
- Remembers procedures, rules and exceptions
- Remembers despite interruption
- Can anticipate sudden changes
- Can deliver the necessary mental effort
- Less vulnerable to emotional preoccupation

Figure 1. Model and hierarchy of dependencies and behavioural markers

Self-regulation is different to self-control which is a narrower set of behaviours that are more directly involved with inhibiting and overriding unwanted impulses and reactions. The ability to self-regulate to develop a competent ability to manage the self, is crucial for social, academic and occupational achievement.

Self-regulation allows the individual to adapt to fulfil intent through their executive or mental faculties, the cognitive control of attention and management of emotion. Self-regulation skills and strategies provide the cognitive resources to withstand difficulties, distractions and overload in the achievement of objectives. The limitation of mental energy and capacity for effort prompts the need to be able to recover mental energy through self-regulating strategies, which act as the underlying executive directing the alerting and orienting facets of attention necessary for situational safety awareness.

Self-regulation is trainable so that mental effort can be improved or recovered when needed through the exertion of 'effortful control'. As an executive process self-regulation intersects the two different mental states of 'introspection' and the more pragmatic and externally directed action form of coping. As an executive function it also underlies cognitive resilience, the ability to recover from adversity or overload and to continue to function as required.

Positive self-regulation enabling the behavioural markers leading to greater situation awareness is measured by the suite of SSA tests.

SSA Testing & Training for All Industries



The SSA SELF-REGULATION SURVEY (V5.1)

is a 96 item survey of capacity for sustainable performance for the achievement of objectives in any role, as indicated by key markers that represent positive self-management in coping with pressures of role stressors and growing

fatigue, belief in own ability and capacity to persevere and take direct action with what is needed. Self-regulation has been demonstrated to be the key marker for occupational success.

SSA SELF-REGULATION SURVEY (V5.1)

COGNITIVE RESILIENCE

- Alertness Status
- Manages Fatigue

SELF-REGULATION

- Direct Action Oriented
- Self-Efficacy

SELF-CONTROL

- Coping Status
- Impulse Management

WORKPLACE PERSPECTIVE

- Personal Responsible
- Risk Sensitivity
- Conscientiousness



Human Factors Online Training for workers V1.1a

The SSA Training course for operators is an untimed and approximate 120 – 180 minute and 100 page program of identification, exploration and assessment of key human factors concepts with interactive and video examples. It is designed to be

combined with the SSA test as a training extension. The SSA training addresses the perspective, behaviours and human limitations that affect the ability to maintain attention, function with coordinated and reasoned action and to generally remain vigilant of situations and circumstances impacting safe performance. Recommended for recruiters and inductees who need to expand their understanding of human factors in assessment of risk.

SSA HUMAN FACTORS TRAINING V1.1a

UNDERSTANDING HUMAN FACTORS

Topics:

1. Understanding Human Error
2. Identification of human factors
3. Reviewing a case
4. Perceived Work Load
5. Effect of Fatigue, Age & Drugs
6. Safety behaviours checklist



Human Factors Online Training for Supervisors V2.0A

The SSA Training course for Supervisors is an untimed and approximate 180+ minutes covering a 120 page program of identification, exploration and assessment of key human factors concepts with interactive and video examples.

Designed to address
'Achieving Safety Through Others'

In addition to the human factors content of the operator course, the supervisor course improves the ability for supervisors to detect signs of early warning in breakdown of SA in the team. The training also provides a template for interaction using personality and communication styles. Recommended for supervisors in safety critical industries who need to expand their understanding and potential actions in managing risk.

HUMAN FACTORS (SUPERVISORS) V2

Topics:

- 1 What is this about?
- 2 What hazards?
- 3 Common human factors?
- 4 You are the investigator
- 5 Identifying loss of SSA
- 6 Getting the message across
- 7 How do I keep them safe?

SMART® - Self Management & Attention Recovery Training

A Single Training Mechanism to Improve Self-Regulation



Self-regulation training develops the ability to manage the self in the achievement of objectives. SR is a crucial competency for social, academic and occupational achievement. It allows the individual to adapt more readily and easily to the demands of the moment so as to fulfil intentions by controlling fatigue, attention and the management of emotion.

SMART SURVEY & TRAINING

Basic outline of the program involves a baseline assessment followed by an initial sequence of ten 30 minute sessions over 10 days.

BASELINE ASSESSMENT

- Mental Alertness
- Manages Fatigue
- Work Load Strain
- Executive Functioning
- Working Memory
- Choice Reaction Speed

SMART DAILY TRAINING EXERCISES

- Daily Exercises 1 - 10
- Progress & Review

SMART® is the key difference between high and low performers

Self-regulation skills and strategies free up cognitive resources to better withstand difficulties, distractions and overload. It is most useful at the moment of sudden demand or crisis, when faced with fatigue and overload.

The ability to recover mental energy through a self-regulating strategy is a decisive attribute that can result in success in situations that would otherwise result in failure. SR is the necessary foundation for performance in general and situational safety awareness in particular.

Basic self-regulation is an easily trainable skill so that mental effort can be improved or recovered on cue when needed, through a simple and instantaneous technique.

As an executive process - self-regulation skills are independent of personality style. As an executive function self-regulation underlies cognitive resilience, the ability to recover from adversity or overload and to continue to function as required.

To deliver greater:

- -Vigilance
- -Multitasking
- -Memory recall
- -Resilience
- -Anticipation of change
- -Mental energy & effort
- -Management of emotions

Benefits of the training includes short time to master, no ongoing cost, a method that generalises to performance and delivers instant results.

SMART® skills for better decisions

SSA

SSA SELF-REGULATION SURVEY (V5.1b) CLIENT REPORT

Client 2: PSYFACTORS PTY LTD (506)

Respondent 11521: Pierre Le Test

Date of Birth: 31-05-1945

Telephone: 0419392351

Email: pnr@psyfactors.com

Address: Suite 615, 370 St Kilda Rd Melbourne
3004 VIC Australia

Assessment Date: 01 / 11 / 2016 07:58:50 AM

SURVEY DESCRIPTION

The SSA SELF-REGULATION SURVEY (V5.1) is a 96 item survey of capacity for sustainable performance for the achievement of objectives in any role, as indicated by key markers that represent positive self-management in coping with the pressures of role stressors and growing fatigue, belief in one own's ability and capacity to persevere and take direct action with what is needed. Self-regulation has been demonstrated to be the key marker for occupational success.

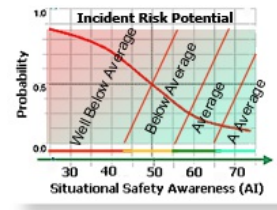


Copyright © 2000-2016 Psyfactors Pty Ltd
Suite 615, 370 St Kilda Rd, Melbourne Vic Australia 3004 ph: +61 3 9645 9800

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

Overview and scale definitions of the SSA SELF-REGULATION SURVEY (V5.1b)

The SSA SELF-REGULATION SURVEY (V5.1) is a 96 item survey of capacity for sustainable performance for the achievement of objectives in any role, as indicated by key markers that represent positive self-management in coping with the pressures of role stressors and growing fatigue, belief in one own's ability and capacity to persevere and take direct action with what is needed. Self-regulation has been demonstrated to be the key marker for occupational success.



COGNITIVE RESILIENCE

Alertness Status

Involves the capacity to maintain and recover a balanced unpreoccupied emotional state due to adverse circumstances.

Manages Fatigue

Extent of self management to avoid safety risks due to unrelieved stress or sleep loss.

SELF-REGULATION

Direct Action Oriented

Extent of capacity to engage and complete tasks despite distraction, fatigue or personal reluctance.

Self Efficacy

Measures the extent to which the person believes in their capacity to achieve and to see themselves as instrumental or in control of what happens to them.

Self-Regulation

Measures the capacity to apply the self to the task, maintain focus despite distractions of all kinds.

SELF-CONTROL

Coping Status

Involves the capacity to maintain and recover a balanced emotional state in the face of adverse circumstances.

Impulse Management

Measures the tendency to sudden thoughtless and reactive behaviours.

WORKPLACE PERSPECTIVE

Conscientiousness

Involves the capacity of the individual to display diligent and conscientious behaviour.

Personal Responsible

Involves the individual's belief in their ability to influence their own safety.

Risk Sensitivity

Considers the individual's tendency to seek out or tolerate risky situations.

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

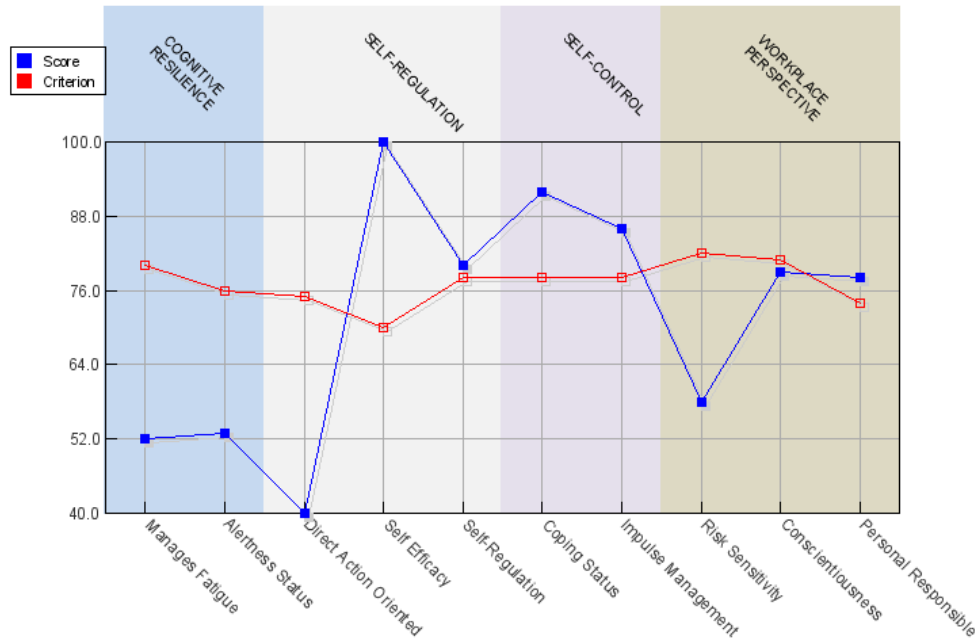
SUMMARY OF RESULTS

Respondent Final Score (Assessment Index): 52 **Time taken:** 25 minutes **Expected:** 15 minutes

Survey comprehension level:

Pierre's preliminary results indicate that his comprehension of the text was adequate to successfully complete the survey.

Pierre's overall results indicates a slightly below average capacity with respect to the benchmark behaviour, to maintain his attention to the task, situational awareness and cope or recover from stress and fatigue in the role.



Pierre reports a greater competency in

- Confidence in the ability to control one's motivation, behavior, performance and interpersonal situations.
- Managing situationally generated stress and ability to recover rapidly from adverse events
- Avoiding impulsive and thoughtless actions when under duress.

Pierre's results indicate that caution should be exercised with respect to tasks requiring competent skills in

- Effectiveness in managing the self to avoid the cumulative or compounding effects of unrelieved fatigue.
- Capacity to maintain a balanced emotional state with increased exposure to adverse circumstances
- Capacity for positive and direct action, avoidance of procrastination and delay in achieving objectives.
- Identifying and avoiding risky situations that are beyond own skills

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

COGNITIVE RESILIENCE

The capacity to maintain or recover attention is critical for both safety and performance. Poor self-management and application can result from emotional fixation and preoccupation or from a wandering mind due to fatigue, a medical context, inadequate or disrupted personal habits. The component measures in this factor identify the particular vulnerability for this person. The factor measures present mental state and fatigue management predictive of performance.

Alertness Status

Contribution to Safety & Productivity

The cognitive capacity scale measures the individuals prevalence of failure in mental functioning as evidenced by every day slips in perception, memory and physical functions. The person subject to cognitive failure shows up as easily distracted with poor short term memory and a tendency to clumsy uncoordinated behaviour. Cognitive failure can be seen to make the person vulnerable to errors of omission and through frustration to expedient behaviour resulting in safety violations.

Effect on Performance

(Rated as Slightly Below Average in range of 61-90)

● Pierre reports a moderately significant tendency to failure in full and alert functioning at the slightly below average level, as evidenced by every day slips in perception, memory and physical functions. Pierre will likely show up with a tendency to be distracted, likely to forget things and a tendency to clumsy behaviour increasing his vulnerability to errors of omission and progressively through frustration to expediency and safety violations.

Manages Fatigue

Scale description

Extent of the accumulated fatigue on personal performance with the potential for breakdown in safe behaviour and vigilance. Considers fatigue inducing behaviours which may prevent good recovery in sleep, otherwise necessary for the maintenance of a positive alert mental state, so as to be able to pay attention to events and surroundings, control emotions, reduce errors of judgement or inadvertent rule breaking.

Effect on Safety & Performance

(Rated as Slightly Below Average in range of 51-90)

● Pierre's results indicate a slightly below average capacity to avoid the impact of cumulative fatigue and which could impact performance. Improved self-management may enhance on the job performance. Pierre may increasingly show decreases in attention and concentration and some increase in emotional reactivity.

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

SELF-REGULATION

The capacity to maintain or recover attention, persevere and directly address needs without delay is critical for the achievement of objectives. Successful accomplishment and timely performance of tasks require the avoidance of distraction, fixation or other preoccupations. A lesser capability may result from self-doubts, poor attention recovery skills and procrastination, resulting in 'too-little', 'too-late'. The component measures in this factor identify the particular vulnerability for this person.

Direct Action Oriented

Contribution to Safety & Productivity

An aspect of self-regulating behaviours to ensure achievement of intentions and objectives, by managing the self to ensure readiness for the task through timely attention and application. Avoidance of ruminative preoccupation and reluctance to engage because of reluctance to make the effort or fear of failure.

Effect on Performance

(Rated as Slightly Below Average in range of 51-90)

● Pierre's results at the slightly below average level suggests some difficulty in managing time and tasks as required which may lead to downstream problems associated with task overload, as in trying to complete things at the last moment. It may be advised to explore whether Pierre has a tendency or preference to work best under pressure as this is often the mechanism that overcomes motivational deficits.

Self Efficacy

Contribution to Safety & Productivity

Self-efficacy is a person's belief in his or her ability to succeed in a particular situation and becomes important in the face of resistance, overload or when confronted or challenged by the unfamiliar. The preparedness to approach an issue rather than retreat in defeat generally enables a speedier and more effective solution to a problem. Poor self efficacy is visible as freezing, inactivity and procrastination due to an inability to overcome self-doubt.

Effect on Performance

(Rated as Above Average in range of 111-200)

Pierre appears to have no emotional blocks to job performance, characteristically robust and capable of taking significant risks with his self esteem, ever ready to try out new things. Pierre will avoid dwelling on any failures typically because he is already busy thinking of ways to succeed with the next thing.

Self-Regulation

Contribution to Achievement

Self-regulation is the constructive and adaptive application of skills and strategies in the achievement of objectives. It is an enabling feature of motivated behaviour acting to expand ability rather than suppressing impulses as in self-control. Self-regulation skills are necessary for achievement to counter the daily accumulation of fatigue, distractions and competing priorities.

Effect on Performance

(Rated as Average in range of 91-110)

Pierre reports adequate to good coping habits at the average level, approaching things in a systematic way, typically thinks ahead and deals with the essential and important issues being faced. Pierre indicates the ability to maintain his focus and switch off and relax when necessary. Pierre will be unlikely to succumb to work overload except in the most extreme circumstances.

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

SELF-CONTROL

Self-control is the management of behaviours that tend to disrupt social or workplace settings. The capacity to maintain restraint and cope with pressures is essential for the avoidance of ill-considered actions and excessive reactions to a perceived threat or need to escape the arduous and routine. Poor self-control leads inevitably to expediency and unnecessary risk taking, disdain of workplace rules and respect for others.

Coping Status

Contribution to Safety & Productivity

Recovers quickly and sufficiently from adverse experiences to enable diligent, alert, situationally aware, responsive and effective performance and communication.

Effect on Performance

(Rated as Above Average in range of 111-200)

Pierre's results were at the above average level indicating a self-perception of having a robust coping ability with a higher capacity to manage occurrences of situationally generated emotional stress. Pierre would tend to be supportive of others when under stress and uphold the morale' of the team. Pierre's general presentation is likely to be marked by a good sense of humour and a capacity to recover easily from adverse events.

Impulse Management

Contribution to Safety & Productivity

Impulsivity and aggression visible as poor self-control in social settings or as excessive reaction and responses to perceived threat. Frequently due to mental overload, chronic fatigue or medical/drug issues, characterised by recklessness, impulsiveness and expediency resulting in risk-taking and disdain of workplace rules and regulations when they seem to be arduous.

Effect on Performance

(Rated as Average in range of 91-110)

Pierre reports being within the average range of self-control generally resisting the tendency to impulsivity and aggression, that would otherwise be visible as poor self-control behaviours in social or workplace settings as blurting, interrupting, ill-considered actions or as an excessive reaction to perceived threat. Pierre is characterised by a low tendency to recklessness and expediency which could otherwise result in risk taking and disdain of workplace rules, when they seem to be arduous.

Report on: **Pierre Le Test** 01 / 11 / 2016 7:58 AM

WORKPLACE PERSPECTIVE

The safety perspective factor measures the respondent's proactive mindset and sense of personal responsibility in managing safety together with the tendency to avoid circumstances that are beyond personal limitations. A lesser result on the measures would tend to impulsive and potentially rash decisions and an avoidance of responsibility for safety. The factor is an important dimension of safety compliance.

Conscientiousness

Contribution to Safety & Productivity

Involves the extent to which the individual is likely to display diligent and conscientious behaviour, avoiding rule breaking, expediency, group pressure and careless acceptance of others work to ensure consistently safe outcomes for themselves.

Effect on Performance

(Rated as Average in range of 91-110)

Pierre indicates an average degree of diligence and conscientiousness in behaviour, avoiding rule breaking, expediency, group pressure and possible careless acceptance of others work to ensure consistently safe outcomes.

Personal Responsible

Contribution to Safety & Productivity

Involves the perception and belief the individual has in their ability to guide and influence what happens to them and others in the context of safety. Behaviour range is from the passive to the proactive with regards to safety.

Effect on Performance

(Rated as Average in range of 91-110)

Pierre reports an average level of belief in his ability to control or influence what happens to him and others and would generally tend to be more proactive with regards to own or others safety.

Risk Sensitivity

Contribution to Safety & Productivity

Considers the tendency for the individual to purposefully seek out, respond to or avoid situations that are uncontrollable, require considerable skill, represent 'quick and dirty' approach to work or may result in punitive action. Higher scorers indicate the capacity to observe the rules, follow procedures and maintain a consistent degree of integrity in their approach to the work.

Effect on Performance

(Rated as Slightly Below Average in range of 51-90)

● Pierre reports a slightly below average tendency avoid risk with a tendency to respond to personally challenging situations that may be uncontrollable or unsafe. Pierre may occasionally tend to ignore the rules and procedures or direct instructions when motivated by a challenge.