11-30-2010

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DOI: 10.4225/75/579ed7bf099cc
3rd Australian Security and Intelligence Conference, Edith Cowan University, Perth Western Australia, 30th November 2010
This Conference Proceeding is posted at Research Online.  
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National Security: A Propositional Study to Develop Resilience Indicators as an Aid to Personnel Vetting

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Abstract
Within the National Security domain there is a convergence of security responsibility across the national security agencies, law enforcement and private security sectors. The sensitivity of this environment requires individuals operating in the domain to be honest, trustworthy and loyal. Personnel vetting is a formal process used to determine an individual’s suitability for access to this domain. Notwithstanding this process, significant breaches of trust, security, and corruption still occur.

In psychology, resilience is a well researched phenomenon that is considered a multidimensional construct where individual attributes, family aspects and social environment interact in aiding individuals to deal with vulnerability. There are many understandings and definitions of resilience based on theorists’ different perspectives; however, most agree that resilience is represented by a minimum of two aspects. The first is adversity and second, how the individual deals with adversity that demonstrates situational adaptation in a positive manner.

The study is a work in progress and proposes the use of a recently developed Lifespan Resilience Scale. This scale will use resilience markers as an aid to National Security by providing vetting agencies with an additional tool for proactive intervention. The Lifespan Resilience Scale is currently undergoing reliability and validity testing within a student population. Once validated within this population, the scale will be adjusted and tested within the vetting environment using cross validated cohorts and expert opinion. Such a tool will assist National Security through better personnel risk management.

Keywords
Resilience, personnel, vetting, National Security, indicators, aid

INTRODUCTION
Resilience is referred to extensively in many elements of the National Security, critical infrastructure, and corporate security environment discourse. The Australian Government’s National Security Science and Innovation Strategy document states the need to build a more prepared and resilient society (2009, p. 61) and one approach to developing and supporting a National Security system is through Personnel Security (PERSEC) with the clearance of personnel. Security vetting is a core function of PERSEC, with the primary purpose of ensuring that only trustworthy personnel have access to classified or sensitive information. However, with the current National Security convergence, greater numbers of personnel now require access to the National Security environment. During the period January 2005 through to November 2007 10,255 Top Secret clearances alone were granted (Australian National Assessment Organisation, 2008), increasing the load on both state and federal vetting resources.

Whilst cases of espionage remain relatively rare, the risk posed to National Security by insiders with access to highly classified information remains extreme. For example, in the USA between 1947 to 2007 there has been approximately 170 publicly acknowledged cases of espionage (Herbig, 2008). Within Australia in the last 15 years there have been the Wispieleare and LaPas cases, resulting in the Blick Inquiry of 2000 that recommended psychometric assessment as part of the positive vetting process (IGIS, 2008). The positive vetting process is an intrusive and comprehensive process used for those individuals requiring access of the highest security classification. In addition to initial vetting, personnel with Top Secret Positive Vetting are subject to continuous review, assigned case managers and expected to keep their case managers advised of life changes that may influence their personal vulnerability. The introduction of demonstrated
resilience indicators may assist case managers to make better informed analysis of potential risk posed by personnel at times of change in circumstances or crisis.

Resilience, in the field of psychology, is a well researched phenomenon with an extensive literature and considered a multidimensional construct, where individual attributes, family aspects and social environment play a role in aiding the individual to deal with some form of adversity or vulnerability. Resilience is represented by a minimum of two aspects; first that there is adversity and second, that resilience is demonstrated by the individual in dealing with the adversity in a way that demonstrates competence or adaptation to the environment or situation in a positive manner (Luthar, Cicchetti, & Becker, 2000; Masten, 2001; Schilling, 2008).

**Study Objectives**

Resilience is an undefined term when considered within the context of security. Nevertheless, resilience is a term that is used extensively in many Australian Government documents (Attorney-General's Department, 2009; Department of the Prime Minister and Cabinet, 2009) in relation to National Security strategy, direction and policy. For example, the National Security Resilience Policy Division (NSRPD) provides policy advice on emergency management, protective security, identity security, e-security and critical infrastructure protection. Therefore, the proposed study merges the two distinct disciplines of Psychology and Security Science to aid the National Security domain.

Psychometric testing has been a part of the Top Secret Positive Vetting process for the past ten-years; however, the value of psychometric testing as a predictor may be somewhat limited. Inappropriate action was more likely to be influenced by the environment, life stressors and disciplinary non-compliance (Booth-Kewley, Larson, Alderton, Farmer, & Highfill-McRoy, 2009; O'Connor-Boes, Chandler, & Timm, 1997), which is consistent with Herbig’s emerging evidence to suggest that significant life events are triggers for espionage (2008).

The study is a work in progress; nevertheless, it puts forward a proposition that the Lifespan Resilience Scale can be developed to provide a suitable tool to aid National Security agencies to better manage, apply and maintain security clearances. The objectives of this study were to consider the suitability of the Lifespan Resilience Scale within the National Security personnel vetting domain and put forward a methodology to test and measure the efficacy of such an aid.

**NATIONAL SECURITY VETTING**

Personnel Security (PERSEC) is a process of ensuring that the individual is not a security risk and is developed in conjunction with an overall security policy and framework. Vetting is the most common form of PERSEC and is based on the evaluation of an individual’s character, attributes, background and actions (Attorney-General's Department, 2010a; Defence Vetting Report, 2007). Depending on the level of access to be granted, an individual will be assigned a level of aftercare and subjected to periodic security reviews. Periodic review and the process of aftercare is recognition that individual circumstances change over time and with that, the individuals’ risk profile.

**The security vetting process**

The vetting process has two primary aims, to validate a person's identity and ensure their integrity. People have been known to present themselves as someone other than themselves, identities are stolen and people may have multiple identities for different aspects of their lives (Thomson, 2007). Integrity ensures the honesty of the person and determines their security vulnerabilities including police checks, referee checks and in some cases a security assessment interview. The interview, which requires specialised skills, seeks to confirm the suitability of the person for a security clearance by determining whether they have “skeletons in their past”.

There are five levels of security clearance, namely restricted, confidential, secret, top secret (negative vetting), and top secret (positive vetting) (Defence Vetting Report, 2007). Positive vetting involves an “intensive enquiry into the subject’s life until suitability for clearance has been established beyond reasonable doubt” (Attorney-General's Department, 2010b, p. 29). It is an intrusive process for individuals requiring access to information of the highest security classification i.e., Top Secret. Negative vetting is less intrusive and only aims to identify the individual’s background and lifestyle.

**Vetting and suitability indicators**

As outlined in the Protective Security Manual (Attorney-General's Department, 2010b), the evaluation of suitability for clearance is based on suitability indicators. These are maturity, responsibility, tolerance, honesty and loyalty. Maturity
PSYCHOLOGICAL RESILIENCE

During the lifespan people may encounter challenging situations that place them at risk of negative psychological, social and physical consequences. Some people respond adversely to these challenging situations and indulge in a range of negative behaviours, for example, substance abuse or violence. Adversity is evaluated according to negative life circumstances and adaptation is defined as successful performance on age-developmental tasks (Schilling, 2008). There is some debate within the psychological literature regarding whether resilience is a personality trait that is stable, fixed and measurable (Cicchetti & Rogosch, 2007; Flores, Cicchetti, & Rogosch, 2005), whether it is a dynamic process that is contingent on context (Luthar, et al., 2000; Rutter, 2007), whether there is a biological component (Cicchetti & Rogosch, 2007; Rutter, 2007), or whether it is a multidimensional construct which also depends on ones cultural background (Ungar, 2004, 2005a). The Triarchic Framework of resilience (Werner & Smith, 1982) was one of the first frameworks to include environmental factors which suggested that protective and vulnerability processes need to be viewed on three levels, namely community influences, family influences and the individual.

Some researchers use the terms resiliency and resilience interchangeably. However, resiliency and resilience are two different constructs. Resiliency relates to a personality characteristic and resilience refers to a dynamic developmental process (Luthar, et al., 2000). The use of these terms should be exercised with caution to avoid further confusion. For example, as resiliency refers to a personality trait, the term may lead to misconceptions that some people “do not have what it takes” (Luthar, et al., 2000, p. 546) to overcome adversity. Luther et al. (2000) indicated that there is a need for specificity in discussing resilient outcomes, such as educational resilience, emotional resilience and behavioural resilience.

Risk and protective factors

The level of an individual’s resilience can depend upon both internal and external resources, which may facilitate or inhibit positive adaptive behaviour. The resources that facilitate adaptive behaviour are generally referred to as protective factors; those that inhibit adaptive behaviour and risk factors. A number of protective and risk factors that either guard against or result in poor outcomes have been identified and unfavourable outcomes are usually defined as behavioural or emotional problems (Hawley & DeHaan, 1996). Protective factors can be considered ‘buffers’ between the ‘person’ and the ‘stressful situation’ (Hawley & DeHaan, 1996). Resilience research has demonstrated that individuals across all age groups have the ability to successfully negotiate challenges or adverse events despite many risk factors.
Risk factors include poverty, low socio-economic status, war, violence, sexual abuse, family dislocation, exposure to maltreatment or violence, loss of a parent, physical injury, mental illness, race or ethnicity, minority status, parental mental illness, parental relationship instability and community violence (Flores, et al., 2005; Luthar, et al., 2000; Martinez-Torteya, Bogat, von Eye, & LeVendosky, 2009; Masten, 2001; Ungar, 2007).

Protective factors can be classified into three main categories: those within the individual (psychological/dispositional attributes); family support/cohesion (and support from friends and peers); and external support (in terms of the environment/community systems) (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003; Hawley & DeHaan, 1996; Ribbens & McCarthy, 2006; Schilling, 2008) and coping processes. Dispositional attributes or internal factors attributed to the person include self-esteem, coping skills, self-confidence, self-efficacy, internal locus of control, pro-social behaviour and empathy, optimism, positive self-image, intellectual functioning, self-regulation, intrinsic motivation, and pleasure in mastery (Cicchetti & Rogosch, 2007; Flores, et al., 2005; Friborg, et al., 2003; Luthar, et al., 2000; Masten, 2001). Positive emotion or self-esteem has been found to be a protective factor strongly associated with resilience and improved coping.

In terms of the second protective factor (family support/cohesion), positive or effective parenting, parental warmth and support are factors which predict positive adaptation in children when faced with adverse circumstances (Martinez-Torteya, et al., 2009). Stable positive relationships are associated with resilience (Rutter, 2007). Other caregivers and adults, that are not part of the immediate family, are important to the resilience of high-risk adolescents (Ungar, 2004). Such relationships allow the adolescent to believe in their ability to overcome adversity. Although much of this research has been conducted with children and adolescents, the knowledge is transferable to adult populations. The third protective factor is environment and community systems, which provide resources necessary for positive development (Ungar, 2005a, 2005b, 2007).

PSYCHOLOGICAL RESILIENCE SCALES

Scales that have been developed to measure resilience of the individual and the family do not fit with emerging ideas associated with resilience research. For example, existing measures do not examine the relationship between the two types of resilience. Nevertheless, current measures have been adapted by changing the items to measure resilience in adolescence (Hjemdal, Friborg, Stiles, Martinussen, & Rosenvinge, 2006) based on items developed to measure resilience in adults (Friborg, et al., 2003).

Current resilience scales

There are a large number of resilience measures, which generally assess protective factors or resources that involve personal characteristics and coping styles (Connor & Davidson, 2003; B. W. Smith et al., 2008). These provide a useful summary of the types of resources that support positive adaptation. A range of measures have been designed to assess resilience in children (Prince-Embury, 2007), adolescents (Resilience Scale for Adolescents (READ) (Hjemdal, et al., 2006); Child and Youth Resilience Measure (CYRM) (Ungar, 2008) and adults (Connor & Davidson, 2003; Friborg, et al., 2003; B. W. Smith, et al., 2008). In this study, the focus is on the adult measures. However, many of these current scales have limitations such as the unidimensional Brief Resilience Scale (BRS) (B. W. Smith, et al., 2008), are internal to the individual Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) or fails to account for the extended literature (Wagnild & Young, 1993).

The most relevant scale to date is the Resilience Scale for Adults (RSA) (Friborg, et al., 2003) that measures protective resources that promote adult resilience. Five dimensions are outlined: personal competence, social competence, social support, family coherence, and personal structure. The RSA covers all three categories of resilience, namely dispositional attributes, family cohesion/warmth and external support systems. This approach corresponds well to the overall categorisation of resilience as a multidimensional construct characterised by personal/dispositional attributed, family support and external support systems (Friborg, et al., 2003; Ribbens & McCarthy, 2006; Schilling, 2008).

Resilience scale for vetting

Whilst these scales are useful, none have been specifically designed to meet the needs of National Security vetting and the role of case managers in aftercare. The researchers are currently developing a resilience measure that can be applied across the lifespan, from 12 years through to the elderly. It is anticipated that the development of this questionnaire will lead directly to a specialised measure that is useful for both initial vetting on recruitment and as an ongoing tool to assess a current state of resilience in personnel.
It is evident that resilience does not only depend on individual attributes, but also on the protective structures that operate around the individual, for example the family, the community and the environment. Models of resilience have adopted this view in terms of working with high-risk individuals. Importantly, one core principle by which resilience models or resilience program development operates is to enhance resilience. In order to achieve this, knowledge of protective factors needs to be reflected in the program development (Christiansen, Christiansen, & Howard, 1997).

THE INSIDER THREAT

Factors linked to insider risk may be divided under stressors (personal, situational and life events), motivators and personality factors.

Stressors (personal, situational and life events)

Shaw, Ruby and Post (1998) outlined that there are personal and situational stressors that may lead to insider risk, such as embarrassment of being caught, feeling betrayed or rejected, workplace conflict, illness or death, disappointments at work, criminal or drug activities, family issues or financial stress. Shaw and colleagues mention that these types of stressors “can trigger an emotional reaction leading to impaired judgement and reckless or vindictive behaviour” (E. Shaw, et al., 1998, p. 8), for example espionage, theft, fraud or sabotage. Likewise, Heuer (n.d.) maintains that the decision to betray is triggered by a life event, whether in a person’s personal or professional life that increases the stress beyond a person’s breaking point. Heuer suggest that less emotionally stable people may react to such situtations by substance abuse, suicide or harming the organisation they work for. Herbig (n.d., p. xi) adds that triggers may include both positive and/or negative crises, for example divorce, death, or starting a new relationship that may precede an individuals’ decision to commit espionage.

Motivation

Various authors (Gelles, n.d.; Golubev, n.d.; Herbig, 2008; E. Shaw, et al., 1998; E. D. Shaw, Fisher, & Rose, 2009) report that there are specific factors that can motivate a person to harm the organisation they work for. People will be tempted to commit a crime if they are unhappy, the crime is easy to commit, there is opportunity and the reward is sufficient (M. R. Smith, 1990). Motivation to commit a crime may increase if there is an intellectual challenge, to satisfy curiosity and to gain personal advantage, such as personal, financial, and competitive and the motivation may be deeper than it appears (Gelles, n.d.). Nevertheless, money is not only a motivation for what it can buy, but for what it symbolises with power and success. As Herbig found, “since the 1990s, money has not been the primary motivator for espionage” (2008, p. xi). Individuals commit espionage to fulfil complex emotional needs (Gelles, n.d.) or a combination of emotional and financial needs (Heuer, n.d.). Espionage cases that appear to be financially motivated are actually motivated by emotional needs, as money symbolises success, power, influence, a way to happiness and self-esteem.

Personality factors

Personality factors are important to consider in terms of prevention. General personality weaknesses include greed, impulsiveness, vindictiveness, alienation, paranoia and sensation seeking (Heuer, n.d.). In addition, spies usually suffer from one or more personality disorders (Gelles, n.d.) with the two most common being antisocial personality disorder and narcissistic personality. A person with antisocial personality disorder rejects rules, lacks feelings of guilt, is manipulative, is oriented toward immediate gratification and has no interest in learning from the past. They have little ability to form attachments or to develop a commitment to anyone or anything; therefore, their ability to develop loyalty is compromised. A person with narcissistic personality has unwarranted feelings of importance or self-esteem, a sense of entitlement, lack of empathy for others, they are over-achievers, have a high self image and a drive to be successful. Both personality factors have been associated with espionage (E. D. Shaw, et al., 2009).

PROPOSITION TO DEFINE VETTING RESILIENCE INDICATORS

The study has completed an extensive literature review, which supports the use of resilience indicators in vetting. Resilience would appear to be an additional tool that National Security vetting personnel could use as an aid. In addition, the Lifespan Resilience Scale (LRS) meets many of the current literature in resilience and in particular, with slight modification could meet risk and protective factors. Such a scale could be considered the Lifespan Resilience Scale (Vetting) (LRSV). Currently, a study is in progress to test the reliability and validity of the LRS. As this study is in progress, the proposition will be to test and measure the efficacy of such resilience indicators within a number of vetting environments. These vetting environments will include both Australian Federal and state departments that use Personnel Security (PERSEC) vetting in their staff selection and maintenance for National Security clearances.
Initially, the resilience questionnaire will be applied by experienced vetting staff within a state department against a sample group of employers currently undergoing either initial clearance or clearance maintenance. Cross validation with both cohorts and comment from expert vetting personnel will be gained to consider their views of the tool in application. After approximately 12-months, a follow-up of the sample clearances will be gained to assess personnel performance, characteristics, action and general supervisors’ comment to cross validate with the LRSV. The intent is to confirm that the Scale supports the identified protective factors, and demonstrates an understanding of the resilience of the population and functions as an indicator for aftercare intervention.

LIFESPAN RESILIENCE SCALE VETTING TOOL

The process of vetting, gaining and maintaining clearance is a core function in the protection of Australian National interests. There are many issues with current vetting for most government and non-government departments operating in the National Security environment. Nevertheless, it is proposed that the Lifespan Resilience Scale (Vetting) (LRSV) could provide an additional tool for vetting agencies. Such a tool would assist case managers in clearance aftercare and allow proactive intervention. In addition, there is a need to increase resilience by identifying and increasing protective factors, understanding the resilience of the population and using resilience as a protector.

Vetting issues

All Australian Government Agencies must have in place PERSEC aftercare arrangements (Attorney-General's Department, 2010c, p. 24). Such aftercare, in particular for top secret positive clearances, involves agency staff managing, monitoring and reporting any significant changes in personal and their circumstance that may impact upon suitability for continuing access security classified resources. Therefore, there is a prescriptive requirement to provide appropriate aftercare services. However, this process is resource excessive, very intrusive and prone to the complex nature of personality traits. Also the onus is in-part on the individual to come forward when there may be personnel changes, life triggers, etc.

Resilience as a vetting tool

The Lifespan Resilience Scale for Vetting (LRSV) would not replace psychometric testing, background checking or other vetting tools, rather it is an additional aid to the vetting sector. Nevertheless, there has been some concern over the efficacy of psychometric testing as a predictor towards future action. As O'Connor-Boes and Chandler stated, “predictive scales did very poorly during .. cross-validation” (1997, p. iii). Therefore, the LRSV should provide an aid to case managers within the context of understanding how individuals’ may respond to or cope with particular changes or triggers in their life or environment.

There is some evidence which suggests that whilst in the past indicators of vulnerability such as illicit drug use, alcoholism and gambling are proving less relevant and trending downwards as causal factors in the current environment; however, there appears to be an increasing trend in significant life events triggering espionage. In addition, violators that had committed a breach of trust tended to have indicators that they were more maladjusted and irresponsible or were more immature (O'Connor-Boes, et al., 1997, p. iv). Notwithstanding these factors, for the very small percentage of offenders who commit espionage after events such as divorce or workplace demotion there are thousands more who encounter these same events or may be considered to be immature by work colleagues, but they do not commit an act of espionage (Herbig, 2008).

Individuals will fall within the spectrum of the Lifespan Resilience Scale for Vetting, as a population within a bell curve. If it can be ascertained that individuals at x resilience are more likely to respond in a particular way for life events, then case managers will be in a better position to monitor and determine thresholds at which active management intervention might be required. Such a tool could prevent espionage occurring. Moreover, it may be that through determining resilience levels of individuals that the real risk of vulnerable behaviours may be measured, allowing for better management of individuals who abuse alcohol, drugs and the like. Aftercare then becomes tailored to the individual and adaptive to the circumstance. Furthermore it may be possible that by determining an individual is an x measure of resilience, a range of protective or coping measures may be introduced as a proactive and educative component of the aftercare process. Moreover this is in keeping with government policy that in all cases vetting decisions be based on an assessment of the individual as a whole person (Attorney-General's Department, 2010c, p. 23).

Vetting intervention

Once a person breaches agency policy, they may feel incapable of reporting such a breach. Such stressors may lead a person to feel that they may lose their job, be rejected or criticised (E. Shaw, et al., 1998). On the other hand, a person
may feel resilient enough to self manage the situation. In practice, it would not be uncommon for someone to be suspected of breaching trust to be reassigned to a non-trusted workplace or be stood down with or without pay. Research has suggested that one of the best predictors of violation has not been the pre-employment process, rather post-hired misconduct (O'Connor-Boes, et al., 1997, p. v).

This study suggests that such self management is a greater concern, as many past breaches of National Security has been by persons who are embedded within an agency and at a senior level. As Herbig indicates “there has been a ‘graying’ of the American spy in the recent past” (2008, p. vii). Therefore, those that feel more in control and have greater authority within their organisation may have a higher measure of resilience. Such a high measure of resilience may require greater aftercare, perhaps greater than those with low resilience, as this cohort may let the situation become dire until they are incapable of reporting their breaches. Intervention that acts as external support in providing the protective factor is important (Ungar, 2005a, 2005b). The clearance aftercare process could be equated to the protective factor, raising the efficacy of the clearance function in PERSEC.

Resilience as a protector

Resilience may be used as a protective factor in developing a catalogue of life events and risk weighting in relation to resilience profiles. Such understanding may resolve some vetting issues, be used as an additional aid for initial vetting and clearance aftercare, and lead to improved vetting in the National Security domain.

CONCLUSION

National Security has to continue to improve the ability to detect the insider threat. A primary tool is Personnel Security (PERSEC) and the use of vetting, where identity, integrity and character are assessed. The level of clearance depends on the persons’ access to the security environment or information. The process of vetting and the maintenance of clearance with aftercare is resource extensive, intrusive and it has not always been successful. Nevertheless, such requirements are mandated by the Australian Government for all departments that have exposure to the National Security environment. The nature of what motivates an individual to commit an act of espionage continues to change and there are many difficulties in dealing with the intelligent human insider threat.

From a psychological perspective, there are a number of factors that buffer people from stressors, such as risk or vulnerability, their ability to have some protective support and the person themselves. Resilience considers how a person may respond to such negative life situations or an adverse change in their environment, for example a marriage breakup, death or other trigger event. Within the context of the study, resilience is considered the potential to exhibit resourcefulness by using available internal and external resources in response to different contextual and developmental challenges.

This article presents a work in progress study that suggests an extension to the recently developed Lifespan Resilience Scale (LRS), with the LRS Vetting (LSRV) tool. The LRS is currently being validated, from which changes will be made to direct the scale into both state and national security vetting agencies. Cohorts will be tested and cross validated, and expert opinion gained. The LRSV could be an aid to National Security, by providing government and non-government departments operating in the National Security environment with an additional tool. Such a tool would assist case managers in clearance aftercare and allow proactive intervention. In addition, there is a need to develop resilience in individuals by working on such protective factors, understanding the resilience of the population and using resilience as a protector.

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