The psychological selection profile for civil-military coordination officers in peace-support operations: The results of field research in the Sudan

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Abstract

The introduction of a multidimensional approach towards peace missions in complex emergencies emphasises the importance of coordination between the military and humanitarian components at all levels of interaction. Cooperation and coordination between the military and humanitarian components are critical in achieving a common goal for these operations: to alleviate suffering and prevent loss of life. The challenge of finding suitable personnel who can develop, enhance and sustain effective working relationships and overcome the potential for conflict in civil-military needs to identify personnel who, firstly, conform to the generic psychological peacekeeping profile and secondly, portray the knowledge, skills, and abilities to perform the coordination function satisfactorily. Due to the absence of a psychological selection profile for civil-military coordination officers, the selection and screening of competent military personnel members remain a challenge. Through this

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descriptive field research (conducted in the Sudan), a psychological selection profile for civil-military coordination officers is developed and defined. The theoretical foundation and primary data from field research are integrated into a job competency model for civil-military coordination officers, useful for future selection purposes. The results of this research are presented as a model of provisional selection criteria for civil-military coordination officers. Preliminary predictor and criterion data were collected to describe the relationship between selection measures and performance ratings of job incumbents. Areas for further research are discussed. Are these events indicative of a militarised SADC strategic culture as opposed to the declared pacifist preferences to resolve conflicts?

Background

Cooperation and coordination between the military and humanitarian components are critical in multidimensional peacekeeping operations (Jackson 2005). Harris and Dombrowski (2002) stated humanitarians need collaborative working relationships with military forces to perform their life-saving functions. The challenge remains to develop, enhance and sustain this working relationship effectively.

There are conflicting views concerning the tasks that the military perform in civilmilitary coordination (Jenny 2001). The United Nations (UN) remains wary of the duplication of effort, i.e. the military should not perform humanitarian tasks, or *vice versa*. Although the regular duties of the military include securityrelated tasks, it might be required to perform tasks in conjunction with other humanitarian organisations and international agencies (Pugh 2001). The nature of such cooperation must be coordinated to ensure the achievement of common goals (Abiew 2003). Poor coordination potentially has severe consequences, such as loss of life caused by delays in response caused by role clarification and deliberation about respective responsibilities (Lindenberg and Bryant 2001). Support to the affected population will be significantly more effective if cooperation with humanitarians is enhanced (Siegel 2001). De Coning 2005 emphasised that coordination is the most important mechanism to create synergy and achieve common goals, which makes civil-military coordination (CIMIC) officers a critical coordination interface between the humanitarian and the military components in peace-support operations.

De Coning (2005) emphasised the importance of a universally accepted definition for CIMIC as a central theme in UN operations, since it will reduce the diverse interpretations of the term in the international peacekeeping community. He indicated that CIMIC in the UN peacebuilding environment relates to optimal coordination between the military component and three other role players, namely (a) the humanitarian component within an integrated mission, (b) agencies within the UN system and (c) external and internal civilian role players. The definition for civil-military coordination, as defined by the UN Department of Peacekeeping Operations (DPKO), is accepted for the purposes of this study:

The system of interaction, involving exchange of information, negotiation, de-confliction, mutual support, and planning at all levels, between military elements, humanitarian organisations and civilian population to achieve respective objectives (United Nations Department of Peacekeeping Operations [UN DPKO] 2002).

The role of CIMIC staff is determined by the mission type and mission stage. Lloyd (2008) summarised their roles and functions as being advisors to military commanders (Abiew 2003; Harris and Dombrowski 2002; Pugh 1998; Spence 2002) and humanitarian coordinators (Abiew 2003; Jackson 2005; Jeong 2005; Newland and Meyers 1999), acting as coordination officers (Cockell 2002; De Coning 2005; Pugh 2001; Weinberger 2002) and project officers for community support initiatives (Jenny 2001; Newland and Meyers 1999), and lastly, taking charge of training management (George 2002; Harris and Dombrowski 2002; Pollick 2000; Pugh 1998). Other authors (e.g. Abiew 2003; De Coning 2005) have suggested that effective CIMIC officers appreciate the complexities of functioning in a cooperative versus coexistence framework. Clearly, the demands associated with these tasks are wide and varied, which highlights the need for flexibility and adaptability to function in a participative management environment. The selection of CIMIC officers is a national responsibility. It implies that the Troop Contributing Country (TCC) must ensure that competent officers are deployed to perform this critical task in peace missions. Van Dyk (1998) developed a generic psychological profile for peacekeeping soldiers that focused on general peacekeeping duties, but this profile does not provide for the selection of specialists. Amongst others, it reflected the dimensions of physical health, depression, dominance, ego strength, state of anxiety, self-esteem, carefreeness, communication, peer group relationships and environmental happiness. Selecting CIMIC officers in the absence of a customised and comprehensive competency profile inclusive of relevant knowledge, skills, attitudes and behaviours is a daunting task and therefore requires urgent research attention.

Despite this need, Pollick (2000) stated that competent staff that suit the required psychological and competency profile are not adequately selected and trained. CIMIC is a specialist field in peace missions; any soldier cannot perform this task effectively (George 2002; Pollick 2000). Reasons for this state of affairs have been suggested. For one, the military often have no option but to deploy personnel with insufficient CIMIC training due to a lack of capacity or ineffective selection criteria (Pollick 2000). Moreover, George (2002) emphasised the fundamental importance of the military in identification of personnel to be trained as CIMIC mission specialists. Various studies (e.g. Abiew 2003; Brooks 2006; De Coning 2005) have concluded that specialist coordination skills, over and above generic peacekeeping soldier skills, are critical for the job performance of CIMIC officers.

Research objectives

Considering the above, two research objectives were formulated for this research.

Objective 1: To compile a psychological and competency profile for the selection of CIMIC officers, using job analysis and competency-modelling.

Objective 2: To clinically describe trait differences of current job incumbents based on job performance, thereby gathering evidence of content and criterion-related validity.

Method

This descriptive research used both qualitative and quantitative methods and spanned a period of fourteen months. A qualitative field research design (Babbie and Mouton 2004) was applied in the first phase to develop the competency profile, based on a job analysis (Lucia and Lepsinger 1999) and subject matter expert ratings (Babbie and Mouton 2004). In this phase, primary and secondary data were gathered using interviews, naturalistic observation and thematic analysis of policy documentation. These data were integrated into a competency model describing the roles, functions, environmental challenges and behaviours of CIMIC officers. Later, in the second phase, cross-sectional data were collected from job incumbents to assess the relationship between performance and profile traits. Thus, a content-based strategy (Society of Industrial and Organisational Psychology [SIOP] 2003) for the validation of the selection instruments was taken, using a concurrent validity design, which is usually more appropriate during the early exploratory phases of selection research and where small sample sizes prohibit correlational approaches to validation. The unit of analysis (Babbie and Mouton 2004) for this phase was individual job incumbents who participated in the study. The study was conducted within a theatre, the African Mission in the Sudan (AMIS), which represented a high-fidelity setting that provided a rich description of the work environment, stressors and challenges associated with the CIMIC task.

Procedure

Research objective 1: To compile a competency profile for CIMIC officers.

The job analysis framework of Gatewood and Feild (2001) was used to develop the job description and job specification (see Figure 1).



Figure 1: Job analysis framework

(Adapted from Gatewood and Feild 2001:182)

The theoretical foundation encompassing the roles, functions and environmental challenges of CIMIC (inferential leap 1) was developed into a competency model comprising positive indicators that enhance coordination and negative indicators that impede coordination. In inferential leap 1 primary data were obtained through five in-depth individual interviews, conducted with humanitarian job incumbents and Subject Matter Experts (SMEs) during the field research in phase one of the study. These interviews were conducted according to the competency model questionnaire of Lucia and Lepsinger (1999). A focus group interview was conducted with 10 appointed officers in a military base. CIMIC officers, operational planning officers and military observers were represented in this group. These officers had frequent interaction with the humanitarian community in the mission and served a minimum of six months in the mission on the day of the interview. These interviews were conducted according to the same competency model questionnaire of Lucia and Lepsinger (1999) as had been applied during individual interviewing (Lloyd 2008). The roles and functions of the CIMIC officer (Lloyd 2008) were integrated into the framework of Bartram (2005) and Kutz and Bartram (2002). Ten broad competencies, founded on the theoretical foundation and interviews with job incumbents and SMEs, were defined. The critical incident technique was used

to develop a list of 100 behaviours that enhance or impede performance (Lloyd 2008). These behaviours are indicated as positive and negative indicators for each competency (Arnold et al. 2005; Brown 2006).

The integrated competency model was rated by six SMEs on a five-point scale of 1=not important, 2=somewhat important, 3=important, 4=very important and 5=critical (Gatewood and Feild 2001). The six judges (SMEs), three experts from the CIMIC institutional environment and three psychologists with peace-support operations (PSO) experience, rated the competency model independently. The critical competencies to enhance coordination as determined by the SMEs were identified. To enhance the reliability of these ratings, intraclass correlation (ICC) of the individual judges and the group of judges (Gatewood and Feild 2001) was measured.

Research objective 2: To gather evidence of the criterion-related validity of the selection instruments by clinically describing trait differences based on job performance levels.

The procedure for studying this objective involved administering a number of measuring instruments to a sample of job incumbents, in order to descriptively assess the relationship between trait levels and job performance.

The sample of military officers was divided by the researcher into a successful and an unsuccessful group. This division was based on end of mission reports comprising the three performance indicators of command and control, operational planning and performance of the CIMIC function. The participants were assessed on the following scale: 1=poor performance, 2=below average performance, 3=average, 4=above average and 5=exceptional. The average performance on the three performance indicators was calculated for each subject whereafter the group was categorised in an above average group (successful) and a below average group (unsuccessful). The results of the psychometric measurement of the sample, successful and unsuccessful groups were reported and compared with the integrated competency model. The meaningful results were summarised in a model indicating the relationship between the apparent criteria and performance variables. The study population for the research was defined as military personnel who interacted through CIMIC within AMIS. A snowball sampling technique (Babbie and Mouton 2004) was applied due to the remote setting of the study. The sample was restricted to military personnel (N=20) due to location and security considerations, and consisted of CIMIC officers, military observers and headquarters staff actively engaged in CIMIC activities. The participants were all males at middle and lower management level in the mission, mostly from African countries (Cameroon, South Africa, Egypt, Gabon, Malawi, Mali, Mauritania, Nigeria, Rwanda, Senegal, Zambia and Kenya). Participants' ages had a range of 25 years with a mean age of 38 years. First language preference was varied and included English (35%), French (25%), Arabic (15%), Chichewa (10%), Swahili (10%) and Kinyarwanda (5%). Most participants (50%) had tertiary qualifications obtained from military institutions. Most participants had limited pre-deployment training, which ranged from national level peacekeeping (45%), international peacekeeping (25%) and CIMIC training (5%) to no peacekeeping training (25%).

Measuring instruments

The following psychometric measurements were administered on available participants to identify possible criterion variables to be validated in inferential leap 3 (see Figure 1).

- *Fifteen Factor Questionnaire (15FQ+).* This questionnaire was developed as an alternative instrument to the 16 Personality Factor (16PF) Questionnaire. The second edition of the 15FQ+ with satisfied validity and reliability coefficients, which was administered in this research, measures fifteen of the core personality factors identified by Cattell (Psychometrics Ltd [Psytech] 2002). The only factor definition that has been altered from the original definitions proposed by Cattell is the intellectance scale (Scale β : intelligence in Cattell's version [Cattell, Eber and Tatsuoka 1970]).
- *Myers Briggs Type Indicator (MBTI).* This indicator (MBTI), with high levels of validity and reliability, was administered in this study to define

the leadership preferences profiles (Kirby and Myers 1997) of available subjects in AMIS. These results enabled the researcher to compare the sample profile with the theoretical foundation of Jung's theory.

Millon Clinical Multiaxial Inventory Third Edition (MCMI-III). This
instrument (MCMI-III) was developed to operationalise Millon's model
of psychopathology (Craig 1999a). It measures personality traits and
psychopathology (Choca 2004). The MCMI-III with satisfied validity and
reliability was administered in this study to identify behaviours that will
impede enhanced coordination of CIMIC officers.

Results and discussion on research objective 1

The competency model is the result of the comprehensive job analysis. The roles and functions of the CIMIC officer (Lloyd 2008) were integrated in the framework of Bartram (2005) and Kutz and Bartram (2005). Ten broad competencies, founded on the theoretical foundation and interviews with job incumbents and SMEs, were defined. Electives identified in the theoretical discussion were linked to the competencies. These electives are indicated as positive and negative indicators for each competency (Arnold et al. 2005; Brown 2006). Positive indicators represent behaviour that enhances the CIMIC officers' performance. Negative indicators indicate behaviour that impedes performance (Lloyd 2008). The inclusion of negative indicators is imperative for selection in demanding work environments (Crowne 2007; Flin 2001). Individuals reporting significant results on criteria associated with negative indicators should not be considered for selection (Flin 2001). These indicators are inclusive of characteristics and behaviour of the CIMIC officer associated with: (a) the dynamic PSO environment, (b) the concept of civil-military coordination, (c) PSO environmental challenges that manifest as stressors, (d) personality theories, and (e) culture. The validity of the indicators from the theoretical foundation was enhanced through triangulation by comparing and integrating the primary data from field research in the positive and negative indicators (Babbie and Mouton 2004; Neuman 2006).

Table 1. Competency model for a CIMIC officer

COMPETENCY 1*: SHOWING MILITARY LEADERSHIP

Definition: Determines the CIMIC course of action necessary to reach CIMIC objectives in line with mission requirements.

COMPETENCY 2*: BUILDING AND PROMOTING PARTNERSHIPS ACROSS THE MILITARY, HUMANITARIAN AND CIVILIAN COMPONENT

Definition: Develops and strengthens internal and external partnerships that can provide information, assistance and support.

COMPETENCY 3*: BEING ADVISOR TO THE MILITARY AND HUMANITARIAN COMPONENTS

Definition: Communicates and networks effectively between the military and humanitarian components.

COMPETENCY 4*: ANALYSING AND INTERPRETING THE DYNAMIC CIVIL-MILITARY COORDINATION ENVIRONMENT

Definition: Shows evidence of clear analytic thinking and experience in analysing complex problems.

COMPETENCY 5*: PROMOTING A WORKING ENVIRONMENT WHERE CREATIVITY AND CONCEPTUALISATION IS ENCOURAGED

Definition: Promotes a working environment where learning, innovation and creativity are encouraged.

COMPETENCY 6*: COORDINATING EFFORTS OF RELEVANT ORGANISATIONS TO BE COMPLEMENTARY

Definition: Performs the CIMIC function to enhance coordination and avoid duplication of effort.

COMPETENCY 7*: BEING EMOTIONALLY STABLE TO ADJUST AND COPE WITH THE MULTIPLE DIMENSIONS OF THE CIVIL-MILITARY COORDINATION ENVIRONMENT.

Definition: Adjusts and responds well to change, challenging and ambiguous peace support environment. Manages pressure effectively and copes well with setbacks.

COMPETENCY 8*: PROMOTING A WORKING ENVIRONMENT WHERE PERSONAL AND ORGANISATIONAL OBJECTIVES ARE ALIGNED WITH MISSION OBJECTIVES.

Definition: Promotes mutual understanding and organisational learning to facilitate self-development and career development.

COMPETENCY 9*: RESPECTING AND PROMOTING INDIVIDUAL, CULTURAL AND ORGANISATIONAL DIFFERENCES

Definition: Demonstrates the ability to work constructively with individuals from all backgrounds and orientations. Respects differences and values all contributions.

COMPETENCY 10*: ENSURING EFFECTIVE USE OF RESOURCES Definition: Identifies priorities in accordance with mission objectives. Develops and implements coordinated plans, allocates resources and monitors outcomes.

*See Lloyd 2008:154 for positive and negative indicators.

(Adapted from Lloyd 2008:154)

Competency model SME ratings

The SME ratings in Table 2 indicate competencies 2, 3, 6 and 7 as very important to critically important. The importance of competency 2 is confirmed by the research of Cockell (2002). He suggested that effective partnerships could be established through participative processes in joint planning committees and joint operations centres. Abiew (2003) and Newland and Meyers (1999) confirmed the importance of competency 3, indicating coordination and communication are critical functions in CIMIC. Pugh (1998) highlighted the importance of coordination at all execution levels as captured in competency 6. Lindenberg and Bryant (2001) confirmed Pugh's statement and said that support to the affected population is significantly more effective through enhanced coordination. The research of Furnham (1997) and Kets de Vries and Miller (1986) reflected that individuals who are emotionally unstable (competency 7) would manifest in counter-productivity at work. Möller (1993) confirmed the importance of emotional stability that manifests in a strong persona. Individuals with a strong persona tend to be successful at work and maintain exceptional interpersonal relations.

Competencies	Minimum	Maximum	Mean	Std. Deviation
Competency 1	2.00	4.00	2.8333	0.75277
Competency 2	3.00	4.00	3.5000	0.54772
Competency 3	2.00	4.00	3.0000	1.09545
Competency 4	3.00	3.00	3.0000	0.00000
Competency 5	2.00	3.00	2.5000	0.54772
Competency 6	3.00	3.00	3.0000	0.00000
Competency 7	2.00	4.00	3.0000	1.09545
Competency 8	2.00	3.00	2.1667	0.40825
Competency 9	2.00	4.00	2.8333	0.98319
Competency 10	2.00	3.00	2.6667	0.51640

Table 2. Descriptive statistics on competency model ratings by SMEs

(Adapted from Lloyd 2008:164)

The results from Table 2 indicate an intraclass correlation coefficient (ICC) of 0.334 for reliability of the ratings. Garson (2007) indicated that an ICC between 0.4 and 0.59 reflects moderate reliability. The results from Table 2 indicate an ICC below the moderate norm. The low coefficient can be attributed to the diversity of the two clearly defined groups of judges. The results from Table 2 show that the ICC (0.924) for the three institutional CIMIC SMEs reflects outstanding norms of reliability (Garson 2007; Gatewood and Feild 2001). Outstanding reliability was reported on the ICC (0.891) for the SME psychologists (Garson 2007; Gatewood and Feild 2001). It appears from the results that the one group of CIMIC SMEs rated the model from a humanitarian institutional background with the primary focus on the coordination function. It seems that the second group of psychologists rated the model from a behavioural perspective. Although acceptable results were reported on the separate ICCs for the institutional CIMIC and psychologist SMEs, the overall reliability is below the acceptable norm (Garson 2007; Gatewood and Feild 2001).

Results and discussion on research objective 2

Sample performance rating

The frequency tables of Statistical Package for Social Sciences (SPSS) reported 10 participants' performance as above average (successful group) and 8 participants' performance as below average (unsuccessful group). Figure 2 shows the successful group (n=10) measured above average ratings on the three performance indicators. Command and control ratings are the lowest (3.4) followed by CIMIC (3.8) and operational planning (4.6). The average performance of the successful group is 3.89. Figure 2 indicates the unsuccessful group (n=8) performed below average on the three performance indicators. Performance on the CIMIC function are the lowest (2.1), followed by operational planning (2.2) and command and control (2.3). The average performance rating for the unsuccessful group is 2.2.





(From Lloyd 2008:167)

Personality profile

Knuth (1999) and Natsios (1995) characterised complex emergencies as a dynamic and ever-changing environment. Within the dynamic PSO environment CIMIC officers need to cope with physical, cognitive, emotional and social stressors (Orsillo et al. 1998; Vogelaar, Soeters and Born 1997). Van Dyk (1998) highlighted the importance of emotional stability for peacekeepers to be able to adjust and cope with the dynamic and challenging PSO environment. The sten scores of the 15FQ+ profile of the successful, unsuccessful and sample groups are compared in Figure 3. The scales of the 15FQ+ profile on the x-axis are: distant aloof/empathic (fA), low/high intellectance (β), feelings/emotionally stable (fC), accommodating/dominant (fE), sober serious/enthusiastic (fF), expedient/conscientious (fG), retiring/socially bold (fH), hard-headed/tender minded (fI), trusting/suspicious (fL), concrete/abstract (fM), direct/restraint (fN), self-assured/apprehensive (fO), conventional/radical (fQ1), group oriented/self-sufficient (fQ2), informal/self-disciplined (fQ3), composed/ tense driven (fQ4), introvert/extrovert (E), low/high anxiety (N), pragmatic/ openness (O), independence/agreeable (A), low/high self-control (C). Figure 3 indicates significant differences in sten scores between the successful and unsuccessful groups on the following scales: low/high intellectance (β), feelings/ emotionally stability (fC), accommodating/dominant (fE), retiring/ socially bold (fH), hard-headed/tender minded (fI), trusting/Suspicious (fL), concrete/ abstract (fM), self-assured/apprehensive (fO), conventional/radical (fQ1), composed/tense driven (fQ4), introvert/extrovert (E) and low/high anxiety (N) (Lloyd 2008).

Figure 3: Sten scores for the source and secondary traits for the 15FQ+ of the sample, successful and unsuccessful groups



(From Lloyd 2008:174)

The results derived from Figure 3 indicate 35% of the sample reported significant sten scores on the feeling/emotional stability (fC) scale. Craig (1999b) and Van Dyk (1998) confirmed the importance of high ego-strength to enable the CIMIC officer to cope with emotional mission stressors (competency 7). Individuals with low scores tend to be emotionally unstable and experience difficulty to adjust to society (Cattell, Eber and Tatsuoka 1970; Craig 1999b). These results are supported by the research of Van Dyk (1998). He confirmed the importance of high ego strength, low state anxiety and adequate self-confidence to be able to adjust to the PSO environment. Consequently low scores are associated with unsuccessful CIMIC officers. Differences were reported on the sten scores (scale fC) between the successful (7.2) and the unsuccessful group (5.7). These results indicate the successful group reported more significant high scores and less significant low scores than the unsuccessful group. These results are supported by the research of Furnham (1997) who reported that individuals with high selfesteem, compared with those with low self-esteem, are likely to report higher performance levels. From inspection of the descriptive statistics, it seems that the low scores on scale fC are an apparent predictor for negative indicators and high scores an apparent predictor on competency 7.

Interacting and communicating with people is central to the coordination function of the CIMIC officer as advisor (Abiew 2003; Jackson 2005; Harris and Dombrowski 2002; Jeong 2005; Newland and Meyers 1999; Pugh 1998; Office of Internal Oversight Services [OIOS] 2005; Spence 2002), coordinating officer (Cockell 2002; Joint Publication [JP] 2003; Pugh 2001; Weinberger 2002), project officer (Jenny 2001; Newland and Meyers 1999; OIOS 2005) and training coordinator (George 2002; Harris and Dombrowski 2002; Inter Agency Standing Committee [IASC] 2005; Pollick 2000; Pugh 1998). The results derived from Figure 3 indicate 30% of the sample reported significant sten scores on the retiring/socially bold (fH) scale. Individuals who are self-conscious and inclined to withdraw in social situations (Psytech 2002) and unable to keep in contact with surroundings (Cattell, Eber and Tatsuoka 1970), would experience difficulty in building and promoting partnerships (competency 2) across the various PSO CIMIC role-players (P. Aboa, personal communication, 9 February 2007). Consequently the CIMIC officer should report high scores on the fH scale to be effective in the execution of the above-mentioned functions. The results derived from Figure 3 indicate a positive correlation between the fH scale and the negative indicators of the competency model. The results on the negative indicator correlate with the research of Van Dyk (1998). The results indicate that the retiring/socially bold (fH) scale is an apparent predictor for negative indicators on competency 2.

The CIMIC officer facilitates participative and collaborative processes to enhance the coordination function (Cockell 2002; OIOS 2005; Pugh 1998). Consequently the CIMIC officer should report high scores on the trusting/ suspicious scale to be effective in enhancing coordination. From the results in Figure 3, 45% of the sample reported significant sten scores on the trusting/ suspicious scale (fL). Individuals who are suspicious of other individuals have a de-inclination to trust others (Psytech 2002). This will have a negative impact for the CIMIC officer in building and promoting partnerships (P. Aboa, personal communication, 9 February 2007). These individuals tend to blame others

for failure and are easily offended (Craig 1999b). The CIMIC officer who has difficulty in accepting criticism would experience difficulty in managing pressure and coping with setbacks (competency 7) (B. Casey, personal communication, 17 April 2006). The results derived from Figure 3 indicate that high scores on the fL scale correlate positively with negative indicators of the unsuccessful group. From inspection of the descriptive statistics, it seems the fL scale is an apparent predictor for the negative indicators on competency 7. Kets de Vries and Miller's (1986) research confirmed the results on the negative indicator. They reported that individuals who are suspicious of others' motives would be ineffective to enhance the coordination function.

The importance of an emotionally stable CIMIC officer is critical to enable the individual to adjust and cope with the challenging PSO environment (Kets de Vries and Miller 1986; Van Dyk 1998). From the results in Figure 3, 25% of the sample reported significant sten scores on the self-assured/apprehensive (fO) scale. Kets de Vries and Miller (1986) confirmed that individual pathology and poor performance are related. High scores on apprehensiveness are associated with individuals who lack self-confidence, doubt own abilities, are indecisive, insecure (Psytech 2002) and depressed (Craig 1999b; Psytech 2002). Consequently CIMIC officers who are dominant on apprehensiveness would experience difficulty to adjust and cope in the challenging and ambiguous PSO environment. This is supported by the research of Van Dyk (1998) who indicated that peacekeepers with low self-confidence would experience difficulty in adjusting to the challenging PSO environment. Individuals with low scores have high self-esteem, are self-sufficient, dependent, objective, practical (Craig 1999b), confident, self-assured (Craig 1999b; Psytech 2002) and secure (Psytech 2002). To be able to adjust to the challenging PSO environment and cope with the various stressors, the CIMIC officer should report low scores on the fO scale to be able perform optimally. Differences were reported for the fO scale on the sten scores between the successful (3.9) and the unsuccessful group (5.25). These results indicate that low scores do correlate positively with the results of the successful group. From inspection of the descriptive statistics, it seems the selfassured/apprehensive (fO) scale is an apparent predictor for positive indicators on competency 7. The importance of a balanced personality, associated with low

scores on scale *f*O, is confirmed in the research of Hall, Lindzey and Campbell (1998) and Möller (1993).

Ewen (1988) confirmed the importance of high ego-power for the CIMIC officer to deal with the challenging PSO environment. Möller (1993) said individuals with high ego-power and a balanced personality would be successful at work. These individuals experience low anxiety, can deal with setbacks and are able to adjust to the PSO environment (Crowne 2007; Ewen 1998; Hall, Lindzey and Campbell 1998). From the results in Figure 3, 30% of the sample reported significant sten scores on the composed/tense driven (fQ4) scale. High-scoring individuals are emotionally volatile (Craig 1999b). CIMIC officers with these characteristics of emotional volatility would experience difficulty to adjust and cope with the ever-changing PSO environment (competency 7) (Furnham and Taylor 2004). These results indicate a positive correlation between the fQ4scale and the positive indicators of the competency model. From inspection of the descriptive statistics, it seems the compose/tense driven (fQ4) scale is an apparent predictor for positive indicators on competencies 2 and 7. These results are supported by Furnham (1997) who indicated the importance of high egopower to enable peacekeepers to cope with setbacks in PSO.

Coordination is one of the roles of the CIMIC officer in PSO (Cockell 2002; De Coning 2005; JP 2003; Pugh 2001; Weinberger 2002). Social interaction is a primary function in the coordination of the military and humanitarian components (Horey et al. 2004). The fundamental dimension of extrovert behaviour is more suited to enhance social interaction (Cloninger 1996; Crowne 2007; Ewen 1988). From the results in Figure 3, 25% of the sample reported significant sten scores on the introvert/extrovert (E) scale. Individuals with high scores are reserved (Craig 1999b), and have low need for social contact (Psytech 2002). Low-scoring individuals need social contact and outside stimulation (Psytech 2002). They are good at making interpersonal contacts, and are enthusiastic and achievement oriented (Craig 1999b). Consequently, the successful CIMIC officer should report low scores on the E scale. From inspection of the descriptive statistics, it seems the introvert/extrovert (E) scale is an apparent predictor for positive indicators on competency 2. Ewen (1988) and Cloninger (1996) confirmed the importance of an external world approach

(extrovert) to be effective in social interaction. This relates to the essential role of coordination of the CIMIC officer (Cockell 2002; De Coning 2005; JP 2003; Pugh 2001; Weinberger 2002).

The CIMIC officer should have low anxiety to adjust and cope with the challenging PSO environment (Hall, Lindzey and Campbell 1998; Rosebush 1998; Stanley 2003; Van Dyk 1998). From the results in Figure 3, 20% of the sample reported significant sten scores on the low/high anxiety scale (scale N). High-scoring individuals are anxious, overwhelmed by problems (Craig 1999b), vulnerable to and challenged by emotional situations (Psytech 2002). CIMIC officers with high levels of anxiety would experience difficulty to adjust (Sue, Sue and Sue 2000) to the ever-changing PSO environment (competency 7). Consequently CIMIC officers should report low scores on the low/high anxiety (N) second order personality scale to be successful in PSO. These results from Figure 3 indicate that the successful group reported lower levels of anxiety. The results indicate a positive correlation between low scores on the E scale and the positive indicators of the competency model. From inspection of the descriptive statistics, it seems the low/high anxiety scale (N) is an apparent predictor for positive and negative indicators on competency 7. These results are confirmed by Van Dyk (1998) who indicated the importance of low levels of anxiety to adjust and cope effectively to the PSO environment.

Leadership preference profile

Cloninger (1996) and Ewen (1988) indicated that the CIMIC officer's fundamental dimension should be extrovert. This will enable the CIMIC officer to perform the key function of social interaction in coordination (Cockell 2002; De Coning 2005; JP 2003; Pugh 2001; Weinberger 2002) between the military and humanitarian components. Introverted behaviour corresponds with the negative indicators of the competency model for CIMIC officers on competency 2 (Lloyd 2008). Extroverted behaviour corresponds with positive indicators of the competency 2) where Horey et al. (2004) highlighted the importance of extending influence beyond the military component in building relationships.





(From Lloyd 2008:178)

The results in Figure 4 reported a mean score of 3.7 on introversion and 4.3 on extroversion for the successful group. These results indicate a positive correlation between high scores on extroversion and positive indicators in the successful group. The importance of high scores on the extroversion scale are supported by the Military focus group (personal communication, 15 January 2007). The results in Figure 4 reflect a mean score of 4.5 on introversion and 3.5 on extroversion for the unsuccessful group. These results indicate a positive correlation between high scores on introversion and negative indicators in the unsuccessful group. From inspection of the descriptive statistics, it seems that the personality dimension of extroversion/introversion is an apparent predictor for positive and negative indicators of competency 2.

Individuals who are dominant in sensing on the paired function of sensing/ intuition observe through their senses (Myers 1993). These individuals focus on real aspects, are present-oriented, require information systematically (Myers 1993), dislike new problems, are impatient on complex issues, seldom make errors of fact (Myers and McCaully 1985) and are practical (Bayne 1995). Sensing corresponds with the negative indicators of the competency model for CIMIC officers on competency 2 (Lloyd 2008). CIMIC officers who are dominant in sensing might experience difficulty in analysing the complex PSO environment (Myers and McCaully 1985). The results from Figure 4 indicate a mean score of 4.1 on sensing and 3.8 on intuition for the unsuccessful group. These results indicate a positive correlation between high scores on sensing and negative indicators in the unsuccessful group. From inspection of the descriptive statistics, it seems that the paired function of sensing/intuition is an apparent predictor for negative indicators of competency 2.

Individuals who are dominant in thinking on the paired function of thinking/ feeling are analytical, good problem solvers (Myers 1993), have clear principles (Bayne 1995), make impersonal decisions and are tough-minded (Myers and McCaully 1985). The theoretical foundation indicated that the CIMIC officer should have a presence of both thinking and feeling with feeling dominating the paired function (Cloninger 1996; Crowne 2007). Feeling is imperative in facilitating participative and collaborative processes (Abiew 2003; Cockell 2002; OIOS 2005; Pugh 1998) as highlighted in the coordination role of the CIMIC officer (Cockell 2002; De Coning 2005; JP 2003; Pugh 2001; Weinberger 2002). The thinking dimension corresponds with the negative indicators of the competency model for CIMIC officers in competency 6 (Lloyd 2008). The CIMIC officer who is dominant in thinking might not be compassionate and conscious of the impact of decisions on people (Myers 1993). The results in Figure 4 indicate a mean score of 5.8 on thinking and 2.1 on feeling for the unsuccessful group. These results indicate a positive correlation between high scores on thinking and negative indicators in the unsuccessful group. From inspection of the descriptive statistics, it seems from the results from Figure 4 that the paired function of thinking/feeling is an apparent predictor of negative indicators of competencies 3 and 6.

Perceiving individuals are curious, tolerant, pull things together well at the last minute (Bayne 1995), are flexible (Bayne 1995; Myers 1993) and adjust well to changing situations (Myers and McCaully 1985). The theoretical foundation

indicated that the CIMIC officer should be dominant in perceiving since it encompasses flexibility (Bayne 1995). The importance of a flexible CIMIC officer is central to the roles and functions of the CIMIC officer (De Coning 2005). The judging dimension corresponds with the negative indicators of the competency model for CIMIC officers in competency 6. Individuals dominant in judging tend to ignore new things to be done (Myers and McCaully 1985). Consequently CIMIC officers who are dominant on the judging dimension, would be ineffective in performing the coordination function. Perceiving corresponds with the positive indicators of the competency model for CIMIC officers in competency 2. The results from Figure 4 indicate that mean scores of 5.1 on judging and 2.8 on perceiving are reported for the unsuccessful group. These results indicate a positive correlation between high scores on thinking and negative indicators in the unsuccessful group. Inspection of the results from Figure 4 indicates that the paired function of judging/perceiving is an apparent predictor of negative indicators on competency 6. The results reported above on the negative indicators are supported by the research of Roush and Atwater (1992). They confirmed that individuals who are dominant on judging strictly comply with schedules and are often inflexible.

From the analyses in the theoretical foundation of this study, the type indicator for the CIMIC Officer is verified as E (extrovert), S (sensation), F (feeling) and P (perceiving) (ESFP). The characteristics associated with this indicator (ESFP) are warm-hearted, conscientious, good at creating harmony, interested in things that visibly effect people's lives (Myers 1993). The last characteristic typifies the PSO environment of alleviating the suffering of victims of war (Durch et al. 2003).

The results indicate the type indicator of the successful group as 40% E (extrovert), N (intuition), T (thinking), and J (judging) (ENTJ), 20% I (introvert), N (intuition), T (thinking) and J (judging) (INTJ), 20% E (extrovert), S (sensing), T (thinking) and J (judging) (ESTJ), 10% I (introvert), S (sensing), F (feeling) and J (judging) (ISFJ) and 10% I (introvert), N (intuition), T (thinking) and P (perceiving) (INTP). The group reported high on extroversion. The characteristics associated with the ENTJ (40% of successful group) indicator are natural leaders who translate possibilities into action. They define their own

high standards and are forceful in achieving it (Myers and McCaully 1985). This result on extroversion is supported by Roush and Atwater (1992) who cited the study of McCaulley who indicated that extroversion is an essential quality in military leadership. They also reported high scores on the intuition and thinking scales for military leaders. These results differ from the ideal leadership preference of ESFP defined in the theoretical foundation of this study. These results confirm the notion that it is not any soldier who can perform the CIMIC function (Abiew 2003; Brooks 2006; De Coning 2005). It is clear that CIMIC officers need skills over and above the normal skills associated with military leadership.

Personality disorders and other clinical syndromes

The scales of the clinical patterns in Figure 5 on the x-axis are: schizoid scale (1), avoidant scale (2A), depressive scale (2B), dependent scale (3), histrionic scale (4), narcissistic scale (5), antisocial scale (6A), aggressive scale (6B), compulsive scale (7), negativistic scale (8A) and self-defeating scale (8B). From the results in Figure 5, participants reported elevated scores on the schizoid (23.5% of sample), avoidant (23.5% of sample), depressive (5.9% of sample), dependent (23.5% of sample), narcissistic (29.4% of sample), antisocial (5.9% of sample), compulsive (5.9% of sample) and negativistic (5.9% of sample) scales. These elevated scores indicate the presence of traits that meet the criteria for the personality disorder (Craig 1999b). No meaningful results were reported from Figure 5 on the histrionic, aggressive and self-defeating scales.

Furnham (1997) indicated that individuals with a narcissistic personality style would manifest themselves in counter-productive behaviour at work. This behaviour is reflected in the negative indicators in competency 6 (Lloyd 2008). B. Casey (personal communication, 17 April 2006) and the military focus group (personal communication, 15 January 2007) confirmed that individuals with a narcissistic personality style, which manifests under difficult and stressful circumstances in PSO, would manifest in counter-productive behaviour. Jeong (2005) indicated that CIMIC officers with elevated scores would disregard mission codes of conduct and rules of engagement. Kets de Vries and Miller (1986) confirmed that self-centred behaviour (competency 6) prevents effective

coordination. The elevated scales of the successful group (29.4%), reported in Figure 5, is in line with the research reported by Craig (1999b).

Figure 5: Clinical patterns for sample, successful and unsuccessful groups



(From Lloyd 2008:196)

The results from Figure 5 indicate 57% of the unsuccessful group reported elevated scores on the narcissistic scale. The unsuccessful individuals seemed to perceive themselves as superior to others, tend to inflate their own worth and exaggerate their abilities (Choca 2004; Craig 2005). They were self-centred, selfish, blamed others for failures (Craig 2005) and depreciated those who oppose their self-image (Choca 2004). This type of behaviour results in counterproductive behaviour that impedes the coordination function (Furnham and Taylor 2004). From inspection of results from the descriptive statistics, differences were reported in frequencies of elevated individual scores between the successful (29.4%) and unsuccessful (57%) groups. It seems from these differences that the narcissistic scale does discriminate between the successful and unsuccessful groups. From inspection of the results on the descriptive statistics, it seems that the narcissistic scale is an apparent predictor of negative indicators for competency 6. These results are confirmed by the research of

Furnham and Taylor (2004) who reported that individuals with elevated scores would manifest in counter-productive work behaviour.

Individuals with elevated scores on the dependent personality disorder scale are unable to take care of themselves and have to depend on others to support them (Craig 1999b). The research of Vollrath, Alnaes and Torgensen, cited in Choca (2004), reported that these individuals have low self-esteem and show a lack of active intervention as a coping style when in a stressful environment. Craig (1999b) reported that they are prone to develop anxiety, depressive disorders and substance abuse when stressed. CIMIC officers with dependent personality disorder would experience difficulty in adjusting to the dynamic PSO environment (Kets de Vries and Miller 1986). These adjustment problems are reflected in the negative indicators in competency 7 (Lloyd 2008). Consequently individuals with a dependent personality disorder should not be considered for selection as a CIMIC officer. Substantial differences in frequencies of elevated individual scores between the successful (0%) and unsuccessful (43%) groups are reported from the descriptive statistics. This substantial difference between the successful and unsuccessful groups indicates that the dependent scale discriminates between the groups. From inspection of the descriptive statistics, it seems that the dependent scale is an apparent predictor of negative indicators for competency 7. Kets de Vries and Miller (1986) reported that individuals with a dependent personality often portray symptoms of depression. As reported above, individuals with a dependent personality would experience difficulty to adjust to the PSO environment.

Peacekeepers must have low state anxiety to adjust and cope with the challenging PSO environment (Hall, Lindzey and Campbell 1998; Stanley 2003; Van Dyk 1998). Individuals with an elevated score on the anxiety disorder scale (scale A) on the clinical syndrome cluster are restless, anxious and apprehensive. Van Dyk (1998) confirmed the importance of low state anxiety to enable peacekeepers to adjust and cope with the dynamic PSO environment. Consequently, CIMIC officers with elevated scores on the anxiety scale are not suited to deployment since they will experience difficulty in adjusting. Elevated scores on the anxiety disorder are reflected in the negative indicators in competency 7 (Lloyd 2008). The research of Orsillo et al. (1998) and Vogelaar, Soeters and Born

(1997) indicated that the CIMIC officer had to deal with a multitude of PSO stressors (competency 7). The results from Figure 5 indicate that 12% of the sample reported elevated scores on the anxiety disorder scale (scale A). This measurement was reported in 28% of the unsuccessful group. No elevated scores were reported for the successful group. These results indicate that the anxiety disorder scale discriminates between the successful and unsuccessful groups. From inspection of the descriptive statistics, it seems that elevated scores on the anxiety disorder scale are an apparent predictor of negative indicators on competency 7. These results are confirmed by the research of Rosebush (1998). He reported that the individuals with high levels of anxiety would experience difficulty in adjusting to the dynamic PSO environment.

Conclusion

This research contributed to the concept of CIMIC in a unique way since it was the first research project that addressed the challenges synonymous with CIMIC in a holistic way. In the theoretical discussion, the concept of civil-military coordination was analysed from a humanitarian and military component perspective. The challenges identified by these components were addressed by integrating possible solutions suggested by both the military and humanitarian components. The roles and functions of the CIMIC officer were defined by integrating the CIMIC concept, definitions, military and humanitarian perspectives and possible solutions that could enhance coordination.

The uniqueness of this study is based on the results of the competency model. The results of the theoretical discussion were integrated with primary data from field research in a competency model for a CIMIC officer. The model encompasses positive indicators that enhance coordination and negative indicators that impede coordination. The inclusion of negative indicators is of critical importance to this study. The results from this research indicated that the successful group reported some characteristics that correlated with the positive indicators in the CIMIC officer's competency model. Some negative indicators were found to correlate positively with characteristics of the unsuccessful group. The link between the negative indicators of the competency model and the unsuccessful group is of critical importance in selecting CIMIC officers. Individuals reporting abnormal behaviour associated with negative indicators should not be selected as CIMIC officers. If applied during selection, it could prevent the manifestation of psychopathology in individuals.

Psychological profile of CIMIC officers

The results of the psychometric tests that were administered on the successful and unsuccessful groups indicated the following apparent predictors for the positive and negative indicators of the competency model:

- 15FQ+ scales for positive indicators: scale *f*C (feelings/emotionally stability), scale *f*O (self-assured/ apprehensive), scale *f*Q4 (composed/ tense driven) and scale E (introvert/extrovert).
- 15FQ+ scales for negative indicators: scale *f*H (retiring/socially bold), scale *f*L (trusting/suspicious), scale *f*Q1 (conventional/radical) and scale N (low/high anxiety).
- MBTI scales for positive indicators: scale SN (sensing/intuition), scale TF (thinking/feeling) and scale JP (judging/perceiving).
- MBTI scales for negative indicators: scale EI (extroversion/introversion) and scale TF (thinking/feeling).
- MCMI-III scale for negative indicators: scale 3 (dependent scale), scale 5 (narcissistic scale) and scale A (anxiety disorder scale).

The relationship between the meaningful scales reported from the results and the apparent indicators are presented as a model in Figure 6.



Figure 6: Model for CIMIC officers indicating apparent relationship between possible predictors and performance

From the results in this research, Figure 6 indicates the apparent relationship between criteria that seem to be provisional criteria, and competencies (variables) in the selection of CIMIC officers. The competencies represent the four very important to critical competencies as rated by the SMEs. The scales of the 15FQ+, MBTI and MCMI-III instruments represent the meaningful scales of these tests. It seems that these scales correlate with the positive and negative indicators of the competencies identified by the SMEs. It seems that if CIMIC officers are selected according to these provisional criteria, they should be able to perform more successfully on the three performance indicators of command and control, operational planning and the CIMIC function.

Limitations

The apparent criterion for performance reported in the results of this study could not be statistically validated owing to restriction of the sample size. Gatewood and Feild (2001) reported that a sample of several hundreds is required to report meaningful correlations in a validity strategy. This implied that inferential leap 3, indicated in Figure 1, could not be investigated fully in this study. Consequently the criterion was reported as a provisional criterion.

The biographical name list did not request information about previous experience in PSO. Previous experiences in PSO could have impacted specifically on the performance of the successful group. Such details should be included in the biographical questionnaire in future research.

The limitation involved in the division of the successful and unsuccessful group was the completion of the performance indicators by the researcher in his official appointment in the mission. Although the researcher was aware of possible bias and therefore applied triangulation in this study, the absence of objective criteria implied that the bias might not have been eliminated.

Choca (2004) emphasised the importance of interpreting the results of the MCMI with information from other sources in determining the level of functioning of assessed individuals. No historical data on the participants were available. Consequently elevated scores on the MCMI-III were interpreted on a one-point scale only.

Recommendations

Although the research focused on the Sudan, the findings should apply to missions conducted in other countries. There may however be significant differences owing to the multidimensional approach to complex emergencies. The different perspectives resulting from the various missions can be used to verify the AMIS experience in future studies. The strict religious and ethnic foundation of the Sudanese implied that alcohol was banned and sexual misconduct was not tolerated. It has been reported in other missions outside the Sudan that peacekeepers frequently misbehave sexually and misuse alcohol. It is suggested that electives measuring social misconduct be included in future research in order to generalise the results for the larger population. This research should be followed up with a larger scale empirical investigation to investigate the model fit and predictive validity of the instruments. It is suggested to follow

up with larger-scale empirical investigation to investigate the model fit, and the predictive validity of instruments.

Sources

- Abiew, F.K. 2003. NGO-Military relations in peace operations. *International Peacekeeping*, 10 (1), pp. 24–39.
- Arnold, J., J. Silvester, F. Patterson, I. Robertson, C. Cooper and B. Burnes 2005. *Work psychology: Understanding human behaviour in the workplace*. 4th ed. Harlow, Prentice Hall.
- Babbie, E. and J. Mouton 2004. *The practice of social research*. Cape Town, Oxford University Press.
- Bartram, D. 2005. The great eight competencies: A criterion-centric approach to validation [Electronic version]. Journal of Applied Psychology, 90 (8), pp. 1185–1203.
- Bayne, R. 1995. The Myers-Briggs type indicator. London, Chapman & Hall.
- Brooks, I. 2006. Organisational behaviour, individuals, groups and organisations. Harlow, Prentice Hall.
- Brown, T. 2006. Stop competency blunders [Electronic version]. *Training & Development*, 60 (1), pp. 20–22.
- Cattell, R.B., H.W. Eber and M.M. Tatsuoka 1970. *Handbook for the Sixteen Personality Factor Questionnaire (16PF)*. Illinois, Institute for Personality and Ability Testing.
- Choca, J.P. 2004. Interpretive guide to the Millon Clinical Multiaxial Inventory. 3rd ed. Washington, D.C., American Psychological Association.
- Cloninger, S.C. 1996. *Theories of personality, understanding persons*. 2nd ed. Upper Saddle River, NJ, Prentice Hall.
- Cockell, J.G. 2002. Civil-military responses to security challenges in peace operations: Ten lessons from Kosovo [Electronic version]. *Global Governance*, 8 (4), pp. 483–502.
- Craig, R.J. 1999a. Overview of the current status of the Millon Clinical Multiaxial Inventory [Electronic version]. *Journal of Personality Assessment*, 72 (3), pp. 390–406.
- Craig, R.J. 1999b. Interpreting personality tests. A clinical manual for the MMPI-2, MCMI-III, CPI-R and 16PF. New York, John Wiley & Sons.
- Craig, R.J. 2005. Alternative interpretations for the histrionic, narcissistic, and compulsive personality disorder scales of the MCMI-III. In: Craig, R.J. ed. *New directions in interpreting the Millon Clinical Multiaxial Inventory III (MCMI-III)*. Hoboken, NJ, John Wiley & Sons.
- Crowne, D.P. 2007. Personality theory. Don Mills, Ont., Oxford University Press.
- De Coning, C.H. 2005. Civil-military coordination and UN peacebuilding operations. African Journal on Conflict Resolution, 5 (2), pp. 89–118.

- Durch, W.J., V.K. Holt, C.E. Earle and M.K. Shanahan 2003. *The Brahimi report and the future of UN peace operations*. Washington, D.C., The Henry L Stimson Center
- Ewen, R.B. 1988. An introduction to theories of personality. 3rd ed. Hilldale, Lawrence Erlbaum Associate Publishers.
- Flin, R. 2001. Selecting the right stuff: Personality and high-reliability occupations. In: Roberts, B.W. and R. Hogan eds. *Personality psychology in the workplace*. Baltimore, United Book Press.
- Furnham, A. 1997. The psychology of behaviour at work: The individual in the organization. Hove, Psychology Press.
- Furnham, A. and J. Taylor 2004. *The dark side of behaviour at work*. New York, Palgrave MacMillan.
- Garson, G.D. 2007. PA 765 Reliability analysis. Available from: http://www2.chass.ncsu.edu/garson/pa765/rliab.htm> [Accessed 22 October 2007].
- Gatewood, R.D. and H.S. Feild 2001. *Human resource selection*. Fort Worth, Harcourt College Publishers.
- George, J.M. 2002. The politics of peace: The challenge of civil-military cooperation in Somalia [Electronic version]. *Policy & Management Review*, 2 (2), pp. 1–34.
- Hall, C.S., G. Lindzey and J.B. Campbell 1998. Theories of personality. New York, Wiley.
- Harris, A. and P. Dombrowski 2002. Military collaboration with humanitarian organizations in complex emergencies [Electronic version]. *Global Governance*, 8 (2), pp. 155–178.
- Horey, J., J.J. Fallesen, R. Morath, B. Cronin, R. Cassella, W. Franks and J. Smith 2004. *Competency based future leadership requirements.* (Army Project Number 20262785A790). Virginia, US Army, Institute for the Behavioural and Social Science.
- Inter Agency Standing Committee (IASC) 2005. United Nations (UN) humanitarian civilmilitary coordination (CM Coord) concept, Endorsed by the Inter Agency Standing Committee Working Group 60th Meeting. Rome, IASC.
- Jackson, M.G. 2005. A necessary collaboration: NGOs, peacekeepers and credible military force – A case study on Sierra Leone and East Timor. In: Richmond, O.P. and H.F. Carey eds. Subcontracting peace: The challenges of NGO peacebuilding. Hampshire, Ashgate. pp. 109–118.
- Jenny, J. 2001. Civil-military cooperation in complex emergencies: finding ways to make it work [Electronic version]. *European Security*, 10 (2), pp. 23–33.
- Jeong, H. 2005. Peacebuilding in post conflict societies. London, Lynne Rienner Publishers.
- Joint Publication (JP) 2003. *Joint doctrine for Civil Affairs: 3-57.1* CAS Centre for Advanced Studies:United States Military Publications.
- Kets de Vries, M.F.R. and D. Miller 1986. Personality, culture and organization [Electronic version]. Academy of Management Review, 11 (2), pp. 266–279.

- Kirby, L.K. and K.D. Myers 1997. Introduction to Type: A guide to understanding the Myers-Briggs Type Indicator. 5th ed. Palo Alto, Consulting Psychologists Press.
- Knuth, R. 1999. Sovereignty, globalism and information flow in complex emergencies [Electronic version]. *The Information Society*, 15, pp. 11–19.
- Kutz, R. and D. Bartram 2002. Competency and individual performance: Modelling the world at work. In: Robertson, I.T., M. Callinan and D. Bartram eds. Organizational effectiveness: The role of psychology. New York: John Wiley & Sons. pp. 227–258.
- Lindenberg, M. and C. Bryant 2001. *Going global, transforming relief and development NGOs.* Bloomfield, Kumarian Press.
- Lloyd, G. 2008. An exploratory study on the psychological profile of a civil-military coordination officer. Unpublished Masters Thesis, University of Stellenbosch, Stellenbosch.
- Lucia, A.D. and R. Lepsinger 1999. The art and science of competency models. San Francisco, Jossey-Bass Pfeiffer.
- Möller, A.T. 1993. Perspektiewe oor persoonlikheid. Durban, Butterworth.
- Myers, I.B. 1993. Introduction to type. 5th ed. Palo Alto, Consulting Psychologists Press.
- Myers, I.B. and M.H. McCaully 1985. Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, Consulting Psychologists Press.
- Natsios, A.S. 1995. NGO's and the UN System in complex emergencies: Conflict or cooperation? [Electronic version]. *Third World Quarterly*, 16 (3), pp. 408–416.
- Neuman, W.L. 2006. Social research methods. 6th ed. Boston, Allyn and Bacon.
- Newland, K. and D.W. Meyers 1999. Peacekeeping and refugee relief. In: Whitman, J. ed. *Peacekeeping and the UN Agencies*. London, Frank Cass. pp. 15–30.
- Office of Internal Oversight Services (OIOS) 2005. *Report on the review of military involvement in civil assistance in peace operations.* (A/60/588). New York, OIOS.
- Orsillo, S.M., L. Roemer, B.T. Litz, P. Ehlich and M.J. Freidman 1998. Psychiatric symptomatology associated with contemporary peacekeeping: An examination of postmission functioning among peacekeepers in Somalia. [Electronic version]. *Journal of Traumatic Stress*, 11 (4), pp. 611–625.
- Pollick, S. 2000. Civil-military cooperation: A new tool for peacekeepers. Canadian Military Journal, 2000 (Autumn), pp. 57–63.
- Psychometrics Ltd (Psytech) 2002. The 15FQ+ Technical Manual. Johannesburg, Psytech.
- Pugh, M. 1998. Military intervention and humanitarian action: Trends and issues [Electronic version]. Disaster, 22 (4), pp. 339–351.
- Pugh, M. 2001. The challenge of civil-military relations in international peace operations [Electronic version]. *Disaster*, 25 (4), pp. 345–357.
- Rosebush, P.A. 1998. Psychological intervention with military personnel in Rwanda [Electronic version]. *Military Medicine*, 163 (8), pp. 559–563.

- Roush, P.E. and L. Atwater 1992. Using the MBTI to understand transformational leadership and self-perception accuracy [Electronic version]. *Military Psychology*, 4 (1), pp. 17–34.
- Siegel, A.B. 2001. Associated development projects with military operations: Lessons from NATO's first year in BiH. *International Peacekeeping*, 8 (3), pp. 99–114.
- Society of Industrial and Organisational Psychology (SIOP) 2003. Principles of validation and use of personnel procedures. Bowling Green, OH, SIOP.
- Spence, N. 2002. Civil-military cooperation in complex emergencies: More than a field application. *International Peacekeeping*, 9 (1), pp. 165–171.
- Stanley, C.H.K. 2003. Psychological dimensions of peacekeeping: The role of the organization [Electronic version]. *Journal of the Singapore Armed Forces*, 29 (2), pp. 14–21.
- Sue, D., D.W. Sue and S. Sue 2000. Understanding abnormal behaviour. 6th ed. Boston, Houghton Mifflin Company.
- United Nations Department of Peacekeeping Operations (UN DPKO) 2002. *Civil-military coordination policy*. New York, UN DPKO.
- Van Dyk, G.A.J. 1998. Peacekeeping psychology: A model for members of military forces and their dependents during peacekeeping operations. Paper presented at Conference of International Peace and Security on The African Experience, Saldanha, South Africa, September 1998.
- Vogelaar, A.L.W., J.L. Soeters and J.B.G. Born 1997. Working and living in Bosnia: Experiences of Dutch IFOR soldiers. In: Soeters, J.L. and J.H. Rovers eds. *HL Arms: Netherlands annual review of military studies (The Bosnian Experience)*, Breda, Royal Netherlands Military Academy, pp. 113–127.
- Weinberger, N. 2002. Civil-military coordination in peacebuilding: The challenges in Afghanistan [Electronic version]. *Journal of International Affairs*, 55 (2), pp. 245–274.