



Defence Research and
Development Canada

Recherche et développement
pour la défense Canada



SOCIAL PSYCHOLOGY THEORIES IN THE META-ORGANIZATIONAL CONTEXT

Jennifer Peach
Post-Doctoral Researcher
University of Waterloo

Damian O'Keefe
Associate Professor
St Mary's University

Emily Schryer
PhD Candidate
University of Waterloo

Alan Okros
Department of Defence Studies
Canadian Forces College

Scientific Authority:
Paul Chouinard
DRDC Centre for Security Science

The scientific or technical validity of this Contract Report is entirely the responsibility of the Contractor and the contents do not necessarily have the approval or endorsement of Defence R&D Canada.

Defence R&D Canada – Centre for Security Science

Contractor Report

DRDC CSS CR 2012-025

December 2012

Canada¹

Scientific Authority

Paul Chouinard

DRDC Centre for Security Science
Operational Research

Approved by

Dr. Denis Bergeron

DRDC Centre for Security Science
Section Head, Operational Research

Approved for release by

Dr. Mark Williamson

DRDC Centre for Security Science
Document Review Panel Chairman

Defence R&D Canada – Centre for Security Science (CSS)

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2012

© Sa Majesté la Reine (en droit du Canada), telle que représentée par le ministre de la Défense nationale, 2012

Abstract

Governments are increasingly requiring different agencies to work together in demanding circumstances using a whole of government or comprehensive approach. In previous work, Okros, Verdon and Chouinard (2010) applied a social and human perspective to examine how a meta-organization may be capable of enacting a comprehensive approach. The multi-disciplinary analyses integrated a number of disparate concepts to present speculative hypotheses that may be used to inform future research agendas. This paper builds on the first work by presenting a number of the theories from social psychology which be of use in exploring the concepts and hypotheses presented in the original work by Okros et al under the broad groupings of: Influence and Persuasion; Affect; Assumptions/Judgment; Information Processing; Role Confusion; Groups and Group Dynamics; Personal Identity; Decision Making; Group Behaviour; and Motivation; the various theories and illustrative studies have been briefly presented along with selected key readings. The intent is to highlight different theories and concepts which may be of use in developing specific testable hypotheses hence an applied research programme to investigate the implications of the broad hypotheses presented in Okros et al, particularly in the discussion of future research.

Résumé

De plus en plus, les gouvernements exigent des différents organismes qu'ils collaborent lorsque les circonstances sont difficiles, utilisant une approche pangouvernementale ou globale. Dans une étude antérieure, Okros, Verdon et Chouinard (2010) ont appliqué une perspective sociale et humaine pour voir comment une méta-organisation peut arriver à adopter une approche globale. Les analyses multidisciplinaires intégraient plusieurs concepts disparates pour présenter des hypothèses pouvant servir à orienter les futurs programmes de recherche. Ce document fait suite aux premiers travaux en présentant des théories socio-psychologiques utiles pour explorer les concepts et les hypothèses présentées dans le travail initial d'Okros et coll. sous les grands thèmes suivants : influence et persuasion; affect; suppositions et jugement; traitement de l'information; confusion des rôles; groupes et dynamique de groupe; identité personnelle; prise de décision; comportement de groupe et motivation; les diverses théories et études explicatives sont présentées brièvement ainsi que des lectures choisies. Le but est de mettre en relief des théories et des concepts qui pourraient être utiles dans l'élaboration d'hypothèses vérifiables, d'où un programme de recherches appliquées pour étudier les implications des hypothèses générales présentées par Okros et coll., surtout lorsqu'il s'agit des futurs travaux de recherches.

Executive summary

SOCIAL PSYCHOLOGY THEORIES IN THE META-ORGANIZATIONAL CONTEXT

Jennifer Peach; Damian O'Keefe, Emily Schryer, Alan Okros; DRDC CSS CR 2012-025; DRDC CSS December 2012

Previous work conducted for the Centre for Security Science (Okros, Verdon & Chouinard, 2011) provided a theory-based assessment of the human elements that may be of importance when those from different departments or agencies have to work closely together under comprehensive approaches or in what was referred to as the meta-organizational context. As a conceptual paper, Okros et al provided a broad, multi-disciplinary and integrative review with the primary findings summarized in a series of rather generalized speculative hypotheses. The authors stated that additional research including further considerations of discipline-specific theories and studies would be required to develop more focused hypotheses and to present more concrete conclusions and recommendations. As a follow on paper, this report draws on the social psychology literature to expand on salient aspects of the initial report.

The initial portion of this paper provides a summary of Okros et al (2011). The first component describes the meta-organizational problem space with discussion of wicked problems, convergence and issue of the commons. The second component provides three approaches to dealing with these issues by summarizing the standard business approach of creating structured organizations and then contrasting with alternate approaches based on professions and complex adaptive systems (CAS). The third component integrates these three approaches with the argument that government should shift from hierarchical, control-based organizations to minimally constrained complex adaptive systems (C-CAS). The fourth component then examines the human element with discussion of people as decision makers, interpersonal dynamics and sources of interpersonal conflicts. The final component summarizes the key conclusions and recommendations presented in Okros et al (2011).

The second portion, and the major contribution, of this paper provides a comprehensive review of how various theories and models drawn from social psychology can inform and explain aspects of the human dynamics presented in the original paper. Under ten broad topics the paper presents selected theories and illustrative studies along with selected key readings. The first topic presented is Influence and Persuasion with discussion of theories related to: Dual-Mode Processing Models of Persuasion, Power, Cognitive Dissonance and Locus of Control. The second topic is Affect with specific attention to the concept of Emotional Intelligence. Third is the rather large literature on Judgment and Assumptions covering the topics of Attribution Error, Pluralistic Ignorance, Ethnocentrism, Right Wing Authoritarianism, Social Dominance Orientation, Social Constructionism and Cultural Intelligence (CQ). Fourth is Information Processing with consideration of Attention, Cognitive Overload, Stereotypes and Cognitive Conservatism. Fifth is the issue of Role Confusion with discussion of Diffusion of Responsibility, Work-Family Conflict and Androgyny Theory. Sixth is Groups and Group Dynamics which addresses Groups and Teams, Acculturation, Optimal Distinctiveness Theory, Social Identity Theory and consideration of Culture versus Climate. Seventh is Personal Identity with attention to Values, Self-Awareness Theory, Self-Monitoring, Self-Regulatory Focus Theory, Impression Management, Self-Presentation Theory and Moral Development. Eighth is Decision Making with particular discussion of the roles of Planning Fallacy and Groupthink. Ninth is Group Behaviours covering Organizational Citizenship Behaviour, Cooperation, Trust, and Social Loafing versus Social Facilitation, Organizational Justice, and Organizational

Commitment. The final section addresses Motivation with presentation of the Theories of Motivation in the workplace.

Consistent with the overall intent of DRDC Technology Investment Fund (TIF) research, this second paper is intended to highlight different theories and concepts which may be of use in developing specific testable hypotheses hence to inform future applied research projects which may be conducted to investigate the implications of the broad hypotheses presented in Okros et al (2011) and, in particular, the Section 6.2 discussion of future research.

Sommaire

THÉORIES DE LA PSYCHOLOGIE SOCIALE DANS LE CONTEXTE MÉTA-ORGANISATIONNEL

Jennifer Peach; Damian O'Keefe, Emily Schryer, Alan Okros DRDC CSS CR 2012-025; RDDC CSS Décembre 2012

Les travaux précédents menés pour le Centre des sciences pour la sécurité (Okros, Verdon & Chouinard, 2011) ont permis de réaliser une évaluation théorique des éléments humains pouvant revêtir une certaine importance dans les cas où différents ministères ou organismes doivent collaborer étroitement en vertu d'approches globales ou dans ce qui a été qualifié de contexte méta-organisationnel. Dans le document conceptuel qu'ils ont produit, Okros et coll. présentent une étude générale, multidisciplinaire et intégrée dont les premières conclusions sont résumées dans une série d'hypothèses basées sur des suppositions plutôt générales. Les auteurs déclarent que d'autres recherches, y compris un examen plus approfondi de théories et d'études propres à une discipline, seraient nécessaires pour élaborer des hypothèses plus précises et présenter des conclusions et des recommandations plus concrètes. En guise de réponse, le présent rapport puise dans la littérature publiée dans le domaine de la psychologie sociale pour développer les notions fondamentales présentées dans le rapport initial.

La première partie du présent document résume l'étude d'Okros et coll. (2001). Le premier volet décrit les difficultés méta-organisationnelles, y compris les problèmes pernicioseux, la convergence et la question des terrains. Le deuxième volet présente trois approches pour traiter ces questions en résumant l'approche professionnelle standard qui consiste à créer des organisations structurées, puis la compare avec d'autres approches en fonction des professions et de systèmes adaptatifs complexes. Le troisième volet intègre ces trois approches en partant du principe que le gouvernement devrait passer d'organisations hiérarchiques où tout est contrôlé à des systèmes adaptatifs complexes dans lesquels les contraintes sont réduites au minimum. Le quatrième volet traite de la dimension humaine en traitant des personnes comme décideurs, des dynamiques interpersonnelles et des sources de conflits interpersonnels. Le dernier volet résume les principales conclusions et les recommandations présentées dans l'étude d'Okros et coll. (2011).

La deuxième partie, et la principale contribution, de ce document brosse un tableau complet de la façon dont différentes théories et différents modèles puisant dans la psychologie sociale peuvent influencer et expliquer des aspects de la dynamique humaine présentée dans l'article initial. Sous dix grands thèmes, le document présente des théories choisies et des études explicatives ainsi que des lectures choisies. Le premier thème abordé est celui de l'influence et de la persuasion, y compris de théories sur les modèles de traitement bimodes, le pouvoir, la dissonance cognitive et le locus de contrôle. Le deuxième thème est l'affect, plus particulièrement l'intelligence émotionnelle. Le troisième est la vaste littérature sur le jugement et les suppositions et couvre plusieurs sujets : l'erreur d'attribution, la méconnaissance généralisée, l'ethnocentrisme, l'autoritarisme de droite, le parti pris pour la dominance sociale, le constructionnisme social et l'intelligence culturelle (IC). Le quatrième est le traitement de l'information sous l'angle de l'attention, la surcharge cognitive, les stéréotypes et le conservatisme cognitif. Le cinquième est la question de la confusion des rôles, notamment la diffusion de la responsabilité, le conflit travail-famille et la théorie de l'androgynie. Le sixième porte sur les groupes et la dynamique de groupe, notamment les groupes et les équipes, l'acculturation, la théorie du particularisme optimal, la théorie de l'identité sociale et l'opposition culture-climat. Le septième concerne l'identité personnelle, plus précisément les valeurs, la théorie de la conscience de soi, le monitoring de soi, la théorie de l'autorégulation, la conduite stratégique des relations, la théorie de la présentation de soi et le développement moral. Le huitième est la prise de décisions, plus

particulièrement les rôles de l'illusion de la planification et de la pensée unique. Le neuvième concerne les comportements de groupe, notamment, les comportements organisationnels empreints de civisme, la coopération, la confiance, la paresse sociale et la facilitation sociale, la justice organisationnelle et l'engagement organisationnel. La dernière section porte sur la motivation et présente les théories de la motivation en milieu de travail.

Conformément à l'objectif général des travaux de recherche du Fonds d'investissement technologique (FIT), ce deuxième document vise à mettre en relief les théories et les concepts qui pourraient être utiles dans l'élaboration d'hypothèses vérifiables pour orienter les futurs projets de recherche appliquée qui pourraient examiner les implications des hypothèses générales présentées dans l'étude Okros et coll. (2011) et, particulièrement, les propos sur les futures recherches à la section 6.2.

Table of contents

Abstract	iii
Résumé	iii
Executive summary	iv
Sommaire	Error! Bookmark not defined.
Table of contents	viii
1 INTRODUCTION	
1.1 THE META-ORGANIZATIONAL CONTEXT	
1.2 SUMMARY OF META-ORGANIZATIONAL LANDSCAPE REPORT	
1.2.1 UNDERSTANDING THE PROBLEM SPACE	
1.2.1.1 Wicked Problems	
1.2.1.2 Convergence	
1.2.1.3 The Commons	
1.2.1.4 Implications of the Comprehensive Approach Problem Space	
1.2.2 DEALING WITH WICKED PROBLEMS AND CONVERGENCE	
1.2.2.1 Introduction	
1.2.2.2 Organizing how ‘work’ gets done	
1.2.2.3 Organizational culture	
1.2.2.4 Reframing Strategy and Organizational Architecture	
1.2.2.5 Professions	
1.2.2.6 The Individual within a Profession	
1.2.2.7 The Public Service and the Hybrid Professional Model	
1.2.2.8 Complex Adaptive Systems	
1.2.2.9 Implications	
1.2.3 THE OPEN ORGANIZATION OR CONSTRAINED CAS	
1.2.3.1 Introduction	
1.2.3.2 Government-Led C-CAS	
1.2.3.3 Holonic Enterprises	
1.2.3.4 Implications for constrained complex adaptive systems	
1.2.4 THE HUMAN ELEMENT: THE PERSON IN THE C-CAS	
1.2.4.1 Introduction	
1.2.4.2 People as Decisions Makers within C-CAS	
1.2.4.3 Interpersonal dynamics in C-CAS contexts	
1.2.4.4 Sources of inter-organizational conflicts and tensions	
1.2.4.5 Summary of the Human Element in C-CAS	
1.2.5 REPORT CONCLUSIONS AND RECOMMENDATIONS	
2 PERSPECTIVES FROM SOCIAL PSYCHOLOGY	
2.1 INTRODUCTION	
2.2 SOCIAL PSYCHOLOGY	
2.2.1 INFLUENCE AND PERSUASION	
2.2.1.1 Dual-Mode Processing Models of Persuasion	
2.2.1.2 Power	
2.2.1.3 Cognitive Dissonance Theory	
2.2.1.4 Locus of Control	
2.2.2 AFFECT	
2.2.2.1 Emotional Intelligence	
2.2.3 ASSUMPTIONS/JUDGMENT	
2.2.3.1 Attribution Error	

	2.2.3.2	Pluralistic Ignorance	
	2.2.3.3	Ethnocentrism	
	2.2.3.4	Right Wing Authoritarianism	
	2.2.3.5	Social Dominance Orientation	
	2.2.3.6	Social Constructionism	
	2.2.3.7	Cultural Intelligence (CQ)	
2.2.4		INFORMATION PROCESSING	
	2.2.4.1	Attention	
	2.2.4.2	Cognitive Overload	
	2.2.4.3	Stereotypes	
	2.2.4.4	Cognitive Conservatism	
2.2.5		ROLE CONFUSION	
	2.2.5.1	Diffusion of Responsibility	
	2.2.5.2	Work-Family Conflict	
	2.2.5.3	Androgyny Theory	
2.2.6		GROUPS AND GROUP DYNAMICS	
	2.2.6.1	Groups and Teams	
	2.2.6.2	Acculturation	
	2.2.6.3	Optimal Distinctiveness Theory	
	2.2.6.4	Social Identity Theory	
	2.2.6.5	Culture versus Climate	
2.2.7		PERSONAL IDENTITY	
	2.2.7.1	Values	
	2.2.7.2	Self Awareness Theory	
	2.2.7.3	Self-Monitoring	
	2.2.7.4	Self-Regulatory Focus Theory	
	2.2.7.5	Impression Management	
	2.2.7.6	Self Presentation Theory	
	2.2.7.7	Moral Development	
2.2.8		DECISION MAKING	
	2.2.8.1	Planning Fallacy	
	2.2.8.2	Groupthink	
2.2.9		GROUP BEHAVIOURS	
	2.2.9.1	Organizational Citizenship Behaviour	
	2.2.9.2	Cooperation	
	2.2.9.3	Trust	
	2.2.9.4	Social Loafing versus Social Facilitation	
	2.2.9.5	Organizational Justice	
	2.2.9.6	Organizational Commitment	
2.2.10		MOTIVATION	
	2.2.10.1	Theories of Motivation	
2.3		CONCLUSION	
BIBLIOGRAPHY			51

INTRODUCTION

1.1 THE META-ORGANIZATIONAL CONTEXT

The Canadian government is increasingly relying on comprehensive or whole of government approaches to deal with a host of complex issues when attempting to address failed states abroad or a disrupted state of affairs at home. Whether endeavouring to achieve long term stability and development in failed states; to strengthen democratic institutions in fragile states; to respond to natural disasters, pandemics or environmental changes; to reduce intransigent social problems such as crime, poverty or drug use; or to ensure public safety and physical security at high profile events, there is a recognition that successful interventions are reliant on the integrated efforts of multiple departments and agencies. Previous work conducted for the Centre for Security Science (Okros, Verdon & Chouinard, 2011) provided a theory-based assessment of the human elements that may be of importance when those from different departments or agencies have to work closely together under comprehensive approaches. As this paper provided a broad, multi-disciplinary and integrative review, the primary findings were summarized in a series of rather generalized speculative hypotheses. It was recognized that additional research including further considerations of discipline-specific theories and studies would be required to develop more focused hypotheses and to present more concrete conclusions and recommendations. To do so, this report will draw on the social psychology literature to expand on salient aspects of the initial report. Prior to doing so, the key points presented in the first report will be summarized.

1.2 SUMMARY OF META-ORGANIZATIONAL LANDSCAPE REPORT

As a Technology Investment Fund initiative, the Meta-Organizational research project is designed more to generate research questions than to answer them. The work presented in Okros et al was informed by the generalized observation that when interdepartmental, combined efforts do not function as intended; the problems are often blamed on ‘human factors’ or ‘culture differences’ amongst the various organizations involved. Thus, the report provides an integration of a number of disparate concepts and ideas to present a series of speculative hypotheses which may serve to explain the human dynamics of comprehensive approaches. A consistent theme developed in the report is that the reliance on traditional controlling aspects of managerial decision making (i.e., planning, organizing, directing, etc.) are, at best, insufficient and, in many cases, may be counterproductive, to ensuring success under comprehensive approaches. The following is a summary of the key topics covered in the original report.

1.2.1 UNDERSTANDING THE PROBLEM SPACE

In considering why governments are relying on comprehensive approaches and, importantly, those aspects that are unique to government-led initiatives, the role and purpose of governments was reviewed. Okros et al state that governments exist to create and maintain social order and manage social goods. Under conditions of shock, social order can become disrupted, social goods can be eroded and general anxiety can increase. Government, and the strengths and stability of a nation’s institutional framework, function to reduce uncertainty which requires public trust and confidence in both government and institutions. Governments, professions and related institutions earn public trust when they fulfill their social responsibility in a manner that is consistent with the expectations of the broader society. A central challenge to governments is

that many of the key issues they must address are seen as complex ‘social messes’. Thus, the initial section of the report examined the social messes’ problem space with discussion of wicked problems, convergence and assemblage, and the concept of the commons.

1.2.1.1 Wicked Problems

The central idea of wicked problems is that these involve complex, dynamic, multi-faceted, often chaotic and contradictory types of social issues that are very difficult to comprehend let alone define or solve (Rittel & Webber, 1973). Horn & Weber (2007) presented the following key factors:

- the ‘problem’ is rarely ever understood or defined, however, how the problem is ‘framed’ and understood strongly influences how it is addressed and, contradictorily, how ‘success’ is defined determines how the problem is understood
- attempting to solve one wicked problem means solving other wicked problems or can create other wicked problems
- solutions are not right or wrong but better or worse; further there is no finite range of alternate solutions
- each wicked problem is novel and unique thus each attempt to address a wicked problem is a one shot/ trial and error endeavor
- wicked problems always evolve over time and are never definitively solved

Of greater importance than describing what differentiates ‘wicked’ from ‘tame’ problems are the implications for addressing them. A key conclusion drawn from this literature is that the scientific model of using sequential steps, assumed objectivity and rational logic to define, analyze and solve complicated problems (those with multiple variables) will not be successful when addressing complex problems (those with multiple unknowns). Thus, the issue of addressing wicked problems is more than simply developing a resource management strategy to harness the capacities of multiple agencies and groups but must be understood as foremost an intellectual endeavour involving coping with 4 “C”s: complexity, chaos, contradictions and counter-intuitive solution sets.

Their discussion of wicked problems led to Okros et al presenting the speculative hypothesis that, when seeking to address wicked social problems, failure to adopt an appropriate approach to framing questions will result in inaccurate or inadequate problem definition resulting in ineffective strategies to attempt to resolve the underlying problem(s).

1.2.1.2 Convergence

Convergence is generally considered to describe the emergent conditions under which different actors come together. When viewed simply as ensuring that people work together in an effective manner, convergence is often seen as encompassing the three functions of cooperation, coordination and collaboration noting that other researchers have extended this to include ‘coming together’ in premise, practice and place. Okros et al extended these ideas further suggesting that meaningful convergence can be considered on multiple levels including: conceptual (drawing on the same ideas), ontological and epistemological (common approaches to defining reality and generating knowledge), cultural (shared norms, beliefs and assumptions), functional (similar purposes), professional (contributing to the same social service/social good), informational (fusion of multiple sources of data), strategies (similar approaches to link ends, ways and means), communities (in the social sense) and connections (as communities of practice/ interest).

Of importance, convergence is understood as the requirement for individuals, groups or organizations to alter or amend aspects of how they normally 'do business' with changes ranging from fairly obvious elements such as adopting new work practices to relatively hidden domains such as shifting the worldview(s), assumptions or the epistemology that frames how one understands their reality. As an extension, assemblage is the capacity to assemble novel capabilities from various components, to attain a greater agility to either to solve unique problems, respond to emergent situations or accomplish particular aims. The movement toward convergence simultaneously requires a divergence from prior-practices, the need to reconfigure, to enable exaptation and to re-assemble subcomponents, in order to develop (assemble) the needed capabilities for inter-active efforts. Assemblage has to be self-organizing in order to provide needed agility, thus, assemblage builds on the wide-spread use of informal networks to get things done. Therefore, Okros et al suggested that a more formal or institutionalized concept of assemblage will enhance the existing reliance upon informal and spontaneous bottom-up collaboration/coordination, building on convergence as a formal top-down governance mechanism and more permanent types of inter-operability arrangements.

While the literature on wicked problems helps redefine the 'what' of the problem space, the discussion of convergence and assemblage redefined the 'how' of tackling these problems. Rather than focussing on trying to extend the traditional functions of planning, organizing, delegating and controlling from one organization to many, the discussion suggested that the key convergences that are required are intellectual and cultural and that the most important organizational responses will be those that facilitate more open systems and structures, in other words, the antithesis of classic administration.

Their discussion of convergence and assemblage led to Okros et al presenting the speculative hypothesis that failure to recognize the 'deeper' elements of convergence pertaining to worldviews, taken-for-granted assumptions, new modes of knowledge production and epistemologies will result in over-attention to the lower order functions of facilitating cooperation, providing coordination and exercising managerial control as well as lack of attention in establishing the conditions for the creativity needed to address wicked social issues.

1.2.1.3 The Commons

Originally coined to describe the management of natural resources, the concept of a commons pertains to any condition where individuals can share scarce resources. Hardin's (1968) 'tragedy of the commons' highlights the conflict that what is often in the individual's best interests (to maximize the benefits they derive from the common resources) is at odds with the shared community's best interests (to maximize the benefits derived by all) with uncontrolled individual use often leading to depletion or destruction of the commons hence with all losing any benefits. The construct has been extended beyond physical resources to include knowledge and ideas (Hardin, 1998). Commons can be the collective depositories of knowledge (e.g., wikis) or pools of human capabilities (e.g. 'cloud-labour' and 'talent-commons') from which crowdsourcing can enable powerful surge capacities and/or new ways of designing how some types of work can be accomplished. Other forms of commons could also be considered such as equipment, facilities and accommodations, etc.

Key in the notion of intellectual convergence is the pooling and sharing of different ideas, worldviews, and perspectives with the possibility of creating new ways to understand wicked social problems. To extend the tragedy of the commons, a challenge is that it is likely in each individual's and each organization's best interests to extract as much knowledge as possible while contributing the least possible (under the philosophy that knowledge is power). There is a long tradition of humans developing diverse institutional arrangements for the 'management of the commons' to avoid system collapse. Okros et al identified that the more accurate reference

should be to the governance of the commons and, in particular, highlighted the need to create the conditions that enable and sustain the types of intellectual and cultural convergences needed to address wicked social problems.

Their discussion of governance of the commons led to Okros et al presenting the speculative hypothesis that, even when the benefits of coming together in convergences are clear, the logic leading to the ‘tragedy of the commons’ suggests that there will be powerful, personal reasons why individuals will engage in actions that will enhance their own objectives at the detriment of the collective.

1.2.1.4 Implications of the Comprehensive Approach Problem Space

Governments have unique responsibilities to society and the requirement to address often intransigent wicked social messes is a primary reason for the decision to apply comprehensive approaches. The Okros et al consideration of the nature of these problems highlighted important factors to be considered in developing solution sets. The primary implication drawn from this initial component of work was that the central challenges are intellectual not managerial, and, in particular that the key is how one understands the problems rather than how one plans, organizes or directs efforts to resolve them.

1.2.2 DEALING WITH WICKED PROBLEMS AND CONVERGENCE

1.2.2.1 Introduction

Having explored the nature of the problem space, Okros et al turned to a conceptual consideration of how agencies can be organized to achieve comprehensive approaches. The initial discussion examined the traditional hierarchical bureaucratic approach that is dominant in government with a consideration of organizational culture. They then provided a series of alternate approaches including reframing how strategy is understood, considering how professions function including discussion of how individuals work within professions and how the professional model functions within government and finally turned to a discussion of complex adaptive systems.

1.2.2.2 Organizing how ‘work’ gets done

Okros et al stated that the core principles of how to organize ‘work’ emerged in the Western world with the evolution from an agrarian to an industrial system with the ‘modern’ understandings of administration and bureaucracy informed by Fredrick Taylor’s principles of scientific management. Subsequently, the importance of the human element in the world of work was recognized / rediscovered with the realization that it was neither effective nor desired to place individuals in contexts in which they were neither expected nor authorized to use discretion on the job. Over time, the concepts of scientific management with its focus on the processes used to perform tasks efficiently were gradually amended or expanded to also include an understanding of the social dynamics which also influenced how people conducted their work. However, the core principles of Taylorism with a reliance on managers using rational decision making to ensure workforce efficiencies remained a dominant facet in how work is typically organized and conducted.

As a result of this evolution, the functioning of any organization can be represented by an integration of formal structural systems (bureaucracy) and informal social systems (the human dimensions). Formal structural systems represent those elements that are intentionally created and assumed to operate on an objective, linear, rational basis to achieve efficiency. Conceptually, structural systems are created as mechanical like entities to produce the work force characteristics

that are deemed needed to achieve pre-determined ends. On the other hand, social systems represent those elements that are emergent and operate on a combination of cognitive and affective bases to achieve those outcomes (ends) using those processes (means) that are valued by the individuals and groups that belong to the social system(s). Of importance, the constellation of norms, beliefs, expectations, etc. that emerge from the social systems are often referred to as organizational culture. Okros et al indicated that the function used to operate the structural component of an organization is management while the function used to influence the social component is leadership. The primary basis for the exercise of management is role-based authority while the primary basis for leadership is social influence derived from a combination of position-based and personal power.

Okros et al argue that, most often, the dominant approach of classic organizations to ensure the right work gets done the right way is to use managerial approaches to alter the structural systems. They state that this results in an over-emphasis on formal (top-down) control mechanisms such as articulating a clear strategy, specifying outcomes, allocating resources and issuing direction to subordinate managers who, in turn, will direct and control work done at levels below them. Unfortunately, the fact that wicked social messes cannot be accurately defined hence cannot be addressed through linear methods along with the requirement for disparate groups, ideas, worldviews and norms to converge on the issues leads to the conclusion that the primary method for those in charge to set the conditions for the combined group's success would be through the exercise of leadership to influence the social systems at play.

Their discussion of hierarchical organizations led to Okros et al presenting the speculative hypothesis that, when it is observed that a comprehensive initiative did not achieve the results intended, the post-event analyses are likely to show that there was a heavy reliance on managerial techniques to provide planning and direction via structural systems and inattention to the exercise of effective leadership to influence key social systems.

1.2.2.3 Organizational culture

Organizational culture is presented as the constellation of workplace-specific perceptual filters (worldview, values, beliefs, assumptions, expectations, myths, narratives, etc.); practices (norms, conventions, behaviours, customs, rituals, artifacts, etc.) and structural factors (processes, incentive frameworks and structures, power-based relations, roles and responsibilities, etc.) that influence how individuals and groups come to understand, function in and master (or not) their work world. Organizational culture is influenced by both internal factors within the organization and external factors drawn from the larger communities in which the organization, its functions and its members are embedded. The aspects of organizational culture that are of specific importance at any one time will vary depending on the context and assessment of these factors at a particular time can be represented as 'organizational climate'. Generally speaking, culture provides a strong yet informal framework to guide how individuals' understand the world around them thus influences how and why people perceive, reason and behave. Further, organizational culture(s) tend to evolve slowly as they are derived from what is commonly held and widely shared amongst the members of the organization.

As one means to differentiate organizational cultures, Okros et al present an approach which differentiates between loose and tight cultures (Pelto, 1968). Tight cultures tend to focus on clarity, consistency and control while loose cultures tend to focus on flexibility, adaptability and comfort with ambiguity. Noting the power of informal culture to influence how individuals understand and respond to their work environment and the requirement to set the conditions for intellectual creativity when working in comprehensive approaches, they argue again for a shift

from traditional top down managerial approaches to more open leadership styles with a shift from leaders as decision maker to sense maker.

Their discussion of organizational culture led to Okros et al presenting the speculative hypothesis that, in order to work effectively with others under comprehensive approaches, those organizations that have tight cultures will have to adopt elements of loose cultures including flexible norms; accepting ambiguity and uncertainty; and, living with fuzzy roles and values.

1.2.2.4 Reframing Strategy and Organizational Architecture

In this section, Okros et al critique traditional organizational decision making and control then discuss the concepts of heterarchy and responsible autonomy. They note that a primary purpose of organizations is to create and focus the capacities of the workforce. To do so, senior managers spend significant time providing strategic direction and creating controlling mechanisms to ensure their direction is implemented correctly. Thus, organizations rely heavily on elements of the structural systems such as authorities, formal direction and the embedded incentive/reward systems to ensure that work gets done and that leadership is developed and oriented to support organizational goals.

Traditionally, managerial decision making is seen as a component of developing and implementing a strategy to align ends, ways and means. Okros et al, however, differentiate between deliberate and emergent strategies. Emergent strategies are the result of unintended strategic order that can arise despite the clear absence of deliberate planning and design. Such strategies arise from the unintended consequences of human action and interaction. They conclude that strategy is much less about the actions of decision making than it is about sense-making and way-finding.

The second concept presented was that a basic rationale for organizations to be structured as they are is to harness human effort by collecting people together so as to reduce 'transaction costs'. Organizations achieve efficiencies by sharing purpose and dividing labour through establishing roles, responsibilities and methods of communication. However, they argue that increased connectivity particularly through the power of the Internet and emerging social media represent new modes of production and enabling architectures of participation. Okros et al argue that organizational architectures now require new sets of rules to enable 'participatory cultures'. A participatory culture is presented as a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing creations, and some type of informal mentorship whereby experienced participants pass along knowledge to novices. In a participatory culture, members also believe their contributions matter and feel some degree of social connection with one another.

To facilitate alternate architectures to move beyond the hegemony of control hierarchy and organization-as-machine, Okros et al present two concepts: heterarchy as rule or control shared by many not exercised by one thus a balance of powers instead of single rule; and, responsible autonomy as individual or group autonomy to decide what to do based on internalized or shared values. The central point made is that alternate views on strategy and architectures build on their previous discussions of wicked social problems and requisite convergence with heterarchy or responsible autonomy focused on enabling human creativity and initiative by facilitating an easier or unrestricted flow of knowledge.

Their discussion of strategy and organizational architectures led to Okros et al presenting the speculative hypothesis that, in order to facilitate the flow of knowledge and ideas necessary to address wicked social problems, organizations will need to shift their decision making framework

and enabling architecture to adopt more open systems and focus on creating knowledge rather than reducing transaction costs.

1.2.2.5 Professions

In comparison to the standard organizational bureaucratic approach, Okros et al present professions as placing a very different emphasis on who and what are of importance and 'work' get done or more correctly how the profession is practiced. Professions are seen as an exclusive group of people who provide a unique service to society by resolving complex problems involving a societal good. They do so by applying a theory-based body of knowledge which is mastered through a lengthy process of formal education and supervised practice. Professions serve the common good and have the obligation to society to do so competently and objectively. Further, professions use a code of ethics to guide decision making in complex, novel or ambiguous circumstances. There are two key facets to the code of ethics and decision making. First, the values contained in the code of ethics must be accepted as legitimate by the society or societies the profession serves. Second, each member of the profession is expected to internalize the code of ethics and to exercise independent moral judgement as to the right thing to do in complex contexts. To be able to do so, beyond periods of formal education and supervised practice, individuals are also normally developed through professional socialization. Finally, professions often have a fair amount of autonomy in regulating professional practice as a result of their professional knowledge and need for moral/ethical judgement.

Deriving from these characteristics, professions can be defined by five attributes: Jurisdiction as the function over which profession claims primacy; Expertise or the theory-based body of specialized knowledge, skills and practices; Responsibility as the profession's special duties to the society it serves; collective Identity which includes unique status in society; and, a shared Vocational Ethic which includes the values, beliefs, expectations and obligations that underpin ethical reasoning and professional practice. The vocational ethic most often contains two types of values: in short the 'how' and the 'what'. The 'what' are the outcome values regarding what is to be achieved (the ends) and the 'how' refers to the conduct values on how this is to be done (the means). Signals to align the extant culture with the desired vocational ethic are often conveyed symbolically through customs, rituals, traditions, narratives and myth making.

Okros et al discuss the concept of contested jurisdiction as the clash that can occur when a profession finds others entering their domain (Abbott, 1988). Contested jurisdictions necessarily imply corresponding conflicts in the identities, expertise, responsibilities and vocational ethics in use. This issue can become especially acute when the domain of activity is to provide a valued service to society (e.g. health, justice, public safety, national security, education, etc) which they highlight is quite likely under government led comprehensive approaches.

The framework of five attributes of a profession is used to illustrate many significant differences from the traditional organization as presented earlier. Okros et al suggest that, with its orientation toward a collective contribution to a social good rather than a corporate focus on profitability, the professional framework shifts the focus from the Taylorist efficient performance of specific tasks to a greater emphasis on exercising independent judgement in complex, ambiguous and dynamic circumstances. At a minimum, therefore, it provides a closer intellectual alignment with the approaches deemed valuable in addressing wicked social problems which, to a large extent, they surmise is due to the fact that the generalized purpose of the classical professions has been to deal with social messes.

Their discussion of professions led to Okros et al presenting the speculative hypothesis that, those who approach wicked social issues using a professional framework will have greater success in

understanding the complexities and implications than those who apply only a standard managerial decision making model.

1.2.2.6 The Individual within a Profession

Okros et al apply their framework of five professional attributes to explain how the profession functions internally, specifically how individuals relate to their profession and to each other. They point out that, within the profession, there are almost always sub-divisions within the jurisdiction which provide the individual with an understanding of their particular role and the roles of other members of the profession hence, depending on one's role (or sub-jurisdiction), the individual is expected to hold role-specific expertise, responsibilities and identity. In contrast to the bureaucratic model of organizations, it is expected that each member of the profession will have an understanding of the roles of others and, in particular, will learn how to work effectively with them to contribute to the collective professional service to society. Further, while it is assumed that all members of the profession hold the same vocational ethic, it is also understood that one can move through stages in personal, moral development to develop increased understandings and capacities to utilize the value set of the vocational ethic to exercise the independent judgement that is a hallmark of the professional ideology.

They identify that, through professional socialization, a central facet of mastering one's profession is learning to decode the symbolic meaning that is used to convey key information to other members of the profession. However, a challenge is that it is usually only those who are in the profession who learn how to decode these symbols and members of professions rely on these as critical shortcuts to establish relative professional credentials especially when engaging in within-profession convergences by applying 'swift professional convergence'. Building on their earlier comment that organizations with different cultures may find it difficult to achieve a negotiated order because they will, at times, fail to share the symbolic meaning of the common terms they use, Okros et al state that this issue can become acute when dealing across professions as most rely on deeply layered meanings which are extremely difficult for the layperson to decipher and, more problematic, become so ingrained in day-to-day professional practice that they are difficult for the professional to explain to others.

They summarize that there are significant differences in 'sense making' between those in professions versus hierarchical organizations with the former relying more on internalized values and wisdom while the latter are guided more by authoritative pronouncements from managers or statements of organizational policy. They conclude that these differences may have significant implications in understanding cross-organizational convergences.

Their discussion of the individual within a profession led to Okros et al presenting the speculative hypothesis that, members of professions who have engaged in effective self-reflection will have greater success communicating taken-for-granted concepts, frameworks and assumptions with those who are not part of the profession while, conversely, those who lack self-insight will impede efforts to achieve intellectual and cultural convergences.

1.2.2.7 The Public Service and the Hybrid Professional Model

Okros et al note that there are a range of areas across government in which departments or agencies see themselves as having a clear and, generally, exclusive jurisdiction and, from this jurisdiction, have develop specific expertise, responsibilities and identity as well as some value set that guides judgement in complex settings. Thus, they state that many elements of government can or could operate based, in part, on the professional model, this is not seen as a complete fit as the dominant philosophy of government organizations is the bureaucratic ideology

not the professional one. They, therefore, present a 'hybrid' professional model representing those in government caught between elements of the bureaucratic and professional ideologies. Specifically, this hybrid professional model is deemed to apply to those who have a generalized jurisdiction as a duty/ownership for a particular social good; a degree of expertise but lacking the full theory-based body of knowledge; implicit (professional) responsibilities to society which are obscured due to explicit (bureaucratic) responsibility to the government of the day; a sense of a collective identity but lacking the clarity to represent Huntington's 'corporateness'; and, a fuzzy vocational ethic which combines professional values with an occupational orientation derived from workplace practices.

Okros et al then expand on the idea of 'swift professional convergence' to suggested that, when individuals from different government organizations are brought together under comprehensive approaches, they will integrate declarative information from the formal, structural systems with the symbolic cues from the informal, social systems with reference to two domains: broad duties (the 'who's who' part) and task-specific priorities (the 'to do what' component). They propose that duties can be derived from examining four areas: established role, level of competence, perceived obligations and granted authority while priorities can be derived from examining: desired outcomes (ends), preferred conduct (means), established procedures (ways) and predetermined limits (consequences). The key implication presented is that each of these facets can only be fully understood by integrating information from the formal bureaucratic/ structural factors and the informal professional/cultural factors with the conclusion that those used to operating in a classic organization may miss key professional factors while those used to operating in a purely professional context may miss important bureaucratic factors.

Their discussion of the hybrid professional model for the public service led to Okros et al presenting the speculative hypothesis that, examples of 'culture conflicts' arising when individuals from different agencies work together may often be explained as due to failure by individuals to correctly integrate all relevant cues to understand the other's duties and priorities.

1.2.2.8 Complex Adaptive Systems

As an alternative to either the hierarchical organizations or the model of professions, Okros et al apply the concept of complex adaptive systems (CAS) in the context of comprehensive approaches. CAS are used to describe large, multi-agent entities which operate in dynamic, adaptive and evolving contexts which are constantly morphing and evolving often producing spontaneous and unpredicted changes. While complex adaptive systems may be explained, they cannot be accurately predicted (the creation and movement of a tornado is an example). They present six characteristics of how complex adaptive systems function deemed most relevant for comprehensive approaches:

- Emergence: the agents in the system interact and properties emerge in what appears to be a random manner rather than being planned, directed or controlled.
- Sub-optimal: complex adaptive systems do not have to produce ideal outcomes in order to survive or even thrive in their environment.
- Variety: the more heterogeneous the elements or actors in the system, the better the chances of success and the greater the likelihood of new properties emerging.
- Connectivity: CAS rely on the nature of the connections across the system(s) to form patterns, evolve characteristics and disseminate information.
- Simple Rules: CAS are not complicated; they operate based on a few simple rules rather than the multivariate algorithms used to explain an ordered world.
- Self-organizing: agents within a CAS are constantly re-assembling or re-organizing to fit changing environmental conditions without reliance on the managerial functions of planning, organizing and controlling.

Okros et al conclude that CAS do find a way to become organized however this is not achieved through standard managerial control mechanisms. Instead, the success of CAS is due to the fact that these systems are comprised of multiple, disparate actors who use numerous connections and feedback loops and are influenced by a few simple rules with the capacity to continually re-organize or re-assemble leads to the emergence of new properties, forms and solutions that, while not achieving an ideal outcome, ensure that the CAS survives despite the near chaos of its environment.

Their discussion of complex adaptive systems led to Okros et al presenting the speculative hypothesis that, those seeking to enable success of integrated teams under comprehensive approaches should shift their focus from attempting to structure and control individuals' duties and functions to providing the conditions for emergent evolutions and, in particular, to reframe the managerial role as one who scans the adaptive social system to detect self-organization and the establishment of the few simple rules that explain the teams' interactions.

1.2.2.9 Implications

In this section of their report, Okros et al provided an examination of three organizational approaches that can be applied to addressing wicked social messes using comprehensive approaches. They highlighted the high degree of structure and control utilized in the traditional hierarchical bureaucracy and via standard managerial decision making, the dominant characteristics of most organizations including government. In contrast, they illustrated the greater degree of flexibility and creativity albeit far less top down control under the professional model and in complex adaptive systems. The key conclusion presented is that the most effective approach to ensuring teams from different organizations can work together effectively is to enable a high degree of creativity, flexibility and adaptability at the working level thus implying a shift from the hierarchical control approach to allowing emergent and dynamic complex adaptive teams.

1.2.3 THE OPEN ORGANIZATION OR CONSTRAINED CAS

1.2.3.1 Introduction

Having examined the problem space that requires government-led comprehensive approaches and then compared the traditional organizational structure with professions and complex adaptive systems, Okros et al concluded that, conceptually, one could argue that the CAS approach could be ideal to address certain wicked social problems. They recognized, however, that, in practice the requirement for government to be accountable to the people for maintaining the social good meant that the degree of freedom of a CAS is rarely going to be able to occur. Thus, they explored the options, issues and tensions that arise from efforts to blend aspects of the organization, profession and CAS to create either a more open organization or a constrained-CAS; what they referred to as C-CAS.

1.2.3.2 Government-Led C-CAS

Okros et al bring forward the idea that organizations rely on both structural systems controlled through management and social systems influenced through leadership whereas a pure CAS involving people function almost exclusively through social systems with multiple, constantly interacting social exchanges influencing the system and generating the few simple rules that inform how the CAS operates. They suggest that, for a C-CAS, the key requirement is to provide limited guidance, direction or control and specifically to do so only with regards to specifying the

boundary conditions and to facilitate the establishment of the C-CAS simple rules. They state that consideration of how to 'shape' an appropriate C-CAS while still retaining government mandated accountabilities, requires consideration of two additional means of control beyond management and leadership, specifically command and swarm.

Drawing on the military application, they argue that command is a high concentration of power and authority subsuming both management and leadership and is needed under circumstances of urgency and high risk. Thus, command is specifically intended to affect both the structural and social systems and is exercised through both legitimate authority and social influence. As the antithesis, swarm is represented as a group of people who are acting and interacting based on some group-based aligned action through social (and often impersonal) networks. Drawing on the concept of responsible autonomy and under the conditions of transparency, independence and diverse participants, they note that it is possible to establish an Accountable Swarm (A-Swarm) to create a shared sense of the purpose and responsibilities of the assembled crowd.

Okros et al note that command and management are 'bounded' by formal authority hence are exercised 'down and in' in support of organizational goals while leadership and A-Swarms are unbounded as these can also exert influence 'up and out' and neither has to be necessarily aligned with organizational goals. They state that, conceptually, command is the authority to formally initiate action; management is the authority to formally amend action; and leadership is the personal and a-swarm is the group capacities to influence action. Command involves the principle-based initiation of action through control networks and can be explained by the Pigeau-McCann CAR Model. Management involves the rules-based amendment and control of action through bureaucratic networks and can be explained by rational actor (including bounded rationality) models. Leadership involves values-based sense making through personalized networks and can be explained as unbounded power. A-Swarm involves group-based consensus making through social networks and can be explained by the wisdom of crowds as well as by what Adam Smith referred to as the invisible hand of 'moral sentiments'.

A key idea presented in Okros et al is that both effective command and accountable swarm rely on a broad shared set of values, beliefs and expectations, in other words, on a coherent culture. They note, however that a significant challenge under multi-agency comprehensive approaches is that this shared culture and what they refer to as cultural enablers will not exist. Further, they note that when and as the C-CAS culture arises, the decisions as to which rule sets will apply, which norms will be adopted and which worldview(s) will frame sense making, will be created by the members of the CAS not those attempting to regulate it.

Their discussion of constrained complex adaptive systems within the context of government bureaucracy led to Okros et al presenting the speculative hypothesis that, those with senior responsibilities for the success of a government-led comprehensive initiative (hence for creating an effective C-CAS) should simply monitor and not attempt to guide or direct the emergence of an effective C-CAS culture.

1.2.3.3 Holonic Enterprises

Okros et al build on their discussion of command as a mechanism to exercise significant control over disparate components to note the added complexity that governments and C-CAS, in particular, will be subject to multiple layers of decision making across multiple organizations. They then draw on the concept of holonic enterprises (Ulmer, 2003) to represent the interactions in multi-layered, multi-organizational contexts and discuss a framework of four levels of decision making. They indicate that, in the military view these are: grand strategy, strategic, operational and tactical while in the public service framework they are: political direction, policy setting, program development and implementation. The main point in applying a holonic enterprise

approach, they argue, is to identify the key issues that are addressed at each level. Thus, potential meta-organizational issues can be developed using a diagnostic framework that examines the three broad levels of strategic/ policy; operational/ program and tactical/ implementation. Each level has corresponding subsets of issues which in turn can be better understood through three key questions: is the issue understood (defined, known vs ambiguous, unknown); is there agreement as to how it is understood by all parties; and, do the decisions at a higher level, impede the opportunities for the types of convergence and assemblage needed to allow a C-CAS to emerge.

Okros et al provide an illustration of the application of multi-layered, multi-departmental decision making in the research on comprehensive approaches conducted by the Australian government (Australian Public Service Commission, 2004). Their “Good Practices Guide” is presented as a good example of consideration of the multiple factors at play within and across different levels. They suggest that this Guide confirms their earlier assertion that it is not on the types of decisions made but the intellectual framework/ worldview(s) used to do so. Although the layering of decision making from policy to program to implementation reflects the common levels of hierarchy in most organizations, they posited that the deeper reason (often neither understood nor applied) is that each set of issues requires a difference method of inquiry. Okros et al summarized these with reference to academic disciplines. The strategic/ policy domain should be based on the methodologies of the Arts with a focus on asking the right questions; the operational/ program level should be based on the methodologies of the Natural Sciences with a focus on answering these questions the right way; and, the tactical/implementation arena should be based on the methodologies of Engineering to apply the answers/ understandings the right way. Thus, they conclude, the key issue presented in applying holonic approaches to understanding multi-layered decision making is to recognize the role of shifting academic frames of reference or methods of inquiry with, in particular, the strategic/policy level to be dominated by the types of thinking that is needed to grasp the implications of seeking to address wicked social problems.

Their discussion of holonic enterprises led to Okros et al presenting the speculative hypothesis that, the most critical initiating condition leading to the creation of an effective C-CAS will be based on the intellectual framework adopted and, in particular, the use of the Arts approach of seeking to ask the right questions rather than the Science approach of trying to answer what appear to be obvious questions the right way.

1.2.3.4 Implications for constrained complex adaptive systems

The third section of Okros et al presents the implications for moving from traditional managerial structures to alternate organizational approaches with recognition that governments must retain some degree of oversight however need to develop significantly different intellectual models and organizational principles in order to ensure meta-organizational success under comprehensive approaches. The central implication presented is that the key requirements for governments to enable constrained complex adaptive systems to emerge is to minimize the degree of top-down direction and allow the emergent group to develop their own shared norms, understandings and expectations. Extending their theme that the key to success under comprehensive approaches lies in the intellectual approach adopted, they argue that the primary role of those responsible is to ensure that the most senior level asks the right questions, those at the intermediate level answers these the right way and those at the front line applied the answers the right way.

1.2.4 THE HUMAN ELEMENT: THE PERSON IN THE C-CAS

1.2.4.1 Introduction

In their final section, Okros et al focused more specifically on the perspectives of the individual who is part of a meta-organizational team under a comprehensive approach. The initial discussion considered the perspective of the person as a decision maker and then shifted to consideration of interpersonal dynamics and sources of error, conflict and tensions. It is considered that the following major section presentation of theories drawn from social psychology is particularly relevant in understanding key issues related to the individual within a meta-organizational team.

1.2.4.2 People as Decisions Makers within C-CAS

Okros et al draw on their assertion that the assumption that people are rational decision makers when addressing social messes is either insufficient or incorrect and can be better informed through actor analyses. They state that decisions by actors in the context of C-CAS convergence can be explained through a combination of: deductive reasoning drawing primarily on formal, structural elements; inductive reasoning drawing on informal, cultural elements; affective determinations and responses influenced by social dynamics; and, pre-determined mental mode and related implicit assumptions based on history and socialization. They argue that all four decision making approaches can be strongly influenced by: the broad professional ideology and processes of deep-rooted socialization and institutional frameworks that frame how the individual sees themselves and their world; the shared culture of the group(s) within which the individual is embedded; and, the dynamics of group climate in response to day to day activities. Further, they suggest that individuals can easily find themselves facing: role ambiguity/overload, organizational cultural confusion and multiple conflicted rule sets (catch 22s).

Okros et al state that decisions will be based, in part, on subjective pay off matrices with, related magnitudes of consequence. As an example, they suggest that fear of failure tends to be weighted much more heavily than expectations of successes; own success tends to be weighted more heavily than shared successes; and failures tend to be uniquely assigned to individuals while successes are shared by all. As a result there tends to be greater effort to engage both face saving and responsibility mitigation which also explain why it is easier to get forgiveness than permission as permissions shifts onus of responsibility from requester to granter.

Their discussion of people as decision makers led to Okros et al presenting the speculative hypothesis that, evaluations of individual decision making need to go beyond the view of the person as a rational decision maker by adopting elements of actor analyses and, in particular, recognizing how deeply embedded elements of socialization as well as the temporal dynamics of team climate can influence decisions.

1.2.4.3 Interpersonal dynamics in C-CAS contexts

In considering the dynamics that can occur with individuals or teams have to work together for the first time in dynamic circumstances, Okros et al drew on the literature regarding swift trust. They stated that swift trust can develop under the conditions of aligned activity; a constrained environment; a collegial atmosphere; and, with a trust broker to mediate frictions. They extended this consideration by positing that there may be the possibility of “swift acculturation” or a process whereby individuals and groups are able to rapidly make sense of the cultural nuances of the context and each other. Further, they integrated the leadership literature reference to position and person power with the model of professions to suggest the use of professional power as provided by the organization yet still transferable thus allow for the establishment of ‘swift professional status’.

Their discussion of interpersonal dynamics led to Okros et al presenting the speculative hypothesis that, the literature and models on swift trust could be extended to develop more inclusive understanding of how individuals initially interact and start to form a C-CAS particularly by examining the possibilities of ‘swift acculturation’ and ‘swift professional status’.

1.2.4.4 Sources of inter-organizational conflicts and tensions

Okros et al considered the sources of inter-organizational conflicts and tensions noting that these tend to be the most common excuses for comprehensive initiatives to not produce the results government leaders expected. They stated that there are a number of ‘simple’ explanations which include: standard mistakes of management such as errors in problem analysis, selection of incorrect courses of action, misallocation of resources, application of the wrong rule set(s), and the ubiquity of open-loop planning where management create objectives, plan, and implement without mechanisms of corrective feedback; and, common frictions of interpersonal dynamics such as (perceived) competing personal agendas, ‘personality’ conflicts, previous histories, (perceived) incompetence, lack of trust or confidence in others. They went on to note that more complicated explanations arise from the deeper conflicts of value such as worldviews, attributions errors (especially when assuming shared understanding), and competing professional values or orientations.

Okros et al presented the Canadian Forces Leadership Institutional Effectiveness model as a framework to understand competing values and resultant tensions. This model suggests that individuals may operate with different frames for prioritization (values) of the four outcome values: mission accomplishment, member well-being, internal integration or external adaptability; as well as regarding the appropriate conduct values which underpin moral or ethical reasoning. They suggested that an obvious source of conflicts or misunderstandings is when individuals place different emphases on the importance of any one of these outcomes and/or worse, assume that others have the same relative value priorities as they do. Finally, they expanded their presentation to include three more complex sources of tensions: errors of command, contested jurisdictions and culture clashes.

Their discussion of inter-organizational conflicts led to Okros et al presenting the speculative hypothesis that, analyses of why effective or ineffective interpersonal relations in C-CAS can arise, it is important to move beyond simple explanations to look for conflicting worldviews, priority given to differing outcome or conduct values; or the failures to anticipate, learn or adapt.

1.2.4.5 Summary of the Human Element in C-CAS

This section of Okros et al provided specific consideration of the human element within the C-CAS. The primary implication of examining why effective or ineffective interpersonal relations in C-CAS can arise was to shift analyses beyond simple explanations to look for conflicting worldviews, priority given to differing outcome or conduct values; or the failures to anticipate, learn or adapt.

1.2.5 REPORT CONCLUSIONS AND RECOMMENDATIONS

In summarizing their paper, Okros et al state that, in resolving wicked social messes, the meta-organization, comprehensive approaches, convergence and assemblage all suggest a new environment where meaning emerges and evolves collectively and collaboratively representing a qualitative difference in the way people make sense of their cultural and operational experience. They conclude that optimizing outcomes under comprehensive approaches inevitably requires institutional innovation and, in particular, that setting the conditions for success requires: holistic thinking; capacity for innovation, flexibility, adaptation and social leadership; contextually

responsive application of governmental accountability frameworks; policy informed by an understanding of behavioural and cultural change; comfort with uncertainty, improvisation, and emergent evolving self-organization; development of new individual, social and teams competencies, media literacies; ability to engage in swift trust, swift acculturation and swift professional status; the 21 Century skills of working with social networks, harnessing collective intelligence and negotiating across cultural differences. Finally, they presented implications for future research in the domains of theory building, modelling and simulation, organizational analyses, lessons learned and professional development.

2 PERSPECTIVES FROM SOCIAL PSYCHOLOGY

2.1 INTRODUCTION

The work presented in Okros et al provides a broad conceptual analysis of the issues, dynamics and perspectives which assist in examine why governments seek to apply comprehensive approaches and to understand how meta-organizations or teams under comprehensive approaches might function. As stated in the introduction, this paper is written to provide additional theories and concepts which are drawn from social psychology that are considered of assistance in moving from the generalized hypotheses presented in Okros et al to develop more specific hypotheses which might be amenable to applied research. In reading the following, recall that Okros et al suggested that organizations function based on a combination of formal structural systems (rules, regulations, policies, reward systems etc.) and social systems (the human elements represented by facets such as organizational culture, climate, individual, intra- and inter- team dynamics etc). While it is beyond the scope of this paper it is important to note that additional understanding of the functioning of structural systems can be found elsewhere particularly in the business, public administration and economics literatures. Further, it is recognized that there are strong interactions across the structural and social systems particularly through human resource management and the related functions of job analysis, selection, training, performance appraisal, succession management, etc. etc.) as well as the more generalized functions of professional socialization. Again, these facets are not the focus on this paper with the organizational behaviour and industrial/organizational psychology literature addressing many of the HR issues and sociology and anthropology touching on the latter. Okros (2010) addresses several of the human resource management issues with comparison of the approaches used in the private sector vs the public service vs the Canadian Forces. The primary rationale for this focus on social psychology and inter-personal dynamics, hence the exclusion of other literatures and other facets of the meta-organizational context is the assumption that, in the majority of cases, the meta-organization or the integration of multiple disparate teams under a comprehensive approach will be a relatively temporary and ad hoc situation. As a result, there will not be the time or resources available to engage in the more traditional methods of creating effective organizations: meta-organizations will be very much a ‘come as you are’ effort thus the real opportunities for effective approaches will be in dealing with the human dynamics that emerge as individuals and teams converge to work together.

2.2 SOCIAL PSYCHOLOGY

As a further brief introduction to this section, social psychology is the study of people thoughts, feelings and behaviours that are influenced by the presence of others. For this report, the current social psychology literature was reviewed to identify those theories, concepts, and studies that were most relevant to the perspectives presented in the initial report. The most relevant information will be presented under ten broad categories, which include: Influence and Persuasion; Affect; Assumptions/Judgment; Information Processing; Role Confusion; Groups and

Group Dynamics; Personal Identity; Decision Making; Group Behaviour; and Motivation. Although many articles were reviewed for this report, each section will end with a list of key readings that readers can refer to for more information on the concept.

2.2.1 INFLUENCE AND PERSUASION

Decisions made in a leadership capacity almost always involves reinforcing, modifying, extinguishing or changing attitudes or behaviours to accomplish a desired goal (Gass & Seiter, 2007). In doing so, leaders are constantly engaging in the process of influencing and persuading others. Researchers have postulated several theories in the study of influence and persuasion such as the dual-mode processing models of persuasion that addresses the motives behind attitudinal and/or behavioural change. Other important influence and persuasion concepts include power, cognitive dissonance, and locus of control.

2.2.1.1 Dual-Mode Processing Models of Persuasion

There several dual-mode theories of persuasion, but the central tenet behind these theories is that the process of attitude and behaviour change depends on one's motivation and the ability to process relevant information. If people are both motivated and are able to process the information carefully, then the desired attitude and/or behavioural change is based on a more comprehensive review of the information and thus more likely to occur. If however, people are either not motivated (e.g., the issue is not personally relevant) or lack the ability to process information, then they tend to use mental shortcuts (i.e., heuristics) and attitude and behavioural changes are not likely to be long-lasting (Wood, 2000).

Key Readings:

Wood, W. (2000). Attitude Change: Persuasion and Social Influence. *Annual Review of Psychology*, 51, 539-570.

2.2.1.2 Power

Power influences human behaviour and is the basic force in social relationships. Although definitions of power differ, it is generally accepted that it is an individual's ability to influence and motivate others to behave in a desirable manner (Keltner, Gruenfeld, & Anderson, 2000).

Power can be a function of one's position within an organization, or can be personally-based. The basis for positional versus personal power are different. The basis for positional power comes from the legitimacy of being a person in a position of organizational authority, and with that role, one can use either reward or coercive tactics to influence behaviour. The basis for personal power comes from one's expertise and knowledge. Research suggests that expert and referent power is the most effective to obtain followers' commitment, reward and legitimate power is somewhat effective, and coercive power is least effective. The most effective leaders have both position and personal power, which will allow them to use the most appropriate basis of power to influence behaviour (French & Raven, 1959; Steers & Black, 1994).

Carli (1999) argued that men and women differ in their ability to influence others, and these differences appear to be based on differences in social power (i.e., the extent to which a person is influenced by another individual). Research indicates that men generally score higher than females in measures of expert power (i.e., expertise or knowledge) and legitimate power (i.e., a role that commands respect and the right to exert authority over others) and females score higher than males in referent power (i.e., individual's likeableness to others; Carli, 1999).

Legitimate power is conceptualized as a form of entitlement, and is derived from a person's external status or position. Fiske and Ruscher state that women on average do not command the same authority as men. For this reason they are seen as less deserving of legitimate power. Other studies postulate that even when women acquire a position of leadership, they continue to lack the legitimacy of men, and this difference in legitimate power seems to generalize across situations as reported in meta-analyses (Eagly, Makhijani, & Klonsky, 1992).

Key Readings:

Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues*, 57(4), 725-741.

Carli, L. L. (2001). Gender, hierarchy, and leadership: An introduction. *Journal of Social Issues*, 57(4), 629-636.

French, J.R.P. & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.). *Studies in social power*, pp. 150-167. Ann Arbor, Michigan: University of Michigan.

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2000). Power, Approach, and Inhibition. *Research Paper 1669*. Research Paper Series, Graduate School of Business, Stanford University. Retrieved 30 April, 2012 from <http://gsbapps.stanford.edu/researchpapers/library/rp1669.pdf>

2.2.1.3 Cognitive Dissonance Theory

Cognitive dissonance is the feeling of discomfort that one experiences when two conflicting cognitions exist (e.g., smoking is bad for you, but I like to smoke), and cognitive dissonance theory proposes that we are motivated to change our attitudes or behaviour in order to reduce our discomfort level. Cognitive dissonance can be a powerful motivating force when one's cognition or behaviours are not in-line with one's self-concept (Wood, 2000). For example, the social image of military personnel is one of service to one's country and as someone who has high morals. Military personnel who act in an unethical manner do not uphold this social image and thus may experience cognitive dissonance. This cognitive dissonance should motivate the unethical military person to either change his/her behaviour to meet the social image, or alternatively change her/his attitude to justify the unethical behaviour.

Key Readings:

Wood, W. (2000). Attitude Change: Persuasion and Social Influence. *Annual Review of Psychology*, 51, 539-570.

2.2.1.4 Locus of Control

The concept of locus of control was developed by Rotter (1966) based on social learning theory (i.e., personality represents an interaction of the individual with his or her environment), and is defined as a tendency for people to either attribute the cause or control of events to themselves (i.e., having internal locus of control) or to the external environment (i.e., having external locus of control). Locus of control is cross-situational and refers to the degree to which people expect that an outcome of their behaviour is contingent upon their own behaviour or personal characteristics versus the degree to which people feel that the outcome is a function of chance, or under the control of powerful others. Rotter argued that people can be classified along a continuum from very internal to very external. People with strong internal locus of control feel that success or

failure is due to their own efforts, while people on the other end of the spectrum (i.e., strong external locus of control) believe that they have very little impact on outcomes that involve them.

In an organizational setting, Spector (1982) argued that people who are high in internal locus of control tend to believe that they can control the work setting through their behaviour. Spector postulated that locus of control was related to several organizational outcomes such as, work motivation, effort, performance, satisfaction, compliance with authority and turnover. As well, there is some evidence that locus of control can influence the relation between perceived influence and procedural justice.

In a survey of 172 employees of a consumer products manufacturing firm, Sweeney, McFarlin, and Cotton (1991) reported that locus of control moderated the relation between perceived influence (i.e., degree to which participants felt they had a say in how to do their work) and procedural fairness. The pattern of the relation was such that among respondents who were high in internal locus of control, there was a greater effect of perceived influence on procedural justice compared with respondents who score lower in internal locus of control (i.e., high on external locus of control).

Key Readings:

Gass, R.H. and Seiter, J.S. (2007). *Persuasion, Social Influence, and Compliance Gaining* (3rd Edition). New York: Pearson, Allyn and Bacon.

Spector, P. E. (1982). Behavior in Organizations as a function of employees locus of control. *Psychological Bulletin*, 91(3), 482-497.

Sweeney, P. D., McFarlin, D. B., & Cotton, J. L. (1991). Locus of control as a moderator of the relationship between perceived influence and procedural justice. *Human Relations*, 44(4), 333-342.

2.2.2 AFFECT

2.2.2.1 Emotional Intelligence

Emotional intelligence (EI) is described as the propensity to perceive, assess, and control your emotions and the emotions of others. While there is some debate over whether EI is trait-based or ability-based, most researchers agree that it involves the ability to monitor one's own and others feelings and emotions, to discriminate among them, and to use information to guide one's thinking and actions (Salovey & Mayer, 1990).

The ability-based perspective of EI states that it consists of four abilities, which include: (1) the ability to perceive your own emotions and detect emotions in faces, pictures, and voices of others; (2) understand and appreciate emotions of yourself and others; (3) using your emotions to facilitate thinking and problem solving; and (4) managing your emotions in yourself and others (Salovey & Mayer, 1990).

The trait-based perspective of EI postulates that it is a combination of personality, moods, and motivational factors that are not part of the taxonomy of human abilities, but are mostly personality in nature. For the most part, trait-based EI deals with one's emotional self-perception that allows us to be aware of emotions in ourselves (i.e., intrapersonal), and others (i.e., interpersonal), and to adapt and regulate our emotions to suit the situation (Petrides, Pita, & Kokkinaki, 2007).

Research studies have found a relation between both trait-based and ability-based EI and organizational citizenship behaviour (Carson & Carson, 1998; Day & Carroll, 2004), and between trait-based EI and job satisfactions (Wong & Law, 2002), and career commitment (Carson & Carson, 1998).

Key Readings:

Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273- 289.

Salovey, P. & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 93(3), 1885-211.

2.2.3 ASSUMPTIONS/JUDGMENT

2.2.3.1 Attribution Error

The fundamental premise behind attribution error is that people are quick to draw conclusions about the actions of other, and tend to consider their own behavior in a different light than the behavior of others. Attribution Error (sometimes called fundamental attribution error) is the tendency to over-value personality-based explanations when explaining the behaviours of others while under-valuing situational factors that might also account for the behaviours. To illustrate, attribution error might occur when a supervisor attributes a worker's inability to accomplish a task to incompetence, while the actual reason for the work not being done was a lack of clear instructions. Attribution error usually occurs when observing the behaviour of others and not when explaining one's own behaviour. In the case of one's own behaviour, people tend to over-emphasize the role of a situation in their behaviours and under-emphasize the role of their own personalities.

Some researchers (e.g., Sabini, Siepmann, & Stein, 2001) have questioned the premise behind attribution error and have argued that attribution error is a not tendency to overestimate dispositional factors in explaining the behaviours of others, but it is the underestimation of the importance of certain situational factors. Sabini et al. (2001) cited the Milgram Obedience experiment as an example of where people underestimated situational factors in predicting the behaviour of others. In the Milgram study, observers of the study predicted that fewer than 1% of the study participants would shock the victim (a study confederate). In contrast, over 60 percent of study participants obeyed the experimenter's commands to shock an innocent victim. Indeed, in this study, it appeared that the presence of an overbearing person who insisted that participants shock the victim had a greater impact on behaviour than the participants dispositional tendency not to shock the victim. Note however, that in the study there were several participants who refused to shock the victim, suggesting that both dispositional and situational factors play a role on explaining behaviour.

Key Readings:

Langdrige, D. & Butt, T. (2004). The fundamental attribution error: A phenomenological critique. *British Journal of Social Psychology*, 43, 357-369.

Sabini, J. Siepmann, M. & Stein, J. (2001). The really fundamental attribution error in social psychological research. *Psychological Inquiry*, 12(1), 1-15.

2.2.3.2 Pluralistic Ignorance

Pluralistic ignorance occurs when strong situational pressures cause individuals in the same situation to behave contrary to their own attitudes or beliefs, but a lack of communication between individuals leads people to believe that others are acting the way they are because they want to, not because of situational pressure. For example, students in a large university lecture may not ask questions in class because they are intimidated by the size of the class. These individuals may believe that other students are not asking questions because they understand the course material, not because they are also intimidated. This pluralistic ignorance means that no one in the classroom asks a question even though many of them may be confused.

Pluralistic ignorance is a type of fundamental attribution error, in which individuals realize the impact that situational pressures have on their own behaviour, but do not realize these same pressures impact others' behaviour as well. Thus, individuals may attribute their own behaviour to the situation, but attribute others' behaviour to internal characteristics (i.e., believe others are acting the way they are because they want to, not because of situational pressures) (Ross, 1977). Fundamental attribution error is also referred to as the correspondence bias, or individuals' assumption that others' attitudes correspond with their behaviour (Jones, 1990; Gilbert & Malone, 1995). Individuals are especially likely to make this mistake when cognitively busy.

Pluralistic ignorance occurs when this fundamental attribution error leads members of a group to fail to voice their concerns with the activities of the group and instead to go along with the group (Miller & McFarland, 1991; Prentice & Miller, 1993). Because individuals believe everyone else is comfortable with the groups' actions, no one speaks out and the behaviour continues. This can lead to a breakdown of communication in a group. For example, if no one is acting to solve a problem or cooperate with individuals from another organization, everyone may believe that others have deliberately decided not to act or cooperate, perpetuating a lack of communication and collaboration.

Key Readings:

Miller, D. T., & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance. In J. Suls & T. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 287-313). Hillsdale, NJ: Erlbaum.

Ross, L. D. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). New York: Academic Press.

Other Readings:

Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117, 21–38.

Jones, E. E. (1990). *Interpersonal Perception*. New York: Freeman.

2.2.3.3 Ethnocentrism

Ethnocentrism is an universal phenomenon that plays a role in group formation and intergroup competition, and deals with how people judge another culture solely by the values and standards of one's own culture. It is an individual orientation that impacts on how people construe their group membership, and membership in a social group (e.g., occupational, fraternal, religious) is

important for attitudinal development, and an individual's need to belong to a specific group heavily impacts on his/her values. People who have a propensity towards ethnocentric thinking, view one's own group as the center of everything, and all others are scaled and rated with reference to it, which could lead to beliefs of one's own group's superiority and contempt for outsiders (Perreault, 1999; Taifel, 1982).

In their seminal work on the authoritarian personality, Adorno and colleagues focused on the idea of ethnocentrism, which they described as an ideology pertaining to groups and group relations. They distinguished between ingroups (i.e., groups in which an individual identifies) and outgroups (i.e., objects of negative opinions and attitudes). Ingroups therefore, are objects of positive opinions and supportive attitudes, and outgroups are objects of negative opinions and should be subjugated to the needs of the ingroup. A primary characteristic of ethnocentrism is the generality of outgroup rejection, in that the ethnocentric individual feels threatened by all groups to which he/she does not belong, and this ingroup-outgroup distinction is the basis for prejudicial thinking.

According to Adorno et al. (1950), political and economic factors play a large part in the development of ethnocentrism. The authors described liberal thinking individuals as people who generally seek progressive societal changes, are critical of status quo, emphasize rugged individualism, and would diminish the power of business by increasing the power of labour. Conservative thinking individuals are those who support the status quo and conservative values and traditions, who believe that labour is subordinate to management, and emphasize free economic system of government. While the relation between politico-economic and ideology are complex, there appears to be an affinity between conservatism and ethnocentrism, and liberalism and anti-ethnocentrism, suggesting that ethnocentrism can be a broader pattern of social thinking and group functioning.

Key Readings:

Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. (1950). *The Authoritarian Personality*. New York: Harpers and Brothers.

Perreault, S. & Bourhis, R. Y. (1999). Ethnocentrism, social identification, and discrimination. *Personality and Social Psychology Bulletin*, 25(1), 92-103.

Taifel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1-39.

2.2.3.4 Right Wing Authoritarianism

Right-wing authoritarianism (RWA) was based on the early work on authoritarianism, and is a socially learned attitude, which emphasizes submission to authority, aggressiveness towards outgroups, and conventionalism (Altemeyer, 1988). Authoritarian submission is a tendency to submit to the will of perceived legitimate authority figures. Authoritarian aggression is a tendency to display aggressive behaviour when it is believed to be sanctioned by authorities. Conventionalism is an adherence to social conventions.

People who score high in RWA are more likely to be prejudiced and hostile towards minorities, and this hostility appears to be a function of their fear of a dangerous and degenerating world (Altemeyer, 1996; 1998; 2004; Petersen & Dietz, 2000). This fear of a dangerous world stems from higher scoring RWAs belief that there are specific groups of people within society (e.g., liberal-minded individuals who question governmental policy, communists, and homosexuals)

who threaten their way of life, and as such, need to be stopped (Altemeyer, 1988; 1996). From a military perspective, in a study on CF Army personnel O'Keefe (2004) found that people who were higher in RWA were more discriminatory compared with people who scored lower in RWA.

Key Readings:

Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.

Altemeyer, B. (1996). *The Authoritarian Specter*. Cambridge: Harvard University Press.

Altemeyer, B. (2004). Highly dominating, highly authoritarian personalities. *Journal of Social Psychology, 144*(4), 421-447.

2.2.3.5 Social Dominance Orientation

Social dominance orientation (SDO) is the degree to which people desire hierarchy among social groups and promote domination over outgroups (Sidanius & Pratto, 1999). SDO is based on Social Dominance Theory (SDT), which was conceived by Pratto and Sidanius in the early 1990s. They postulated that societies tend to minimize group conflict by creating consensus or ideologies that promote the superiority of one group over another (Pratto, Sidanius, Stallworth, & Malle, 1994).

People scoring higher in SDO are highly competitive, tend to place great emphasis on high economic and social status, personal prestige and power, and more strongly endorse the statement that 'winning is the only thing' (Duckitt, 2001; Pratto et al., 1994). They are willing to manipulate others for personal gain (Altemeyer, 2004), and tend to have a preference for group dominance based on gender, race, ethnicity, class, religion, and sexual preference (Duckitt, 2001; Sidanius & Pratto, 1999). Higher scoring SDOs prefer an unjust and unfair social system, which they believe benefits them (Pratto et al., 1994), and this opposition to equality appears to be based on a general drive for group-based personal dominance (Altemeyer, 2004; Duckitt, 2001). Moreover, higher scoring SDOs tend to have little moral restraint, and are willing to step over people for their own personal gain (Altemeyer, 2004). From a military perspective, in a study on CF Army personnel O'Keefe (2004) found that people who were higher in SDO reported were discriminatory and self serving that people who were lower in SDO.

Key Readings:

Sidanius, J. & Pratto, F. (1999). *Social Dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.

2.2.3.6 Social Constructionism

Social constructionism is a post-positivist approach to understanding the world around us (Gergen, 1985). Post-positivism challenges the traditional way of studying behaviour, postulating that it is difficult to have objective knowledge of the real world, but rather we must consider how social dynamics such as power and hierarchy affect human conceptualizations of the world. Post-positivism questions the idea of operationalization (i.e., defining latent concepts to make them understandable and measurable) in the study of human behavior, stating that operational definitions of psychological concepts are not really operational definitions, but more like indirect

measurement operations. As such, post-positivists would argue that phenomena such as learning, memory, reasoning, perception and emotion can be neither adequately defined in terms of, nor reduced to a small set of measurement operations.

Post-positivist have great difficulty with how human behaviour is studied in traditionally methodology. They argue against the use of humans as organisms that respond to stimuli, but state that social behaviour must be conceived as actions, which cannot be explained by reducing human action to discrete behaviours or attitudes. Furthermore, post-positivists contend that most human actions cannot be linked to antecedent events, but people are agents of their own actions, and that human action is intentional and self-propelled (Polkinghorne, 1983).

Social constructionists argue that instead of searching for simple causes of behaviour, that we should adopt a context-dependent strategy to observe human actions (Gergen, Gulerce, Lock, & Misra, 1996). Social constructionism offers no truth through traditional ways of understanding behaviour, but contends that psychological processes are caused by social interchange, where human action is dependent upon the world as it is perceived, rather than as it actually is. Post-modernists would question whether reality exists independent of researchers, or whether researchers actually create reality (Ryan, 1999). Gergen (1985) argues that social categories are constructed rather than discovered, and "...[i]n large degree ... sciences have been enchanted by the myth that the assiduous application of rigorous method will yield sound fact – as if empirical methodology were some form of meat grinder from which the truth could be turned out like ... sausages" (p. 272 - 273).

Key Readings:

Gergen, K. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275.

Gergen, K. J., Gulerce, A., Lock, A. Misra, G. (1996). Psychological science in cultural context. *American Psychologist*, 51, 5, 496-503.

Polkinghorne, D. (1983). *Methodology for the Human Sciences*. Albany: State University of New York Press.

2.2.3.7 Cultural Intelligence (CQ)

Cultural intelligence is one's aptitude to interpret unfamiliar and ambiguous gestures from people from another culture in a similar manner that someone from the local culture would (Earley & Ang, 2003; Earley & Mosakowski, 2004). It is related to emotional intelligence, but it picks up where emotional intelligence leaves off. Emotional intelligence shares some attributes with CQ such as the idea that intelligence is multidimensional and involves both behavioural and cognitive facets. However, although emotional intelligence may be meaningful within one specific cultural setting it may not apply in another. For example, social skills developed in one country may be ineffective in another culture with different rules for social interaction. CQ on the other hand, allows someone to function effectively in culturally diverse settings (Earley & Mosakowski, 2004; Thomas, 2006).

Cultural Intelligence comprises four unique facets that may or may not correlate with each other - metacognitive, cognitive, motivational and behavioural. Metacognitive CQ reflects mental processes that individuals use to acquire and understand cultural knowledge. Cognitive CQ reflects knowledge of the norms, practices and conventions in different cultures acquired from education and personal experiences. Motivational CQ reflects the capability to direct attention

and energy toward learning about and functioning in situations characterized by cultural differences. Behavioural CQ reflects the capability to exhibit appropriate verbal and nonverbal actions when interacting with people from different cultures (Ang et al., 2007; Ng & Earley, 2006).

In recent years, the Canadian Forces Leadership Institute (CFLI) has conducted research on the development of cultural intelligence (CQ) among CF leaders (Davis, 2009). O'Keefe (2011), using a sample of 1054 CF members (893 English and 161 French), O'Keefe (2011), found that a measure of Cultural Intelligence (Cultural Intelligence Scale; Earley & Ang, 2003) was psychometrically sound measure (valid and reliable) of cultural intelligence and is suitable for use with the CF population.

Key Readings:

Ang, S., Van Dyne, L., Koh, C., Ng, K.L., Templer, K.J., Tay, C., Chandrasekar, N. A. (2007). Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision Making, Cultural Adaptation and Task Performance. *Management and Organization Review* 3:3 335–371.

Davis, K., D. (2009) (ed) *Cultural Intelligence and Leadership: An Introduction for Canadian Forces Leaders*. Kingston, ON: Canadian Defence Academy Press.

Earley, P.C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto, Calif: Stanford University Press.

Earley, P. C., & Mosakowski, E. (2004). Cultural Intelligence. *Harvard Business Review*, October, 2004.

2.2.4 INFORMATION PROCESSING

2.2.4.1 Attention

Information processing theory posulates that we attend to the information in our senses, use working memory to actively manipulate new information, and use long term memory to store information so that it can be used in the future. Key to this process is how we attend to new information.

Kahneman (2011) argues that we use two separate information processing systems when attending to new information - Systems 1 and 2. System 1 involves automatic processing where we instantaneously and effortlessly develop a coherent interpretation of what we are perceiving around us. This system can sometimes be labeled intuitive thinking, but Kahneman points out that the key to System 1 processing is associative memory (i.e., recalling previously experienced events by thinking of something that is linked with it). For example, when asked to answer what 2+2 is, we instantly answer 4. We do this, not because we actually conducted the addition but, because we learned this answer years ago, and have perfected this simple addition through prolonged practice.

System 2 is more deliberate processing where we allocate attention and effort to process incoming information. In the case of System 2, we don't use associative memory, but rather a system of ordered and complex computations, where we use learned processes to deal with new and often ambiguous information. A key feature of System 2 is that it is significantly slower than System 1, and requires sustained attention. For example, when asked to answer what 345 + 1135,

we now have to actually use the rules of addition that we learned in elementary school, because the answer is not readily available in our memory, like the 2+2 addition question was.

Although System 1 requires less effort and is faster than System 2, it can sometimes provide incorrect information because a key feature in System 2 is associative memory, which sometimes can be wrong. System 2, on the other hand, may be slower and requires more effort, but because it uses rational decision making as its key feature, it is less likely to be wrong.

Key Readings:

Cowan, N. (1988). Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. *Psychological Bulletin*, 104(2), 163-191.

Kahneman, D. (2011). *Thinking Fast and Slow*. Doubleday Canada.

2.2.4.2 Cognitive Overload

Cognitive overload is similar to information overload, which is the difficulty one faces in processing information and making decisions when presented with too much information. Cognitive overload has four components: (1) too much information supply (either *forced* upon workers in the form of memos, emails or telephone calls, or *retrieved* by workers in the form of accessing libraries or online journals); (2) too much information demand; (3) the need to deal with multi-tasking and interruption; and (4) the inadequate workplace infrastructure to help reduce overload. The effect of cognitive overload at a social level is tension with colleagues, loss of job satisfaction, and strained personal relationships (Kirsh, 2000).

Cognitive overload in the workplace has led to work-related stress, which is becoming an epidemic, with nearly half of Canadian workers reporting moderate to high levels of stress (McShane, 2001). This would certainly be the case for CF personnel given the high operational tempo that CF personnel are now involved in. There are several possible outcomes of work-related stress, which can be manifested physiologically, psychologically or behaviourally. Physiologically, work-related stress can result in increased heart and respiratory rate, elevated blood pressure, and sweating, which could lead to stress-related illnesses (i.e., ulcers, hypertension and coronary heart disease, migraines, asthma and colitis). Psychologically, stress can result in feelings of anxiety, frustration, despair, or burnout. Behaviourally, work-related stress can result in substance abuse, absenteeism, turnover, and poor job performance (Kahn & Byosier, 1992; Nelson & Simmons 2003; Riggio, 2003; Spector, 2003).

Key Readings:

Kahn, R., & Byosiere P., (1992) Stress in organizations, in Marvin Dunnette and Leetta Hough (Eds.) *Handbook of Industrial and Organizational Psychology*, Vol 3. Palo Alto: Consulting
Kirsh, D. (2001). A few thoughts on cognitive overload. *Intellectica*, 30, 19-51.

Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick & L. Tetrick (Eds), *Handbook of Occupational Health Psychology* (pp. 97-117). Washington DC: APA.

2.2.4.3 Stereotypes

Stereotypes are standardized and simplified conceptions of people based on some prior, and often incorrect, assumptions. They are forms of information that are stored in memory until they are activated for use, and once activated are applied to the situation (Gilbert & Hixon, 1991). For example, a person with dark skin will activate whatever concept we have of Black people, and this concept will be used to form judgements of the person.

There is a plethora of models that try to explain the stereotype activation – application relation. Many theorists have assumed that the activation of a stereotype is an automatic consequence of encountering the subject of the stereotype. Indeed, the assumption of earlier theories of stereotyping was that stereotype application always coincided with activation, in that when we encounter a member of a stereotyped group, we spontaneously activate that group's stereotypes.

Recent theories hypothesize that stereotyping is influenced by a number of goals in the activation – application relation, which exert their influence on either stereotype activation or application. Some studies suggest that the stereotype activation - application relation is conditional and that the mere exposure of the stereotype object is not always enough to activate the corresponding stereotype. For example Gilbert and Hixon (1991) postulated that because stereotypes must be activated before being applied to a target, that cognitively busy people are less likely to apply stereotypes because they more pre-occupied with the task at hand and have no time to process stereotype information. Kunda and Spencer (2003) stated that goals such as self-enhancement and motivation to avoid prejudice can exert influence on the stereotype activation - application relation. Self-enhancement goals generally increase stereotype activation and application, while motivation to avoid prejudice primarily decreases stereotype activation and application. Indeed, some researchers (e.g., Fein, 2003) postulate that increases in the salience of egalitarian norms (e.g., frowning upon a bigoted joke rather than laugh at it) can increase the motivation to avoid prejudice, and as such promote stereotype inhibition.

Key Readings:

Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.

Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology*, 60 (4), 509-517.

Kunda, Z., & Spencer, S. J. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin*, 129(4), 522-544.

2.2.4.4 Cognitive Conservatism

Cognitive conservatism is a tendency to resist change and to prefer safe, traditional and conventional forms of institutions and behaviour. Van Hiel, Pandelaere, and Duriez (2004) posited that people who show high levels of cognitive conservatism have little motivation to process information that is counter to their belief system, resulting in a greater proneness to use cognitive heuristics, such as negative stereotypes. Because cognitive conservatively people have low levels of motivation to process information, they are more likely to support conservative ideologies because these rely on tradition that aims to conserve societal stability and avoid the ambiguity caused by change.

Cognitive conservatism combines the support for traditional power structures with the opposition to egalitarianism (i.e., all people should be treated equally) and is closely associated with

personality types such as dogmatism, authoritarianism, and intolerance of ambiguity, which is similar in nature to the concept of ethnocentrism discussed earlier.

Key Readings:

Skitka, L. J., & Tetlock, P. E. (1003). Providing public assistance: Cognitive and motivational processes underlying liberal and conservative policy preferences. *Journal of Personality and Social Psychology*, 65(6), 1205-1223.

Van Heil, A., Pandelaere, M. Duriez, B. (2004). The impact of need for closure on conservative beliefs and racism: Differential mediation by authoritarian submission and authoritarian dominance. *Personality and Social Psychology Bulletin*, 30(7), 824-837.

2.2.5 ROLE CONFUSION

2.2.5.1 Diffusion of Responsibility

Diffusion of responsibility occurs in a situation in which many people could perform a task but it is not assigned to one person and there is no clear leader. In this situation, because many people could act, individuals believe that someone else will perform the task, which means that no one acts. The more individuals who could perform the task, the greater the diffusion of responsibility, and the less likely the act will be performed. Diffusion of responsibility is also less likely when individuals are held accountable for their actions and each individuals' work contribution can be tracked.

Diffusion of responsibility has been studied in emergency situations, in which many bystanders witness an emergency but none step forward to help the victim (Latane & Darley, 1970). This effect can be reduced if someone is assigned the role of leader (Baumeister, Chesner, Senders, & Tice, 1988). An individuals' career may make it more likely that they will act in an emergency situation. For example, nurses are more likely to act when someone is hurt than members of the general public (Cramer, McMaster, Bartell, & Dragna, 1988).

In the context of cross-organizational collaboration, a diffusion of responsibility is more likely if there is no clear leader in the situation or if the necessary action falls between situations. This means that if individuals are attempting to solve a wicked social problem and come across an issue that does not directly match their skills set, they may assume that someone else in their work group must be the "expert" on that issue. This diffusion of responsibility means that no one may take initiative to solve the issue. To reduce diffusion of responsibility in acute emergency situations, roles and responsibilities can be assigned beforehand.

Key Readings:

Latane, B., & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10(3), 215-221.

Latane, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* New York: Appleton-Century-Crofts.

Other Readings:

Baumeister, R. F., Chesner, S. P., Senders, P. S., & Tice, D. M. (1988). Who's in charge here? Group leaders do lend help in emergencies. *Personality and Social Psychology Bulletin*, 14(1), 17-22.

Cramer, R. E., McMaster, M. R., Bartell, P. A., & Dragna, M. (1988). Subject competence and minimization of the bystander effect. *Journal of Applied Social Psychology*, 18(13), 1133-1148.

2.2.5.2 Work-Family Conflict

Work-Family Conflict (WFC) is a form of role conflict in which the pressures from work and family domains are incompatible in some respect. That is, the work (family) role is made difficult by virtue of participation in the family (work) role. WFC literature suggests that there are three major forms of WFC; (1) time-based, (2) strain-based, and (3) behavioural-based (Greenhaus & Beutell, 1985).

Time-based WFC refers to the conflict between work and family in relation to the amount of time spent at each activity, and takes two forms: (1) time pressure (usually from work) that makes it physically impossible to comply with other responsibilities (usually family); and preoccupation with one role (again usually work) that interferes with the other role (family) (Greenhaus & Beutell, 1985). Time-based WFC is particularly salient in the CF, in that CF members often spend many days away from their families. Indeed, of the family-related concerns expressed by CF members in a recent Quality of Life (QOL) survey, members responded that having more time to spend with their family was critical to improving their QOL (Jefferies, 2001).

Strain-based WFC involves role-produced strain, which includes stressors related to the work environment (Greenhaus & Beutell, 1985). Strain-based WFC is quite prevalent in the CF in that many military bases are located in remote areas, which causes a number of family-related stressors for the CF member. These stressors include; a lack of suitable employment opportunities for spouses, a lack of suitable educational and childcare facilities for children, and a lack of recreational facilities (Jefferies, 2001).

In an effort to fully explain the relation between the relative impact of work and family stress and overall well-being, Frone, Russell and Cooper (1992) developed a model of WFC. The model was designed to provide a comprehensive overview of the factors involved in the work-family interface and as such, met the following criteria; (1) to address the family-related antecedents of WFC, (2) to examine both domain-specific and general measures of well-being, (3) to address the bi-directional nature of WFC, and (4) to be generalized over a large, heterogeneous and representative sample of employed adults.

Frone et al. (1992) postulated that the work family interface is bidirectional in nature in that it distinguishes between work interfering with family (WFC) and family interfering with work (FWC), although most research has focused on the former. Predictors of WFC include job stressors and job involvement, while predictors of FWC are family stressors and family involvement. The consequence of WFC is family distress, and the consequence of FWC is job distress, and the consequence of both family and job stress is depression. As the model is additive, the authors propose that the relation between the stressors and distress, and ultimately depression are mediated through direct or indirect relations with WFC and FWC acting as the mediators.

Building on the work of Frone et al. (1992), Frone, Yardley and Markel (1997), expanded the work-family interface model to include the following; to postulate feedback relations between work and family life not included in the earlier model, to draw a distinction between proximal

(i.e., direct) and distal (i.e., indirect) predictors of work-family conflict, and to identify the relations between work-family conflict and role-related affect and behaviour.

Proximal predictors of WFC are work time commitment (similar to time-based WFC as described by Greenhaus & Beutell (1985)), work distress (similar to strain-based WFC as described by Greenhaus & Beutell (1985)), and work overload, which can have a direct and indirect affect on WFC. Proximal predictors of FWC are family time commitments, family distress, and family overload, which also have a direct and indirect effect on FWC (Frone et al., 1997).

Distal predictors of WFC are work-related antecedents (e.g., supervisor support and co-worker support), which indirectly effect WFC through work distress, work overload and work time commitment. Distal predictors of FWC are family-related antecedents (e.g., spousal support and family support), which indirectly effect FWC through family distress, family overload and family time commitment. As outlined by Frone et al. (1997), some of these antecedents of WFC and FWC (i.e., distress and support) are counter to most previous research, which identify these constructs as either outcomes or buffers between WFC and strain.

Several studies (Frone, Russell & Barnes, 1996; Thomas & Gangster, 1995) have reported significant relations between both WFC and general health-related outcomes such as, depression, poor health and substance abuse. Grzywacz and Marks (2000) reported that work-family spillover (e.g., support from coworkers and supervisors) was related to global measures of physical and mental health, and life satisfaction. Other studies (Major, Klein & Enhart, 2002; Noor, 2004) have reported significant relations between work interference with family, and depression and somatic complaints.

Key Readings:

Frone, M.R., Russell, M., & Cooper, M.L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77 (1), 65-78.

Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behaviour*, 50, 145-167.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10, 76-88.

2.2.5.3 Androgyny Theory

Androgyny theory states that workers can take a predominantly masculine (i.e., agentic) stance in their relations with others, or a feminine (i.e., accommodative) stance. Agentic people strive and achieve in the work situation, while accommodative people are open to the experience of others as well as to the immediacy of prevailing environmental conditions. Still other people take neither a masculine nor feminine, but an androgynous role, which will be either masculine (agentic) or feminine (accommodative) in behaviour as required by the situational circumstances (Cronshaw, 2005).

Androgyny refers to individuals who conceive themselves as possessing high levels of both assertive and accommodative characteristics. Androgynous individuals have a wider range of behaviours from which to draw and are more likely to choose them based on the requirements of the situation (Bem, 1975). In contrast, individuals who are sex-typed as masculine or feminine are

more limited in their behaviours because they tend to restrict their behaviours to those congruent with their gender-typing (Hall, Workman, & Marchioro, 1998).

Korabik & McCreary (2000) state that possessing too little agency (i.e., being too accommodative) is undesirable, and that too much agency (i.e., being too assertive) is also undesirable. This is because too little agency may result in individuals being overly passive and submissive, whereas too much agency may result in their being too autocratic and competitive. Likewise, too little communion may result in individuals being overly cold and antisocial, whereas, too much communion may result in their being overly helpful and nurturant.

Buchler (1979) described agentic behaviour as forward propulsion and accommodative behaviour as patient absorption, and described human behaviour as a dynamic between agency and accommodation depending on the context in which one finds himself/herself. Buchler used the term proception to describe the interplay of the human individual's activities and dimensions. Proception suggests a moving union of seeking and receiving, of forward propulsion and patient absorption.

Buchler (1979) postulated that the way that an individual will act at any time, and the way in which his intellectual and moral character will be modified depends on his proceptive direction. There are two fundamental and correlative dimensions in the proceptive direction - manipulation and assimilation. In the manipulative dimension, the individual is the actor, the agent, and in the assimilative dimension, the individual is the spectator. Buchler argued that people can occupy both the manipulative and assimilative dimensions. For example, the solver of a problem is also the acceptor of what it involves, an acceptance imposed by the pressure of the world.

Key Readings:

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.

Korabik & McCreary (2000). Testing a model of socially desirable and undesirable gender-role attributes. *Sex Roles, 43*(9/10), 665-685.

2.2.6 GROUPS AND GROUP DYNAMICS

2.2.6.1 Groups and Teams

Research on groups suggests that there is no general consensus on one theory of group development. One school of thought was developed by Tuckman, (1965), who postulated that group development is a lengthy process that requires several stages, which include forming (i.e., the groups comes together and the situation is often ambiguous and uncertain), storming (i.e., conflicts emerge as roles and responsibilities are sorted out) norming (i.e., cohesiveness develops and group identity become evident), performing (i.e., the group is fully functional), and adjourning (i.e., the activity or task is completed and the group disbands). Another theory (Ginnet, 1990, as cited in Guzzo & Shea, 1990) hypothesizes that effective working groups can form in a matter of minutes, while another theory (Katz, 1982, as cited in Guzzo & Shea, 1990) speaks of the usefulness of disbanding, or at least periodically reconstructing groups in the interest of team effectiveness. Although there no shortage of group development theories, Guzzo and Shea (1990) point out that there are few empirical research studies that test theories in an applied setting. Furthermore, Sundstrom, De Meuse, & Futrell (1990) state that research needs to examine teams in their natural context and at multiple points in time in order to truly understand the dynamics of group development.

Guzzo and Shea (1992) defined a team as a social system that is perceived to be an entity by its members and nonmembers familiar with it, where its members have some degrees of interdependence, and differentiation of roles takes place in the group. Similarly, Sundstrom, De Meuse, and Futrell, (1990, p.120) stated that a team is an "... interdependent collection of individuals who share responsibility for specific outcomes for their organizations", and Adam and Webb (2003, p. 37) postulated that a "... core feature of a team is that its members interact frequently to conduct mutually inter-dependent tasks in pursuit of a common goal". As outlined by Campion, Medsker, and Higgs (1993), interdependence is a key feature in the definition of teams because it entails interlinked tasks, complementary roles, super-ordinate goals and shared outcomes, all of which are critical in the development of trust in teams.

One dominant way of thinking about work teams is presented as the input – process – output model of group performance as postulated by Hackman and Morris (1975). The fundamental premise behind the input-process-output model is that various inputs combine to influence team processes, which in turn influence team effectiveness (Kiffin-Petersen, 2004). Input usually refers to the things that people bring to the group (e.g., ability, expertise, personality), processes refers to the interaction among group members (e.g., exchange of information, support, cooperation), and output refers to products yielded by groups (e.g., decisions, ideas, creations, products) (Guzzo & Shea, 1992).

There are several input-process-output models of team effectiveness. Hackman and Morris (1975) described team characteristics in terms of a number of factors, which include organizational context (i.e., training, rewards, measurement, information systems technology, and control practices), design features (group task and composition) interpersonal processes (i.e., intragroup communication, coordination, conflict, cohesion, and group norms), intermediate criteria of effectiveness (knowledge, skills or abilities) and technology. Gladstein (1984), proposed a five-factor model of team characteristics, which included; organizational structure (e.g., rewards for performance), available resources (e.g., training availability), group structure, and group composition (i.e., numbers of members, demographics, or ability), which were postulated to have direct and indirect effects of performance through group process (e.g., task complexity or interdependence of team members). Sundstrom, et al. (1990), expanded the organizational context factor to include autonomy and physical environment, and hypothesized that there are three types of factors that influence team effectiveness at work; organizational context, group boundaries, and group development.

Based on these models, Campion, Medsker, and Higgs (1993) developed a conceptual model of five themes and characteristics of teams, which are related to team effectiveness. These themes include; job design (i.e., self management, participation and task variety), interdependence (task or goal), composition (i.e., size, heterogeneity), context (i.e., training, support), and process (i.e., social support, workload sharing). Described in terms of the model of input-process-output perspective of group effectiveness, the first four themes (i.e., job design, interdependence, composition, and context) deal with inputs to the group (i.e., conditions that exist prior to performance), and the process theme describes those things that go on in the group that impact on the output, which can be defined in terms of group effectiveness or group performance (Campion, et al., 1993; Guzzo and Shea, 1992; Mathieu, Goodwin, Heffner, Salas, & Cannon-Bowers, 2000).

While these models vary to some degree, as indicated by Sundstrom, McIntyre, Halfhill, & Richards (2000), they all incorporate the following four broad categories of factors related to team effectiveness: (a) organizational context; (b) group composition and size; (c) group work

design (i.e., equipment, reporting relationships, autonomy, decision-making authority); and (d) group processes (i.e., cohesion, potency, efficacy).

Key Readings

Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, 46(4), 823-850.

Guzzo, R. A., & Shea, G. P. (1992). Group performance and intergroup relations in organizations. In M. Dunnette & L. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (2nd ed) Vol 3. Palo Alto, CA: Consulting Psychologists Press, Inc.

Tuckman, B. W. & Jensen, M. C. (1977). Stages of small-group development revisited. *Groups and Organization Studies*, 2(4), 419-427.

2.2.6.2 Acculturation

John Berry (2006) outlines a model of acculturation, or the process through which immigrant groups and individuals react to exposure to a new culture. Acculturation can be studied from the perspective of an immigrant joining a dominant culture, or from the perspective of the dominant culture itself. The strategy employed by an immigrant is impacted by the extent to which the incoming individual wishes to take on aspects of the dominant culture while maintaining his/her heritage culture. If immigrants wish to take on aspect of the dominant culture but does not want to maintain their heritage culture they will assimilate into the dominant culture (or, cease to identify with and practice aspects of their heritage culture and instead take on aspects of the dominant culture). If immigrants wish to take on aspects of the dominant culture while also maintaining their heritage culture they will use the strategy of integration (or, they will maintain cultural practices associated with their heritage culture and take on new practices of the dominant culture). If immigrants do not wish to take on aspects of the dominant culture but wish to maintain their heritage culture they will engage in the strategy of separation (or, they will attempt to remain as separate from the dominant culture as possible). If immigrants give up their heritage culture (perhaps because they have been forced to by the dominant culture) and do not take on aspects of the dominant culture they are marginalized from both cultures.

The strategy used by immigrants is likely to be influenced by the strategies of the larger society (or dominant culture). A “melting pot” strategy occurs if the dominant culture expects new ethnocultural groups to take on the dominant culture while giving up their heritage culture. Multiculturalism occurs if the dominant culture allows new ethnocultural groups to become members of the larger society while allowing them to maintain aspects of their heritage culture. Segregation occurs if the larger society does not allow new immigrants to actively participate in the dominant culture but allows them to maintain their heritage culture. Exclusion occurs if the larger society excludes new immigrants from the dominant culture but also does not allow them to practice their heritage culture. Berry suggests that new immigrants can experience various amounts of stress associated with the acculturation process (or, acculturative stress), and suggests that marginalization is the most stressful strategy while integration is the least stressful, while segregation and assimilation fall in between. Berry advocates that integration is the best strategy for immigrant groups and individuals and multiculturalism is the best strategy for larger societies as a whole (for a more detailed discussion see Berry, 2006).

Although designed to refer to ethnocultural groups, this theory can be applied to contexts in which individuals from different organizational cultures meet as well. There may be a dominant

organization within which only a few individuals from other organizations join. When predicting the strategies that individuals or organizations will employ, it is important to assess their philosophies on who should have to change their organizational culture. Is the larger organization willing to let incoming members keep aspects of their organizational culture, or do they expect new members to assimilate to the organization? This will impact whether the dominant organization expects members from other organizations to be included in a multicultural fashion or are expected to assimilate. Are individuals from one organization willing to learn about and adopt practices from the organization they are working with, or do they wish to remain separate from the cultural practices and beliefs of the other organization? For example, if members of NGOs are joining a primarily military operation, the military operation may be unwilling (or unable) to change key aspects of the organizational culture, but might be willing to allow members of other organizations to keep the organizational culture that is found in the NGO. When two cultures come together, it may be more apparent that cultural practices (such as language of communication) must be negotiated, but this need for an acculturation strategy may be less apparent when different organizations come together. Individuals from different organizations may assume their organizational cultures are similar when in fact they are not, which may lead to misunderstandings and potential conflict.

Key Readings:

Berry, J. W. (2006). Acculturative stress. In P. T. P. Wong & L. C. J. Wong (eds) *Handbook of multicultural perspectives on stress and coping*. International and Cultural Psychology Series. Dallas, US: Spring Publications, pp. 287-298.

2.2.6.3 Optimal Distinctiveness Theory

Optimal distinctiveness theory (Brewer, 1991) assumes that individuals have two opposing motivations; a need to be similar to others and a need to be distinct and unique. People will be uncomfortable if they either stick out or blend in too much. Individuals are thus motivated to create optimal distinctiveness; the right blend of fitting in while also being unique. These needs can be met by being a member of a group, but by being a member of a group that is not overly large or inclusive. (For example, youth often form peer groups that dress and act similarly but are very different from main-stream culture, thus meeting the need to fit into a crowd and be different at the same time).

This theory suggests that individuals can choose their social identity depending on the context and their current needs, suggesting the situation can play an important role in determining the defining identity of an individual at any point in time. If individuals believe they are too similar to others or that they are a part of a very large group they may strive to assert their uniqueness, either by focusing on unique characteristics they hold or by focusing on a social identity to which few people belong (e.g., a subgroup). If individuals believe they are too different from others they will strive to become a part of a group or identify more with a group to which they already belong. Individuals will then attempt to advance the interests of this small group.

When individuals work in cross-organizational groups they have many identities with which they could identify. Individuals could identify with the discipline within which they were trained, the original organization that they worked with, the group they are currently working with, or the mission to which they have been assigned. According to optimal distinctiveness theory, individuals will choose to identify with the group that best meets their need to be unique and a part of a group.

Key Readings:

Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475-482.

2.2.6.4 Social Identity Theory

According to research conducted on social identity theory (Tajfel & Turner, 1979) the more an individual identifies with a group, they more likely they are to defend that groups' decisions, the more resources they will allocate to that group vs. others, the more they will focus on positive aspects of that group and negative aspects of other groups, and the more they will act to bolster that groups' status or meet the goals of the group. If, in an inter-organizational context, individuals identify with their particular work group this may lead to positive behaviour such as higher commitment to the group project and increased work productivity. If, however, individuals identify with their previous organization, this may lead to competition between organizations and an attempt to allocate resources based on previous organizational lines, not based on the current goals of the work group. In order to facilitate collaboration among organizations, small work groups with clear goals can be created, meeting individuals' need to be unique from others while also being a member of a group.

Key Readings:

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In H. Tajfel's *Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations*. New York: Academic Press.

2.2.6.5 Culture versus Climate

Culture is often referred to as the psychological life of an organization and is defined as the shared beliefs, values, and ideologies of an organization that are acquired through collective experience and repeated social interactions over time (Schneider, 2000; Trice & Beyer, 1993).

The culture of the CF is driven by its values, which are expressed within the context of the Canadian military ethos (i.e., values, beliefs and expectations that reflect core Canadian values) and include: Duty, Loyalty, Integrity, and Courage (Duty with Honour: The profession of arms in Canada, 2003). The concept of Duty obliges personnel to adhere to lawful authority, while displaying dedication, initiative and discipline. Loyalty is very similar to duty, and requires CF members to support superiors and readily obey lawful commands, but to also display loyalty to comrades across the chain of command. Integrity involves having unconditional commitment to a principles approach, which includes being responsible for one's own actions. Indeed, integrity requires acting with honesty and candour and pursuing the truth, regardless of personal consequences. Courage is both physical and moral, and involves having the strength to make the right choice among difficult alternatives, and to disregard the cost of one's actions in terms of physical difficulty, advancement, or popularity (Duty with Honour: The profession of arms in Canada, 2003).

Climate is conceptualized as pervasive characteristics of organizations, affecting a broad range of decisions, which people use to guide their daily work life (Victor & Cullen 1988). It is similar to culture, however, unlike culture, which is associated with beliefs and values, climate is usually defined as perceived attitudes towards specific aspects of organizational behaviour such as, safety, service, or ethical issues (Schneider, 2000). Researchers have found that organizations with clear ethical norms and strong ethical climates report fewer serious ethical problems, and are

more likely to deal with ethical issues when they arise, compared with organizations that have weaker ethical climate (Bartels, Harrick, Martell, & Strickland, 1998).

Schneider (2000) argued that groups within organizations develop a unique approach and set of rules with regard to decision making that may or may not be in-line with the organizational culture. That is, people's sense of ethical climate is based on their perceptions of organizational practices and norms involving acceptable behaviour in their immediate workplace, and not necessarily the espoused culture (e.g., Duty, Loyalty, Integrity, and Courage. In other words, when assessing ethical climate, members act as observers of the work environment, and use this information to guide their behaviour (Victor & Cullen, 1988). In a study of CF Army personnel, O'Keefe (2004) found that people who perceived the climate of their organization to be weak were more likely to act in a discriminatory and self-serving behaviour.

Key Readings:

Duty with Honour: The profession of arms in Canada. (2003). Published under the auspices of the Chief of the Defence Staff by the Canadian Defence Academy – Canadian Forces Leadership Institute. Kingston, Ontario.

Schneider, B. (2000). The Psychological life of organizations. In N.M. Ashkanasay, C.P.M. Wilderon, & M. F. Peterson (Eds.), *Handbook of Organizational Culture and Climate* (pp. 21-36). London: Sage Publications, Inc.

2.2.7 PERSONAL IDENTITY

2.2.7.1 Values

Values are often the basis on which we form judgments and ultimately act. Interestingly however, there is not one agreed upon definition of values, but there are often defined as basic convictions about what is important to the individual (Robbins & Langton, 2003), personally held, internalized guides in the production of behaviour (McKinney, 1980), and global beliefs that guide judgments and actions across a variety of situations (Schermerhorn, Hunt, & Osborn, 1997). McKinney (1980) argues that values provide the social framework within which judgments are made (e.g., Honesty), that help form moral judgment (e.g., cheating is not being honest thus is wrong), which in turn lead to behaviour (e.g., I would never cheat).

Schwartz and Bilsky, (1987) developed a universal model of human values, which the authors defined as concepts or beliefs that pertain to desirable end states or behaviours. Values are thought to be trans-situational goals that serve as guiding principles for people to use to evaluate the world. Initially conceptualized as eight value domains, Schwartz (1994) postulated ten types of values, which include; Achievement (pursuit of personal success), Benevolence (concern for others in one's life), Conformity (adherence to social norms), Hedonism (personal pleasure and gratification), Power (dominance over others), Self-direction (independent thought), Security (safety and stability), Stimulation (excitement and challenge), Tradition (moderation and preservation), and Universalism (concern for the welfare of others).

Some research suggests that values can serve as a motivational basis for ethical decision making. For example Stangor and Leary (2006) suggests that the motivational basis for Right-Wing Authoritarianism (i.e., socially learned attitude that emphasizes submission to authority and aggressiveness towards outgroups) can be traced to conservatism versus openness-to-change values, while the motivational basis for social dominance orientation (i.e., the degree to which

people promote domination over outgroups) can be traced to self-enhancement versus self-transcendence values.

Key Readings:

McKinney, J. P. (1980). Moral development and the concepts of values. In M. Windmiller, N. Lambert & E. Turiel (Eds). *Moral Development and socialization*. Boston, MA: Allyn & Bacon.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 58, 878-891.

2.2.7.2 Self Awareness Theory

The term self awareness is typically used to refer to the state in which the self is taken as the object of attention, and the term self consciousness is used to refer to the dispositional tendency to consider the self as an object. In accordance with self awareness theory, when people are self-aware their consciousness is focused on their thoughts and feelings, their personal history, their body or other personal aspects of themselves (Durval & Wisklund, 1972). Self aware people are inclined to interpret their actions and remarks in light of salient self-knowledge. Self-referent information is accessible to individuals who are high in dispositional self consciousness.

Self awareness theory delineates between private self awareness and public self awareness. Private self awareness involves a focus on one's inner thoughts, feelings, and motives, whereas, public self-awareness reflects a concern with how one is viewed by others. Individual differences in self-consciousness is assessed with a scale, which is comprised of; private self consciousness factor ("I reflect a lot"), public self-consciousness ("I am usually aware of my appearance"), and social anxiety ("Large groups make me nervous") (Vorauer, Ross, 1999). Increased awareness of one's performance process seems to denote a private self-consciousness, but public self-consciousness may increase one's sensitivity to some situational manipulations of pressure (Baumeister, 1984).

Key Readings:

Baumeister, R (1984). Choking under pressure: Self-Consciousness and Paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, 46(3), 610-620.

Duval, T. S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic.

Vorauer, J., & Ross, M. (1999). Self-awareness and feeling transparent: Failing to suppress one's self. *Journal of Experimental Social Psychology*, 35, 415-440.

2.2.7.3 Self Monitoring

The concept of self monitoring was developed by Snyder (1974) as a self-presentation strategy that involves sending social signals, such as one's appearance, accent, the manner of speaking, and style of interaction. It is an individual difference construct in the extent to which people regulate their self-presentation by tailoring their actions in accordance with situational cues. Behaviour of high self-monitors exhibit more cross-situational variability and is more strongly associated with salient aspects of the proximal perceived environment than the behaviour of low self-monitors (Furnham & Capon, 1983; Lennox & Wolfe, 1984).

High self-monitors, out of concerns for social appropriateness of their behaviour, are especially attentive to cues from others in their immediate social environment as to how they should behave. They are concerned with self-presentation and they use social comparison cues to guide their behaviour (McCann & Hancock, 1983; Snyder & Gangestad, 1986). They are much more likely than low self-monitors to modify their message to suit their audience. Low self-monitors act in accordance with their inner beliefs, attitudes, and feelings, and pay little attention to such social comparison information.

Danheiser and Graziano (1982) investigated how anticipated future social contact acted as a situational moderator between self-monitoring and cooperative behaviour. The authors reported that high self-monitors were more variable cross-situationally in their rates of cooperation and were more contingently responsive to their partners' cooperative responses than were low self-monitors. Specifically, high self-monitors directed more cooperation to a partner for whom they expected future interaction than to a partner for whom they had no such expectation, while the prospect of future interaction did not affect the cooperative rates of the low self-monitor.

In prejudice research, Klein, Snyder, and Livingston (2004) postulated that situational cues are a crucial determinant of prejudice expression, and that prejudicial expression is, in large part, a response to these situationally salient standards. The authors state that individual differences in sensitivity to situational cues, or in concerns with social appropriateness, should chiefly moderate the impact of a situational norm on prejudice expression. In their research, Klein, et al. (2004) reported that high self-monitors expressed less prejudice when addressing a tolerant than a prejudiced audience, and expressed more prejudiced attitudes than low self-monitors in the prejudiced-audience and no-audience conditions.

Key Readings:

Furnham A. & Capon M. (1983) Social skills and self-monitoring processes. *Personality and Individual Difference*, 4, 171–178.

Klein, O., Snyder, M., & Livingston, R. W. (2004). Prejudice on the stage: Self-monitoring and the public expression of group attitudes. *British Journal of Social Psychology*, 43, 299-314.

Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30(4), 526-537.

2.2.7.4 Self-Regulatory Focus Theory

Self-regulatory focus theory explains behaviour as being either promotion focus or prevention focuses. In promotion focus self-regulatory process, peoples' growth and development needs motivate them to try to bring themselves into alignment with their ideal selves, thereby heightening the salience (felt presence or absence) of positive outcomes. In prevention-focused self-regulatory focus people's security needs prompt them to attempt to bring themselves into alignment with their ought selves thereby increasing the salience (felt absence or presence) of negative outcomes.

Self-regulatory theory posits that transformation (transactional) leaders may elicit more of a promotion (prevention) focus in their followers. It argues that transformational and transactional leaders also may differ in the psychological states they elicit in others, in particular, the regulatory focus of their followers.

Key Readings:

Brockner, J. & Higgins, E.T. (2001). Regulatory Focus Theory: Implications for the study of emotions at work. *Organizational Behaviour and Human Decision Processes*, 86(1), 35-66.

Higgins, E. T. 1998. Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1–46.

2.2.7.5 Impression Management

Impression management (IM) is defined as self-presentation tailored to a specific audience, or a tendency to present one's actions in such a manner so as to control the social images that one projects to particular target (Paulhus, 1984; 1988). IM occurs when people act or respond in a way that they believe is most likely to best reflect how they would like to be perceived (Davies, Norris, Turner, & Wadlington, 2005). People manage their public image in many situations, such as when applying for employment (Chen, Yang, & Lin, 2010), engaging in organizational citizenship behaviours (Bolino, 1999; Halbesleben, Bolino, Bowler, & Turnley, 2010), or in establishing a positive social identity in general (Iedema & Poppe, 1994). People who are high in IM do not claim to be good at everything, but rather focus on presenting a favourable self-image within the given context (von Hippel et al., 2005). Indeed, some research suggests that people will present themselves in a negative light if they think that the targets of their public image (e.g., their immediate supervisor) value or support such behaviour (Leary & Kowalski, 1990).

Several research studies have reported significant relationships between IM and self-report unethical behaviour such as, academic cheating (Jackson, Furnham, Levone, & Burr, 2002; Randall & Fernandes, 1991; Zimny, Robertson, & Bartoszek, 2008), personal cheating (e.g., infidelity: Zimny et al., 2008), and lying in a job interview (Weiss & Feldman, 2006). Paulhus (2002) reported that although IM was significantly correlated with some personality constructs (e.g., conscientiousness and agreeableness), it might be more state-like than trait-like because of its sensitivity to situational demands, thus asserting that contextual factors may affect the relationship between IM and reporting undesirable behaviour. O'Keefe, MacIntyre and Charbonneau (in progress) argue that people high in IM might report past unethical behaviour if they thought they would gain favour in a particular situation or current context (e.g., working for an unethical leader), thus asserting the importance of leadership in curbing unethical behaviour of followers.

Key Readings:

Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598-609.

Paulhus, D.L., & Reid, D.B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, 60, 307-317.

2.2.7.6 Self Presentation Theory

Self-presentation theory argues that people use both situational and dispositional factors to manage how they construct their public image (Leary & Allen, 2011; Leary & Kowalski, 1990). In postulating the theoretical underpinnings of how people present themselves in public, Leary and Kowalski (1990) presented a two-component model of impression management - impression motivation and impression construction, which accounts for why people are concerned with others' impression of them (motivation), and why people adopt one impression management tactic over another (construction). Impression motivation is the degree to which people are

motivated to control their public image, and impression construction deals with how people go about making the impression (Leary & Allen, 2011).

Impression motivation stems from the desire to maximize rewards and minimize punishments. It involves the motivation to convey the right impression that will increase the likelihood that one will obtain desired outcomes, such as approval from one's immediate supervisor. One factor in impression motivation is the goal-relevance of impressions that involves the degree to which people are motivated to fulfill one or more goals, which can be affected by the individual's dependency on the target (Leary & Kowalski, 1990). People are often motivated to manage their self-image for targets who are powerful or of high status.

Impression construction deals with both intrapersonal and interpersonal variables. One intrapersonal variable is self-concept, which is the degree to which one selects specific aspects of oneself (either positive or negative) to portray in a particular situation. This self-concept is often tempered by interpersonal variables such as, the values of the target, one's social image, and role constraints (Leary & Allen, 2011; Leary & Kowalski, 1990). On the one hand, it could be argued that perhaps people tailor their social image to suit the values of an intended target, and may indeed even present themselves in a negative image if they felt it would gain favour from the intended target. On the other hand, perhaps people are governed by role constraints that involve the expectations regarding how one ought to behave. Moreover, people may portray a social image that they think is currently regarded by others, and are reluctant to present themselves in ways that are inconsistent with their social identity.

Key Readings:

Leary, M. R., & Allen, A. B. (2011). Personality and Persona: Personality Processes in Self-Presentation. *Journal of Personality* 79:6, 889-916.

Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34-47.

2.2.7.7 Moral Development

Kohlberg (1971) described moral development in terms of three broad levels, each comprised of two stages. In the first level (Preconventional), moral decision making is based on punishment and obedience orientation (Stage One), and one's hedonistic needs to satisfy one's own needs (Stage Two). In the second level (Conventional), moral decision making is based on the need to 'live up to' the expectations of others (e.g., family, peer group or the nation), and comprised of stages that involve the 'Good-boy/nice-girl orientation' (Stage Three), and the 'Law and Order orientation' (Stage Four). The third level of Kohlberg's moral development is the Postconventional level, which involves morality based on abstract principles. Stage Five in this level is the 'Social Contract' and is based on the principle of utilitarianism, and Stage Six is the orientation of universal ethical principles. Kohlberg places most adults in our society in Stages three or four, and as such, are susceptible to the influence of contextual variables.

Key Readings:

Kohlberg, L., & Hersh, R. H. (1977). Moral Development: A review of the theory. *Theory into Practice*, 16(2), 53-59.

2.2.8 DECISION MAKING

2.2.8.1 Planning Fallacy

When people predict the length of time it will take them to complete a project, they consistently underestimate the actual completion time. This effect is known as the planning fallacy. This underestimation of completion time is a robust effect that occurs regardless of the experience of the predictor (if they have completed similar projects in the past) or the importance of the task (Buehler, Griffin & Ross, 1994). The planning fallacy is particularly strong for group tasks. Individuals working together in a group are less accurate in their time predictions than individuals making predictions alone. The planning fallacy is a robust effect and is difficult to correct. However, predictions of task completion do tend to be more accurate if the predictions are made by the individuals within the group rather than through group consensus (Buehler, Messervey & Griffin, 2005). Segmenting the task also increases prediction accuracy. People are more accurate in their estimations of the time it will take to complete sections of the task rather than the project in its entirety (Krueger & Evans, 2004).

Key Readings:

Buehler, R., Messervey, D., & Griffin, D. (2005). Collaborative planning and prediction: Does group discussion affect optimistic biases in time estimation? *Organizational Behavior and Human Decision Processes*, 97, 47-63.

2.2.8.2 Groupthink

Groupthink is a way of thinking that characterizes group decision making when a group is focused on seeking concurrence. Groupthink occurs when the seeking of concurrence interferes with the consideration of decision alternatives (Flowers, 1977).

There are 2 major types of symptoms of group think: compliance and reinforcing processes (Henningesen, Henningesen, Eden & Cruz, 2006). Compliance processes occur when individuals go along with the group regardless of their own beliefs. Such processes include the suppression of alternative opinions (Henningesen et al., 2006). Individuals will self-censor, keeping any doubts about the decision to themselves. Members of the group will also censor each other, putting pressure of the group as whole to squelch any dissenting views from being expressed (McCauley, 1989; Moorhead & Montanari, 1986). This self-censorship is associated with biased perceptions of the outgroup – perceiving the enemy (if there is one) as weak and incompetent, and underestimating the intelligence of the opponent (Flower, 1977).

Reinforcing processes occur when individuals agree with the group and strengthen these beliefs through group interactions (Henningesen et al., 2006). As the group works together they become increasingly convinced in the strength and morality of the group and its decisions. Members begin to believe in the invulnerability of the group. This perception of invulnerability becomes associated with greater risk taking. The group also comes to increasingly believe in the morality and justice of the group's actions. All of these reinforcing processes in turn increase conformity within the group (Flowers, 1977).

Reinforcing processes are associated with decision confidence. The more people agree with their group and perceive their group as invulnerable, morally just, and right, the more confident they are in the group's decisions. The more compliance processes are at work (people are pressured into agreeing despite their private doubts) the less confidence any individual member will have in the decisions of the group (Henningesen et al., 2006).

Groupthink tends to occur when a group becomes insular and has little input from outside sources. Groupthink is also more likely to occur when the leader of the group has a directive leadership style. When the leader presents his/her position first and does not encourage dialogue, discussion of alternative options is less likely to happen (Flower, 1977). Group norms also influence whether groupthink occurs. The presence of norms emphasizing task cohesion and group unanimity increases groupthink. Norms specifying methodological procedures decrease the likelihood of groupthink (McCauley, 1989). Groupthink is also more likely to occur in crisis situations when the group believes that important decisions need to be made quickly.

Not all of the decisions made under conditions of groupthink are bad. If a simple decision needs to be made quickly, groupthink processes can facilitate the making of the decision. To the extent that the leader's proposed solution is the best, groupthink will also lead to good decisions. However, when the decision is complex and a proper decision requires the pooling of information from different individuals within the group, the processes of groupthink can be problematic. Decisions in groupthink situations tend to be poorly conceived because the members of the group do not share privately held information freely. Rather decisions tend to be made based on the knowledge of the leader alone, or based on the shared knowledge of the group. This can lead to poorly informed decisions. There is also less formulation and consideration of alternatives in groupthink conditions (Henningesen et al., 2006).

Key Readings:

Flowers, M. L. (1977). A laboratory test of some implications of Janis's groupthink hypothesis. *Journal of Personality and Social Psychology*, 35, 888-896.

Henningesen, D. D., Henningesen, M. L. M., Eden, J., & Cruz, M. G. (2006). Examining the symptoms of groupthink and retrospective sensemaking. *Small Group Research*, 37, 36-64.

2.2.9 GROUP BEHAVIOURS

2.2.9.1 Organizational Citizenship Behaviour

Organizational citizenship behaviour (OCB) is voluntary, informal behaviour that contributes to organizational effectiveness. It is positive behaviour that usually is; voluntary (i.e., not dictated by job description); spontaneous (i.e., not suggested by anyone); contributes to organizational effectiveness; and is unlikely to be formally rewarded (Borman & Motowildo, 1993; Kelloway, Catano, & Day, 2011).

Research studies have found that OCB has been linked to job satisfaction (Ilies, Spitzmuller, Fulmer, & Johnson, 2009), leadership behaviour (Organ & Rayn, 1995) organizational commitment (Meyer, 1997), and organizational justice (Skarlicki & Latham, 1996). There is some research that suggests that one's personality may be a driving factor in whether one engages in OCBs. For example, personality factors such as agreeableness (i.e., being likeable and friendly) and conscientiousness (the drive to achieve) have been shown to be related OCB (Organ, Podsakoff, & MacKenzie, 2006). However, other research suggests that there is not a direct link between personality and OCB, but rather that job satisfaction mediates the relationship between personality and OCB, such that personality is directly related to job satisfaction, which in turn is related to OCB (Ilies et al, 2009).

Key Readings:

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. in N. Schmitt & W. C. Borman (Eds), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.

Ilies, R., Spitzmuller, M. Fulmer, I. S., & Johnson, M. D. (2009). Personality and citizenship behavior: The mediating role of job satisfaction. *Journal of Applied Psychology, 94*(4), 945-959.

Organ, D. W. (1988). *Organizational Citizenship Behavior*. Lexington, MA: Lexington Books.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage Publications.

2.2.9.2 Cooperation

Cooperation includes any behavior which is enacted to benefit another individual (the recipient). Cooperation often involves supporting a group goal over a personally beneficial choice. In social dilemma situations, an individual must choose how much of a scarce resource to use. If they choose to take a larger portion of the resource (e.g. funding), then there will be less for the other members of the group. If all (or many) of the members of the group behave similarly then the resource may be depleted. If the individual cooperates and takes a smaller portion of the resource, then there will be more of the resource for the other members of the group. If all (or most) of the group members cooperate then all will receive a fair portion of the resource and the resource itself can be maintained. If members do not cooperate then some members of the group will not receive the resources that they need, and the resource itself may be depleted (Kopelman, Weber & Messick, 2004).

Fortunately, most people operate under a norm of conditional cooperation. (Fehr & Fischbacher, 2004). They believe that people should cooperate with others as long as others cooperate with them. If a member (or members) of the group refuses to cooperate then most people view this as a legitimate excuse for non-cooperation. Otherwise, however, most people will cooperate with the group to at least some extent. Although the majority of people will conditionally cooperate in group situations, some individuals are consistent free riders and will only cooperate under the right situation. For most other individuals their levels of cooperation (i.e. the amount of resources they are willing to allocate for the good of the group) will vary depending on the situation, and will often decline over time (Fehr & Fischbacher, 2004). The degree to which they cooperate and continue to cooperate over repeated interactions will depend on a variety of factors including social motives, identification with the group, payoffs, power and status, group size and communication.

People differ in the kinds of chronic goals (social motives) that they tend to pursue. Some individuals are more motivated by prosocial goals (e.g. altruism) and others by more pro-self goals (e.g. competition). Individuals who are motivated by pro-self goals tend to be less cooperative. People with more prosocial motivations tend to view cooperation (or non-cooperation) along a moral dimension: cooperation is right and non-cooperation is wrong. People who are more motivated by more pro-self goals take a more pragmatic view of cooperation. If cooperating fulfills their pro-self goals, then they will cooperate. If cooperation does not fulfill those goals then they will not cooperate (Kopelman, Weber & Messick, 2004).

Individuals, in general, are more likely to cooperate with people with whom they share a common social identity (Goette, Huffman & Meier, 2006). Individuals are more likely to cooperate with perceived group members. To the extent that an individual views the other people as being group

members than that individual is more likely to cooperate with them. However, individuals are also more likely to punish group members with whom they share a common identity for not cooperating. It seems more of a betrayal if an in-group than an out-group member is non-cooperative (Goette, Huffman & Meier, 2006).

Payoffs (rewards and punishments) can also affect cooperation. Reward interdependence (rewards that benefit the group rather than the individual) can increase performance on interdependent tasks (Wageman & Baker, 1997). Sanctions for non-cooperation can decrease free-riding. People are more likely to cooperate if the contributions and identity of each group member is public knowledge. This is particularly true if the group members share some form of social identity (Fehr & Fischbacher, 2004).

Power imbalances can decrease cooperation. People are more likely to focus on their own self-interests when they are aware that power is unequally distributed within the group. In this situation, individuals are more likely to form coalitions within the larger group. Imbalances of power tend to foster competition between these coalitions rather than cooperation within the group as a whole (Kopelman, Weber & Messick, 2004).

Finally the size of a group and the communication within the group can also affect cooperation. Smaller groups tend to lead to greater cooperation (Kopelman, Weber & Messick, 2004). Groups with better communication are also more likely to cooperate. The effect of communication on cooperation depends on both the amount and the type of communication. The more groups communicate the more cooperative the group members are. Similarly groups that communicate face to face tend to be more cooperative than groups that communicate through other mediums (e.g. email) (Balliet, 2010).

Key Readings:

Dolšak, P. C. Stern, S. Stovich & E. U. Weber (Eds.), *The Drama of the Commons*. Washington, DC: National Academy Press.

Fehr, E., & Fischbacher, U. (2004). Social norms and human cooperation. *Trends in Cognitive Sciences*, 8, 187-190.

Kopelman, S., Weber, J. M., & Messick, D. M. (2002). Factors influencing cooperation in commons dilemmas: A review of experimental psychology research. In E. Ostrom, T. Dietz, N.

2.2.9.3 Trust

Trust is a complex psychological state that involves both cognitive and affective components. When interacting with another person, there is a risk that that person's motives and behaviors might be detrimental to the self. Trust involves overcoming that uncertainty and believing that an individual's intentions are good. Trust is integral to effective group interactions. Individuals are less likely to make negative attributions about group members' motives when there is trust. People engage in more pro-social behavior when they trust their group members. They are also more likely to cooperate and less likely to overuse scarce resources. Trust in the system is also crucial. When a conflict arises, trust in the procedures can influence the successful resolution of the conflict (Kramer, 1999).

There are two major sources of trust: history of trust and presumptive trust. People develop a history of trust with other individuals (Kramer, 1999). As they interact with another person, and observe their behavior across multiple situations an individual begins to develop a trust (or

distrust) of that person. However, people can also trust even when in the absence of any personal interactions. Research has found that trust develops quickly even in short term online virtual groups. The trust demonstrated in these short term working groups is not based on any personal interactions with the team and is considered a kind of presumptive trust.

Presumptive trust develops from a variety of sources including reputation, category membership, role and belief in the system (Kramer, 1999). When working with someone for the first time, individuals often rely on a person's reputation as a substitute for personal experience. If 3rd party sources indicate that a new group member is trustworthy then that individual is more likely to be trusted (Kramer, 1999).

However, even in the absence of any outside information, individuals can develop trust based on the person's category membership. People are more likely to trust individuals who are members of their in-group. Even if they have never previously met, an individual is more likely to trust someone from their own university, church, or club than someone from a different group. People tend to ascribe more positive motives to fellow in-group members, assuming that in-group members are more likely to have the individuals' best interests at heart (Foddy, Platow & Yamagishi, 2009). Some categories of people are also trusted more than others. Men, for example, tend to be trusted less than women by people of both genders (Kramer, 1999).

The role of an individual within the group can also engender trust (Kramer, 1999). People trust the accountant within a group to understand and manage money. Many temporary working groups such as film crews function largely on the basis of role-based trust. Each individual in the crew knows their own role and the roles of the other crew members. Even though some members have never worked together before, the groups function because they trust that each other individual will fulfill their mandated role (Bechky, 2006). In other groups, trust is presumed because the individual believes in the effectiveness of the system. If a trusted leader or system has assigned a member to the team, then that member is presumed to be trustworthy (Kramer, 1999).

Over time as individuals interact presumptive trust is replaced by a history of trust. As people interact, they come to trust or distrust team members based on their experiences with those individuals (Hong, Dennis & Robert, 2004). Of course all of the factors that influence presumptive trust (reputation, category, role and system) can also engender distrust. If there is presumptive distrust within a group, it is much more difficult to develop a history of trust through interpersonal interactions. Suspicion tends to lead to negative attributions of behavior. People who distrust each other initially are less likely to interact in ways that create a history of trust (Kramer, 1999).

As reported by Dirks (1999), some trust-related research points towards the main effect of trust on work group processes and performance. For example, Costa (2003), in a study of 112 teams in three social care institutions in the Netherlands, reported that trust was positively related to attitudinal commitment, but negatively related to continuance commitment. However, other research investigating the relation between trust and team performance have produced mixed results, and suggests that trust may impact performance both directly and indirectly through team processes (Dirks, 1999).

Several conceptual papers (Das & Teng, 1998; Jones & George, 1998) suggest that trust can lead to cooperative behaviour in organizations, which in turn leads to effective team performance. As part of a conceptual model of trust and control in strategic alliances, Das and Teng, (1998), postulated that trust building (e.g., risk taking, equity preservation, communication) and control mechanisms (e.g., goal setting, cultural blending) act as antecedents to trust, which in turn impact on confidence in cooperation.

Jones and George (1998) examined how differences between conditional trust (i.e., a state of trust in which both parties are willing to transact with each other as long as both parties behave appropriately) and unconditional trust (i.e., each parties' trustworthiness is assured based on confidence in the other's values) impact on the level of cooperative behavior within teams, and associated performance in groups. The authors proposed that although both conditional and unconditional trust may result in cooperation and teamwork, the nature of the cooperation would be different under these two forms of trust. Specifically, they conceptualized that unconditional trust can directly impact on interpersonal cooperation and teamwork, but can also indirectly affect team effectiveness through relations with a number of team processes such as; role definition, communal relationships, confidence in others, free exchange of knowledge, subjugation of personal needs for common good, and high involvement.

In a study investigating a number of possible antecedents and outcomes of trust, Porter and Lilly (1996), using a sample of 464 undergraduate students comprising 85 teams, reported that group task commitment had a positive influence on the group's level of trust, and that trust had a positive impact on task processes (i.e., ability to identify task objectives, prioritize, and develop a work plan) and a negative influence on group conflict. Conflict, in turn had a negative impact on team performance. These results led the authors to conclude that trust is important to consider in the study of team performance, not because of its direct influence on performance, but because it influences team processes, which in turn influence team performance.

Another study, using 252 MBA students comprising 67 teams, investigating the relation between trust, conflict and team performance (Petersen & Behfar, 2003), reported that intragroup trust was negatively related to team conflict and this relation maintained significant, but reduced in magnitude over time (i.e., a 4 week period). The same study reported that intragroup trust moderated the relation between task conflict at Time 1 and relationship conflict at Time 2, such that these forms of conflict were less related when trust was high. The authors conclude by saying that when these results are taken together, that intragroup trust is a key ingredient for addressing early conflict within a team, which impacts on conflict in teams as they develop.

Other research studies have investigated conditions under which the relation between trust and work attitudes (i.e., another form of team processes) is more or less pronounced. Brockner, Siegel, Day, Tyler, and Martin (1997) investigated the conditions that influenced the relation between employees trust in organizational authorities and work attitudes and behaviours. In three separate studies, the authors found that the relation between trust and support for supervisors was stronger when outcomes were perceived as relatively unfavorable (i.e., overall favorability of outcomes associated with their supervisor's decisions). These results led Brockner et al. (1997) to conclude that when outcomes are unfavourable, people are motivated to determine whether the other party can be trusted, and that procedural fairness may be one factor that people use when making inferences about the trustworthiness of the other party.

Key Readings:

Das, T. K., & Teng, B-S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review*, 23(3), 491-512.

Dirks, K. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology*, 84(3), 445-455.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23(3), 531-546.

Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569-598.

2.2.9.4 Social Loafing versus Social Facilitation

Social loafing is the tendency to withhold physical or intellectual effort when performing a group task. It occurs when individual's contributions are pooled on a group project, leading individuals to contribute less than they would if they were working on their own. Socially loafing has been found to being negatively related to group cohesion and team efficacy and performance. (Mulvey & Klein, 1998). The concept of social facilitation postulates that the performance of individuals engaging in group work is not always dampened, and that sometimes group work can be facilitated by collaborating with others and the group can produce more than individuals working on their own (Sanna, 1992).

The ease of the task and the anxiety level caused by the task influences whether social loafing or facilitation occurs. When individual contributions are pooled, social loafing is possible. This is especially likely for easy tasks that produce low anxiety. When the task at hand produces a high level of anxiety, however, pooling contributions can actually reduce anxiety levels and performance can increase. When individual contributions to the group task can be monitored (and the task is easy and causes low levels of anxiety) performance can actually be improved by working in a group. When contributions can be monitored (but the task causes high anxiety) then performance may decrease (Karau & Williams, 1993). Ways to counteract social loafing include; ensure individual performance is more visible; ensure sure that the work is interesting; increase feelings of indispensability among team members; increase performance feedback; reward group and individual performance (Johns & Saks, 2005; Karau & Williams, 1993)

Key Readings:

Johns, G., & Saks, A.M. (2005). *Organizational behaviour: Understanding and managing life at work* (6th ed.). Toronto: Prentice Hall.

Karau, S. J. & Williams, K. D. (1993). Social Loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology*, 1993, 65(4), 681-706.

Mulvey, P. W. & Klein, H. J. (1998). The impact of social loafing and collective efficacy on group goal processes and group performance. *Organizational Behavior and Human Decision Processes*, 74(1), 62-87.

2.2.9.5 Organizational Justice

Researchers have been active in developing a strong theoretically- and empirically-grounded understanding of the types of justice, as well as identifying a number of antecedents and outcomes of justice.

The first wave of organizational justice research involved the development of the concept of distributive justice (i.e., the degree to which one expects his/her profits or outcomes to be proportionate to his/her investments). It was initially based in part on social exchange theory developed by Blau in the 1960s, which postulated that the actions of people are motivated by the returns that they expect to receive. In the 1970s, Adams added to the theory by arguing that whether people feel as if they are being treated fairly does not depend solely on social exchange, but also on the relevance of one's inputs and outputs (i.e., equity). Indeed, equity theory states

that when people feel inequity, they are motivated to reduce these unpleasant feelings by altering the input versus output ratio by either increasing one's outcomes or reducing one's input (Colquitt, Greenberg, & Zapata-Phalen, 2005).

The concept of relative deprivation added to equity theory and postulated that people's reactions to outcomes depend not only on the absolute level of the outcomes, but also on how their inputs and outcomes compared with those of a comparison group. As such, when people feel inequity they are motivated to reduce their inputs or increase their outcomes, or alternatively, alter the inputs or outcomes of their comparison group in order to restore equity (Colquitt, et al., 2005; Tyler, Boeckmann, Smith, & Huo, 1997).

The second wave of justice research, conceptualized by Thibault and Walker in the 1970s, spawned procedural justice (i.e., the degree to which people feel as if the procedures used in decision making are fair). Factor analytic studies (Alexander & Ruderman, 1987) produced three factors of procedural justice, which included process control, correctability, and global process fairness. In the 1980s, Leventhal expanded on these three factors and postulated six rules of procedural justice, which included; consistency (i.e., procedures are consistent across people and time), bias suppression (i.e., procedures should not be affected by personal self-interest), accuracy (i.e., procedures should be based on valid and accurate information), correctability (i.e., procedures must be able to be justifiability modified), representativeness (i.e., procedures must reflect the needs of the groups and individuals concerned), and ethicality (i.e., procedures must be based on moral and ethical guidelines) (Colquitt, et al., 2005; Lind & Tyler, 1988).

A third wave of organizational justice was conceptualized by Bies and Moag (1986) and involves Interactional Justice (i.e., the quality of interpersonal treatment people receive as procedures are enacted). Bies and Moag argued that interactional justice differs from procedural justice in that interactional justice involves the social enactment of the procedures, while procedural justice involves with the development of the procedures themselves. In developing interactional justice, Bies and Moag (1986) postulated the following four factors that govern the fairness of interpersonal treatment; truthfulness (i.e., being open and honest), justification (i.e., provision of adequate explanations), respect (i.e., treating people with sincerity and dignity), and propriety (i.e., refraining from making prejudicial statements).

Numerous studies have investigated outcomes of justice. In fact, several researchers have reported that procedural justice may be an important predictor of organizational outcomes, such as organizational commitment and trust in supervisor, and distributive justice may be an important predictor of personal outcomes, such as satisfaction with pay. For example, Folger and Konovsky (1989) reported that in a survey of reactions to pay raise decisions of 217 first-line employees in a manufacturing plant, that distributive justice accounted for more satisfaction with pay than did procedural justice, but that procedural justice accounted for more organizational commitment and trust in supervisor, compared with distributive justice (commitment and trust, respectively). McFarlin & Sweeney (1992) reported that distributive justice was related to personal outcomes such as, pay satisfaction and job satisfaction, and that procedural justice was related to organizational outcomes, such as organizational commitment. Skarlicki and Folger (1997) reported significant correlation coefficients between organizational retaliation behaviour (ORB) and distributive justice, but higher correlations between ORB and procedural justice, and interactional justice. However, the delineation of procedural justice as being an important predictor of organizational outcomes, and distributive justice as being an important predictor of personal outcomes is not consistent across all research.

Key Reading:

Colquitt, J. A., Greenberg, J. M., & Zapata-Phelan, C. P. (2005). History of organizational justice. In J. Greenberg, & J. Colquitt (Eds.), *Handbook of Organizational Justice* (pp. 12-20), Mahwah, NJ: Erlbaum.

2.2.9.6 Organizational Commitment

Organizational commitment is often described as a psychological contract between the worker and the organization, which reflects workers' identification with and connection to a particular organization (Fiorito, Bozeman, Young, & Meurs, 2007). Originally developed as an individual's emotional attachment to an organization (Mowday, Steers, & Porter, 1979), Meyer and Allen (1991) conceptualized organizational commitment as having three distinct components; affective commitment (i.e., the emotional attachment), continuance commitment (i.e., perceptions of costs of leaving the organization), and normative commitment (i.e., a feeling of obligation to the organization).

Organizational commitment has been linked to job satisfaction, work performance, career intention and organizational citizenship behaviour (OCB), such that employees with higher affective and normative commitment reported greater job satisfaction (Walumbwa, Orwa, Wang, & Lawler, 2005; Yousef, 2002), were absent less often from work (Burton, Lee, & Holtom, 2002), had lower intentions to leave the organization (Jaros, 1997), and engaged in more OCB (Mathieu & Zajac, 1990). In contrast, workers with higher continuance commitment reported lower job satisfaction (Yousef, 2002), and engaged in less OCBs (Allen & Meyer, 1996).

There is some research that has investigated the link between leadership and organizational commitment. In research in a military setting, Karrash (2003) found that affective and normative commitment was positively correlated with perceptions of leadership ability, while continuance commitment was negatively correlated with perceptions of leadership ability. Walumbwa, et al. (2005) reported a significant and positive correlation between transformational leadership and organizational commitment (using the unitary concept of organizational commitment as postulated by Mowday, et al, 1979, which is similar in nature to affective commitment), and this significant relation was similar across two distinct cultures (i.e., Kenya and United States). Wang and Walumbwa (2007) found that transformational leadership had a moderating effect on the relation between working conditions (i.e., family-friendly work programs) and organizational commitment, such that when the supervisor was assessed as being more transformational, the relation between working conditions and affective commitment was significant and positive. In contrast, when the supervisor was rated as less transformational, the relation between work conditions and affective commitment was not significant. However, to date, no research has investigated the link between organizational commitment and unethical behaviour in the workplace. As well, as stated above, there is no research that has investigated the mediating effect of organizational commitment between the relation between perceptions of leadership and unethical behaviour of subordinates.

Key Readings:

Karrash, A. I., (2003). Antecedents and consequences of organizational commitment. *Military Psychology*, 15 (3), 225-236.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 372-378.

2.2.10 MOTIVATION

Motivation is the willingness of exert effort to accomplish a goal to satisfy some individual need. It can involve psychological processes, such as arousal (i.e., unfulfilled need between one's current and desired state), direction (i.e., the focus of the arousal), and intensity (i.e., the importance and attainability of the goal; Muchinsky, 2003; Kelloway, Catano, & Day, 2011). Motivation can be categorized as intrinsic motivation (i.e., motivation that stems from within), and extrinsic motivation (i.e., motivation that stems from some external reward: Ryan & Deci, 2000).

2.2.10.1 Theories of Motivation

There are two main types of motivation theories; (1) Needs theories and (2) Process theories. Needs theories strive to identify the needs that people have and the conditions under which they will be motivated to satisfy these needs. Examples of Needs theories are Maslow's hierarchy of needs, and McClelland Acquired Needs Theory. Process theories strive to identify how motivation occurs. Examples of Process theories are Adams Equity theory, and Ryan and Deci's Self-Determination theory.

Maslow's Needs theory involves five hierarchical levels of needs (i.e., physiological, safety, belongingness, self-esteem, and self-actualization) that we all strive to obtain. The premise behind Maslow's theory is that behaviour is dominated by unfilled needs, people start at the basic need (i.e., physiological) and work up, and lower order needs take precedence over higher order needs. McClelland's Needs theory involves three non-hierarchical needs (i.e., achievement, power, and affiliation) that serve as motivation for behaviour.

Unlike Maslow's theory, McClelland argues that people may not be motivated to fulfill all three types of needs, but just those needs that are of importance. For example, one could have a strong need for achievement and thus strive for perfection in school or training courses, but have a low need for power and therefore not seek out positions of authority. The common theme in Needs theories of motivation is that leaders must appreciate diversity and be adept at evaluating the needs of individual employees and offer incentive that appeal to these needs (Muchinsky, 2003; Kelloway, Catano, & Day, 2011).

Adam's Equity theories postulate that motivation stems a comparison of the inputs that one invests in an activity and the outcome one receives from that input in comparison to a referent other. When the ratio of the output that one receives versus the input is similar to a referent other, then there is perceived equity. When the ratio of the output that one receives versus the input is less than that of a referent other than perceived negative inequity exists and we are motivated to act in such a manner to reduce this inequity. This can be accomplished behaviourally by reducing one's input or outputs or, or cognitively by adjust one's perception of the inputs and outputs, or choosing a different referent.

In explaining the Self-Determination Theory (SDT) approach to human motivation, Ryan and Deci (2000) postulated three innate needs – competence, autonomy, and relatedness – that foster intrinsic motivation, which are essential for social development and personal well-being. As outlined by the authors, research has produced strong links between intrinsic motivation and the needs for autonomy and competence, but the findings aren't as clear for relatedness. SDT hypothesizes that intrinsic motivation will flourish in contexts where there is security and relatedness, and the authors use the example of how the feedback from adults can impact on the

observed intrinsic motivation of children. While they make the statement that intrinsically motivated behaviours can occur in isolation, they argue that a secure relational base is important for the development of intrinsic motivation (i.e., feedback from significant others is an important element for relatedness).

Key Readings:

Kelloway, E.K., Catano, V. M., and Day, A.L. (2011). *People and Work in Canada*, Nelson Canada: Toronto.

Muchinsky, P. M. (2003). Work motivation. In *Psychology applied to work* (7th ed.) (Chapter 12, pp. 372-411). Belmont, CA: Wadsworth/Thompson.

Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.

2.3 CONCLUSION

This paper has provided an overview of a number of theories drawn from social psychology which be of use in exploring the concepts and hypotheses presented in the original work by Okros Under the broad groupings of: Influence and Persuasion; Affect; Assumptions/Judgment; Information Processing; Role Confusion; Groups and Group Dynamics; Personal Identity; Decision Making; Group Behaviour; and Motivation; the various theories and illustrative studies have been briefly presented along with selected key readings. The intent is to highlight different theories and concepts which may be of use in developing specific testable hypotheses hence an applied research programme to investigate the implications of the broad hypotheses presented in Okros et al, particularly in the Section 6.2 discussion of future research.

BIBLIOGRAPHY

- Abbott, A. (1988) *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: The University of Chicago Press.
- Adorno, T. W., Frenkel-Brunswik, E, Levinson, D. J., & Sanford, R N. (1950). *The Authoritarian Personality*. New York: Harpers and Brothers.
- Alexander, S. & Ruderman, M. (1987), The role of procedural and distributive justice in organizational behavior, *Social Justice Research, 1*: 177-98.
- Allen, N.J. & Meyer, J.P. (1996) Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior, 49*: 252 – 276.
- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.
- Altemeyer, B. (1996). *The Authoritarian Specter*. Cambridge: Harvard University Press.
- Altemeyer, B. (2004). Highly dominating, highly authoritarian personalities. *Journal of Social Psychology, 144*(4), 421-447.
- Ang, S., Van Dyne, L., Koh, C., Ng, K.L., Templer, K.J., Tay, C., Chandrasekar, N. A. (2007). Cultural Intelligence: Its Measurement and Effects on Cultural Judgment and Decision Making, Cultural Adaptation and Task Performance. *Management and Organization Review 3*:3 335–371.
- Australian Public Service Commission (2004). *Connecting Government: Whole of Government Responses to Australia's Priority Challenges Good Practices Guides*. Management Advisory Committee Report 4, Canberra, Department of Communications, Information Technology and the Arts.
- Balliet, D. (2010). Communication and cooperation in social dilemmas: A meta-analytic review. *Journal of Conflict Resolution, 54*: 39-57
- Bartels, K.K., Harrick, E., Martell, K. & Strickland, D. (1998). The Relationship Between Ethical Climate and Ethical Problems Within Human Resource Management. *Journal of Business Ethics 17* (7):799-804.
- Baumeister, R (1984). Choking under pressure: Self-Consciousness and Paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology, 46*(3), 610-620.
- Baumeister, R. F., Chesner, S. P., Senders, P. S., & Tice, D. M. (1988). Who's in charge here? Group leaders do lend help in emergencies. *Personality and Social Psychology Bulletin, 14*(1), 17-22.
- Bechky, B. A. (2006) Gaffers, Gofers, and Grips: Role-Based Coordination in Temporary Organizations. *Organization Science, 17*(1): 3-21.

- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155-162.
- Berry, J. W. (2006). Acculturative stress. In P. T. P. Wong & L. C. J. Wong (eds) *Handbook of multicultural perspectives on stress and coping*. International and Cultural Psychology Series. Dallas, US: Spring Publications, pp. 287-298.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiations in organizations* (Vol. 1: pp. 43–55). Greenwich, CT: JAI Press.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *Academy of Management Review 24*(1): 82-98.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. in N. Schmitt & W. C. Borman (Eds), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*(5), 475-482.
- Brockner, J. & Higgins, E.T. (2001). Regulatory Focus Theory: Implications for the study of emotions at work. *Organizational Behaviour and Human Decision Processes, 86*(1), 35-66.
- Brockner, J., Siegel, P.A., Daly, J.P., Tyler, T., & Martin, C. (1997). When trust matters: The moderating effect of outcome favorability. *Administrative Science Quarterly, 42*: 558-583.
- Buchler, J. (1979) *Toward a general theory of human judgment*. New York: Dover.
- Buehler, R., Griffin, D., & Ross, M. (1994). Exploring the "planning fallacy": Why people underestimate their task completion times. *Journal of Personality and Social Psychology, 67*, 366-381.
- Buehler, R., Messervey, D., & Griffin, D. (2005). Collaborative planning and prediction: Does group discussion affect optimistic biases in time estimation? *Organizational Behavior and Human Decision Processes, 97*, 47-63.
- Burton, J.P., Lee, T.W., & Holtom, B.C. (2002). The influence of motivation to attend, ability to attend, and organizational commitment on different types of absence behaviors. *Journal of Managerial Issues, 14*: 181-197.
- Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology, 46*(4), 823-850.
- Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues, 57*(4), 725-741.
- Carli, L. L. (2001). Gender, hierarchy, and leadership: An introduction. *Journal of Social issues, 57*(4), 629-636.
- Carson, K. D. & Carson, P. P. (1998). Career Commitment, Competencies and Citizenship. *Journal of Vocational Behaviour, 6*.(2): 195 - 208.

Chen, C.C., Wen-Fen Yang, I. & Lin, W.C. (2010), Applicant impression management in job interview: The moderating role of interviewer affectivity. *Journal of Occupational and Organizational Psychology*, 83 (3): 739–757.

Chief of the Defense Staff (2010) *Duty with Honour: The profession of arms in Canada*, (2nd Ed). Kingston, ON: Canadian Forces Leadership

Colquitt, J. A., Greenberg, J. M., & Zapata-Phelan, C. P. (2005). History of organizational justice. In J. Greenberg, & J. Colquitt (Eds.), *Handbook of Organizational Justice* (pp. 12-20), Mahwah, NJ: Erlbaum.

Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review*, 32(5), 605-622.

Cowen, N. (1988). Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. *Psychological Bulletin*, 104(2), 163-191.

Cramer, R. E., McMaster, M. R., Bartell, P. A., & Dragna, M. (1988). Subject competence and minimization of the bystander effect. *Journal of Applied Social Psychology*, 18(13), 1133-1148.

Cronshaw, S.F. (2005). Developmental dynamics of workplace adaptive skill. *Psychological Reports*, 96: 1066-1094.

Danheiser, P.R. & Graziano, W.G. (1982). Self-monitoring and cooperation as a self-presentation strategy. *Journal of Personality and Social Psychology*, 42: 497-505.

Das, T. K., & Teng, B-S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review*, 23(3), 491-512.

Davies, S., Norris, D., Turner, J., & Wadlington, P (2005). Cheating, guessing, faking and self-presentation in assessment responses. Paper presented at the 20th Annual SIOP Conference, Los Angeles.

Davis, K., D. (2009) (ed) *Cultural Intelligence and Leadership: An Introduction for Canadian Forces Leaders*. Kingston, ON: Canadian Defence Academy Press.

Day, A. L. & Carroll, S. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and Individual Differences*, 36: 1443-1458.

Dirks, K. (1999). The effects of interpersonal trust on work group performance. *Journal of Applied Psychology*, 84(3), 445-455.

Dolšak, P. C. Stern, S. Stovich & E. U. Weber (Eds.), *The Drama of the Commons*. Washington, DC: National Academy Press.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, 33:41-113. San Diego, CA: Academic Press.

- Duval, T. S., & Wicklund, R. A. (1972). A theory of objective self-awareness. New York: Academic.
- Eagly, A. H. Makhijani, M. G. & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111: 3-22.
- Earley, P.C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto, Calif: Stanford University Press.
- Earley, P. C., & Mosakowski, E. (2004). Cultural Intelligence. *Harvard Business Review*, October, 2004.
- Fehr, E., & Fischbacher, U. (2004). Social norms and human cooperation. *Trends in Cognitive Sciences*, 8, 187-190.
- Fein, S., Hoshino-Browne, E., Davies, P. G., & Spencer, S. J. (2003). Self-image maintenance goals and sociocultural norms in motivated social perception. In S. J. Spencer, S. Fein, M. Zanna, & J. M. Olson (Eds.), *Motivated social perception: The Ontario symposium* (Vol. 9): 21-44. Mahwah, NJ: Erlbaum.
- Fiorito, J. A., Bozeman, D. P., Young, A., & Meurs, J. A. (2007). Organizational Commitment, Human Resource Practices, and Organizational Characteristics. *Journal of Managerial Issues*, 19 (2): 186-207.
- Fiske, S. T., & Ruscher, J. B. (1993). Negative interdependence and prejudice: Whence the affect? In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception*. (pp. 239-268). San Diego: Academic Press.
- Flowers, M. L. (1977). A laboratory test of some implications of Janis's groupthink hypothesis. *Journal of Personality and Social Psychology*, 35, 888-896.
- Foddy, M., Yamagishi, T., & Platow, M. (2009) Group-based trust in strangers: The roles of stereotypes and expectations. *Psychological Science*. 20(4): 419-422.
- Folger, R. and Konovsky, M.A. (1989), Effects of procedural and distributive justice on reactions to pay raise decisions, *Academy of Management Journal*, 32(1): 115-30.
- French, J.R.P. & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.). *Studies in social power*, pp. 150-167. Ann Arbor, Michigan: University of Michigan.
- Frone, M. R., Russell, M. & Barnes, G. M. (1996). Work-family conflict, gender, and health related outcomes: A study of employed parents in two community sample. *Journal of Occupational Health Psychology*, 1(1): 57-69.
- Frone, M.R., Russell, M., & Cooper, M.L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77 (1), 65-78.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behaviour*, 50, 145-167.

- Furnham A. & Capon M. (1983) Social skills and self-monitoring processes. *Personality and Individual Difference*, 4, 171–178.
- Gass, R.H. and Seiter, J.S. (2007). *Persuasion, Social Influence, and Compliance Gaining* (3rd Edition). New York: Pearson, Allyn and Bacon.
- Gergen, K. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275.
- Gergen, K. J., Gulerce, A., Lock, A. Misra, G. (1996). Psychological science in cultural context. *American Psychologist*, 51, 5, 496-503.
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology*, 60 (4), 509-517.
- Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, 117, 21–38.
- Gladstein, D. L. 1984. Groups in context: A model of task group effectiveness. *Administrative Science Quarterly* 29: 499-517.
- Goette, L., Huffman, D., & Meier, S. (2006). The impact of group membership on cooperation and norm enforcement: Evidence using random assignment to real social groups. *American Economic Review*, 96(2): 212-216.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10, 76-88.
- Grzywacz, J.G. & Marks, N.F. (200) Reconceptualizing the work–family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1): 111-126.
- Guzzo, R. A., & Shea, G. P. (1992). Group performance and intergroup relations in organizations. In M Dunnette & L. Hough (Eds.) *Handbook of Industrial and Organizational Psychology* (2nd ed) Vol 3. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Hackman, J. R. and C. G. Morris, 1975. Group tasks, group interaction process and group performance effectiveness: A review and proposed integration. In: D. L. Gladstein, 1984. Groups in context: A model of task group effectiveness. *Administrative Science Quarterly* 29: 499-517.
- Halbesleben, J., Bowler, W.M., Bolino, M.C., & Turnley, W.H. 2010. Organizational concern, prosocial values, or impression management? How supervisors attribute motives to organizational citizenship behavior. *Journal of Applied Social Psychology*, 40: 1450-1489.
- Hall, R.J., Workman, J.W., Marchioro, C.A. (1998) Sex, task, and behavioral flexibility effects on leadership perceptions, *Organizational Behavior and Human Decision Processes*, 74: 1-32.
- Henningsen, D. D., Henningsen, M. L. M., Eden, J., & Cruz, M. G. (2006). Examining the symptoms of groupthink and retrospective sensemaking. *Small Group Research*, 37, 36-64.

Higgins, E. T. 1998. Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1–46.

Hong, Dennis & Robert, 2004. Trust in virtual teams: towards an integrative model of trust formation. *Proceedings from the 37th Annual Hawaii International Conference on Science Systems*, 2004.

Horn, R.E. & Weber, R.P. (2007) *New Tools For Resolving Wicked Problems: Mess Mapping and Resolution Mapping Processes*. Accessed 15 March 2010 at http://www.strategykinetics.com//New_Tools_For_Resolving_Wicked_Problems.pdf

Iedema, J., & Poppe. M. (1994). The effect of self-presentation on social value orientation. *The Journal of Social Psychology*, 134: 771-782.

Ilies, R., Spitzmuller, M. Fulmer, I. S., & Johnson, M. D. (2009). Personality and citizenship behavior: The mediating role of job satisfaction. *Journal of Applied Psychology*, 94(4), 945-959.

Jackson, C. J., Levine, S. Z., Furnham, A., & Burr, N. (2002). Predictors of cheating behavior at university: A lesson from the psychology of work. *Journal of Applied Social Psychology*, 32: 1031-1046.

Jaros, S.J. (1997) An assessment of Meyer and Allen's (1991) three-component model of organizational commitment and turnover intentions. *Journal of Vocational Behavior*, 51: 319 - 337.

Jefferies, J.E., (2001). Quality of life in the Canadian Forces: Qualitative analysis of the quality of life questionnaire for CF members. *Sponsor research report 01-11*. Directorate of Human Resources Research and Evaluation. Ottawa: National Defence Headquarters.

Johns, G., & Saks, A.M. (2005). *Organizational behaviour: Understanding and managing life at work* (6th ed.). Toronto: Prentice Hall.

Jones, E. E. (1990). *Interpersonal Perception*. New York: Freeman.

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23(3), 531-546.

Kahn, R., & Byosiere P., (1992) Stress in organizations, in Marvin Dunnette and Leaetta Hough (Eds.) *Handbook of Industrial and Organizational Psychology*, Vol 3. Palo Alto: Consulting

Kahneman, D. (2011). *Thinking Fast and Slow*. Doubleday Canada.

Karau, S. J. & Williams, K. D. (1993). Social Loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology*, 1993, 65(4), 681-706.

Karrash, A. I., (2003). Antecedents and consequences of organizational commitment. *Military Psychology*, 15 (3), 225-236.

Kelloway, E.K., Catano, V. M., and Day, A.L. (2011). *People and Work in Canada*, Nelson Canada: Toronto

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2000). Power, Approach, and Inhibition. *Research Paper 1669*. Research Paper Series, Graduate School of Business, Stanford University. Retrieved 30 April, 2012 from <http://gsbapps.stanford.edu/researchpapers/library/rp1669.pdf>

Kiffin-Petersen, S.A. (2004) Trust: A Neglected Variable in Team Effectiveness Research, *Journal of the Australian and New Zealand Academy of Management*, 10 (1): pp. 38-53

Kirsh, D. (2001). A few thoughts on cognitive overload. *Intellectica*, 30, 19-51.

Klein, O., Snyder, M., & Livingston, R. W. (2004). Prejudice on the stage: Self-monitoring and the public expression of group attitudes. *British Journal of Social Psychology*, 43, 299-314.

Kohlberg, L. (1971). Stages of moral development. In C. M. Beck, B. S. Crittenden, & E. V. Sullivan (Eds.), *Moral education*. Toronto: University of Toronto Press.

Kohlberg, L., & Hersh, R. H. (1977). Moral Development: A review of the theory. *Theory into Practice*, 16(2), 53-59.

Kopelman, S., Weber, J. M., & Messick, D. M. (2002). Factors influencing cooperation in commons dilemmas: A review of experimental psychology research. In E. Ostrom, T. Dietz, N.

Korabik & McCreary (2000). Testing a model of socially desirable and undesirable gender-role attributes. *Sex Roles*, 43(9/10), 665-685.

Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569-598.

Kruger, J. & Evans, M. (2004) If You Don't Want to be Late, Enumerate: Unpacking Reduces the Planning Fallacy. *Journal of Experimental Social Psychology*, 40 (4): 560-567.

Kunda, Z., & Spencer, S. J. (2003). When do stereotypes come to mind and when do they color judgment? A goal-based theoretical framework for stereotype activation and application. *Psychological Bulletin*, 129(4), 522-544.

Langdridge, D. & Butt, T. (2004). The fundamental attribution error: A phenomenological critique. *British Journal of Social Psychology*, 43, 357-369.

Latane, B., & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10(3), 215-221.

Latane, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* New York: Appleton-Century-Crofts.

Leary, M. R., & Allen, A. B. (2011). Personality and Persona: Personality Processes in Self-Presentation. *Journal of Personality* 79:6, 889-916.

Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34-47.

Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6): 1349-1364

- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- Major, V.S., Klein, K.J. & Enhart, M.G. (2002) Work Time, Work Interference with Family, and Psychological Distress. *Journal of Applied Psychology*, 87(3): 427-436.
- Mathieu, J. E., Heffner, T. S., Goodwin, G. F., Salas, E., & Cannon-Bowers, J. A. (2000). The influence of shared mental models on team process and performance. *Journal of Applied Psychology*, 85(2): 273-283.
- McCann, C. D., & Hancock, R. D. (1983). Self-monitoring in communicative interactions: Social cognitive consequences of goal-directed message modification. *Journal of Experimental Social Psychology*, 19, 109–121.
- McCann, C. D. & Rodney D. H. (1983) Self-Monitoring in Communicative Interactions: Social Cognitive Consequences of Goal Directed Message Modification, *Journal of Experimental Social Psychology*, 19: 109-121.
- McCauley, C. (1989). The nature of social influence in groupthink: compliance and internalization. *Journal of Personality and Social Psychology* 57: 250–260.
- McFarlin D.B. & Sweeney P.D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35 (3): 626-637
- McKinney, J. P. (1980). Moral development and the concepts of values. In M. Windmiller, N. Lambert & E. Turiel (Eds). *Moral Development and socialization*. Boston, MA: Allyn & Bacon.
- McChane, S. L. (2001). *Canadian Organizational Behaviour*. Toronto: McGraw-Hill.
- Meyer, J.P., & Allen, N.J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage Publications.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 372-378.
- Miller, D. T., & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance. In J. Suls & T. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 287-313). Hillsdale, NJ: Erlbaum.
- Moorhead, G. & Montanari, J.R. (1986) An empirical investigation of the groupthink phenomenon. *Human Relations*, 39: 399 - 410.
- Mowday, R.T., Steers, R.M. & Porter, L.W. (1979) The measurement of organizational commitment. *Journal of vocational behavior*, 14: 223 – 247.
- Muchinsky, P. M. (2003). Work motivation. In *Psychology applied to work* (7th ed.) (Chapter 12, pp. 372-411). Belmont, CA: Wadsworth/Thompson.
- Mulvey, P. W. & Klein, H. J. (1998). The impact of social loafing and collective efficacy on group goal processes and group performance. *Organizational Behavior and Human Decision Processes*, 74(1), 62-87.

- Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick & L. Tetrick (Eds), *Handbook of Occupational Health Psychology* (pp. 97-117). Washington DC: APA.
- Ng, K.Y., & Earley, P.C. (2006). Culture and intelligence: Old constructs, new frontiers. *Group and Organization Management*, 31: 4-19.
- Noor, N.M. (2004) Work-Family Conflict, Work- and Family-Role Salience, and Women's Well-Being. *The Journal of Social Psychology*, 144(4): 389-405.
- O'Keefe, D.F. (2004). *Assessing the moderating effects of ethical climate on the relation between social dominance orientation/right wing authoritarianism and unethical behaviour*. Unpublished PhD Dissertation, The University of Guelph, Guelph, ON.
- O'Keefe, D.F. (2011). Measuring cultural intelligence in the Canadian Forces: Validity and reliability of the cultural intelligence scale (CQS). *Contractor Report 2011-TBD*. Ottawa, ON: Director General Military Personnel Research and Analysis.
- O'Keefe, D.F., MacIntyre, A., & Charbonneau, D. (in progress). Can perceptions of ethical leadership influence how high impression managers admit past unethical behaviour. Contact damian.okeefe@smu.ca for a copy of the paper.
- Okros A.C. (2009) Becoming an Employer of Choice: Human Resource Challenges within DND and the CF. In Craig Stone (ed), *The Public Management of Defence in Canada*. Toronto, ON: Breakout Educational Network.
- Okros, A.C., Verdon, J. & Chouinard, P. (2011) *The Meta Organization: A Research and Conceptual Landscape* (DRDC CSS TR 2011-13). Ottawa: Defence Research and Development Canada – Centre for Security Science.
- Organ, D. W. (1988). *Organizational Citizenship Behavior*. Lexington, MA: Lexington Books.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage Publications.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48(4): 775-802.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, 46, 598-609.
- Paulhus, D. L. (1998) Intrapyschic and interpersonal adaptiveness of trait self-enhancement A mixed blessing? *Journal of Personality and Social Psychology*, 74: 812-820.
- Paulhus, D.L., & Reid, D.B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, 60, 307-317.
- Pelto, P.J. (1968) The differences between “tight” and “loose” societies. *Trans-actions*, 37-40.
- Perreault, S. & Bourhis, R. Y. (1999). Ethnocentrism, social identification, and discrimination. *Personality and Social Psychology Bulletin*, 25(1), 92-103.

Peterson, R., & Behfar, K. J. (2003). The dynamic relationship between performance feedback, trust, and conflict in groups: A longitudinal study. *Organizational Behavior and Human Decision Processes*, 92: 102–112.

Petersen, L. & Dietz, J. (2000), Social discrimination in a personnel selection context: the effects of an authority's instruction to discriminate and followers' authoritarianism. *Journal of Applied Social Psychology*, 30 (1): 206-220.

Petrides, K. V., Pita, R., & Kokkinoki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273- 289.

Pigeau, R. & McCann, C. (2002) Re-conceptualizing Command and Control. *Canadian Military Journal*, Vol. 3, No. 1: 53-63.

Polkinghorne, D. (1983). *Methodology for the Human Sciences*. Albany: State University of New York Press.

Porter, T. W., & Lilly, B. S. (1996). The effects of conflict, trust, and task commitment on project team performance. *The International Journal of Conflict Management*, 7(4): 361-377.

Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67, 741-763.

Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64: 243-256.

Randall, D.M. & Fernandes, M.F. (1991). The Social Desirability Response Bias in Ethics Research. *Journal of Business Ethics*, 10: 805-817.

Rittel, H.W.J. & Webber, M.M. (1973) Dilemmas in a General Theory of Planning. *Policy Sciences Vol 4*: 155-169.

Riggio, R.E., Riggio, H.R., Salinas, C., & Cole, E.J. (2003). The role of social and emotional communication skills in leader emergence and effectiveness. *Group Dynamics: Theory, Research, and Practice*, 7: 83-103.

Robbins, S. P., & Langton, N. (2003). *Organizational behaviour: Concepts, controversies, applications (3rd ed.)*. Toronto: Prentice-Hall.

Ross, L. D. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 173–220). New York: Academic Press.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80.

Ryan B. A. (1999). Does postmodernism mean the end of science in the behavioral sciences, and does it matter anyway?. *Theory and Psychology*, 9 (4), 483-502.

Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.

Sabini, J. Siepmann, M. & Stein, J. (2001). The really fundamental attribution error in social psychological research. *Psychological Inquiry*, 12(1), 1-15.

Salovey, P. & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 93(3), 1885-211.

Sanna, L.J. (1992) Self-Efficacy Theory: Implications for Social Facilitation and Social Loafing. *Journal of Personality and Social Psychology*, 62 (5): 774-786.

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82: 434-443.

Skarlicki, D. P., & Latham, G.P. (1996). Increasing citizenship behavior within a public sector union: A test of organizational justice theory. *Journal of Applied Psychology*, 81: 161 - 169.

Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (1997). *Organizational Behavior*. (6th ed.) New York: Wiley.

Schneider, B. (2000). The Psychological life of organizations. In N.M. Ashkanasay, C.P.M. Wilderon, & M. F. Peterson (Eds.), *Handbook of Organizational Culture and Climate* (pp. 21-36). London: Sage Publications, Inc.

Schwartz, S.H. (1994). Beyond individualism/collectivism: New dimensions of values. In U. Kim, H.C. Triandis, C. Kagitcibasi, S.C. Choi and G. Yoon (eds) *Individualism and Collectivism: Theory Application and Methods*. Newbury Park, CA: Sage.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 58, 878-891.

Sidanius, J. & Pratto, F. (1999). *Social Dominance: An intergroup theory of social hierarchy and oppression*. New York, NY: Cambridge University Press.

Skitka, L. J., & Tetlock, P. E. (1003). Providing public assistance: Cognitive and motivational processes underlying liberal and conservative policy preferences. *Journal of Personality and Social Psychology*, 65(6), 1205-1223.

Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30(4), 526-537.

Snyder, M., & Gangestad, S. W. (1986). On the Nature of Self-Monitoring: Matters of Assessment, Matters of Validity. *Journal of Personality and Social Psychology*, 51: 125-139.

Spector, P. E. (1982). Behavior in Organizations as a function of employees locus of control. *Psychological Bulletin*, 91(3), 482-497.

Spector, P. E. (2003). Individual differences in health and well-being in organizations. In D. A. Hofmann, & L. E. Tetrick (Eds.). *Health and safety in organizations: A multilevel perspective* (pp. 29-55). San Francisco: Jossey-Bass

- Stangor, C., & Leary, S. (2006). Intergroup Beliefs: Investigations from the Social Side. *Advances in Experimental Social Psychology*, 38: 243-283
- Steers, R. M., & Black, J. S. (1994). *Organizational Behavior*. New York: Harper Collins.
- Sundstrom, E., De Meuse, K.P. & Futrell, D. (1990), Work Teams: Applications and Effectiveness, *American Psychologist*, 45 (2) : 120-133.
- Sundstrom, E., McIntyre, M., Halfhill, T. R., & Richards, H. (2000). Work groups: From the Hawthorne studies to work teams of the 1990s and beyond. *Group Dynamics*, 4: 44-67.
- Sweeney, P. D., McFarlin, D. B., & Cotton, J. L. (1991). Locus of control as a moderator of the relationship between perceived influence and procedural justice. *Human Relations*, 44(4), 333-342.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1-39.
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In H. Tajfel's *Differentiation Between Social Groups: Studies in the Social Psychology of Intergroup Relations*. New York: Academic Press.
- Thomas, C. B. (2006) Some observations on the social psychological study of human values. In Donald Hantula (ed.), *Advances in Social and Organizational Psychology: A Tribute to Ralph Rosnow*. Mahwah, N.J.: Lawrence Erlbaum.
- Thomas, L. T., & Ganster, D. C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80: 6-15.
- Trice, H. & Beyer, J. (1993). *The Cultures of Work Organizations*, Englewood Cliffs, NJ: Prentice Hall.
- Tuckman, B. W. & Jensen, M. C. (1977). Stages of small-group development revisited. *Groups and Organization Studies*, 2(4), 419-427.
- Tyler, T. R., Boeckmann, R. J., Smith, H. J., & Huo, Y. J. (1997). *Social justice in a diverse society*. Boulder, CO: Westview Press.
- Ulieru, M. (2003) Emergence of Holonic Enterprises from Multi-Agent Systems. In Vincenzo Loia (Ed.) *Soft Computing Agents: A New Perspective for Dynamic Information Systems*. Amsterdam: IOS Press.
- Van Heil, A., Pandelaere, M. Duriez, B. (2004). The impact of need for closure on conservative beliefs and racism: Differential mediation by authoritarian submission and authoritarian dominance. *Personality and Social Psychology Bulletin*, 30(7), 824-837.
- Victor, B. & Cullen, J.B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33 (1): 101-25.
- von Hippel, W., von Hippel, C., Conway, L., Preacher, K. J., Schooler, J. W., & Radvansky, G. A. (2005). Coping with stereotype threat: Denial as an impression management strategy. *Journal of Personality and Social Psychology*, 89 22-35.

Vorauer, J., & Ross, M. (1999). Self-awareness and feeling transparent: Failing to suppress one's self. *Journal of Experimental Social Psychology*, 35, 415-440.

Wageman, R., & Baker, G., (1997). Incentives and Cooperation: The Joint Effects of Task and Reward Interdependence on Group Performance. *Journal of Organizational Behaviour* 18 (2): 139-158.

Walumbwa F., Orwa, B., Wang, P., & Lawler, J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and U.S. financial firms. *Human Resource Development Quarterly*, 16(2), 235-257.

Wang, P. & Walumbwa, F. (2007). Family-friendly programs, organizational commitment, and work withdrawal: The moderating role of transformational leadership. *Personnel Psychology*, 60 (2): 397-427.

Weiss, B. & Feldman, R. S. (2006). Looking Good and Lying to Do It: Deception as an Impression Management Strategy in Job Interviews. *Journal of Applied Social Psychology*, 36 (4): 1070-1086.

Wood, W. (2000). Attitude Change: Persuasion and Social Influence. *Annual Review of Psychology*, 51, 539-570.

Wong, C.-S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study: 243–274.

Yousef, D.A. (2002) Job satisfaction as a mediator of the relationship between role stressor and organizational commitment: A study from an Arabic cultural perspective. *Journal of Managerial Psychology*, 17 (4), 250-266

Zimny, S.T., Robertson, D.U., & Bartoszek, T. (2008). Academic and personal dishonesty in college students. *North American Journal of Psychology*, 10: 291-312.

List of acronyms

CAR	Competence, Authority and Responsibility
CAS	Complex Adaptive Systems
C-CAS	Constrained Complex Adaptive Systems
CFLI	Canadian Forces Leadership Institute
CQ	Cultural Intelligence
DND	Department of National Defence
DRDC	Defence Research & Development Canada
EI	Emotional Intelligence
IM	Impression Management
OCB	Organizational Citizenship Behaviour
QOL	Quality of Life
RWA	Right Wing Authoritarianism
SDO	Social Dominance Orientation
TIF	Technology Investment Fund
WFC	Work-Family Conflict

DOCUMENT CONTROL DATA

(Security classification of title, body of abstract and indexing annotation must be entered when the overall document is classified)

<p>1. ORIGINATOR (The name and address of the organization preparing the document. Organizations for whom the document was prepared, e.g. Centre sponsoring a contractor's report, or tasking agency, are entered in section 8.)</p> <p>Jennifer Peach Organizational Behavior team (DROOD-4) Director General Military Personnel Research and Analysis</p>	<p>2. SECURITY CLASSIFICATION (Oversall security classification of the document including special warning terms if applicable.)</p> <p>UNCLASSIFIED (NON-CONTROLLED GOODS) DMC A REVIEW: GCEC JUNE 2010</p>	
<p>3. TITLE (The complete document title as indicated on the title page. Its classification should be indicated by the appropriate abbreviation (S, C or U) in parentheses after the title.)</p> <p>SOCIAL PSYCHOLOGY THEORIES IN THE META-ORGANIZATIONAL CONTEXT</p>		
<p>4. AUTHORS (last name, followed by initials – ranks, titles, etc. not to be used)</p> <p>Peach, J., O'Keefe, D., Schryer, E., & Okros, A.</p>		
<p>5. DATE OF PUBLICATION (Month and year of publication of document.)</p> <p>December 2012</p>	<p>6a. NO. OF PAGES (Total containing information, including Annexes, Appendices, etc.)</p> <p>77</p>	<p>6b. NO. OF REFS (Total cited in document.)</p> <p>84</p>
<p>7. DESCRIPTIVE NOTES (The category of the document, e.g. technical report, technical note or memorandum. If appropriate, enter the type of report, e.g. interim, progress, summary, annual or final. Give the inclusive dates when a specific reporting period is covered.)</p> <p>Contractor Report</p>		
<p>8. SPONSORING ACTIVITY (The name of the department project office or laboratory sponsoring the research and development – include address.)</p> <p>Defence R&D Canada – CSS 222 Nepean St 11th fl Ottawa, Ontario K1A 0K2</p>		
<p>9a. PROJECT OR GRANT NO. (If appropriate, the applicable research and development project or grant number under which the document was written. Please specify whether project or grant.)</p>	<p>9b. CONTRACT NO. (If appropriate, the applicable number under which the document was written.)</p>	
<p>10a. ORIGINATOR'S DOCUMENT NUMBER (The official document number by which the document is identified by the originating activity. This number must be unique to this document.)</p> <p>DRDC CSS CR 2012-025</p>	<p>10b. OTHER DOCUMENT NO(s). (Any other numbers which may be assigned this document either by the originator or by the sponsor.)</p>	
<p>11. DOCUMENT AVAILABILITY (Any limitations on further dissemination of the document, other than those imposed by security classification.)</p> <p>Unlimited Distribution</p>		
<p>12. DOCUMENT ANNOUNCEMENT (Any limitation to the bibliographic announcement of this document. This will normally correspond to the Document Availability (11). However, where further distribution (beyond the audience specified in (11) is possible, a wider announcement audience may be selected.))</p> <p>Unlimited</p>		

13. ABSTRACT (A brief and factual summary of the document. It may also appear elsewhere in the body of the document itself. It is highly desirable that the abstract of classified documents be unclassified. Each paragraph of the abstract shall begin with an indication of the security classification of the information in the paragraph (unless the document itself is unclassified) represented as (S), (C), (R), or (U). It is not necessary to include here abstracts in both official languages unless the text is bilingual.)

Governments are increasingly requiring different agencies to work together in demanding circumstances using a whole of government or comprehensive approach. In previous work, Okros, Verdon and Chouinard (2010) applied a social and human perspective to examine how a meta-organization may be capable of enacting a comprehensive approach. The multi-disciplinary analyses integrated a number of disparate concepts to present speculative hypotheses that may be used to inform future research agendas. This paper builds on the first work by presenting a number of the theories from social psychology which be of use in exploring the concepts and hypotheses presented in the original work by Okros et al under the broad groupings of: Influence and Persuasion; Affect; Assumptions/Judgment; Information Processing; Role Confusion; Groups and Group Dynamics; Personal Identity; Decision Making; Group Behaviour; and Motivation; the various theories and illustrative studies have been briefly presented along with selected key readings. The intent is to highlight different theories and concepts which may be of use in developing specific testable hypotheses hence an applied research programme to investigate the implications of the broad hypotheses presented in Okros et al, particularly in the discussion of future research.

De plus en plus, les gouvernements exigent des différents organismes qu'ils collaborent lorsque les circonstances sont difficiles, utilisant une approche pangouvernementale ou globale. Dans une étude antérieure, Okros, Verdon et Chouinard (2010) ont appliqué une perspective sociale et humaine pour voir comment une méta-organisation peut arriver à adopter une approche globale. Les analyses multidisciplinaires intégraient plusieurs concepts disparates pour présenter des hypothèses pouvant servir à orienter les futurs programmes de recherche. Ce document fait suite aux premiers travaux en présentant des théories socio-psychologiques utiles pour explorer les concepts et les hypothèses présentées dans le travail initial d'Okros et coll. sous les grands thèmes suivants : influence et persuasion; affect; suppositions et jugement; traitement de l'information; confusion des rôles; groupes et dynamique de groupe; identité personnelle; prise de décision; comportement de groupe et motivation; les diverses théories et études explicatives sont présentées brièvement ainsi que des lectures choisies. Le but est de mettre en relief des théories et des concepts qui pourraient être utiles dans l'élaboration d'hypothèses vérifiables, d'où un programme de recherches appliquées pour étudier les implications des hypothèses générales présentées par Okros et coll., surtout lorsqu'il s'agit des futurs travaux de recherches.

14. KEYWORDS, DESCRIPTORS or IDENTIFIERS (Technically meaningful terms or short phrases that characterize a document and could be helpful in cataloguing the document. They should be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location may also be included. If possible keywords should be selected from a published thesaurus, e.g. Thesaurus of Engineering and Scientific Terms (TEST) and that thesaurus identified. If it is not possible to select indexing terms which are Unclassified, the classification of each should be indicated as with the title.)

Organizations; whole of government; comprehensive approach; complex adaptive systems; social psychology; influence; persuasion; affect; judgment; information processing; role confusion, groups; group dynamics; personal identity; decision making; group behaviour; motivation