Title: Processes and Personality Preferences Involved in Adult Consciousness Development: An Investigation of Participants in Australian Community Leadership Programs

Author: Niki Vincent

Chief Executive Officer, Leaders Institute of South Australia & PhD Candidate, School of Psychology, Faculty of Health Sciences, University of Adelaide, South Australia, 5005 AUSTRALIA

Correspondence concerning this article should be addressed to Niki Vincent, Leaders Institute of South Australia, Level 1, 164 Greenhill Road, Parkside, South Australia 5063. <u>niki.vincent@lisa.com.au</u>. Telephone +61 439 493 303. Fax +61 8 8125 5889.

Abstract

Although the majority of adults demonstrate consciousness (or ego) stages well below maximum potential, the growth of consciousness to post-conventional levels is associated with many adaptive advantages. I explored whether personality preferences (as measured by the Myers-Briggs Type Indicator) might act as inhibiting or facilitating factors in consciousness development. I also examined the impact of community leadership programs in facilitating consciousness development when compared to a university-based management program. Participants were 374 adults undertaking 11 community leadership programs and 2 university-based management development programs (participants in the latter acted as controls). A preference for Intuition on the MBTI was associated with significantly higher consciousness on program entry and with greater consciousness development during the programs. Community leadership programs that offered challenge to worldviews only through the exploration of community issues were as successful in facilitating consciousness development from Expert to Achiever as those programs that offered this in addition to other psychosocial components. However, to trigger development beyond the Achiever level, more extensive psychosocial development components were necessary and only those community leadership programs that offered these were successful in shifting participants into the post-conventional tier.

1. Introduction

1.1 Background

How can leaders in our community come to terms with the complexity of the adaptive challenges we are facing in our organisations, communities and globally? They are tangled, complex and involve multiple systems and threats in which the solution to one part of the problem may unintentionally exacerbate another (Heifetz, Grashow & Linsky, 2009). Can we develop the creative, innovative and analytical ability, long-range future orientation, willingness to experiment and high tolerance for ambiguity that will be required to make progress in tackling these issues – and if so, how?

These questions have been at the core of my work in community leadership development for the last eleven years. Coming to the field from an academic background in social research and public health as well as recent experience in senior leadership roles in two major NGO's, I had worked around the world researching and developing interventions aimed at tackling some of our seemingly intractable issues – minimising the harm associated with illegal drug use, HIV transmission, heart and vascular disease and child abuse and neglect – just to name a few.

In 2006, I came across two powerful influences that converged to inform and guide my work from that point forward. The first was the adaptive leadership model of Harvard professors Ron Heifetz and Marty Linsky and the second was Ken Wilber's Integral Theory. That year I was privileged to be able to study in an executive program, 'The Art and Practice of Leadership Development' led by Heifetz and Linsky, at Harvard's Kennedy School (and where Professor Robert Kegan also took us for a class). A few months after returning to Australia, I received a scholarship to participate in an Integral Sustainability course at the Integral Institute in Colorado. At Harvard I learned a framework for distinguishing between adaptive and technical problems and between authority and leadership and for developing the kind of leadership capacities required to tackle adaptive challenges. Through integral theory's AQAL model I gained a 'meta paradigm' for approaching the field of leadership development and, particularly through the work of Loevinger, Cook-Greuter and Kegan (with which I became familiar through integral theory) I began to understand that the capacities for recognising and responding effectively to adaptive leadership challenges are related to the development of consciousness (also known as ego development).

In the years since 2006, my colleagues and I at the Leaders Institute of South Australia have been exploring and incorporating the adaptive leadership framework and elements of integral theory in our organisational practices and our community and other leadership programs. We have also been spreading these ideas and sharing our practices throughout the wider community leadership development network in Australia.

A key part of the exploration process and the dissemination of our ideas and practices has been my (very part-time) PhD research, a brief summary of some of the results from which will be outlined in this paper. The research has included 374 of the participants in 11 Australian community leadership programs (as the intervention groups) and two universityrun professional management programs (as the control group). In this research I have set out to do two things to date: Firstly, to advance understanding of why and how development to higher consciousness levels might occur for some individuals and not others (Vincent, Ward & Denson, in press) and secondly, to investigate the efficacy of community leadership programs (CLPs) in triggering consciousness development (Vincent, Ward & Denson, manuscript in preparation).

1.2. Ego development theory

My research has drawn on Loevinger's stage theory of ego development (Loevinger, 1976), which I first discovered through Wilber (2000) and which has been described as one of the most comprehensive constructs in the field of developmental psychology (Westenberg & Block, 1993). Loevinger proposed a framework for conceptualising the growth in an individual's way of constructing meaning through the lifespan which is comprised of an invariant sequence of stages. Each shift in stage transforms perceptions of reality, offering a more integrated perspective, greater self and interpersonal awareness, decreasing defensiveness and increasing flexibility, reflection and skill in interacting with the environment, cognitive complexity, responsibility and personal autonomy (Cook-Greuter, 1999, 2004). Identity expands from egocentric to 'sociocentric' to 'worldcentric' and beyond (Wilber, 2000). Several critical reviews of Loevinger's theory and its measurement tool, the Washington University Sentence Completion Test (WUSCT) have concluded that there is substantial empirical support for the construct and have supported the discriminant validity of both the theory and the WUSCT (Cohn & Westenberg, 2004; Hauser, 1976; Loevinger, 1979; Manners & Durkin, 2001).

Loevinger divided the stages of development into pre-conventional, conventional and post-conventional tiers. The first (pre-conventional tier) represents the period in a person's life where cognitive and affective development has not yet reached a level at which the individual can fully function in conventional society. Adults operating in the preconventional tier tend to exhibit psychopathologies such as narcissistic or borderline personality disorders (Pfaffenberger, 2005). Based on their research, Miller and Cook-Greuter (1994) estimated that around 10% of the adult population in Western societies function within the pre-conventional tier.

The three stages in the 'conventional' tier are where, according to Miller and Cook-Greuter (1994) and Cook-Greuter (2004), we would find around 80% of adolescents and adults. This tier is characterised by the individual's adherence to conventional values, norms, beliefs and practices.

In contrast, once an individual enters the stages of the third 'post-conventional' tier (around 10-20% of the population according to Cook-Greuter, 2004) he or she is able to recognise the constructed nature of reality, and to view conventional norms, practices, values and beliefs as object (as opposed to being subject to them, and therefore unable to examine them, when operating from stages in the conventional tier). Post-conventional adults have been found to have greater tolerance of paradox and ambiguity and are able to think multisystemically. They can anticipate and creatively adapt to changing contingencies and life circumstances and can step outside of existing institutional structures and values Cook-Greuter (2004).

Loevinger provided only a very brief outline of her final stage (Integrated). However, through her work with Loevinger as well as extensive independent research, Cook-Greuter (1999) developed a more rigorous definition and measurement of the much rarer later stages. She replaced Loevinger's Integrated stage with two additional stages and developed a set of scoring categories for the WUSCT so that these new stages could be scored using this same instrument. Cook-Greuter's post-autonomous stages are called 'Construct-Aware' and 'Unitive' (Cook-Greuter, 1999). Recent qualitative research by Hewlett (2004) supported Cook-Greuter's descriptions of the post-autonomous stages and provided additional detail about how post-autonomous individuals handle emotions, their strategies in effecting transformational change in others, and the importance of 'present-centred' awareness (Hewlett, 2004). These stages, although acknowledged, are beyond the scope of my research – and thus, this paper.

In response to a critique by Kohlberg (1984) that Loevinger's model lacked an underlying structural logic, Cook-Greuter put forth an underlying theoretical structure for Loevinger's model that she adapted from Kegan's (1980) work on the 'evolving self'. In Kegan's view, the evolution (development) of consciousness (which he describes as the 'self identity') is a meaning-making activity that involves the development of subject-object relations (or 'self' and 'other' relations). This is essentially a process of adaptation which involves that which was the subject of one stage (the subject being the "I" or what we are identified with) becoming the object (i.e. what we view as the 'other') of the next. This is carried out by a process of differentiation (creating the 'object' by differentiating from it) and integration (developing a relationship to the object by understanding that you are separate from it). According to Kegan (1982), the stages of consciousness development thus represent "...successive triumphs of 'relationship to' rather than 'embeddedness in'." It was this illumination that Wilber (2000) noted as a particularly important contribution of Kegan's to developmental theory. Cook-Greuter (1999) argued that this evolving 'perspective on the self' demonstrated the inner logic of ego development and provided a "...scaffold that underlies the ego stages" (p40). In addition, she argued that this scaffold provides a test of whether one stage is qualitatively different from the one preceding it and also serves as the basis from which to make predictions.

In collaboration with Cook-Greuter and others, Torbert adapted the work of Loevinger to develop a model of leadership development that was intended to facilitate wider application of the theory. The model developed by Torbert and Associates (2004) is called the 'Leadership Development Framework'. The stages in this model align with those of Loevinger (but have been given different labels) and the descriptions of the stages relate to how they would manifest in individuals within an organisational context. Table 1 shows the features of the stages.

INSERT TABLE 1 ABOUT HERE

Cook-Greuter (2004) made theoretical and empirical modifications to the WUSCT in collaboration with Torbert, so that it would be able to better assess professional subjects in organisational contexts. Unfortunately however, unlike Loevinger's original version, this has not been made freely available.

As noted above, my research has also been informed by the constructive developmental model of Kegan (1994) and particularly his linkage of this with Heifetz and Linsky's work in adaptive leadership (Kegan & Lahey, 2009). Kegan (1994) noted that "the expectations on us [in modern life] demand something more than the acquisition of specific skills or the mastery of particular knowledge. They make demands on our minds, on how we know, on the complexity of our consciousness". Similarly, he asserted that we are 'in over our heads' with the adaptive challenges we are facing today – i.e. that our consciousness is

often not geared to the challenge. This is supported by a meta-analysis of 92 studies involving over 12,000 participants from a wide range of samples (Cohn, 1998), as well as research reported by Cook-Greuter (2004), showing that the vast majority of adults stabilise at or below Loevinger's Self-Aware ego stage (now more commonly known as the 'Expert' stage). This is well below the maximum potential for development identified by Loevinger's theory but it is consistent with findings of stabilisation below the maximum potential found in other areas of adult development, such as cognitive and moral development (Manners & Durkin, 2000).

People at the Expert stage of consciousness – and even the stage above this (Achiever) - are unlikely to be able to deal with the complexity of the adaptive challenges we face today. As Donovan (1997) argued, the currently predominant conventional world view has "...produced the industrial revolution and evolved into the current global technology, which has solved many dire problems of humanity and created technological wonders unimaginable fifty years ago". However, he noted that it is also responsible for the dire problems currently facing our planet because it is a limited in form and range to a relatively short-term, unreflective, mainly instrumental empirical-analytic mode of thinking "...well suited to calculating the means to attain predetermined ends, but deficient when it comes to more fundamental matters - such as determining what ends are to be pursued, and challenging the premises on which calculations proceed." (Donovan, 1997 p 25-26). Recently, Barker and Torbert (2011), Cook-Greuter (2004), Joiner and Josephs (2007), Kegan & Lahey (2009) and Rooke and Torbert (2005) have all argued that leaders who operate from post-conventional levels of consciousness are essential in addressing humanity's adaptive challenges because of their transformational capacity, agility, creativity, flexibility and mature insight.

1.3. Consciousness development and leadership

The primary thrust of the work of Torbert and associates (2004) and that of Kegan and Lahey (2009) is that a person's stage of consciousness influences his or her approach to the tasks of management and leadership, and that those who operate from later stages tend to be more effective managers and transformational leaders. Research exploring the relationship between consciousness development and leadership performance is increasing, although the field is still in its infancy and many studies to date have suffered from small sample sizes and other problems (McCauley, Drath, Palus, O'Connor & Baker, 2006). Nevertheless, a growing body of recent research in this area has shown associations between consciousness development and better leadership performance and outcomes in organisations (Barker & Torbert, 2011, Bushe & Gibbs, 1990; Brown, 2011; Guerette, 1986; Joiner & Josephs, 2007; King & Roberts, 1992; Marrewijk & Were, 2003; McCauley, Drath, Palus, O'Connor & Baker, 2006; Merron, 1985; Merron, Fisher & Torbert, 1987; Rooke & Torbert, 1998; Strang & Kuhnert, 2009; Torbert & Associates, 2004).

So what are the implications of this research for leadership development? Kegan and Lahey (2009) argued that leadership development should shift its focus from what Cook-Greuter (2004) has described as horizontal or lateral development – focusing on knowledge and competencies that expand and enrich a person's current way of meaning making – to much more powerful 'vertical development' - supporting people to transform their current way of making sense of the world (shift their consciousness) so that they can take a broader perspective. But what does vertical development entail?

Unfortunately, it has only been in relatively recent times that researchers have begun to focus on the factors that might facilitate progress to advanced stages of consciousness development (Manners & Durkin, 2000; Manners, Durkin & Nesdale, 2004; Marko, 2011; Pfaffenberger, 2005). Manners' and Durkin's (2000) conceptual framework represents egostage transition as an accommodative restructuring of schemas in response to life experiences that are personally salient, interpersonal in nature, emotionally engaging and challenging (but amenable to positive interpretation) and that are disequilibriating for the person's existing ways of seeing the world. In their model, development is influenced by the degree of exposure to such life experiences, along with dispositional personality traits that interact in complex ways to influence the likelihood of such exposure, and how the experiences are perceived and responded to (i.e. whether they do, in fact, facilitate a shift in consciousness).

Manners, Durkin and Nesdale (2004) tested this conceptual framework using an intervention that targeted those at the Expert stage of consciousness and which had been specifically designed to be structurally disequilibriating for those at this level, personally salient, emotionally engaging and interpersonal in nature. Their research utilised an experimental design and found a significant increase in consciousness in participants who had taken part in the intervention, compared to no effect for those in a matched control group.

1.4.Community Leadership Development Programs

Although they have not been deliberately designed in terms of the framework for consciousness development developed by Manners and Durkin (2000), many Australian Community Leadership Programs (CLPs) fit it quite well in that they offer potentially disequilibriating experiences that are interpersonal in nature, cognitively and emotionally engaging and challenging – as well as personally salient for the participants. Australian CLPs are typically run over 10 months from February to November. They recruit established and emerging leaders from very diverse business, government and not-for-profit organisations. All such programs facilitate experiential exposure to major economic, environmental, social and cultural issues affecting their communities - and (under the Chatham House Rule) to the leaders at the forefront of these issues from a diversity of perspectives, sectors and industries. The programs generally involve sessions spent in environments that participants might otherwise never experience – such as homeless centres, disability services, prisons, indigenous communities, farms and law courts, as well as attending artistic performances, visiting various businesses and public infrastructure projects and meeting with high level State and Federal officials and visiting overseas dignitaries. Some of the better-funded programs also include challenging outward-bound experiences, individual coaching and personal development components and community action learning projects. The types of experiences and activities that CLPs offer, have the potential to be most disequilibriating for those at the last two conventional stages of consciousness (Expert and Achiever) because they begin to expose participants to the fundamental paradoxes in human nature, confront them with ambiguous challenges and invite them to face their discomfort with this, as well as focus them on their own mental habits and biases - all concerns that Cook-Greuter (1999) noted come to the fore in the post conventional stages.

Anecdotally, most participants describe their experience in community leadership programs as 'transformational' and this has certainly been the case in the CLP that my colleagues and I have run in South Australia for the last 11 years. Over the years we have seen so many of the more than 440 graduates make radical transformations in their personal lives, their communities and in their organisations as a result of completing the program. Time and again, graduates report 'seeing the world differently', being better able to reflect and take a 'balcony' perspective, to reframe and redefine problems, question assumptions, explore and integrate different points of view, inspire commitment and to better take care of their own wellbeing and that of their team. In 2008, we introduced the use of the WUSCT into our program as a self-awareness tool for participants and have observed in the years since then that 35-50% (depending on the year) have transitioned at least one consciousness stage during the course of the program.

Over the years, we also noticed that some participants seemed to transform more readily than others during the program. We wondered for some time, about whether this might, in part, relate to personality preferences revealed by our use of the Myers Briggs Type Indicator (MBTI) with all program participants. The MBTI reveals preferences on four dichotomies. The first dichotomy indicates differences in the way people orient their energy - either directing it primarily to the external world of people and things (Extraversion - E) or primarily to their inner world thoughts and reflections (Introversion - I). The second indicates differences in the way people take in information and the kind of information they like and trust, with some preferring to take in information using their senses and focus on the present and what is real and tangible (Sensing -S) and others preferring to go beyond what is real or concrete and focus on the future – patterns, possibilities, meanings and connections (Intuition - N). The third dichotomy indicates differences in the way people make decisions, with those with a preference for Thinking (T) preferring to base decisions on impersonal, objective logic and those with a preference for Feeling (F) preferring a person-centred, values-based process. The fourth indicates differences in orientation to the external world, with some having a preference for planning and organising (Judging - J) and others

preferring spontaneity and flexibility (Perceiving – P). These sets of opposite preferences result in 16 possible "type" combinations.

However, in spite of the popularity of the MBTI, only a single study could be found in which it had been used to explore the relationship between personality and consciousness development. This was undertaken by Bushe and Gibbs (1990) and it found a modest but significant positive correlation between consciousness development and the MBTI preference for Intuition (N), and a modest but significant negative correlation between the preference for Sensing (S) and consciousness development. No relationships between consciousness development and any of the other MBTI preferences were found – however, the sample size of 64 participants was small.

Other research into the groupings of the MBTI preferences has nevertheless revealed particular combinations that might be more or less likely to be associated with higher consciousness development. Research with ST types found that they showed most risk avoidance when in operating in challenging environments – a factor that might lead to less learning from such environments, and possibly less likelihood of experiencing them - whereas SF, NF and NT types were more risk tolerant (Walck, 1996). Similarly, research with STJ's found them to be resistant to change (Isachsen & Berens, 1988; Clancy, 1997) – a characteristic that is likely to mitigate against seeking out novel life experiences and growing from them. On the other hand, NP types have been found to seek out new challenges, new ideas and new people and NP and NF types have been found to be associated with higher creativity on various measures (Myers et al., 2003).

Fascinated by the early results from our use of the WUSCT in our program, as well as curiosity about the possible links between personality preferences and consciousness development, I commenced research for my PhD in 2009 with the aims of, as noted above, advancing understanding of why and how development to higher consciousness levels might occur for some individuals and not others and to investigate the efficacy of community leadership programs (CLPs) in triggering consciousness development.

2. Research summary

A full description of this two-part research and its results is reported in Vincent, Ward and Denson (in press) and in another upcoming paper (Vincent, Ward & Denson, manuscript in preparation). In summary, as mentioned above, it involved a total of 374 program participants - 337 from 11 Australian community leadership programs (CLPs) and 37 controls recruited from two non-academic (but university-run) professional management programs. A total of 335 participants (90%) remained in the study and took part in the final testing session at the end of their program. The sample was highly educated, with the majority (75%) having completed a university degree. At program entry, participants ranged from the Diplomat to Strategist levels of consciousness, with the majority (67%) at the Achiever stage.

The two alternate short forms of the WUSCT (Loevinger, 1985) were used to assess consciousness development on program entry and at the completion of the program. In determining consciousness level, I utilised the ogive rules modified by Cook-Greuter (1999); they have higher cut-off numbers for assigning high-end consciousness scores (Individualist

and above). The Myers Briggs Type Indicator (MBTI) was used to assess personality preferences on program entry.

3. Findings and conclusions

My research results reinforced the finding from one previous study that Intuition, as measured by the MBTI, is associated with higher consciousness development. In addition, I found something that has not been demonstrated before - that those with a preference for Intuition were more likely than Sensing types to have increased a consciousness stage at the end of a leadership development program. No other MBTI preferences or combinations of preferences were found to be related to ego development (except where combinations included the Sensing/Intuition preferences – but in these cases, the addition of other preferences did not add to the strength of the association).

In addition, the research provided further support for the finding by Manners, Durkin and Nesdale (2004) that programs designed in accordance with the conceptual framework developed by Manners and Durkin (2000) can successfully trigger consciousness development. In the current study, those CLPs that offered challenge to worldviews primarily through the exploration of community issues were as successful in facilitating consciousness development from Expert to Achiever as those CLPs that offered this in addition to other psychosocial components. However, to trigger development beyond the Achiever level, more extensive psychosocial development components were necessary and only those CLPs that offered these (such as outward-bound experiences, individual coaching, community action learning projects and/or other more substantial personal development

components) were successful in shifting participants from the Achiever stage into the postconventional tier.

Although this study has several limitations (such as the restriction of the measurement of personality to the MBTI and the limited representation of consciousness levels below Expert), the results nevertheless demonstrate that the design of effective leadership development interventions that trigger consciousness development should be guided by the conceptual framework formulated by Manners and Durkin (2000). This means that traditional MBAs and skill-based leadership development programs are not likely to develop the consciousness shifts needed to tackle the kinds of adaptive problems faced by our organisations, communities and globally. The latter tend not to offer disequilibriating challenge for levels of consciousness development beyond the Expert level (Donovan, 1997; Rooke & Torbert, 2005) simply offering horizontal development for those beyond this stage. If we want to challenge the current predominant world views and develop the creative, innovative and analytical ability, long-range perspective and tolerance for ambiguity and uncertainty that will be required to make progress in tackling our adaptive challenges then we must move beyond horizontal development and incorporate vertical (psychosocial) development processes into our leadership programs, taking account of the levels of consciousness development at which participants are currently functioning (Bartone, Snook, Forsythe, Lewis & Bullis, 2007; Forsythe, Snook, Lewis, & Bartone, 2002; Kuhnert & Lewis, 1987).

Moreover, as Bartone et al. (2007) have argued, much more work needs to be done in order to understand whether, as has been suggested by some research, there are generalised processes (such as meditation), which may foster or speed growth throughout the

developmental process, and to also understand the specific factors that influence development at each consciousness level. In addition, the analysis by Manners and Durkin (2000) and the results of the current research suggest that personality factors are likely to influence how individuals will respond to such experiences, and thus need to be taken into account. To further complicate the matter, work by Baumeister (1994) and Helson and McCabe (1994) has indicated that the timing of such experiences in the lives of participants may also be important.

In South Australia, our organisation is focussed on developing wiser leadership to tackle the adaptive challenges we face – and we are passionate about this mission. At the end of 2013, 480 people will have graduated from our community leadership program (the Governor's Leadership Foundation) – and many more from our other programs. Our aim is to develop a critical mass of people in influential leadership roles to higher levels of consciousness in order to create a 'snowball' effect that rolls throughout the institutions, systems and structures of our community and eventually lifts everyone's capacity (Donovan, 1997). We recognise that this is a grandiose goal, but as Vaclav Havel once said (and we agree) '...it makes sense, regardless of how it turns out'!

4. References

Barker, E.H. & Torbert, W.R. (2011). Generating and Measuring Practical differences in leadership performance at postconventional action-logics. In A.H. Pfaffenberger, P.W. Marko, & A. Combs (Eds.), *The postconventional personality: assessing, researching, and theorizing* (pp. 39-56). New York: State University of New York Press.

Bartone, P., Snook, S., Forsythe, G., Lewis, P. and Bullis, C. (2007). Psychosocial development and leader performance of military officer cadets. *The Leadership Quarterly*, 18, 490–504.

Baumeister, R.F. (1994). The crystallisation of discontent in the process of major life
changes. In T.F. Heatherington & J.L. Weinberger (Eds), *Can personality change?* (pp. 281297). Washington DC: American Psychological Association.

Brown, B. (2011). *Conscious leadership for sustainability: How leaders with a late-stage action logic design and engage in sustainability initiatives*. (Doctoral dissertation). Retrieved from http://integralthinkers.com/wp-content/uploads/Brown_2011_Conscious-leadership-for-sustainability_Full-dissertation_v491.pdf

Bushe, G.R. & Gibbs, B.W. (1990). Predicting organisation development consulting competence from the Myers Briggs Type Indicator and stage of ego development. *The Journal of Applied Behavioural Science*, 26, 337-357. doi: 10.1177/0021886390263008

Clancy, S.G. (1997). STJs and change: Resistance, reaction, or misunderstanding? In C. Fitzgerald & L. Kirby (Eds.), *Developing Leaders: Research and applications in psychological type and leadership development.* (pp. 415–38) Palo Alto, CA: Davies-Black Publishing.

Cohn, L.D. (1998). Age trends in personality development: A quantitative review. In P.M.
Westenberg, A Blasi, & L.D. Cohn (Eds.) *Personality development: Theoretical, empirical and clinical investigations of Loevinger's conception of ego development* (pp. 133-143).
Hillsdale, NJ: Erlbaum.

Cook-Greuter, S. (1999). *Postautonomous ego development: A study of its nature and measurement*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database (<u>http://search.proquest.com/docview/304503009?accountid=8203</u>)

Cook-Greuter, S.R. (2004). Making the case for a developmental perspective. *Industrial and Commercial Training*, 36(7), 275-281. doi: 10.1108/00197850410563902

Donovan, T. (1997). *The Edge of the Possible: Intelligence of a New Era*. New South Wales: Business and Professional Publishing.

Forsythe, G.B., Snook, S.A., Lewis, P. & Bartone, P.T. (2002). Making sense of officership:
Developing a professional identity for 21st century army officers. In D.M. Snider, G.L
Watkins, & L.J. Matthews (Eds.). *The future of the army profession* (pp. 357-378) New York:
McGraw-Hill Primus Publishing.

Guerette, R.H. (1986). Environmental Integrity and Corporate Responsibility'. *Journal of Business Ethics*, *5*, 409-415. Retrieved from http://www.springerlink.com.proxy.library.adelaide.edu.au/home/main.mpx

Heifetz, R., Grashow, A. and Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organisation and the world*. Boston, Harvard Business School Publishing.

Helson, R. & McCabe, L. (1994). The social clock in middle age. In B.F. Turner & L.E Troll (Eds.), *Women growing older: Psychological perspectives* (pp. 68-93), London: Sage.

Isachsen, O. & Berens. L.V. (1988). *Working together: A personality centered approach to management*. Coronado, CA: Neworld Management Press.

Joiner, B & Josephs, S. (2007). Developing agile leaders, *Industrial and Commercial Training*, 39(1), 35-42. http://dx.doi.org/10.1108/00197850710721381

Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge: Harvard University Press.

Kegan, R. & Lahey, L.L. (2009). Immunity to change. Boston: Harvard Business Press.

King, P.J. & Roberts, N.C. (1992). An investigation into the personality profile of policy entrepreneurs. *Public Productivity & Management Review*, *XVI*(2), 173-190. Retrieved from http://www.jstor.org.proxy.library.adelaide.edu.au/stable/10.2307/3380990

Kuhnert, K.W. & Lewis, P. (1987). Transactional and transformational leadership: A constructive developmental analysis. *Academy of management review, 12*(4), 648-657. Retrieved from http://www.jstor.org/stable/258070

Loevinger, J. (1976). Ego Development. San Francisco: Jossey-Bass.

Loevinger, J. (1985). A revision of the Sentence Completion Test for ego development. Journal of Personality and Social Psychology, 48, 420-427.

Manners, J. & Durkin, K. (2000). Processes involved in adult ego development: A conceptual framework. *Developmental Review*, 20, 475-513. doi:10.1006/drev.2000.0508

Manners, J. & Durkin, K. (2001). A Critical Review of the Validity of Ego Development Theory and Its Measurement. *Journal of Personality Assessment*, 77(3), 541-567. doi: 10.1207/S15327752JPA7703_12

Manners, J., Durkin, K. & Nesdale, A. (2004). Promoting advanced ego development among adults. *Journal of Adult Development, 11(1)*, 20-27. doi: 10.1023/B:JADE.0000012524.32002.8d

Marko, P. (2006). *Exploring facilitative agents that allow ego development to occur*. Unpublished doctoral dissertation. Dissertation Abstracts International. (AAT 32`7527). Marko, P. (2011). Exploring facilitative agents that allow ego development to occur. In A.H. Pfaffenberger, P.W. Marko, & A. Combs (Eds.), *The postconventional personality: assessing, researching, and theorizing* (pp. 87-100). New York: State University of New York Press.

Marrewijk, M.V. & Were, M. (2003). Multiple levels of corporate sustainability. *Journal of Business Ethics*, *44*(2/3), 107-119. Retrieved from http://www.springerlink.com.proxy.library.adelaide.edu.au/home/main.mpx

McCauley, C.D., Drath, W.H., Palus, C.J., O'Connor, P.M.G. & Baker, B.A. (2006). The use of constructive developmental theory to advance the understanding of leadership. *The leadership Quarterly*, *17*, 634-653. Doi: 10.1016/j.leaqua.2006.10.006

Merron, K.A. (1985). *The relationship between ego development and managerial effectiveness under conditions of high uncertainty* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database

(http://search.proquest.com/docview/303377696?accountid=8203)

Merron, K.A., Fisher, D. and Torbert, W. (1987). Meaning making and management action. *Group and Organization Studies*, 12(3), 274-86.

Myers, I. Briggs, McCaulley, M.H., Quenk, N.L. & Hammer, A.L. (2003). *MBTI Manual: A guide to the development and use of the Myers-Briggs Type indicator* (3rd Edition). California: CPP Inc.

Pfaffenberger, A. (2005). Optimal Adult Development: An Inquiry into the Dynamics of Growth. *Journal of Humanistic Psychology*, 45(3), 279-301. doi: 10.1177/0022167804274359

Rooke, D. & Torbert, W.R. (2005). *Seven transformations of Leadership*. Harvard Business Review (April), 1-12. Retrieved from http://www.newperspectives.com.au/downloads/seven%20transformations%20of%20leaders hip.pdf

Rooke, D. & Torbert, W.R. (1998). Organisational transformations as a function of CEO's developmental stage. *Organization Development Journal*, 16(1), 11-28. Retrieved from http://www.odinstitute.org

Strang, S.E. & Kuhnert, K.W. (2009). Personality and Leadership Developmental Levels as predictors of leader performance. *The Leadership Quarterly*, 20, 421-433. doi:10.1016/j.leaqua.2009.03.009

Torbert, B. & Associates (2004). *Action Inquiry: The Secret of Timely and Transforming Leadership*. San Francisco: Berrett-Koehler Publishers Inc.

Vincent, N., Ward, L. & Denson, L. (in press). Personality Preferences and their Relationship to Ego Development in Australian Leadership Program Participants. *Journal of Adult Development*. Vincent, N., Ward, L. & Denson, L. (2013). *Promoting post-conventional consciousness in adults: Australian community leadership programs*. Manuscript in preparation.

Walck, C.L. (1996). Management and leadership. In A.L. Hammer (Ed.), *MBTI applications: A decade of research on the Myers Briggs Type Indicator* (pp. 55-80). Mountain View, CA: CPP Inc.

Wilber, K. (2000). Integral Psychology. Boston: Shambhala Publications.

Westenberg, P.M. & Block, J. (1993). Ego development and individual differences in personality. *Journal of Personality and Social Psychology*, *65*(4), 792-800. doi: 10.1037/0022-3514.65.4.792

Table 1: Stages of Consciousness (or Ego) Development

TIER		STAGE	TYPICAL MANIFESTATIONS
PRECONVENTIONAL		IMPULSIVE	Dependent on others for control. Physical needs and impulses. Others understood in simple dichotomies (good and bad, clean and dirty etc). Rules poorly understood.
		OPPORTUNIST (SELF- PROTECTIVE)	Fragile self-control. Opportunistic hedonism. Short time horizon (hours to days). Focus on concrete things. Deceptive, manipulative. Exploitive. Preoccupied with staying out of trouble, not getting caught; externalising blame. Lacking long term goals and ideals. See life as a 'zero sum game'. Views luck as central. Rejects critical feedback. 4.3% found to be at this stage by Cook-Greuter, (2004)
CONVENTIONAL		DIPLOMAT (CONFORMIST)	Group-centred. Identified with the group and/or authority. Imitates behaviour of high status group members. Friendliness and social niceness highly valued. Rules and norms accepted without question. What is conventional and socially approved is 'right' (although may also rigidly conform to some unconventional norms to fit in with a group). Preoccupation with reputation, social acceptance, appearance and material things. People (including the self) perceived in terms of stereotypes based on social groups. Conceptually simple, 'black and white' thinking. Feelings only understood at banal level. Use of clichés, favourite phrases and pre-fabricated jokes. Face-saving essential. One week to three month time horizon. 11.3% found to be at this stage by Cook-Greuter (2004)
		EXPERT (SELF-AWARE)	Distinction between self and the group and allows some modification of absolute rules, but stage is still basically a version of Conformist. Concentrates on mastery of one or more particular crafts or disciplines. Desire to stand out, be unique. Perfectionist. Increased, though still limited, self-awareness and appreciation of multiple possibilities in situations. Relationships described in terms of feelings (not just actions). Self-critical but accepts external feedback only from acknowledged craft masters. Values decisions based on technical merit. Humour tends to practical jokes. Six month to one year time horizon. 36.5% found to be at this stage by Cook- Greuter (2004).
		ACHIEVER (CONSCIENTIOUS)	Self-evaluated standards. Reflective; responsible; empathetic. Rich and differentiated inner life Strives for longer term goals and ideals (one to three years). Tries to improve the self. Achievement is highly valued. Thinking beyond personal concerns to those of society. Displays and perceives true conceptual complexity. Can see the broader perspective and can discern patterns. Principled morality. Mutuality in relationships. Self-critical. Welcomes behavioural feedback. 29.7% found to be at this stage by Cook-Greuter, 2004.
POSTCONVENTIONA L		INDIVIDUALIST (INDIVIDUALISTIC)	Heightened sense of individuality. Takes a relativistic perspective. Interested in own and others unique self-expression. Tolerant of self and others. May become a maverick. Awareness of inner conflicts and personal paradoxes, without a sense of resolution or integration. Values relationships over achievement. Provide less certainty and less firm leadership to followers as aware of the layers of assumptions and interpretations at work in current situation. Possible decision paralysis. 11.3% found at this stage (Cook-Greuter, 2004).

STRATEGIST (AUTONOMOUS)	Self-awareness in action. Intuitively recognises other and own stages and accesses all of these creatively to achieve desired outcomes. Reframes issues and seeks transformational solutions. Creative at conflict resolution. Deepened respect for other people and their need to find their own way/make their own mistakes. Relationships seen as interdependent rather than as dependent/independent. Tolerance for ambiguity and the recognition of paradoxes. Capacity to face and cope with inner conflicts. Striving for achievement is transmuted into a search for self-fulfilment/self-actualisation. Cherishes individuality and uniqueness. Vivid expression of feelings. Witty existential humour. 4.9% found at this stage (Cook-Greuter, 2004).
POSTAUTONOMO ALCHEMIST (CONSTRUCT AWARE/ INTEGRATED)	Self-actualising. Starts to see own thought and language habits and become aware of profound splits and paradoxes inherent in rational thought. Aware of ego defences for self-preservation. Stands in the tension of opposites and seeks to blend them. 'Peak experiences' or 'flow states' may be experienced. Intentionally participates in the work of historical/spiritual transformation. 2.0% found at this stage (Cook-Greuter, 2004).

Adapted from Hy & Loevinger (1996), Manners & Durkin (2001), Cook-Greuter (1999; 2004), Marko (2006) and Torbert & Associates (2004). Brackets indicate Loevinger's/Cook-Greuter's original stage names.