

# Analysing the thinking and learning styles of the Senior Management Service

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## **ABSTRACT**

*With the creation of the Senior Management Service (SMS) in 2001 a specific attempt was made at professionalising the senior management cadre of the Public Service. An inherent requirement for professionalisation is continuous executive development. The article argues that for executive development to meet the requirements of both the organisation and the senior manager, learning and thinking style preferences should be considered in the design and implementation of continuous professional development interventions. The article uses a mixed method research approach to determine the thinking and learning style preferences of senior managers who participated in the Executive Development Programme (EDP) as part of their professional development. The article provides a theoretical perspective of thinking and learning style preferences based on the work done by Kolb (1973) and Neethling (2000). The findings reveal a specific preference towards left brain thinking and learning which is structured, analytical and process-driven with limited preference towards innovative or imaginative considerations. The article argues that the thinking and learning preferences of senior managers is indicative of an environment in which structure and process (or compliance) are emphasised, yet senior managers are expected to be visionary in dealing with service delivery complexities. Thinking and learning preferences should be considered in the manner in which professional development is driven as well as designed. Ultimately professional development should enable the senior manager to perform better at a practical, competency level, but also at a higher level of self-awareness necessary for leading public service delivery in such a complex environment.*

## INTRODUCTION

One of the prominent changes effected by the South African Government during the restructuring of the Public Service in the new Millennium, was the creation of the Senior Management Service (SMS) through an amendment to the Public Service Regulations in 2001 (Department of Public Service and Administration (DPSA), 2001:Section 4). The Public Service Regulations, 2001 require that the performance of all members of the SMS should be managed through a performance agreement or -contract, which is linked to the strategic plan of the department in which they serve. Included in this performance agreement is a development plan designed to ensure that the SMS members is provided with relevant professional development opportunities to maximise productivity in the workplace (DPSA 2001: Section 4).

The need for the successful learning and professional development of the SMS members is essentially a key requirement to ensure an able and willing Public Service (National School of Government (NSG) 2013: online). Recorded in the Personnel and Salary Management System of the South African Government (PERSAL), the SMS are a collection of unique individuals, appointed from different backgrounds and with different levels and specialist areas of education (PERSAL 2014). Data from the NSG Learning Management System (NSG 2014) shows that only 2500 SMS members from a possible 10 000 have opted to attend the learning and development opportunities offered by the NSG. Of these 2 500 learners only 191 have completed the required six modules which constitute the Executive Development Programme (EDP) specifically designed to meet the competency requirements for SMS members.

Diverged from the data in the PERSAL the education levels of the SMS members indicate that the majority are professionals, duly qualified with post school qualifications and up to 75% of SMS hold post graduate qualifications (DPSA 2007: 23–26), but still significant challenges in the ability of the SMS to efficiently deliver government programmes. The article argues that performance and leadership should thus be of a professional standard, and that quality leadership should be reflected by the way SMS members lead other public officials to successfully serve and implement the policies of the Government.

Van Dijk (2008:391) argues that the strategic importance of on-going learning and development should not be underestimated. This important management function remains central to the achievement of the vision and goals of any organisation. The National Planning Commission (NPC) (2011:406–407), emphasises that it is essential for the South African Government and its Public Service to be more capable, professional and responsive, and that effective management is crucial to ensure efficient, economic and appropriate use of resource. However, management is rarely empowered and encouraged to use the discretion and power that are available to them within the policy contexts of the Public Service. The National Development Plan (NDP) (NPC 2011:380) accentuates the lack of key professional skills in the Public Service, but argues that focussing on the development of key skills alone is not enough if professionals are not empowered to do their jobs. Too often policies are made, very well considered and structured, but with a limited view or plan for implementation. Quality management should turn these policies to relevant, effective and implementable strategies (NPC 2011:377).

Professional development qualifications, courses and certificates that are designed for the development of the Public Service, such as the EDP for the SMS, consider only the



organisational requirements and policy context from a vocational perspective. This results in a disjuncture between professional development requirements and solutions for the Public Service and the professional development needs of the SMS (Public Service Commission (PSC) (2014:21–24). This raises the question whether the professional development framework for the SMS can be enhanced by considering the needs of the SMS not only in relation to the vocational and organisational needs of the Government, but also by considering the thinking and learning style preferences.

Senior managers play a key role in shaping the direction, culture, structures and systems to support delivery of Government programmes (Fraser-Moleketi 2007: n.b.). The DPSA (2007) reports the need for innovation and focus to improve development programmes available to the SMS. Correspondingly, the NDP (NPC 2011:364, 432–434, 462) places great emphasis on the unevenness and poor quality of capacity, skills and competence of public servants and services rendered by the state. The NDP (NPC 2011:364) argues that this is a result of the lack of capability of the state to implement key policy programmes, even though great strides have been made in policy formation since democracy in 1994.

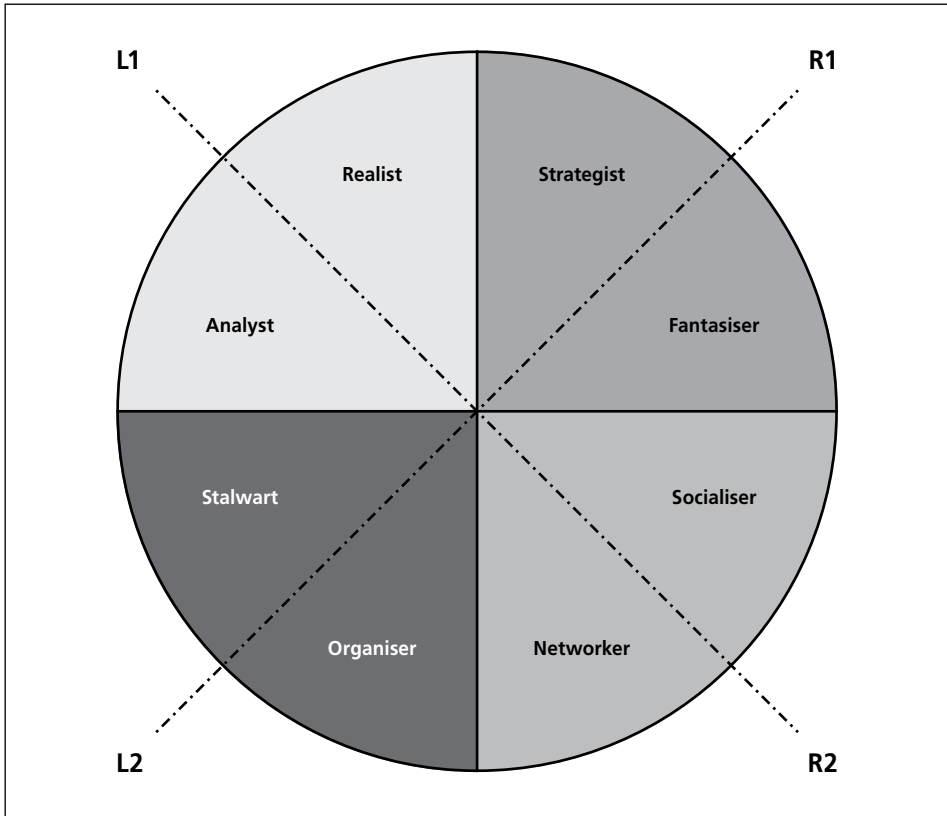
When proposing solutions to turn around the failures of the state, the NDP (2014:365) underscores the importance of focusing on key capabilities, and the need for a rigorous effort by the state to reinvigorate its role as a developer of much needed specialist and professional skills in the country. Muthien (2014:127) argues that “Effective leaders assemble an ‘architecture of execution’ underpinned by high performance, execution driven managers with a value proposition of ‘end-to-end capability’ and a strong operational culture”. The aim of this article is to determine the extent to which the structuring of professional development solutions not only fits the needs of the Public Service, but is packaged in such a way that also considers the thinking and learning style preferences and needs of the SMS members. The article argues that the professional development of senior managers and the influence of their thinking and learning preferences may have specific requirements and conditions for the design and delivery of professional development interventions for the SMS.

## **THEORETICAL PERSPECTIVE ON THINKING AND LEARNING STYLES**

Gouws, Meyer, Louw and Plug (2000:50) define thinking as all cognitive processes that are non-perceptive and through which aspects of the environment are understood and interpreted. Gouws *et al.* (2000:50) cite Carl Gustav Jung (1919) and describe the thinking function as one of the basic functions of the psyche; and thinking type as the preferred thinking function in the conscious mind. Both Rothman (1990:144) and Neethling (2000:29) further note that people are inherently different, and that individual differences result in personal thinking preferences that influence the manner in which people communicate, make decisions, solve problems and manage themselves and others.

Thinking preferences are determined by the way in which the brain is structured. Neethling (2000:29) argues that children are born with 20% to 30% of thinking preferences, while 70% to 80% develop through social and environmental interaction. These preferences reside in the four quadrants of the human brain. Figure 1 depicts the structure of the brain as defined by Neethling’s Thinking Style Preference Model (Neethling 2000:7).

**Figure 1: Neethling’s Thinking Style Preference Model**



Source: Neethling (2000:7).

Each individual receives and processes information and acts upon this information in a specific manner, depending on which brain quadrant is dominant. This explains why people think, learn, communicate and make decisions in different ways. Because individual thinking preferences and brain profiles have a specific impact on how an individual communicates, acts towards other people, does business, learns, solves problems and makes decisions (Neethling 2000:2), it can be argued that presenting information in a way fitting a specific thinking style preference crafts an environment where learning can take place. It implies that different people have different learning styles.

Four main categories of learning styles can be distinguished:

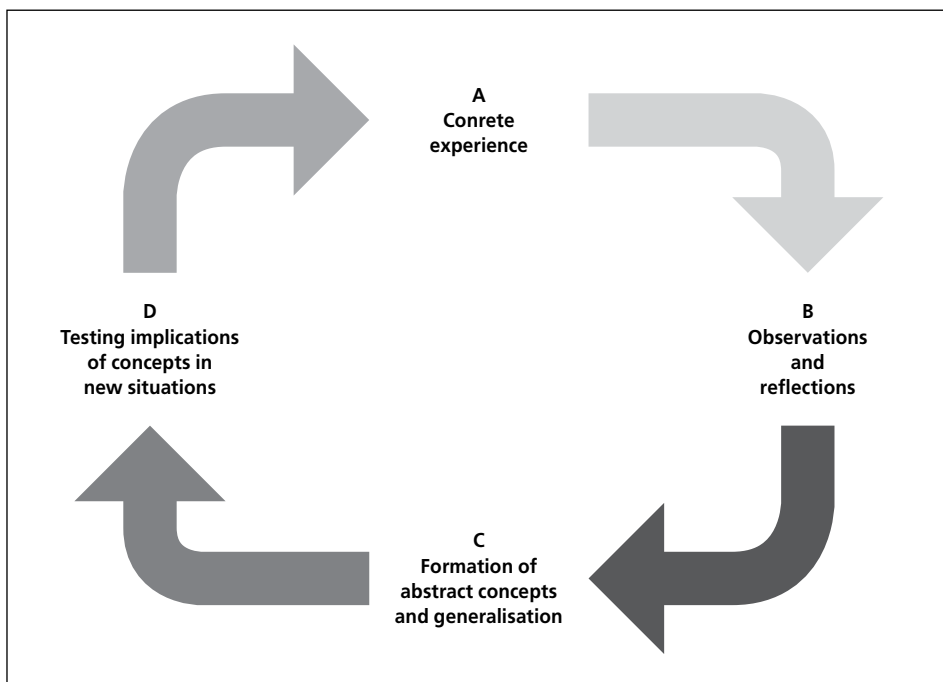
- cognitive personality elements (Witkin 1978:15)
- information-processing style (Kolb 1984:38);
- approaches to studying (Entwistle & Tait 1994:93–103); and
- instructional preferences (Riechmann & Grasha 1974 cited by Richlin 2006:34–41).

In his original work, Kolb (1973:2) presented a cyclical model of learning, consisting of four stages:

- concrete experience (or do);
- reflective observation (or observe);



**Figure 2: Kolb's Experiential Learning Cycle.**



Source: Kolb (1973: 2)

- abstract conceptualisation (or think); and
- active experimentation (or plan) as is also presented visually in Figure 2.

Kolb's four-stage learning cycle illustrates how learners translate experience through reflection into concepts, using these concepts as directions or guides to actively experiment and make choices for new experiences. In addition to defining the stages of learning, Kolb is also very well known for the Learning Style Instrument (LSI) which originated from his theory. The LSI determines an individual's learning preference from the possible four learning styles, corresponding to the four stages in the Experiential Learning Cycle Model (Figure 2). In each of these styles the conditions under which learners learn better, are different (Kolb 1984:36).

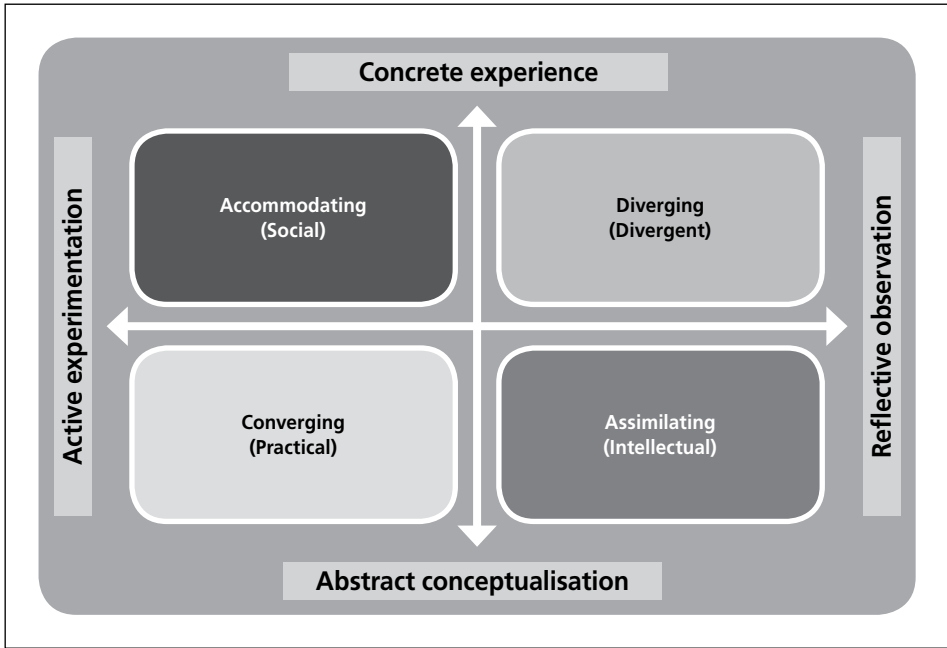
The following present the categories of the learning preferences (Kolb 1984:36–38):

- assimilators who learn better when presented with sound, logical theories to consider;
- convergers who learn better when provided with practical applications of concepts and theories;
- accommodators who learn better when provided with "hands-on" experiences; or
- divergers who learn better when allowed to observe and collect a wide range of information.

Kolb's (1984:76) model assesses learner perception and processing of information and bases the model on two continuums, namely:

- a processing continuum (how a task is approached – from doing to watching); and

Figure 3: Kolb's Learning Style Model



Source: Kolb (1984)

- a perception continuum (emotional response, or thoughts or feeling about a task, – from thinking to feeling).
- From abovementioned scales four dimensions of learning are depicted:

Kolb's model considers individuals' preferred reactions to information presented in four quadrants. Kolb links each of the four profiles to feeling, thinking, doing or converging. In a similar way, Neethling's four-quadrant Thinking Style Preference Model determines profiles in relation to a holistic, analytical, structured or feeling oriented thinking pattern. Bringing these two models in connection with each other, an argument can be made that taking equal consideration of thinking and learning preferences, and incorporating these in learning delivery models based on adult education principles, the performance of a SMS member may improve significantly after participating in such a learning intervention.

Knowles (1974:29) clearly outlines the diversity in adult education when he derives that the adult educator has a mission that is far beyond the pedagogical norm. He emphasises that the adult educator should at all times help individuals in more complex and significant ways than what might appear on the surface. Knowles (1974:37) argues that, somewhere in the history, the specific reference to children had been removed from the definition and pedagogy became the application across all boards of learning and development. In his efforts to correct this blanket application, Knowles (1974:37) teaches that skilful adult educators have long realised that one cannot teach adults in the same way as one would children, mostly because adults are in most instances voluntary learners. Should learning experiences not satisfy their need, they would simply disappear from the learning experience. In *The Modern Practice of Adult Education* (1974), Knowles goes beyond the



known definition of *pedagogy* and defines *andragogy* as the art and science of helping adults to learn, or helping human beings to learn.

Knowles (1974:37–38) built this definition on four assumptions:

- as a person matures, his/her self-concept changes from being a dependant person to a self-directed individual;
- as a person matures, his/her collection of experiences accumulates and becomes an ever growing resource for learning;
- as a person matures, his/her readiness to learn is linked to the social roles and developmental tasks thereof; and
- as a person matures, his/her time perspectives become more direct and require instantaneous application of knowledge and skills rather than postponed application of skills.

This argument is supported by the NPC (2011:377) which reported that a one-size-fits-all approach to learning will not achieve the required objectives. This confirmation creates a strong motivation to provide professional development solutions that are relevant, timely and that give special attention to packaging and delivery that are aligned to thinking and learning preferences. The design of professional development solutions should not assume that methodology and delivery are defined by the content, but should rather consider the need of the SMS members.

## RESEARCH DESIGN

To understand this personal and social world within which learning and development takes place, an interpretative phenomenological design was followed. Smith and Osborn (2008:53) explain that the aim of interpretive phenomenological analysis is the discovery of the participants' understanding of their personal and social world, creating value from the meaning that these participants find in particular experiences. Analysing the phenomenon of the SMS (as unit for analysis) in relation to thinking and learning style preferences will provide an opportunity for the detailed examination and understanding of the life-world of the SMS members. The aim of the interpretive phenomenological method, as described by Smith and Osborn (2008:53), is the discovery of the participants' understanding of their personal and social world, creating value from the meaning that these participants find in particular experiences.

The nature of the SMS members, the geography and the availability of access challenges experienced daily, required a strategic decision to guarantee a valid, suitable sample from where data will be collected (Oppenheim and Oppenheim, 1992:62). The non-proportional quota sampling method, a sub category of the purposive sampling method (Tashakkori & Teddlie 2003:713, Palys 2008:697–698), was selected to be best suited to the study. This type of purposive sample, allowed for the sample to be selected specifically to achieve the purpose of the study, rather than randomly selecting a sample (Tashakkori & Teddlie 2003:713). The non-proportional quota sample applied a set of specific criteria to the population, to determine who the sample will be (Palys 2008:697–698). The target sample consisted of public servants at SMS level in national and provincial government departments. The criteria to participate in the study included that respondents need to be:

- an employed public servant;
- at the level of director, chief director or similar;
- employed at the time of participation in the EDP at either national or provincial sphere of Government (including public agencies, the protection services like the South African Police Service (SAPS) and the South African National Defence Force (SANDF) and similar institutions);
- must have registered for at least seven modules (six compulsory modules and one orientation module) of the EDP (from 2007 onward), also including qualifying participants from the original EDP pilot programme run during 2006; and
- must have completed either successfully or unsuccessfully to ensure that a holistic perspective of experiences can be attained.

Based on the above criteria, 191 possible respondents were identified. While the whole sample was included in the distribution of questionnaires, saturation in terms of thinking and learning preference analysis was achieved with the 47 respondents who returned the questionnaire within the allotted time. Comparing holistically the gender per sphere of government variable as presented in the sample (Female 50%, Male 50%), correlates well with the profiles of the population (Female 45.2%, Male 54.8%) and all EDP participants (Female 50%, Male 50%), while comparing relatively well with the Public Service SMS profile (Female 39.8%, Male 60.2%). The analysis of the age and race representativeness of the same was tested and is presented in Table 1. Age and race defines the population and may have an influence on preferences.

This demonstrates a clear correspondence between the age representation for age groups 36–45, 26–35, 46–55 and 56–65 in all categories (SMS, EDP and sample). Two instruments are utilised to obtain data for this study namely a literature review and a semi structured, self-administered questionnaire. “In an academic context, all research is based on previous research” (Badenhorst 2008:155), strongly suggesting that a literature review is inherent in the initial design of the research and the research topic. A comprehensive literature review, logically arguing the case originating from an expansive understanding of the current state of knowledge about the research topic, establishes the theoretical context identifying issues for argument in response to the research questions (Machi & McEvoy 2012:4). Mouton (2008:87) explains further that a literature review can be regarded as a review of existing scholarship relevant to the study, to provide the most recent, credible and relevant overview of the study field.

The questionnaire was designed to make relevant data available, in response to specific questions pertaining to the thinking and the learning style preferences of the respondents. From a quantitative perspective, data was collected by discovering, counting and identifying themes and categories as these emanated from the literature review. Standardised questions were designed to which respondents were required to reply (Taylor 2005:243). The questionnaire was structured by presenting respondents with ten (10) statements each pertaining to thinking and learning preferences, each of which describe a specific situation or experience in the daily life of each person. For analysis purposes, priorities were allocated a score: Priority one (1) – four (4) points, Priority two (2) – three (3) points, Priority three (3) – two (2) points and Priority four (4) – one (1) point. Respondents were required to prioritise the responses from a personal perspective and rank the proposed responses (coded A, B, C





**Table 1: Comparison: Age Distribution per Race**

SMS				
Age category	White	Asian	Coloured	African
26–35	7.84%	7.65%	5.35%	79.16%
36–45	8.78%	6.27%	7.27%	77.68%
46–55	14.22%	6.41%	10.30%	69.08%
56–65	26.86%	5.66%	7.39%	60.10%
66+	33.33%	5.80%	1.45%	59.42%
EDP				
Age category	White	Asian	Coloured	African
26–35	5.79%	3.42%	12.89%	77.89%
36–45	6.32%	3.67%	8.05%	81.96%
46–55	8.33%	4.17%	8.93%	78.57%
56–65	5.85%	3.90%	8.08%	82.17%
66+	0%	0%	0%	0%
SAMPLE				
Age category	White	Asian	Coloured	African
26–35	0.00%	100.00%	0.00%	0.00%
36–45	11.76%	5.88%	17.65%	64.71%
46–55	14.29%	9.52%	9.52%	66.67%
56–65	0.00%	0.00%	16.67%	83.33%
66+	0%	0%	0%	0%

or D), on the scale of one (1) to four (4), where one (1) means “this is mostly how I would react”, and 4 means “this least describes how I will react”.

An example of the method is presented in Table 2.

**Table 2: Example of converting a priority into a score**

Statement: Before I start on a project...			
Proposed response	Category	Priority	Score
I make sure that I understand the essence of the project	A	1	4
I develop a step by step plan to ensure that I know what I how to execute the project	B	2	3
I move between various activities on the project and complete these simultaneously	C	3	2
I make sure that I become involved with all aspects of the project	D	4	1

This method provides for the personal reflection on thinking and learning style preferences and the results depict the preferred personal style of thinking or learning of the member of the SMS. Data was analysed by:

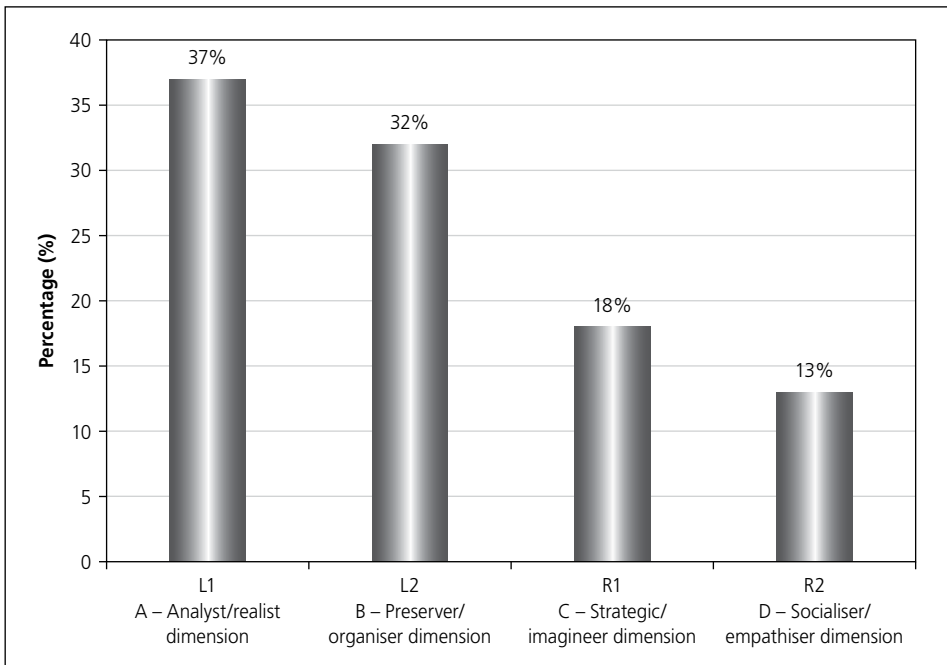
- Determining the frequency for assigning Priority 1 to categories A, B, C, or D, first per respondent, and then summarising the frequency per category by calculating the sum of frequency, per category, for all respondents.
- Calculating the percentage of the total per category (total of frequency per category as a percentage of the total of frequency across all categories).

## FINDINGS

The SMS thinking style preference profile (presented in Figure 4), as derived from the questionnaire data coded and analysed, shows a very definite preference toward the structured, analytical and organised left hemisphere of the brain.

The first preference of the SMS is the L1 – analyst/realist dimension (37%), and the second preference, following very closely at 32% of the total, in the L2 preserver/organiser dimension as explained in the Neethling Thinking Style Preference Model. Very low preferences are recorded for the thinking preferences in the right hemisphere of the brain, for R1 – strategic/imagineer and R2 – socialiser/empathiser dimensions, with an overall result of 18% and 13% respectively. As documented by both Herrmann (1996) and Neethling (2000) the typical thinking patterns of the left brain are structured, process driven, analytical with no consideration of the big picture or feelings and people. Thinking patterns in the

**Figure 4: SMS thinking style preference profile**



left hemisphere are void of any visionary, strategic and imaginative considerations and individuals with a left brain dominant profile prefer the process and plan above solution finding and innovation (Neethling 2000:29).

The L1 – analyst/realist dimension (Neethling 2005:4), as the first or primary thinking style preference of the SMS, means that the SMS prefer to focus and consider the essence of a case, are clinical in their approach, prefers the concrete, are performance driven, objective, rational, clinical and critical, and have a quantitative orientation. The second and supporting preference is the L2 – preserver/organiser dimension. The typical characteristics in this dimension include a need to be organised and orderly, planning, a step-by-step approach to achieve objectives, working sequentially, showing attention to detail and task and result driven, to name a few.

The SMS scored the lowest in the right hemisphere dimensions (Neethling 2005:4), scoring a mere 18% in the R1 – strategist/imagineer dimension and an even lower 13% in the R2 – socialiser/empathiser dimension. The very low preference recorded in the right hemisphere thinking style dimensions (Neethling 2005:4), is indicative of a lesser tendency of the SMS to include and consider the bigger picture, flexible solutions, does not tend to consider another individual's perspective, the possibility to move into uncharted and unfamiliar territory, and break new ground or be part of change and transformation. With the low preference in the R1 dimension, the SMS is typically less able to multi-task or experiment and integrate different ideas and link unrelated concepts. The SMS will thus have the understanding of principles and practice of innovation and experimentation, but will prefer to rely on known, conventional and proven practices.

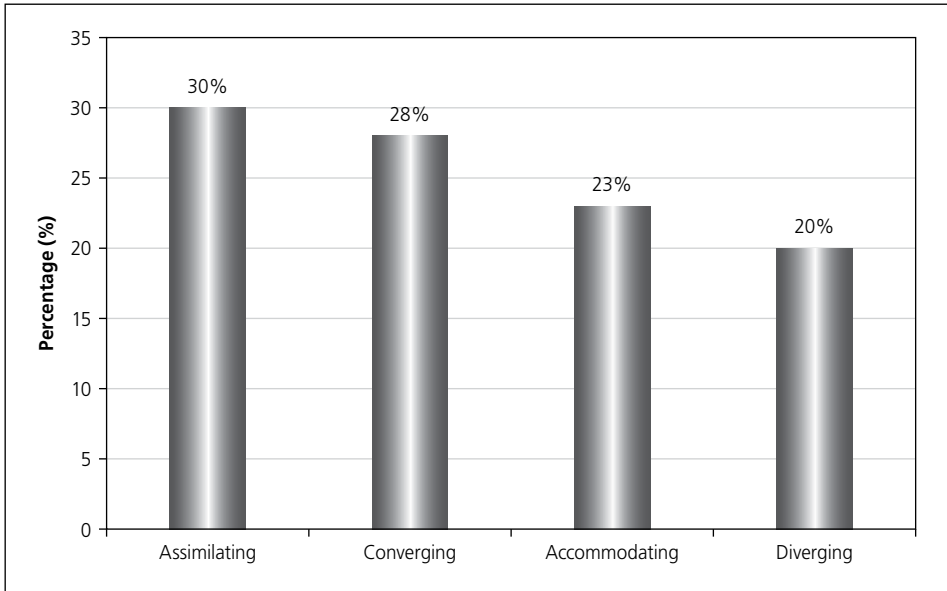
The benefit of a leadership group with strong left brain thinking skills, is the inclination towards evidence based decisions, thorough analysis, and scientific or quantitative assessment of factual representation. Left brain thinkers are the “stalwarts” (Neethling 2005:5-5), that will protect the *status quo*, applying policy strictly without considering the bigger intent thereof, using policies as safe enablers rather than restrictors for delivery. The left brain SMS is a typical manager, transactional and process orientated, showing little competence or skill in developing and sharing a vision, or innovation.

The article argues that an analytical left brain approach can improve productivity, but will be caught up in the known and proven ways, sometimes not being effective and efficient. This may result in the SMS and their teams doing much but achieving little. Thornhill and Van Dijk (2003:345) present the juxtaposed methods of management and leadership, presenting management as instructional and directive, whereas leadership relies on “leading, directing, actuating, and motivating of subordinates” (Sisk & Williams 1981:7).

The Public Service needs a cadre of innovative leaders with the ability to create strategies and new solutions to existing challenges (NPC 2011:Section 13). The evidence show that the SMS are not inclined to a natural preference to perform in such a context creating new pathways to success. The Public Service and its leadership must grow, learn, and develop continuously to evolve into the powerful machinery required to deliver services to all South Africans (NPC 2011:334). To develop the skills, attitudes and competencies required to achieve such a successful, highly effective organisation, necessitates a dynamic Public Service, with a clear vision, internalised by leaders (NPC 2011:Chapter 13).

Successful professional development initiatives require an even distribution between the development of the individual both from a knowledge and skills perspective and a personal development and growth realm (Van Dijk 2006:353–354). Participation in professional

**Figure 5: SMS learning style preference profile**



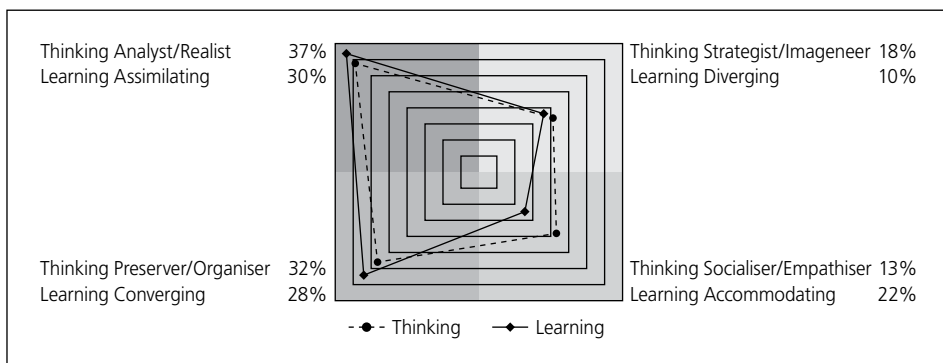
development initiatives might not be based only on the requirements of a strict policy regime for the SMS. Learning and professional development solutions in reaction to the support provided by policy, should respond to the needs of the organisation, the team and the individual member of the SMS (Van Dijk 2006:349). The summarised results per learning style preference category, showed in Figure 5, provide a more definitive result that does differentiate between the four (4) learning style preference categories.

Results of the Learning Style Preference data collected from the sample, show a stronger preference towards the assimilating (1<sup>st</sup>) and converging (2<sup>nd</sup>) learning styles of learning, and a lesser preference toward the accommodating (3<sup>rd</sup>) and diverging (4<sup>th</sup>) learning styles.

The assimilating style (30%) represents the abstract, reflective learner who will develop a number of different observations and thoughts into an integrated whole. The assimilating learner prefers to reason inductively by way of a logical process based on confirmed data from which conclusions are made. The converging learner (28%) presents the practical learner who chooses the practical application of ideas when solving problems, easily makes decisions and easily solves problems. The converging learner prefers the practical application of ideas, and technical problems rather than engaging on interpersonal issues. The accommodating learner (23%) easily adapts to changing circumstances, will respond to his/her intuition when solving problems, and in this way learn by discovery. The learner with this style preference is at ease with people while the diverging learner (20%) emphasises the innovative and imaginative approach to doing things. Diverging learners view specific situations from many perspectives and adapts by observation rather than by action (Kolb 1973:2 & 26, Mainemelis, Boyatzis & Kolb 2002:5-7).

Similar to the challenges identified with the thinking style preference profile of the SMS, the results from the learning style preference profile analysis, poses the challenge that members of the SMS present with a lack of interest in exploring new avenues and ideas, and to a great

**Figure 6: Similarity in SMS thinking and learning style preference profiles**



extent are not instinctive solution finders. The SMS members further present an attitude of defiance toward proposals for change and new and innovative learning approaches.

Research by Kolb (1984) shows that learning styles are influenced by a number of factors namely personality type, didactic specialisation, choice of career and the current job profile, role and tasks. Subsequent to the Jungian theory that presents adult development as a process that moves in adapting to the environment from a specialised perspective to a more integrated way of adaption, Mainemelis *et al.* (2002:9) argue that sophistication in learning implies the move from “specialisation to integration”. This ideal, sophisticated learning cycle is a product of integrating conceptualising/experiencing and acting/reflecting in the learning process (Mainemelis *et al.* 2002:2–3). This integrated learning helix can act as an important instrument to develop learners, in this case members of the SMS, into better learners. It can be a mechanism for members of the SMS to “learn how to learn” when the approach is aimed at consciously following the learning cycle of reflecting, thinking and acting (Kolb & Kolb 2009:297).

The empirical evidence profiles the SMS as mostly having a preference towards the dimensions of the left hemisphere of the brain (described by Sperry 1974) and represented by the L1 – analyst/realist and L2 – organiser/stalwart dimensions of the Neethling Thinking Style Preference Model (Figure 1). Similarly, the learning style preference profile of the SMS clearly highlights the assimilating and converging thinking styles (Kolb 1984) as the SMS preference profile. The typical characteristics of the assimilating and converging thinking styles (Kolb 1984), also closely linked with the processes in the left hemisphere of the brain (Sperry 1974, Neethling 2000). This overlap in style is reflected upon in Figure 6.

Figure 6 provides the overall comparative result from the statistical analysis and the empirical findings of the thinking style and learning style preference profiles of the SMS viewed as an integrated profile, while maintaining the integrity of the resulting by presenting the integrated profile with the explicit inclusion of the distinct results for the learning style preference and thinking style preference profiles of the SMS. There can be no conclusion other than that thinking style preferences and learning style preferences are related, and are linked at the cognitive level. This means that, should a thinking style preference profile of an individual be analyst/realist according to the Neethling (2000) model, the comparative Kolb (1973, 1984) assimilating thinking style preference will be found in the same individual.

From the findings of this study, supported by scholars such Kolb (1984) and Neethling (2000), the importance and value of an integrated and holistic approach for learning

and professional development becomes prevalent. As presented, among other cognitive processes, individuals have a natural preference in the way they think, learn and solve problems. These preferences towards the one or the other concept, even though measurable, are flexible. A great number of people are able to develop and/or move between various cognitive preferences. For this reason, these individuals are not limited or held ransom by their natural preferences, and can, especially within the right context and with sufficient motivation, move beyond their primary preference (Van Dijk 2006:349). Providing an enabling environment for the development of the whole, will map the way from a delineated, specialised perspective to adaptation and move toward the integrated way of adaption and learning sophistication (Mainemelis *et al.* 2002:2–3).

## SYNTHESIS

In the work environment, the SMS is evidently well positioned to naturally provide technical and statistical insights into the data, grasp the information and the problem, critically analyse options to determine the solution. Further, based on the secondary thinking style preference, the SMS will tend to be effective when the organisational aspects are needed, and planning to put an idea into action. The SMS members are also well positioned to execute a work plan, criticise and correct content and plans, organisation, time management, and practical application of ideas and solutions.

The strongly left oriented thinking style preference of the SMS, further challenges the ability of the SMS to define the problem and explore the problem and possible solutions from a holistic, contextual perspective. A lack of innovation and intuition may result in bad judgement and evaluation of ideas, and a lack of synthesis to understand the big picture, and setting goals that show only the link between the existing, and does provide for change and innovation (Neethling 2005, 9).

Learning and professional development rely on the transformation of experiences, ideologies and beliefs of others to effect real learning (Knowles 1980). The SMS members are required to lead a Public Service to success, enabling relevant, efficient, effective, cost effective, quality and timely services to the citizens. This implies that the development of the SMS can never only focus on being competent from a vocational perspective, but should be transformative in thinking and learning to ensure that the strategies of the South African Government are put into action and the country's goals are achieved (NPC 2011). Learning content should naturally include the policy related vocational training, but must develop members of the SMS as well, to be able to improvise, be innovative and relevant to the objectives of the Public Service.

The ideal learning process ensures that the learner engages with all four learning modes (Kolb 1973, 1984), namely experience, observation, conceptualisation and experimentation, and follows a reiterative process responding to different situational demands. Learning and professional development solutions must concretely attempt to guide members of the SMS through these learning modes to not only maximise learning, but also develop the individual from a personal perspective.

The golden thread between the thinking style preference profile and the learning style preference profile of the SMS, is an important indicator of the natural preferences of the



SMS that should be considered in the adequate design and development of curriculum and instruction of learning and professional development solutions offered to the SMS. It will enhance the study by identifying development areas in the SMS developing the attitudes and ideologies of the SMS toward a more people focussed, citizen centric leadership that is able to transform the Public Service and improve service delivery.

Members of The SMS are mostly left brain thinkers, with a thinking style preference strongly leaning toward the analyst/realist and preserver/organiser dimensions in the Neethling (2000) Thinking Style Preference Model. This orientation is fact orientation, process driven, practical and unemotional, with a weak ability to maintain healthy interpersonal relations, present with empathy, extremely limited or no preference for innovation, big picture thinking and developing new ideas, moving into unknown territory to find success. There is a definite correlation between the learning style preference profile of the SMS and the thinking style preference profile, and an exciting opportunity to infuse learning and development solutions with curriculum and instruction designs that advance learning and further develop the SMS to comply with the trying circumstances and high expectations that exist in the current South Africa.

The direct and indirect implications of the thinking and learning style preferences of the SMS must be applied when determining design and development methods and practices for learning and professional development solutions. Motivation for learning and professional development is an important building block towards the creation of a capable state (NPC 2011:376). The NPC (2011:376–377) proposes a model for learning and professional development that develops skills of public servants over the course of their career, serving as a tool to nurture a sense of professionalism and common purpose, shared visions and ethical standards and principals, provide for the development of skills and create opportunities to engage and discuss workplace challenges and solutions. The importance of a positive attitude and healthy state of motivation for learning and professional development among the members of the SMS should not be underestimated. The Public Service faces many challenges that require commitment, leadership, innovation and the implementation of policies, programmes and projects (NPC 2011:363–369).

To fully develop a representative and effective Public Service, as envisaged in the Constitution, 1996 (South Africa 1996), necessitates that the Public Service becomes an organisation that repeatedly assesses itself to enable the continuous improvement of practice required for optimal performance Senge (1994:14) This can be achieved by a cadre of leaders that are professional, focussed, and creative, and who infuse passion and energy into their teams (NPC 2011:Section 13).

In order to achieve the status of a learning organisation, Senge (1994:14) proposes that the organisation identifies creative ways in which to tap into the full potential and ability of people at all levels, in order for individuals to commit to the organisational goals and to learn continuously. Learning and professional development become a principal part of this vision. Van Dijk (2004:518) argues that learning and development provide the organisation with the opportunity to respond to the needs of the environment and in being flexible in this response develop into a learning organisation.

Siemens (2004) states that decisions that are made are influenced by continually evolving fundamentals, the collections of new information. Siemens (2004) claims that one of the vital skills to support successful decision making, is the ability to differentiate between

important and unimportant information, and knowing when such new information impacts on the current landscape, created by the decisions previously taken. Because learning rests in diverse views, connects various sources of information, maintaining connection to facilitate continual learning is one of the important enablers of successful development. From the arguments presented by Siemens (2004), it is clear that, in order for professional development opportunities to deliver expected results, SMS must be presented with up to date knowledge, be provided the opportunity to develop sufficient decision making skills, and realise the shifting reality within which the Public Service finds itself, knowledge, wherever this is retained, must be connected with the SMS for learning to occur.

Staley and Eastcott (1999:41) challenge the *status quo*, and argue that in the context of lifelong learning, work-based learning will develop and increase creating links between theory and practice that are conclusive and explicit. Professional development extends beyond the boundaries of only the development of knowledge, or practice, or self, and must be a fusion of theory, practice and personal and emotional growth to be successful.

A clear determination from the literature review is that thinking and learning are undeniably. In the words of Sperry (1987): "When the brain is whole, the unified consciousness of the left and right hemispheres adds up to more than the individual properties of the separate hemispheres". When the learning intervention approaches the learning from a comprehensive perspective a greater measure of success can be achieved. Learning and professional development opportunities should comprehensively consider the individual, and inclusively promote the development of the concepts, beliefs, feelings and judgements of the SMS to shape the understanding of the SMS during the learning and development experience (Mezirow 1997:223). Considering individual and organisational needs on an equal basis will enable the SMS to perform better at a practical, competency level, and at a higher level of self-awareness, enabling them to lead the Public Service to successful service delivery.

The current practice is that curriculum designed for SMS learning and professional development is customarily informed by the policy frameworks of South Africa, the vocational competencies specified in the SMS Handbook (DPSA 2003:Chapter 5) and related determinations. The curriculum is knowledge heavy and practice based, and strongly influenced by policy and practice. Programmes are expected to be accredited. The nature and content of such skills courses result in accreditation of most such offerings accredited at the lower levels of the NQF, ranging between NQF levels 4 and 6. This conflicts with the needs expressed by the SMS members that learning and development opportunities should be cognitively stimulating, exciting and advancing professional development. A renewed focus is needed to review what informs curriculum and instruction, wisely incorporating individual needs and preferences to advance learning and develop an effective and competent SMS.

## CONCLUSION

Thinking and learning are undeniably linked and understanding the thinking and learning preferences of adult learners, such as the SMS, should enable an organisation to design professional development interventions to meet both organisational and individual needs. The article provided a theoretical basis for thinking and learning style preferences and





established, empirically, the relationship between these two in the SMS. Using mixed method research, the article provides an analyses of the thinking and learning style preferences of senior managers as well as describing the benefits and limitations of these preferences. As synthesis to the article, the argument is made that the undeniable link between thinking and learning style preferences allows for organisations to determine the content and delivery mode of their professional development interventions. When considering senior managers holistically an argument can be made towards developing not only their own natural preferences, but emphasising the importance of whole brain development in order to enable them towards professional public service delivery.

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