

MIDAS-AN USEFUL TOOL FOR CAREER COUNSELLING

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Abstract

The article presents The Multiple Intelligences Developmental Assessment Scales (MIDAS™) elaborated by C. Branton Shearer and makes an analysis of their usefulness for Career Counselling, with focus on 10-14 year-old children. More than 20 years of integration of multiple intelligences theory into career counselling process proved that clients might get several benefits of its application such as the improvement of career decision-making process and enhancement of personal development. This tool has proved to be very useful but one must keep in mind that the results must be understood not as a label but as a starting point for future exploration. At the same time, it is compulsory to compare the information got by MIDAS scales with the information obtained from other sources like school records, hobbies or in-depth interviews with the pupils and knowledgeable persons like parents , teachers or other reference persons.

Key words: assessment, career counselling, Gardner, MIDAS™, multiple intelligences, Shearer

Introduction

The aim of this article is to present the Multiple Intelligences Developmental Assessment Scales (MIDAS™) - a very useful tool for career counselling as it proved to be so far in other cultures, as we will see further. This tool is based on the Theory of multiple intelligences elaborated by Howard Gardner in 1983 and presented in his book *Frames of Mind* (Gardner, 2004). This theory states that each person has a unique cognitive profile composed by at least eight different types of intelligences that are at different levels of development and can be continuously improved if appropriate conditions - such as an enriched environment full of various stimuli - are provided. Gardner does not agree at all with the psychometric approach to intelligence, disagreeing with the

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IQ test as in his opinion this is very rigid, simplistic (as it measures only one single general factor of intelligence *g*) and de-contextualized. Instead, he supports observation as the most powerful method of identifying a person's different intelligences: one simply has to watch that person acting in various contexts and tasks and take notes of his/her preferences, choices and ways of solving problems and creating new products. But, although Gardner dislikes the psychometric approach he "considers Branton Shearer's efforts to measure multiple intelligences to be among the well-founded ones" (Shearer, 2013, pp.9), because **MIDAS™** has kept very well the meaning of a multiple cognitive profile. **MIDAS™** does not mean at all another way of labelling persons but provides a useful glimpse of the way the intellectual profile of a person looks like at a certain moment and it is a very good start for in-depth analysis and personal development.

Howard Gardner's Multiple Intelligences Theory

The theory of multiple intelligences comes in line with the pluralist views of Thorndike, Thurstone, Guilford, Sternberg and Ceci about intelligence (Prieto & Ferrándiz, 2001; David et al., 2011). Gardner does not deny the existence of the general intelligence factor *g* but argues that this is only measured in relation with the school context and that is why he supports an expanded view of intelligence in close relation with the real life and the cultural context in which one lives. For instance, if we think about the sailors who find their way among hundreds of islands using the stars and the water currents, a word to define their intelligence will be related to their sailing skills (Gardner, 2004, pp.4). Thus, Gardner believes that intelligence is a life-long evolving process and defines it as a "biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner, 2004, pp. 60-61). So far, he has identified eight intelligences: linguistic, logical-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal and naturalistic, and is still investigating the ninth one which would be the existential intelligence. These intelligences are relatively independent and each of them has a precise localization in the brain. There are eight criteria an intelligence must fulfil in order to be declared as such: potential isolation by brain damage; the existence of idiots-savants, prodigies or other exceptional individuals with this ability; an identifiable core operation or set of operations; a distinctive development history along with a definable set of end-state performances; an evolutionary history and evolutionary plausibility; support from experimental psychological tasks; support from psychometric findings; susceptibility to encoding in a symbol system (Gardner, 2004, pp. 62-66). There are no "pure" intelligences and in real-life activities they occur most often than not in

different combinations. For instance, a lawyer needs to have well developed Linguistic, Logical-Mathematical and Interpersonal Intelligences. Therefore, it is possible to have more intelligences for a single domain as well as to find one intelligence in several domains (for instance, interpersonal intelligence is needed by orchestra directors, sellers and teachers).

Table 1. *Gardner's Eight Intelligences* (Davis, Christodoulou, Seider & Gardner, 2011, pp.6-7)

INTELLIGENCES	SHORT DESCRIPTION
Linguistic	An ability to analyse information and create products involving oral and written language such as speeches, books, and memos.
Logical-Mathematical	An ability to develop equations and proofs, make calculations, and solve abstract problems.
Spatial	An ability to recognize and manipulate large-scale and fine-grained spatial images.
Bodily-Kinaesthetic	An ability to use one's own body to create products or solve problems
Musical	An ability to produce, remember, and make meaning of different patterns of sound.
Interpersonal	An ability to recognize and understand other people's moods, desires, motivations, and intentions
Intrapersonal	An ability to recognize and understand his or her own moods, desires, motivations, and intentions
Naturalistic	An ability to identify and distinguish among different types of plants, animals, and weather formations that are found in the natural world.

MIDAS™ presentation

There are 5 types of Multiple Intelligences Assessment Development Scales depending on the age of the respondents: one scale for adults which is a 119-item self-(or other)report, one scale for teens (14-18 years old) which is a slightly modified version of the adults scale and three versions of MIDAS-KIDS : "All About Me" is a 93-item scale for children between 10 and 14 years of age; the "My View" questionnaire comprises 60 items and is self-completed by children 8 and 9 years old. The "My Young Child" questionnaire contains 70 items and is completed by a parent or knowledgeable informant for children 4 to 8 years old. The questionnaire may be group administered via self-completion or individually as a structured interview. The items are about daily life activities that need cognitive ability, involvement and judgment. All the items reflect everyday life activities, therefore are easy to answer. There are 6 possible answers on a Likert scale: A= "Never or Very little", B= "Fairly good", C= "Good", D= "Very good", E= "All the Time or Excellent" and F= "I do not know. Does not apply". Percentage scores for each scale are calculated only from the total number of responses from A to E. Most items are related to the

level of skills, fewer of them to the amount of participation and very few to the degree of enthusiasm for specific activities. There is no time limit for filling in the questionnaire. One must be careful how to communicate the results as they may generate profound effects (Shearer, 2013, pp.12-25). Since it is about a self-perception of intellectual skills “this tool is more a screening instrument or a reasonable estimate of a person’s multiple intelligences disposition” (Shearer, 2013, pp.25) and the results should always be compared with information obtained from other sources (such as teachers, parents, knowledgeable persons, activity products, hobbies, interview with the respondent etc.). The obtained profile comprises three pages of both qualitative and quantitative information about the cognitive profile of the person. It provides information about the most developed and the least developed intelligences at the moment of applying the questionnaire and as reported by the subject. It is not about labelling the respondent but about identifying his/her strengths and weaknesses in order to use this as a starting point for reflection and development (Bordei, 2015).

A **MIDAS™** profile offers, first and foremost, an estimate of the development of the eight intelligences as reported by the respondent, secondly a description of 26 subscales associated with each intelligence (for instance Space Awareness, Artistic Design and Working with Objects for Spatial Intelligence), then an estimate of the development of the intellectual styles (Innovation and Technical for children, Innovation, General Logic and Leadership for teens and adults) and, finally, qualitative information from each question. If the profile is low and flat this might “indicate a general lack of skill development but should be checked carefully for invalidity due to significant depression or low self-esteem”. Self-disclosure proves efficient as it has been found that when **MIDAS™** administrators share their own profiles with the pupils they are more attentive and engaged in learning about MI and the meaning of their personal **MIDAS™** profiles (Shearer, 2013, p. 31). “The basic steps in the interpretation process are: the review of **MIDAS™** profile (check it for missing information, work history, educational level and referral questions), brief introduction to the multiple intelligences theory, constructing the Brief Learning Summary (which presents the results as belonging to High, Moderate and Low categories) in order to point out the strengths and weaknesses, Profile Verification: the child is encouraged to compare the profile to his/her previous experience, particularly grades, other test results, feedback from teachers, friends, parents. The respondent is encouraged to make any necessary adjustments to the Brief Learning Summary for a better reflection of the skills and abilities. This adjusted Summary is considered to be Verified and can be used for decision making and planning” (Shearer, 2013, pp. 45-46). It is strongly advised to avoid the tendency to make simplistic statements such as “Your **MIDAS™** Profile shows you are a Linguistic learner” but instead: you have strength for

using language in social situations requiring persuasion and negotiation. You might consider developing this “skill further and use it to improve study skills” (Shearer, 2013, p. 47). **MIDAS™** revealed good psychometric properties. The internal consistency within each scale was between .78 for Kinaesthetic to .89 for Musical and Linguistic for **MIDAS™** and from .83 for Kinaesthetic and Linguistic to .91 for Intrapersonal for MIDAS-KIDS. The three intellectual scales of **MIDAS™** displayed an average of .83 internal consistency, while for MIDAS-KIDS the internal consistency values were .82 for Innovation scale and .83 for Technical scale. The temporal stability and inter-rater reliability were also good. Construct, concurrent and predictive validity are also appropriate (Shearer, 2013, pp.73-93).

MIDAS™ usefulness for career counselling

The profile which results is in fact an indicator of the respondent’s intellectual disposition and can be interpreted and understood in the bigger picture of the person’s life history. Abilities are evaluated in relation to specific activities and skills. Then the counsellor helps the client to understand the profile depending on the reason of the counselling sessions, namely if the client wants to choose a career or a high school/faculty etc.

Table 2. Some careers associated to the eight intelligences. (adapted after Shearer,2013, pp.44)

INTELLIGENCES	CAREERS
Linguistic	Teacher, storyteller, writer, poet, politician, journalist, translator, editor, lawyer, actor,
Logical-Mathematical	Mathematician, engineer, statistician, accountant, researcher, lawyer, computer programmer, scientist, broker, detective, physician, astronomer
Spatial	Architect, designer, inventor, scout, hunter, mountain guide, pilot, sailor, sculptor, film editor, photographer, builder, hairdresser, carpenter, plumber, tailor, urban planner, caricaturist, painter, cartographer
Bodily-Kinaesthetic	Mechanic, surgeon, dancer, actor, athlete, stunt man, gymnast, clown, craftsperson, choreographer, sports teacher/couch, circus acrobat, calligraphist, rider
Musical	Composer, singer, music critic, music teacher, instrumentalist, sound engineer, disc jockey, orchestra conductor
Interpersonal	Teacher, psychologist, salesperson, manager, counsellor, priest, receptionist, coach, public relations clerk, social worker, nurse, waiter, anthropologist
Intrapersonal	Poet, actor, researcher, psychotherapist, philosopher, writer
Naturalistic	Natural scientist, veterinarian, forest engineer, biologist, farmer, astronomer, gardener, ecologist, mountain guide

An individual interview is best recommended for using **MIDAS™**. “It turned out that the most effective interview procedure is to have the person read each question aloud and then the interviewer reads the response choices aloud” (Shearer, 2013, p. 28). The theory of Multiple Intelligences has been used in career exploration, planning and assessment for more than 20 years with obvious benefits such as improvement of career decision-making process and personal development (Shearer & Luzzo, 2009, p. 9).

We shall further elaborate upon one experience of using MIDAS™ in counselling, in Ireland. The data is taken from www.miresearch.org website. This testimony is from 2001 and belongs to Samantha Ryan, a Guidance Counsellor at St. Mary’s Secondary School in the County of Wexford, Ireland. She says that what she liked most about this tool was that “it breaks the large scales down into smaller areas”. And thus everybody can find strengths in some areas. “For example, inside the same Linguistic area, you might not be very persuasive but still you might be a good story teller or writer. This offers a better insight for students with respect to their abilities”. After seeing the results many state that “they would have never thought of themselves as having strengths in the Linguistic area” since they had been previously labelled globally as “poor in Linguistic skills”. So, they get a new perspective upon their abilities.

Some of the main advantages of using MIDAS™ in counselling are:

- it enhances the person’s self-esteem, especially the low-achievers in school thus find out that they are smart too as it reveals their strengths;
- it enhances motivation for learning when the person realizes that his/her strengths are greater than expected and finds together with the counsellor various ways of using the strengths in order to develop the weaknesses;
- it offers a broad view about the person’s skills, favourite activities and abilities;
- the strengths identified can be subsequently used as “entry-points” to start fostering the less developed intelligences;
- it offers realistic information based on everyday life activities that help in making further informed career choices;
- it is a very flexible tool in the sense that the profile provided is not a static picture but data for starting generating reflection, development, debate and action planning;
- it does not limit people’s perspectives regarding their professional future as it does not mistake intelligence for the domain;

- it is always interesting and useful, whenever possible, to compare the self-assessment with the assessment made by a teacher, parent or knowledgeable person;
- MIDAS™ has a positive and optimistic approach to the constant development of people's abilities and possibilities, thus enhancing self-confidence and self-perception, with a good impact on the person's life.

MIDAS™ in Romania

MIDAS-KIDS "All about me" was translated into Romanian and then back-translated. Afterwards, a sample of 296 6th-graders from three counties and also from Bucharest city was used to check the internal consistency of the scales and an exploratory factor analysis was conducted. A Maximum Likelihood scale with Promax Rotation ($kappa=4$) was used. KMO was .910, Approx. Chi-Square= 10108,843, $df.=3003$, $sig.=.000$ which meant that the sampling was adequate for the EFA. The Scree Plot showed 6 factors instead of 8 as expected. The First factor grouped the Interpersonal and Intrapersonal Intelligences and this is in line with the theory according to which until adulthood these two intelligences tend to be very closely intertwined in one single "Personal" Factor. Besides, Gardner himself noted that although these two intelligences are separately located, it was very difficult to study them independently as they cannot exist one without another: "whereas each of our other intelligences has been comfortably discussed independently of the others, I have here linked two forms of intelligence ... our two forms of personal intelligence could, in fact, be described separately; but to do so would involve unnecessary duplication as well as artificial separation. Under ordinary circumstances, neither form of intelligence can develop without the other" (Gardner, 2004, pp. 240-241). The second Factor found could be named "Academic" Intelligences as it comprises items from Linguistic and Logical-Mathematical Intelligences. This Factor should be further tested on a larger sample. The 3rd factor was Spatial Intelligence, the 4th Kinaesthetic Intelligence, the 5th Naturalistic Intelligence and the 6th Musical Intelligence. All these factors fit within the theoretical model (Bordei, 2015). All the factors got very good reliability scores, from .740 for the Musical Scale to .921 for the Personal Scale. Altogether, they explained 41,253% of the total variance.

Conclusions

Before another tool for measuring multiple intelligences is developed in Romania, MIDAS™ remains a very useful tool for career counselling, in line with Super's Archway model that views the career process as a dynamic one and influenced by the person's personal development (Kosine

& Lewis, 2008, p. 229). This self-concept theory is in line with the multiple intelligences approach to the continuous development of one's skills and abilities throughout life, as long as the environment provides new challenging stimuli, activities and opportunities. "The use of MI language helps to focus and elaborate the client's thinking about the ways in which his or her chances for vocational success may be maximized" (Shearer & Luzzo, 2009, p. 8). It enhances self-esteem and self-confidence, and usually broadens the view of the respondent regarding career choices, offering a more rounded picture of the person and his/her abilities and revealing hidden strengths. Although it might be group administered, it is advisable to use it individually as an in-depth interview with children for better qualitative data collection. At the same time, one must not forget that MIDAS™ must be used only as a beginning of a dialogue, a starting point of a future exploration of the respondent's intellectual life with its strengths and weaknesses. As it is a self-reporting tool it is liable to distortion that is why the triangulation of data is necessary. As its items relate to real world activities, they are easy to answer and persons usually enjoy filling them in. Its psychometric properties are very good and the internal consistency of the scales remained high when applied to a sample of 296 Romanian 6th graders.

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