

The Sonia Case: An Illustration of the Use of the M/81 Technique

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Abstract

This paper illustrates a technique designed to help adolescents and young adults become aware of: (a) the relationships between certain classic determinants e.g. (prestige, salary, career prospects) and their vocational preference system; (b) the strong and weak points in their information systems; and, (c) the internal structure of their occupational representations. An example of extension to the family is presented and analyzed.

Résumé

Cet article présente, à l'aide d'un cas concret une technique permettant à des adolescents et à de jeunes adultes de prendre conscience (a) des relations entre certains déterminants classiques (prestige, revenus, débouchés ...) et leur système de préférences professionnelles, (b) des points forts et des points faibles de leur système d'informations, et (c) de la structure interne de leurs représentations professionnelles, est présentée à travers un cas concret. Cette technique peut également être utilisée en vue de promouvoir et de favoriser des échanges et une meilleure compréhension entre parents et enfants pour tout ce qui relève de l'orientation professionnelle.

Sonia was in the 3^o form of the French school system and was aged 14.2 at the time of the interview with the counsellor. The younger of two children, her academic performance had declined steadily since the year before. Her brother, in contrast, had an excellent record in his second-to-last year (1st form) of a high school science diploma course. The family is well to do: the father (Slavic background) is an architect. The mother, who is French, teaches in a private school.

Sonia alluded to her anxiety about the future from the start of the interview. She appears to be unable to represent the near future and

prefers to talk about her "retirement" which she sees as a time of happiness with no burden of responsibility. She is put off by all forms of intellectual effort and does not see what she can gain from it. She retreats into a childhood fantasy world, an idealized, imaginary paradise whose inhabitants are animals, her only real passion. Animals are her antidote to loneliness, and a haven of affection which allows her to avoid coming to grips with reality, such as the schoolwork she refuses to involve herself in.

As compared to her brother, whose scholastic achievement fulfills family expectations to the utmost, what comes out during the course of the interview is that Sonia uses her scholastic failure to set herself apart from the parental goals of intellectual achievement, and to simultaneously attract the attention of all around her, including her parents, teachers, the counsellor, and even the psychologist she sees regularly but whom she unconsciously and continuously defies. Sonia finds it difficult to define her place in the family and, as a consequence, to develop a dynamic personal lifeplan that is firmly based in reality. Her love of animals clearly situates her in the opposite camp from her parents, who refuse to recognize their daughter's desire to take care of animals; they destine her for jobs they consider to be much more prestigious.

The problem the counsellor must face after this interview is how to help Sonia; in other words, how to explore problems which are essentially rooted in the family without creating too strong a transfer situation that would interfere with the work being done by Sonia's psychotherapist. The decision was made to use the M/81 questionnaire.

The M/81 is a technique which enables adolescents and young adults to become aware of: (a) the relationships between certain classic determinants such as prestige, salary, or career prospects, and their vocational preference system, (b) the strong and weak points of their information system, and (c) the internal structure of their occupational representations. It can also be used to promote discussion and better understanding between parents and children regarding vocational and career choices.

The M/81 now exists in four versions: a Castilian version (Mullet and Munoz-Sastre, 1991), a French version (Mullet, 1988), a Moroccan version (Chami and Mullet, 1991) and a Portuguese version (Mullet and Neto, 1988a, 1988b; Mullet, Neto, & Henry, 1991). An Italian and a German version are currently in preparation.

The M/81 is based on an extremely simple principle: students are invited to complete a multi-criteria choice task. The task consists of stating and comparing designations on sets of pairs of occupations. Individuals are first asked to state successively which of the two occupations they would *not* like to hold. They are then asked to re-examine the same set of pairs of occupations and state which of two in each pair is most likely to satisfy a given criterion such as high salary or good job

prospects. Two sets of designations (rejections and designations as a function of a criterion) are compared for each assessment. Strength of association is indicative of the importance assigned to the characteristic in question. The mode of calculation selected for strength of association was deliberately chosen to be used and understood by 14-year olds. The score, expressed in terms of degree of agreement, lends itself much more easily to interpretation than a correlation coefficient (or regression coefficient).

The set of occupations in the M/81 is composed of 21 occupations chosen as a function of three criteria: level of skill, field of interest (literary, artistic, scientific, technical, athletic or altruistic), and overall appeal to students. Efforts were made to obtain a highly diversified set of occupations for high school students. Further, only occupations which were not systematically chosen or rejected by a sample of 90, 14- to 15-year olds were included (Mullet, 1988). These 21 occupations were randomly combined into 42 pairs of occupations (each occupation appears four times). The set of occupations and the 42 pairs are available from the authors.

Rejection and Designation as a Function of Various Dimensions

Students are first asked to state rejections. The instructions are the following: "Look at each pair of occupations. Put an X next to the job you would *least* like to have later on." No time limit is imposed. (It is apparently easier for students to make judgments in terms of "the least" rather than in positive terms on this question, which explains the fairly unusual wording). Before responding the student is allowed to ask the teacher about occupations s/he knows little or nothing about.

The other designations are made on one or several of a total of 12 job characteristics. These include: (a) job prestige; (b) manual or intellectual type of job; (c) obedience, following rules . . . as opposed to initiative, freedom to create . . .; (d) fatigue, obligations . . . as opposed to ease, free time . . .; (e) job opportunities; (f) salary; (g) promotion; (h) more feminine—masculine type of job; (i) access to the profession in personal terms (as a function of grades); (j) access (as a function of cost and length of study); (k) meeting people, contacts . . . as opposed to working alone; and (l) inside—outside. The 12 characteristics were selected on the basis of previous studies (Larcebeau, 1983). The advisor (teacher or counsellor) or the student, in conjunction with the advisor, selects the characteristics the student is interested in. The instructions for the first two characteristics are the following: "Look at each pair of occupations. Put an X next to the occupation you feel is the *most* prestigious of the two."; "look at each pair of occupations. Put an X next to the occupation you feel is the *most* manual of the two." Subjects work at their own pace,

but this time are not allowed to ask questions about the nature of occupations.

Relating the sets of designations

Overall agreement (from 0% to 100%) between the set of rejections and each set of designations (for each dimension) yields a measure of the importance (or weight) of each characteristic in determining rejections. Agreement is calculated by simply placing one sheet on top of the other (rejection and meeting people, for example). The raw score ranges from 0 to 42 (there are 42 pairs of occupations). This score is converted into percentage agreement. If there is complete agreement (a score of 100%) between designations for example on the “meeting people—being alone” criterion and the set of job rejections, the “meeting people—being alone” dimension can reasonably be assumed to play a major role in defining the individual’s vocational preference system. The rejected occupations are also those which are judged to be the most likely to provide opportunities for contact. If the degree of agreement is 50% or greater, it is likely that the dimension “meeting people—being alone” plays no role, on the average, in determining rejection. If there is no agreement, the “meeting people—being alone” dimension can also be assumed to play a major role, in that all the rejected occupations are likely to be those which were judged to provide the greatest amount of time alone. Thus, a dimension is said to be important when the degree of agreement between designation on this dimension and rejection *differs* from 50%. Prior to calculating the degree of agreement (simply by counting and dividing by 42) students are invited to estimate the importance of each dimension.

Sonia selected 5 dimensions in the following order: salary, intellectual—manual, meeting people—being alone, inside—outside, free time—obligations. She qualifies three of these dimensions as highly important: intellectual—manual, meeting people—being alone, free time—obligations. Sonia states that she always rejected the jobs she believed to be the most intellectual, and never rejected the jobs she felt provided the greatest opportunities for meeting people and free time. The other two dimensions are qualified as fairly important. Sonia states that she only rejected jobs she judged to involve working outside and commanding higher salaries approximately once every four pairs of occupations. To sum up, Sonia tends to prefer jobs that she considers to be the most manual, the best paid, provide the greatest opportunities for meeting people, free time, and work outside.

Calculation of degree of agreement shows that the dimension which appears to be the most important is intellectual—manual; Sonia rejected occupations she judges to be the most intellectual, which is entirely congruent with her statements. The association between rejections and

intellectual—manual is not, however, as high as Sonia believed it to be. Twenty-nine percent of the time, Sonia rejected occupations that she judged to be the most manual; this figure is considerably different than her original statement of less than 10%.

The salary and inside—outside dimensions both have importance; Sonia, however, rejected occupations likely to pay the most (67%) and where she felt she would spend most time outside (64%). The direction of the associations thus contradicts her statements. The dimensions meeting people—being alone and free time—obligations can be considered to have little or no impact.

The associations between Sonia's designations on dimensions and specialists opinions are, in general, low. Sonia, however, appears to be very well informed on what society typically judges as "manual" and intellectual (84% matching responses). She is less well informed as regards the inside—outside dimension (73% agreement). The associations are null (=50%) for the other three dimensions. The fact that a dimension Sonia is the best informed about is the one that has the most importance for her, both actively and consciously, has obvious importance. As contradictory as it is with her statements, Sonia's preference system is nevertheless solidly anchored in reality. An identical, although somewhat attenuated, negative association emerges when Sonia's rejections are compared to specialists' judgments on salary.

A certain number of substantial links between dimensions were observed in Sonia's case. The link between intellectual—manual and salary or inside—outside are quantitatively comparable to those observed between intellectual—manual and rejections. The most manual jobs tend to be judged as likely to provide the lowest salaries and the least opportunities for outside work. This association pattern can partially explain the contradiction mentioned above. Sonia rejects jobs she judges to be the most intellectual, which in her estimation are those which also tend to yield the highest salaries and the most opportunity to work outside. This accounts for the negative links between salary and inside—outside, and preferences.

In addition, the highest interdimensional associations were observed for meeting people—being alone, and salary or inside—outside. The jobs judged to be the most likely to provide opportunities to meet people are also judged to be those most likely to command high salaries and the opportunity to work outside. Note as well that two other interdimensional links (between manual—intellectual and meeting people—being alone, and between manual—intellectual and free time—obligations) were present. The jobs judged to be the most manual tend to be judged as having the greatest number of obligations and, therefore, would be the least likely to provide opportunities to meet people.

Extension to the Family

Sonia showed surprise and astonishment when given the results of the questionnaire; in particular as regards: (a) the extent to which one of the dimensions forming a major source of conflict with her parents, the manual—intellectual dimension, is important for her, and (b) the mediocre quality of her information on the other dimensions she chose. The first phase of the counsellor's task consisted of delving deeper into Sonia's reasons for choosing the more manual jobs. This resulted in bringing out her rivalry with her brother (who seems to have been able to satisfy his mother's desires, and is seen by the whole family as the most intellectual) and a description of her father's unorthodox occupational career as an architect. Sonia primarily perceives the technical and manual aspects of the profession.

The second stage of the interview was spent describing certain jobs that Sonia clearly knew nothing about. She then learned how to start seeking out objective and useful information in areas she was unfamiliar with such as salary, meeting people, and obligations—free time.

Stimulated by the discussion which was based on concrete information, and by the perspective of discussion with her parents, she decided to take questionnaires home for them to fill out. (The M/81 is sufficiently nonstressful and flexible enough for family use). Both Sonia's parents were willing to take part. With respect to occupational preference, the instructions given to them was the following: "Look at each pair of occupations. Indicate the one you would least like your child to exercise in the future."

Sonia's mother's responses. There was an exceptionally high agreement between her mother's designations on the dimensions chosen by Sonia, and expert responses. The mean degree of agreement is 91%. Sonia's mother has extremely good access to (social) information.

The most important dimension emerges as meeting people—being alone (21%). The mother rejects jobs for her daughter which she judges will provide the least opportunities for contacts. Another important dimension is intellectual—manual. In contrast to her daughter, Sonia's mother rejects occupations she judges to be the most manual. Salary and obligations—free time have approximately the same amount of importance. Sonia's mother rejects jobs for her daughter which she sees as least likely to command a high salary and give her free time.

Almost all the dimensions exhibit substantial links. The highest is for the dimension meeting people—being alone and free time—obligations (83%). Jobs seen as most likely to provide opportunities for contact are those which are seen as providing the greatest opportunity for free time. The other interdimensional links are quantitatively comparable whereas jobs seen as more likely to provide opportunity for contacts tend also to be those seen as more intellectual, more likely to provide

high salaries, and possibilities to work outside. Jobs seen as more likely to command high salaries also tend to be seen as those which are the most likely to provide opportunities to work outside and have free time. These two dimensions are also positively linked. Sonia's mother's system of determinants thus appears to be non-conflictual.

Sonia's father's responses. As was the case for Sonia's mother, Sonia's father is also well informed. The mean degree of agreement is 82%. With respect to salary, however, Sonia's father is far less well informed than her mother.

As was the case for Sonia, the dimension which emerges as the most important is intellectual—manual (78%), but like his wife, the jobs he would prefer Sonia to have tend to be those which he sees as the least manual. The dimensions meeting people—being alone and free time—obligations have approximately the same impact. Sonia's father rejects jobs he judges to be the least likely to provide opportunities for contacts and a certain amount of free time. Similar to his wife, the inside—outside dimension apparently has little or no impact, but in contrast to Sonia's mother, this is also true for salary.

The number of high interdimensional associations is much lower. The most important dimension, intellectual—manual is strongly associated with meeting people—being alone (19%), and is also fairly strongly associated with the dimension free time—obligations. Jobs seen as being the least manual are also seen as providing more opportunity for contacts and free time. Jobs seen as likely to command high salaries are also seen as providing the greatest opportunities for meeting people. The jobs seen as providing the greatest opportunities to be outside also tend to be those seen as providing the most free time.

Comparison of the three systems. The degree of agreement (between Sonia, her mother, and her father) for Rejections, and for each of the five sets of designations was calculated. In terms of designations on the five dimensions chosen by Sonia, there is greater agreement between father and daughter than between mother and daughter despite the fact that Sonia's mother is in general better informed than Sonia's father. Regarding salary, for instance, the degree of agreement between father and daughter is 76%, whereas between mother and daughter agreement is 55% despite the fact that Sonia's mother has better information (86% match with specialists) than her father (67%). Husband and wife are in agreement on a large number of points (with the exception of salary).

The parents are also in agreement on the importance of different determinants and their direction of impact. Intellectual—manual, meeting people—being alone, free time—obligations have substantial impact. The dimension inside—outside, in contrast, is apparently of little importance. The only major difference concerns the impact of salary which only has substantial importance for Sonia's mother. The impact

patterns for Sonia and her mother are highly dissimilar. Inverse trends were observed between Sonia and her mother for the salary and intellectual—manual dimensions. In addition, the dimensions meeting people—being alone and free time—obligations are important for the mother and not for the daughter, and the dimensions inside—outside are important for the daughter and not for the mother. Sonia's father's impact pattern is midway between his wife's pattern (impact of the dimension meeting people—being alone . . .) and his daughter's (null impact for salary). As concerns interdimensional associations (salary—intellectual—manual, etc. . .), the family point of view is fairly cohesive; although the associations do not all have the same strength, they are almost always in the same direction, thus allowing effects to compensate for each other.

Overall, in terms of rejections, agreement is once again higher between father and daughter (64%) than between mother and daughter (38%), which was expected. The association is positive between father and daughter and negative between mother and daughter. Between spouses, the degree of agreement is positive (67%). In all cases the values are fairly close to 50%.

Concluding Comments

The combined use of the interview technique and family use of the M/81 showed that Sonia clearly overestimated the link between meeting people—being alone, free time—obligations, and her rejections. It indicated the contradiction between Sonia's statements concerning the effect of the salary and the inside—outside dimensions, as shown by the association of two sets of judgments she made. It revealed the reasons for this contradiction and pinpointed a source of internal value conflict, and suggested why underestimation had taken place. It indicated to Sonia that the quality of information she had in general was poor, except for the intellectual—manual dimension, the cornerstone of her preference system. It indicated that her parents' quality of information was excellent; the family in this case constitutes a valuable source of information. It situated the source of the main oppositions between Sonia's preference system and her parents' systems for the most part on the intellectual—manual dimension. It revealed a greater proximity between Sonia's global personal goals and the expectations and wishes of her father, than between the expectations and wishes of her mother. Her mother cherishes a goal for her daughter which in Sonia's eyes is unattainable and creates an obstacle to her personal development. It showed, however, that there is fairly good agreement between the parents. Can the father play the role of go-between?

Ideally it would have been interesting to present and comment on the reactions of Sonia's parents to the present analysis. It would also have

been interesting, and highly informative for all involved to compare Sonia's preference system with that of her brother's... i.e. take the family extension procedure to its logical conclusion.

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