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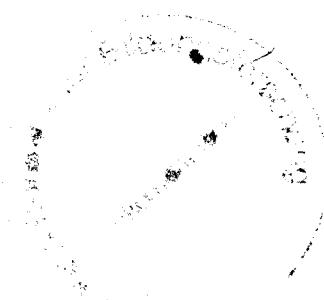
**Ursula M. Staudinger, Jacqui Smith, and
Paul B. Baltes**

**MANUAL FOR THE ASSESSMENT OF
WISDOM-RELATED KNOWLEDGE**

[Englische Version]

**Max Planck Institute for
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Summary and Acknowledgments

The project "Wisdom and life-span development" is part of a larger research program on the development of intellectual functioning across the life span conducted at the Max Planck Institute for Human Development and Education. The wisdom project originated in the mid 80ies involving Paul B. Baltes, Freya Dittmann-Kohli, Roger Dixon, and Jacqui Smith. Empirical research on the assessment of wisdom started in the late 80ies with Paul P. Baltes, Jacqui Smith as primary investigators and Doris Sowarka and Ursula M. Staudinger as predoctoral fellows. Currently, the project is co-directed by Paul B. Baltes and Ursula M. Staudinger. Other current members of the project are Jacqui Smith (scientist), David E. Lopez (postdoctoral fellow), Susanne Böhmig and Marcel Braß (graduate students).

In this manual the theoretical framework and empirical method is described which was developed within the Berlin Wisdom Project for the study of wisdom-related knowledge and judgement. The empirical procedure is illustrated by means of exemplar tasks dealing with life planning and life review. The manual comprises a description of the standardized conduction of the wisdom interview as well as the training of raters who subsequently evaluate response protocols by means of five wisdom criteria. The materials necessary for the actual conduction of wisdom interview and rater training are to be found in the appendix of this handbook.

We would like to thank a number of people who over the years contributed to the emergence of this manual: Shavonne Boone, Claudia von Grote, Anita Günther, Kerstin Haenel, Annette Lepenies, Anna G. Maciel, Andreas Maercker, Andreas Overmann, Yvonne Schütze and Silvia Sörensen. Special thanks for their investment in this enterprise go to Anushka Baltes (translation), Susanne Böhmig, Irmgard Pahl and Cathy Schmidt.

1. Introduction

1.1 A Psychological Model for the Empirical Study of Wisdom

In developmental psychology, the concept of wisdom has long been portrayed as the ideal endpoint of human development (e.g., Baltes, 1984; Clayton & Birren, 1980; Erikson, 1959; Hall, 1922; Staudinger & Baltes, *in press*; Sternberg, 1990). Which variables, beside chronological age, could lead to higher levels of performance? Apart from studies on implicit theories of wisdom which deal with people's conception of a wise person (e.g., Holliday & Chandler, 1986; Sowarka, 1989; Sternberg, 1985), empirical studies on performance in wisdom-related tasks are still rare. What might such tasks look like? How could the quality of wisdom-related performance be assessed?

In recent years, we have been attempting to define a theoretical framework that would allow an empirical analysis of wisdom and its preceding stages, that is, wisdom-related knowledge (Baltes, Dittmann-Kohli & Dixon, 1984; Baltes & Smith, 1990; Baltes, Smith & Staudinger, 1992; Baltes & Staudinger, 1993; Dittmann-Kohli & Baltes, 1990). We started with the general dictionary definition of wisdom as "sound judgement and advice in important and uncertain matters of life." In a next step, we defined wisdom as an expert knowledge system dealing with the fundamental pragmatics of life and developed a family of five criteria for the assessment of the quality and quantity of this knowledge and its application. These criteria are primarily based on three theories: (1) philosophical-historical analysis of the so-called wisdom literature (e.g., Assmann, 1991; Oelmüller, 1989; Kekes, 1983; Rice, 1958); (2) life-span developmental psychology (e.g., Baltes, 1987; Lerner, 1986); and (3) cognitive psychology and theories of expertise (e.g., Glaser, 1986; Salthouse, 1991; Ericsson & Smith, 1991).

Wisdom is defined as "expert-level performance in the fundamental pragmatics of life." This domain comprises knowledge and insight regarding life-span development (including one's own development), human nature, social and intergenerational relationships, life tasks and life goals, interindividual and cultural variations in the pathways of life, as well as life's uncertainties. The domain of fundamental pragmatics of life furthermore entails insights into the quintessential aspects of the human condition and human life including its biological finitude and cultural conditioning. We assume that many adults spend much time thinking about these questions as they manage their lives, plan and prepare for their future and the future of others, and review their past. In order to access knowledge about the fundamental pragmatics of life, we have selected three areas of investigation: life planning, life management, and life review, of which two are highlighted in this manual.

The five criteria used to assess wisdom-related knowledge are: (a) rich factual knowledge about the fundamental pragmatics of life; (b) rich procedural knowledge about dealing with the fundamental pragmatics of life; (c) life-span contextualism: understanding of life contexts and their temporal (developmental) relations; (d) value-relativism: knowledge about the differences in values and life goals; and (e) uncertainty: knowledge about the relative uncertainty of life and its management (see also Table 1 below; Baltes & Smith, 1990; Baltes &

Staudinger, 1993). A response is called wise when it receives high scores on all five criteria. Lower levels of knowledge are referred to as wisdom-related. These criteria are described in more detail below.

1.2 Life Planning and Life Review as Exemplar Tasks for the Assessment of Wisdom-Related Knowledge

In our empirical paradigm, we usually access wisdom-related knowledge by asking subjects to "think aloud" about the problem of a fictitious person. In the case of life planning, the fictitious person must make an important decision concerning his/her future (e.g., Smith & Baltes, 1990; Smith, Staudinger & Baltes, *in press*), and in the case of life review, the life of a fictitious person is to be re-constructed and evaluated (Staudinger, 1989; Staudinger, Smith & Baltes, 1992). We adopted the method of "thinking aloud" according to the cognitive psychology of Ericsson and Simon (1984), with slight adaptations to suit our needs. The responses of our subjects are evaluated according to the wisdom-related criteria presented in Table 1.

We would like to point out that we do not ask the subjects to discuss their own life planning, their own life review, or their own decision making. We are primarily interested in our subjects' general knowledge about the fundamental pragmatics of life, rather than the manner in which they apply this knowledge to their own lives. Of course, it is to be expected that the subjects will respond, at least partly, on the basis of their self-related experiences.

2. Collection of Wisdom-Related Responses

The following sections present the standard procedure for the collection of responses indicative of wisdom-related knowledge. Throughout the interview, the interviewer follows a standardized written text of instructions and explanations. Interviewers should receive at least 2 days of training and actual practice in administering the interview before actual data collection starts. In the following, the instructions given to the participant by the interviewer are indicated by quotation marks. The written text handed out to the subjects is presented in bold letters, and instructions or notes for the interviewer are printed in italics.

The first part of the interview serves to familiarize the participants with the method of "thinking aloud," and to prepare them for the task of reflecting on the life problems of a fictitious person.

2.1 The Method of Thinking Aloud

A number of tasks are helpful in motivating the subjects to think aloud rather than silently. We selected several examples, which are described in the following sections, from Ericsson and Simon (1984). The task to multiply 24 and 36, for instance, clearly shows the difficulty of verbalizing all the steps in one's thought processes, and also illustrates the importance of continuous feedback on the part of the interviewer.

The task to name 20 animals is especially well suited for giving the subjects feedback on thinking aloud and speaking continually without pausing, rather than recapitulating preceding thought processes. While naming 20 animals, most subjects tend to pause for several seconds as they search for different species. Feedback should encourage them to verbalize both their search and the solutions they come up with.

Usually, as a final warm-up task, we ask the subjects to retrace the route from their home to the interview laboratory, describing every change of direction they made (all the left and right turns taken). This is meant as a final check on whether the subjects fully understand the method of thinking aloud, that is, whether they really verbalize the pathway to their solution, rather than simply stating the answer.

"In this study, we are interested in what you spontaneously think about when you are presented with a certain problem to be solved. In order to find out what goes on in your mind while you are solving the problem, we ask you to think aloud. We want you to say everything that goes through your head, from the moment when you first read the problem, until you are finished. Please speak continuously while you are working on the problem. Also, please do not try to plan or explain what you say, simply imagine that you are sitting alone in a room, talking to yourself. It is very important for us that you speak continuously. For this reason, if you should stop talking for an extended period of time, I will prompt you to continue speaking. Is it clear what we mean by thinking aloud? If you have any questions then we should resolve them now, before you start working on the problem."

Alright. We will start with some warm-up tasks, so that you can get used to the method of thinking aloud. First, I would like you to think aloud when you multiply two numbers. Please tell me what you are thinking while you compute the answer."

What is 24 times 36?

The subject (S) is given a card with the task typed on it. The interviewer (Int.) reads the task out loud. Then S reads the task aloud and begins to think aloud. When S remains silent for 10 seconds, Int. says "please continue speaking," otherwise, Int. remains silent until S announces he/she is finished with the task.

"Now, please try to remember the main steps of your train of thought, beginning with when you first read the task until you solved it. We are mainly interested in what you actually remember, rather than what you think you might have thought. If possible, recount what you remember in the same sequence that your thoughts occurred to you when you were working on the problem. Please tell me whenever you feel uncertain about any of your memories. I do not want you to work on the task again, but just tell me your thoughts while you were working on it. And, now, please tell me what you can remember."

These instructions are meant to check on the reliability of the subject's verbal reporting. If S relates ideas that obviously must have occurred in the first phase of the problem solving but had not been verbalized, then Int. should remind S that it is very important that all thoughts are verbalized. Int. gives S general feedback concerning the method of thinking aloud, and emphasizes the importance of verbalizing all steps in thinking, even those which normally would never be spoken.

"Now, I will give you three more warm-up tasks before we begin with the main task. I want you to do the same thing for each of the tasks: Think aloud (as before) while you work on the task. Afterwards, I will ask you, once again, to tell me all you can remember about the steps in your train of thought. Do you have any questions? Here is your next task."

Name 20 animals.

Feedback: While naming the animals, subjects tend to pause between different animal species. S should be encouraged to describe thoughts while searching for other species.

After 20 animals have been named....

"Now, please try to remember the main steps of your train of thought while you were working on the task."

"Here comes the next warm-up task. Please think aloud while you try to answer it. Don't worry about keeping count, I'll do that for you."

On your way here, how often did you make a left or a right turn?

When giving feedback, Int. should pay attention that S does not simply state the answer (e.g., 1 x right, 2 x left), but that the path, as it is seen in the mind's eye, is described aloud (for example, what mode of transportation was used? Did anything in particular grab his/her attention?). Also, it is important that literally every change in direction is described.

When S is finished....

"Now, please try to remember the main steps of your train of thought while you were working on the task."

2.2 Instructions for Life Planning

Following the warm-up tasks in "thinking aloud," the interview proceeds with one or two practice problems for each respective wisdom task used for data collection, before subjects are presented with the main task.

In this manual, we describe two different kinds of life-planning problems (Smith & Baltes, 1990; Smith et al., in press). The problems in the first category differ on two dimensions: (a) target age of the principal character (a young adult of about 30 years of age vs. an older adult of about 60 years of age) and (b) the type of life decision to be made (normative vs. nonnormative). Problems are grouped more or less normative according to our assessment of their age-graded statistical frequency, commonness, and "on-time/off-time" nature (e.g., Baltes & Nesselroade, 1984; Brim & Ryff, 1980; Neugarten, 1968). These distinctions represent a first effort at varying the age-specificity of the problems and their degree of familiarity. A major theme present in all of the problems -even if in varying degrees- is the relationship between work and family. This choice follows the suggestion by Berger, Berger, and Kellner (1973), that this theme underlies a majority of life plans in current western societies. The second category of life-planning problems deals with specific events, for example, sickness, divorce, and chance luck.

The tasks are formulated such that there are two different options for the main character to take into consideration. These two possibilities, on the one hand, are supposed to give all participants equal leeway in their decision-making and, on the other hand, to motivate subjects to look at the task from different perspectives.

2.2.1 Practice Problems

We have chosen two problems as practice exercises. Subjects are asked to think aloud while they plan (a) a very special dinner for 8 people and (b) a move to another city. Through these practice planning problems, the subjects should learn to set their own goals for the planning and the completion of the task. In contrast to the preceding exercises, there are no "correct" answers here. The exercises to plan the dinner and the move demand more complex and varied steps, and the solution is open (i.e., it is the subject's own decision). In addition, these two tasks are specifically intended to provide subjects with the opportunity to practice planning in general, and in particular, planning for a fictitious person.

"The last two practice problems are somewhat different since there isn't necessarily a right or wrong answer, nor is there a specific end to the solution (such as in the previous task, upon arrival at the Institute or after naming 20 animals). In this respect, they resemble the kind of tasks that we are concerned with in our study. Please proceed exactly as you did before by telling me everything that comes to mind while you are working on the problem. Continue speaking until you feel that you have nothing more to add."

Practice Problem 1: Dinner Exercise

Assume that you have unlimited resources. Your task is to plan a menu for a very special dinner party for eight people.

Practice Problem 2: Moving Exercise

Imagine that you have to organize a move to another city. What matters would you have to pay attention to?

Feedback: The participants are asked to (a) pay attention to all the information in the text (e.g., in what way the dinner should be "special"; who should be invited); (b) consider several possibilities; (c) answer in detail (e.g., description of the preparation, the setting, and the dinner itself); (d) to reflect on their own suggestions (for example, to critically evaluate the suggestions).

2.2.2 Main Task

"This problem should prepare you for the life-planning tasks we will get to next. There are many different occasions which can prompt you to think about and make plans for the future. One may plan for a day, a week, or a month, but there are also times when one reflects on the direction one should take in the years to come. In this study, when we speak of life planning, we are interested in the latter kind of planning. Life planning implies considering and evaluating various options, as well as considering the possible consequences of these options and weighing one against another." In the story I am about to give to you, a person is precisely in such a situation where life planning is called for. Please, read the story aloud and then formulate a realistic life plan for this person. It should be clear from the plan what the person should do and consider within the next two to five years.

Once again, please think aloud while you are formulating the plan. Talk about all aspects of the problem, as you see it. Which decisions should be made? Which opportunities are available? What plans must be made?

As you are thinking through the plan, you might find that you need answers to certain questions or that you need additional information. If this is the case, then simply ask me what you would like to know, for example, "I need to know about X," or "I would like to know why this or that happened," or something like that. I can't give you the answers to these questions, but we are interested in finding out what extra information you feel you need in order to work on the problem. So please don't feel discouraged if you don't get an answer. Ask as many or as few questions as you like. So then, we would like you to do two things: first, to formulate a plan in which you describe what the person should do and consider within the next two to five years, and second, to indicate what additional information you need to do this."

S is given a card with the typed problem. S's response is recorded on tape for later transcription; S is asked to read the problem text aloud and to begin to think aloud. Int. remains silent and only interrupts when S is silent for more than 10 seconds. After each problem, when S is finished, Int. says

"Could you, please, repeat the main steps of your train of thought and, if possible, in the same chronological order. Please do not work on the problem again but simply list all the thoughts you can remember."

These general comments usually prompt S to voice more (additional) thoughts:

- "Thank you. Now I will ask you several questions about your answers."
- "What was the most important additional information that you needed?"
- "Why was this the most important information?"
- "What advice would you give the main character, and why?"
- "How do you picture X's personality, and why?"
- "From what perspective did you formulate your plan: from X's perspective, from that of another person, or from your own (meaning you identified with X)?"

2.2.3 Problem Texts

2.2.3.1 Topic: Work-Family

Target Age: Older Adult (Nonnormative)

Joyce, a 60-year-old widow, recently completed a degree in business management and opened her own business. She has been looking forward to this new challenge. She has just heard that her son has been left with two small children to care for.

Joyce is considering the following options: She can plan to give up her business and live with her son, or she can plan to arrange for financial assistance for her son to cover child-care costs.

What should Joyce do and consider in making her plans? What additional information is needed?

Target Age: Young Adult (Nonnormative)

Michael, a 28-year-old mechanic with two preschool-aged children, has just learned that the factory in which he is working will close in three months. At present, there is no possibility for further employment in this area. His wife recently returned to her well-paying nursing career.

Michael is considering the following options: He can plan to move to another city to seek employment, or he can plan to take on full responsibility for the child-care and household tasks.

What should Michael do and consider in making his plans? What additional information is needed?

Target Age: Older Adult (Normative)

Up to now, Jack, 63 years old and married, has approached compulsory retirement at 65 with some anxiety. Recently, his company was taken over. The new management has decided to close the outer suburban branch where Jack is employed.

Jack is considering the following options: He can plan to take early retirement with full pay for two years, as compensation, or he can plan to move to work in the company head office for two to three more years.

What should Jack do and consider in making his plans? What additional information is needed?

Target Age : Young Adult (Normative)

Elizabeth, 33 years old and a successful professional for eight years, was recently offered a major promotion. Her new responsibilities would require an increased time commitment. She and her husband would also like to have children before it is too late.

Elizabeth is considering the following options: She can plan to accept the promotion, or she can plan to start a family.

What should Elizabeth do and consider in making her plans? What additional information is needed?

2.2.3.2 Topic: Sickness

Women

Mary was diagnosed with cancer. The doctors told her that she has but one year to live. Mary is now thinking about what she should do. Among other options, she can try, as much as possible, to continue living the way she has been, or she can make a drastic change in her life.

What should Mary do and consider in making her plans? What additional information is needed?

Men

Mark was diagnosed with cancer. The doctors have told him that he has but one year to live. Mark is now thinking about what he should do. Among other options, he can try, as much as possible, to continue living the way he has been, or he can make a drastic change in his life.

What should Mark do and consider in making his plans? What additional information is needed?

2.2.3.3 Topic: Divorce

Women

Barbara wants to get a divorce. Now that she has decided to take this step, she is wondering what she should do. Among other options, she can try, as much as possible, to continue living the way she has been, or she can make a drastic change in her life.

What should Barbara do and consider in making her plans? What additional information is needed?

Men

Peter wants to get a divorce. Now that he has decided to take this step, he is wondering what he should do. Among other options, he can try, as much as possible, to continue living the way he has been, or he can make a drastic change in his life.

What should Peter do and consider in making his plans? What additional information is needed?

2.2.3.4 Topic: Inheritance

Women

Ruth recently found out that she was to be given a considerable inheritance. After celebrating, she is thinking about what to do. Among other possibilities, she can invest the money and continue living the way she has been, or she can make a drastic change in her life.

What should Ruth do and consider in making her plans? What additional information is needed?

Men

Steve recently found out that he was to be given a considerable inheritance. After celebrating, he is thinking about what to do. Among other possibilities, he can invest the money and continue living the way he has been, or he can make a drastic change in his life.

What should Steve do and consider in making his plans? What additional information is needed?

2.3 Instructions for Life Review

For the life review tasks, the life situation of a fictitious person is briefly described and subjects are asked to think aloud about the possible life review of that person (Staudinger, 1989). Compiling a life review implies the (re-)construction of life events and their chronological sequence, as well as providing possible explanations and evaluations of that particular life story. This manual presents a life review task regarding the area of work and family (Berger et al., 1973). This topic is targeted at three different age groups: young, middle-aged, and old. To do so, the respective main character is characterized by age-typical attributes (example for an older person: retirement, children left home). The trigger for the life review (e.g., Romaniuk & Romaniuk, 1981) is the chance meeting with a longtime friend whose lifestyle has been very different from that of the main character.

2.3.1 Practice Problems

In preparation for the life-review tasks, subjects are routinely given two practice problems. Those subjects who, after having worked on these two problems, still do not quite understand the approach, practice on a third problem. The topics of the three problems are the longtime experience with a vacation spot, a clothing store, and a car dealership, respectively. The goal of this training session is to familiarize subjects with the task of thinking about the life of a fictitious person and reviewing this life (re-constructing, explaining, evaluating).

"The following practice problems should prepare you to think about a fictitious person, and to review this person's life. As in the main task, there are no right or wrong answers, nor is there an end point or a definite solution. You yourself decide when you feel you have nothing more to say. We would like you to imagine a fictitious -but realistic- person, whom you may combine from many different sources of experience. Please do not simply use one person as a model, and include as many details as possible in your answer. Remember that we are interested in learning all about your knowledge on life matters in general."

Practice Problem 1: Vacation

Imagine that for several years a person has travelled to the same vacation spot with her/his family. One day, the person receives a letter from the local tourist bureau, thanking her/him for her/his loyalty to the town. This letter prompts the person to look back on the past vacations spent there.

Which experiences and events might the person recall?

How could she/he explain these events and aspects?

How might she/he, in retrospect, evaluate the past vacations spent at this place, and why?

Practice Problem 2: Clothing Store

Imagine that for several years, a person has bought clothes for her/his family at the same clothing store. At the store's fifteenth anniversary, the person receives a letter thanking her/him for her/his loyalty to the store. This letter prompts the person to reflect on her/his past experiences with the store.

Which experiences and events might the person recall?

How could she/he explain these events and aspects?

How might she/he, in retrospect, evaluate the experiences with that store, and why?

Practice Problem 3: Car Dealership

Imagine that for several years a person has bought her/his new car, and had it repaired, at the same car dealership. At the dealership's fifteenth anniversary, the person receives a letter thanking her/him for her/his loyalty to the dealership. This letter prompts the person to reflect on her/his past experiences with the dealership.

Which experiences and events might the person recall?

How could she/he explain these events and aspects?

How might she/he, in retrospect, evaluate the experiences with that dealership, and why?

Subjects receive feedback as to our expectations regarding the nature of a life review. Positive feedback is provided when all components of a life-review were present (for example: "You talked about, explained and evaluated several vacation experiences, and you didn't simply recount the experiences of one person.") Did the subject really review events and mention specific experiences? (For example, the woman might recall a beautiful hike in the mountains on which the children saw goats, cows and even gophers; or she might remember a vacation when a child became ill). Were these events explained and evaluated? (Children who live in the city see fewer wild animals; hiking in the mountains is a relaxing form of exercise; even though an illness during holidays adds stress, because of the friendly atmosphere and the extremely helpful hotel owners, it was possible to manage just fine). If something is missing, address and offer aid with the above mentioned examples.

2.3.2 Main Task

"After the practice problems, which were supposed to give you some guidelines for solving certain life problems, we will now begin with the main task, namely, to construct a detailed life review. In our study, life review means reconstructing a life course, as well as attempting to explain and evaluate that reconstructed life story.

People tend to review their lives at certain turning points, for instance, when they have to make an important decision or when a close friend or relative dies. In our study, we ask you to construct a life review for a fictitious -but realistic- person. Similar to the practice problems, we ask you to think aloud while you develop the life review of the fictitious person. Try to imagine which events this person might remember when reviewing his/her life and how he/she might explain and evaluate these events in retrospect. Please try to fill in as many details as possible and do not confine yourself to one particular person whom you know as a model, simply recounting this person's life. Instead, try to incorporate as much as possible of your knowledge on life matters in general."

S's think-aloud response is recorded on tape.

Standardized interventions: Remind S to think aloud if silent for longer than 10 sec. If, after finishing the task, S has only described the fictitious person's current situation, or had problems with the answer in general, then read the problem text again, with special emphasis on the individual questions at the end.

After each task, Int. asks the following questions:

"Now, could you please recount the main steps of your train of thought?"

"What would you say was the main source of knowledge that you used to answer the question (own life, other persons' lives, media, books)?"

2.3.3 Problem Texts

2.3.3.1. Target Age: Young Adult

A young woman decided to concentrate on her family and not to take up a profession; she married and had children. One day she meets an old friend whom she had not seen for a long time. This friend once had decided to concentrate on her career, rather than starting a family. Presently, she is on her way to becoming a successful professional. The meeting prompts the young woman to review the life she has led so far.

What might such a life review look like? Which aspects of her life might she recall (decisions, problems, solutions, important people, feelings, helpful events, obstacles)?

How might she explain her life course and the motives for her actions? (Coherence, central theme)?

How might she evaluate her life in retrospect? Did she attain what she had aimed for?

2.3.3.2. Target Age: Middle-Aged Adult

A middle-aged woman had once decided to concentrate on her family and not to take up a profession. Her children are about to leave home. One day she meets an old friend, whom she had not seen for a long time. This friend once had decided to concentrate on her career, rather than starting a family. She is well established in her profession. The meeting prompts the woman to review the life she has led so far.

What might such a life review look like? Which aspects of her life might she recall (decisions, problems, solutions, important people, feelings, helpful events, obstacles)?

How might she explain her life course and the motives for her actions? (Coherence, central theme)?

How might she evaluate her life in retrospect? Did she attain what she had aimed for?

2.3.3.3. Target Age: Older Adult

An elderly woman had decided in her youth to concentrate on her family and not to take up a profession. Her children left home several years ago. One day she meets an old friend, whom she had not seen for a long time. This friend once had decided to concentrate on her career, rather than starting a family. She retired several years ago. The meeting prompts the woman to review the life she has led so far.

What might such a life review look like? Which aspects of her life might she recall (decisions, problems, solutions, important people, feelings, helpful events, obstacles)?

How might she explain her life course and the motives for her actions? (Coherence, central theme)?

How might she evaluate her life in retrospect? Did she attain what she had aimed for?

2.3.3.4 Target Age: Neutral

In reflecting over their lives, people sometimes realize that they have not achieved what they once planned to achieve.

What should one/they do and consider?

2.4 Transcription of Responses

The responses recorded on tape are transcribed word for word. These protocols are then compared with the original recording and, if necessary, corrected. Pauses that last longer than 2 sec. are to be noted with the comment "(Pause)". Afterwards, the text of the protocol is divided into 30-sec. segments. The entire length of each response is determined in seconds, and the amount of words spoken is counted. Segmentation allows for an analysis of the response sequence. The number of words spoken allows one to analyze the relationship between the quality and the length of a protocol.

3. Protocol Scoring

3.1 Overview of Criteria for the Evaluation of Wisdom-Related Knowledge

The protocols are evaluated on the basis of the five wisdom criteria outlined in Table 1. These five criteria represent the specific characteristics of knowledge and judgement in the domain, fundamental pragmatics of life. Responses are considered "wise" if they score high on the entire family of five criteria. Two of the five criteria (rich factual and rich procedural knowledge) we have defined as essential for a body of knowledge to be labeled as "wisdom-related". They are derived from general conceptions of expert systems (e.g., Anderson, 1987). Factual and procedural knowledge are basic criteria in the sense that they are necessary but not sufficient to define wisdom. The three remaining criteria (life span contextualism; value-relativism, and uncertainty) are meta-level or meta-criteria and are considered to be more specific and unique to the domain, fundamental pragmatics of life. They emanate from life-span theory (Baltes, 1987), developmental conceptions about the nature of adult thought (e.g., Alexander & Langer, 1990, Labouvie-Vief, 1990), and from characterizations that cognitive psychologists have used when describing problem solving in tasks of high complexity and ecological validity (e.g., Dörner, 1986). In the following, we describe the characteristics of an ideal response with respect to each criterion. We believe it is very important to exactly define an "ideal" response, in order to illustrate the criteria presented in Table 1 and to provide an anchor point for the rating process.

Table 1: Family of Wisdom-Related Criteria

Basic Criteria	
1.	Rich factual knowledge about the fundamental pragmatics of life
2.	Rich procedural knowledge about dealing with the fundamental pragmatics of life
Meta-Level Criteria	
3.	Life span contextualism: Understanding of life contexts and their temporal (developmental) relations
4.	Value-relativism: Knowledge about the differences in values and life goals
5.	Uncertainty: Knowledge about the relative uncertainty of life and its management

3.2 Description of the Five Wisdom-Related Criteria

3.2.1 Rich Factual Knowledge About the Fundamental Pragmatics of Life

A prerequisite for good judgement in difficult life situations is a rich factual knowledge about the fundamental pragmatics of life. Factual knowledge, in this context, comprises a well-organized body of general knowledge about human nature and life conditions (motives, emotions, vulnerability, mortality, human conduct and its social, normative, and personal conditions), common to all individuals within a cultural community. Furthermore, factual knowledge refers to a body of specific knowledge about specific life events (for example accidents, job interviews), the age-related occurrence of such events, including their expected or unexpected course (for example, the course of a school career, entrance into the professional world, starting a family, the birth of a child), as well as the functioning of institutions.

Exceptional factual knowledge about the fundamental pragmatics of life is characterized by two aspects:

- (a) It encompasses a wide variety of themes, including general knowledge about human nature and life conditions (restrictions and possibilities of the human existence, for example, mortality, the capacity for self-perception, rules and dynamics of social relationships, and the influence of normative rules on life goals), as well as specific knowledge about the life course and its institutional, normative, and personal conditioning.
- (b) It shows depth, that is linking a rich variety of detailed knowledge, thus forming a complex pattern of information on human nature and life.

3.2.2 Rich Procedural Knowledge About Dealing with the Fundamental Pragmatics of Life

Another prerequisite for good judgement in difficult life situations is knowledge about procedures of dealing with fundamental pragmatics of life. This includes knowledge about strategies and heuristics concerning the management and interpretation of life matters with regard to the past, present, and future.

Exceptional procedural knowledge about dealing with the fundamental pragmatics of life has the following qualities:

- (a) The capacity for insightful decision-making: This includes, for example, the cost-benefit-analysis of the various aspects of an option, and the flexible planning of alternative options, without changing the basic conditions of life. Of equal importance is the capability of taking full advantage of all information sources and assessing their importance and relevance for a given problem, of taking into consideration various opportunities in life, as well as listening to advice.

- (b) The ability to systematize and to analyze past experiences and to apply this knowledge. The ability to develop blueprints of life, for the past or the future (life review and life planning), and to explain and evaluate such scenarios.
- (c) When coping with life problems and decisions, one should be able to first decide on the most important goals, and then on the corresponding means to achieve them.
- (d) A profound knowledge about who should be taken into consideration when making decisions and interpreting certain life situations, and awareness of the conditions and possible consequences a discussion with a certain person might imply.
- (e) A profound knowledge about strategies of giving advice in difficult life situations. This implies providing orientation and assistance in finding adequate solutions. Moreover, giving good advice means realizing when advice is called for, and taking into account others who might be helpful for the solution of a given problem; it also means evaluating various phases of a life problem and judging when and how to offer advice.

3.2.3 Life-Span Contextualism: Understanding of Life Contexts and Their Temporal (Developmental) Relations

Good judgement in difficult life situations demands contextualistic thinking. This means that persons or events are not considered in isolation, but that the various temporal (past, present, future) and thematic (family, friends, work, leisure time etc.) contexts of a life problem are highlighted and elaborated. We distinguish three life-span contexts:

- Age-related contexts: Certain stages (or a specific age) are associated with certain tasks and expectations (e.g., starting school at 6 years, age limits as to child bearing, expected age of retirement).
- Cultural contexts: Various historical time periods and events (e.g., wars) or new cultural achievements (e.g., new technologies) bring about new conditions and result in different experiences.
- Biographical contexts: Certain unexpected, or non-normative, events (e.g., the death of a child, winning the lottery) or idiosyncratic life decisions (e.g., giving up a profession to travel around the world) lead to individual variations and to highly individualized life courses.

Exceptional knowledge and thinking in the area of life-span contextualism is characterized by the following aspects:

- (a) Awareness of the fact that the three above mentioned contexts (age-related, socio-historical, and biographical) cannot be viewed separately, because they form a system which does not allow adequate treatment of a life problem if only one of these contexts is considered. Rather, the various relationships between the time-related and thematic aspects of a life problem are only revealed by taking into account several contexts simultaneously.
- (b) Realizing that the importance of various areas and themes in life is dependent upon, or is a result of, the corresponding conditions and expectations prevalent in the various age-related, socio-historical, and biographical contexts.
- (c) One is aware that some life domains within a certain life situation are compatible, while others result in conflict and tension, and that this may change with age (e.g., historical time and idiosyncratic constellations. The relationship between work and family can be problematic at the age of 30, but not at all at the age of 50). Also, the three contexts (age, culture, biography) themselves might result in conflict and tension in certain life situations (e.g., age-related contexts and biological contexts as to career-planning: age-related job demands may conflict with individually different career-plans).
- (d) It is recognized that over the course of a life time, the relationships within and between different areas in an individual's life can change their structure and rank of importance (for example, new cultural aspects and personal experiences result in new life conditions). Similarly, the same life aspects and questions can change in their rank of importance at different times in an individual's life (the same problem will appear differently to someone who is 40 than to someone who is 20).

3.2.4 Value-Relativism: Knowledge About the Differences in Values and Life Goals

A further prerequisite for good judgement in difficult life situations is the awareness of the relativity of individual or cultural values and life goals. This implies the knowledge that within a society, there are goals and values which differ from one's own, and that these differences are embedded in different personalities, priorities, and relevant cultural and social expectations and evaluations.

Exceptional knowledge and thinking regarding the relativity of individual and cultural values and goals is characterized by the following aspects:

- (a) The ability to distance oneself from personal values, and to respect and consider alternative views. This presupposes the awareness that personal values and objectives are conditioned by individually different social and cultural backgrounds.
- (b) Recognizing that it is imperative to consider the specific values and objectives of a person coping with a life problem, so that possible solutions can be offered and decisions made in an unbiased, flexible, and non-dogmatic manner. This perspective is called decentralization.
- (c) The insight that there are a multitude of possible solutions, depending upon which values and objectives (based on personality traits and social and cultural circumstances) one adopts when defining and discussing a life problem. This perspective is called value-related relativism.
- (d) At the same time, a person should possess the insight, that, in spite of the multitude of values and objectives, and the manner in which they are embedded in individual and socio-cultural conditions, there might be, or is, a canon of basic human principles, which cannot simply be exchanged at random. This perspective makes it clear that there may well be a restricted number of universal values, rendering total relativism unacceptable.

3.2.5 Uncertainty: Knowledge About the Relative Uncertainty of Life and its Management

A prerequisite for good judgement in difficult life situations is thinking which considers the uncertainties of life. This incorporates knowledge that life is relatively unpredictable, and that life decisions, life interpretations, and life plans will never be free from uncertainties. Such knowledge demands the insight that one never has access to all the information and possible interventions to settle all life questions beyond doubt, and that, therefore, the future cannot be fully predicted or controlled. For a life review, this incorporates the understanding that past decisions were made in light of uncertainty about future developments, and that based on present knowledge, previous interpretations and explanations might have to be changed and re-evaluated. By the same token, there will never be an absolutely "correct" interpretation of the past.

Exceptional knowledge and thinking which recognizes the uncertainties in life is characterized by the following aspects:

- (a) It is acknowledged that, in the future, unexpected individual or social events and developments might take place, and that not all aspects of the past or present can be known. Therefore, the significance and interpretation of decisive life events may change during the life course.
- (b) Someone who is able to deal with the uncertainties in life can estimate which events are likely to occur at different life stages, and which, at present, would be the most likely interpretation or the currently best solution.
- (c) Beyond simply recognizing life's uncertainties, a person should be able to successfully manage these uncertainties. This implies the insight that in light of these uncertainties, plans must be made and decisions taken as best one can, rather than being avoided in a resigning manner. This may well mean that the final decision is postponed until all necessary and accessible information is available. Even with incomplete information, this person is willing to trust his/her own judgement, and in case of an unexpected event, to reconsider a decision and to incorporate that event in a constructive manner.
- (d) Dealing with uncertainty implies also being able to give advice on how to manage unexpected life events, recognizing the necessity of testing decisions and plans in respect to whether or not they are still appropriate, as well as knowing when substitute or alternative solutions are called for.

4. Rater-Training

4.1 Overview

The protocols are scored according to a specific rating method. Usually, the rating is not done by the project team, but by a panel of raters chosen from people recruited by advertising in the newspaper. We looked for people who often give advice themselves and are experienced in evaluating texts. The selection process is explained in more detail in Smith & Baltes (1990) and Staudinger (1989). The raters might also be chosen from the scientists working on the study. The blindness to the origins of the protocols and the hypotheses of the study, however, should be guaranteed.

The raters are trained to evaluate the protocols on the basis of the five wisdom-related criteria. The training procedure takes place in two parts:

The first part includes general training and begins with an introduction to working on texts in regard to complicated assessments (e.g., awareness of typical mistakes in judgement). Then follows training in the use of a 7-point scale, as well as explaining and practicing the evaluation of a text according to a complex criterion, in comparison to an ideal and not according to a rank order. The entire panel of raters takes part in this general training section, which lasts about five hours (not including breaks).

In the second part, the raters are divided into groups of at least two. Each pair is assigned one wisdom criterion at random and then continues the training together. In this part, first the definition of the criterion is explained and discussed, in order to reach a joint agreement on the meaning of the concept. The criterion is then applied to the wisdom task at stake, with the aim of creating an ideally wise response for that particular problem. The trainer has standardized guidelines for leading the discussion.

In addition, raters develop criteria for the evaluation of average (3 or 4 on the scale) and unwise (1 on the scale) answers. The raters practice by evaluating protocols taken from a pilot study, comparable to the protocols of the main study. The training procedure is finished as soon as the raters' evaluations correspond to the standards set by the project (calibration). In each training session, raters usually evaluate protocols of only one type of problem. Before rating a different type of problem, the raters should be trained for that specific task. Training for all the criteria takes about six to seven days.

4.2 General Training

In the following, instructions used in the rater training are presented.

4.2.1 General Introduction

"In this session, as well as the following one, we plan to investigate and systematize the factors underlying our everyday assessments about the quality of a movie or a book. Later, we will train you for evaluating the protocols of our study according to the criterion assigned to you. Altogether there are five criteria which the protocols are scored by. Throughout the entire evaluation process, you will work with one criterion only, within the same group. For methodological reasons, we decided to have the protocols evaluated according to one specific criterion only, without any

information about the other criteria. In this session, in order to discuss the conditions and restrictions which form the basis of our judgement, we will first work on a number of practice problems. In tomorrow's session, you will be introduced to the wisdom task used in the main study, and you will learn how to go about scoring the responses with respect to your specific criterion."

4.2.2 Introduction to the Study

"The protocols which you will be scoring stem from participants of varying ages and professions. They worked on two life problems: life planning and life review. This means they had to devise a detailed plan for a certain dilemma demanding a decision, or, they had to review and evaluate a person's life at a given point in time. It is important for you to remember that the participants in the study were asked to think aloud. This means that the protocols document all the characteristics of spontaneous thought, such as jumps from one thought to another, disorderliness, dismissing and reinstating thoughts, etc. When evaluating a text, please try not to be influenced by how much it contains such characteristics, but rather by how well it reflects the criterion you are working with."

4.2.3 Identification of Possible Rating Errors

"Independent of any criterion used for evaluation, strong subjective opinions may influence your viewpoint and distort the basis of your judgement. With the following, I would like to sensitize you to these possible distortions. You remember that often evaluations follow a numerical scale, ranging from small (1) to large (7) - - the higher the number, the better the score. Assessments are based on ideas about the essence of a good movie or book, or in our case, the definition of a specific criterion. The following factors might influence or distort your judgement:

- (a) **Leniency:** This refers to a person's attitude toward not judging critically. Some people avoid harsh criticism and tend to evaluate things more positively, others tend to be more critical. Differences in judgement are based on a person's ideals, for example of a good movie or book, that is, how high a person's standards are. Please watch out for such personal tendencies and try to control them.
- (b) **Avoiding extremes:** It is apparent that some people, when making assessments according to a scale such as ours, avoid both ends of the spectrum ("very positive" or "very negative"). This shows reservations towards extreme praise or extreme criticism, and may be the result of trying to avoid false judgements. However, our study has nothing to do with correct or incorrect judgements, but rather with appropriate assessment. When you feel a text is of poor quality with regard to a given criterion, this should be expressed in your numerical evaluation.
- (c) **Changing the assessment standards from text to text:** Yet another distortion in judgement may come about due to the sequence of the texts. For example, if the first text reveals extremely positive or negative characteristics, then this might influence your evaluation of the following texts in such a way that they are scored too high or too low. Please try to rate each protocol individually, in comparison with the ideal protocol which we will discuss later on.
- (d) **Interaction between rater and protocols:** This type of distortion refers to a rater's tendency to score behaviour, attitudes, or values too high or too low because he/she compares them to his/her own behaviour, attitudes, or values, thereby perhaps inferring more similarities than are actually there (for example, the rater who loves cats might take an insignificant comment to be proof for a similar affinity towards cats). Please be aware of and try to control such tendencies.
We will consider possible assessment distortions as we move through the rating exercises. In spite of possible distorting influences, we set great store by the assessment capability of the human mind, which allows for the simultaneous analysis and integration of a multitude of different aspects and criteria. In the next part of our training session, we would like to introduce you to the rating scale and the evaluation of a product against an ideal rather than rank ordering products".

4.2.4 Training for the Use of the 7-Point Scale

(For training materials see Appendix 1)

"This first exercise should help you to develop a feeling for the 7-point scale which you will be working with. In the following task, please try to make use of the entire range of the scale."

The raters should determine which of the seven listed vehicles is most suited for transporting heavy cargo over a long distance. The raters are asked to use all seven numbers of the scale. Because the raters usually first read through the list and then begin ranking, we encourage them to compare the different vehicles to an ideal (e.g., train or ship), rather than comparing them to one another (compare Appendix 1).

After the raters completed the exercise, a discussion is held concerning the ratings that raters assigned to the seven vehicles. In the following, the most important topics to be touched upon during discussion are mentioned.

- Use of extremes: Did anyone use the 7 or the 1? What other scores were given? Why? If extreme scores were given, emphasize that it is in accordance with our conception of the use of the scale. The highest score (7) can be given when one cannot imagine another vehicle which would be more suited for transporting heavy cargo.
- Exploring semantic content by naming another function. What if the criterion would be fast transportation of heavy items rather than heavy cargo over long distances? Have the raters re-rank the vehicles, this time using the new criterion "heavy items and fast transportation". If the truck again received the highest score (7), then point out that the raters did not pay enough attention to the specific definition of the criterion.
- Discussion of scoring errors due to ranking rather than comparing with ideal. The number of vehicles (7) and the spectrum of the scale (1-7) are suggestive of ranking the vehicles.

4.2.5 Training for the Rating of Texts and for Rating in Comparison to an Ideal

(For training materials see Appendix 1)

In this exercise, the raters learn to compare texts based on two complex evaluation criteria (good fairy tale, fantastic fairy tale). We chose fairy tales of different lengths, so that the raters learn to evaluate the quality of a text independent from its length (quantity of words) (see Appendix 1).

The definitions of the two criteria are read aloud and the characteristics of an ideally "good fairy tale" and an ideally "fantastic fairy tale" are discussed. Following are several guidelines for the discussion around the fairy tale rating:

- **"Rich"**: Complex structure, several episodes, e.g., the hero or heroine is put to the test three times.
- **"Suspenseful story"**: Plot with clear motives and logical consequences, describes dangerous situations etc.
- **"Deals with life questions and there is a moral to the story"**: The brave and courageous win, the person who helps the weak (also animals) is helped him/herself, the proud are humbled, the greedy are punished, etc.
- **"Fantastic story"**: Metamorphosis of characters (animals and rivers talk, people can turn themselves into flowers, blindness can be healed by the tears of a loved one), laws of physics and logic have no meaning (people have superhuman powers, poison loses its power after a certain period of time, etc.). All this takes place in order to have a happy ending.
- **"Fantastic elements"**: Realistic people, however, without historical or time-related restrictions (can sleep for 100 years, kings, princesses, etc.), fantastic characters such as wizards, witches, elves, etc. or occurrences such as magical transformations, superhuman powers, etc.

After the fairy tales have been scored, once again, the various assessments are discussed:

- **Extreme ratings**: Which fairy tale was scored the highest, which the lowest? Why? Discuss an ideal fairy tale and how the texts under discussion stand in comparison.
- **Discussion of differences in assessment of the same story for different criteria**: Point out that the same story will be assessed differently depending on which criterion or aspect is being considered. Point out the differences of the criteria: The first criterion demands integration of various aspects, while the second criterion concentrates on one aspect only. Text 1 and 2 clearly differ in quality, depending upon which criterion is used as a judgement basis. Point out that, similarly, the protocols in our study may score well with some criteria and poorly with others. Therefore, the raters may find that a certain protocol is generally

good, but merits only a low score with respect to their specific criterion. It is important to convey the idea that the quality of the protocol will be recognized through other criteria also used to evaluate the text. If they consider it helpful, raters may write such personal comments at the end of the protocols.

- Discussion of scoring errors as they appear in the discussion and explanation of the scores, as well as of previously identified mistakes, e.g., extremely mild scoring (Did anyone give only positive scores?), avoidance of extremes (Did anyone score only in the middle range?), mistakes due to sequence of texts (Did the sequence of the texts make a difference? Did anyone have the desire to change evaluations after reading other texts?) and interactive mistakes (for example judging according to one's own tastes).
- Point out that the quality of a text is independent from its length (a short text might be better than a long one).

"The steps we have taken so far were supposed to familiarize you with using the numerical scale in its full range, and to show you how much the concept of an ideal text, as a standard of assessment, can change when different criteria are applied. In addition, we wanted to emphasize that a text should be evaluated according to a specific criterion, and that the definition of this criterion should be clear from the outset. Finally, we wanted to give you a feeling for the various possible scoring errors."

At the end of the group training session, the raters are divided into groups of at least two, without mention of the assigned wisdom-criterion. Then, appointments for the criterion-specific training sessions are made with each group.

4.3 Criterion-Specific Training (in five separate training groups)

4.3.1 Overview

The criterion-specific training is divided into three parts. First, the definition of the criterion (see Appendix 2) is discussed with the two (or more) raters, in order to achieve a mutual basis of understanding. Then, the raters are given one or two life problems, depending on how much time is available, which they are to discuss together. The contents of an ideal response to these problems with respect to the wisdom criterion at stake is then mutually agreed upon. Finally, the raters are presented with two to three sample protocols for the practice problems which they are to score. The scoring is discussed until a consensus is reached between the raters' scores and those of the project team. If there is not enough time available, then simply discuss the life problem treated in the protocols to be scored later. In the following, a life-planning task is used to illustrate the training procedure. This procedure can also be applied to the other wisdom-related tasks available.

4.3.2 Introduction and Explanation of the Specific Wisdom-Related Criterion

The individual criteria are discussed, based on hand-outs covering the definitions and their paraphrases (see Appendix 2). In this first step, raters are to achieve a basic understanding of the definition of the criterion.

"Now, we will begin discussing the actual criterion according to which you will be scoring all the protocols in our study, independently from the other raters. This criterion, as I already mentioned in the beginning, is only one of five different criteria. (If questions arise concerning the other criteria, then say, "We will gladly tell you about the other criteria when all the evaluations are over with. We want to make sure that your judgement will not be influenced by them. The protocols must be scored separately for each criterion.) Now, I will give you a description of the criterion, as well as a paraphrase of it, the text of a life problem, and the instructions the subjects received. In the following, I would like to discuss the description of the criterion with you (clarify uncertainties, answer questions, etc.), and then apply it to a concrete life problem, so that we can agree on an ideal response concerning this criterion."

4.3.3 Characteristics of "Thinking Aloud" Protocols and Discussion of Ideal Response

The raters, on the one hand, are to be familiarized with the method of thinking aloud, and on the other hand, they are to construct an ideal response for their wisdom-related criterion with regard to the wisdom-related task at stake. The problem text is handed out to raters. Raters are encouraged to think aloud about the problem. Afterwards, the discussion is supposed to become geared towards the construction of an ideal response.

Joyce, a 60-year-old widow, recently completed a degree in business management and opened her own business. She has been looking forward to this new challenge. She has just heard that her son has been left with two small children to care for.

Joyce is considering the following options: She can plan to give up her business and live with her son, or she can plan to arrange for financial assistance for her son to cover child-care costs.

What should Joyce do and consider in making her plans? What additional information is needed?

At first the discussion leader does not interrupt the discussion but pays close attention and takes note of examples to be used later to:

- (a) point out typical characteristics of thinking aloud (e.g., repetition, grammatical errors, and frequent use of incomplete sentences or thoughts). The raters are encouraged to read the response protocols they will receive, later out loud and to try to imagine they "hear" a voice reading the text; this technique facilitates the reading of thinking aloud protocols.
- (b) discuss the characteristics of an ideal response (7 points) in relation to the given criterion. The discussion leader is to introduce as many themes as possible. He/she should begin with those themes which are included in the text (age, profession, family), and discuss their implications. Then the discussion leader should bring the discussion to another level of abstraction.

Here are some general themes which might be helpful in the discussion of an ideal protocol:

- **Her age:** future expectations of a 60-year-old woman; this is a special case, since Joyce went back to school and got a degree in her later years.
- **Her independence:** It is unusual to study and pass exams when one is in one's late fifties. But then, we do not know whether she had studied at a university earlier in life, and then stopped to start a family or to help her husband financially. What is her educational background? How long has she been a widow?
- Joyce in the role of a widow, a mother, a grandmother.
- Does a "new challenge" mean she is highly motivated, or was it just a whim?
- **Daily activities:** At the moment she is probably rather busy. Her studies took up much time and energy. How much is she involved in her new business? Is it a store, an agency, or a larger firm with several employees to supervise, or does she have colleagues who assist her? How much of her time does the business take up?
- **Her family:** We know little about her son and grandchildren. How old is her son? Where and how far away does he live? What is his profession? What is the relationship between mother and son, grandmother and grandchildren, mother-in-law and daughter-in-law?
- Why was her son "left?" Because of a divorce, a separation, or an accident? Where is his wife? What is the emotional state of the son and his children? The phrase "She has just heard" can lead to several assumptions on the relationship between mother and son, as well as the son's present situation, depending on whether it came about expectedly or unexpectedly. Is it perhaps the son's own fault that his wife left him, and is he now panicking unduly? Or is this a time of distress when family members ought to stick together?
- Is he asking too much from his mother? Did he actually ask her for help, or is it Joyce who feels it is her duty to step in?
- **The children:** We know that they are young and in need of care. How close are they to their grandmother?
- **Option 1:** Give up the business
Did she set herself these goals (degree in business, start own business), in order to make a new beginning and build up her self-esteem? Or is this only one of many challenges that she has set herself throughout life? How important is this challenge to her? Would she perhaps consider looking after her grandchildren as a "new challenge" of equal importance to her sense of self?
- **The move:** What distances are involved here and how realistic is this venture? How long has Joyce been living in her apartment? How well can an elderly person handle a move and everything it involves, for example, saying goodbye to friends, etc.? Joyce would not be moving into her own home, but that of her son, where he would have the say in the house. What will happen if he remarries or has different relationships, or if his wife comes back and Joyce has to move out again? How could Joyce incorporate these various possibilities into her plans? How is her health? Maybe she should move now, instead of waiting until she has to; maybe she should take advantage of this opportunity in order to plan ahead for the future, when she herself might be in need of care?
- **Option 2:** Financial support for her son
This is a good solution if Joyce is not willing to take on the mother's role, as small children can be very strenuous for older people. Maybe Joyce thinks it would be better for the children if they were not raised by their grandmother, but by a younger person who is more able to satisfy their wishes and needs. Besides, Joyce already reared her own child(ren). (Does she have more children and, if so, how

many?) Her son is old enough to be responsible for his own life and to understand that his mother, too, has her own life to lead (Does Joyce perhaps want to remarry?)

- Other possibilities: The son could move in with his mother. Joyce could sometimes take care of the children. Maybe her store has an adjoining room where the children could play during the day, and her son could pick them up in the evening. Perhaps Joyce could take one or two months off to help her son deal with the new situation (e.g., find a house-keeper), and then continue living her life the way she has. She could place a marriage add for her son in the personal column of the newspaper, or she could encourage him (or her daughter-in-law) to resolve their problems and continue the marriage.

The group discussion should end with those themes which are specifically related to the criterion at hand. The raters should discuss what points a protocol must include in order to score a 7 on the scale. The materials handed out before (definition, paraphrase, anchor points) should be used as a basis.

The trainer should make sure that the raters do not base their evaluations on the decisions that were suggested in a given response, but on the discussed themes, conclusions and comments, with special emphasis on justifications for a certain decision and the enumeration of various options. The raters should be sensitized to the content of the answers which is directly related to their specific criterion.

At the end of the training, the raters have the following material available for their evaluations:

- (a) an exact description of the criterion (definition and paraphrase),
- (b) characteristics of an ideal response,
- (c) an instruction sheet for the scores 1, 4, and 7 (anchor points of evaluation).

The description of the characteristics of an ideal protocol should be used by the discussion leader as a guideline to achieve a consensus on what can be expected from an ideal protocol, and when the scores 1 and 4 should be given. The raters can then incorporate the collective ideas into the evaluation sheet for their individual criterion.

4.3.4 Scoring of Sample Protocols and Calibration of Raters

After the discussion of an ideal response for the wisdom task at stake, the raters are given three constructed sample protocols (for the respective task). The three protocols (see Appendix 3) were constructed in order to represent low (1-2 points, practice protocol 1), middle (3-4 points, practice protocol 2) or high rating (6-7 points, practice protocol 3) on each of the five wisdom-related criteria. The raters' evaluations are then compared with the project ratings, and the reasoning behind the various assessments is discussed. The training is completed when the raters agree with and can explain the project ratings. If the protocols of different wisdom tasks are to be scored, then it is advisable to repeat the training for the other wisdom task before new protocols are distributed. When there is a large amount of data, it might be helpful to have another calibration session with the raters, after half of the protocols are evaluated.

5. Current Studies within the Berlin Wisdom Project

- The assessment of wisdom-related knowledge and judgement in a social-interactive performance setting:
 - A social-interactive wisdom paradigm
- The development of a recognition measure for wisdom-related knowledge and judgement
- Discriminant and convergent validity of wisdom-related performance: Wisdom in the context of measures of personality and intelligence
- The relationship between implicit and explicit theories of wisdom
- Wisdom-related knowledge and judgement in children and adolescents
- Comparing self-report and performance measures of wisdom
- Wisdom nominees talk about wisdom: Scoring of semi-structured interviews.

6. Dissertation Studies completed in the Berlin Wisdom Project

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- Staudinger, Ursula M. (1988). The study of life review: An approach to the investigation of intellectual development across the life span. Dissertation, Free University of Berlin and Max Planck Institute for Human Development and Education.
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Appendix 1

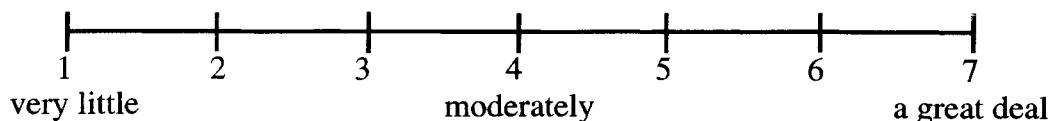
General Rater-Training: Practice Material

1. Training for the Use of a 7-point Scale

Imagine the type of vehicle that could be best used to transport heavy cargo over a long distance.

To what extent do each of the vehicles listed below match your image of such a vehicle?

Give each vehicle a number from (1) "very little" to (7) "a great deal" on the scale below.



Vehicle	Rating
VW Käfer (Beetle)	
Bicycle	
LKW (Semi-trailer)	
Sports car	
Transport (Van)	
Motorcycle	
4-door family sedan	

2. Training for the Rating of Texts and for Rating in Comparison to an Ideal

There are four fairy tales in this folder which you are to evaluate according to the following criteria:

(1) Quality of a fairy tale

Fairy tales usually are stories involving supernatural powers and heros who are faced with a number of tests of courage. Also, the plots almost always lead up to a happy ending.

Good fairy tales differentiate themselves from average fairy tales in that they are interesting and suspenseful and that they deal with important life aspects in an unobtrusive manner. To what extent would you say the following fairy tales correspond to this definition?

(2) Extent of fantastic elements

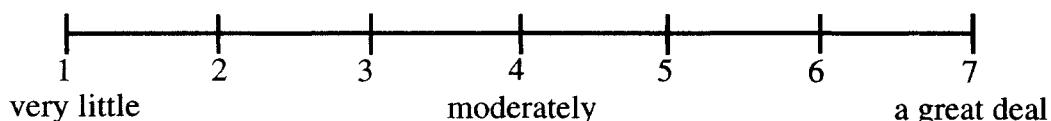
In fairy tales reality is portrayed in a fantastic manner and fantastic events are to be viewed as reality. The laws of physics and logic no longer have any meaning and people and animals have supernatural powers.

Fairy tales differ in how many fantastic elements are included. To what extent are fantastic elements included in the following fairy tales?

Evaluation

Please evaluate the four texts in regard to the two above mentioned criteria. Please try to create an ideal in your mind of a good fairy tale (criterion 1) and a fairy tale incorporating fantastic elements (criterion 2), based on the definitions of the criteria, and relate this to the individual texts.

Give each fairy tale a number from (1) "very little" to (7) "a great deal" on the scale below.



Text	1. Quality of a fairy tale	2. Extent of fantastic elements
1		
2		
3		
4		

TEXT 1

There once was a king who had a very beautiful daughter. Unfortunately, she was so proud and arrogant that she felt no man was good enough for her, not even Prince Valiant, who was a very rich and kind man. The old king became weary of his daughter's stubborn behaviour and decided to marry her to the first person who knocked on his door.

And, indeed, when a peddler came by several days later, the king offered him his daughter's hand in marriage. No matter how much the princess complained, she had to marry the peddler and live with him in his tiny cottage and do all the house work. Now she regretted that she hadn't married rich Prince Valiant.

After a while her husband said to her, "Wife, it is time we start earning some money. The Prince is looking for a new maid, and if you work there you will get your meals for free. I will start peddling again." So now the princess was a maid and had to do peasant's work.

One day, the Prince decided to marry and had a grand celebration. The poor princess stood in the doorway to watch the festivities. When she saw all the splendour and magnificence, she thought about her fate and cursed her pride and arrogance, which were the cause of her present humble situation.

When the Prince entered the room, she recognized that it was the kind Prince Valiant, whose marriage offer she had once so haughtily declined. When he saw the beautiful woman standing in the doorway, he asked her to dance with him and led her into the middle of the ballroom. The people laughed when they saw her in her dirty tattered rags. She was very ashamed, but the Prince kindly said, "Don't be afraid, Prince Valiant and the peddler are one and the same person. I disguised myself for your sake, because I wanted to tame your pride and punish your arrrogance." The Princess wept and said, "I was so unkind, I don't deserve to be your wife." But the Prince replied, "That is all in the past. Now, it is time for us to celebrate our wedding!" Her father and all the people of the court came to enjoy the happy event, and everyone lived happily ever after.

TEXT 2

Once upon a time, a farmer was plowing his fields, when, all of a sudden, the horns on the oxes' heads started to grow. By the time he wanted to go home, the horns were so huge that the oxes couldn't fit through the gate. Luckily, a butcher happened to be passing by, and the farmer decided to give him the oxes. The two men made a deal: The farmer would bring the butcher a sack of corn, and in return, he would receive a coin for every single kernel. What a good deal!

So, the farmer went home to get the sack of corn. While he was carrying it to the butcher's store, one of the kernels fell out - one coin less for the farmer.

On his way home, when the farmer reached the spot where the kernel had fallen out, a huge tree had grown which touched the sky. The farmer thought to himself, "Well, this is an opportunity you can't let pass. Why not look and see what the angels are doing up there?" So, he climbed up the trunk and saw that the angels were threshing wheat.

As he was watching them, he noticed that the tree on which he was standing started to shake. Looking down to find out what was going on, he saw that someone was trying to chop it down. "It would be very bad, indeed, to fall off," the farmer thought to himself, and in his distress, he decided to tie a rope from the chaff of the wheat, which was lying around in heaps. He also grasped a hatchet and a flail which were lying around up there in the sky. He climbed down the rope and happened to let himself down right into a deep hole in the earth - needless to say, he was happy to have the hatchet. So, he hacked steps into the side of the hole and climbed out. He decided to take the flail with him as a token so that no one could raise any doubts about his story.

TEXT 3

Once upon a time, there was a little boy and a little girl who were brother and sister, and they loved each other dearly. They lived together with their evil stepmother. One day the little boy saw that the evil stepmother was secretly cooking a soup to poison the children.

The little boy decided he and his little sister should leave as soon as possible. They dressed quickly and left. When their stepmother noticed they were gone, she sent out three servants to look for them and bring them back.

The children were sitting at the edge of the woods. When they saw the servants approaching, the brother said to the sister, "If you do not leave me, then I will not leave you." The sister said, "I shall not leave you. Not ever." Then the brother said, "You turn yourself into a rose bush and I will turn myself into a rose." The three servants did not see the children and returned home empty-handed. The stepmother scolded them and decided to look for the children herself.

The two children saw her coming and the brother said to the sister, "If you do not leave me, then I will not leave you." The sister replied, "I shall not leave you. Not ever." Then the brother said, "You turn yourself into a pond, and I will turn myself into a duck." When the stepmother saw the pond, she tried to catch the duck, but the duck was too quick. He pulled her into the pond with his bill and the old witch drowned. The children went home and lived happily ever after.

TEXT 4

There once was a poor widow who had an only daughter. Her name was Sarah. One day, Sarah noticed a small box on the cupboard shelf. "I wonder what is in the box?" she thought to herself.

At that moment, the widow came in and said to Sarah, "I am going to the market to buy you something. Do you see the box over there? Don't touch it, Sarah! Be a good girl."

"Of course, Mother. I promise not to touch the box," Sarah replied, and thus assured, the widow left for the market.

Sarah dusted and cleaned the cottage. When she was finished, she had nothing else to do and was overcome by curiosity. She looked at the little box, looked away, and then looked back at it again. How she wished she knew what was in it!

"Why did mother tell me not to open it?" she asked herself. "I really would like to know what is in it. Jewelery? Money? I must find out." Sarah took the little box from the cupboard. How pretty it was!" Finally, she opened it and a small puff of smoke rose into the air. Higher and higher it climed and slowly turned into a great dark cloud.

When the widow returned home, Sarah was not to be found anywhere. Her mother called and called her name, but she didn't get an answer. Then she remembered the small box. She ran to the cupboard, but the box was gone. Right away, she understood what had happened. Sarah had broken her promise, she had opened the little box.

Ever since then, there are sometimes dark clouds up in the sky, and if one looks carefully, one can recognize a human figure. Those are the clouds that were locked in the little box, and people say, that the human figure is the girl who broke her promise.

Appendix 2

Criteria-Specific Rater-Training: Rating Material

- Definition of Criteria
- Paraphrases
- Characteristics of an Ideal Response
- Application Rules for Three Scale Points

Rich Factual Knowledge About The Fundamental Pragmatics of Life

Definition

A prerequisite for good judgement in difficult life situations is a rich factual knowledge about the fundamental pragmatics of life . Factual knowledge, in this context, comprises a well-organized body of general knowledge about human nature and life conditions (motives, emotions, vulnerability, mortality, human conduct and its social, normative, and personal conditions), common to all individuals within a cultural community. Furthermore, factual knowledge refers to a body of specific knowledge about specific life events (for example accidents, job interviews), the age-related occurrence of such events, including their expected or unexpected course (for example, the course of a school career, entrance into the professional world, starting a family, the birth of a child), as well as the functioning of institutions.

Exceptional factual knowledge about the fundamental pragmatics of life is characterized by two aspects:

- 1) It encompasses a wide variety of themes, including general knowledge about human nature and life conditions (restrictions and possibilities of the human existence, for example, mortality, the capacity for self-perception, rules and dynamics of social relationships, and the influence of normative rules on life goals), as well as specific knowledge about the life course and its institutional, normative, and personal conditioning.
- 2) It shows depth, that is linking a rich variety of detailed knowledge, thus forming a complex pattern of information on human nature and life.

Paraphrase of the Definition

Paraphrase of general knowledge about human nature and life conditions:

With motives we mean luck, survival, and security. Emotions include rage, anger, jealousy, and happiness. Vulnerability includes mental, as well as physical vulnerability. Mortality emphasizes the finite nature and temporal structure of life (childhood, youth, etc.).

Paraphrase of conduct and its conditions:

With conduct we mean such isolated incidents as "greeting" people, or events taking place over a longer time period, such as "arguing" or "child-rearing." The following example demonstrates what we mean by social and normative conditions: What happens when a child is raised only by his/her mother (in comparison to his/her father) (economic, social, and normative conditions, for example, the mother's role, etc.) Limits of normative influences relate to how under certain conditions one can, and should, stray from societal norms.

Paraphrase of specific knowledge:

Concrete knowledge pertaining to daily life or social institutions:

Explanation of terms "breadth" and "depth" in relation to concrete life problems:

Breadth refers to addressing additional themes, beyond those already mentioned in the problem text, and that these themes are discussed not only on a concrete level, such as family, free time, work, etc., but also on an abstract level, such as emotions, motives, temporal structure, etc. Depth refers to exploring a theme to its full extent. An example for "family": What usually happens in a family? What motives, emotions, hopes, vulnerabilities etc. are involved? What is the life cycle of a family? What are the hopes of the family as a whole? How does the parent-child relationship develop throughout life?

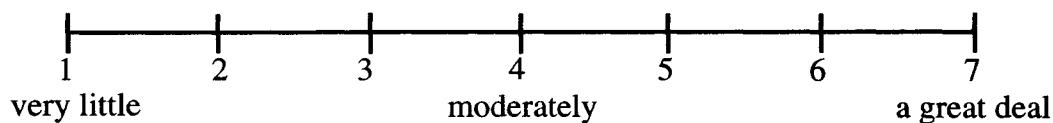
Characteristics of an Ideal Response

There are few concrete examples for this dimension: The evaluation of a protocol will be mainly based on the impression that the author has thoroughly pondered over life problems.

An ideal response includes the following:

- a) the problem of the main character is clearly defined, not simply by recapitulating the text, but in a larger context (for example, in relation to life as a whole);
- b) several themes and alternatives are mentioned, and the problem is viewed from different perspectives, not simply in the form of a list, but on the basis of deliberate and constructive thinking;
- c) Events are not just enumerated, but discussed on the basis of motives and emotions of the main character, and of other persons involved;
- d) The nature of social networks (society, family) and the mortality of man (sickness, death) are discussed;
- e) A variety of themes and observations concerning human nature and the conditions of human existence are discussed: typical events, decisive situations and the satisfaction of basic needs (e.g., self-esteem, health, social relationships).

To which degree is this protocol similar to an ideal response with regard to rich factual knowledge about the fundamental pragmatics of life?



Application Rules for Three Scale Points

1. Very little resemblance to an ideal protocol. This protocol only discusses themes explicitly mentioned in the text, and does not include rich factual knowledge about life questions. This protocol is far from ideal, because...

4. Moderate resemblance to an ideal protocol. This protocol includes more themes than were explicitly mentioned in the text. However, the discussion of important themes and aspects remains on a superficial level. This protocol is less than ideal, because...

7. Closely fits what could be included in an ideal protocol. This protocol covers a broad area of knowledge, and, in addition, at least two relevant life themes are discussed in depth. This protocol is close to ideal because...

Rich Procedural Knowledge About Dealing with the Fundamental Pragmatics of Life

Definition

Another prerequisite for good judgement in difficult life situations is knowledge about procedures of dealing with fundamental pragmatics of life. This includes knowledge about strategies and heuristics concerning the management and interpretation of life matters with regard to the past, present, and future.

Exceptional procedural knowledge about dealing with the fundamental pragmatics of life has the following qualities:

- 1) The capacity for insightful decision-making: This includes, for example, the cost-benefit-analysis of the various aspects of an option, and the flexible planning of alternative options, without changing the basic conditions of life. Of equal importance is the capability of taking full advantage of all information sources and assessing their importance and relevance for a given problem, of taking into consideration various opportunities in life, as well as listening to advice.
- 2) The ability to systematize and to analyze past experiences and to apply this knowledge. The ability to develop blueprints of life, for the past or the future (life review and life planning), and to explain and evaluate such scenarios.
- 3) When coping with life problems and decisions, one should be able to first decide on the most important goals, and then on the corresponding means to achieve them.
- 4) A profound knowledge about who should be taken into consideration when making decisions and interpreting certain life situations, and awareness of the conditions and possible consequences a discussion with a certain person might imply.

- 5) A profound knowledge about strategies of giving advice in difficult life situations. This implies providing orientation and assistance in finding adequate solutions. Moreover, giving good advice means realizing when advice is called for, and taking into account others who might be helpful for the solution of a given problem; it also means evaluating various phases of a life problem and judging when and how to offer advice.

Paraphrase of the Definition

The first paragraph presents a general definition of the criterion, namely, its relation to the "know-how" of different strategies in dealing with life planning or life-reviewing.

This general definition is divided up into five aspects:

Aspect 1 is a strategy of balance and is more general than Aspects 2 and 3, which represent specific strategies of balancing: Aspect 2 refers to the planning of scenarios as a strategy of simulation of conditions and their consequences. Aspect 3 relates to the definition and discussion of goals and the means to realize them.

Aspects 2 and 3 might be explicitly mentioned in the text, for example: "The main character in the problem must first decide what he/she wants, and why." These two aspects might also be implicitly mentioned in the text, for instance, when the subject formulates his/her answer so that the main character decides what he/she wants to do most, and why. The question is, which strategies to use and which ones are best suited for the various problems of the main character?

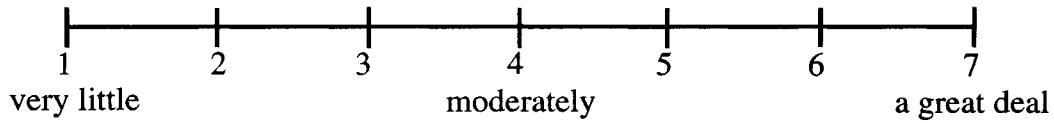
Aspects 4 and 5 deal with the people and circumstances to be taken into consideration while working on the problem. Here, we focus on the type of knowledge dealing with how to apply the various strategies, considerations, and courses of action of other people who are relevant to the solution of the problem. Aspect 4 relates to the closeness or distance of people in relationship to the main character. Aspect 5 relates to the advisory role of an objective bystander, who might be able to come up with other people who could prove helpful, and whom the main character had not even considered. This could be someone who suggests a totally different solution, seemingly unacceptable for the main character, or someone who considers the overall perspectives, rather than the specific problem at hand.

Characteristics of an Ideal Response

An ideal response includes the following:

- a) the important aspects of a problem are discussed in a manner showing that much thought has been given to the difficulties in life and the problems of making life decisions;
- b) specific questions are asked pertaining to the central themes, and it is explained why the answers to these questions are important for solving the problem;
- c) rich knowledge about life questions: choices and decision-making, future goals and options, and strategies for attaining these goals;
- d) alternative options for the main character are offered and one or two plausible scenarios are described in detail;
- e) experiences are systematized and evaluated, forming the basis for new life perspectives and influencing one's own life review, as well as those of others. Past events are re-evaluated on the basis of new experiences.

To which degree is this protocol similar to an ideal response with regard to rich procedural knowledge about dealing with the fundamental pragmatics of life?



Application Rules for Three Scale Points

1. Very little resemblance to an ideal protocol. The different options are not compared to one another and no strategies are offered to create and analyze possible solutions, or to consider other people. Only one scenario is discussed. This protocol is far from ideal, because...

4. Moderate resemblance to an ideal protocol. The protocol includes at least a few explicit statements about strategies on life planning and assessment (Aspects 1-3). At least two scenarios are mentioned, as well as some people who are involved in the decision making. This protocol is less than ideal, because...

7. Closely fits what could be included in an ideal protocol. There are detailed statements on strategies of balance (scenarios as well as discussion of goals and means), showing knowledge about the strategies and ideas of others, as well as knowledge about giving advice. At least two scenarios are discussed in detail, or satisfactory reasons are given for presenting only one option. All five aspects are discussed explicitly and thoroughly. Important missing information is pointed out, as well as key comparative aspects. Several scenarios are described, simulating various aspects of changing conditions and explaining their consequences. Important goals are defined, and the means to achieve them are mentioned. This protocol is close to ideal, because...
-
-
-
-
-
-

Life-Span Contextualism: Understanding of Life Contexts and Their Temporal (Developmental) Relations

Definition

Good judgement in difficult life situations demands contextualistic thinking. This means that persons or events are not considered in isolation, but that the various temporal (past, present, future) and thematic (family, friends, work, leisure time etc.) contexts of a life problem are highlighted and elaborated.

We distinguish three life-span contexts:

- **Age-related contexts:** Certain stages (or a specific age) are associated with certain tasks and expectations (e.g., starting school at 6 years, age limits as to child bearing, expected age of retirement).
- **Cultural contexts:** Various historical time periods and events (e.g., wars) or new cultural achievements (e.g., new technologies) bring about new conditions and result in different experiences.
- **Biographical contexts:** Certain unexpected, or non-normative, events (e.g., the death of a child, winning the lottery) or idiosyncratic life decisions (e.g., giving up a profession to travel around the world) lead to individual variations and to highly individualized life courses.

Exceptional knowledge and thinking in the area of life-span contextualism is characterized by the following aspects:

- 1) Awareness of the fact that the three above mentioned contexts (age-related, socio-historical, and biographical) cannot be viewed separately, because they form a system which does not allow adequate treatment of a life problem if only one of these contexts is considered. Rather, the various relationships between the time-related and thematic aspects of a life problem are only revealed by taking into account several contexts simultaneously.
- 2) Realizing that the importance of various areas and themes in life is dependent upon, or is a result of, the corresponding conditions and expectations prevalent in the various age-related, socio-historical, and biographical contexts.

- 3) One is aware that some life domains within a certain life situation are compatible, while others result in conflict and tension, and that this may change with age (e.g., historical time and idiosyncratic constellations. The relationship between work and family can be problematic at the age of 30, but not at all at the age of 50). Also, the three contexts (age, culture, biography) themselves might result in conflict and tension in certain life situations (e.g., age-related contexts and biological contexts as to career-planning: age-related job demands may conflict with individually different career-plans).
- 4) It is recognized that over the course of a life time, the relationships within and between different areas in an individual's life can change their structure and rank of importance (for example, new cultural aspects and personal experiences result in new life conditions). Similarly, the same life aspects and questions can change in their rank of importance at different times in an individual's life (the same problem will appear differently to someone who is 40 than to someone who is 20).

Paraphrase of the Definition

Emphasis on the temporal and thematic aspects of all contexts. Development of such temporal and thematic aspects for the three contexts.

Examples for Age-Related Contexts

1. Independent housekeeping: The temporal aspect relates, first, to becoming an adult and, second, to being unable to care for oneself. The thematic aspect deals with how independent housekeeping influences many other areas in life.
2. Retirement: The temporal aspect is age. Discussion of what it means to retire at 65 or to retire at 50, due to illness. The thematic aspect deals with the transition period between work and retirement, and what this means in a person's life.

Examples for Cultural Contexts

1. War: temporal aspects become apparent when different wars are considered, for example, the First or the Second World War, each one being fought for different reasons, with different weapons and enthusiasm. The thematic aspect may be present in the following themes: Marriageable women do not find husbands, education is broken off, standard of living changes abruptly, etc.
2. New technologies: Twenty years ago electric typewriters were revolutionary and now computers are (Temporal aspect). Changes at the work place, changes in work content, changes in relationships with colleagues, etc. (Thematic aspect).

Examples for Biographical Contexts Involving Unexpected Events

The death of a loved one: This is to be expected at a certain age (e.g., old parents or old spouse) or during war times (connected with cultural context), but not with children (connection to age-related context).

Paraphrase of "Idiosyncratic"

Even when several individuals in a society share various demographical traits, each individual person still leads his/her own personal life. Idiosyncratic ways of life may vary a great deal, depending on how traditional or how open a society is (connection to cultural context: more normative freedoms, more objective possibilities, e.g., professional women. In our society, a woman's decision to stop working and, say, move to the country is an idiosyncratic one).

Paraphrase of the Aspects

Aspect 1 is a general aspect pointing out the various connections and the resulting differentiation in the discussion. Aspects 2 and 3 point out the contents of two important forms of connections: priorities and the taking up of tension and conflict. Aspect 4 touches on the last two aspects, in that it describes the individual life course as an organizing element.

Depending upon the problem, not all four aspects must be present to find a solution. However, at least two of these aspects must be mentioned in an answer. This means that in most of the problems, a connection must be established between the aspect of priorities, of conflicts within and between the contexts, and of the changing significance of themes during the life course.

Examples for Aspect 1

Combining the three contexts highlights the connections between the temporal and thematic aspects of a problem: For example, the death of a husband varies in significance, depending on whether he dies young or old, leaves children or not, whether the death occurs during a time of economic crisis or stability, and whether or not the wife is financially independent.

Examples for Aspect 2

The significance an event depends on the age of the person involved, the era in which this person lives, and the individual biographical history. Certain sicknesses, for example, can be cured with today's medicine and can take on completely different meanings, depending on the age and the individual biographical history of the sick person.

Examples for Aspect 3

When a very young person attempts to lead an independent life, conflicts arise between what is considered to be age appropriate in our society and the individual situation. Conflicts also arise between wishes and reality, in the sense of finances and fulfilling the demands of daily life.

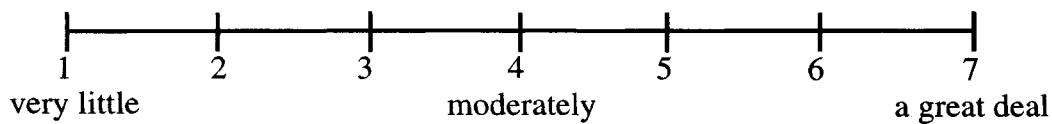
Characteristics of an Ideal Response

An ideal response for this criterion should discuss the most important temporal and thematic contexts of the problem (generally taken from the problem text). The problem should be discussed in terms of the three life contexts and connections between the different contexts should be made.

An ideal response considers the connection between the different contexts and aspects of life problems, in particular:

- a) Important social relationships of the main character (spouse, family, friends) in relation to age, historical period, and individual life situation;
- b) time-dependent developments during the main character's life (past, present, future), as a result of mutually influencing events and relationships;
- c) socio-historical context of a life problem;
- d) possible tensions and conflicts, especially effecting the lives of others; various priorities and compromises are discussed;
- e) short and long term solutions are discussed by considering the various contexts, relationships, and conflicts in terms of their temporal dependence and their change in meaning over a life course;
- f) priorities are set within the different contexts, depending on their importance for long and short term solutions.

To which degree is this protocol similar to an ideal response with regard to knowledge about life contexts and their temporal (developmental) relations?



Application Rules for Three Scale Points

1. Very little resemblance to an ideal protocol. The protocol only discusses temporal and thematic aspects without relating them to the problem. Either only irrelevant or no connections at all are made. The protocol does not discuss the significance of the age context (e.g., only a brief mention: is still young), which conditions and possible consequences have to be considered or what "story" is behind the problem. Age-related, social and idiosyncratic contexts are mentioned only cursorily, if at all. This protocol is far from ideal, because...

4. Moderate resemblance to an ideal protocol. In this protocol, at least a few connections are made between a number of contexts and thematic aspects, but they are not discussed in depth. This protocol is less than ideal, because...

7. Closely fits what could be included in an ideal protocol. This protocol includes a number of differentiated relationships between the contexts and some of these are discussed in depth. The important social relationships involving the main character are discussed in relation to the problem or in relation to one another. The past, present, and future conditions of the main character are discussed as a sequence of contexts (e.g., if A, then B; or A implies B) which are relevant to the problem. Several tensions and conflicts are discussed relating to, or resulting from, the problem. Temporary priorities are set, depending on the different contexts and their consequences for the main character. This protocol is close to ideal, because...
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Value-Relativism: Knowledge About the Differences in Values and Life Goals

Definition

A further prerequisite for good judgement in difficult life situations is the awareness of the relativity of individual or cultural values and life goals. This implies the knowledge that within a society, there are goals and values which differ from one's own, and that these differences are embedded in different personalities, priorities, and relevant cultural and social expectations and evaluations.

Exceptional knowledge and thinking regarding the relativity of individual and cultural values and goals is characterized by the following aspects:

- 1) The ability to distance oneself from personal values, and to respect and consider alternative views. This presupposes the awareness that personal values and objectives are conditioned by individually different social and cultural backgrounds.
- 2) Recognizing that it is imperative to consider the specific values and objectives of a person coping with a life problem, so that possible solutions can be offered and decisions made in an unbiased, flexible, and non-dogmatic manner. This perspective is called decentralization.
- 3) The insight that there are a multitude of possible solutions, depending upon which values and objectives (based on personality traits and social and cultural circumstances) one adopts when defining and discussing a life problem. This perspective is called value-related relativism.
- 4) At the same time, a person should possess the insight, that, in spite of the multitude of values and objectives, and the manner in which they are embedded in individual and socio-cultural conditions, there might be, or is, a canon of basic human principles, which cannot simply be exchanged at random. This perspective makes it clear that there may well be a restricted number of universal values, rendering total relativism unacceptable.

Paraphrase of the Definition

The general definition emphasizes the relativity of moral concepts and goals and its explanation (namely, it is due to specific social conditions and anchored in personal life). This definition also emphasizes that dealing with this relativity includes being aware of the goals, motives and moral values of others (distancing) and to consider them for the evaluation or solution of the current problem (differentiation).

Aspects 1, 2, and 3 elaborate this definition:

Aspect 1 connotes distancing oneself from one's own standpoint (differentiating between "Me" and "Not Me" while evaluating or solving the problems of others), defining the area of validity (e.g., limiting a viewpoint to one's own culture or subculture), and considering the formal conditions of a viewpoint (e.g., "based on the information I was given, I would..." time restrictions: "In the limited amount of time available for reflection, I would..." etc.):

Aspect 2 concentrates on taking the values and goals of other relevant persons into consideration, as well as evaluating their significance for the current problem (for instance, the sentence "Suicide is something a family should not have to deal with," is a dogmatic form of decentralization, while "One should consider the impact suicide has on the surviving relations," portrays a relative approach to decentralization).

Aspect 3 deals with the differentiation between various solutions or judgements, depending on which values a person supposedly has (for instance, if I think that X enjoys being with children and that their development is important to him/her, then... but if I say that his/her job actually is more important to him/her, then...).

Aspect 4 is a corrective aspect which points out that not everything is relative. This may be expressed in a text when either universal norms (for instance equal rights for men and women, that is equal respect for their needs) or basic human values are discussed, which are not to be questioned (for instance "people are mortal and that is why..."), or explicit remarks are made on how values are not completely arbitrary.

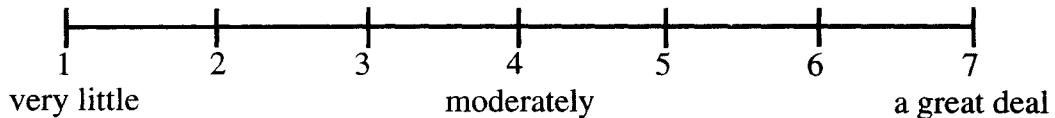
Characteristics of an Ideal Response

An ideal response for this criterion should offer detailed interpretations and solutions, depending on the underlying values and goals.

In an ideal response a person:

- a) can separate his/her personal values, preferences, and experiences from their consideration of the problem at hand;
- b) describes a variety of life goals, solutions, and assessments according to the personal structure, values and motives attributed to the main character. One does not have the impression that there is only one solution or one way to approach the problem and that, therefore, any extra informations would be superfluous;
- c) points out the relatively best out of a variety of possible solutions and assessments, presuming certain values and motives of the people involved;
- d) recognizes the validity of certain fundamental values mentioned in the problem at hand, regardless of his/her personal point of view.

To which degree is this protocol similar to an ideal response with regard to knowledge about the differences in values and life goals?



Application Rules for Three Scale Points

1. Very little resemblance to an ideal protocol. The protocol does not include any comments which show distance, differentiation, or relativistic thinking, that is, there is only minimal self dissociation (for instance, "If I were in X's position..."), or dogmatic statements are made ("Wives should..."). This protocol is far from ideal, because...

4. Moderate resemblance to an ideal protocol. In the protocol either all three aspects are mentioned cursorily, or two aspects are mentioned, and at least one of them is discussed in depth. The values or goals of at least one other relevant person are mentioned. This protocol is less than ideal, because...

7. Closely fits what could be included in an ideal protocol. This protocol explores all four aspects thoroughly (Aspect 4 need not be mentioned if the other three are discussed thoroughly). Aspect 4 may be presented in such a way that the differences between goals and values relating to the problem are recognized and discussed, but that at the same time it is recognized that there is not an arbitrary and equally important amount of such goals and values. This protocol is close to ideal, because...

Uncertainty: Knowledge About the Relative Uncertainty of Life and its Management

Definition

A prerequisite for good judgement in difficult life situations is thinking which considers the uncertainties of life. This incorporates knowledge that life is relatively unpredictable, and that life decisions, life interpretations, and life plans will never be free from uncertainties. Such knowledge demands the insight that one never has access to all the information and possible interventions to settle all life questions beyond doubt, and that, therefore, the future cannot be fully predicted or controlled. For a life review, this incorporates the understanding that past decisions were made in light of uncertainty about future developments, and that based on present knowledge, previous interpretations and explanations might have to be changed and re-evaluated. By the same token, there will never be an absolutely "correct" interpretation of the past.

Exceptional knowledge and thinking which recognizes the uncertainties in life is characterized by the following aspects:

- 1) It is acknowledged that, in the future, unexpected individual or social events and developments might take place, and that not all aspects of the past or present can be known. Therefore, the significance and interpretation of decisive life events may change during the life course.
- 2) Someone who is able to deal with the uncertainties in life can estimate which events are likely to occur at different life stages, and which, at present, would be the most likely interpretation or the currently best solution.
- 3) Beyond simply recognizing life's uncertainties, a person should be able to successfully manage these uncertainties. This implies the insight that in light of these uncertainties, plans must be made and decisions taken as best one can, rather than being avoided in a resigning manner. This may well mean that the final decision is postponed until all necessary and accessible information is available. Even with incomplete information, this person is willing to trust his/her own judgement, and in case of an unexpected event, to reconsider a decision and to incorporate that event in a constructive manner.
- 4) Dealing with uncertainty implies also being able to give advice on how to manage unexpected life events, recognizing the necessity of testing decisions and plans in respect to whether or not they are still appropriate, as well as knowing when substitute or alternative solutions are called for.

Paraphrase of the Definition

Even knowing that life cannot be completely controlled and planned, one can use this knowledge to make the best possible decisions or assessments at the right point in time. There are calculable uncertainties (for instance, the possibility of a child falling ill before a vacation), which can and should be incorporated into one's planning, and then there are uncertainties which, when taken into consideration, can cause stagnation.

"Unexpected events" include both individual events, such as sickness and separation, and social occurrences such as wars, economic or ecological crises, earthquakes, etc.

Aspects 1 and 2 refer to the knowledge that unexpected events might come up in life and that sometimes things happen differently than the way one expected (changes in priorities, contextual conditions, etc.). One can anticipate such changes to a certain extent (for instance, one can anticipate that a young girl's true love might turn out to not be so true after all within two or three years).

Aspects 3 and 4 refer (on a meta-level) to the knowledge that one must be able to manage the uncertainties of life (for example, decisions cannot be put off forever; certain situations, regardless of their uncertainty, demand immediate action; judgements cannot always be avoided, but are essential fundamentals in life). One must be prepared to deal with the unexpected when it comes up (for example, have alternative solutions; change biographies due to historical events).

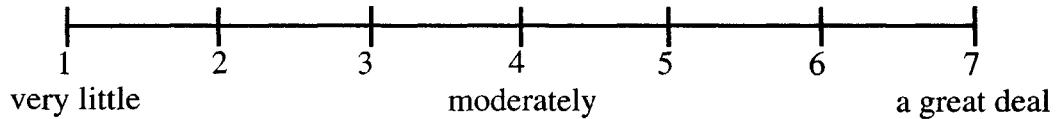
Characteristics of an Ideal Response

In an ideal response, a person expresses that life cannot be completely controlled, planned, or assessed; that one never has all the necessary information; and that plans, decisions, and assessments are never final. The various aspects of a problem and the additional information needed are discussed in detail, depending on their significance and the likely occurrence of the different events.

An ideal response clearly shows that

- a) when making plans and decisions one has to take certain risks;
- b) unexpected events might come up and things might turn out differently than one expected. For this reason, decisions should constantly be re-examined, with the possibility to reverse them if necessary. When reviewing decisions, one has to take into account that there might be other interpretations. While making decisions or evaluations, one should be aware that not all the necessary information is available;
- c) regardless of the uncertainties in life, decisions, assessments, and plans must be made;
- d) within this uncertainty there might be a great potential for man;
- e) when advising others, this inherent uncertainty must be taken into consideration. Therefore, advice, too, should always be re-examined and, if necessary, revised.

To which degree is this protocol similar to an ideal response with regard to knowledge about the relative uncertainty of life and its management?



Application Rules for Three Scale Points

1. Very little resemblance to an ideal protocol. The author of the protocol either implicitly assumed complete predictability of the future (for example, he/she did not ask for any additional information), or made explicit comments about the incomplexity and definiteness of decisions, past assessments, or plans. This protocol is far from ideal, because...

4. Moderate resemblance to an ideal protocol. This person discusses the uncertainty of future plans, past assessments, or current decisions (Aspect 1), and very good assumptions are made (Aspect 2). Aspects 3 and 4 are not mentioned. This protocol is less than ideal, because...

7. Closely fits what could be included in an ideal protocol. This protocol includes extensive knowledge about the uncertainty of life and about ways and possibilities to deal with it. All four aspects are discussed thoroughly (Aspect 4 can be neglected to a certain extent, as long as the other three aspects are discussed thoroughly), that is, comments are made about unexpected events and new assessment aspects, and how they can be handled and employed in a constructive manner. This protocol is close to ideal, because...
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Appendix 3

Criteria-Specific Rater-Training: Practice Protocols

Practice Protocol 1: Low Rating on each of the Five Wisdom-Related Criteria

Well, I mean, Joyce should do exactly what she had planned to do, namely, to open her business, where she could be successful, or she might fail, it all depends. And her son, I don't know, could hire a babysitter or perhaps send the children to a nursery school or something like that. In any case, Joyce should by no means move in with her son and take care of the children. I think that would be absolutely wrong, because I believe it is just a question of time. The son doesn't seem too old, 60 years old, well, the son might be in his thirties. If his wife died, he will certainly remarry or have another partner, who might move in or so, in any case he will have his own life, and any possible arrangement, such as his mother living with him and taking care of the children, while he is at work, will be certainly just a question of time, of a year, or two years, and then she will have to face the same decision, what to do, and by then she has missed her chance to build up something on her own. For this reason, I think that, well, she can perhaps help her son financially, if she can afford it and he is in need, but otherwise I think there should be an absolute separation. And I do not need any additional information, nor do I have anything else to say, because I made up my mind and don't see any reason to change it. In this type of life situation people behave very differently. You can't discuss all kinds of reactions. I think one has to make a decision and then stick to it. If you try to consider everything it eventually drives you crazy.

Well, I must say that, upon reading the text, I immediately realized the whole background, and I think it is tremendously positive that this woman completed her studies at that age. She wanted to open her own business. Perhaps some kind of management consultancy, which have become quite frequent in industry lately. It would be an interesting job with a lot of people and contacts and she would be independent. She would travel around a lot, just imagine, how exciting this must be for an older widow.

But I have no doubts that she should contribute to the cost of child care, for it is likely that she can afford it, and it would be a great pity if she didn't accept this challenge. Besides, taking care of the children herself might not be in their best interest, somebody else could do that just as well. Even though, of course, a grandmother is a very dear and warm person. But perhaps a younger woman would be equally competent. All this came to my mind while reading the text, and therefore, as far as I am concerned, the question is settled.

Practice Protocol 2: Middle Rating on each of the Five Wisdom-Related Criteria

Well, it would be important to know whether she has enough money and savings to help her son or if she makes enough money with her business to support her son financially. Basically, the situation seems clear to me, she would do her son a greater favour if she did not move in with him and take over his responsibilities, that would certainly be very nice and convenient for a while, but that would most likely mean giving up her business completely and not being able to continue her job later. If she did that for a longer period, this certainly wouldn't be to the advantage of her son or the children.

For her son it would undoubtedly be better if he could find another partner. That would be the most reasonable solution. But most likely she loves her grandchildren and also her son, and well, personally, I would be in a conflict, because I would consider it a wonderful challenge to take care of young children, as long as I am still strong and healthy. Not in the sense of taking care of the son and having conflicts with him, but I would love taking care of the children, and then it depends on the past life experiences of this 60 year old woman. If it is the first time that she opened up her own businesss, after having completed her studies, this is a big deal, and if it is the first time that she is completely independent then this is very important for her and she ought to continue. On the other hand, she has achieved a lot and might say, "well, I completed my studies, opened up a business, I have achieved a great deal, I am independent and I can afford to renounce and to dedicate myself to a human cause, after all, children are more important". But then of course, she should know that sooner or later she might be superfluous, perhaps, after two or three years, the man meets another woman who will join the household, and even if the house is big and she has her own apartment, she might feel useless and perhaps - not necessarily - conflicts might come up and then she might have to leave and would be alone, yes. If she had continued her business, she would have found satisfaction and contact with other people, but essentially, she would have been alone, too. Therefore, I do not know if one should miss the chance to take care of two children, if one likes to do that. But this is something very personal, one has to like it. If one doesn't like it, it doesn't make sense to sacrifice oneself, then it is really more reasonable to support him financially, so that he can find someone to take care of the children. And this is possible, if one has the financial means and looks around, then someone can be found who takes proper care of the children.

Therefore, it depends on the person, on her preferences, whether she prefers to develop her own business or to spend her time with children, children of her own family. And when she knows this, then they can decide, even though this will certainly not be an easy decision, because she knows very well, it might be only for a short time, but still, one did do something, an investment into children, which I consider very important.

One should also know whether she depends on this business financially, but probably not, if she has founded her own business, then she had to invest money which she could probably get back with a certain loss, which would provide for a financial basis. If she is a widow, then she is entitled to a widow's pension, therefore, she could decide independent of financial considerations. She should do what she likes most.

Practice Protocol 3: High Rating on each of the Five Wisdom-Related Criteria

1. Is he the only child? 2. Is the son able to remarry and to have a second relationship? Or is he himself, through appropriate means - hired help or with a new partner - able to care for the children. This is important. But the most important is, does the son want to? Since he has such an ambitious and diligent mother, does the son want to be together with her and does the son want the children to be brought up by the mother?

Does the mother still have energy, at age 60, still want to care for the children? One does not know whether Joyce is going to keep her health. If she herself would fall ill for a longer period of time, someone else would have to be found to look after the children. Is there the possibility for her to not only support the children financially, but also to take them into her home? Won't there immediately be confusion, when Joyce wants to take the children into her home? Because she has built up her own life, in which a family with small children does not fit in. She also could have a new partner in life, who then should be asked, too. It is unpredictable what their daily life would look like. It might be unbearable or could also run smoothly. And one's own business is always something distracting when taking care of small children. I would actually like to know how young the children are? Well, I can imagine that very intelligent and business-minded women are definitely capable of raising small children until about ten years old, in addition to running a business. Is it an open business or is it an independent office floor which she has? She also cannot tell how her business will fair financially. A business is always combined with a risk. So, if she has a degree in business, then she probably is involved in office work in which there is enough time, perhaps, to look after the children. But is the 60-year-old, independent woman still compatible with the son, perhaps the two have grown too far apart from one another?

This cannot be predicted with certainty. That is why she should try it out first for one to two weeks, and then decide whether living together and caring for the children is a possibility for her. The daughter-in-law probably is not dead, but there has been a divorce or a permanent separation. But it could be that the son would like to start another relationship. At his age, there is a large likelihood that he will not stay alone forever. And if he also has the children, then he probably is less at fault for the separation and has a positive attitude towards family and child rearing, because otherwise the son wouldn't have gotten the children? And if there remains enough time, which depends also on his professional situation, the help probably is not needed to such an extent, that the independent Mrs. Joyce has to do the whole child rearing, she could share it with her son. Or they could look for and find hired help.

But whether she has these interests at all, or whether taking care of the family was always important for her, is a deciding factor in whether she is willing to take over looking after the children. Women from this generation used to be family oriented, today this has changed. Today, a large number of young women work. Even if I think that Joyce should fulfill her duty as a grandmother, I think that she also has the right to finally follow her own goals and interests.

One must consider that other people are working in her business, whom she, as an employer, is committed to. Yes, through little changes in one area in life many conflicts can quickly arise in other areas in life and the harmony is gone. A solution is only possible by setting priorities. Joyce should set these up according to her own goals and motives. And, there, I see Joyce's professional interest as standing in the foreground, because it really is unusual that at 60 years, one goes back to studying and begins one's professional career, instead of enjoying life in retirement.

She also didn't intervene much in the fate of her son, so who knows if she will do it in the future? And her son perhaps doesn't trust her much. I find this woman to be not very family oriented, otherwise she would have also made more advances to the stepdaughter. Her life course will be geared to the preservation of professional and business oriented interests. Perhaps she even was the cause of the separation? That the daughter-in-law said that, well I can't, regardless of everything, live here with this 60-year-old, very courageous and diligent mother? There are some character traits which are unpleasant indeed. Well, I see more separation and distancing from the family, than I actually want to see. The intelligence and capability of a person are not enough to take care of two small children. This takes very very much. One just has to ask both how they feel about one another. And, if possible, how the children feel about their grandmother. And since the stepdaughter probably did not die, but instead left her husband alone, I do not think that this woman is the type of person to help her husband now, especially in regard to the children.

Maybe Joyce could help her son by paying for a house keeper. Because she is thinking about her son's current problem, according to the exercise, she also is willing to help, but probably not as a substitute for the mother. She could advise her son in choosing a house keeper and nanny, since she once was a mother herself maybe she knows better than her son what demands this person must fulfill in the household, and maybe she also made some of her own experiences in her business with hiring people, that is making contracts. That would at least be a temporary solution until new aspects come about, if the son meets another woman, the daughter-in-law comes back, because it is not certain that the wife will not come back (maybe it is a temporary situation) or his professional things will change or Joyce's situation might change.

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