FAMILY PROBLEM-SOLVING: HOW DO FAMILIES WITH ADOLESCENTS MAKE DECISIONS?

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Abstract: In the present study, we adopt an observational method for the analysis of family members' interactions during a problem-solving task. The specific focus of our work is to put the family as a whole beneath the lens of observation, as well as to analyze how the parents and the adolescent separately contribute to the task solution. Twenty-eight non-clinical families with adolescents (13 to 16 years old) were filmed in their homes during a problem-solving task. Family interactions were analyzed according to four observational measures: family efficiency, family communication, family climate, and families that control (high efficiency, calm family climate, collaborative participation), families that surrender (low efficiency, tense family climate, individual participation), and families that struggle (intermediate efficiency, serious family climate, alternated participation). Theoretical and practical implications in terms of everyday ways of dealing with problems in families with adolescents are discussed.

Keywords: family problem-solving, observation, decision-making, family efficiency, adolescence

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Family problem-solving is typically defined as an interactive situation to which all members are called to participate in order to make a decision or find a solution and accomplish a new adjustment (Miller, Lefcourt, Holmes, Ware, & Saleh, 1986; Rettig, 1993; Tallman, 1993). As such, it is a task involving the family as a whole: When confronted with problematic issues, all members are engaged in interactive processes of negotiation, reconstruction, and interpretation of the reciprocal positions (Cowan, 1991; Silverstein, Bauxbaum Bass, Tuttle, Knudson-Martin, & Huenergardt, 2006).

There are times in the life-course when families, involved in multiple changes and transitions, encounter many problem-solving situations in their everyday lives, and the way they deal with them may affect family functioning. Adolescence is undoubtedly one such time. During adolescence, parents and children need to regulate their interactions in order to negotiate the new developing competencies (Grotevant & Cooper, 1986; Kreppner, 1996; Kreppner & Ullrich, 1998; Molinari, Everri, & Fruggeri, 2010) and to deal with the adolescent's demands for more autonomy and self-determination (Collins & Laursen, 2004).

The study of how family members *interact* during problem-solving tasks lies at the core of the foundational works of David Reiss (Reiss, 1971, 1981; Costell, Reiss, Berkman, & Jones, 1981), who collected an extensive corpus of data based on observational methods over several years of both empirical and clinical work. Reiss emphasizes the extraordinary variety of coping strategies that families employ in response to stress situations, and argues that these strategies are related to an enduring structure of beliefs, convictions, and assumptions held by the family about its social world and shaping its action.

In the most recent studies on this topic, the observation of how families actually interact when facing problem-solving situations has given way to more subjective methods for the study of the conflict resolution styles adopted by parents and adolescent children. Among others, an influential research team (Branje, Van Doorn, Van der Valk, & Meeus, 2009; Van Doorn, Branje, & Meeus, 2007, 2011) has conducted a longitudinal study lasting four years with the aim of investigating the associations between inter-parental and parent-adolescent conflict resolution styles and the changes of such styles during adolescence. Using self-report instruments, these authors reached positive conclusions about both the association and the gradual shift in favor of a more horizontal relationship between parents and children. Similar questions were addressed in a cross-sectional study conducted by Reese-Weber (2000) with questionnaires distributed to middle and late adolescents. The results highlighted the mediator role of mother-adolescent and father-adolescent conflict resolution styles on sibling conflict resolution styles for both samples.

Though interesting, these studies share a methodological approach based on the analysis of *what* family members say they usually do when facing stressful situations, while the more interactional approach emphasized by Reiss is left behind. In the current study, we observe *how* families with adolescents actually interact during a problem-solving task. There are two characteristics of the method we have used in the current study: One is the focus on the whole family, given that the expression of new competencies on the part of the youngsters requires all members to learn and practice new resolution skills (Cooper, Grotevant, & Condon, 1983;

Hauser, 1991); the second is the use of direct observations, suitable for overcoming the focus on the participants' perceptions and for grasping the family processes leading to the task's resolution. In order to do so, we have investigated in particular three family dimensions: emotions, communication, and participation.

There are theoretical reasons to believe that *emotions* and *affects* have an impact on how families solve problems. For instance, Forgatch and colleagues (Forgatch, 1989; Capaldi, Forgatch, & Crosby, 1994) have found that the expression of antagonistic and hostile emotions is negatively associated with families possibly solving a problem. Consistent with this finding, McColloch, Gilbert, and Johnson (1990) showed that, in addition to negative emotions, the display of aggression during the task also limited the family's effectiveness. Going further into this topic, Reuter and Conger (1995) confirmed that problem-solving is negatively influenced by hostility and aggression, but they also argued that the opposite is not true, since an emotional climate characterized by warm and supportive interactions is not associated with a higher quality of the resolution process.

In regard to the members' *participation* in the task solution, several authors have assumed that during problem-solving situations families have to coordinate and work together in order to maintain efficient family functioning (Silverstein et al., 2006). Only a few studies have specifically analyzed how family members participate in a problem-solving task. In a two-year longitudinal study, Vuchinich, Angelelli, and Gatherum (1996) asked families with children in the transition from childhood to adolescence to solve a series of tasks, consisting overall in structured discussions, which were videotaped in the families' homes. Their results show that throughout the two years, families became progressively less effective in the process of task resolution. As they grow older, children tended to be more active in the discussions than they were before, as they argued and raised more controversial issues. As a consequence, the family had to engage in and commit more strongly to longer negotiations about the problem, before a common solution was eventually reached.

Jory and colleagues (Jory, Rainbolt, Karns, Freeborn, & Greer, 1996; Jory, Yan, Freeborn, & Greer, 1997) also conducted a series of studies videotaping families' interactions during structured problem-solving tasks. Their results show the importance of analyzing, among other variables, the families' *communication* styles. Drawing on Reiss' assumptions, these authors developed a classification of problem-solving interactions in families with adolescents, and showed a variety of ways in which members verbally communicate. For example, some families tended to express criticism of one another, correcting and trying to direct the actions of others underlining their possible mistakes. Other families instead mainly expressed concerns for the feelings of others, as they praised one another, communicated positive feelings, and shared information as a means of benefiting others.

The Present Study

In the present study, we adopt an observational method for the analysis of family members' interaction during a problem-solving task. The specific focus of our work is to put the family as a whole beneath the lens of observation, as well as to analyze how the parents and the adolescent contribute separately to the task solution. Given the specifics of adolescence, we argue that the adolescent's expression of autonomy and self-determination in solving the problem, and the corresponding acknowledgement, on the part of the parents, of their child's action and initiatives are indicators of a good family functioning.

The objectives of our work were twofold. First, we have developed a classification system of the *family efficiency* in the resolution process, emerging through the analysis of indicators that describe how family members interact and proceed in the course of the task. How can we define the efficiency of a family facing a stressful situation? We uphold that families perform different degrees of efficiency: Efficient families will concentrate on the task, proactively evaluating if they are proceeding towards the resolution, and eventually reaching the solution to the problem. On the contrary, non-efficient families will avoid focusing on the task and will circumnavigate the topic, disrespectful of the allocated time and of the request to work together in order to find the task solution. We controlled for some demographic variables, such as number, gender, and ages of children, in order to verify whether they contribute to the degree of family efficiency.

Second, we have investigated if family communication, emotional climate, and participation affect the degree of efficiency. In doing so, we considered separately the contribution of the adolescent and his or her parents. We predict that in highly efficient families members will tend to talk about the solution process itself, will set up a relaxed emotional climate, and will show the ability to coordinate one with the others. We also advance the hypothesis that in these families the parents' and adolescent's contributions to the task will differ, with the first acknowledging and respecting the child's autonomy and initiative while at the same time keeping a degree of engagement and control over the interactive process. In families of low efficiency, disengagement from the task and from demonstrating support for the adolescent's initiatives will instead be observed; moreover, parents and adolescents will assume similar roles, heedless of their specific positions in the developmental process.

Method

Participants

Twenty-eight Italian non-clinical families with adolescents, recruited through the schools, were videotaped in their homes during a problem-solving task. They all participated in this study on a voluntary basis. To be eligible for the study, families had to have at least one child in the 13 to 16 age bracket. All family members, with the exception of the children under the age of 6, were invited to participate.

The participant families came from Emilia Romagna, a region in Northern Italy. They were all Caucasian and rather homogeneous for SES (they belonged to the upper-middle class). Twenty-one adolescents were males (mean age = 14.29) and seven females (mean age = 13.85). In six families, the adolescent was the only child, in 15 families two siblings were present, and in seven families there were three or four siblings.

Prior to data collection, parents' informed consent and children's assent were acquired from all participants. In line with the ethical norms defined by the American Psychological Association, family members were informed that they had the option to stop the filming at any

time if they felt uncomfortable or tired, and that the video recordings would be used only for research and educational purposes.

After we obtained the families' agreement to participate, two researchers went to their homes. One researcher introduced the task and answered any questions, while the other was in charge of the videotaping (the whole of the task was videotaped).

Problem-solving task

The choice of the specific task required a certain caution. The first question was: What is the validity of observing a family solving a structured problem in a research setting? Once again, Reiss' (1971, 1981) conclusions meet the requirement: Drawing upon the many results obtained in 17 years of studies, he argued that in such occasions families show interactive patterns reflecting the way they face problems in everyday life. But another question was even more crucial, and concerned the external validity of any specific task we decided to ask the families to solve. After several trials, we decided to use a tri-dimensional puzzle made up of five pieces. The reason for this choice is that it requires all family members to find the way to regulate their interactions in order to make decisions and solve problems, thus accomplishing the theoretical assumptions guiding our work.

The "pharaoh's pyramid" puzzle is a five-piece wooden pyramid enclosed in a transparent plastic box with a hard paper base containing the instructions for the solution. This type of task can be solved through the work of all members, of a couple, or of one single member. However, to reach the solution members have to coordinate, as all five pieces are necessary for the task completion. One single member can reach the solution working alone *only if* the rest of the family accepts that he or she assembles all five pieces of the puzzle. On the contrary, if one member works with two or three pieces and another separately handles the remaining ones, any of them will be able to complete the task.

The procedure was as follows. Family members were invited to sit around a table comfortably. Before the instructions were given, it was ascertained that the families had not previously encountered the task or any form of it. The task was then explained to every family in exactly the same way by reading the following from a written script: "Open the box, pull apart the pieces of the puzzle and then reassemble them working together in about ten minutes. When you have finished, put again the puzzle back in the box."

After the assignment of the task, the researcher sat to one side and let the family solve the puzzle without intervening. If a family member asked a question, the researcher replied as concisely as possible, and drove all the members' attention back to the task. If the family did not solve the task in the allocated time (10 minutes), the researcher would not interrupt and let the members go on until they finished or asked for the solution (this happened in two cases).

Preparation of the material for the analysis

A research team carefully watched the filmed material several times, in order to let the categories of analysis emerge from the data rather than decide in advance which indices to consider and how to define them. After repeated viewings of the video recordings, we agreed that the degree of *family efficiency* (i.e., the process through which families proceed along the

task) is expressed by four indicators: (a) the task *duration*; (b) the fact that families reach or do not reach the *solution* of the task (the problem is considered as solved if the family completes the task within a period of time not exceeding the assigned time by more than 30 percent); (c) the *number of solution strategies* they try; and (d) the *time* they allocate to each strategy. A *solution strategy* is defined as one trial of solution, that is, one of the possible ways to reassemble the puzzle (i.e., the table as a base, the hard paper base, the plastic box, the instructions). Each of these strategies may be used more than once, thus theoretically the number of solution strategies is unlimited.

The preparation of the material for the analysis was carried out in three steps. In the first step, we identified the solution strategies used by each family. A strategy started when at least one family member proposed, either verbally or non-verbally, a way to solve the task and at least one other member joined him or her (again, either verbally or non-verbally). This happened, for instance, if a member said: "Why don't we use the paper box as a base?" and another member replied: "Yes, it's a good idea!" or nodded as to express compliance with the proposed strategy. During this step, we worked independently first and afterwards discussed together until we reached a complete agreement. For each family, the *number* and *mean duration* of strategies were then calculated. As stated above, the indices of task duration, solution, number, and mean duration of strategies combine together to define *family efficiency*.

The second step consisted in the detailed transcription of all that was observable during each strategy. The first transcription was done by one researcher, who annotated facial expressions, body movements, and verbal exchanges produced by each family member, considering the effects that they had on the other participants as well. Afterwards, another researcher watched the same video while reading the transcription, and expressed agreement and/or disagreement. Both researchers then discussed until a draft categorization of verbal communication, emotions, and participation was eventually devised. After hours of discussion within the research team, an observational coding system was finally developed.

Lastly, three trained observational coders applied the coding system to the material. Judges first worked independently and then they discussed together with the research team until a satisfactory degree of agreement was reached for each index.

The Coding System

Three observational measures were considered:

1. *Family communication*, comprising two indices: the total number of verbal messages, and the number of effective verbal messages produced by each family member (inter-raters agreement > .90). A *verbal message* is defined as the conversational turn; an *effective verbal message* is defined as a message directed to the advance towards the resolution of the problem. Examples of effective messages are: "Put the triangular piece on the top" or "Look at the pyramid shape before pulling the pieces apart". In our analyses, we consider the messages expressed by the adolescent and by his or her parents separately¹.

¹ The data we present in this paper refer either to the family as a whole (for the measures of family efficiency and family climate) or to the contribution of the parents and the adolescent child to the task (for the measures of family communication and family participation), while the contribution of any single sibling was not considered.

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2. *Family climate*, expressed by two indices. One refers to the *emotions* displayed by the family (considered as a whole) during each strategy: Family members can be prevalently *calm* (when they smile and show relaxed facial expressions), *serious* (when they express neutral facial expressions close to seriousness), or *tense* (when they display sudden and short laughter and sneers). For every family, judges were asked to assign an emotional label to what they observed in each strategy, considering the prevailing emotion displayed (inter-raters agreement > .85). The second index concerns the quality of the *actions* observable during the transition from one strategy to the successive. Actions were coded as *fluent*, when members gradually introduced a new strategy, or *abrupt*, when they displayed sudden and quick motions (for example, tearing away one wooden piece from someone else). Inter-raters agreement was > .95.

After coding was complete, for each of the indices referring to the family climate (calm serious, tense, fluent, abrupt) we calculated a proportion of occurrence in every single family, given by the number of strategies in which they were observed divided by the total number of strategies (for example, if a family was coded as calm during all strategies, its values were: calm = 1.00, serious = .00, tense = .00; if instead a family was coded as calm during one out of four strategies, serious during another, and tense during the remaining two strategies, the corresponding values were: .25, .25, .50).

3. Family participation. This measure refers to the quality of the adolescent's and the parents' involvement in each strategy. In particular, we considered three different indices for participation: *peripheral* (the member is not actively involved in the task); *individual* (the member works individually on the task); and *collaborative* (the member cooperates with one or more members). A proportion of the adolescent's and parents' peripheral, individual, and collaborative participation was again calculated (inter-raters agreement > .90).

Results

A k-mean cluster analysis was conducted on the indices of family efficiency (Table 1).

	Group 1	Group 2	Group 3
	Highly efficient	Intermediate	Low efficient
	families	efficient families	families
	(HE)	(IE)	(LE)
Task duration (sec.)	249.18	814.38	1569.67
Number of strategies	4.59	7.88	6.33
Strategies' duration (sec.)	55.24	116.95	265.33
Solution $(1 = yes; 2 = no)$	1.00	1.38	2.00
Number of families	17	8	3

Table 1. K-mean Cluster Analysis: Families' degrees of efficiency during the resolution process

Three clusters were considered (three is the maximum number of cluster having more than two families in each group). Families in the first group (*Highly Efficient*, *HE*, n = 17) progressed rapidly towards the task solution, which they all reached, passing through an average of four to five strategies, spending less than one minute on each strategy, and solving the task in a limited amount of time. On the contrary, families in the third group (*Low Efficient*, *LE*, n = 3) took a long time and eventually did not reach the solution; moreover, they persisted on the same strategy before deciding to move and explore a new way of resolution. Families in the second group (*Intermediate Efficient*, *IE*, n = 8), in addition to the fact that they were "in the middle" as far as task duration, strategies' duration, and solution were concerned, went through the highest number of strategies.

Non-parametric tests (Kruskal Wallis) showed no differences among the groups as far as gender, number, and ages of children in the families were concerned. We then conducted other analyses in order to verify whether the three clusters differed as far as family communication, family climate, and family participation were concerned. Table 2 reports the results concerning the family communication.

Table 2.	Parents'	and adolescent's	s communication	by Cluster	membership
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	Group 1	Group 2	Group 3
	HE families	IE families	LE families
Total messages by adolescents	19.12	34.62	101.67
Proportion of effective messages by adolescent	.22	.26	.15
Total messages by parents	19.32	46.62	110.67
Proportion of effective messages by parents	.24	.18	.17

The total number of messages produced by the adolescent and the parents in the three groups was very different: *LE* family members produced a number of total messages which was five to six times higher as compared to *HE* (for adolescents, Chi2 (2) = 9.32, p < .009; for parents, Chi2 (2) = 18.23, p < .001). As for the proportion of effective messages, adolescents in the *IE* families were those who revealed to be more effective for the task solution (Chi2 (2) = 8.04, p < .01), while the same was true for parents in the *HE* group (Chi2 (2) = 9.47, p < .009). Groups' comparison concerning the family climate is reported in Table 3.

	Group 1 HE families	Group 2 IE families	Group 3 LE families
Emotions			
Calm	.88	.40	.67
Serious	.09	.40	.08
Tense	.03	.21	.25
Actions			
Fluent	.92	.59	.75

Non-parametric tests (Kruskal Wallis) conducted for the comparison among the three groups revealed that, as far as emotions were concerned, *HE* families were the calmest (Chi2 (2) = 10.53, p < .005), *IE* families tended to be more serious than the other groups (Chi2 (2) = 5.34, p < .05), and *IE* and *LE* families were more tense than *HE* ones (Chi2 (2) = 9.47, p < .009). As for actions' indicators, *HE* families moved more fluently from one strategy to the other (Chi2 (2) = 8.11, p < .01), while *IE* families were more abrupt (Chi2 (2) = 8.11, p < .01). Finally, we explored whether the quality of the adolescent's and parents' participation in the task differed (Table 4).

	Group 1 HE families	Group 2 IE families	Group 3 LE families
Adolescent's			
participation			
Peripheral	.10	.38	.13
Individual	.35	.32	.72
Collaborative	.56	.29	.15
Parents'			
participation			
Peripheral	.45	.31	.14
Individual	.18	.36	.82
Collaborative	.38	.33	.07

Table 4. Parents' and adolescent's participation in the task by Cluster membership

The non-parametric tests showed differences among the groups for all variables. Adolescents in *IE* families were the most peripheral (Chi2 (2) = 8.34, p < .01), in *LE* families were the most individuals (Chi2 (2) = 6.13, p < .03), and in *HE* families were the most collaborative (Chi2 (2) = 6.91, p < .05). Parents in *HE* families were the most peripheral (Chi2 (2) = 6.12, p < .03), in *LE* families were the most individual (Chi2 (2) = 12.75, p < .002) and the least collaborative (Chi2 (2) = 7.51, p < .04).

Discussion

Drawing on the results of this study, an interesting view of how families with adolescent children interact when facing problem-solving situations is depicted. As far as *HE* and *LE* families are concerned, our predictions were confirmed. However, with the cluster analysis we also identified a third group, the intermediate efficiency families, that shows a very interesting interactive pattern. In this discussion, we propose an overview of the interactive patterns characterizing each group of families, enriched by a few descriptions extracted from the videos.

Highly Efficient Families: Those who control. The videos provide us with some hints about how *HE* families typically approached the task. As soon as the researcher gave them the pyramid and read the instructions, one member, generally the adolescent or an older sibling,

explored it carefully, often expressing comments on the possible strategies for its solution. This immediately triggered the prompt activation of other members, thus giving the idea of a family that directly faces the problem to be solved, with concentration and initiative.

The results of the analyses reported above tell us that these families solved the problem in a very short time. Six families actually completed it in a couple of minutes, using only three strategies: they (a) explored the pyramid and opened it, (b) tried one of the possible solution strategies, and (c) found the solution and put the pyramid back in its box. When they did take a longer time, they rapidly moved through a higher number of strategies (five or six).

Their progression towards the solution (which they all reached) seems to be guided by the regular evaluation (expressed through effective messages) of how the task was proceeding and by introducing innovative ideas (new strategies) as soon as the old ones proved to be ineffective. A closer look at the family communication during the task reveals that parents and adolescents expressed approximately the same number of comments; however, parents' comments were slightly more effective than those of the adolescents.

As for their actual participation in the task, the adolescents of these families were seldom peripheral. At times, they worked individually but more often they collaborated with other members. Parents, on the other hand, seldom worked on the task individually. They mainly performed peripheral or collaborative participation. The emotional climate was relaxed, and the transitions from one strategy to the other were always smooth.

In brief, the way *HE* families went through the task seems to be characterized by a high amount of control. All members regularly contributed, with suggestions and evaluations, to the task solution in the allocated amount of time. The parents assumed different positions, at times allowing the adolescent to work alone on the task, at others cooperating with him or her. In either case, they maintained the control of what was happening by verbally guiding the children through the process, thus facilitating a good family performance.

Low Efficient Families: Those who surrender. A very different approach to the task was observed in *LE* families. The video recordings show that in all these three families, members asked the researcher for supplementary information as soon as she had read the instructions. In one case, the adolescent inquired about the number of families that were able to solve the task, in another the mother asked for specifics about the research goal, and in the third the father stated: "it's too much for us!"

The families grouped under the *LE* label used much more than the allocated time without eventually reaching the solution (the fastest of these families gave up after 22 minutes of trials). They remained "stuck" in the same strategy for many minutes, while talking about unrelated issues and joking about their poor performance. The emotional climate was prevalently calm; however several moments of tension among participants were observable, particularly in the abrupt movements performed when moving from one strategy to the other.

Finally, *LE* families did not work together on the task, as the assignment explicitly asked. Rather, they separately worked on some pieces and tried to assemble a few of them, without showing any concern about the fact that if individual actions were not accompanied by some form of coordination among the members, they could not lead to the solution. In short, these families seemed to get lost in the task and eventually gave up. They did not concentrate on the problem and tended to avoid the effort required in finding a common solution, for instance, by talking about anything but the task.

Intermediate Efficient Families: Those who struggle. The third group of families shows a very interesting pattern, differing partly from the other two. In comparison with *HE* families, they turned out to be less efficient in the resolution process, since they needed a longer time and did not always reach the solution. However, the data also tell us that they went through a higher number of strategies, the highest of all. Even when the time pressure was high and they still seemed far away from the solution, *IE* families did not give up or moved around the task (as *LE* families did), but rather went on struggling and making attempts. This effort is documented by their serious concentration on the task.

What is also very important is that the adolescent's contribution was highly relevant throughout the whole process, as it was actually the youngster who verbally guided the process more than parents did, a pattern which was not observed in any of the other groups. As regards the quality of the family participation in the task, the parents and the adolescent switched their positions in the course of the task resolution: Sometimes the parents remained peripheral and let the adolescent work, at other times it was the adolescent who withdrew and left the field open to the parents, at still others they all actively cooperated. In brief, these families seem to be going through a "testing" time, with all members struggling to find their specific role.

Conclusion

In the present study we have described the process of decision-making during a problemsolving situation in families with adolescent children. The notion of family efficiency has shown to be important in order to shed light on the *interactional processes* displayed by family members when they face critical situations, as is frequent during adolescence (Molinari et al., 2010).

Several considerations arise from the discussion of our results. First, we can highlight that, consistent with what Reuter and Conger (1995) have described, the family climate, and even more the quality of the verbal messages, affect the processes by means of which families face the situation at hand. When dealing with the adolescents' requests in everyday life, parents are often called upon to engage in discussions and negotiations that can benefit from a calm setting and an open and direct communication style.

Also relevant is how family members actually work in the course of problematic situations. Not surprisingly, highly efficient families are very collaborative. The ability to coordinate in a group is significant to decision-making, because it gives each family member the possibility to intervene. However, beyond everybody's active participation in the task, in these families the adolescent and the parents hold different positions, with the first who seldom has the chance to work alone and the second who verbally guide and support him or her. This reveals a form of control over the adolescent's behavior on the part of parents. On the contrary, families

working mainly individually, and eventually *surrendering*, seem to convey the idea that both parents and adolescents should rely on their own individual efforts in order to make decisions. We suggest that this form of participation recalls a sort of premature attribution of responsibility to children that is close to disengagement, which prevents the family reaching the solution of the problem.

As a final remark, let us consider in more detail the interactive picture of the *struggling families*. In these families, adolescents are more active, and members engage in multiple strategies. At times all of them actually collaborate and participate, but there are also times when the adolescent talks and individually works on the task, while the parents lessen their control thus favoring the child's individuation and autonomy, regardless of the fact that the apparent struggle to put forth different suggestions makes the process longer and more complicated.

Our work certainly has several limitations and leaves many questions unanswered, since it only provides a snapshot of the different ways families with adolescents deal with decisionmaking. One limitation concerns the fact that the unbalanced number of families in the three clusters did not allow for more rigorous statistical analyses. Moreover, the families are limited in number, and they do not necessarily reflect the demographic composition of the region; as a consequence, we are unable to make generalizations about family adjustment during adolescence. Another important weakness concerning the external validity of our work lies in the degree to which the task that we asked families to solve reflects other types of tasks that they are called upon to solve in everyday life. This still remains an open question that has to do with the more general problem of how "real" our conclusions can be in terms of the recurrent ways that families will interact during decision-making. One more limitation is that this is a study at a particular moment in time, and we do not know if there were external factors (e.g., marital conflicts or other family problems) that might have influenced the outcomes. Finally, we are aware that the particular research setting, requiring the presence of an observer in the families' homes as well as the video-recording equipment, constitutes in itself a limitation, given that the families might have only been willing to present themselves in an "ideal" way.

Beyond these limitations, we believe that household observations of non-clinical families are crucial and deeply needed to further an understanding of how parents and adolescents, who are called upon daily to find new ways to readjust their relations, deal with the challenges that are enhanced by the frequent changes and problematic situations of their everyday live.

We conclude our contribution by raising an issue that may be further addressed in future research and can also be considered as an interesting working hypothesis for professional practice. We have shown that the most efficient families are those in which parents continuously control and monitor the adolescent's actions. But the crucial question is: Does this interactive process accomplish this efficiency through the specific nature of adolescence, calling for a balance between cohesion and autonomy? The variety of interactive patterns we have observed allows us to put forth the idea that adjustment and functioning in families with adolescents are not just a matter of efficiency in solving problems and making decisions. In some cases, a loss in efficiency on the part of the families who engage in discussions and negotiations before coming to the final decision is offset by the fact of acknowledging the adolescent's needs for exploration, initiatives, trials, and errors.

What are the practical implications of this study for educators and practitioners working with families and adolescents? Our results highlight the need for rethinking around the dimension of parental monitoring. An interesting debate about this issue has recently been raised by psychologists (Stattin & Kerr, 2000; Kerr, Stattin, & Burk, 2010) who, drawing on the results of both cross-sectional and longitudinal studies, have shown that parental monitoring, based on tracking and surveillance, is linked to forms of internal and external adjustment. However, the same authors also stress that many prevention and intervention programs addressed toward parents and based on the exclusive increasing of monitoring are not effective. They state that "there must be mechanisms not yet considered or tested that explain the role of parents and that suggest what they might best do to guide their children through adolescence into adulthood" (Kerr, Stattin, & Burk, 2010, p. 62).

We suggest that the focus on the family interactive patterns can account for a wider perspective in which the adolescent's position and behavior concur with the parenting dynamics. From this point of view, the dimension of monitoring is questionable, at least in the process of decision-making. Adolescents have the possibility to cooperate, to make mistakes, and eventually to become competent in coping with problematic issues *only if* parents sometimes let them "take the risk" of experimenting with new situations.

The distinction between high and low efficiency, as well as that between high and low monitoring, is therefore not enough to grasp the multifaceted universe of families with adolescents: Their interactive processes may also take on different nuances meeting the requirements of the continuous oscillations implied in the identity formation process, which is the most challenging developmental task for adolescents.

References

- Branje, S. J. T., Van Doorn, M. D., Van der Valk, I., & Meeus, W. H. J. (2009). Parentadolescent conflict, conflict resolution, and adolescent adjustment. *Journal of Applied Developmental Psychology*, *30*(2), 195–204.
- Capaldi, D. M., Forgatch, M. S., & Crosby, L. (1994). Affective expression in family problemsolving discussions with adolescent boys. *Journal of Adolescent Research*, 9, 28–49.
- Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and influences. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 331–362). New York: Wiley.
- Cooper, C. R., Grotevant, H. D., & Condon, S. M. (1983). Individuality and connectedness in the family as a context for adolescent identity formation and role taking skill. In H. D. Grootevant & C. R. Cooper (Eds.), *Adolescent development in the family: New directions* for child development (pp. 43–59). San Francisco: Jossey-Bass.
- Costell, R., Reiss, D., Berkman, H., & Jones, C. (1981). The family meets the hospital: Predicting the family's perception of the treatment from its problem-solving style. *Archives of General Psychiatry*, 38(5), 569–577.
- Cowan, P. A. (1991). Individual and family life transitions: A proposal for a new definition. In P. A. Cowan & M. Hetherington (Eds.), *Family transitions* (pp. 3–30). Hillsdale, NJ: Lawrence Erlbaum.
- Forgatch, M. S. (1989). Patterns and outcome in family problem-solving: The disruptive effect of negative emotions. *Journal of Marriage and the Family*, *51*(1), 115–124.
- Grotevant, H. D., & Cooper, C. R. (1986). Individuation in family relationships: A perspective in individual differences in the development of role-taking skill in adolescence. *Human Development*, 29(2), 82–100.
- Hauser, S. T. (1991). Adolescents and their families: Paths of ego development. New York: The Free Press.
- Jory, B., Rainbolt, J., Karns, T., Freeborn, A., & Greer, C. (1996). Communication patterns and alliances between parents and adolescents during a structured problem-solving task. *Journal of Adolescence*, *19*(4), 339–346.
- Jory, B., Yan, X., Freeborn A., & Greer, C. V. (1997). Locus of control and problem-solving interaction in families with adolescents. *Journal of Adolescence*, 20(5), 489–504.
- Kerr, M., Stattin, H., & Burk, J. W. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence*, 20(1), 39–64.

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- Kreppner, K. (1996). Parent-child relationships: Childhood and adolescence. In A. E. Auhagen & M. von Salisch (Eds.), *The diversity of human relationships* (pp. 81–105). New York: Cambridge University Press.
- Kreppner, K., & Ullrich, M. (1998). Talk to mom and dad, and listen to what is in between. In M. Hofer, P. Noack, & J. Youniss (Eds.), *Verbal interaction and development in families with adolescents* (pp. 83–108). Greenwich, CT: Ablex.
- McColloch, M. A., Gilbert, D. G., & Johnson, S. (1990). Effects of situational variables on the interpersonal behaviour of families with an aggressive adolescent. *Personality and Individual Differences*, 11, 1–11.
- Molinari, L., Everri, M., & Fruggeri, L. (2010). Family microtransitions: Observing the process of change in families with adolescent children. *Family Process*, 49(2), 236–250.
- Miller, P., Lefcourt, H., Holmes, J., Ware, E., & Saleh, W. (1986). Marital locus of control and marital problem-solving. *Journal of Personality and Social Psychology*, *51*(1), 161–169.
- Reese-Weber, M. (2000). Middle and late adolescents' conflict resolution skills with siblings: Associations with interparental and parent-adolescent conflict resolution. *Journal of Youth and Adolescence*, 29(6), 697–711.
- Reiss, D. (1971). Varieties of consensual experience. A theory for relating family interaction to individual thinking. *Family Process*, 10, 1–28.
- Reiss, D. (1981). *The family's construction of reality*. Cambridge, MA: Harvard University Press.
- Rettig, K. D. (1993). Problem-solving and decision making as central processes of family life: An ecological framework for family relations and family resource management. *Marriage and Family Review*, 18(3/4), 187–222.
- Reuter, M. A., & Conger, R. D. (1995). Interaction style, problem-solving behavior, and family problem-solving effectiveness. *Child Development*, 66(1), 98–115.
- Silverstein, M. S., Bauxbaum Bass, L., Tuttle, A., Knudson-Martin, C., & Huenergardt, D. (2006). What does it mean to be relational? A framework for assessment and practice. *Family Process*, 45(4), 391–405.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71(4), 1072–1085.
- Tallman, I. (1993). Theoretical issues in researching problem solving in families. *Marriage and Family Review*, *18*(3/4), 155–168.

- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2007). Longitudinal transmission of conflict resolutions styles from marital relationships to adolescent-parent relationships. *Journal of Family Psychology*, 21(3), 426–434.
- Van Doorn, M. D., Branje, S. J. T., & Meeus, W. H. J. (2011). Developmental changes in conflict resolutions styles in parent-adolescent relationships: A four-wave longitudinal study. *Journal of Youth and Adolescence*, 40(1), 97–107.
- Vuchinich, S., Angelelli, J., & Gatherum, A. (1996). Context and development in family problem solving with preadolescent children. *Child Development*, 67(3), 1276–1288.