

“Self-regulation contributes to economic success and a healthy lifestyle”

Behavioral economist Ernst Fehr talks about how self-regulatory and motivational skills can be taught and explains why behavioral economics is so important for policymakers

Interview by [Sabine Gysi](#)
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Sabine Gysi: *We have heard a great deal this year about the [KIDS WIN](#) research project, which evaluates programs for teaching schoolchildren such competencies as patience, motivation, concentration and determination. How do these skills affect success later in life?*

Ernst Fehr: There is convincing scientific evidence that these competencies, generally referred to as self-regulatory and motivational skills, are associated with economic success, in terms of less unemployment and higher incomes in adulthood. In addition, people with these skills are less likely to smoke or to be obese, and more likely to engage in sports and to be generally healthier.

Our goal, therefore, is to develop interventions that will promote these competencies. A good teacher will sometimes do this intuitively. During early childhood, self-regulatory and motivational competencies may be even more important than cognitive skills, since they play an essential role in the later acquisition of cognitive skills. Students who have difficulty concentrating will not be very successful at learning the material presented to them in school.

The big question is this: How can these competencies be taught? We have some answers to this question, but much remains to be learned. In an attempt to shed light on this subject, the KIDS-WIN project conducted two interventions. One was a program to train working memory, while the other focused on self-regulation. Rather than developing these programs ourselves, we adapted existing programs for use in schools.

For the self-regulation intervention we used a method known as “mental contrasting with implementation intentions.” The [method was developed by Gabriele Oettingen and Peter Gollwitzer](#), and its basic idea is simple: With the help of the teacher, the child sets certain goals. In a next step, again with the teacher’s help, the child identifies possible obstacles. The third step is to think about how those obstacles might be overcome with an “implementation intention” – which takes the form of a simple if-then plan.

Let me give you an example: Assume, for instance, that I’m a child who is too easily distracted. I want to concentrate on my schoolwork, even if my neighbor is bothering me. So I ask myself: What, exactly, is preventing me from concentrating? I might then make a little sign with a face saying “Shh!” – signaling to the other child: Be quiet. If he starts talking, I just show him the sign. That’s the if-then approach. First I identify my goal, then the potential obstacle. And then I create a tool or method for overcoming that obstacle. This helps children manage their environment and their

impulses more effectively and keeps them from being constantly distracted.

This intervention targeted self-regulation directly. The other was a computer-assisted program for training working memory. Both had positive effects on a variety of skills, but particularly on self-control. Our study, which included over 1,000 children, has not yet been thoroughly analyzed because it involves such enormous quantities of data. We still have a long way to go.

SG: How might a program of this kind be implemented in a school system? Would it be necessary to work through these training units in every class, on a regular basis, or should every teacher ideally be competent to teach these skills as part of normal classroom instruction?

EF: Self-regulation training might well be integrated into classroom instruction, and the advantage would be that it could be geared to the interests and problems of individual children. Indeed, I think that it should be part of regular instruction – an additional tool for the teacher to use.

In contrast, our program for training working memory was computerized. It was very intensive – one hour every day over a period of five weeks. Today, with computers increasingly present in the classroom, schools might well implement a program of this kind. It would then be a separate unit. But there might also be innovative ways of integrating this training into regular instruction. That's something to think about.

SG: Your work involves behavioral economics and neuroeconomics. Are such interdisciplinary approaches potentially more helpful than traditional economics in providing recommendations to policymakers and the business community?

EF: There is convincing evidence that policy recommendations based on behavioral economics can be both effective and less expensive. That doesn't mean that the recommendations of conventional economists are invalid, but behavioral economics enhances the policy toolkit enormously. Traditionally, economists have issued two kinds of policy recommendations. One involved making changes in what was prescribed or proscribed. If you wanted to protect the environment, then you had to prohibit companies from polluting the air and water. The other involved pricing mechanisms: Taxes are levied on activities that cause pollution.

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Today, however, we know that there are many other ways to influence behavior, other than taking “invasive” administrative measures (prescribing or proscribing certain activities) or using pricing mechanisms. A term that summarizes the behavioral economics approach towards policy is “nudging” – changing people's behavior with “soft” interventions that direct their attention towards a desirable goal and that are often in their own interest.

But to finish answering your question: An interdisciplinary approach that takes psychological, economic and sociological factors into account is preferable to limiting ourselves to a single discipline, for the simple reason that it provides a larger policy “toolbox.”

SG: On our blog, developmental psychologist Michael Tomasello recently wrote an article about his work in which he explained how young children develop a sense of fairness. In your own work, you describe how that sense of fairness continues to develop in adolescence. You talk about how young people eventually become more tolerant of the members of their own group, but less tolerant of outsiders. Why does that change take place during this particular stage of development?

EF: In a study we published in *Nature* in 2008, we found that children become very egalitarian between the ages of three and eight. In other words, they pay close attention to whether people are treated equally, and regard inequality as unfair. Indeed, their sense of fairness can sometimes lead to rather surprising arguments. Let me give you one example: A girl, perhaps 7 or 8 years old, said, "I can't let the other kid have two pieces of candy, when I only get one, because that will be bad for his teeth."

She rationalized her envy by pointing out what was in the best interest of the other child. We also found that 7- and 8-year-olds are more willing to share than 3- and 4-year-olds – but only within their own group. When dealing with members of other groups – "outgroups" – they are no longer willing to share at all.

In another study, we discovered that children between the ages of 13 and 17 are much more willing to accept inequality that works to their disadvantage because they are less envious than younger children. Even then, however, there is a considerable gap between the generosity shown to members of their own group and that shown to members of other groups.

Why children start to behave differently toward members of their own group, relative to members of other groups, is a question to which science has not yet found a conclusive answer. We can only speculate. In evolutionary terms, group selection might be a plausible explanation; groups have often been in conflict with one another. Animosity, fear, and distrust of members of other groups have deep evolutionary roots.

SG: *In the modern world, wealthy groups in Western Europe find themselves confronted with ever larger groups of refugees from different cultural backgrounds. Using the mechanisms you just described, can you explain why many people in situations like this show little tolerance or generosity to members of an "outgroup"?*

EF: This is obviously a very complex situation. For one thing, people of lower socioeconomic status in our society feel that they are missing out. And they often believe that immigrants and asylum seekers are given overly generous benefits when they arrive in our country. The problem is further complicated by the fact that asylum seekers frequently lack access to our labor market, so they are unable to support themselves. In a sense, the law forces them into the welfare system rather than allowing them to enter the labor market.

Another issue is that many of these refugees and immigrants come from regions with very different social norms, so they are "culturally alien." Distrust of those who are culturally and ethnically different probably has deep evolutionary roots, and it can be easily exploited for political purposes. It is always a temptation for politicians – in most cases belonging to parties on the right – to use these feelings to their political advantage. They stir up latent xenophobia in an effort to win as many votes as possible.

SG: *What might schools do to encourage openness toward people from other "groups"? Is that even possible?*

EF: Yes, I'm convinced that it's possible. For example, a study by Harvard economist Gautam Rao has shown that bringing children in India from diverse social backgrounds together in school classes makes the children of wealthy parents more generous and less likely to discriminate against children whose parents are poor.

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Obviously this is not directly comparable to the situation in Switzerland. In general, however, these studies suggest that mixed classes are a good idea. In a similar study, [Marcus Alexander and Christia Fotini](#) looked at cooperation between Catholic Croatian children and Muslim Bosnian children in segregated as well as mixed schools. Here, too, the results showed that bringing different groups together – in this case children from different ethnic and religious backgrounds – has a positive effect. Children in diverse schools are better able to achieve cooperation based on peer pressure.

SG: *In Western Europe, there is heated discussion of whether the “right” people end up enrolling in our universities. The question is whether decisions as to whether someone “belongs” in a university are based not on that person’s intellectual capacity, but on whether he or she comes from a certain background – one in which earning a university degree is perhaps taken for granted. What steps might be taken to address that issue?*

EF: This is a long-term problem. There doesn’t seem to have been a substantial increase in the percentage of working-class children enrolled in our universities. In general, it is not easy to integrate disadvantaged groups into the educational system. But it is important to remember that a hundred years ago, very few girls and even fewer working-class children attended high school. We are now making much better use of the talents of these groups, which remained untapped in the past.

Why is that? Because school attendance is compulsory. The law requires that children receive basic schooling into early adolescence. Those who oppose the idea of early childhood education seem to have forgotten the value of compulsory education. By making schooling compulsory, the civilized world has taken a major step forward that has had enormous positive effects on our overall economy and society.

Another important step toward integrating educationally disadvantaged groups is to expand early childhood education programs and facilities, preventing the development of a gap that is very difficult to close later on. If all children receive appropriate support when they are 1, 2 and 3 years old, it is possible to compensate to some extent for the disadvantages some of them suffer. We need creative solutions that offer support starting when children are still very young and that induce parents from disadvantaged groups to take advantage of that support.

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This article was published on BOLD, the Blog on Learning and Development. If you would like to share it with others, please do not use this PDF but instead link to the original post at <https://bold.expert/self-regulation-contributes-to-economic-success-and-a-healthy-lifestyle/>.