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# UNFREEZING SCHOOL REPUTATIONS: THE ROLE OF SOCIAL COGNITIVE FLEXIBILITY

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## Abstract

*The school often generates different kinds of reputations. These reputations can have negative consequences on pupils' learning process. Bad reputations make pupils' efforts invisible, whereas good reputations restrict teachers' perception of pupils' desinvestment in learning. Although individualization seems to be an ideal alternative to thwarting reputation creation, it cannot be permanently applied in teachers' practice because of time pressures, cognitive overload, and other facilitators of the automatism emergence. Hence, the aim is not to banish stereotypical reasoning, but rather to keep a balance between automaticity and reflection through a social cognitive flexibility approach (SCF). The current study tests the impact of a social cognitive flexibility approach on teachers' thinking about pupils. Social cognitive flexibility seems to help teachers suspend hasty judgments of pupils' attitudes and behaviors. The study considers the implications of social cognitive flexibility on teachers' practice in terms of better perception of pupils' learning potential.*

**Key words:** social cognitive flexibility, categories of pupils, teachers' thinking.

## Introduction

Who has never heard about school reputations: how teachers can be lax with good learners and intransigent with those who are considered bad learners. Who has never perceived inequality when observing this kind of unbalanced treatment, whether privileged (teachers' pets) or strict? Bad reputations often persist in pupils' memories even many years later and inhibit their motivation toward hated domains. The teachers' opinions about pupils are based on available information (perceived by themselves or received, for example, from colleagues) and often solidified in their memories (Hamilton, Katz, & Leirer, 1980). The problem is that perception can be biased and received information can be partial. Hence, memorized impressions can be distorted or overgeneralized.

### *Bias of Neutral Vision*

Admittedly, it could be inferred that one possible solution to the problem of school reputations would be the prohibition of stereotyping or recommendation of individualization. Although this perspective seems ideal, it poses several problems. First, it is almost impossible for the individual to analyze the social reality in-depth and permanently and to not categorize at all, because of the nature of the teaching profession, which is very demanding of cognitive resources. Even trying not to stereotype can yield the opposite result due to ironic effects of mental control (Wegner, 1994). More precisely, even if teachers try to not categorize automatically, they risk relapsing with greater intensity not only at the level of stereotype (rebound effect) (Macrae, after Milne & Jetten, 1994), but also at the level of behavior (Follenfant & Ric, 2010). One solution is to search for information about specific pupils.

*Traps of Available Information*

In attempting to get additional information about pupils, teachers can communicate with colleagues, meet pupils' parents, and enquire about pupils' antecedents and school careers. However, these strategies can have pernicious effects. Indeed, information can be partial, incomplete, or inaccurate. Furthermore, there is a risk of conforming to the majority of colleagues' opinions and of decreasing objective observation of pupils. More specifically, as in Asch's experience (Asch, 1956); teachers can express their public agreement on some pupils' attitude and/or behavior (even if in reality they do not share it), or inversely, they can accept others' opinions without questioning them. In both cases, they take part in the creation of pupils' reputations.

*Perception of Learning Potential*

The opinion established by teachers or based on the opinion of their colleagues restrains objective perception of pupils' learning potential because of the stability of teachers' expectations. Despite the rather high accuracy of teachers' perceptions of pupils' learning investment in the moment, the will to predict it can bias perception of potential. Pupils' learning potential can be influenced by contextual elements like life events (birth of a sibling, parents' divorce, or bereavement). There are moments when pupils can appear to look their best and others when they can appear apathetic and disinvested. Thus, the development of capacity to readjust the expectations systematically, despite high cognitive load and temporal pressure, seems to be important.

*Problem of Research*

What teachers can do to readjust their expectations systematically? How can they make their views of pupils less dependent on different sources of information? How can they unlock their critical thinking in situations of emergency and stress?

In this study, it is hypothesized that social cognitive flexibility (SCF) could increase character temporarily and relative of established opinion or some sources of information (colleagues, antecedents, social origin, cultural origin, or school level), especially in problematic learning situations.

*Research Focus**Social Cognitive Flexibility*

Spiro, Feltovich, Jacobson, and Coulson (1992) argued that domains in which knowledge is complex and poorly structured (history, medicine, law, literature interpretation, or teachers' training) need to be treated differently than those that are well-structured, mainly because the learners are asked to apply their knowledge in new and often unique situations. Indeed, educational situations are a priori, without correct or known solutions. Thus, methods for developing awareness that the interpretation of the same situation can vary according to several representations can allow them to seize the complexity of it. The awareness of multiple interpretations could let teachers develop an association network, interconnections between the explanations of how to see the object from different perspectives, and to avoid oversimplification and rigid and linear reasoning.

Knowledge about pupils involved in educational situations is complex. It is assumed that human relations professionals should develop a capacity to see several representations of

the same problem or of the situation to increase the quality of the interpretation. That is why it seems essential to develop the awareness of the existence of several explanations (Martin & Rubin, 1995, Dennis & Vander Wal, 2010).

## **Methodology of Research**

### *General Background of Research*

In this study, secondary schoolteachers were asked how they think about several general affirmations about pupils. It was hypothesized that teachers who take a higher SCF approach (several possible explanations or/and weak linear predictability of human behavior) are less sensitive to information about social category than those with lower levels of SCF. They were supposed to make fewer associations between the problem with a given pupil and his or her social origin or immigrant status.

### *Sample of Research*

One hundred fifty-nine secondary schoolteachers (99 women, 60 men; mean age=31.8 years) in the Geneva district who were enrolled in a teacher training program participated in the research, which was presented as a way to improve the training course. The impact of the SCF approach on teachers' visions of pupils is one of the indicators needed for SCF development during teachers' training courses. The survey was conducted for the first time; hence its reliability cannot be confirmed yet. However, developments on this issue will be dealt with in a subsequent report.

### *Instrument and Procedures*

Participants completed a standardized (each participant had the same questions) and anonymous questionnaire individually, at the beginning of the training. Teachers rated some affirmations about different kinds of pupils' origin (school/class level, social background, immigration status, parents' appearance) on a 6-degree scale (from 1, "strongly disagree," to 6, "strongly agree"). Then they were invited to answer some questions related to social cognitive flexibility approach dimensions (weak linear predictability and awareness of multiple explanations of human behavior) on a 6-degree scale (from 1, "strongly disagree," to 6, "strongly agree").

### *Independent measure*

The SCF approach was measured by questions related to capacity that were put into questions about hasty conclusions about human behavior (example: "People can behave in a contradictory way in different situations," "In my opinion, there is only one way to explain the behavior of a person" (6-point scale: 1=strongly disagree and 6=strongly agree).

### *Dependent measure*

Teachers' critical thinking was measured by questions related to some aspects of their practice, including how teachers think about pupils according to their social background, immigration status, school level, and parents' appearance.

*General hypothesis:* Teachers with high social cognitive flexibility think more critically than those with low social cognitive flexibility.

*H1:* Teachers with high social cognitive flexibility (predictability or multiple explanations items) think more critically about school/class level than those with low social cognitive flexibility.

*H2:* Teachers with high social cognitive flexibility (predictability or multiple explanations items) think more critically about immigration/social background status than those with low social cognitive flexibility.

*H3:* Teachers with high social cognitive flexibility (predictability or multiple explanations items) think more critically about colleagues' opinions about pupils than those with low social cognitive flexibility.

*H4:* Teachers with high social cognitive flexibility (predictability or multiple explanations items) think more critically about parents' appearance than those with low social cognitive flexibility.

### *Data Analysis*

The questions related to the SCF approach as well as those related to teachers' manner of thinking were analyzed with factor analysis. Factor analysis concerning the SCF approach indicated two factors that accounted for 62.48% of response variance ( $KMO=0.80$ ). The first factor (eigenvalue=3.55) included items like "People can behave in a contradictory way in different situations." A composite score was computed to form an index of weak linear predictability of human behavior ( $\alpha=0.80$ ) (see Table 1, A). The second factor (eigenvalue=1.45) included items like, "In my opinion, there is only one way to explain the behavior of a person." Similarly, a composite score was computed to form an index of several explanations of human behavior ( $\alpha=0.78$ , after reverse-scoring four items) (see Table 1, B). The Bartlett test was significant (Bartlett box=405.25,  $df=28$ ,  $p<0.001$ ).

**Table 1. Social cognitive flexibility factors.**

Variables	KMO=0.86	Cronbach- $\alpha$
A. Weak linear predictability		0.80
B. Multiple explanations		0.78

The questions related to teachers' thinking about pupils were also analyzed with factor analysis, which yielded 10 principal factors ( $KMO=0.71$ ) that accounted for 59.1% of response variance. However, only four factors were retained for results because of weak reliability of response in other six factors. Participants' responses were averaged according to subsequent factors. The first factor (eigenvalue=7.99) included four items (see Table 2, A), and a composite score was computed to form an index of colleagues' opinion about pupils ( $\alpha=0.70$ ). The second factor (eigenvalue=2.88) included three items (see Table 2, B) and was labeled school level ( $\alpha=0.77$ ). The third (eigenvalue=2.79) included four items (see Table 2, C) that referred to pupils' immigration/social background ( $\alpha=0.70$ ). Similarly, the fourth factor (eigenvalue=1.32) included two items (see Table 2, D) and was computed to form an index of parents' appearance ( $\alpha=0.63$ ). The Bartlett test was significant (Bartlett box=2329.09,  $df=946$ ,  $p<0.001$ ).

**Table 2. Pupils' origins variables.**

	Variables <b>KMO=0.71</b>	<b>Cronbach-α</b>
<b>A.</b>	<b>Colleagues' opinion about pupils</b> Example: "Generally, when a teacher ask their colleagues about one pupil, he/she can anticipate the <i>behavior</i> of this pupil", "Generally, when a teacher ask their colleagues about one pupil, he/she can anticipate the <i>performance</i> level of this pupil".	0.70
<b>B.</b>	<b>School social level</b> Example: "When the teacher knows from which school pupil comes from, he/she can anticipate behavior", "When the teacher knows from which school pupil comes from, he/she can anticipate performance".	0.77
<b>C.</b>	<b>Immigration/social background status</b> Example: « Globally, immigrants pupils have a socio-cultural impediment and therefore lack of discipline » « Globally, immigrants pupils have a socio-cultural impediment and therefore weak performance », "If a student is unruly, is because of his low social background".	0.70
<b>D.</b>	<b>Parents' appearance</b> Example: "When teacher see the pupils' parents, generally he/she can anticipate the pupils' behavior", "When teacher see the pupils' parents, generally he/she can anticipate the pupils' performance".	0.63

The four teachers' thinking factors were analyzed as the dependent variables (two-factor SCF approach as the independent measure) with Analysis of Variance (ANOVA) and were tested in terms of correlations.

## Results of Research

### *Social Cognitive Flexibility Effect*

At the univariate level, neither the impact of multiple explanations and weak linear predictability of colleagues' opinions nor the impact of parents' appearance was significant. In contrast, the SCF effect on school level and on immigration/social status was significant. Indeed, the teachers' awareness of multiple explanations of human behavior seems to influence their perceptions of pupils' origins in terms of school level ( $F(10,142) = 4.31, p < 0.00, \eta^2 = 0.23$ ) and of immigration/social status ( $F(10,142) = 1.79, p < 0.07, \eta^2 = 0.11$ ). Similarly, the teachers' awareness of weak linear predictability of human behavior has a significant effect on their perceptions of pupils' origins in terms of school level ( $F(11,141) = 3.05, p < 0.00, \eta^2 = 0.19$ ) and on importance of immigration/social status in teachers' perception of pupils ( $F(11,141) = 2.01, p < 0.03, \eta^2 = 0.14$ ). The significant negative correlations between the SCF dimensions and the teachers' perception of pupils' origin (school level and social background) (see Table 4) indicate that more the participants are aware of multiple explanations of human behavior, less they are influenced by information about pupils' previous school (school level) and their social background (immigration status). Similarly, more participants are aware of weak linear predictability of human behavior, less they are dependent on information about pupils' school level (see Table 4).

**Table 3. Correlations between SCF dimensions (weak linear predictability versus multiple explanations) and pupils' variables.**

	School level	Immigration/s. background status	Colleagues' opinion about pupil	Parents' appearance	SCF approach Weak linear predictability	SCF approach Multiple explanations
School social level						
Immigration/s. background status	0.36**(0.00) 159					
Colleagues' opinion about pupil	0.44**(0.00) 159	0.24**(0.00) 159				
Parents' appearance	0.28**(0.00) 152	0.18*(0.03) 159	0.46**(0.00) 159			
Weak linear predictability <i>SCF approach</i>	-0.27**(0.00) 153		-0.22**(0.01) 153	-0.25**(0.00) 153		
Multiple explanations <i>SCF approach</i>	-0.32**(0.00) 153	-0.19*(0.02) 153	-0.20*(0.01) 153		0.53**(0.00) 153	

Although the social cognitive flexibility dimensions seem to not significantly influence teachers' thinking about colleagues' opinions and parents' appearance, there are the significant negative correlations between those variables and the SCF dimensions (see Table 4).

## Discussion

The results partially support the general hypothesis (SCF influences the interpretation of pupils' attitude and behavior on both performance and relation dimensions). It was hypothesized that a social cognitive flexibility approach could influence teachers' thinking about pupils and more precisely make them more careful when they obtain information about pupils' previous schools (in terms of level) or their social status. Indeed, teachers with high levels of social cognitive flexibility seem to be more watchful and do not have a rigid outlook on pupils' social backgrounds, school level, or immigration status.

These findings are important above all because this flexible approach could lead to action. Indeed, if SCF lets teachers see pupils as individuals who can change and evolve and consequently do not label them; it can be hypothesized that they would be more likely to help pupils to get an epistemic dimension. Flexibility approach in daily practice could thus contribute to breaking the negative dynamic in learning (learned helplessness) (Seligman, 1975) or



(stereotype threat) (Steele & Aronson, 1995). On the contrary, a flexible vision of pupils would result in potential feedback (Hattie & Timperley, 2007) that would allow the student to launch him- or herself into the future. This feedback would make clear that it is worth putting forth an effort. The pupils could see that changing their position is always possible. This approach to students' abilities and behavior would also help pupils deal with failure, because, according to the theory of self-affirmation (Steele, 1988), having learning potential in one area would allow pupils to assert themselves and thus to compensate for their failure in other school domains.

Future studies will attempt to replicate the SCF effect and examine several additional issues. First, it will address more precisely moderators and mediators of the SCF effect. For that, teachers' approaches will have to be analyzed at the beginning and end of training. Second, future research will examine the impact of SCF on teachers' practice in terms of concrete action in educational situations.

## Conclusions

Admittedly, teachers are responsive to fluctuations of pupils' behavior and their attitudes toward learning. But the development of SCF could improve this quality to help them to use this tool more systematically in the aim to readjust regularly their expectations of pupils, perceive the variations of learning situations more easily, and avoid the stable position that is linked to a bad or good reputation. Thus, teachers' ability to see and interpret available information in more critical ways deserves to be developed through teacher training.

In keeping with this proposition, the flexibility approach adopted systematically could shed different light on the question of drop-out.

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## References

- Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs*, 70 (Whole no. 416).
- Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility Inventory: Instrument Development and Estimates of Reliability and Validity. *Cognitive Therapy and Research*, 34 (3), 241-253.
- Follenfant, A., & Ric, F. (2010). Behavioral rebound following stereotype suppression. *European Journal of Social Psychology*, 40, 774-782.
- Hamilton, D. L., Katz, L. B., & Leirer, von O. (1980). Cognitive representation of personality impressions: Organizational processes in first impression formation, *Journal of Personality and Social Psychology*, 39 (6), 1050-1063.
- Hattie, J., Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77 (1), 81-112.
- Macrae, C. N., Bodenhausen, G. V., Milne, A. B., & Jetten, J. (1994). Out of mind but back in sight: Stereotype on the rebound. *Journal of Personality and Social Psychology*, 67, 808-817.
- Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports*, 76, 623-626.
- Seligman, M. E. P. (1975). *Helplessness: On depression, development, and death*. San Francisco: Freeman.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21), (pp. 261-302). New York: Academic Press.



- Steele, C. M., & Aronson, J. (1995). Stereotype Threat and the intellectual test-performance of African-Americans. *Journal of personality and Social Psychology*, 69 (5), 797-811.
- Spiro, R. J., Feltovich, P. J., Jacobson, M. J., & Coulson, R. L. (1992). Cognitive flexibility, constructivism and hypertext: Random access instruction for advanced knowledge acquisition in ill-structured domains. In T. Duffy & D. Jonassen (Eds.), *Constructivism and the Technology of Instruction*. Hillsdale, NJ: Erlbaum.
- Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, 101, 34-52.

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