

## What do we want them to want to do? Against intrinsic motivation

Alexander M. Sidorkin, University of Northern Colorado

### ABSTRACT

A significant body of research in psychology demonstrates how extrinsic rewards undermine intrinsic motivation of students. The conceptual weakness of the notion of intrinsic motivation makes the research findings at least suspect, and for sure excessively generalized. The research is often used to argue against compensating students for their academic work. It contributed to expansion of false beliefs about the possibility of significant increase of intrinsic learning motivation. These beliefs are grounded in several false assumptions:

1. The assumption of abundant curiosity; or a belief that children are all motivated to learn everything that is offered to them. It is false, because children's indiscriminate curiosity inevitably focuses on a more narrow set of interests as the person's identity develops.
2. The assumption that intrinsic motivation can be easily invoked, drawn to the surface. This assumption does not find support in experience. Moreover, education is different from entertainment in terms of objectives, so adding entertainment value to curriculum tends to diminish its educational value.
3. The main argument against extrinsic rewards is that if those are taken away, activity stops. But this argument is tautological: the definition of extrinsic rewards is that they create motives extrinsic to the person's interest in the activity. The fact that the desired activity stops after withdrawing the rewards is simply another way of defining what extrinsic motivation is, not an argument against it.
4. And finally, proponents of intrinsic motivation believe it can be extended to every activity. However, this is impossible, because having an interest or preference in one activity implies less interest or preference for another activity. Interest is selective, and is used by people to establish their identities. Therefore, some children will not like school learning simply because they are different from those children who do.

The utopian thinking predictably has an effect opposite to its intention, namely, the strengthening of administrative and legal coercion in education. The solution seems to be to offer a number of extrinsic rewards for children to motivate their learning, without the fear that it will somehow destroy their intrinsic love of knowledge. In the near future, we need to rethink schools as places where children receive something tangible in exchange for their effort in learning the curriculum. For some, it is the belonging to the school community, for other, an opportunity to engage in activities that are truly

desirable (sports or theater, or arts, or social activism). In the long run, we need to figure out a way of normalizing the educational industry by starting to pay older children salaries for their learning activity.

## Research shows...

Alfie Kohn offers an exhaustive and authoritative review of the research findings in *Punished by Rewards*.<sup>1</sup> Although 15 years old, the book remains an effective summary of the entire field of learning motivation research. His account is consistent with other reviews.<sup>2</sup> This particular research story begins with a classic 1971 experiment,<sup>3</sup> where Edward Deci asked college students to work on a puzzle. Some were offered money; others were not. When left alone supposedly to wait for the next phase, those who got paid continued to play with the puzzle less than those who did not get paid. The difference was at first insignificant, but became stronger in subsequent studies.

Virtually at the same time, Mark Lepper experimented with Head Start preschoolers, who were given Magic Markers to play with. Some were given a reward for drawing, while others were not. A week or two weeks later, those who received the reward were less interested in the markers than those who did not, and less than they were before the rewards.<sup>4</sup>

A number of other studies followed, producing numerous results mostly consistent with the original ones. Simplifying a little, I will reduce these results to three points:

1. "Extrinsic rewards reduce intrinsic motivation"<sup>5</sup>
2. Extrinsic rewards change short-term behavior, but they do not lead to lasting change. As soon as the rewards are withdrawn, desired behavior also stops.
3. Rewards negatively affect performance. People who are rewarded do less well on intellectual tasks; they are less creative, and tend to choose simpler, less challenging tasks.

These findings would remain one of many curiosities produced by psychologists, if they were not used to inform debates in educational policy. Any time some sort of tangible rewards for learning are suggested, critics inevitably cite this research. For example, here is how Barry Schwartz responds to the recent New York City's plan to offer cash rewards to students for attending schools and doing well on the exams:

But it is plausible that when students get paid to go to class and show up for tests; they will be even less interested in the work than they would be if no incentives were present. If that happens, the incentive system will make the learning problem worse in the long run, even if it improves achievement in the short run — unless we're prepared to follow these children through life, giving them a pat on the head, or an M&M or a check every time they learn something new.<sup>6</sup>

All attempts to treat school learning as productive work that deserves compensation meet resistance backed up by research containing one or more of the three claims above. Let us take a critical look at these findings.

## Fallacy 1: Abundant curiosity

Kohn and others assume that students are already abundantly endowed with intrinsic motivation to learn, and we just fail to channel this motivation properly. Of course, if this is true, the finding #1 would lead a reasonable teacher to stop giving any sorts of extrinsic rewards, because they only diminish the

existing pool of intrinsic motivation. However, such an assumption is not based on any evidence or any strong argument; there is no sign of the large pre-existing motivation to master K-12 curriculum, either currently existing or however revised. Therefore, where no motivation exists in the first place, extrinsic rewards will produce total gain in motivation, even if they are less effective than intrinsic motivation. To Kohn's credit, he understands the objection above; that he avoids answering it is a real pity.

Many educational writers lamented the loss of curiosity among children and attributed it to schooling. Indeed, little children enter school doors excited and eager to learn, only to become bored and frustrated a few years later. The facts are indisputable, but the authors succumb to the most trivial logical fallacy, assuming correlation indicates causation. It is very likely that students change their attitude towards learning simply because they grow up. A very simple evolutionary argument puts a lot of doubt into the abundant curiosity assumption. Indiscriminant curiosity is beneficial to a young animal that has to learn everything about its environment, both natural and social. However, the drive to learn is an enormous physiological expense, and it would detract an adult animal from more important tasks of reproduction, nourishment, and avoiding danger. Thus the adult animal naturally becomes more discriminate, and less curious in its learning; it develops preferences, focuses its attention on specific things it finds "interesting." Curriculum is a human way of focusing learning on specific things to the expense of other, perhaps more interesting things; it is an attempt to counter the natural narrowing and waning of curiosity.

John Dewey contributed to the myth of abundant curiosity: "Now, keeping in mind these fourfold interests—the interest in conversation, or communication; in inquiry, or finding out things; in making things, or construction; and in an artistic expression—we might say they are natural resources, the uninvested capital upon the exercise of which depends the active growth of the child."<sup>7</sup> I do not wish to dispute the existence of these natural resources, but the amount can and should be disputed. Dewey may have overestimated the reserves, but after 100+ years of Progressive experiments in education, we have a better sense of how much curiosity is available for us to use in education. The failure of Progressive thought to reshape educational practice can be attributed to many different causes.<sup>8</sup> However, one plausible explanation is that the assumption of the boundless curiosity simply turned out to be wrong.

The image of the boundlessly curious child is a more of an ethical ideal than a result of research. The claim about damage done by extrinsic rewards does not seem warranted, because it rests on dubious assumption that children have an inexhaustible willingness to learn anything. While extrinsic rewards may dampen the pre-existing intrinsic motivation, it will not damage what did not exist before. Extrinsically motivated learning activity is better for learning than no learning activity at all.

## **Fallacy 2: Intrinsic motivation can be easily manufactured**

Rejection of extrinsic rewards leaves just one option: to increase intrinsic motivation. Kohn's book is full of good research analysis and insightful argument, but the following makes one cringe: "It is often possible to devise creative, interesting ways of doing things that are of themselves quite dull. A friend of mine managed the mind-numbing memorization anatomy required in medical school by inventing elaborate fables in which different parts and systems of the body played starring roles."<sup>9</sup> This is an example of the utopian faith in making all learning interesting, or intrinsically motivating; not unlike an alchemist's belief in transmutation of common metals into gold. To sustain the legend, there is always a friend who has done just that, but never a definite proof. Consider, for example, an assessment made by the already mentioned pioneers of the intrinsic motivation research Mark Lepper:

Do these sorts of instructionally incidental embellishments actually enhance students' interest in the activity itself? Somewhat surprisingly, there is little empirical evidence available to answer this question.<sup>10</sup>

Tellingly, Kohn spends an entire second half of the book suggesting instructional embellishments to increase intrinsic motivation. This seems to be odd, because "embellishments" can also be considered instances of extrinsic motivation. Yet this is what the logic of intrinsic motivation requires; one cannot simply "find" preexisting intrinsic motives; one has to show a way of creating them. Some of the embellishments are inspiring, some are banal, and most seem targeting children who are already motivated. However, the very fact of the overwhelming concern for creating more of intrinsic motivation contradicts the initial claim that there is plenty of it to go around. If the innate curiosity would indeed be naturally plentiful, no need for instructional embellishments would ever arise.

Even if intrinsic motivation can be induced, this would not mean that such a task does not have limitations. If we make the entire curriculum relevant and interesting to students, it will cease to be curriculum, and will be indistinguishable from entertainment. Entertainment has one purpose: make its content intrinsically motivating to consume. It does not have a role of selecting and organizing such content for the purposes other than keeping consumer's attention. To say that certain content has educational value is the same as to say that it is preselected on the grounds of usefulness as defined by others, and not on the grounds of intrinsic appeal. While many progressivists believed children can select their own curriculum, they actually assumed it would be selected by certain rules. Dewey, for example, believed we can select curriculum by directing the child's activities, "giving them exercise along certain lines."<sup>11</sup> Whatever the method, curriculum without any criteria other than learner's interest ceases to be curriculum. Although hybrids do exist, entertainment and education pull in the opposite directions. None of the edutainment ventures were clearly successful either commercially or educationally.

While it is possible to induce intrinsic motivation, on a large scale it is an impossible task because of the limitations outlined above.

### **Fallacy 3: A is not B, therefore A is better**

Another interesting assumption is that the rewards are supposed to be taken away at some point, and the desired behavior should still continue on its own. Kohn writes: "...it is most important to avoid rewarding people for engaging in an activity or behavior that we would *like* them to find intrinsically motivating... *Extrinsic motivators are most dangerous when offered for something we want children to want to do.*"<sup>12</sup> Barry Schwartz has the same concern for the future: what if students always expect a reward for learning something they are not otherwise inclined to learn? This is an example of specifically educational exceptionalism rooted in sharp distinction between the world of learning and the world of working. A company that stops paying its employees is not surprised if employees stop working. Why should it work differently for children is rarely explained, although the assumption is quite clear: Kohn and many others believe that children *should* want to learn, and the merit of extrinsic rewards can only be measured by how much they can help this desire to happen. In a workplace, rewards are to cause certain behavior; in schools, they are to generate certain "better" motivation for behavior. Such a striking difference in approach is hard to justify.

One can see how intrinsic motivation adepts offer a tautological argument: Extrinsic motivation is bad because it does not lead to intrinsic motivation and any motivation should lead to intrinsic motivation, because the latter is good. In other words, intrinsic motivation is good because extrinsic is bad.

To be intrinsically motivated essentially means to work for free. We try to convince children that their work is good for them *and* intrinsically interesting. However the huge amount of effort, and the scale of manipulations required to drive these two ideas home are the signs of falsity, not of veracity. That our success rate is quite low speaks of the same.

Interestingly, Kohn explicitly compares extrinsic rewards used in schools with merit pay systems used at workplaces. Both do not work, he observes. However, Kohn ignores the fact that students do not get paid at all; he never implies salaries for adults should be discarded. That would clearly be a utopian thinking even Communists abandoned at least half a century ago. Employees who feel underpaid perceive merit pay as a dishonest attempt to wring more productivity out of them without fair compensation. People who feel fairly compensated perceive merit pay as a management fad, and apply reasonable effort without merit pay. Merit pay and school rewards have in common their position outside of normal labor market relationship; those are just attempts to get more labor at a discount by substituting real money with trinkets, or giving small sums disproportional significance not connected to their value. Both are just not strong enough to create a real change in labor productivity. Token economies do not work not because they are economies, but because they are token.

#### **Fallacy 4: Intrinsic motivation can be extended to everything**

The finding #3 is not so surprising. People do better if they are under the impression that they do it for their own interest and enjoyment. However, to assume that people can do everything at the same top of their shape is unrealistic. It would be the same as to ask a person to love everyone he meets with the same passion as he loves his special person. But love and friendship are exclusive relationships: we are close to some people *because* we are not as close to everyone we now. Similarly, a person will perform better at some tasks she perceives to be her choice, in part because she will not do as well on other tasks. A person's likes and dislikes are selective, which creates and sustains the sense of agency. The hope to convert all kids into followers of the Love for Knowledge religion is simply utopian, because such a conversion would obliterate their individuality. Just like some kids make being a good student, or being interested in learning a part of their identity, others identify with other traits to the exclusion of these.

Students who are invited to play with puzzles for free in Deci's experiment, are, in effect, asked to volunteer their time. The activity itself is motivated by notions of altruism, of helping science, of boredom, of doing a favor to Dr. Deci, of hope to get some useful contacts, of curiosity, and perhaps a dozen more considerations. The silence about rewards triggers powerful mechanisms of self-justification: I am not getting paid therefore this must be interesting; otherwise I am a sucker. Such a motive is no less extrinsic than desire for money. Those promised money calculate that other probable payoff is probably going to be minimal. A person paid to do something rents his body and his mind to the employer; it is in his interest to apply less effort and thus perform less well. Paying someone means freeing one from obligation; it means using different currency; it is a signal that social approval won't be forthcoming. The logic of the gift in the relational economy can be stronger than the logic of markets; this does not negate that both are somewhat less and more than intrinsic. What psychologists did in their experiments is silly: why try to incentivize behavior that does not need incentives? No one does that, so their surprise is hard to understand. Of course, all people, not just children will read the message: if an activity involves rewards, it must not be that interesting on its own merit. But not just

that, the researchers misunderstood the laws of human reciprocity and what they called the intrinsic motivation.

In the case of magic markers, similar critique applies. I don't believe kids are born with innate interest in magic markers. Instead, they learn the difference between bad desires and good desires. Perhaps kids react to subtle clues about good desires when magic markers are introduced in the classroom. One is supposed to be interested in them; such desires are approved by the teacher; otherwise, why bring them in class in the first place? They cannot avoid seeing older kids drawing. But when some of the kids are given trinkets for playing with magic markers, a not-so-subtle cue is that markers should not be desired on their own merit. The teacher's actions again speak louder than words: do not be interested in markers unless I give you a trinket. Do the kids lose intrinsic motive or simply do what is expected of them, in both cases? Even when left alone, children respond to social approval; they internalize adults' expectations; isn't it what makes things "interesting" in the first place?

### **The motive as a story**

The problem is deeper than the flawed conceptual distinction between intrinsic and extrinsic motivation. Let us consider the difference between motive and action. The former is by necessity a linguistic and social phenomenon; the latter may or may not be so. Motive is, ultimately, a story about action to which we have access only through language, and it is a story told to someone else. Why people do certain things is what the person who acts says. We may or may not believe the actor's version, and provide an alternative story which is what prosecutors or therapists like to do. However, there is no access to the motive without language. Moreover, when a prosecutor or a therapist help finding "true" motives, what does that mean? In judicial proceedings, establishment of a plausible motive contributes to the proof of guilt, but it does not make a claim of veracity. The claim is limited to plausibility. When a therapist reveals a true motive that has been previously repressed, she is simply convincing the patient to accept a different, better story about his actions.<sup>13</sup>

The story of "why" is always contested and censured; those who receive the message of the motive allow and disallow certain motives to be named; the community establishes rules of such communication. The next point is important for my argument: What Kohn and psychologists write about learning motivation is also a part of the process of censoring. They describe learning motivation in strikingly judgmental manner: the intrinsic motivation is good and honorable while extrinsic motivation is base and utilitarian. Psychological research prescribes more than it describes. A psychologist in a very literal sense *creates* the motives by describing them, since the motive is a story, and psychologists retell stories.

The distinction between a motive and an action is a specific case of the more general distinction between sign and reality. B.F. Skinner and behaviorists after him make a mistake of obliterating any difference between the two; in his view, language is just another form of behavior. I disagree: motivation is different from outward action; this distinction is unavoidable in a social world. Neither law nor ethics are conceivable without differentiating between the intent and the content of human actions. However, Kohn makes another error by assuming a direct causality: motivation causes behavior. Therefore, his logic goes, if we ensure good kind of motivation, it will result in the increase of desired behavior. He overestimates the independence and importance of motivation with respect to action. Kohn is making an ontological assumption about the existence of motive and action: the motive's existence is privileged over that of the action; it pertains to "deeper" more truthful description of the action than a factual one would be. The cause must precede the effect, but motive both precedes and

follows the action. We know what we want to do, in part, because we have done it before. The motive is a result of previous and current behavior. Motivation can be as easily described as a consequence of action as its cause. We tell a story about our past or future action, and result and outcome of this action determines what story we tell. For example, I was interested in the puzzle, which is why I played with it. Or, I played longer with the puzzle because it was interested in it.

## **Can there be intrinsic motivation?**

Pierre Bourdieu attacks the notion of intrinsic motivation in his essay “Is a disinterested Act Possible?” The answer is this:

All apparently disinterested actions must conceal intentions to maximize a certain kind of profit. In introducing the notion of symbolic capital (and symbolic profit), we in some way radicalize the questioning of the naïve version: the most holy actions — asceticism or the most extreme devotion — may always be suspect (historically they have been, through certain extreme forms of rigorism) of being inspired by search for the symbolic profit of saintliness, or celebrity, etc.<sup>14</sup>

The concept of the disinterested or intrinsically motivated learner is exactly that, a reflection of a certain form of symbolic capital. Just like saintliness, or like honor, the intrinsic motivation is a social good, and it is no more intrinsic than money. A student of certain class must be interested in learning for learning’s sake. This adds to her status and helps maintain important relationships with others. Dewey expressed a similar idea: Children “are interested in the world of things mainly in its connection with people, as a background and medium of human concerns.”<sup>15</sup>

But let us follow Bourdieu a little further:

In fact, there exist social universes in which the search for strictly economic profit can be discouraged by explicit norms or tacit injunctions.... The behaviors of honor in aristocratic or precapitalist societies have at their origin an economy of symbolic goods based on collective repression of interest and, more broadly, the truth of production and circulation, which tends to produce “disinterested” habitus, anti-economic habitus, disposed to repress interests, in the narrow sense of the term (that is, the pursuit of economic profits), especially in domestic relations.<sup>16</sup>

Extrinsic motivation in learning has certainly been repressed through a variety of cultural mechanisms, including psychological research. Paradoxically, we are witnessing an era of expansion and erosion of one particular habitus, the habitus of disinterested education. The dramatic expansion of compulsory education over the last 100 years has created two problems for this habitus. The first is the clash with the culture of the lower classes which was traditionally not a part of it. “The indifferent person, — writes Bourdieu, — ‘does not see why they are playing,’ it’s all the same to them; they are in a position of Buridan’s ass, not making a distinction.”<sup>17</sup> Despite tremendous efforts to change it, many lower class children still refuse to see the rules of the game where the intrinsic learning motivation is a valuable asset. The second problem is that value of the symbolic capital is eroding, and the habitus of the disinterested learning is eroding with it. The Human Capital theory argument (more education means higher earnings) destroys the disinterested learning ideal. You cannot argue that learning is a joy in itself, and, by the way, it will make you economically successful. Those two messages are contradictory, and each weakens the other. The spread of purely monetary argument for education is the evidence of

capitalist habitus encroaching on the pre-capitalist world of education. What is happening to the field of education is similar to the decay of the noble society.

In a well-constituted society of honor, La Rochefoucauld's analyses are incorrect; they apply to societies of honor which are already in crisis... , and where the values of honor crumble as monetary exchanges, and through them the spirit of calculation, are generalized; this process goes hand in hand with the objective possibility of calculating (the work and value of a man begin to be evaluated in monetary terms, which is unthinkable).<sup>18</sup>

Similarly, the very possibility of calculating the return on educational investment in monetary terms tends to signify but also to enhance the decay of the intrinsic motivation habitus.

## **The consequences**

Most people have difficulty comprehending even a possibility that there might never be enough motivation to sustain a universal schooling for 13 years. As Bourdieu puts it, "Between agents and the social world there is a relationship of infraconscious, infralinguistic complicity: in their practice agents constantly engage in theses which are not posed as such."<sup>19</sup> The real thesis is that kids should go to school and learn without demanding any compensation. However the stated thesis is that all kids are curious and that extrinsic rewards are only harming their innate thirst for knowledge. The habitus of schooling rests on the denial of certain truths: specifically on denial of the shortage of intrinsic motivation. The production of intrinsic motivation depends entirely on such denial: If we stop believing that all kids want to learn, we will undermine whatever limited amounts of intrinsic motivation do exist. This is why it is so difficult to argue against the prevalence of intrinsic motivation position: the society has a stake in maintaining the myth.

Yet no amount of denial will be able to manufacture the needed quantities and duration of motivation, considering that the economy becomes more and more knowledge-based. We depend on very large proportion of population having school-learned skills, and the demand does not seem to subside. Education experiences a classic case of shortage of labor. It is finally becoming like any other part of the economy: if we do not have enough volunteers to do demanding and boring jobs, we find ways of compensating someone for doing such jobs. Yet as long as the myth holds, educators blindly believe the myth of intrinsic motivation, instead of experimenting with various forms of compensation. Learning motivation does not have a pedagogical solution; it is an economic problem.

The assumption about primacy of intrinsic motivation is not a harmless mistake. As it happens with many utopias, once it fails, brutal force fills the void. Compulsory education system has been expanding under the utterly unrealistic assumptions that all children can be made interested in learning. When it does not happen, we blame teachers, parents, families, policymakers, tests, and everyone else. However, to maintain the semblance of order and to show some achievement, schools have no choice but to introduce stricter rules, bring more policy, and more administrative enforcement in school buildings. As schooling expands into the lower classes, it takes on more and more prison-like features. This is the case, in part, because the society is not ready to accept what it should accept: schooling expanded to such a degree that it no longer may be sustained by the limited resources of intrinsic motivation.

The solution seems to be to offer a number of extrinsic rewards for children to motivate their learning, without the fear that it will somehow destroy their intrinsic love of knowledge. In the near future, we

need to rethink schools as places where children receive something tangible in exchange for their effort in learning the curriculum. For some, it is the belonging to the school community, for other, an opportunity to engage in activities that are truly desirable (sports or theater, or arts, or social activism). In the long run, we need to figure out a way of normalizing the educational industry by starting to pay older children salaries for their learning activity.

---

<sup>1</sup> Alfie Kohn, *Punished by Rewards*, New York: Plenum Press, 1993.

<sup>2</sup> See, for example a brief history in Mihaly Csizsentmihalyi and Jeanne Nakamura, "The Dynamics of Intrinsic Motivation: A Study of Adolescents" in Carole Ames and Russel Ames, editors, *Research on Motivation in Education*, Volume 3, *Goals and Cognitions*, San Diego: Academic Press, 1989, pp. 45-69. Another source is a more recent Roland Bénabou and Jean Tirole, "Intrinsic And Extrinsic Motivation", *Review of Economic Studies* 70 (3), 489–520, also available at <http://www.cepr.org.uk/meets/wkcn/3/3514/papers/TiroleBenabou.pdf>.

<sup>3</sup> Edward L. Deci, "Effects of Externally Mediated Rewards on Intrinsic Motivation," *Journal of Personality and Social Psychology*, 18, 1, Apr 71, 105-115.

<sup>4</sup> Mark R. Lepper, David Greene and Richard Nisbet, "Undermining Children's Intrinsic Interest with Extrinsic Reward; A Test of 'Overjustification' Hypothesis," *Journal of Personality and Social Psychology* 28, 1973, 129-37.

<sup>5</sup> Kohn, 71.

<sup>6</sup> Barry Schwartz, "Money for Nothing," *New York Times*, July 2, 2007, available at <http://www.nytimes.com/2007/07/02/opinion/02schwartz.html>

<sup>7</sup> John Dewey, *The School and Society. The Child and the Curriculum*. Chicago: The University of Chicago Press, 1990, 47-48.

<sup>8</sup> See, for example an account by Diane Ravitch. *Left Back: A Century of Failed School Reforms* (New York: Simon & Schuster, 2000).

<sup>9</sup> Kohn, 87-88.

<sup>10</sup> Mark R Lepper and Melinda Hodell, "Intrinsic motivation in the classroom," in Carole Ames and Russel Ames, editors, *Research on Motivation in Education*, Volume 3, *Goals and Cognitions*, San Diego: Academic Press, 1989, 95.

<sup>11</sup> Dewey, 37.

<sup>12</sup> Kohn, 87

<sup>13</sup> See the argument in V.N.Vološinov, *Freudianism: A Marxist Critique*, Translated by I.R.Titunik (NY: Academic Press, 1976), p. 78.

<sup>14</sup> Pierre Bourdieu, *Practical Reason*, Stanford, CA: Stanford University Press, 1998, p. 86

<sup>15</sup> Dewey, 48.

<sup>16</sup> Bourdieu, 86.

<sup>17</sup> Bourdieu, 77.

<sup>18</sup> Bourdieu, 87.

<sup>19</sup> Bourdieu, 80.