

How to Raise Teachers' Motivation through "Nudges" and Attribution Theory

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Abstract

Teachers' motivation correlates positively with better teaching practices, higher student motivation, and better overall well-being. This case study reflects on an innovative approach being used to raise teachers' motivation in India. The approach combines Nudge Theory (from the discipline of Political Science) and Attribution Theory (from the discipline of Psychology) into a comprehensive strategy that has the potential to change teachers' long-term motivation, by changing their sense of identity.

Keywords

Behavioral Science, Cognitive Science, Innovation, Social Problems, India

1. Introduction

Since the late 1990s, teacher motivation has seen a surge of research interest and for good reasons: High teacher motivation correlates positively with better teaching practices, higher student motivation, and better overall teachers' well-being (Han and Yin, 2016, p. 2) [1]. While studies have identified several factors influencing teacher motivation, this study is unique in that it is the first to link Nudge Theory and Attribution Theory together in a comprehensive strategy to increase teacher motivation. "Nudges" are a form of social control that, unlike bans or mandates, are "liberty-preserving approaches that steer people in particular directions, but that also allow them to go their own way" (Sunstein, 2014, p. 1) [2]. Attribution Theory refers to the explanations people give to *why* they or others do what they do, *i.e.* a causal attribution.

The following is a case study of one organisation (STIR Education, a U.K. non-profit) employing Nudge Theory and Attribution Theory to raise teachers' motivation in government schools in India. After a brief introduction to STIR,

its unique strategy for raising teacher motivation will be told in the first person through the eyes of a sympathetic outsider and reflective social scientist. This study employs several research methods in order to construct its case study, including participant interviews, practitioner interviews, participant observation, document review, and quantitative measurements. The findings of this research offer a more theoretically grounded, comprehensive strategy for addressing the issue of teacher motivation.

Regarding STIR Education, its mission is bold: to change teacher's identity from "just a teacher" to "teacher change-makers". Their scope is also bold: one million teacher change-makers by 2025. Their history, however, is short. STIR education began in 2012 with a small pilot of twenty-five teachers in Delhi. It has since grown to 25,000 teachers reaching over one million students as of October 2017. It aims to reach 100,000 teachers by 2020. STIR provides a platform to link teachers with one another, with incentives, and with teaching innovations. It identifies exceptional teachers, invests in them for three years, and then releases them. During this time, motivated teachers become more highly motivated and are encouraged to share that passion with other teachers in their schools.

2. Ethnographic Experience

When I first received my invitation to participate in STIR's "Education Leadership Development Programme", I was not impressed. It was not content of the invitation; that was clear and purposeful. It was not the team; they had been prompt and professional. It was the venue. As I googled the venue "Park Plaza Hotel Shahdara", I saw this: "one of the top five-star hotels in New Delhi [India]". I was expecting an unused classroom with broken fans and power cuts. It's not that I wasn't happy to enjoy the air conditioning for the day. It is just that I wondered, "What does an NGO need a five-star hotel for? That seems like a waste of funds." It was only half way through the training that I realised, "This is intentional. And I think it is necessary." The five-star experience is central to the STIR strategy.

Before the training began, I moved from table to table meeting the government teachers. I asked them about their jobs. One teacher said, "The basic problem [in our work] is that we have too many instructions from the government—'do this, do that'. I think we would do better if we were just left to ourselves." This wasn't the first time I had heard this. The Chief Programme Director of STIR had told me months before, "Teachers are both neglected and controlled." This was a confirmation of teachers' present situation.

At lunch, I met several more teachers, and asked, "Why did you come to this training?" Everyone gave the same answer: "It's really important to improve our teaching practices." I was impressed, but I was skeptical.

When I asked the facilitators of the programme, they gave a different answer: "Recognition, the internal feeling of accomplishment, externally being able to move up in the government system because they have these relationships, and also the peer relationships."

When a former participant told about their experience with STIR, they described both motivations. “Before I was just teaching. But after I went through the programme, my name was recognised before the whole school and inside I said, ‘Yes I am successful’... If we do this, we will be able to shift the entire history [of schooling in India].” This former participant highlighted both self-focused and service-focused motivations.

The answers seem contradictory but are complimentary. The explicit STIR curriculum is designed around exchanging innovative teaching practices. The hidden curriculum is designed around providing incentives leading to a new identity as teacher change-makers.

One such subtle incentive happened over the lunch hour. As the programme approached noon, several new people entered the room and sat in back. I asked one STIR facilitator, “Who are these people?” He said, “They are the principals of their schools.” Just before everyone broke for lunch, the principals were allowed to speak. The first principal stood up and immediately said, “You are the cream of us!” The teachers were delighted. It was a public recognition of their hard work. This ten-minute seeming diversion was core to the hidden curriculum of the programme. It was the recognition side of the curriculum. This was the antidote to teachers feeling “neglected”. Most government teachers can serve for decades without this sort of public, prestigious affirmation, which STIR was helping to facilitate. Meanwhile, the explicit curriculum built around knowledge-sharing was the antidote to teachers feeling “controlled”.

What causes the “significant attitudinal and motivational changes” among teachers (STIR Impact Report)? Viewed sequentially, STIR Education changes teachers’ values through a three-step process: choosing outliers as role models within the system, nudging teachers towards increasingly large micro-commitments, and allowing teachers to reflect on their micro-commitments through Attribution Theory.

3. Results and Discussion

3.1. Strategy #1: Choosing Outliers as Role Models

STIR does not work with everyone. They work with outliers. Outliers may be defined objectively through standard of deviation measures or subjectively (Ben-Gal, 2010, pp. 117-118) [3]. In STIR’s case, they are identified subjectively. How? First, STIR secures permission from the Directorate of Education to work with schools in the area. Second, they identify government schools with at least 30 teachers on staff. Third, with the blessing of the Directorate of Education in hand, they approach the principals of the schools. They ask each principal to identify one outstanding, motivated teacher for this elite programme.

During the programme, teachers introduced themselves. Despite their diverse backgrounds and subjects, the most common thing the teachers said about themselves was “I’m a very optimistic person.” The first time I heard this, I wrote it down on my notepad. The second time I added a tick, until four (out of

33) had said this. Later, one of the STIR facilitators confessed to me, “It is very hard to find these types of teachers.” They are the optimistic outliers with the system.

As outliers, they become role models within the schooling system. While they may have already modeled the behaviour before, STIR provides a platform to approve, amplify, and multiply what they are doing. Without the backing of the Directorate of Education and the principal, teachers tend to be “crushed down if they dare to do something different” according to one STIR leader. For example, when an inspector comes to a school, they are not looking for teachers that go beyond the syllabus to topics of students’ interest. Inspectors are looking for whether the teacher has kept all the records and all the routine paperwork is in place. Teachers work in a system that rewards following the rules, not innovation.

3.2. Strategy #2: Nudging toward Increasing Micro-Commitments

No teacher is forced to come, participate, or recruit others, but they are nudged. STIR is a three-year programme. Statistically, only 30% drop out over three years. The majority that stay are required to make increasingly large commitments.

So why do teachers stay? In a busy schedule with competing commitments from family and work, why add one more thing? The answer lies in motivational theory, Nudge Theory, and the psychology of consistency.

3.2.1. Motivational Theory

While several paradigms exist for studying motivational theory (Hull, 1943 [4]; Festinger, 1957 [5]; Herzberg, 1968 [6]; Alderfer, 1972 [7]; Ryan & Deci, 2000 [8]), this case study uses the lens of Maslow, McClelland, and Lawrence and Nohria. Maslow (1943) [9] theorised that people are motivated by five needs: physiological, safety, love/belonging, esteem, and self-actualisation. McClelland (1961) [10] theorised that people are motivated by the need for achievement, affiliation, and power (p. 300). Lawrence and Nohria (2002) [11] theorised that people are motivated by the drive to acquire (possessions or experiences that improve our status), to bond, to learn, and to defend (ourselves, family, beliefs, possessions). Viewed synthetically, teachers within the STIR model are driven by desire for recognition (*i.e.* esteem, achievement, acquiring), growth (*i.e.* self-actualisation, achievement, learning), camaraderie (*i.e.* love/belonging, affiliation, bonding), and accountability (*i.e.* love/belonging, affiliation). The motivation for accountability relates closely to the psychology of consistency—the desire to appear consistent with what we have already done. While each of these motivations is treated separately conceptually, in practice they overlap.

While these four motivations can be drawn theoretical, they were also reflected empirically. When one of STIR’s facilitators was asked why he thought teachers stuck with STIR, he said, “In their profession, they start as teachers and finish as senior teachers. They feel stuck working in monotonous work in isolation...

In their work, if something goes well, the principal gets the recognition. Their only interaction is with students. This gives them an opportunity to get recognition from principals and interact with peers in a setting like [a five-star hotel].” Here again, one can see the three of the four motivations (or incentives) at work: recognition from their principals, growth as opposed to monotony, and camaraderie as opposed to isolation. Accountability motivates teachers because if one does not perform (*i.e.* recruit other teachers, apply new micro-innovations), he/she will be excluded from the other three incentives.

3.2.2. Nudge Theory

The four motivations are embedded within the larger theoretical framework of Nudge Theory. Nudge Theory grows out of the interdisciplinary work of psychologist Daniel Kahneman, economist Richard Thaler, and legal scholar Cass Sunstein. Because of its interdisciplinary nature, Nudge Theory has been difficult to define and has been criticised for its operational fuzziness (Marteau *et al.*, 2011, p. 228) [12]. However, Thaler and Sunstein (2008) define Nudge Theory as “any aspect of choice architecture that alters people’s behaviour in a predictable way without removing any options or significantly changing their economic incentives” (p. 6) [13].

As a discipline, Nudge Theory falls broadly within the discipline of policy. It can be applied to policy issues ranging from environment to discrimination to public health (Shafir, 2012, pp. 245, 475) [14]. One example includes a 2013 Cornell Study applied to public health. In the study, researcher arranged the food choices in a high school lunchroom so that junk food was placed on high shelves and vegetables were placed at eye level. The result was a 23% increase in vegetables being chosen (Hanks *et al.*, 2013, p. 867) [15].

An Indian example of Nudge Theory at work is the recent rise of outdoor gyms in Delhi. Outdoor gyms do not force any one to exercise, nor do they provide any financial incentives to exercise. But they do change the choice architecture. While Nudge Theory has generally been received positively, it has also been criticised for violating the public’s freedom, fairness, and empowerment (Blumenthal-Barby & Burroughs, 2012, p. 1 [16]; Goodwin, 2012, p. 85 [17]). Proponents of Nudge Theory have responded by saying that a nudge is not a shove (Sunstein, 2014, p. 2) [2].

3.2.3. Psychology of Consistency

While Nudge Theory explains why teachers make micro-commitments, it does not fully explain why they are willing to make increasingly large commitments. Nudge Theory works on the assumption that one cannot ethically restrict freedom of choice. So why do 70% of teachers remain in the programme for three years, recruiting others and adopting micro-innovations into their own teaching?

One explanation is the desire for consistency. According to Heider (1946) [18], Newcomb (1953) [19], Festinger (1957) [20], Cialdini *et al.* (1978) [21],

Cialdini (2000) [22], Petrova *et al.* (2007) [23] consistency is a driving motivation. Humans desire to appear consistent with previous commitments, actions, or beliefs. In this case, by committing to the first invitation, teachers are more likely to commit to the second invitation. This sense of commitment only grows with time, making it less and less likely for teachers to drop out.

The psychology of consistency can be applied to multiple fields. In marketing and sales literature, the desire for consistency can be exploited through the “foot-in-the-door” technique and the “low ball” technique (Freedman & Fraser, 1966, p. 196 [24]; Cialdini *et al.*, 1978, p. 464 [21]). In each case, the sales person gets the prospective buyer to agree to something small before expanding its scope of commitment (*i.e.* foot-in-door) or raising its price (*i.e.* low ball). Cialdini (2000) [22] gives the example of horse betting. Before a bidder chooses a horse, generally they are quite torn. However, after choosing their horse, they become more convinced that they have made the right choice (Cialdini, 2000, p. 53) [22].

In the case of STIR, consistency works on both the principals and the teachers. For the principals, STIR asks if they are willing to recommend a teacher for their free training programme. It is a small commitment. However, over the course of three years, one teacher multiplies into ten to twenty teachers within their school. Because they have already made a small commitment, it makes them less likely to resist it later. In the words of Leonardo da Vinci, “It is easier to resist at the beginning than at the end.” For teachers, they initially make a one-day commitment to attend a training workshop. At the end of three years, they are leading a network of teachers.

Is this ethical? Constitutionally, it is not violating people’s liberty of thought or choice. Second, STIR is not being deceptive by trying to conceal their larger mission. The full scope of their expectations for the three years have been mapped out, printed, and given to teachers on day one. Nevertheless, the psychology of consistency works in their favour.

3.2.4. Choice Architecture in Practice

In practice, how does the STIR model nudge someone to increasing micro-commitments? In stage one, participants commit to attend a one-day training. The choice architecture is simple: come or don’t come. The tradeoff cost is eight hours of their time. The nudge incentives are the recognition of being invited to a five-star hotel free of cost, the growth opportunity to “advance your own professional success”, and the camaraderie of a “special group of teachers who constantly work towards improving children’s learning” (STIR Education Leader Invitation Letter).

In stage two, participants commit not only to attend the one-day training but to engage. The choice architecture is to participate or not. The tradeoff cost is the energy it demands to fully engage. In the course of the day, teachers practice three new skills which they are expected to implement after the training: “How to Create a Buzz” (*i.e.* advertise the launch), “How to Facilitate a Launch”, and

“How to Use the Idea Form” (STIR Programme Schedule). The primary nudge incentive is a subtle form of accountability—namely, who would go against the social herd and authorities facilitating by not participating (Cialdini, 2000, pp. 98, 178) [22]?

In stage three, participants commit to recruit teachers and apply micro-innovations to their own teaching. The choice architecture is to multiply or drop out. The tradeoff cost is steeper this time. It requires teachers to be entrepreneurs. It demands more time, more energy, and most of all their own reputation behind this model.

As the costs are larger, so the nudge incentives are also larger. Teachers are given recognition: publicity materials with the Directorate of Education seal at the top, a certificate from Roehampton University as they complete each year, and the possibility of their micro-innovations being shared locally and nationally. Teachers are given growth opportunities: “learning new ideas” to improve children’s learning (STIR Education Leaders Handbook). Teachers are given camaraderie incentives: “join over 300 Changemaker Networks”, “meet innovative teachers from across India during National Summits”, and attend the quarterly training meetings with their cohort (STIR Education Leaders Handbook). Lastly, teachers are given accountability: each teacher receives a call from a STIR coach before and after their proposed launch date.

3.3. Strategy #3: Allowing Reflection through Attribution Theory

Nudge Theory produces consistent behaviour, but can it change motivation permanently? The mission of STIR is to change motivation at the level of identity. Nudge Theory, by itself, is inadequate to explain how consistent behaviour can change identity. However, if paired with Attribution Theory, it explains how incentivised actions change identity—and therefore long-term motivation.

Without Attribution Theory, the STIR model breaks down. If short-term nudges do not lead to long-term change in decision-making criteria, STIR’s efficacy ends when its three-year programme ends. STIR ceases to become “a movement” (STIR website). It is a short-term pick-me-up.

Attribution Theory is a theory about how people explain things by assigning causal reasons (Kelley, 1967, p. 192) [25]. It happens automatically in “system one” of our brain—the fast, intuitive part of our thinking (Kahnemann, 2011, p. 21) [26]. Unfortunately, system one, according to Nobel laureate Daniel Kahnemann, has systemic flaws. While it can be corrected with intentional, effortful “system two” thinking—the slow, rational part of our thinking—it generally is not.

One such systemic flaw is the self-serving bias. People tend to interpret events favourably for themselves and less favourably for others. For example, personal failure is generally attributed to external, situational factors and personal success is generally attributed to internal, character factors. Conversely, others’ failures are generally attributed to internal, character factors and others’ success to external, situational factors (Heider, 1958, p. 172 [27]; Hastorf, Schneider, & Po-

lefka, 1970, p. 73 [28]).

Despite its flaws, attribution conclusions affect future decisions (Weiner, 1985, p. 559 [29]). In the case of STIR, nudged decisions (those that have been incentivised by recognition, growth, camaraderie, and accountability) are interpreted through the lens of a self-serving bias. How? By concluding that the cause of one's extraordinary commitment, above and beyond what is required in government schools, is motivated internally—not externally. For three years, teachers observe their actions. Their actions display the values of a teacher change-maker. System one of their brains reflects on these actions and concludes, "I am a teacher change-maker." After nudge incentives are removed, teachers' identity and motivations have already been changed and teachers continue to act in line with the new value system.

4. Limitations

While the case study reveals a comprehensive strategy to raise teacher motivation, its implications come with several limitations. First, it is a case study of a single intervention carried out over a single day in a single location. Thus, it may not be representative of STIR Education's interventions that are carried out throughout the country by other facilitators or at other times. Second, there is no longitudinal dimension to the case study. There is no follow-up with the participants and the long-term impact of the intervention. Third, the observations were not triangulated with a second observer. Therefore, the events are interpreted through the lens of Nudge Theory and Attribution Theory, but perhaps, a second or third observer would have come to interpret the events through a different theoretical lens. Fourth, the sample included only government teachers and only teachers from India. The efficacy of the interventions may vary in the private school context or in other countries. Fifth, the analysis includes very minimal quantitative measurements for the group as a whole. Therefore, the data reflects the random selection of participants and facilitators, and not the whole sample size. Further studies should be conducted to address these limitations and strengthen the theoretical strength of its recommendations for teacher trainings internationally.

5. Conclusions

If teachers' motivation is an "essential component" of classroom effectiveness, then further studies are merited—both quantitative and qualitative (Han and Yin, 2016, p. 12 [1]). This qualitative study aims to expose a new method to raise teachers' motivation, by combining Nudge Theory with Attribution Theory with a cohort of teachers. While Nudge Theory stimulates short-term motivation in teachers, Attribution Theory links those short-term motivations into long-term motivations by changing a teacher's fundamental identity. If STIR succeeds in raising the motivation of one million teachers, there is no reason that others cannot imitate (and improve upon) their example.

References

- [1] Han, J. and Yin, H. (2016) Teacher Motivation Definition, Research, and Implications for Teachers. *Cogent Education*, **3**.
<https://doi.org/10.1080/2331186X.2016.1217819>
- [2] Sunstein, C. (2014) Nudging: A Very Short Guide. *Journal of Consumer Psychology*, **583**, 1-7.
- [3] Ben-Gal, I. (2010) Outlier Detection. In: Maimon, O. and Rokach, L., Eds., *Data Mining and Knowledge Discovery Handbook*, Springer, New York, 117-132.
- [4] Hull, C.L. (1943) *Principles of Behavior: An Introduction to Behavior Theory*. D. Appleton-Century Company, Inc., New York.
- [5] Festinger, L. and Carlsmith, J.M. (1959) Cognitive Consequences of Forced Compliance. *Journal of Abnormal and Social Psychology*, **58**, 203-211.
<https://doi.org/10.1037/h0041593>
- [6] Herzberg, F. (1968) One More Time: How Do You Motivate Employees? *Harvard Business Review*, **46**, 53-62.
- [7] Alderfer, C. (1972) *Existence, Relatedness, and Growth; Human Needs in Organizational Settings*. Free Press, New York.
- [8] Ryan, R.M. and Deci, E.L. (2000) Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, **55**, 68-78. <https://doi.org/10.1037/0003-066X.55.1.68>
- [9] Maslow, A. (1943) A Theory of Human Motivation. *Psychological Review*, **50**, 370-396. <https://doi.org/10.1037/h0054346>
- [10] McClelland, D.C. (1961) *The Achieving Society*. Van Nostrand, Princeton.
<https://doi.org/10.1037/14359-000>
- [11] Lawrence, P.R. and Nohria, N. (2002) *Driven: How Human Nature Shapes Our Choices*. Jossey-Bass, San Francisco.
- [12] Marteau, T., Ogilvie, D., Roland, M., Suhrcke, M. and Kelly, M.P. (2011) Judging Nudging: Can Nudging Improve Population Health? *British Medical Journal*, **342**, 228. <https://doi.org/10.1136/bmj.d228>
- [13] Thaler, R. and Sunstein, C. (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Yale University Press, New Haven.
- [14] Shafir, E. (2012) *The Behavioural Foundations of Public Policy*. Princeton University Press, Princeton.
- [15] Hanks, A.S., Just, D. and Wansink, B. (2013) Smarter Lunchrooms Can Address New School Lunchroom Guidelines and Childhood Obesity. *Journal of Pediatrics*, **162**, 867-869.
- [16] Blumenthal-Barby, J.S. and Burroughs, H. (2012) Seeking Better Health Care Outcomes: The Ethics of Using the “Nudge”. *The American Journal of Bioethics*, **12**, 1-10. <https://doi.org/10.1080/15265161.2011.634481>
- [17] Goodwin, T. (2012) Why We Should Reject “Nudge”. *Politics*, **32**, 85-92.
<https://doi.org/10.1111/j.1467-9256.2012.01430.x>
- [18] Heider, F. (1946) Attitudes and Cognitive Organization. *The Journal of Psychology*, **21**, 107-112. <https://doi.org/10.1080/00223980.1946.9917275>
- [19] Newcomb, T.M. (1953) An Approach to the Study of Communicative Acts. *Psychological Review*, **60**, 393-404. <https://doi.org/10.1037/h0063098>
- [20] Festinger, L. (1957) *A Theory of Cognitive Dissonance*. Stanford University Press, Stanford.

- [21] Cialdini, R.B., Cacioppo, J.T., Bassett, R. and Miller, J.A. (1978) Low-Ball Procedure for Producing Compliance: Commitment then Cost. *Journal of Personality and Social Psychology*, **36**, 463-476. <https://doi.org/10.1037/0022-3514.36.5.463>
- [22] Cialdini, R. (2000) *Influence: Science and Practice*. 4th Edition, Allyn and Bacon, Boston.
- [23] Petrova, P.K., Cialdini, R.B. and Sills, S.J. (2007) Consistency-Based Compliance across Cultures. *Journal of Experimental Social Psychology*, **43**, 104-111.
- [24] Freedman, J.L. and Fraser, S.C. (1966) Compliance without Pressure: The Foot-in-the-Door Technique. *Journal of Personality and Social Psychology*, **4**. <https://doi.org/10.1037/h0023552>
- [25] Kelley, H.H. (1967) Attribution Theory in Social Psychology. In: Levine, D., Ed., *Nebraska Symposium on Motivation*, Vol. 15, University of Nebraska Press, Lincoln, 192-238.
- [26] Kahnemann, D. (2011) *Thinking Fast and Slow*. Farrar, Staus, and Giroux, New York.
- [27] Heider, F. (1958) *The Psychology of Interpersonal Relationships*. John Wiley & Sons, New York. <https://doi.org/10.1037/10628-000>
- [28] Hastorf, A.H., Schneider, D.J. and Polefka, J. (1970) *Person Perception*. Addison-Wesley, Reading.
- [29] Weiner, B. (1985) An Attributional Theory of Achievement Motivation and Emotion. *Psychological Review*, **92**, 548-573. <https://doi.org/10.1037/0033-295X.92.4.548>