Parents' Perception of Using Tangible Reward Systems at Compulsory Schools in China

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Abstract. With the establishment of the two-child and three-child policies in China, parents pay more attention to kids' education. Many countries support using tangible reward systems in educational institutions, and this situation is prevalent in Chinese schools, especially for young-age students. In this experiment, the author collected perceptions about using tangible reward systems in compulsory schools from Chinese parents who have at least one child currently studying in a compulsory school in China. The author summarized parents' thoughts about the expected advantages and disadvantages of using tangible rewards from other studies. A majority of parents supported using tangible reward systems at school. They somewhat or strongly agree with those advantages, such as improving children's self-esteem, collective sense of honor, and independent learning ability. Most of them did not think this kind of system could bring a significantly negative impact on children, such as undermining students' intrinsic motivation. However, a large number of parents agreed that tangible rewards could make students more working for external rewards. In conclusion, most participants still believe in the benefits of tangible reward systems and will also feel happy when their children obtain those rewards from school.

Keywords: Tangible rewards, Patients' perceptions, Chinese Education, Compulsory schools.

1. Introduction

Using tangible rewards, including material and symbolic rewards, to influence students' behaviors is very popular in the educational system, such as giving snacks, school supplies, certificates of merit, or recording points for exchange rewards [1]. In China, teachers are more likely to use tangible reward systems for students in compulsory schools, from the first year in primary school to the last year in middle school [2]. Many years ago, Chinese parents began to be crazy about praise education because they thought this could help to improve children's self-confidence and self-efficiency. Giving verbal, material, and symbolic rewards as praise became common in teaching children [3].

Disruptive behaviors, such as getting out of their seat, disrupting the teacher or other students talking, teasing others, or violence, have been paid attention to by people for a long period, from educators to parents. Many researchers and scientists wanted to use the educational system or class structure to reduce the appearance of disruptive behaviors [4]. In many countries, people think the tangible reward system is one of the most straightforward and efficient methods to help a group of students set up their learning habits, modify their behaviors, and address values simultaneously [2]. Based on a study on how tangible rewards influence the behaviors of children in an elementary school, the researcher found that the behavior of leaving belongings after eating was reduced after giving rewards to children. However, children would not keep this positive effect for an extended period, indicating that the reward effect only existed for a few sessions [5]. The use of tangible rewards participated in the theory of psychology, sociology, and education. For the positive impacts, using the tangible reward system could improve students' positivity and teaching efficiency. Middle school students are too young to set up a specific study goal to lead their thoughts and behaviors, so the appearance of a tangible reward could give them a material target instead of an abstract imagination of study [6]. From a study of college students, providing tangible rewards to praise could motivate students to do better, whether for low- or high-level performance in arts, females or males, and what kind of tangible rewards [7].

During the infant period, kids are curious to explore the world and easily feel excited [3]. Even when nobody provides tangible rewards for them, infants or young kids still have the interest to endow motivation for them to do whatever they want [8]. However, some researchers noticed that children became more difficult to obtain pleasure than the younger period when they get older. The reason for this phenomenon probably was related to the tangible reward system, which transferred children's intrinsic motivation to extrinsic motivation [3]. According to Deci, Koestner, and Ryan's study, tangible rewards could significantly undermine intrinsic motivation, particularly for school-aged children. Even though unexpected or surprising tangible rewards would not impact intrinsic motivation, expected rewards substantially and dramatically decreased children's intrinsic motivation [1].

Many researchers engaged in studying teachers' views or uses of tangible reward systems. For instance, Lynzi Lowe surveyed an elementary school and found that most teachers use tangible rewards as the primary form of the reward system in class. More participants disagreed or neither agreed nor disagreed with the opinion that material rewards would undermine children's intrinsic motivation [9].

The educational problem does not only relate to teachers and students at teaching institutions but also closely connects to parents. The perceptions of parents are necessary for academic workers or scientists to notice and consider. Based on a survey of 99 parents in the United States, the more rewards students get, the worse relationship between parents and the school they would have. Moreover, the worse relationship would reduce students' independent learning ability [10].

Even though more parents began to pay attention to kids' education and different educational systems, a group of parents still could not know enough about tangible reward systems. Most of them knew whether the class their children participated in was using rewards or not, but they did not think about it deeply. Therefore, this study will focus on parents' perceptions of tangible reward systems in schools in China. This study could notify more parents to pay attention to their children's education life on campus and their developments every day. Studying parents' perceptions of teaching systems could also help educators find more efficient ways to teach students through connecting with parents. The combination between class teaching and family teaching is necessary and more beneficial for education.

2. Methods

2.1. Participants

There were 146 parents who had at least one child participating in this experiment, including 110 mothers and 36 fathers. Based on the limitation of having a child currently studying in a compulsory school in China, 121 answers from them are viable, including 93 females and 28 males.

2.2. Materials

Participants would receive a Qualtrics survey on "how they think about using tangible reward systems applied in the Chinese educational system." Questions include multiple choice for collecting basic information like sex, age group, or having kids or not, and agree or disagree questions for asking about parents' views on using tangible reward systems on their kids, such as the tangible reward systems could improve students' independent study ability and could help to manage student's behaviors.

Because the survey was online, participants needed to use their personal devices, such as mobile phones or laptops, to complete it.

2.3. Procedure

Each participant was asked to complete the survey individually whenever they were free and wherever they wanted. This survey would open for five days to ensure that all participants had enough

time to finish the survey, even though each survey only needed approximately five minutes to finish. The Qualtrics website would automatically and anonymously record the result of each survey.

Before talking about using a tangible reward system in the educational environment, participants were required to fill out some basic information about themselves. In this experiment, 121 in 146 participants are a parent who has at least one child currently studying in a compulsory Chinese school. Among these 121 participants, the majority number of them were between 31 to 50 years old. 2.48% (N = 3) were 21-30 years old; 60.33% (N = 73) were 31-40 years old; 36.36% (N = 44) were 41-50 years old; and only 0.83% (N = 1) were 51-60 years old.

Next, participants were going to answer how many kids they have and what grades their kids are specifically in currently, from the first grade in primary school to the ninth grade in middle school, which is the senior year. 28.33% (N = 34) have only one child; 65.00% (N = 78) have two kids; and 6.67% (N = 8) have three children. For this question, one parent left it blank.

Then, participants were asked if their kids' school or class were in the process of using tangible reward systems. According to participants' answers, 63.33% (N = 76) of participants knew that their children were engaged in this educational system, and 20.00% (N = 24) of participants' kids were not studying with tangible rewards. However, 16.67% (N = 20) of participants did not know about their kids' educational system at school, and one of them did not answer this question (see Table 1).

Table 1. Participants' information about sex, age, how many kids they currently have, and whether their kids are engaging in tangible reward systems.

Category	Subcategory	Frequency	Percent
Sex	Female	93	76.86%
	Male	28	23.14%
Age	21-30	3	2.48%
	31-40	73	60.33%
	41-50	44	36.36%
	51-60	1	0.83%
Number of Kids Currently Have	1	34	28.33%
	2	78	65.00%
	3	8	6.67%
	Blank	1	
Kids are Currently Engaging in Tangible Reward Systems or Not	Yes	76	63.33%
	No	24	20.00%
	Not Sure	20	16.67%
	Blank	1	

3. Results

3.1. What Kind of Rewards Parents Know Using in Their Kids' Classes

From participants' replies, different kinds of rewards were used in kids' classes. Some of them reflected that teachers usually combined many additional rewards simultaneously. 28 participants said their kids' teacher used school supplies, such as pencils, erasers, and notebooks. 23 participants replied that teachers used points as a group style to give rewards based on the whole group. 14 participants mentioned getting snacks at school, and 27 participants talked about getting the certificate of merit at the end of the semester. 2 participants talked about other rewards, such as the power to manage other students or a pass card for reducing homework (see Figure 1).

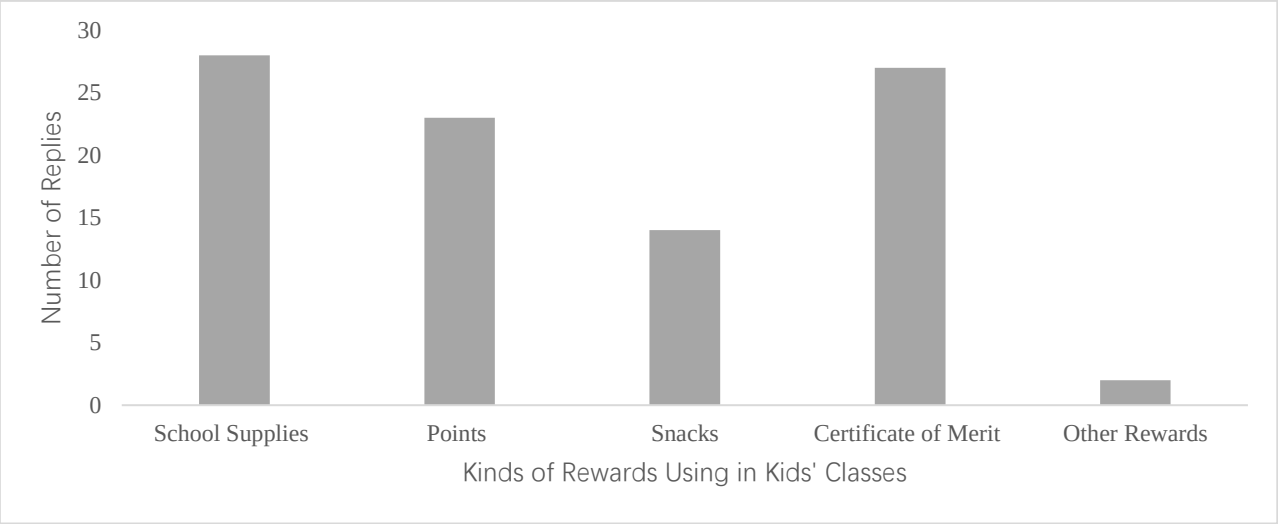

Figure 1. Kinds of Rewards Using in Kids' Classes Based on Parents' Replies

3.2. Parents' Overall Views of Using Tangible Reward Systems

Of the participants, 66.94% (*N* = 81) agreed with using tangible reward systems at school, whereas 15.70% (N = 19) disagreed with it. 14.88% (*N* =18) of participants did not provide a clear opinion about supporting using this system or not, and 2.48% (*N* = 3) did not make sure about it (see Table 2).

Table 2. Participants' overall perspectives about using tangible reward systems at school or not

Do You Agree or Disagree with Using Tangible Reward Systems at School?		
	N	Percent
Agree	81	66.94%
Disagree	19	15.70%
Neither Agree nor Disagree	18	14.88%
Not Sure	3	2.48%

3.3. Parents' Perspectives on How Using a Tangible Reward System Impacts Students

In order to collect parents' thoughts about using a tangible reward system from many regions, participants were required to rate many statements based on a seven-point scale from strongly agree to strongly disagree: 1 is "Strongly Agree," 2 is "Agree," 3 is "Somewhat Agree," 4 is "Natural," 5 is "Somewhat Disagree," 6 is "Disagree," and 7 is "Strongly Disagree."

3.3.1 Statements about using tangible reward systems can improve students' identities or abilities

The first statement is that "tangible reward systems can improve students' self-esteem." 11 participants left this one blank, and 110 answers (*M* = 2.80, *SD* = 1.48) were collected. 14.55% of participants (*N* = 16) replied strongly agreed to this question, 44.55% (*N* = 49) agreed with it, 10.00% (*N* = 11) somewhat agreed, 17.27% (*N* = 19) felt natural, 5.45% (*N* = 3) somewhat disagreed, 7.27% (*N* = 8) disagreed, and 0.91% (*N* = 1) strongly disagreed with the idea that using tangible rewards could improve students' self-esteem.

When rating "using a tangible reward system can improve students' collective sense of honor," 112 participants (*M* = 2.53, *SD* = 1.31) gave visible answers. 19.64% (*N* = 22) strongly agreed with it, 42.86% (*N* = 48) agreed, and 16.07% (*N* = 18) somewhat agreed. 13.39% (*N* = 15) were natural, 2.68% (*N* = 3) somewhat disagreed, and 5.36% (*N* = 6) disagreed that it could improve students' collective sense of honor.

For the message, "using a tangible reward system can improve students' independent learning ability," there were 8 participants who did not answer this question. Among 113 visible answers (*M* = 2.40, *SD* = 1.31), 21.24% (*N* = 24) strongly agreed with this statement, 48.67% (*N* = 55) agreed

with it, and 14.16% (*N* = 16) somewhat agreed with it. Compared with the supportive group, 3.54% (*N* = 4) somewhat disagreed with this system, 4.42% (*N* = 5) disagreed with it, and 0.88% (*N* = 1) strongly disagreed (see Table 3).

Table 3. Parents' perspectives on how tangible reward systems positively impact children's identities

	It can Improve Students' Self-Esteem		It can Improve Students' Collective Sense of Honor		It can Improve Students' Independent Learning Ability	
Likert Scale	N	Percent	N	Percent	N	Percent
1 - Strongly Agree	16	14.55%	22	19.64%	24	21.24%
2 - Agree	49	44.55%	48	42.86%	55	48.67%
3 - Somewhat Agree	11	10.00%	18	16.07%	16	14.16%
4 – Natural	19	17.27%	15	13.39%	8	7.08%
5 - Somewhat Disagree	6	5.45%	3	2.68%	4	3.54%
6 - Disagree	8	7.27%	6	5.36%	5	4.42%
7 - Strongly Disagree	1	0.91%	0	0	1	0.88%
Blank	11		9		8	

3.3.2 Statements about using tangible reward systems to help teachers manage class behaviors

In the survey, participants would rate two ideas about how tangible rewards could positively help manage students' behaviors and improve teaching efficiency. When talking about using tangible reward systems to help manage or lead children's behaviors, 110 participants (*M* = 2.43, *SD* = 1.30) wrote down their thoughts, and 11 did not answer. 20.91% (*N* = 23) strongly agreed with this opinion, 47.27% (*N* = 52) agreed, 12.73% (*N* = 14) somewhat agreed, 11.82% (*N* = 13) stayed in the middle, 2.73% (*N* = 3) somewhat disagreed, 3.64% (*N* = 4) disagreed, and 0.91% (*N* = 1) strongly did not agree with it.

There were 109 participants (*M* = 2.50, *SD* = 1.34) who participated in rating the statement, "this system can improve teaching efficiency," while 12 people left it blank. 18.53% (*N* = 20) strongly agreed that it could help with teaching efficiency, 47.71% (*N* = 52) agreed with it, 14.68% (*N* = 16) somewhat agreed, 11.01% (*N* = 12) of them neither agreed nor disagreed, 1.83% (*N* = 2) somewhat disagreed, 5.50% (*N* = 6) disagreed, and 0.92% (*N* = 1) strongly disagreed with this perspective (see Table 4).

Table 4. Parents' perspectives on how tangible reward systems positively influence teaching efficiency.

	It Can Help to Manage or Lead Students' Behaviors		It can Improve the Teaching Efficiency	
Likert Scale	N	Percent	N	Percent
1 - Strongly Agree	23	20.91%	20	18.35%
2 - Agree	52	47.27%	52	47.71%
3 - Somewhat Agree	14	12.73%	16	14.68%
4 - Natural	13	11.82%	12	11.01%
5 - Somewhat Disagree	3	2.73%	2	1.83%
6 - Disagree	4	3.64%	6	5.50%
7 - Strongly Disagree	1	0.91%	1	0.92%
Blank	11		12	

3.3.3 Statements about using tangible reward systems will bring adverse impacts on students

In the first statement, "using tangible reward systems can negatively impact students' values," 116 visible answers (*M* = 4.21, *SD* = 1.56) were recorded. Only 1.72% (*N* = 2) strongly agreed with it, 18.10% (*N* = 21) agreed, 12.07% (*N* = 14) somewhat agreed, and the highest number of participants (*N* = 30, 25.86%) did not show their positions for supporting or opposing. 14.66% (*N* = 17) somewhat disagreed, 23.28% (*N* = 27) disagreed, and 4.31% (*N* = 5) strongly disagreed that it could negatively influence the formation of children's values.

The next one is that "using this system can make students work more for outside rewards rather than intrinsic interests." 119 participants (M = 3.63, SD =1.61) rated it, and 2 did not answer. 5.04% (N = 6) strongly agreed, 26.89% (N = 32) agreed, 18.49% (N = 22) somewhat agreed with this view. There were 21.01% (N = 25) who were natural, 10.08% (N = 12) who somewhat disagreed, 15.13% (N = 18) who disagreed, and 3.36% (N = 4) strongly disagreed with it.

118 parents (M = 4.29, SD = 1.63) participated in rating the last question that using tangible rewards can negatively impact the relationship among students. 3.39% (N = 4) strongly agreed with the negative impact on friendships, 15.25% (N = 18) agreed, 14.41% (N = 17) somewhat agreed, 18.64% (N = 22) neither agreed nor disagreed, 19.49% (N = 23) somewhat disagreed, the most people (N = 26, 22.03%) agreed with, and fewer parents (N = 8, 6.78%) strongly disagreed with this perspective (see Table 5).

Table 5. Parents' perspectives on how tangible reward systems negatively impact their children.

	It can Negatively Impact Students' Values		It can Make Students Become More Working for Outside Rewards		It can Negatively Impact Students' Relationships with Others	
Likert Scale	N	Percent	N	Percent	N	Percent
1 - Strongly Agree	2	1.72%	6	5.04%	4	3.39%
2 - Agree	21	18.10%	32	26.89%	18	15.25%
3 - Somewhat Agree	14	12.07%	22	18.49%	17	14.41%
4 - Natural	30	25.86%	25	21.01%	22	18.64%
5 - Somewhat Disagree	17	14.66%	12	10.08%	23	19.49%
6 - Disagree	27	23.28%	18	15.13%	26	22.03%
7 - Strongly Disagree	5	4.31%	4	3.36%	8	6.78%
Blank	5		2		3	

4. Discussion

Based on the results, more parents agreed with using tangible reward systems as a part of educational methods with more or fewer opinions (see Table 2). Even though many parents did not clearly understand how this kind of reward system works in teaching or what teachers want it to bring to students, they still noticed this system in many daily situations because it is very common in the Chinese educational system. Comparing parents' perspectives on different statements, more people agreed with the positive impacts on students, from improving self-identities to helping manage class behaviors. When discussing adverse effects, including negative influence on students' values and relationships with others, both of the means for the scale are between natural and somewhat disagreed. This indicates that participants did not highly agree with these opinions. However, another negative impact on students' growth, more than half of the participants (N = 60) agreed or somewhat agreed that the use of tangible rewards could make children spend effort more on extrinsic things instead of intrinsic interests.

In fact, when asking participants if they realized what the tangible reward system is used for or not, 38.02% (N = 46) only knew this definition without specific understanding or information, and 2.48% (N = 3) completely did not know about this system. Those parents were more likely to leave their children's education for school and teachers entirely. The traditional common educational methods would not spend time or energy to learn and think more about how it impacts children's development. Also, in Chinese education, the most and the only standard to evaluate a student's ability is the grade, which is the result of exams. Many parents would only pay attention to what grades and rewards children get from the class rather than what they experienced in the process of studying, especially for abstract impacts like intrinsic motivation.

According to what participants shared, many of them thought that their children would feel happy when they got rewards, and they also would feel satisfied and proud of their children as their parents. Parents believed this tangible reward system could improve children's positivity and efficiency in studying by setting up a specific goal to lead their learning behaviors. They also wanted to use this

way to teach children that they need to work hard if they want to get something for themselves, and the reward is not staying somewhere to wait for one person to come because lots of children want it. Even if kids cannot get the reward this time, they still have the chance to get it next time, which could motivate them to study more.

However, other participants gave some reasons for not using tangible rewards in teaching. The most significant problem they were concerned about was that children would lose interest and positivity in studying or improving themselves if they could no longer get rewards, even less than before. One parent mentioned that schools differed from society and that material rewards could not be used for evaluation. Therefore, some participants suggested using more verbal or spiritual rewards instead of material rewards.

5. Conclusion

The purpose of this study is to find out a general view of common advantages and disadvantages of tangible reward systems from parents who were close to this kind of educational system because they currently have a child studying in a primary school or middle school. One limitation of this study is that the information needed to be narrower. Therefore, in the future, the study of parents' perspectives could separate based on their age, educational level, work, the time they spend with their children, or the times they help with children's studies per week. Moreover, the educational system does not only include campus life but also relates to the time when students stay at home for the rest of the day, on weekends, or on holidays. The study of how tangible reward systems participate in family relationships and stay-home learning could reflect more detailed perspectives from parents.

The final purpose of studying tangible reward systems is to improve educational systems and help the development of children. Hence, the more limitations set up for the experiment, the more specific information people could get from using tangible reward systems in schools. It could be easier for academic researchers to set up better educational methods based on different school requirements.

References

[1] Deci, E. L., Koestner, r., & Ryan, R. M. Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again. Review of Educational Research, 2001, 71(1), 1-27.

[2] Tsang, Y. & Zhang, T. Advantages and disadvantages of using tangible rewards by teachers with Chinese young students. Atlantis Press, 2022.

[3] Pan, X. Parents need to be careful about using rewards: thinking based on intrinsic and extrinsic motivation. Popular Psychology. 2021(01): 36-37.

[4] Kaplan, A., Gheen, M., & Midgley, C. Classroom goal structure and student disruptive behaviour. British Journal of Educational Psychology, 2002, 72(2): 191-211.

[5] Garlock, M. M. The effect of tangible and social reward systems on changing behavior in an elementary school setting. Available from ProQuest Dissertations & Theses Global, 2004.

[6] Wan, H. & Zeng, Y. The thinking and developing of tangible reward systems for students in middle schools. Education and Management, 2020, (10), 3.

[7] Nasir, J. S. M. Reinforcement of rewards as motivation for students in art learning: a case study at a Local University. Proceeding of the International Conference of Innovation in Media and Visual Design, 2020.

[8] Murayama, K. A reward-learning framework of knowledge acquisition: An integrated account of curiosity, interest, and intrinsic–extrinsic rewards. Psychological Review, 2022, 129(1):175–198.

[9] Lowe, L. Teachers' uses and perceptions of reward systems in elementary schools in rural areas of the central valley of California. The California State University, 2015.

[10] Kowalski, M. J., & Froiland, J. M. Parent perceptions of elementary classroom management systems and their children's motivational and emotional responses. Social Psychology of Education, 2020, 23: 433–448.