

Willingness to Work in the Acknowledged Condition Re-examined

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1. Introduction
2. The formulation of an experimental design
3. Experiment
 - 3-1. The first experimental result: paper work
 - 3-2. The second experimental result: assembling LaQ
4. Conclusion

1. Introduction

The relationship between *others' behavior* and organizational members' *willingness to work* at the workplace have been discussed widely for a lengthy period not only in the field of organizational behavior but also in the fields of other social sciences such as behavioral economics, human resource management, social psychology, sociology, and other various disciplines. In the fields of leadership and motivation researches, especially, how organizational members' attitudes and behaviors are influenced and motivated has been focused upon and researched¹⁾; however, the question regarding the process or mechanism of demotivation is still open except for some research findings (e.g. Ariely, 2010; Ariely, Kamenica, and Prelec, 2008; Deci, 1995; Herzberg, Mausner, and Snyderman, 1993) Thus, even though there are many influential constructs and theories that have been developed and proposed, it is not clear that what kinds of factors cause

one particular attitude and/or behavior such as loss of morale and motivation scientifically. In other words, predicting such attitude and/or behavior and applying effective interpersonal relationship management in practice seem not to go a single step out of range of low probability.

Thus, in this paper, with the search of one of key factors to sustain and not to demotivate organizational members' willingness to work in mind, how others' behavior such as small action influence them will be investigated and verified through a series of experiments.

2. The formulation of an experimental design

Experiment motive

It may be reasonable to suppose that most people agree many workplaces still have room for improvement because they usually face some kinds of new problems regarding managing human resources effectively.²⁾ In fact, many explanations or solution approaches to the various problems have been proposed to improve the current interpersonal relationships at the workplace.³⁾ For instance, some might propose that workplace should reconsider not only the previous monetary incentives but non-monetary incentives for every individual member at the workplace and rethink the suitable atmosphere, which is referred to as organizational climate and culture.

The question we must consider here is that most management theorists and practitioners indicate limited or biased perspectives and suggestions. They generally propose and support that there are at least two stimuli to promote the individual work motivation. Why don't we apply the various incentives to stimulate organizational members' intrinsic motivation and/or extrinsic motivation is one of the typical examples. The

simple question here is the limited perspective of managing human resources might lead to a certain bias. They actually focus too much on incentives that might sound expensive and motivations that are supposed to move in a positive direction.⁴⁾

Thus, they do not seem to focus on the other aspect or direction of motivation. In other words, it seems that the aspect of demotivating organizational members has been viewed as unimportant, compared to incentives and motivation, except for some experimental researches. Recently, relevant research was executed by Ariely, Kamenica, & Prelec (2008) on the basis of controlled laboratory experiments, which revealed the effect of *minimal perceived meaning*. It seems reasonable to suppose that their actual research findings provide one of right ways to sustain organizational members' motivations and not to demotivate them.

Experiment objective

In this paper, mainly following Ariely *et al.* (2008) experiments, the causal relationship between others' behavior such as small action and willingness to work, which may be referred to as work motivation, will be verified through a series of experiments. In other words, a series of additional experiments are run in order to investigate whether or not their experiments' results have validity and reliability for Japanese.

The main reason that these constructs are employed to execute a series of experiments is that these constructs are able to be supposed to be the greatest common denominator at the workplace. Willingness to work is considered here that every single organizational member has more or less it. To be more exact, most of them perceive some kind of small or little meaning of work while doing their jobs. Even though some task

seems to be meaningless for others at the workplace, this might be meaningful for a person in charge. For instance, you got an order to make a Xerox for others, and doing this is so small and easy, and the others can definitely do it. However, you might feel different about doing this. As an extreme example, the completion of this order to make a Xerox might contribute to the effective operation of meeting, information sharing, and so forth; therefore, every single task or job or work, whatever it is, might give some kind of meaning to a person in charge.⁵⁾

If this is true, others who regard its easy job as meaningless job might be one cause of demotivating a person in charge. For instance, others' behaviors such as little liberties may let a person in charge down. Furthermore, since every single person at the workplace experiences reciprocity, all members are influenced more or less by the others such as a boss, peers, and subordinates. Thus, a series of experiments serve to know whether some small actions by others influence willingness to work or not.

Constructs and definitions of others' behaviors and willingness to work

It is simply defined operationally that others' behavior has two elements, reflecting the ordinary workplace situations. First element is *recognition*, which means that one experimenter acknowledges the completion of the task which was done by participants. According to Ariely *et al.* (2008, p. 672), "Such recognition does not have to be linked to any financial incentives or to any non-tangible rewards such as praise or appreciation." Second one is *goal setting*. Participants are supposed to know the end of task that is informed by the experimenter. This is what one experimenter has to inform participants in a series of experiments. As mentioned earlier, these are basically based on Ariely *et al.* (*ibid.*) experi-

ments in order to consider the conceptual framework and definition of willingness to work.

Participants' willingness to work has also two elements to measure their willingness to work. First one is *continuity of work*, which indicates more or less meaning of work that participants perceive or their sustainable motivations. Second element is *completion of a task*. In other words, the task that the experimenters set has consistently *terminus ad quem*.

Employed variables and an analytical model and framework

As independent variables, acknowledged and no acknowledged condition, which are acted by an experimenter, are employed. As a dependent variable, continuity of work is employed as willingness to work. In order to measure it, in a series of experiments, number of times and working time are employed as surrogate variables. In addition, as control variables, completion of the task and goal setting are employed, and needless to say, other laboratory environmental conditions are controlled to enhance the experimental accuracy. Incidentally, the instruction is directed by the recorded tape. Thus, other conditions basically keep homogeneity in order to measure the degree of dependent variables such as continuity of work.

An analytical model and framework seem quite simple as can be seen in **Figure 1** and **Table 1**; however, these experimental model and framework are employed to search the causal relationships in the field of epidemiology. In addition, reservation wage is also employed as a dependent variable in order to search some kind of findings that might contribute to the effective and efficient operation of workplaces from the point of view of managing human resources.

Figure 1
An analytical model

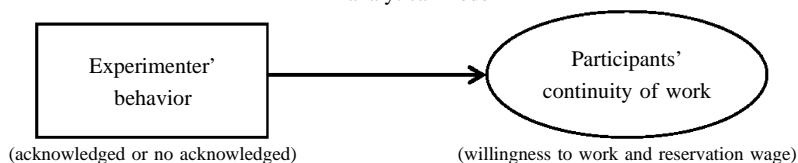


Table 1
An analytical framework

	Continuity of work	Reservation wage
Experimental group (No acknowledged)		
Control group (Acknowledged)		

In a series of experiments, one experimenter's behavior (or acting performance) has only two patterns. One is small action that the experimenter acknowledges the completion of a task which has been done by the participant. The other one is no small action that the experimenter does not acknowledge and ignores the completion of a task which has been done by the participant. In other words, the experimenter performs as if what one participant has done would be meaningless. To be more exact, the task that has been done by the participant goes back to square one with the task before the participant had started. This sounds unusual and unbelievable one; however, these situations happen far too often at the workplace. For instance, you would have experienced that your job is regarded as nothing and meaningless even though how much time and effort you had spent to complete a work.

The continuity of work is, as I mentioned before, measured on the

basis of two scales. One is a number of times. The other one is working time. In this paper, reservation wage is also employed in the general meaning. It is the minimum compensation that individuals are willing to accept for work.

The findings from the previous study

Table 2 and **Table 3** indicate the results of the prior experiments which were published by Ariely, Kamenica, and Prelec in 2008. According to their experiments, in Acknowledged condition, the minimal perceived meaning by participants indicates higher willingness to work and reservation wage was also lower, compared with other conditions such as the Shredded condition and Ignored condition. Furthermore, another experimental result shows that the condition, which is referred to as a ‘Sisyphus’ condition and the task goes back to square one with the task that participants had already done, indicated much lower willingness to work and higher reservation wage. These results are tested by Wilcoxon rank-order test, and all comparative results show the statistically-significant differences except for the difference between the Ignored and Shredded conditions in **Table 2**. This result reveals Shredded condition

Table 2
A tedious and repetitive task

	Willingness to work	Reservation wage
Experimental group <i>Shredded</i> (n=34)	Ave. 6.34 sheets	Ave. 28.29 ¢
Experimental group <i>Ignored</i> (n=35)	Ave. 6.77 sheets	Ave. 26.14 ¢
Control group <i>Acknowledged</i> (n=35)	Ave. 9.03 sheets	Ave. 14.85 ¢

Table 3
Assembling Bionicle Lego

	Willingness to work	Reservation wage
Experimental group <i>Sisyphus</i> (n=20)	Ave. 7.2 times	Ave. \$1.40
Control group <i>Meaningful</i> (n=20)	Ave. 10.6 times	Ave. \$1.01

and Ignored condition are equally efficacious in the treatment of the subjects' willingness to work and reservation wage.

Experimental procedure

As mentioned above, in a series of experiments, two groups, which are the acknowledged condition and no acknowledged condition, were employed and compared to verify the causal relationship between others' behavior and participants' willingness to work and reservation wage.

In the first experiment, whether or not the performance by participants who do a tedious and repetitive task can be modulated and controlled under the conditions of either acknowledged or no acknowledged is investigated.⁶⁾ Concretely, the task that the experimenter set is that participants find 20 instances of two consecutive letters such as 'a', 'b', and so forth.⁷⁾ Having completed the first sheet, the participants are asked if they would be willing to complete the second sheet for ¥5 less except the task from 5 times to 6 times (See **Table 4**). If the participants complete its tedious and repetitive tasks 10 times, their total compensation is ¥300. And if they do not show any rational behavior, they keep on doing this task because it can be supposed that they perceive some kind of small and little meaning of this and are motivated intrinsically.

Table 4

A number of times, wage, cumulative wages in the first experiment

A number of times	Wage	Cumulative wages
1	¥55	¥55
2	¥50	¥105
3	¥45	¥150
4	¥40	¥190
5	¥35	¥225
6	¥25	¥250
7	¥20	¥270
8	¥15	¥285
9	¥10	¥295
10	¥5	¥300
11	¥0	¥300

In the control group, acknowledged condition, after a participant finds 20 instances of two consecutive letters, he or she turns in its completed paper, and the number of correct answers is checked by the experimenter. In case that there are some incorrect answers, the experimenter tells the participants about it (recognition), yet the number of incorrect answers do not reflect the participants' compensation.

While on the other hand, in the experimental group, no acknowledged condition, the experimenter does not check the paper at all. Rather, he or she dumps it in a trash can in front of the participant without looking at him or her, and then the experimenter asks if the participant keeps on doing this tedious task or not. It is supposed here that the participant might easily perceive that his or her effort for tedious paper work was meaningless. Also, the experimenter just explains that he or she does not

care about the strictness of doing paper work but care about how many times the participant continues his or her paper work in case that the experimenter is asked why he or she does so.

In the second experiment, LaQ⁸⁾ was used as an experimental tool, and participants were asked whether or not they have experienced to put a 24 piece of LaQ together to assemble a little doll.⁹⁾ That is mainly because this experiment needs to make the condition of other things being equal. In addition, this experiment needs to avoid a potential contributory factor in proficiency level.

Participants had at least 6 times opportunities to get compensation, which means total compensation is ¥105 as can be seen in **Table 5**. Also, the maximum opportunities were predetermined up to 8 times. Having completed the first LaQ, participants are then asked whether or not they would be willing to assemble the second a little doll for ¥5 less.

In the control group, acknowledged condition, after a participant assembles a little doll, the experimenter places it on the desk in front of the participant, which means a participant can see what he or she has completed, and the experimenter gives him or her next LaQ to assemble it again if the participant wants to do. Thus, as the session progressed, the completed a little doll accumulates on the desk (a participant can perceive the completion of the task supposedly).

While on the other hand, in the experimental group, no acknowledged condition, there are only two LaQ. As is the case with the first experiment, after the participant completed the first LaQ and began working on the second one, the experimenter disassembles the first LaQ into pieces in front of a participant. As might be expected, at least the participant might easily perceive that his or her effort to complete LaQ was unimportant

Table 5

A number of times, wage, cumulative wages in the second experiment

A number of times	Wage	Cumulative wages
1	¥30	¥30
2	¥25	¥55
3	¥20	¥75
4	¥15	¥90
5	¥10	¥100
6	¥5	¥105
7	¥0	¥105

even though the experimenter just explains that he or she has only two LaQ.

3. Experiment

3-1. The first experimental result: paper work

Table 6 shows the analytical results in the first experiment. As mentioned above, participant's task in this experiment was a tedious and repetitive one. As a result of Wilcoxon rank-order test, in all comparisons, there were statistically-significance differences between an acknowledged condition and no acknowledged condition.¹⁰⁾ Thus, all hypotheses were supported.

In the first comparison of the continuity of work, the number of times in an acknowledged group was more than two times better than a no acknowledged condition ($p\text{-value}=0.002$). Next, in the comparison of the duration of work, a control group was inevitably much longer than an experimental group ($p\text{-value}=0.000$). That is because of the statistically-significance difference of the continuity of work. The more the partici-

Table 6
Paper work

	Willingness to work (continuity of work)	Willingness to work (duration of work)	Reservation wage
Experimental group <i>No acknowledged</i> (n=20)	Ave. 4.00 sheets	Ave. 10:40	Ave. ¥38.75
Control group <i>Acknowledged</i> (n=20)	Ave. 8.25 sheets	Ave. 25:40	Ave. ¥14.75

pants do with the task at hand, the longer minutes they need to do it. Finally, the average reservation wage in an acknowledged condition was much lower than it in a no acknowledged condition ($p\text{-value}=0.002$).

From these results, at least two points would be noted. The first point is that this is the same as the experimental results by Ariely, Kamenica, & Prelec (2008). The second point is that if the participants did not perceive any recognition from others, they would tend to stop working and give up getting compensation. In other words, as they perceived a small or little recognition from others, they keep on doing their work rationally. If any exceptions are to be made, most participants (75%) who belong to an experimental group stop doing their tasks within five times.¹¹⁾ Thus, it is reasonable to conclude that a little or small recognition by others influences the degree of willingness to work and reservation wage.

3-2. The second experimental result: assembling LaQ

Table 7 shows the analytical results in the second experiment. As mentioned earlier, participant's task in this experiment was LaQ to assemble a little doll. As a result of Wilcoxon rank-order test, in all comparisons, there were statistically-significance differences between an acknowl-

edged condition and no acknowledged condition. Thus, as is the case with the first experiment, all hypotheses were supported.

In the first comparison of the continuity of work, the number of times in an acknowledged group was approximately 1.8 times better than a no acknowledged condition ($p\text{-value}=0.009$). Next, in the comparison of the duration of work, a control group was inevitably much longer than an experimental group ($p\text{-value}=0.011$). That is because of the statistically-significance difference of the continuity of work. The more the participants do with the task at hand, the longer minutes they need to do it. Finally, the average reservation wage in an acknowledged condition was much lower than it in a no acknowledged condition ($p\text{-value}=0.015$).

From these results, at least two points would be noted as is the case with the first experiment. However, there is one notable exception. As mentioned above, participants had at least 6 times opportunities to get total compensation. If they behaved rationally, they would stop assembling LaQ at the sixth; however, 46.6% of participants ($n=15$) in an acknowledged condition kept doing the task up to the eighth times even though they could not get any compensation from the seven times.¹²⁾ Thus, it would be reasonable to conclude that at least small action (recognition) by

Table 7
Assembling LaQ

	Willingness to work (continuity of work)	Willingness to work (duration of work)	Reservation wage
Experimental group <i>No acknowledged</i> ($n=15$)	Ave. 3.07 times	Ave. 12:27	Ave. ¥20.00
Control group <i>Acknowledged</i> ($n=15$)	Ave. 5.53 times	Ave. 18:50	Ave. ¥9.67

others sustains their willingness to work, and their intrinsic motivations are aroused due to the task characteristic, assembling a little doll.

4. Conclusion

Most people find value in what they do. That is, most of them feel recognized consciously or unconsciously for every little thing they do. If they did not feel recognized for their jobs or tasks, it would be hard to find why they work. It might be easy for some to answer this question; however, if their jobs or tasks were dreary and tedious one, would they keep on doing their jobs? In principle at least some might say that they supply their labors for their living; however, it naturally leads to the next question. How long do they keep on doing their jobs or tasks, and do they accept what they have done was assessed to be disvalued? That is because if they lost the reason they have committed to complete their jobs or tasks, they would probably become demotivated and give up working. That is to say, if this presented a certain level of objective fact, most workplaces would have possibility to cause a labor shortage and to confront the higher labor cost. This is what I wanted to verify in this paper.

In accord with a series of experimental results, it should be clear that at least three priority issues are pointed out. The first one is that it might be easy to operate the participants' willingness to work. The experimental results regarding a tedious and repetitive paper work and LaQ support this and indicate that small action (recognition) by an experimenter causes to do more work. The second one is that behavior recognition by participants might be one key factor to sustain their work motivation and to demotivate them. The third one is that reservation wage might be either expensive or cheap depending on others' small actions.

Thus, it might be presumed that the issues here have roots in daily small actions by evaluators such as a direct boss and peers. It might have roots deep in their attitudes and/or behaviors. That is, evaluators' small attitudes of indifference and not caring about people who have completed their jobs would make them become demotivated or affect their work motivations. Such their unintentional behaviors would cause to decrease organizational members' motives to do more work, and in some circumstances, these might cause slipshod piece of work. In sum, workplaces would eventually confront the decrease of labor productivity and the increase of labor cost.

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- 1) This issue also has been attempted to solve for a long time in the business field. However, how leadership role and organizational members' willingness to work that are generally considered to be the bases of interpersonal relationships at the workplace should be developed and managed is still one of the abstract problems.
 - 2) For instance, many workplaces have recently experienced a number of new threats such as the increasing number of organizational members who need treatment for a mental health problem and confront power harassment to influence organizational operation. That is, how leadership role and willingness to work should be developed and managed in practice is old and new problem.
 - 3) It is often the case that many explanations are mere opinions on the basis of a rule of thumb. That is especially true in explaining the causal relationship. Thus, many do not go a single step out of hypothetical thinking. Some of them are not even hypotheses to be verified yet.
 - 4) That the construct of motivation does not include negative aspect is fully understood. However, it is considered here that at least the construct of willingness to work has both positive aspect and negative aspect. Thus, the conceptual framework of motivation might need to be carefully examined.
 - 5) It is appropriate to suppose that this might be exactly in a state of intrinsic motivation.

- 6) The basic information regarding participants in the first experiment is shown in **Table A**. In addition, all participants are undergraduate students who go to a private university in Tokyo (n=40).

Table A
The basic information of participants

Investigation period	November 24–30, 2011	
Number of participants	n=40	
Average age	20.2 years old	
Minimum age	18 years old	
Maximum age	22 years old	
Gender	Male	n=21
	Female	n=19

- 7) As one of examples, an experimental tool in the first experiment is as follows.

qwertypuiopasdfghjklzxcvbnmqwertyuioasdfghhjk
mnbvcxzlkjhgfdsaoitiutrewq, mnbvcxzlkjhgfdsqw
ertyuikjhgfdszxcvbnlkjhgfdsaquuertyuizxcvbnma
sdfghjwertyukjhgfdsasdfghjkzxcvbnm,kjhgfdsaqwe
rtyuokjhgfdsazxcvbnmqppwertyuioasdfghijkvcxrf
vrfvedcwsxqazrfkkgbtghbnyhjmqwertyuiolkjhgfds
sazxcoovbnm,lkjhgfdsaqwertyuokjhgfdsazxcvbnm,
kijhgfdswertyuiopzxcvbnm,asdfsghjkqwertyuiolk
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dfghjkjmmnbvcxzqwertyuiolkjhgfdsazxseevbnm,kjh
gfdsawertyuikjhgfdszxcvbnlkjhgfdsqwertyuokjhgf
sazxcvbnm,mnbvcxzasdyfghjkqwertyuiolkjhgfds
aeddzxcvbnmoyutrewqasdfghjk,mnbvcxzoitruo
wqsdfghjkkjhgfdsazxcvbnmoiutrewqzxcvbnioit
rewqasdfghjkzxcvbnm,kjhgfdsjkjhgfdsazxcvbnmoip
puytrewasdfghjk,mnbvcxz.,mnbvcxzasdfghjkplloiu

- 8) According to the explanation of http://www.la-q.co.jp/en/whats_la-q/, LaQ is

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“a very simple, yet highly creative construction toy...”

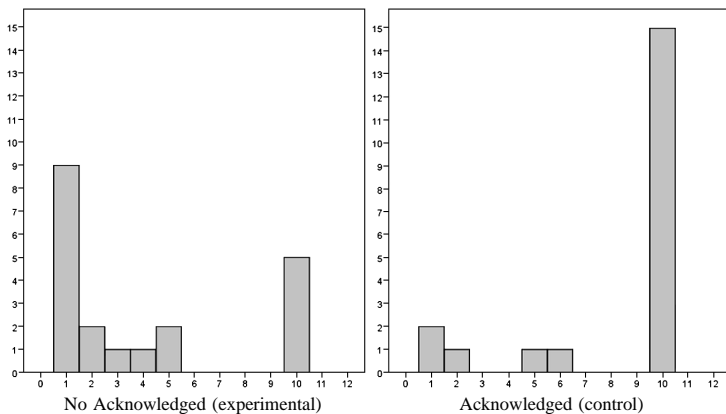
- 9) The basic information regarding participants in the second experiment is shown in **Table B**. In addition, all participants do not participate in the first experiment, and they are undergraduate students who go to a private university in Tokyo (n=30).

Table B

The basic information of participants

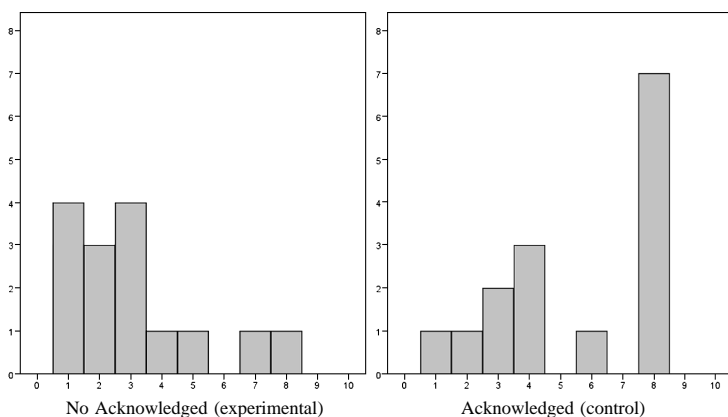
Investigation period	July 16–20, 2012	
Number of participants	n=30	
Average age	20.7 years old	
Minimum age	19 years old	
Maximum age	23 years old	
Gender	Male	n=23
	Female	n=7

- 10) IBM SPSS Statistics 20.0 Japanese was employed to execute a series of analyses.
- 11) This tendency can be confirmed through the comparison between the histograms of an experimental group and a control group. However, even in a no acknowledged condition, there were five participants who behaved rationally. It is not clear at this point that why five participants exhibited rational behavior.



One hypothesis here is that other factors exceeded small action by an experimenter.

- 12) We can confirm that seven participants in an acknowledged condition exhibited some kind of irrational behavior. However, even in the no acknowledged condition, there are two participants who kept assembling a little doll up to the end of getting compensation, and it would be supposed that these participants were intrinsically motivated.



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