CESifo WORKING PAPERS

10409
2023

May 2023

A Theory of Indifference Based on Status-Seeking Behaviour

Sugata Marjit, Krishnendu Ghosh Dastidar, Abhilasha Pandey

CESifo

Impressum:

CESifo Working Papers
ISSN 2364-1428 (electronic version)
Publisher and distributor: Munich Society for the Promotion of Economic Research - CESifo GmbH
The international platform of Ludwigs-Maximilians University's Center for Economic Studies and the ifo Institute
Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 (0)89 2180-2740, Telefax +49 (0)89 2180-17845, email office@cesifo.de
Editor: Clemens Fuest
https://www.cesifo.org/en/wp
An electronic version of the paper may be downloaded
· from the SSRN website: www.SSRN.com
· from the RePEc website: www.RePEc.org
· from the CESifo website: https://www.cesifo.org/en/wp

CESifo *Working Paper No. 10409*

A Theory of Indifference Based on Status-Seeking Behaviour

Abstract

This paper explores the reluctance of men (women) to acknowledge or recognise the work, comments, and claims of new ideas by other men (women) via widespread and intense demonstrations of indifference. Instances like desk rejections by journals by not allowing papers to reach a review stage, deliberately ignoring responses to respectful and cordial emails, or not referring to relevant papers in references may be related to a kind of status-seeking behaviour beyond what is projected as the real reason for such actions. Against this backdrop, this paper draws from the contemporary experimental psychology and economic theory literature on the causes and consequences of status-seeking behaviour. It integrates the idea in a simple two-player non-cooperative game theoretic framework to explain why even in a world where "Recognition" is a socially optimal strategy, "Indifference" will persist at an equilibrium. We also look at the formation of self-pampering clusters in social media as a resistance to indifference.

JEL-Codes: D910, C720, C730.

Keywords: experimental psychology, status-seeking behaviour, indifference, recognition, non-cooperative games, repeated games.

Sugata Marjit
Hong Kong Polytechnic University &
Indian Institute of Foreign Trade (IIFT), Kolkata / India
marjit@gmail.com
sugata@iift.edu

*Krishnendu Ghosh Dastidar**
Jawaharial Nehru University
New Delhi / India
krishnendu.dastidar@gmail.com
kgd12@yahoo.com

Abhilasha Pandey
Indian Institute of Foreign Trade (IIFT)
Kolkata / India
p.avilashas@gmail.com

*corresponding author

Introduction

Think about the last time you put your heart and soul into a research project, moulded it into something you were proud of, and nailed the execution. That feeling of accomplishment is uplifting, but it is multiplied exponentially when others take notice. Consider an instance when you contact someone well-known with an interesting observation. However, she never responds to you, or your paper is seldom sent to referees by the editor under the pretext of desk rejection. The simple act of acknowledging achievement is a significant boost for human morale and performance. The opposite happens when others do not acknowledge this effort and are indifferent. Indifference is close to apathy, the feeling of not being interested. If you are indifferent, you do not care either way. A modern tendency toward selfishness, screens, and narcissistic social media has exacerbated this unhappiness trigger. By ignoring, blocking, shaming, or dismissing people with views other than ours, we diminish our ability to see other people and connect with them. We limit how much we can learn from them and that's why recognition of others is so critical.

This paper explores the logic of remaining indifferent to the contributions of others as opposed to recognising their action*. The idea of "recognition", as used here, refers to either praising or criticising the work of others*. In other words, recognising is the opposite of displaying indifference. Thus, indifference refers to the complete undermining of the effort of the other individual by ignoring them or refusing to evaluate their work. Examples of such indifference can arise in the domain of desk rejection of papers in professional journals, reluctance to respond to email queries, ignoring work on social media platforms, etc. Such actions do not necessarily reflect reasonable indifference but may contain elements of deliberate neglect. It is this possibility that we focus on in our paper.

We argue that one socio-psychological reason behind such action is related to status-seeking behaviour, which has been analysed in different contexts. Status-seeking behaviour refers to a person's desire to achieve or maintain a higher position or social status within a group or society. We develop a simple game theoretic model of interaction between status seekers and prove that the non-cooperative game throws up indifference as the equilibrium outcome when recognition by both of each other's existence dominates in terms of social welfare.

Note that indifference might arise when the work of the other is not good enough to solicit a response or evaluation. The quantum of poor-quality work to be handled by the evaluator can legitimately become the driving force relative to the opportunity cost of time of the potential evaluator. However, the inherent moral hazard issue is that indifference does not reveal whether the work is not worth evaluating because of its poor quality or whether it is entirely a subjective decision of the evaluator because of other considerations. We need to determine the actual opportunity cost of the evaluator's time. Our core idea is that such action may boost the self-esteem or status of the individual who publicly demonstrates such indifference. Examples of such a game can be easily derived from interaction on a virtual platform and in the domain of academic publications.

The proliferation of individual sites on virtual platforms is a common feature of social media, targeting primarily viewers and subscribers through personal notifications and inviting as many "likes" as possible from friends and their network. The inherent threat of indifference from unknown viewers and the fact that many viewers might attract more viewers make individuals proactive, soliciting favourable views from known circles and their networks. Anecdotal evidence suggests that this behavioural trait is prevalent among younger people, reflecting the urge to succeed as quickly as possible. Individual sites attract connected people through connected networks and provide the platform mainly for proof of visibility (see Goyal, 2011 and Jackson, 2006 and 2008). While seeking "likes" is a natural incentive to cater to such platforms, criticisms also help the site to attract visibility. Thus, the recognition or its absence becomes a pivotal factor. More is merrier, no matter which way the opinion goes. This intention is beyond the concern for generating more significant advertising revenues, although the benefit does move in the same direction with more significant attraction towards the websites.

Desk rejection and reluctance of the editors not to forward the submissions to referees for further evaluation can be interpreted as similar problems. After the referees' extensive comments and reasons, acceptance or rejection might dishearten the authors. Nevertheless, the very act of not entertaining the papers for an evaluation may contain a moral hazard issue. Editors may lie about the reasons behind not passing the papers onto the next stage or truthfully and genuinely report their inability to process it further. Reported reasons expressed by an editor cannot be taken at face value. Various biases and anomalies regarding the publication process have been pointed out by Greenspon and Rodrik (2021). It is possible that the inherent desire to maintain a reputation of higher status, where status is about reluctance to recognise the work of others or is about maintaining high desk rejection rates, can creep in as an equilibrium outcome consistent with inherent moral hazard issues related to the complexity of the truth-telling problem.

When a society believes that recognising someone's contribution in any sphere is demeaning to one's status, cursory desk rejection of papers submitted for publication in academic journals where editors send letters with a universal format to all rejected authors effectively does not allow the work to reach up to the recognition stage where a referee accepts or reject the work after reading the paper. The quantum of desk rejections also signals the status of the journals, and there is no way of knowing whether the work deserves some recognition. This often leads to the multiplication of journals that cater to authors' search for recognition. In both cases, the demand for attention leads to the formation of clusters where the chance of facing an indifferent player is somewhat reduced.

In a two-person non-cooperative game-theoretic framework with symmetric payoffs, we prove that the strategy of indifference can be the unique Nash equilibrium even when the strategy of recognition promises a higher payoff to both players. In the process, we explain the critical role of status-seeking behaviour. The strength of the status-seeking incentive nullifies the strategy of recognition as an alternative Nash equilibrium. This status effect determines when a person chooses to be indifferent and when he chooses to recognise. If the status effect is high enough, players end up being indifferent.

The above phenomenon holds in the cases of the sequential move game and the infinitely repeated game. For the case of infinitely repeated games, a more substantial status effect raises the critical discount factor making it more difficult for collusion to be sustained and leading to indifference as the chosen outcome.

We also consider situations where within a smaller social neighbourhood or a cluster, demonstrating indifference may lead to a lower payoff, reflecting social losses of creating distance from the and, in the process, replacing indifference by recognition as the unique Nash equilibrium where players are better off. The neighbourhood effect counters the status-seeking incentive.

Concept of self

The concept of "self" has been used by psychologists to explain the reasons behind conspicuous consumption as if to redeem social status. Sivanathan and Pettit (2010) via repeated experiments have established that the "self" being under constant attack in various social domains induces a variety of people to go for excessive conspicuous consumption. This idea has been used in justifying status-seeking behaviour and theorising its impact on poverty, malnutrition, growth, and the incidence of child labour by Marjit, Santra, and Hati (2015), Dwibedi and Marjit (2017) and Beladi, Marjit, Oladi, and Yang (2021). Other dimensions of such behaviour where income alone does not affect individual satisfaction were discussed earlier by Easterlin (2001 and 2009), Van Long and Shimomura (2004), and Mujcic and Frijters (2013).

In the two-person game, one can think of a third person. This outsider roughly resembles the "self" as in Sivanathan and Pettit (2010) who is a passive player of the game but symmetrically evaluates the value of payoffs from different strategies. The status effect one enjoys when he ignores the contribution of the other at a time when the other person recognises his contribution is often valued by an outsider. Ignoring or being indifferent to someone who does not reciprocate indicates additional satisfaction, which is crucial in making a society that is reluctant to recognise the effort of others.

We argue that such indifference drives people towards interacting within a relatively congenial domain of social neighbourhood where undermining each other is costlier, such as between friends and acquaintances—similarly, new journals surface to accommodate undermined scholars. One may look at Greenspon and Rodrik (2021) in this context.

Indifference within a mega group leads to these kinds of branching outs or fragmentation where individuals start dedicated individual or group-specific sites to insulate themselves from the threat of indifference. Papers by Chakravarty, Fonseca, Ghosh, and Marjit (2016a, 2016b, and 2019) discuss group-specific behaviour regarding cooperation and conflict when groups are located within the same economic and social domain. However, they do not analyse the status-seeking aspect of the problem.

Plan of the paper

The paper is laid out as follows. The next section describes the game and possible equilibria incorporating status-seeking behaviour. The last section provides some concluding remarks.

Model and results

We consider a two-person game. Strategies are denoted as being indifferent *(i)* or recognising *(r)* the other agent's action. Recognition may reflect admiration or criticism. It is more like not being indifferent.

The payoffs are denoted as the set $\pi = \pi_{k_1 k_2}^{J}$ where the superscript $J \in \{1, 2\}$ stands for players 1 and 2. The subscript $k_1$and k_2 is for the strategies chosen by players 1 and 2. Thus, $k_1 \in \{i, r\}$ and $k_2 \in \{i, r\}$.

When both choose *i* or *r*, the payoffs are denoted as follows.

$$\pi_i = \pi_{ii}^1 = \pi_{ii}^2, \qquad \pi_r = \pi_{rr}^1 = \pi_{rr}^2$$

When one player chooses *i*, and the rival chooses *r*, the payoffs are as follows.

$$\pi_S = \pi_{ir}^1 = \pi_{ri}^2$$
$$\pi_0 = \pi_{ri}^1 = \pi_{ir}^2$$

The above signifies that the payoff to player 1 when he chooses *i* and player 2 chooses *r*, is equal to the payoff to player 2 when player 2 chooses *i*, and player 1 chooses *r*. We define this as the status payoff, π_S, and in the reverse case, the payoff is denoted by π_0.

We assume the following.

(i) $\pi_i, \pi_r, \pi_S, \pi_0 > 0$. **(ii)** $\pi_r > \pi_i > \pi_0$ and $\pi_S > \pi_i > \pi_0$.

Note that the inequality, $\pi_r > \pi_i$, suggests that recognition is a more desirable outcome in society. When both do not undermine each other, it reflects social harmony that improves individual payoffs. Both players choosing *r* is a socially optimal or a cooperative outcome. It is strictly better than the outcome when both players choose *i*.

A point to be noted is that all such actions can be justified in terms of the "true quality" of the contributions, which can be unique and shared knowledge. Thus, indifference and recognition are derived outcomes. We distinguish our case by suggesting that despite having such common knowledge or no prior information, humans may engage in this kind of strategic behaviour which we cannot rule out. Thus, if the quality is used as a logic towards indifference or recognition, there can be latent motives that may hide the true intention. This can be considered a moral hazard problem, or a truth-telling problem ridden with incentive issues. We assume the quality issue is non-existent to focus on the other component. As the reduced-form outcome of the game does not tell us about the structural reasons, one could safely assume that the outcome will look like a pooled equilibrium. We aim to spell out the other possibility, the status effect, beyond the conventional quality-driven argument.

The non-cooperative symmetric payoff matrix is represented as follows.

1 \ 2	*i*	*r*
i	π_i, π_i	π_S, π_0
r	π_0, π_S	π_r, π_r

Figure 1

We now proceed to analyse different cases.

Case (1): $\pi_s > \pi_r > \pi_i > \pi_0$**.**

Proposition 1. *For case (1), (i, i) is a strictly dominant strategy equilibrium of the game.*

Proof *Follows straight from the payoff matrix and case (1). QED*

Whatever the rival chooses, a player will always choose *i*. *That is, (i, i) is the unique Nash equilibrium of the game.* This is a classic Prisoners' Dilemma case where (*r, r)* will give a better payoff to both, but the strategic choice implies a Pareto inferior equilibrium with (*i, i*). This establishes our main point that even without any other reason to undermine someone's work, we will engage in a social demonstration of an indifferent attitude and not want to recognise her contribution.

Now we consider another possibility.

$Case\ (2)$: $\pi_r > \pi_S > \pi_i > \pi_0$.

Proposition 2. *For case (2), we have 3 Nash equilibria: two pure strategy Nash Equilibria – (i, i) and (r, r) and one Mixed Strategy Nash Equilibrium. In the MSNE, player 1 chooses i with probability p*=* $\frac{\pi_r-\pi_s}{\pi_r-\pi_s+\pi_i-\pi_0}$ *and r with probability (1-p*), Player 2 chooses i with probability q*=* $\frac{\pi_r-\pi_s}{\pi_r-\pi_s+\pi_i-\pi_0}$ *and r with probability (1-q*).*

Proof *Follows straight from the payoff matrix, case (2), and standard techniques. QED*

Note that $p* = q* = \frac{\pi_r-\pi_S}{\pi_r-\pi_S+\pi_i-\pi_0} = \frac{1}{1+\frac{\pi_i-\pi_0}{\pi_r-\pi_S}}$. The lower the ratio, $\frac{\pi_i-\pi_0}{\pi_r-\pi_S}$, the higher will be $p* = q*$. Note that the mixed strategy Nash equilibrium may be interpreted as follows. Suppose the game is being played with many players. In such a large population, proportion $p* = q*$ chooses the strategy, *i*. This proportion increases if $\frac{\pi_i-\pi_0}{\pi_r-\pi_S}$ decreases.

A possible intuition behind the above is as follows. It seems counterintuitive that the more significant the difference between the payoffs due to recognition and indifference, the higher the chance we end up with indifference as the MSNE. The equilibrium p and q tell us what they must be, given the difference between recognition and status payoffs, being candidates for MSNE. When the first player chooses her optimal p, the first-order condition suggests that q multiplied by the difference between the net payoffs of indifference and recognition strategies must equal the net payoff from the recognition strategy. That implies the expected payoff of the other player due to the gain from pursuing an indifferent strategy is precisely equal to the specific net benefit from pursuing the recognition strategy. Then this implies that higher is the net gain between π_r and π_s, equilibrium q must be higher to compensate for the loss in terms of the difference in the net gains between strategies i and s. Just note that $(\pi_r - \pi_s)$ is the net gain from strategy, r, and $(\pi_i - \pi_0)$ is the net gain from strategy, i, then the difference in the net gain is $[(\pi_i - \pi_0) - (\pi_r - \pi_s)]$.

We now analyse a sequential move game with the same set of players.

Sequential move game

A sequential move game may be more relevant to our story in many contexts. For instance, suppose in a social interaction; two people meet after a long time. The first person may display indifference (act as if he does not remember the other person) or may greet the other person with a polite smile (that is, recognise the other's presence). Subsequently, the second person reacts, and he may also choose to be either indifferent or choose to recognise. In this context, indifference refers to a lack of interest, concern, or emotion towards a particular person. It is characterised by detachment and apathy (possibly deliberate neglect). The act of recognising is just the opposite. We produce below the relevant game tree (figure 2).

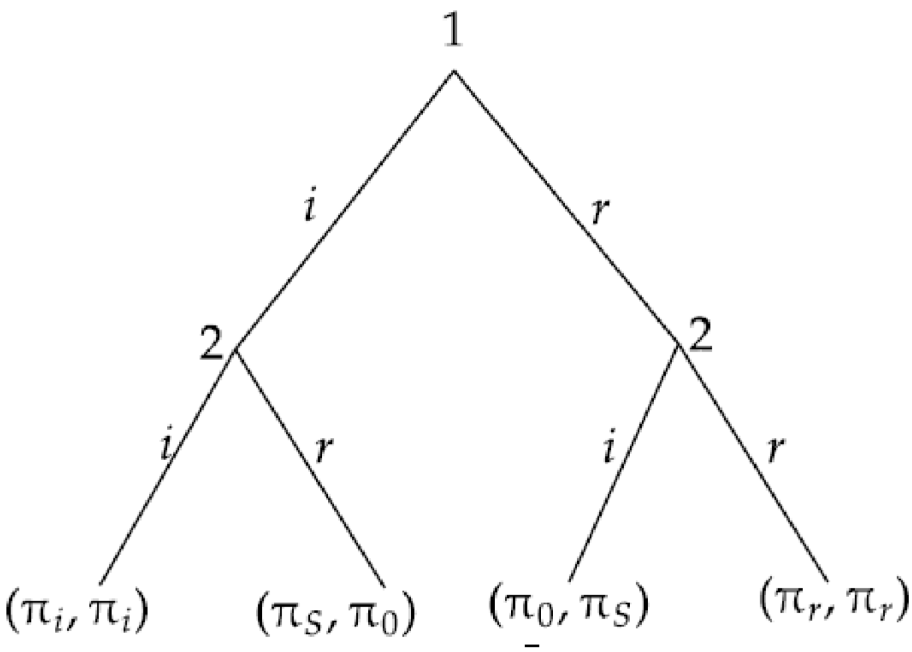

Figure 2

In the above sequential move game with perfect information, player 1 has two pure strategies: *i* and *r*. Player 2 has four pure strategies: *ii, ir, ri,* and *rr*.

First, consider **case 1**. That is, $\pi_S > \pi_r > \pi_i > \pi_0$. *In this case, the unique backward induction equilibrium outcome is (i, ii). That is, in equilibrium, each player will choose i as its action.*

Now consider **case 2**. That is, $\pi_r > \pi_S > \pi_i > \pi_0$. *In this case, the unique backward induction equilibrium outcome is (r, ir). That is, in equilibrium, each player will choose r as its action.*

Thus, depending on the different cases, we have two possible equilibrium outcomes: both choosing action *i* or both choosing action *r*. The equilibrium outcome will depend on the strength of the status effect. We have argued that $\pi_S = \pi_{ir}^1 = \pi_{ri}^2$ reflects a status concern. Note that we assumed $\pi_S > \pi_i > \pi_0$.

Now take the following. $\pi_S(T) = (1+T)\,\pi_0$ where $T \in [0, \underline{T}]$.

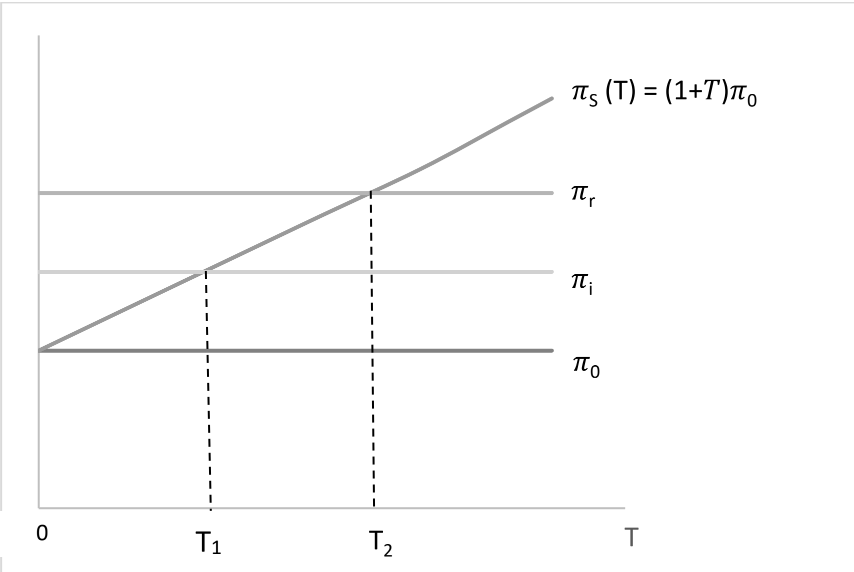

Figure 3

In figure 3 above, the expression $\pi_S(T) = (1+T)\,\pi_0$ denotes the strength of the status effect. Note that our assumption implies that $T > T_1$ which ensures $\pi_S > \pi_i > \pi_0$. Note that for $T \in (T_1, T_2)$, we have $\pi_r > \pi_S$ (case 2). This implies that *(r, r)* is a possible equilibrium in the simultaneous move game. In the sequential move game (case 2), the unique backward induction equilibrium outcome is *(r, ir)*. That is, in equilibrium, each player will choose *r* as its action when $T \in (T_1, T_2)$. However, when $T \in (T_2, \underline{T}]$, we have $\pi_S > \pi_r$ (case 1). In this case, only *(i, i)* will be the Nash equilibrium in the simultaneous move game. In the sequential move game (case 1), the unique backward induction equilibrium outcome is *(i, ii)*. That is, in equilibrium, each player will choose *i* as its action when $T \in (T_2, \underline{T}]$. The higher the degree of status concern, the greater the likelihood that society will reflect indifference as the equilibrium strategy.

We now analyse an infinitely repeated game with the same set of players.

Infinitely repeated game

We deal mainly with case (1) as this is interesting. In this case $(\pi_s > \pi_r > \pi_i > \pi_0)$, in the stage game (with simultaneous moves), the only Nash equilibrium is *(i, i)*. Note that this case is a classic Prisoners' Dilemma case where (*r, r)* will give a better payoff to both, but the strategic choice implies a Pareto inferior Nash equilibrium outcome with (*i, i*). The outcome (*r, r)* may be considered collusive, where both players are better off. We now demonstrate that in the infinitely repeated game, the cooperative outcome (*r, r)* can be sustained in a subgame perfect equilibrium provided the discount factor, δ, is high enough (see Gibbons, 1992).

Proposition 3. *For case 1* $(\pi_s > \pi_r > \pi_i > \pi_0)$*, the following trigger strategies constitute a subgame perfect equilibrium in the infinitely repeated game with discount factor* $\delta \geq \underline{\delta} = \frac{\pi_s - \pi_r}{\pi_s - \pi_i}$*. Play r in the first stage (t = 1). In stage t > 1, choose r if the outcome of all the previous (t -1) preceding stages has been (r, r). Otherwise, choose i forever.*

Proof *Using the one-stage deviation principle and standard techniques, it is easy to show that the above trigger strategies constitute an SPNE provided* $\delta \geq \underline{\delta} = \frac{\pi_s - \pi_r}{\pi_s - \pi_i}$*.*

QED.

In such an SPNE, *(r, r)* will be played at every stage of the game. This is the collusive outcome. Hence, the cooperative outcome is always feasible, provided δ is large enough.

However, note that $\delta \geq \underline{\delta} = \frac{\pi_s - \pi_r}{\pi_s - \pi_i} = \frac{\pi_s - \pi_r}{\pi_s - \pi_r + \pi_r - \pi_i} = \frac{1}{1 + \frac{\pi_r - \pi_i}{\pi_s - \pi_r}}$. Note that given π_r and π_i, the higher is π_s higher is $\frac{1}{1 + \frac{\pi_r - \pi_i}{\pi_s - \pi_r}}$ and consequently, the more difficult it will be to sustain collusion. Higher $\pi_S = \pi_{ir}^1 = \pi_{ri}^2$ means that if the rival chooses r (the cooperative strategy), then there is a greater incentive to break the collusion and choose i. Hence, the required δ to sustain collusion increases, and it becomes difficult to sustain the collusive outcome *(r, r)*. Players will only cooperate if the discount factor, δ, is larger than the critical delta, $\underline{\delta}$. A more substantial status effect (higher π_S) increases the critical value of delta ($\underline{\delta}$) and makes it more difficult for collusion to be sustained in equilibrium.

Note that in Case 2 ($\pi_r > \pi_S > \pi_i > \pi_0$), cooperative outcome (r, r) is a Nash equilibrium in the stage game. Consequently, both players choosing r regardless of history will be a subgame perfect Nash equilibrium for the infinitely repeated game.

Social Fragmentation and Clusters

The critical assumption so far is that $\pi_i > \pi_0$, which makes (i, i) a Nash equilibrium in the simultaneous move game (for both cases). It is possible that within a group of "friends" or the "near ones", "indifference" has a cost. Indifference may hurt friendship and hence a loss of payoff. α is the probability that an individual will not incur a loss by demonstrating indifference. With probability $(1 - \alpha)$, the individual will incur a loss, L. Thus, the net payoff is as follows.

$$\widetilde{\pi_i} = \alpha\pi_i + (1 - \alpha)(\pi_i - L)$$

Similarly, in the case of recognition of friends, it works in the other direction. Recognition strengthens the bond of friendship with a probability $(1 - \beta)$, an individual gets an extra benefit B.

$$\widetilde{\pi_r} = \beta\pi_r + (1 - \beta)(\pi_r + B)$$

Note that $\widetilde{\pi_i} = \pi_i - (1 - \alpha)L$ and $\widetilde{\pi_r} = \pi_r + (1 - \beta)B$.

Similarly, $\widetilde{\pi_0} = \pi_0 + (1 - \beta)B$ and $\widetilde{\pi_S} = \pi_S - (1 - \alpha)L$. Note that we do not distinguish between B_{ir} and B_{rr} and take both as equal to *B*; similarly, for *L*.

We assume that $L + B > \pi_i - \pi_0$ and $L + B > \pi_S - \pi_r$. We also restrict our attention to **case 1:** $\pi_s > \pi_r > \pi_i > \pi_0$.

The modified payoff matrix is as follows.

1 2	*i*	*r*
i	$\pi_i - (1-\alpha)L,\ \pi_i - (1-\alpha)L$	$\pi_S - (1-\alpha)L, \pi_0 + (1-\beta)B$
r	$\pi_0 + (1-\beta)B, \pi_S - (1-\alpha)L$	$\pi_r + (1-\beta)B,\ \pi_r + (1-\beta)B$

Figure 4

If i is chosen by one player, the other player will choose r iff

$$\pi_i - (1-\alpha)L < \pi_0 + (1-\beta)B - - - (1).$$

Similarly, if *r* is chosen by one player, the other player will choose *r* iff

$$\pi_S - (1-\alpha)L < \pi_r + (1-\beta)B - - - (2).$$

Low values of $(\alpha \ and \ \beta)$ will reduce LHS and increase RHS in the above inequalities. Now suppose $\alpha = \beta$. Then we get the following from (1) and (2).

$$\pi_i - (1-\alpha)L < \pi_0 + (1-\alpha)B \ \leftrightarrow \ \alpha < \tilde{\alpha} = 1 - \frac{\pi_i - \pi_0}{L+B} - - - (3)$$

$$\pi_S - (1-\alpha)L < \pi_r + (1-\alpha)B \ \leftrightarrow \ \alpha < \underline{\alpha} = 1 - \frac{\pi_s - \pi_r}{L+B} - - - (4)$$

Note that we have case 1: $\pi_s > \pi_r > \pi_i > \pi_0$. This case, together with our assumption, $(L + B > \pi_i - \pi_0 \ and \ L + B > \pi_S - \pi_r)$ ensure that $\tilde{\alpha}, \underline{\alpha} \in (0,1)$.

Proposition 4. *For all* $\alpha = \beta < min\{\tilde{\alpha}, \underline{\alpha}\}$*, (r, r) is the dominant strategy equilibrium.*

Proof. *Follows from (3) and (4). QED*

Note that $(L + B)$ reduces the weight of the benefit from status-seeking behaviour, $(\pi_S - \pi_0)$, and implements *(r, r)* as the unique NE. We now come to our next main result.

Proposition 5. *For all* $\alpha = \beta > max\{\tilde{\alpha}, \underline{\alpha}\}$*, (i, i) is the dominant strategy equilibrium.*

Proof. *Straightforward and follows from (3) and (4). QED*

Propositions 4 and 5 indicate that for low enough $\alpha = \beta$, we get *(r, r)* as an equilibrium, and for high enough $\alpha = \beta$, we get *(i, i)* as an equilibrium. Note that if $[\pi_i - \pi_0]$ and $[\pi_S - \pi_r]$ are high enough, then $max\{\tilde{\alpha}, \underline{\alpha}\}$ will be low enough, and it is more likely that $\alpha = \beta \geq max\{\tilde{\alpha}, \underline{\alpha}\}$. If the strategy of 'indifference' is very profitable, then *(i, i)* will emerge as the only possible equilibrium outcome.

If $min\{\tilde{\alpha}, \underline{\alpha}\} < \alpha = \beta < max\{\tilde{\alpha}, \underline{\alpha}\}$, then using standard techniques, we can show the existence of three Nash equilibria: two in pure strategies and one in mixed strategy. We now proceed to state our last main result.

Proposition 6. *Suppose* $min\{\tilde{\alpha}, \underline{\alpha}\} < \alpha = \beta < max\{\tilde{\alpha}, \underline{\alpha}\}$*. For case (2), we have 3 Nash equilibria: two pure strategy Nash equilibria – (i, i) and (r, r) and one mixed strategy Nash equilibrium (MSNE). In the MSNE, player 1 chooses i with probability* $p ** = \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$ *and r with probability* $(1 - p **) = 1 - \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$*, Player 2 chooses i with probability* $q ** = \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$ *and r with probability* $(1 - q **) = 1 - \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$.

Proof. *Straightforward and follows from routine computations using (3), (4), and the payoff matrix in figure 4. QED*

Note that if $\tilde{\alpha} < \underline{\alpha}$ then $min\{\tilde{\alpha}, \underline{\alpha}\} = \tilde{\alpha}$ and $max\{\tilde{\alpha}, \underline{\alpha}\} = \underline{\alpha}$. Similarly if $\tilde{\alpha} > \underline{\alpha}$ then $min\{\tilde{\alpha}, \underline{\alpha}\} = \underline{\alpha}$ and $max\{\tilde{\alpha}, \underline{\alpha}\} = \tilde{\alpha}$. In both cases, since $min\{\tilde{\alpha}, \underline{\alpha}\} < \alpha <$ $max\{\tilde{\alpha}, \underline{\alpha}\}, we\ have\ \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$ $\in (0,1)$. That is, $p ** = \ q ** = \frac{\underline{\alpha}-\alpha}{\underline{\alpha}-\tilde{\alpha}}$ is well defined.

The mixed strategy equilibrium can be interpreted as follows. Suppose the game is being played with many players. In such a large population, proportion *p*** = *q*** will choose strategy *i*. *Proportion (1-p**) = (1- q**)* will choose *r*. This leads to the formation of clusters.

Reflection of such behaviour or strategy is evident in people creating their sites or pages on virtual platforms and requesting "friends" to like or subscribe. This also has transitive effects as such requests can proliferate via a network of friends.

Thus, the indifferent attitude of others may induce some people to create a group such that members of the group will not be indifferent to each other. This will generate "clusters" to implement the recognition equilibrium. The above is a kind of social fragmentation or group formation that might be indifferent to other groups. The proliferation of academic journals is also an example of such a cluster effect.

Conclusion

This paper is an attempt to explore theoretically the reasons behind our inclination to remain indifferent to others. Drawing from contemporary psychology and behavioural economics, we show that status-seeking behaviour can drive us to ignore others.

Together, status-seeking behaviour and indifference suggest an individual is focused on his goals and ambitions and may not place much importance on external factors such as social relationships or emotional connections.

Consider a case where one person evaluates the work of another person. This could be in the domain of academic research (evaluating journal submissions) or in the corporate world, where the boss assesses the contribution of his colleague. Our fundamental point is that there is always an element of moral hazard hidden in the behaviour of the evaluator when quality is cited as the core reason for being indifferent, leading to a negative evaluation of any achievement. We do not know whether it is quality or the status-seeking behaviour of the evaluator leading to a strategy of indifference.

This behavioural pattern can explain agents clamouring for "likes" on social media platforms and the rise in alternative journals after excessive desk rejections by the editors of reputed academic journals. The former reflects the phenomenon of ignoring others as a status-seeking behaviour, and the latter reflects undermining others as the percentage of desk rejections is supposed to reconfirm the elite status of the outlet. The subjective excuse to objectivity-driven rejections by denying the right to referee comments may reflect the innate desire to undermine others. Even when both parties recognise that the other's contribution can yield higher payoffs for both, the strategy of choosing indifference can be the unique Nash equilibrium.

We then bring in status-seeking behaviour as the main driver behind the result. When both strategies of indifference and recognition appear to be two possible equilibria of the two-person non-cooperative game, the stronger incentive for status-seeking behaviour will rule out the recognition equilibrium.

Such indifference induces people to form clusters in their social neighbourhood where the strength of the status-seeking behaviour is downplayed by a mutual fellow feeling in the face of rejection. This explains the proliferation of individual or group-specific sites in social media and the multiplication of journals.

One interesting issue that we plan to analyse in our future research has to do with the fact that a strategy of choosing i, say, desk rejections, often sought to be justified by the intense competition towards publication in that particular journal by using the statistical rate of very low acceptance, again a trait of status-seeking behaviour, actually makes the rest of the field increasingly less competitive and more collusive.

References

1. Beladi, H., Marjit, S., Oladi, R., and Yang, L. (2021). “Malnutrition in the shadow of economic growth”. *Review of Development Economics*, **25**, pp. 500-514.
2. Chakravarty, S., Fonseca, M. A., Ghosh, S., and Marjit, S. (2016a). “Religious fragmentation, social identity, and cooperation: Evidence from an artefactual field experiment in India”. *European Economic Review*, **90**, pp. 265-279.
3. Chakravarty, S., Fonseca, M. A., Ghosh, S., and Marjit, S. (2016b). “Religious fragmentation, social identity, and conflict: Evidence from an artefactual field experiment in India”. *PLOS ONE*, **11**, e0164708, pp. 1-17.
4. Chakravarty, S., Fonseca, M. A., Ghosh, S., Kumar, P., and Marjit, S. (2019). “Religious fragmentation, social identity, and other-regarding preferences: Evidence from an artefactual field experiment in India”. *Journal of Behavioural and Experimental Economics*, **82**, pp. 1-10.
5. Dwibedi, J. K., and Marjit, S. (2017). "Relative affluence and child labour—Explaining a paradox". *Review of Development Economics*, **21**, pp. 1178-1190.
6. Easterlin, R. A. (2009). “Lost in transition: Life satisfaction on the road to capitalism”. *Journal of Economic Behaviour and Organization*, **71**, pp. 130-145.

7. Gibbons, R. (1992). *Game Theory for Applied Economists*. Princeton University Press, Princeton, New Jersey.
8. Goyal, S. (2011). “Social networks in economics”. In *Handbook of Social Networks* (edited by P. J. Carrington and J. Scott).
9. Greenspon, J., and Rodrik, D. (2021). “A Note on the Global Distribution of Authorship in Economics Journals” *Working Paper No. 29435*, National Bureau of Economic Research.
10. Jackson, M. (2006). “The Economics of Social Networks”. In Proceedings of the 9th World Congress of the Econometric Society, Vol. 1 (edited by Richard Blundell, Whitney Newey, and Torsten Persson). Cambridge University Press, Cambridge.
11. Jackson, M. O. (2008). “Average distance, diameter, and clustering in social networks with homophily”. In *International Workshop on Internet and Network Economics* (edited by Christos Papadimitriou and Shuzhong Zhang)). Springer, Berlin, Heidelberg.
12. Marjit, S., Santra, S., and Hati, K. K. (2015). "Relative social status and conflicting measures of poverty: A behavioural analytical model". *Journal of Quantitative Economics*, **13**, pp. 77-86.
13. Mujcic, R., and Frijters, P. (2013). “Economic choices and status: measuring preferences for income rank”. *Oxford Economic Papers*, **65**, pp. 47-73.
14. Sivanathan, N., and Pettit, N. C. (2010). “Protecting the self through consumption: Status goods as affirmational commodities”. *Journal of Experimental Social Psychology*, **46**, pp. 564-570.
15. Van Long, N., and Shimomura, K. (2004). “Relative wealth, status-seeking, and catching-up”. *Journal of Economic Behaviour & Organization*, **53**, pp. 529-542.