Training Module 3

Free-Rides in GVTs

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Learning by Doing

The Problem

As organizations shift from hierarchical and rigid bureaucratic structures to more organic organizational designs, work teams become more prevalent. In recent years, the trend has been signified by a ubiquity of Global Virtual Teams (GVTs). Various studies suggest that between 50 and 70 percent of all white-collar workers in OECD countries at least occasionally work on projects that require some form of virtual collaboration. Of those 20 to 35 percent involve collaborations across national borders, and the number of such interactions is increasing (c.f., Duarte & Snyder, 2011; Kurtzberg, 2014).

The reliance on virtual communication has fundamentally changed how team members gather, share, exchange information, make decisions, and monitor progress. Virtual teams offer a number of advantages, including flexibility with respect to geography and timing. One problem with virtual teams is that the physical and psychological distance of its members exacerbates the fundamental team problem of free-riding (Pillis & Furumo, 2007).

The term '*Free Riding'* was first introduced in the economics literature (Olson, 1965) and later extended to the management literature (Jones, 1984). A form of social loafing, free-riding refers to "a tendency for individuals to fail to participate in collectively profitable activities in the absence of coercion or individual incentives" (Stigler, 1974, p. 359).

Decades of research in social psychology, organizational psychology, and communication have shown that the social context creates a powerful set of forces that influence group members' cognitions and behaviors, in particular with respect to preventing deviant behaviors and social loafing (Burnstein & Vinokur, 1973; Hackman, 1987; Maass & Clark, 1984). Virtual groups represent a substantially different social context than face-to-face groups (Hackman, 2002). In traditional collocated teams, social obligation and reciprocity among team members arise from closer acquaintanceship, shared experiences, common interests, and integration in one another's personal networks, including those external to the team. The separation in time, space, and geography of the members of virtual teams greatly weakens common social forces, thereby removing social pressures that minimize free-riding (Falk & Fischbacher, 2006). Moreover, cultural differences, which are an inherent feature of *GVT*s, further dissociate team members from their team and inhibit social and team identities, which further exacerbates the free-rider problem.

We propose that the damaging effects of free-riding on virtual team performance is non-linear and multi-dimensional. That is, the performance loss is neither limited nor proportional to the loss of labor due to free-riding; it's much greater (Figure 1). The most obvious performance cost due to free-riding is forfeiture of labor. However, a team's performance is further damaged by the increased coordination and internal maintenance cost necessitated by free-riding. Once free riding occurs, the workflow gets broken and deadlines can be missed, creating process loss by requiring intensified process management efforts to resolve coordination problems and develop a new plan.

Further, probably the most devastating effect of free-riding is that it damages team morale, thereby triggering what we call the "*rotten apple*" vicious cycle. Free-riding induces feelings of injustice, which undermines team morale, which undermines effort, which leads to more free-riding. Soon enough conflicts occur, a blame game starts, and team performance collapses. One "*rotten apple*" spoils the entire barrel.

With the growing ubiquity of GVTs and the acuteness of the free-riding problem under this form of work design, a study that could explain the mechanisms by which free-riding damages team performance and experimentally test effectiveness of commonly available strategies for minimizing free-riding would make a *major contribution* to HRM literature and practices.
Unfortunately, studying free-riding in GVTs is extremely difficult – prohibitive in most cases – because of the difficulties to obtain continuous and reliable access to a sizable team-level sample of corporate GVTs

performing comparable tasks. Furthermore, lab based studies do not lend themselves well to replicating the cultural, geographic, and temporal contextual issues that must be captured for a full understanding of GVT effectiveness.

We are in unique position to overcome the above challenges. Our quasi-experimental study on the mechanisms of free-riding and strategies for dealing with the problem will be based on a priority access to *X-Culture* (www.X-Culture.org), a large-scale international business collaboration project that involves annually about a 1,000 GVTs (500 twice a year) comprised of 3,000 MBA and business students and working professionals from all six continents (Taras et al., 2012; Taras et al., 2013). Working in GVTs where each member is from a different country, the project participants rely on virtual communication and face challenges of collaborating across time zones and cultures, a real business challenge, real rewards, and possible real losses. Furthermore, we will have a unique opportunity to study free-riding in GVTs longitudinally, manipulate various factors, including team composition and treatment, and have sizable samples in each of the variety of treatment conditions. The proposed study can offer a major leap forward in terms of the research design possibilities, richness, and validity of the findings from earlier research on GVTs.

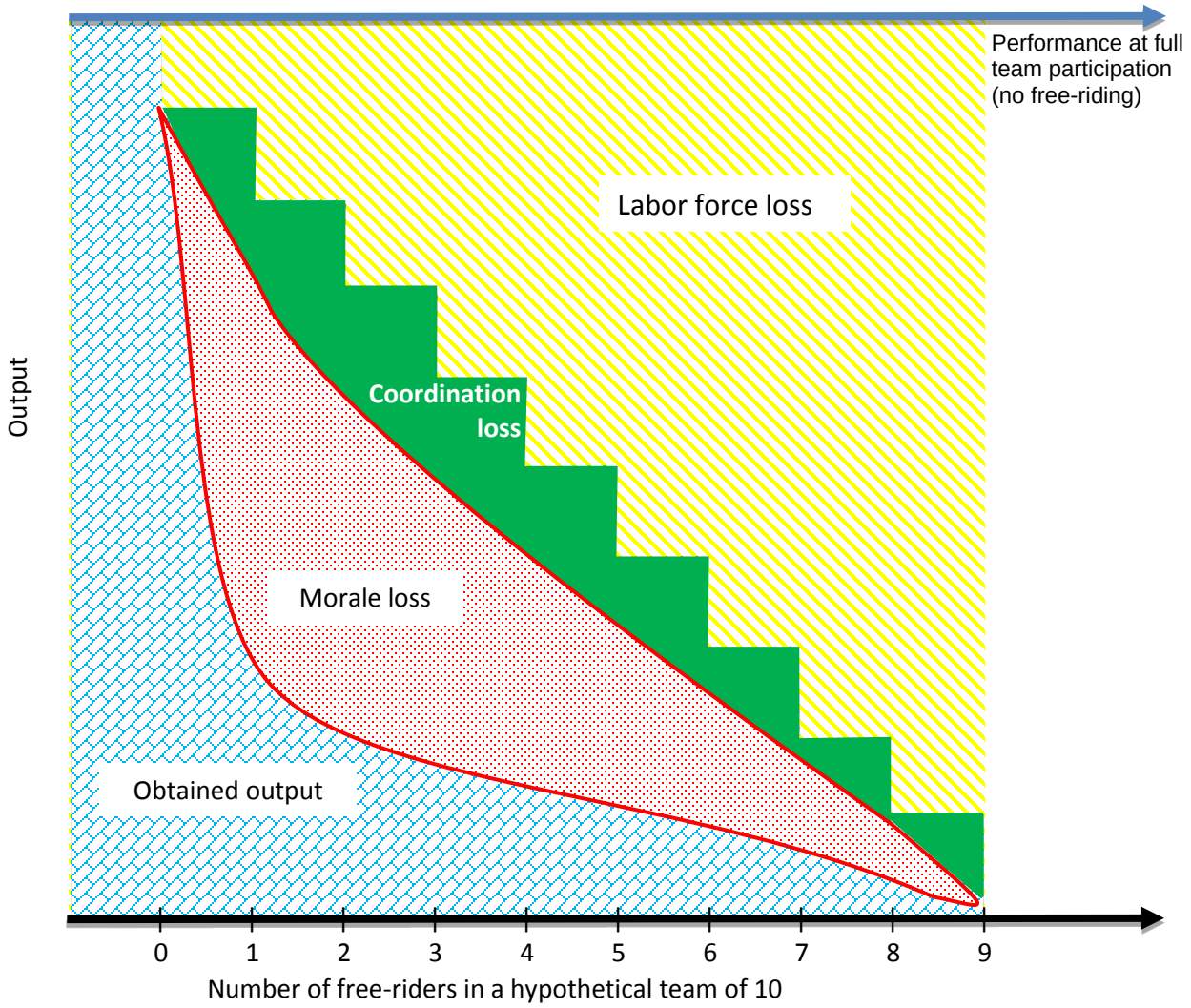
Theoretical Basis

The goal of the proposed study is twofold. First, we will explore the mechanisms by which free-riding affects group dynamics and performance. Second, we will examine the comparative effectiveness of various commonly available strategies for preventing and dealing with free-riding in GVTs.

Free-Riding Mechanisms

As discussed earlier, we hypothesize that the effect of free-riding is comprised of multiple components, which makes its effect non-linear and much greater than what would be the expected performance loss from reduced labor loss only. As illustrated in Figure 1, we propose that the performance losses due to free-riding stem from (1) labor force loss, (2) coordination loss, and (3) morale loss. While the effect of the reduced labor force is linear and directly proportional to the percent of the team member's time lost due to free-riding, the combined effect of all three components leads to a disproportionally rapid performance loss in response even to a minor occurrence of free-riding. For example, a loss of input from a single member due to free-riding in a team of ten will lead to a performance loss greater than 10 percent.

Figure 1. Performance Loss due to Free-Riding



The proposed study will also assess the exact magnitude of the performance loss due to free-riding in response to the different number and percent losses in labor force and will attempt to model the exact shape of the performance loss function. Figure 2 illustrates the key components of our hypothesized mechanism by which free-riding damages team dynamics and performance.

Different factors contribute to the probability of free-riding at different stages of team life. Accordingly, different forms of interventions are possible and suitable at these different times.

Intervention Opportunity 1

The first intervention opportunity to minimize chances of free-riding presents itself when the team is being formed. At this stage, it is still possible to manipulate key team characteristics to remove the factors contributing to free-riding. Several factors are hypothesized to play a role at the team forming stage:
Team size: Larger teams are more likely to experience free-riding. As the group size increases, it becomes easier to "hide" social loafing. Furthermore, diffusion of responsibility hinders motivation to contribute (Darley & Latane, 1968). When people work alone, the responsibility is then concentrated in one person and any shirking will be immediately linked to the person. In groups, the responsibility is shared. As the

team size increases, each person assumes less responsibility, which makes identifying shirking more difficult. The lack of contribution can go unnoticed which limits motivation and effort.

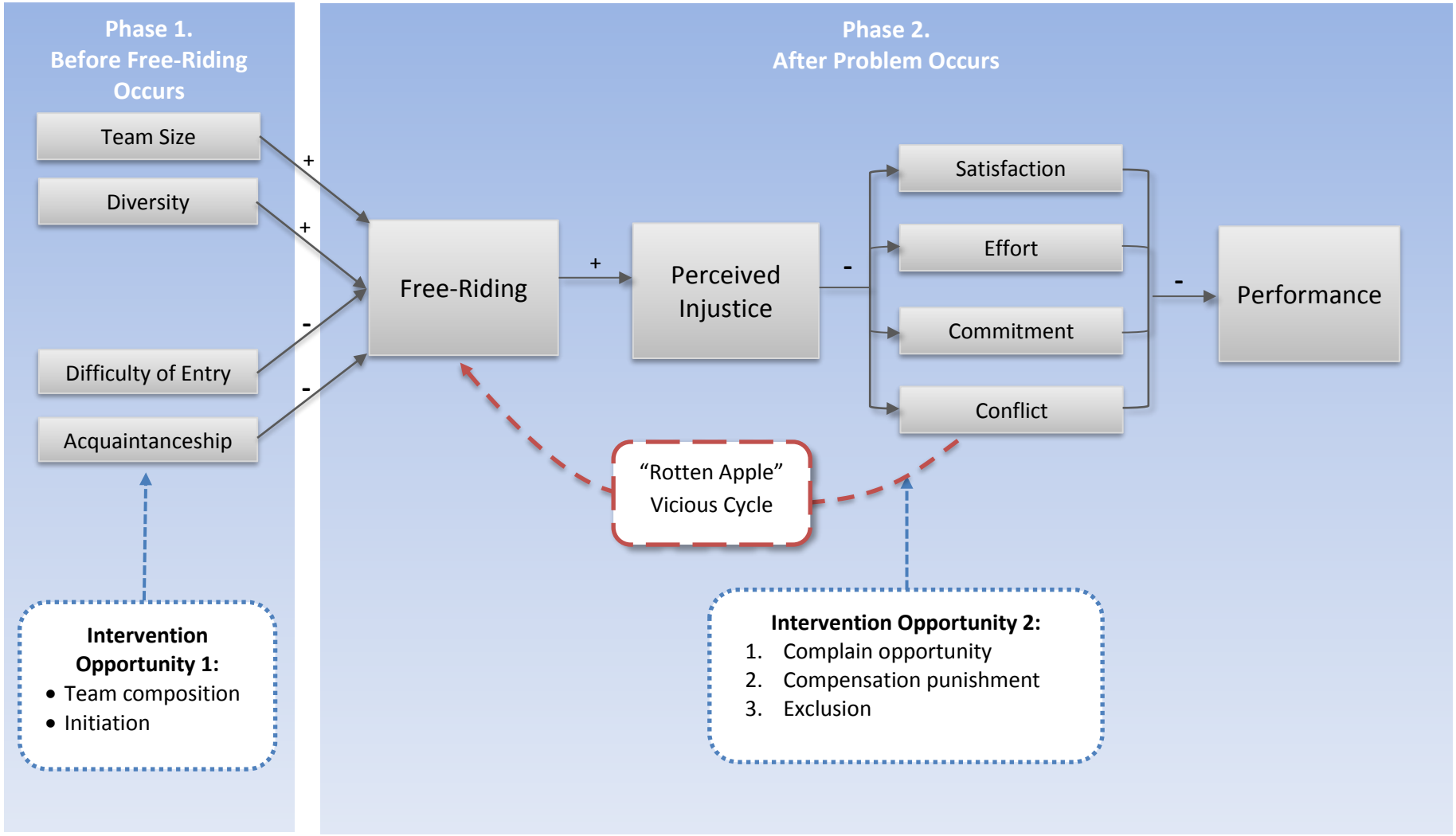
Team diversity: similarity-attraction theory postulates that people tend to associate with those who are similar and therefore familiar to them either in terms of such easily observable attributes as race, ethnic, origin or social status, or in terms of more subtle attributes such as attitudes and beliefs (Williams & O'Reilly, 1998). Therefore, homogeneity facilitates and diversity hurts group integration and cohesion (Watson & Kumar, 1992). As diversity increases, the members of the team have less in common, have less trust, feel less connected, the sense of social reciprocity and obligation that prevents free-riding vanishes (Jarvenpaa & Leidner, 1999; Katsikeas, Skarmeas, & Bello, 2009). Furthermore, the social queues and communicating patterns are more likely to differ across cultures making misunderstandings likely. Genuine effort to contribute and desire to connect may go unnoticed due to misinterpretation of the signals due to cultural or demographic differences (Barna, 1985; Maznevski, 1994; Shaw & Barrett-Power, 1998; Wlotko & Federmeier, 2012). The challenges will only be aggravated by the virtual nature of collaboration where low-context low-media-richness communication channels further limit opportunities for effective social exchange (Hambley, O'Neill, & Kline, 2007a, 2007b). In other words, two separate smaller teams will have a greater output than that of one larger team equal in size to the sum of the two teams.

The difficulty of entry: Prior research has shown that difficulty of entry makes membership in the team more valuable, which in turn leads to greater team commitment, cohesion, and effort (Burgess & Turner, 2000). In teams where membership depends on ability to pass rigorous selection tests and survive challenging initiations, team members not only perceive their membership on the team as more exclusive and valuable, but will feel stronger social and affective ties to their team members as they feel they have more in common and are more committed, which reduces perceived diversity and, ultimately, free-riding.

If confirmed, the hypothesis suggests that free-riding can be minimized by administering team member selection tests and publicizing the test difficulty and the low acceptance rate.

Acquaintanceship: Group members that are closely acquainted with one another are more interpersonally attracted, feel more social obligation and reciprocity, tend to contribute a greater effort toward a common goal, display more citizenship behavior, and shirk less. One of the reasons free-riding is more common in *virtual* teams is because in the virtual context the interactions tend to be less personal and more task-focused. Low media-richness of the communication media (e.g., email) and limited opportunities for off-work interaction often result in members of virtual teams not being acquainted with each another at the personal level. The cultural differences that often are an inherited feature of GVTs only make it more difficult to learn about other team members as their unfamiliar background context provides fewer queues and associations.

Figure 1. Free-Riding in Global Virtual Teams: Nature and Prevention Model



Intervention Opportunity 2

After free-riding occurs, we hypothesize that it is possible to stop this behavior by understanding how free-riding causes the "*rotten apple*" vicious cycle and removing the factors that perpetuate the cycle. As illustrated in Diagram 2, the key factor that induces further free-riding behavior is the perception of injustice. If free-riding occurs, the free-rider is seen as someone who gets the same benefits while contributing less. This is not fair – the free-rider's contribution-reward ratio is better than that of the other team members – so the rest of the team tries to restore justice. Usually, two basic options are available. First, the personal outcomes (rewards or punishments) can be adjusted to reflect the different levels of contribution. In this case, the free-rider's lower performance would be associated with lower personal gains. Unfortunately, adjusting the rewards/punishments is not always within the power of the team members.

Second, if rewards cannot be adjusted, the only other way to equalize the contribution-reward ratio across the team members is to lower one's own performance (Adams, 1965). Not only lowering one's performance ensures that one's contribution-reward ratio will be closer to that of the free-rider, each team member has an incentive to follow the free-rider behavior as soon as possible. The sooner one stops contributing, the better one's final contribution-reward ratio will be. The team member who stops contributing last will end up with the lowest reward-performance ratio. Accordingly, we hypothesize that intervention strategies that restore perceived justice in a team will be effective in stopping free-riding behavior after it occurs. Several interventions are available:

Opportunity to complain: The simplest strategy could be allowing the team members to formally complain about the free-rider. While this approach does not remove the problem per se, it ensures that the management knows of the injustice in the team and gives the team member hope that the justice will be restored. This may be a less effective strategy than the more radical ones described below, but it is likely to at least temporarily break the "*rotten apple*" cycle.

Reduced compensation: Formal reduction of the compensation of the free-rider will likely be more effective than the strategy detailed above as it not only gives hope that the justice will be restored but also provide a specific readily observable adjustment: free-riders get less. The free-rider can be punished by reducing his/her pay (in corporate teams) or grade (in academic teams). It would be especially effective if compensation hinged on peer evaluations. This way, the team can be sure that the punishment through a reduction of the compensation resides with the team members and, thus, is inevitable.

Exclusion: Finally, justice through equal contribution-award ratio across all team members can be ensured by removing the free-rider from the team. Excluding the free-rider does not improve the amount of labor force available to the team, but it does restore a sense of justice. While a loss of one team member may never bring the team back up to the level of performance it could have when all original team members performed to their fullest capacity, the output drop will only be equal to that of labor loss, but the losses due to coordination and morale could be avoided.

Free-Riding in Global Virtual Teams: An Experimental Study of Antecedents and Strategies to Minimize the Problem

Full text download

Abstract
Free-riding is a major problem in workgroups, particularly in global virtual teams (GVTs). This study explores mechanisms by which free-riding affects group dynamics and performance in GVTs, and experimentally test several commonly available strategies to alleviate the problem. The study was conducted using 2,163 GVTs composed of 15,453 people from over 40 countries who worked real business challenges presented by international companies. The results confirmed that the damage caused by free-riding is disproportionately higher than the loss in manpower and that many strategies implemented before the team start working on the project and/or after the problem of free-riding occurs can be remarkably effective in preventing and mitigating the problem. Presented here are the initial results of the study.

Main Findings
In the proposed study, we examined a large sample of global virtual teams doing comparable and consequential work over an extended period. Although the results of the study yet again showed how damaging free-riding is, the results of our experiments are very encouraging: free-riding can be effectively dealt with. Indeed, free-riding appears to not only reduce manpower available to the team but also lead to process losses and undermining the team morale, thereby further damaging team performance. However, several interventions appear to significantly reduce the problem.

At the onset of the project, creating teams that are smaller, more homogeneous and less dispersed can reduce free-riding rate by about 25%. If team member diversity is desired and cannot be compromised, or in addition to team composition, prompting team members to get to know each other at the personal level is likely to help in preventing free-riding. Just a few minutes investing in meeting team members in the first days of the project can significantly reduce free-riding down the road.

When free-riding occurs, doing nothing is the worst option. Up to 17% of the team members (or more than one per team in teams of 4 to 10 people in size) are likely to free-ride under this condition. Letting team members complain but doing nothing about it is not likely to solve the problem, although just a possibility of a complaint will bring a noticeable improvement. Regular peer evaluations will further help, especially if the results are shared with the team members.

The most effective strategy turned out to be a complete removal of the free-riders. Even though only a very small number of project participants were removed (less than 2% or just one per 50 teams), the threat of exclusion did wonders: the free-riding dropped by about 50%.

Table 5. Free-Riding Prevention Strategies, Frequency Analysis

Free-Riding Prevention Strategies	N	# of Free-riders	% of Free-riders
1. Nothing	847	1.09	16.97
2. Complain, no action	343	1.03	15.22
3. Complain, peer-evaluations not shared	382	1.00	14.17
4. Complain, peer-evaluations shared	82	0.94	13.19
5. Exclude if repeated complaints received	509	0.56	9.00
Grand Total	**2,163**	**0.99**	**14.82**

The Other Side of the Barricades:
Interviewing the Free-Riders, Not Their Managers and Co-Workers, On the Reasons Of and Ways to Deal With Free-Riding in GVTs

Full text download

Abstract
Based on a unique sample of 86 documented "free-riders" from 750 teams that completed a long-term international business consulting project, this study attempts to understand the reasons for and ways to deal with low performance in GVT context by looking at the problem through the eyes of the guilty ones, as opposed to the accounts of their active team members or project managers. Hundreds of pages of qualitative interview data are coded and analyzed. The findings are discussed with respect to HR managerial implications and future research directions.

Main findings and implications

Positive responses despite negative experience. Despite their unsatisfactory performance, most free-riders remain positive about the project and their team. So, problems of this nature do not necessarily mean the team member is a loss of the organization. They appear to remain committed to the organization and their co-workers and given another chance will likely do better.

Don't expect an admission of guilt. Even when faced with well-documented evidence of their unsatisfactory performance, most free-riders will not admit guilt. Many will agree their performance was poor, but the clear majority will attribute the problem to external causes. This is alarming as it means most free-riders to not recognize their personal can control their performance in GVTs.

First days of the team life are critically important. Free-riding tends to take root in the forming and storming stages of the team life. Almost always it is due to problems related to these initial contacts and interactions. If the team survives these initial stages, free-riding is much less likely to occur later. Moreover, about a quarter of to-be free riders could be detected (and excluded) even before the project commences. Leadership and training are very important at the team member selection stages, as well as at the beginning of the project.

Communication is the key. If we were to provide one best recommendation for dealing with the problem, it would be better inter-member communication. Most free-riders are not lazy irresponsible people. Under different circumstances, most would have turned out to be productive members of the teams. However, due to a lack of communication, they fail to get involved or later fail to resolve a conflict or figure out what and how should be done. Better communication could preclude or resolve most of the problems surrounding free-riding.

Withholding Effort in Teams: A Meta-Analytic Synthesis of Empirical Evidence on Social Loafing, Free Riding, and Free-Loading in Teams

Full text download

Abstract
By the means of a meta-analysis of 101 publications (112 independent samples, 458 data points) on social loafing, free-loading, and free-riding, we investigated the predictors and consequences of withholding effort in teams (WET). Our database includes samples from a variety of populations including students, lower level employees, and managers. We meta-analytically tested the predictive power of 36 different factors on WET that represented team member characteristic, team dynamics, and work design, and effects of WET on 6 team outcomes, representing team performance and psychological outcomes. The results are remarkably consistent: a number of factors reliably predict WET and occurrence of WET dramatically damages team performance and dynamics. The results clearly indicate that WET has a negative effect on team performance and team member well-being, but proper team member selection, team dynamics management, and work design can substantially alleviate the problem. Underexplored but promising areas in the extant literature are identified and directions for future research provided.

Main Findings
Best predictors of free-riding

Less free-riding if:

- Team members score high on consciousness (a personality trait) (r= -0.42)
- Membership in the team is prestigious (r= -0.55)
- Regular feedback (r= -0.41)
- Individual effort is tracked (r= -.38)

More free-riding if

- Team members think others shirk (r=0.40)
- Bullying in teams (r =0.46)
- Team morale low (r=0.52)
- Trust is low (r=0.42)
- Perceived injustice (r= 0.55)

Consequences of free-riding

- Team performance down (r= -0.37)
- Burnout (r= 0.46)
- Team cohesion down (r= -0.62)
- Motivation down (r= -0.35)

Preparing for the Theory Test

On the Theory Exam, the Coaches will be asked to show their understanding of the problem of free-riding in GVTs, including the prevalence of the problem, the main contributing factors, and the known methods to reduce the problem.

Additionally, the Coaches are welcome (but not required) to review additional literature on the topic. Google Scholar is an excellent source of quality research.

For the final reflection paper, Coaches can choose to propose more effective methods for reducing free-riding in GVTs, describe their observations related to the problem, or develop guides for team members, managers, instructors, or other Coaches to handle the problem.

Likewise, Coaches can choose to develop additional or better text-based training modules, record video lectures, or prepare live webinars that address this topic.

And as always, if you see any typos, poor language, or have other suggestions for improving this document, please share your corrections with Admin@X-Culture.org.