Study on the Internal Mechanism and Avoidance Path of Free-Riding Behavior from the Perspective of Team Common Goal Perception

Feimin Liu*, Junjie Zhu, Jiawen Xu, Fanfan Qiu, Lijie Lin

College of humanities and Foreign Languages, China Jiliang University, Hangzhou 310018, China.

Abstract: To clarify the internal mechanism and related avoidance path of "free-riding" behavior under the perception of team common goals, this study constructs a relevant model, and investigates the internal relationship and operation mechanism of shared goals, team members' charisma, and "free-riding" behavior through the research of individual and overall variables of team members, and obtains the avoidance path of related behavior according to the survey data and literature research. The research takes college students as the main object of investigation and adopts a questionnaire form to investigate the perception of their team's "free-riding" behavior. The results show that: (1) after controlling other factors, shared goals have a significantly negative correlation with "free-riding" behavior; (2) Team members' charisma is the mediating variable of the relationship between shared goals and "free-riding" behavior; (3) The predictive effect of shared goals on "free-riding" behavior and the mediating effect of team members' charisma is moderated by team support.

Keywords: "Free-Riding" Behavior; Shared Goals; Team Members' Charisma; Team Support; Mediating Effect; Regulation

1. Introduction

In team cooperation, the phenomenon of "free rider" has become a trend, but this phenomenon not only hurts the operation and performance of the team but also brings difficult problems to people's work and life (Qian Zhiyou, Shen Ming, 2013)[1]. Understanding and solving the problems caused by this phenomenon is particularly important for strengthening team cooperation and improving team performance.

According to existing studies, "free riders" have the following classifications.

Table 1 Classification of "free riders"

standard	results	scholar
Ability to work	Capable inaction type Self-incompetent and inactive type Incapacitated inaction type	Qian Zhiyou, Shen Ming, 2013[1] ;Li Yan, Yang Yi, Geng Liuna, 2010[2]
The time when the phenomenon occurs	Join the team with the purpose of "free-riding" type Change for various reasons after joining the team type	Qian Zhiyou, Shen Ming, 2013[1]

The causes of free riders, based on the perspective of psychology, can be divided into personal psychology and team environment. Personal psychological factors mainly lie in three aspects: demand level, emotional motivation level, and cognitive level. In terms of demand level, the middle and low-level demand members occupy the dominant position in team

* Feimin Liu (2001.11-), female (Han), Lishui, Zhejiang, undergraduate of China Jiliang University(310018), the research direction is public cultural services and government performance evaluation.

cooperation (Xu Shuang, 2014) [3]. Due to the lack of enthusiasm for the work itself, they constitute the main body of free riders (Qian Zhiyou, Shen Ming, 2013)[1]. In terms of the level of emotional motivation, a positive mental motivation system can improve the sense of responsibility for the positive work of group members, to encourage members to actively and seriously engage in group activities (Xu Shuang, 2014) [3]. On the contrary, "free-riding" psychology will appear. In terms of cognitive level, incompetent self-denial cognition plays a stronger role in limiting individual ability (Xu Shuang, 2014) [3]. The team environment mainly includes a management system and working atmosphere. In terms of the management system, the lack of rationality of target management (Qian Zhiyou, Shen Ming, 2013) [1], the unreasonable structure of team activities (Qian Zhiyou, Shen Ming, 2013) [1], the failure of the reward and punishment system (Li Yan, Yang Yi, Geng Liuna, 2010) [2], and the unclear division of functions (Xu Shuang, 2014) [3] all lead to the emergence of "free rider" phenomenon. In terms of the working atmosphere, the team with the "free-riding" phenomenon continued to grow in a weak state, members lack learning awareness, and the team also ignored its assistance (Li Yan, Yang Yi, Geng Liuna, 2010) [2].

From the perspective of cooperative competition theory, this paper studies the motivation of workers in a team production environment. The experimental data show that "free riders" are less than predicted, especially when the team competes with another team. (Mürüvvet Büyükboyaca, Andrea Robbett, 2017) [4] Therefore, when team members have common goals and are in a competitive environment, the probability of "free riders" will decrease. Based on the theoretical analysis of employee participation, if the organizational goals are closely related to the vital interests of "free riders" and give them some power (Lu Jie, Huang Xinjian, Zhang Fan, 2008) [5], then it will improve the enthusiasm of "free riders" and thus leave the "free riders" group. Based on expectation theory, when setting organizational goals and reward and punishment mechanisms, organizations need to deal with the relationship between reward and meeting individual needs (Liu Yongfang, 2008). Managers need to take into account the use of different incentives to meet different needs of the members of the organization and timely use positive reinforcement, negative reinforcement, and other means to stimulate the enthusiasm of those "free riders".

In summary, in the above theoretical perspective, this study combines the theory of cooperation and competition, employee participation theory, two-factor theory, and expectation theory to study the internal mechanism of "free-riding" behavior and common goals, and focuses on the mediating role of team members ' charisma in the relationship between the two and the moderating effect of team support, and explores the methods to avoid "free-riding" behavior in team cooperation. This is not only conducive to the improvement of relevant research in this field but also plays an important role in friendly team building in terms of practical significance, helping organizations to form an effective management mechanism, to accelerate the improvement of organizational construction.

1.1 Relationship between shared goals and "free-riding" behavior

The shared goal is a concept based on the principle of goal unification. The principle of goal unification refers to the that the more contributions of all departments and members in the organization are conducive to achieving the goal of the organization, the more reasonable the organization structure is. An organization is a collaborative system created to achieve a goal. The common goal is the objective foundation of organization establishment and existence (Qin Yong, 2013)[6]. The free-rider effect (N.S.Glance & B.A.Huberman, 1994)[6] is an effect of conflict between individual interests and group interests. Shared goals focus on mining the parts that match the team goals and individual goals, so that their conflicts can be minimized, that is, promoting the achievement of individual interests while pursuing group interests. It can be concluded that the existence of shared goals in theory will reduce the ' free rider ' behavior. Therefore, this study assumes that shared goals can negatively affect the "free-riding" behavior (H1).

1.2 Mediating effect of team members' charisma

Team charisma is a positive driving force to actively and consciously achieve team goals by stimulating team members to have strong emotional resonance and value recognition of team common goals. It can be seen from its definition that a shared goal is an important influencing factor of team charisma. Team members have a strong sense of identity and resonance

for shared goals can be considered the team's charisma; on the contrary, it is believed that the team's charisma is weak. Shared goals may positively influence team members' charisma. Using ideology to appeal to team members, team members can give up on personal interests, the group can be full of competition and vitality (Xie Jiangping, 2011)[7]; good team charisma is the key to the implementation of shared goals. The higher the team charisma, the higher the team members ' sense of identity for shared goals, the higher the enthusiasm for achieving goals, and the less prone to "free-riding" behavior. Therefore, this study assumes that shared goals may have an indirect impact on "free-riding" behavior through the mediating role of team members (H2).

1.3 Moderating effect of team support

Team support refers to the help and cooperation from organizations and individuals, as well as the concern and recognition of employees, which reflects the interpersonal relationship and work coordination within the organization. It includes: support and helps when employees encounter difficulties at work; the team's attention to and adoption of employees' suggestions and opinions; team recognition of staff goals and values; the team's concern for employees and so on. (Wang Jie, 2006). An obvious feature of a team with high cohesion is the coordination of relationships within the team. Mutual help and cooperation between individuals and between teams and individuals are common, so team members are more willing to cooperate (Westwood, 2002)[6], and then the "free-riding" behavior will decrease. It can be seen that the participation of team support will amplify the positive effect of shared goals on team charisma and the negative effect of shared goals on free-riding behavior. Therefore, this study assumes that team support may play a moderating role in the relationship between shared goals and "free-riding" behavior and team members' charisma, that is, the direct prediction effect of shared goals on "free-riding" behavior and the mediating effect of shared goals on team members' charisma will cause an increase in team support (H3).

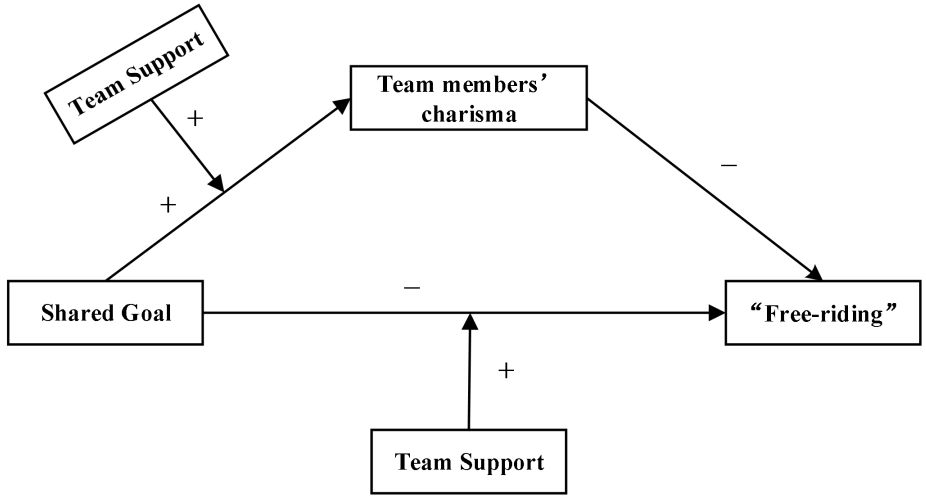

Figure 1 A hypothetical model of the relationship between team charisma, team support, and "free-riding" behavior

2. Methodology

2.1 Questionnaire survey method

2.1.1 Shared goal questionnaire

Carson J.B., Tesluk P.E. & Marrone J.A. [8]pointed out that shared goal is a key part of team climate construction, and developed a scale of shared goal for team members. Each item in the scale was scored 1-5 fifth grade, that is, the addition of

each item score is the total score of the subjects on the test scale. The higher the score, the higher the degree of goal sharing and the reliability of the scale in this study was 0.76.

2.1.2 Team support questionnaire

Carson J. B., Tesluk P. E. & Marrone J. A. [8], based on the fact that team support is a measure of team motivation and has an important impact on team performance improvement, developed a scale for team members to share goal support. Each item in the test scale adopts the fifth-level score of 1–5, that is, the sum of each item's score is the total score of the participants on the test scale. The higher the score is, the higher the team support is. The reliability of the scale in this study is 0.81.

2.1.3 Inspiration questionnaire

Dobrow S.R. & Tosti-Kharas J. [9]points out that charisma is a strong and meaningful passion that individuals experience in a certain field. The scale of charisma is helpful for organization managers and human resource managers to understand the morale and passion of employees. It is a practical tool for feedback on employees' work moods. Each item in the test scale was scored by 1-5 fifth grade, that is, the addition of each item score is the total score of the subjects on the test scale. The higher the score, the stronger the charisma. The reliability of the questionnaire in this study was 0.88.

2.2 Statistical analysis method

2.2.1 Descriptive statistics

This study uses descriptive statistical methods to describe the data obtained from the questionnaire survey, mainly including statistical analysis of the concentration trend, dispersion degree, distribution, and frequency analysis of the questionnaire data.[10] This paper aims to form a preliminary cognition of the current situation of the ' free rider ' phenomenon in the team and analyze its general rules by descriptive statistics.

2.2.2 Harman test

The data of this study come from a similar measurement environment, which is easy to cause the artificial covariation between the prediction variables and the effect standard variables, namely, "common method deviation".[10] Harman single factor test was used to test the co-variation.

2.2.3 Reliability and validity testing

In this study, the reliability and validity of the scale used in the questionnaire were tested to observe its reliability, consistency, and stability, to further determine the credibility and generalization of the conclusions.

2.2.4 Mediating effect model

In this study, the mediating effect of the simple mediation model in SPSS macro compiled by Hayes (2012) [10]on team members' charisma was analyzed to test the correctness of H2.

2.2.5 Regulatory effect model

This study analyzed and tested the moderating effect of team support through the first half of the hypothetical mediation model in the SPSS macro written by Hayes (2012) and the model was adjusted in the direct path to test the correctness of H3.

3. Results

3.1 Control and test of common method deviation

Program monitoring of common method deviation is difficult to operate and cannot completely remove common method deviation. [11]We consider using statistical methods to detect common method deviation in analysis (Zhou Hao, Long Lirong, 2004).[12] In this study, Harman single factor test was used to effectively control and detect common errors.[13] The results show that the variance decomposition ratio of the first common factor is less than 40%, that is, there is no significant common way error in the survey concluded.

3.2 Mean, standard deviation, and correlation matrix of variables

Description and correlation analysis results show that (table 1): The shared goal is negatively correlated with free-rider behavior, and positively correlated with team member charisma and team support; team members ' charisma is positively correlated with shared goals and team support, and negatively correlated with free-rider behavior; team support is positively correlated with shared goals and team members ' charisma, and negatively correlated with ' free rider ' behavior.

Table 2 Describing statistics, correlation analysis

	M	SD	Shared goal	Team members' charisma	"free-riding"	Team support
Shared goal	3.6731	0.89902	1	0.751**	-0.596**	0.774**
Team members' charisma	3.7508	0.90444	0.751**	1	-0.767**	0.834**
"Free-riding"	1.60	1.032	-0.596**	-0.767**	1	-0.647**
Team support	3.6731	0.89659	0.774**	0.834**	-0.647**	1

Note : * *.At the 0.01 level (double tail), the correlation is obvious.

3.3 Relationship between shared goals and "free-riding" behavior: moderated mediating variables

First, using Model4 (Model4 as a simple mediation model) in the SPSS macro of Hayes (2012) to test the mediating effect of team members' charisma in the relationship between shared goals and "free-riding" behavior under the control of gender, age and educational level. Results (Tables 2 and 3) showed that shared goals significantly predicted free-rider behavior ($t = -7.1384$, p0, $t = 11.056$, $p < 0.01$), and team members' charisma significantly predicted the negative effect of free-rider behavior ($B < 0$, $t = -7.6615$, $p < 0.01$). In addition, the upper and lower limits of bootstrap 95% confidence intervals for the direct effect of shared goals on "free-riding" behavior and the mediating effect of attention control do not contain 0 (Table 3), indicating that shared goals can not only directly predict "free-riding" behavior, but also predict "free-riding" behavior through the mediating effect of team member charisma. The mediating effect (-0.6391) and direct effect (-0.0329) accounted for 95% and 5% of the total effect (-0.6721), respectively.

Second, Model8 in the SPSS macro of Hayes (2012) (Model8 assumes that the first half and direct path of the mediation model are regulated, which is consistent with the theoretical model of this study) is used to test the moderated mediation model under the control of gender, age, and educational level. The results (Tables 4 and 5) show that after the team support is put into the model, the interaction term between shared goals and team support has a significant predictive effect on "free-riding" behavior and team members' charisma ("free-riding" behavior: $t = 0.0003$, $p < 0.01$). Team members' charisma: $t = 0.0005$, $p < 0.05$), indicating that team support can adjust the predictive effect of shared goals on team members' charisma.

A simpler slope analysis shows that (Figures 2 and 3), as shown in Figure 2, participants with lower team support have a significantly negative predictive effect on "free-riding" behavior ($p < 0.001$); however, for participants with a high level of team support, shared goals have a negative predictive effect on "free-riding" behavior ($p < 0.001$), but their expected impact is also large. It shows that with the increase in team support level, the predictive effect of shared goals on "free-riding"

behavior is also gradually enhanced. Figure 3 shows that shared goals have a significant positive predictive effect on team members' charisma in subjects with low team support ($p < 0.001$), while shared goals have a significant positive predictive effect on team members' charisma in subjects with low team support ($p < 0.001$), but the predictive effect is small. It shows that with the improvement of team support, the predictive effect of shared goals on team members' charisma is gradually improved. In addition, with the improvement of team support, shared goals are easier to improve team members' charisma and thus reduce "free-riding" behavior.

Table 3 Intermediary model test of team members' charisma

Regression model		Fit index			Apparent coefficient	
Outcome variable	Prognosis variate	R	R^2	F(df)	p	t
"Free-riding" behavior		0.7764	0.6028	29.4395		
	sexuality				0.6686	-0.4294
	age				0.3835	0.8753
	standard of culture				0.5474	0.6038
	shared goal				0.0000	-7.1384
Team members'		0.7548	0.5697	32.4342		
charisma	sexuality				0.2556	-1.1436
	age				0.8698	-0.1644
	standard of culture				0.8391	-0.2035
	shared goal				0.0000	11.056
"Free-riding" behavior		0.602	0.3624	13.9258		
	sexuality				0.1597	-1.4168
	age				0.3315	0.976
	standard of culture				0.5477	0.6034
	Team members' charisma				0.0000	-7.6615
	shared goal				0.0121	-0.2942

Table 4 Decomposition table of the total effect, direct effect, and intermediary effect

	Effect	BootSE	BootLLCI	BootULCI	relative utility value
Mediating effect of team members' charisma	-0.6391	0.1215	-0.8896	-0.4206	95%
direct effect	-0.0329	0.11	-0.2187	-0.2144	5%
total effect	-0.6721	0.1	-0.852	-0.464	

Table5 Moderated Mediation Model Test

Regression model		Fit indices			Apparent coefficient	
Outcome variable	prognosis variate	R	R^2	F(df)	p	t
		0.8564	0.7334	44.014		
Team members' charisma	sexuality				0.7862	-0.2721
	age				0.9502	-0.0626
	standard of culture				0.9456	0.0684
	shared goal				0.0081	2.7041
	team support				0.0000	7.5828
	shared goal*team support				0.0005	-1.903
		0.8088	0.6541	25.6614		
"Free-riding" behavior	sexuality				0.1931	-1.3108
	age				0.6973	0.3901
	standard of culture				0.4289	0.7945
	Team members' charisma				0.0000	-5.539
	team support				0.0073	3.7456
	shared goal				0.0071	3.0982
	shared goal* team support				0.0003	-0.9445

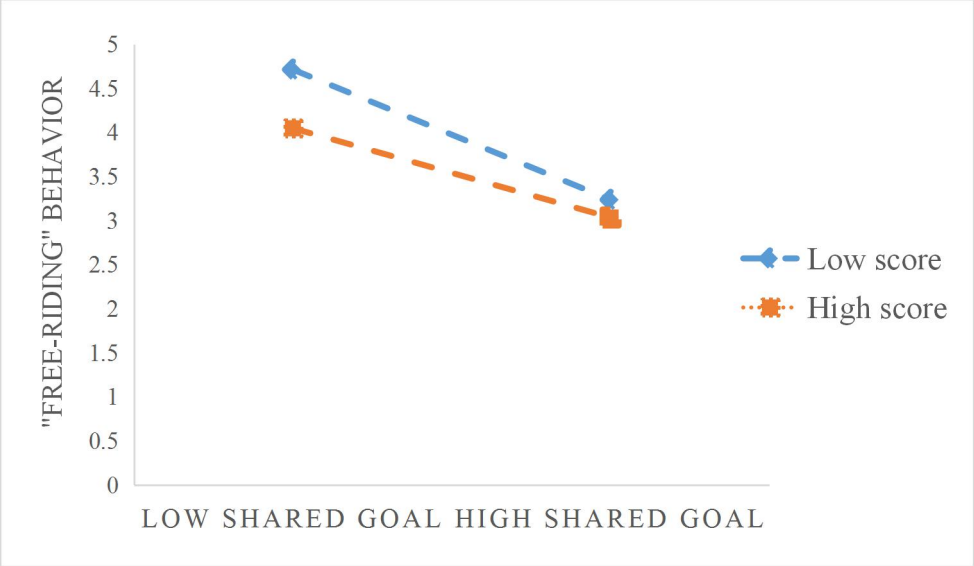

Figure 2 The moderating role of team support in the relationship between shared goals and free-riding behavior

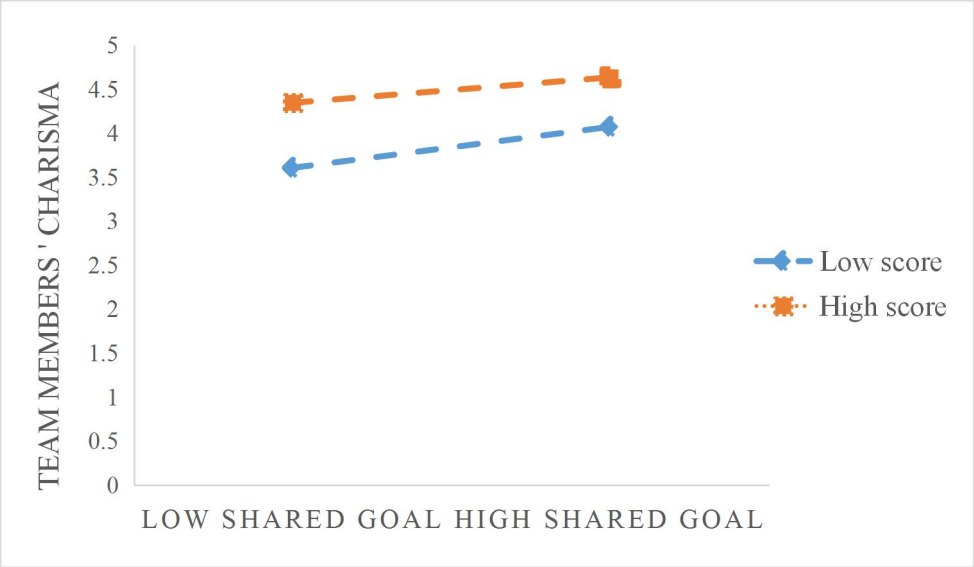

Figure 3 The moderating effect of team support on the relationship between shared goals and team members' charisma

4. Discussion

From the perspective of a shared perception of team common goals, this study constructs a moderated mediation model with team members' charisma as the mediating variable and team support as the moderating variable. This model not only shows that shared goals reduce "free-riding" behavior through the mediating effect of team members' charisma but also explains that shared goals have a more obvious influence on team members' charisma under the condition of team support. [14]The research results provide a certain theoretical basis and practical ideas for solving the "free-riding" behavior in the team and related research fields.

4.1 Mediating effect of team members' charisma

This study found that shared goals can reduce a team's "free-riding" behavior through the mediating effect of team members' charisma. The results show that team members' charisma can reduce team members ' free-riding behavior by stimulating team members ' strong emotional resonance and value recognition of team sharing goals, so that team members can consciously achieve team goals. The promotion of team members' charisma under shared goals can play a more prominent role in reducing "free-riding" behavior.

The purpose of team cooperation is to help team members to achieve a shared goal, but in this process, the dissatisfaction and fluke of team members will lead to the emergence of free-riding behavior, which deviates from the goal of team cooperation. The clarity of shared goals will enhance the charisma of team members, alleviate the dissatisfaction and fluke mentality of team members, and further reduce the possibility of free-riding behavior.

In short, sharing goals will reduce the "free-riding" behavior of team members by enhancing the charisma of team members.

4.2 Moderating effect of team support

This study constructs a moderated mediation model to analyze the role of team support in regulating the relationship between shared goals and team members' charisma and free-riding behavior. The results show that team support can moderate the relationship between shared goals and free-riding behavior, and also moderate the mediating model of team members' charisma as an intermediary variable.

For subjects with a low level of team support, a shared goal has a significant negative predictive effect on free-riding behavior, while for subjects with a high level of team support, a shared goal has a negative predictive effect on free-riding behavior and its predictive effect is larger. It indicates that with the improvement of team support level, the predictive effect of shared goals on free-riding behavior is gradually increasing. In short, team support can amplify shared goals, which will have a negative predictive effect on free-riding behavior.

Participants with a low level of team support, and shared goals have a significant positive predictive effect on team members' charisma. For subjects with low team support, a shared goal has a significant positive predictive effect on team members' charisma, but their predictive effect is small. With the improvement of team support, the predictive effect of shared goals on team members' charisma is gradually improved. In addition, with the improvement of team support, sharing goals is easier to improve team members' charisma and thus reduce "free-riding" behavior.

In short, shared goals make it easier to enhance the charisma of high team support team members and reduce "free-riding" behavior.

5. Ways to avoid "free-riding" behavior

5.1 Strengthen shared goals, increase team members' charisma, and reduce "free-riding" behavior

Sharing goal is the basis of team cooperation. On the premise of sharing goals, team members spend a lot of time actively and enthusiastically participating in the discussion of team projects to ensure that each member of the team has a clear and accurate understanding of the project. Team leaders will allocate corresponding tasks and develop detailed timetables to ensure the achievement of team goals. Therefore, in team building, leaders should set reasonable team-sharing goals. Team sharing goals need to be clear and challenging.

5.2 Increase team support to enhance the impact of shared goals on "free-riding" behavior avoidance

Teams lacking team support often have "free-riding" behavior problems. It is easier to lack an atmosphere of sustained growth. First of all, the team members are not enthusiastic, a weak sense of learning.[15] Secondly, the team neglects the support of the less competent groups, so that they do not have a sense of belonging, and are extremely easy to form "free-riding" behavior.[16]

Given the lack of team support, leaders should continue to pay attention to the psychological state of team members, take appropriate interventions under appropriate circumstances, such as encouragement in anxiety, and establish a harmonious interpersonal relationship and working environment.

5.3 Enhance team members' charisma and reduce team "free-riding" behavior

Teams with team charisma make team members have a sense of happiness and mission. Team cooperation is a good experience for members. In the process of team collaboration, the group culture and atmosphere of collaboration and reciprocity are established to improve the collective appeal of group members. It can not only improve the cohesion and sense of belonging of team members but also standardize individual words and deeds in the group so that individual expectations and group goals are highly consistent. Team leaders should rebuild team culture at the beginning of membership and establish common values to facilitate later management and progress.

5.4 Reduce unfair “free-riding” behavior and improve efficiency and motivation in teamwork

Hitchhiking behavior will directly affect the efficiency of team cooperation. Given the low efficiency of team cooperation, leaders should pay attention to clarifying the functions of team members and establishing perfect performance evaluation standards in team construction. [17]

Leaders should refine the team tasks and allocate them to each team member, with clear responsibilities and advantages. At the same time, the evaluation system also has a good deterrent effect, so that those members who have the idea of “free-riding” lose the opportunities and ways of “free-riding” behavior, to achieve the purpose of inhibiting the emergence of “free-riding”.

6. The significance and deficiency of the research

This study is helpful to explore the internal relationship between team sharing goals and “free-riding” behavior and provides effective suggestions for the teams to avoid “free-riding” behavior in cooperation, to facilitate the development of team construction and the improvement of organization construction. In addition, the study also plays an important role in strengthening team cooperation and improving team performance. This study focuses on the mediating role of team members’ charisma in the relationship between team sharing goals and free-rider behavior and the moderating role of team support and answers on how to avoid the emergence of free-rider behavior in team cooperation. [18]It is not only conducive to the improvement of related research in this field but also plays an important role in friendly team building in terms of practical significance. It helps the organization to form an effective management mechanism, thereby accelerating the improvement of organizational construction.

At the same time, because there are still some defects in this study, it must be improved in further scientific research. Firstly, this study mainly adopts the cross-sectional research design method, so the results of the study cannot be derived causally. The vertical design method and empirical research method should be used to conduct an in-depth analysis of its conclusions, and the design methods such as multi-layer linear model, aggregated cross-design, and manipulated independent variables and mediating variables are used to study the relationship between the “free-riding” behavior and the internal mechanism of shared goals. Secondly, our research has the problem of insufficient data and narrow scope, which is due to the limitation of our team members’ ability, time, and environment. Due to the situation of epidemic prevention and control, our questionnaire survey is only carried out on campus, with a small audience range and a small number of audiences. The difference between audiences is not obvious.[19] Therefore, in future research, we should expand the scope of the investigation, increase the number of investigators, draw more scientific conclusions, and further explore the influence of sharing goals on the team’s “free-riding” behavior.

References

[1] Qian ZY & Shen M. (2013). Analysis and Suggestions on the Phenomenon of ' Free-riding ' in Team Cooperation - Based on the Perspective of Management Psychology. China Management Informationization (15),71-72. DOI:CNKI:SUN: GLXZ.0.2013-15-043.

[2] Li Y, Yang Y & Geng LN. (2010) How to eliminate the phenomenon of free rider in the team.Social Psychology Science (2), 30-34.

[3] Xu S. (2014). Team managers ' countermeasures and suggestions on ' free ride ' in cooperation. Human resources development (20), 84-85. DOI:CNKI:SUN: XZRG.0. 2014-20-064.

[4] Büyükboyacı M, Robbett A. Collaboration and Free-riding in Team Contests, Labour Economics (2017).Volume 49, Pages 162-178.

[5] Lu J, Huang XJ & Zhang F.(2008). On enterprise high performance team building. Enterprise Economy (03),34-36.

doi:cnki:sun: quit.0.2008-03-011.
[6] Hu PY. (2015). On the ' free-riding ' behavior in team management.China market (13),106-107+110. doi:10.13939/j.cnki.zgsc.2015.13.106.
[7] Che C, Wu GH & Zhang ZH. (2020). Research on the Impact of Price Discount Level on Consumer Purchase Intention. Journal of Commercial Economics (23),76-79. DOI:CNKI:SUN: SYJJ.0.2020-23-021.
[8]Carson J.B.， Tesluk P.E. & Marrone J. A.(2007).Shared leadership in teams： An investigation of antecedent conditions and performance. Academy of Management Journal，50(5)，1217-1234.
[9] Dobrow SR. & Tosti-Kharas J.(2011). Calling: The development of a scale measure. Personnel Psychology， 64(4)， 1001-1049.
[10] Lian SL, Liu QQ, Sun XJ & Zhou ZK.(2018). Mobile Phone Addiction and College Students' Procrastination: Analysis of a Moderated Mediation Model. Psychological Development and Education (05),595-604. doi:10.16187/j.cnki.Issn 1001-4918. 2018.05.10.
[11] Zhu HT & Li CY. (2019). Is common method variance a “deadly plague”? Unsolved contention, fresh insights, and practical recommendations. Advances in Psychological Science (04), 587-599.
[12] Zhou H, Long LR. (2004). Statistical Remedies for Common Method Biases. Advances in Psychological Science (06),942-950. DOI:CNKI:SUN: XLXD.0. 2004-06-017.
[13] Xiong HX, Zhang J, Ye BJ, Zheng X & Sun LZ. (2012). Common Method Variance Effects and the Models of Statistical Approaches for Controlling It. Advances in Psychological Science (05),757-769. DOI:CNKI:SUN: XLXD.0.2012- 05-015.
[14] Qu TC, Zhang XF & Lu YX. (2019). Discussion on team performance management bonus ' free ride ' behavior avoidance. Human resources development (01),25-26. doi:10.19424/j.cnki.41-1372/d.2019.01.012.
[15] Zhang LL, Zheng XY, Ma J, Nie GL & Shi Y. (2009). Research on improving efficiency of team's knowledge transfer and sharing based on free ride. Studies inScience of Science(10),1543-1550. doi:10.16192/j.cnki.1003-2053.2009.10.016.
[16] Cui YW & Guo LF. The Influence of Employee Resilience on Employee Responsibility Innovation Behavior in new Research and Development Institutions:a Moderated Mediation Model. Science & Technology Progress and Policy. doi:10. 6049/ kjjbydc. 2021010615.
[17] Zhao BB, Cai H & Lian RR.(2020). Research on the Relationship between Leadership Empowerment Behavior and Job Embeddedness of Distance Employees——A Mediating Moderating Effect. Enterprise Economy (12),106-113. doi:10.13529/j.cnki.enterprise.economy. 2020.12.013.
[18] Tian CY, Jiang T, Yu XJ, Zhang ZP. The effect of college students ' mobile phone dependence on academic performance: a moderated intermediary [J]. Journal of Mudanjiang Normal University (Social Science Edition), 2021 (03): 75-86. DOI : 10.13815 / j.cnki.jmtc (pss).2021.03.008.
[19] Chen Z, Lin F & He JJ.(2020). Impact of team virtuality on knowledge sharing behavior: a moderated mediation model. Science-Technology and Management (06), 70-76. doi:10.16315/j.stm.2020.06.009.