

Review/Meta-analysis

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Revisiting the status-legitimacy hypothesis: Concepts, boundary conditions, and psychological mechanisms

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Abstract

The status-legitimacy hypothesis proposes that low-status groups are more inclined to justify the status quo as fair and legitimate than high-status groups. Although there are some research evidences for this hypothesis, many studies have found the opposite result, that disadvantaged groups are more dissatisfied with the social system. To resolve this disagreement, this article integrates relevant ideas and empirical research in three aspects. First, the conceptual approach emphasises that the controversy is a result of different operational definitions of social status and system justification in previous studies. The second approach, focusing on moderator variables, proposes that the disputes over past studies are probably due to moderator variables, which can influence the relationship between status and system justification. The third approach, based on psychological mechanisms, proposes that system justification theory cannot completely explain the psychological underpinnings of status differences in system justification, and in order to clarify this, it is necessary to explore other psychological processes. Future studies should continue to examine the mediation mechanisms and boundary conditions of the status-legitimacy hypothesis and may try to establish a nonlinear hypothesis. Moreover, researchers should also pay attention to the application of experimental methods and big-data methods.

The origin and controversies of the status-legitimacy hypothesis

With economic development, social inequality has become increasingly serious in many social-economic systems in the Asia-Pacific region. How do low-status disadvantaged groups in a social system perceive the fairness and justice of the system they live? In recent years, this question has aroused sustained attention of researchers in the field of social psychology. This is not only due to the significance of the question itself, but also because different studies have reported conflicting results. Some studies have shown that compared with high-status groups, low-status groups are to some extent more supportive and accepting of the status quo of the system, although this attitude may conflict with their own interests (e.g. Henry & Saul, 2006; Jost, Pelham, Sheldon, & Sullivan, 2003; van der Toorn et al., 2015). However, a number of studies have arrived at the opposite conclusion, that low-status individuals' evaluations of the fairness and justice of the social system are significantly lower than that of high-status groups (e.g. Brandt, 2013; Caricati, 2017; Kraus & Callaghan, 2014; Kraus, Rucker, & Richeson, 2017; Lee, Pratto, & Johnson, 2011; Osborne & Sibley, 2013; Yang, Guo, Hu, Shu, & Li, 2016; Zimmerman & Reyna, 2013). The goal of the current article is to discuss this dispute, based on an extensive review of the literature, including research findings from both Western countries and countries in the Asia-Pacific region. We first delineate the core of the dispute.

The origin of the dispute has a connection with system justification theory, although the theory itself does not stand on either side of the dispute, which we will clarify later. System justification theory was proposed by Jost and Banaji (1994) to explain the tendency of system support, which is often displayed by disadvantaged groups but is not congruent with their own interests. According to this theory, in addition to motives of ego justification and ingroup justification, people also have system justification motive, which refers to psychological processes contributing to justification of the existing social arrangements, even at the expense of personal interest. In other words, people are motivated (at least to some extent) to defend and justify aspects of the social system in which they live (e.g. Jost, 2011; Jost, Banaji, & Nosek, 2004), and low-status groups are no exception. Driven by the system justification motive, they tend to hold the same kind of system-justifying beliefs as elite groups (e.g., Jost, 2017). To investigate the existence of system-justifying beliefs among disadvantaged groups, Jost et al. (2003) examined a number of indicators of attitudes (toward the system) of individuals from different

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backgrounds in the United States. The result showed that compared with advantaged groups, those of lower social status were more supportive of the existing social system.

However, it should be noted that neither system justification theory nor Jost *et al.* (2003) have asserted that system-justifying beliefs of low-status/disadvantaged groups are always (or even ordinarily) stronger than that of high-status/advantaged groups. As Jost *et al.* have repeatedly stated, the results of their research only indicate that low-status groups also justify the status quo, but not that their system justification is necessarily stronger than that of high-status groups, because the impact of social status on system justification is not certain and involves multiple motives (e.g. Jost, 2017, 2018; Kay & Jost, 2014). Nevertheless, given their finding (Jost *et al.*, 2003) conflicts with people's common sense, this study was so impressive that it aroused great interest among researchers and has been repeatedly quoted and debated. A decade later, Brandt (2013) named it the "status-legitimacy hypothesis" in order to better define the debate. According to Brandt (2013), the status-legitimacy hypothesis refers to the view that members of low-status groups are more likely to see their social systems as legitimate than members of high-status groups, which represents research findings of one side of the dispute (but not the idea of system justification theory). In contrast, findings of the other side, including Brandt's (2013) study, support the opposite conclusion that disadvantaged groups are more dissatisfied with the social system.

Revolving around the status-legitimacy hypothesis, researchers have been arguing theoretically and empirically over the past few years. Recently, however, the theoretical debate is likely to wind down, as Jost (2017, 2018) has clearly pointed out that system justification theory has never maintained the status-legitimacy hypothesis, and that it is a misunderstanding among many researchers who oppose the status-legitimacy hypothesis. Nevertheless, the mystery of status-legitimacy hypothesis still exists because of numerous conflicting research findings. What is the relationship between social status and system justification? Between high- and low-status groups, who is more likely to justify the status quo? Why have there been conflicting research findings? Many researchers (including us) are still interested in unpacking the puzzle of the relationship between the two variables. Therefore, based on previous studies, this article proposes and integrates the following three possible ways to approach the question.

First is the conceptual approach, which proposes that these conflicting research findings have resulted from different operational definitions of social status and system justification in previous studies. Therefore, one possible solution is to specifically define the two concepts. Second is the boundary condition approach, which takes a number of moderators into consideration. It is proposed that some other variables may moderate the relationship between status and system justification, thus providing another way to examine the debate. The third approach focuses on psychological mechanisms of status-legitimacy hypothesis. Some researchers believe that the psychological process assumed in previous studies may not be enough to fully explain the psychological mechanism of system justification among disadvantaged groups. It is necessary to explore other psychological mediators to clarify the controversy. We propose that all of these three lines of research are conducive to settle the dispute over status-legitimacy hypothesis, and to reveal the complex relationship between status and system justification. Based on these explorations, researchers can carry out in-depth studies to unpack the puzzle, rather than merely debating whether the correlation is positive or negative. After all, exploring

differences in system justification between groups of different social status is not only an important academic issue in many fields of social psychology, but also has important implications for social development and social governance (e.g. Chang & Kang, 2018; Guo, Yang, & Hu, 2017). Fortunately, a number of researchers have been exploring the question through the above three approaches in recent years, and there have also been some excellent studies from Asia and the Pacific region. In the following sections, we will review and discuss these three lines of research.

The conceptual approach

The conceptual approach refers to a more detailed examination of the relationship between status and system justification by further clarifying the operational definitions of both status and system justification. Advocates of this approach think that although studies on the status-legitimacy hypothesis all take a certain classification of social status as the independent variable and the support and justification for the system or its various aspects as the dependent variable, the adopted operational definitions of status and system justification differ among researchers. As a result, the issue they are debating may not be the same one, and the research findings may be conflicting. Therefore, it is necessary to define status and system justification specifically.

What is status when we talk about the status-legitimacy hypothesis?

In different studies on the status-legitimacy hypothesis, the operational definitions of status are very different. Researchers use variables such as race (e.g. Henry, 2011; Sengupta, Osborne, & Sibley, 2015), social class (e.g. Vargas-Salfate, Paez, Liu, Pratto, & Gil de Zúñiga, 2018; Yang *et al.*, 2016), power (van der Toorn *et al.*, 2015) and even gender (e.g. Sutton *et al.*, 2008) to represent different status levels. (However, due to the relatively weak relationship between gender and status, among those studies devoted to this issue, few really use gender as the independent variable; thus, this article will not discuss it.) Beside these indicators, there are other ways to reflect participants' status. For example, through experimental manipulations, participants can be primed and divided into high- or low-status groups according to their performance in a math competition (Blue, Hu, Wang, van Dijk, & Zhou, 2016). Another example is to directly select members from typical advantaged and disadvantaged groups as participants (Hu, Guo, Li, & Yang, 2016).

As can be imagined, in examining the status-legitimacy hypothesis, the results will be different to a certain extent if different indicators are used to reflect the status. Although each indicator can be used to divide people into high- or low-status groups, due to different criteria of division, the differences in key psychological outcomes between high- and low-status groups may also be different.

The indicators of social class, for example, include educational attainment, income, occupational prestige, and individuals' subjective evaluation of their relative standing in the social hierarchy (i.e. subjective social class; Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012; Kraus, Tan, & Tannenbaum, 2013). In Brandt's (2013) research, it was found that when educational attainment was taken as the indicator, the lower the status, the higher the tendency to justify the system; but when subjective social class was taken as the indicator, the opposite was true, namely, there was a positive correlation between status and

perceived social fairness. For educational attainment and subjective social class, although both are commonly used indicators of social status, they may have different components in their constructs, resulting in opposite effects on system justification. We infer that one reason for the positive correlation between subjective social class and system justification may be that factors similar to social satisfaction are included in the concept of subjective social class. In contrast, higher education may lead to critical thinking, thus being negatively correlated with system justification.

Van der Toorn et al. (2015) also think that in order to more deeply investigate the issue of whether the disadvantaged justify the system more than the advantaged, it is necessary to make a more nuanced distinction among disadvantaged groups. Instead of selecting indicators of social status in general as in previous studies, they focused on powerlessness to explore the relationships with system justification. It was found that powerlessness predicted the justification of the system; that is, the more the individuals felt powerless, the more strongly they legitimized authorities, hierarchy and government. Based on this work, van der Toorn et al. suggest that powerlessness is the key conceptual component of social status that causes disadvantaged groups to be more convinced of the legitimacy of the system, because powerlessness can lead to a decreased sense of control, which in turn leads to needs for structure, order and certainty, thus eliciting system justification. Van der Toorn et al. consider that due to the lack of attention paid to this key factor, previous studies have made the relationship between status and system justification complicated and confusing. Therefore, this line of thinking can help clarify some of the conceptual confusions, although it cannot be claimed that powerlessness is the only key for solving the puzzle of the status-legitimacy hypothesis.

What is system justification when we talk about the status-legitimacy hypothesis?

Like the concept of social status, the operational definition of system justification is also very complex. In general, system justification refers to an individual's tendency to maintain and support the existing social, political and economic system and regard it as fair, legitimate and justified (e.g. Kay & Jost, 2014; van der Toorn & Jost, 2014). However, its extension is very rich due to the complexity of the social system itself, and thus there may be various manifestations of its legitimacy and illegitimacy. Therefore, a system-justifying belief may have various expressions in different areas (Jost et al., 2014). For example, variables such as general system justification (Kay & Jost, 2003), economic system justification (Jost & Thompson, 2000), social dominance orientation (Beierlein, 2014), and perceived fairness (Caricati, 2017) are all considered by Jost et al. (2014) as different forms of system justification. Although all of these concepts are concrete expressions of system justification in certain aspects, they may have different effects. For instance, research has found that general system justification and meritocracy ideology, two different system-justifying ideologies, have different impacts on corrupt intention (Tan, Liu, Huang, Zheng, & Liang, 2016; Tan, Liu, Huang, & Zheng, 2017). Specifically, meritocracy ideology positively predicts corrupt intention because of its connection with corrupters' power and privilege. General system justification, however, negatively predicts corrupt intention, as a result of avoiding the threats of corruption on the stability of general society. In another example, it was found that people's justification of wealth was actually separate from their justification of status (Baryła, Wojciszke, & Cichońska, 2015). In other

words, people usually tend to justify status, but not material wealth. In addition, some scholars (Brandt & Reyna, 2017) have proposed that although many previous studies equate acceptance of inequality with resistance to social change, and both are regarded as operational definitions of system justification, there are differences between them. They found that both resistance to social change and acceptance of inequality were positively correlated with perceived legitimacy in societies with high level of inequality; however, in more equal societies, resistance to social change was positively correlated with perceived legitimacy, whereas the correlation between acceptance of inequality and perceived legitimacy was negative or near zero. As such, the relationship between acceptance of inequality and resistance to social change is contingent on the level of (in)equality of the society (Brandt & Reyna, 2017).

Based on the above evidence, there are differences in the effects of different indicators of system justification. Thus, the disputes over the relationship between status and system justification may be partly due to different operational definitions of system justification in different studies. It is possible that for some operational definitions of system justification, low-status groups score higher than high-status groups; for other definitions, the opposite may be true. Some researchers have explored this issue and have distinguished dimension-specific legitimation from general legitimation (Sengupta et al., 2015). The latter refers to the justification of the entire social-political system in general by individuals, while the former refers to the justification of the specific status quo, which is relevant to the social status dimension being analyzed (e.g. for low-income groups, the specific dimension means the distribution system; or for disadvantaged races, the specific dimension means the ethnic policy that causes their low status). Sengupta et al. (2015) argue that the key to the establishment of the status-legitimacy hypothesis lies in the cognitive dissonance of disadvantaged groups (resulting from conflicts between their self-interest and their system justification motives), and that only when disadvantaged groups are evaluating a certain system arrangement that really causes their disadvantaged status do they experience psychological conflicts to a great extent and this psychological process of cognitive dissonance appears. Therefore, there may be no such process when they are making general evaluations of social fairness. Sengupta et al.'s arguments were supported by a comparison of New Zealand's advantaged and disadvantaged races, with data showing that disadvantaged ethnic groups exhibited higher support for the ethnic policy (dimension-specific legitimation) than the advantaged group, but these groups did not perceive the overall political system (general legitimation) as fairer than the high-status group. As seen by distinguishing and identifying dimension-specific legitimation, it is possible to more directly examine system justification among low-status groups.

However, the study by Sengupta et al. (2015) has been questioned. In line with the ideas of Sengupta and colleagues, Caricati (2017) divided the social status of individuals according to income and then examined their attitude regarding the wide income gap (dimension-specific legitimation). The data failed to replicate the results of Sengupta et al. because it was found that low-income individuals were more dissatisfied with the wide income gap. The reason might be that low-income individuals' identification with their income status was weaker than disadvantaged races' identification with their race status. As a result, their cognitive dissonance with the income distribution system was less obvious than disadvantaged races' cognitive dissonance with ethnic policies. In short, although there is relatively little research evidence available, we believe that it is worth exploring the solution

of the status-legitimacy puzzle by examining the specific definitions of system justification. Caricati (2017) also believes that, due to the complexity of the system, certain dimensions must be measured in order to understand the status-legitimacy relationship in depth.

The boundary condition approach

The boundary condition approach holds that the reason for the disputes over the relationship between status and systems justification in previous studies is probably because the relationship is influenced by some moderator variables. Thus, the relationship may be different at different levels of moderator variables. Based on this, researchers have investigated the boundary conditions of the status-legitimacy hypothesis from personal or social factors.

Personal factors

Some researchers suggest that a sense of control may moderate the relationship between status and system justification (Yang *et al.*, 2016). Using social class as the indicator of status, they found that low-class individuals had a lower level of system justification than did high-class individuals, but this effect was moderated by the sense of control. Specifically, when the sense of control was low, low-class individuals exhibited fewer tendencies to support the social system; however, when the sense of control was high, the difference in system justification between low- and high-class individuals disappeared, as levels of justification rose for the low-class individuals. Although this study did not further discover under what circumstances low-class individuals would tend to perceive more fairness in the system than would high-class individuals, it at least showed to a certain extent that the effect of status-legitimacy hypothesis might vary at different levels of personal control. Moreover, some studies have paid attention to the moderating effect of the opposite variable of the sense of control (i.e. the sense of restriction). It was found that low-class individuals expressed more dissatisfaction with the system when they perceived how the system restricted them; in contrast, when the perceived level of restriction was low, they expressed more positive attitudes toward the system as high-class individuals (Li, 2014). In addition, the study of Zhou, He, Yang, Lao, and Baumeister (2012) found that when individuals experienced a prolonged period of control deprivation, they might be better able to accept the status quo of the circumstance by self-regulation, thereby implicating a higher level of acceptance of the status quo.

The moderating effects of some other personal variables on the status-legitimacy relationship have also been examined. In one recent study (Chang & Kang, 2018) on the relationship between income (an indicator of status) and redistribution preference (a typical indicator of system-justifying attitude), it was found that the poor were generally more supportive of income redistribution, thus expressing lower system-justifying attitude than the rich. However, when the level of national identification or fatalism was high, the difference between the poor and the rich in redistribution preference diminished. It is a pity, however, that this study also failed to find out under what circumstances low-status individuals would justify the system more than high-status individuals.

Aside from the above factors, social mobility may also moderate the status-legitimacy relationship. Studies have shown that regardless of the social class to which participants belonged, upward mobility within five years independently and positively predicted their sense of fairness and positive attitude towards the

redistribution policy (Whyte & Han, 2008). It was also found that perceived social mobility was positively correlated with system-justifying attitude (e.g. Day & Fiske, 2017; Shariff, Wiwad, & Aknin, 2016). Although no studies have examined the interaction effect of social mobility and social status on system justification, it can be inferred that given their higher needs for social mobility, low-status individuals' social mobility perception may predict system justification better than high-status individuals. In addition, Kraus and Tan (2015) found that Americans tended to overestimate the possibility of social mobility. This finding implies that the results supporting the status-legitimacy hypothesis may be due to high perceptions of social mobility among Americans. As a consequence, the relationship between status and system justification may alter if one's perception of social mobility is relatively low. In short, although there is no direct evidence showing that social mobility can moderate the relationship between status and system justification, it is also a potential moderator that can be further investigated in the future.

Social factors

Social structure and sociocultural factors may affect ideology more so than personal factors. Whether low-status individuals in a social system support or oppose that system may also be influenced by the characteristics of the society itself. Brandt (2013) proposed three variables that may have an impact on this issue, and assumed that in societies with high levels of civil liberties, high levels of inequality, or a prevailing meritocratic culture, low-class individuals tend to believe more in the fairness of the system than high-class individuals and that there is no such effect if the three societal conditions do not exist. However, the findings in his study showed that only the level of social inequality had a moderating effect. In addition, different indicators of status and system justification were used by Brandt (2013), with results showing that the interaction effects of status and social inequality on system justification were not consistent.

Caricati (2017) also examined whether the freedom and equality of a society might moderate the status-legitimacy relationship. He used samples collected from 36 nations, with participants' self-placements in their social hierarchy, social class and personal income as three indicators of their social status. The human freedom index (HFI) and the Gini index were taken from evaluation data released by international authorities. It was found that the effect of status on perception of social fairness was significant and that disadvantaged groups were more likely to perceive the social distribution as unfair compared with advantaged groups. Moreover, an interaction effect was also found: the more the nation was free and equal, the greater the gap in the perceived fairness between advantaged groups and disadvantaged groups. Although perceived fairness increased in more free and equal nations for both disadvantaged and advantaged groups, the increment among advantaged groups was more significant. In addition, Vargas-Salfate *et al.* (2018) also found the moderating role of social equality, and their findings were more in line with the status-legitimacy hypothesis: in social systems with high levels of inequality, the degree of system justification of low-status groups was significantly higher than that of high-status groups, but in social systems with low levels of inequality, the correlation between status and system justification was not significant. The above three studies showed to some extent the moderating effect of social equality on the status-legitimacy relationship. However, this moderating effect is not robust, and results of simple effects are also inconsistent within

their studies when using multiple indicators of status and system justification. Thus, it remains to be examined in future studies.

In addition, some scholars have examined the possible influences of sociocultural and racial factors on the status-legitimacy relationship because the relationship between status and endorsement of legitimacy may also vary in different cultural groups. For instance, Sengupta et al. (2015) found that Maori (a low-status race) always exhibited a very low level of system justification, either when evaluating the fairness of New Zealand's overall social system, or when evaluating the fairness of New Zealand's ethnic-group relations (i.e. a specific dimension of the social system). If the Maori sample was excluded, the system justification of low-status groups was higher than that of high-status groups on the issue of ethnic-group relations. Thus, the authors suggest that the cultural norms shared by some groups may have their own specificities, which may affect the status-legitimacy relationship. For Maori, group norms of anti-system have persisted for a long time, and thus they can retain the perception of system unfairness even in the face of anxiety resulting from cognitive dissonance (e.g. Manuela & Sibley, 2013). Therefore, cultural factors should not be neglected when exploring the moderators of status-legitimacy relationship.

The psychological mechanism approach

The third approach focuses on psychological mechanisms of status predicting system justification to investigate the relationship between the two variables. Researchers using this approach are less concerned with whether or when low-status groups are more supportive of the status quo than high-status groups, but are rather concerned with psychological processes whereby low-status groups justify or do not justify the status quo. System justification theory proposes that system justification originates from epistemic, existential and relational needs to reduce uncertainty, threat and social discord, which explains why disadvantaged groups tend to justify the system (e.g. Jost, 2017, 2018). However, some researchers argue that this process alone is not enough to understand the status-legitimacy relationship. Thus, they have put forward some new psychological mechanisms, which may provide important avenues for solving the puzzle of status-legitimacy hypothesis in future research.

In this regard, the research by Owuamalam and colleagues (Owuamalam, Rubin, & Spears, 2016; Owuamalam, Rubin, Spears, & Weerabangsa, 2017) is representative. They suggest that in the past there have been two theoretical perspectives from which to explain intergroup relations and social ideologies of low-status groups. In addition to system justification theory, there are also relevant discussions from the perspective of social identity theory. However, the two theories offer competing propositions in explaining the reason why disadvantaged groups sometimes tend to support the system more than advantaged groups. System justification theory proposes that low-status groups are more likely to support the system when they are less concerned about interests of themselves and their ingroups. In contrast, social identity theory holds that justification should be motivated most among low-status individuals when they are more concerned about their own interests and their ingroups, because their interests are related to the legitimacy of the social system and they can only feel hopeful about the future by acknowledging the legitimacy of the status quo. Owuamalam et al. (2017) used Malaysians and Australians as participants in their experiments, and the results showed that low-status individuals endorsed societal systems more strongly when

their group interests were strong, thus supporting the viewpoint of social identity theory.

Based on social identity theory, Owuamalam, Rubin, and Spears (2018) propose that low-status groups' attitude of system justification may result from three psychological processes. First, it is merely a passive reflection of social reality. For example, members of disadvantaged groups may acknowledge that people with a higher social class have better education and income. This acknowledgment represents a passive acceptance of social reality. Second, low-status groups may interpret the overarching system (e.g. country) to be an extension of the ingroup that includes the higher status. Thus, their system justification may be a form of ingroup bias. Third, low-status individuals may justify systems as fair in order to support their hope that, in the longer term, the system may allow their group to improve its social status. This is consistent with their above line of thinking (Owuamalam et al., 2016, 2017). In short, as Owuamalam and colleagues have suggested through their research, there may be more complicated mechanisms involved in the status-legitimacy relationship other than the motive of system justification.

Moreover, some scholars have noted that the key that triggers system justification may be cognitive factors (Hussak & Cimpian, 2015). The cognitive pathway explanation emphasizes that the most important psychological basis for system justification is the inherent cognitive tendency; that is, the tendency of individuals to pay more attention to their intrinsic characteristics when perceiving external objects and to make more internal attributions for their own results. When socioeconomic disparities (such as the gap between rich and poor) are perceived in this way, it is natural to think that the difference between things is due to differences in intrinsic factors (e.g. income disparity is due to the differences in inherent characteristics of the rich and the poor), thereby taking socioeconomic disparities for granted and thus believing that the social system is fair and legitimate and should be supported (Hussak & Cimpian, 2015). In their studies, Hussak and Cimpian (2015) did find that participants had a greater tendency to make more internal attributions for the differences in economic status between people (i.e. considering high-status individuals as more intelligent and more competent than low-status individuals), and the support for the system was positively predicted by the degree of internal attribution. And in order to be different from studies based on system justification theory, Hussak and Cimpian (2015) controlled effects of participants' palliative motives in their research, because previous studies had emphasized that system justification is a result of individuals' need to alleviate anxiety. Therefore, Hussak and Cimpian's (2015) results showed that the cognitive factor independently triggered the tendency to justify the system without taking the motive of system justification into consideration.

Based on the findings of Hussak and Cimpian (2015), Chinese researchers (Yang et al., 2016) have further integrated social class into their study. As previous studies have shown that low-class individuals tend to make fewer internal attributions for socioeconomic disparities (e.g. Li, 2014) and that a lower level of internal attribution for socioeconomic disparities corresponds to a lower level of system justification (Hussak & Cimpian, 2015), Yang et al. (2016) hypothesized that the effect of social class on system justification was mediated by attributional tendency for the rich-poor gap. Specifically, they proposed that when explaining socioeconomic disparities, low-class individuals were more likely to attribute it to external factors (such as resource distribution, regional disparity), thus exhibiting lower level of system justification. Yang et al. (2016) conducted two studies using different samples and

indicators of social class; both results gave support for the mediation model of class-attribution-justification. Thus, it not only replicated the cognitive pathway of system justification proposed by Hussak and Cimpian (2015), but also demonstrated the cross-cultural consistency of the conclusion with Chinese samples. Therefore, the perspective of social cognition can provide new research avenues in exploring the status-legitimacy relationship.

In addition to the above, the perspective of compensatory control may also be a psychological process that helps to explain the status-legitimacy hypothesis. According to this perspective, when the sense of control is low, or when one's control ability is threatened by the external environment, individuals will experience a tendency for structural need, unconsciously increasing their needs and preferences for order and certainty (e.g. Landau, Kay, & Whitson, 2015). This need for structure is considered as a trigger of system justification, because the system can provide individuals with a general structure, order and certainty, compensating for the threat to their sense of control they suffer (e.g. Kay & Friesen, 2011). Many studies have supported this theory and found that a low sense of control or deprivation of control can induce system justification (e.g. Kay, Gaucher, Napier, Callan, & Laurin, 2008; Friesen, Kay, Eibach, & Galinsky, 2014). For instance, one study by Chinese researchers (Liu, Wang, & He, 2014) found that low levels of perceived control could prompt individuals to purchase more domestically produced goods (a form of system support). Although there are few studies directly linking compensatory control to status-legitimacy hypothesis, this perspective is also one direction that future studies may explore, because studies have found that low-status individuals are more likely to exhibit compensatory control (e.g. Li, Lu, Xia, & Guo, 2018). Thus, given cognitive dissonance may not be the only explanation for the mechanism between status and system justification, it is important to further explore other possible psychological processes.

General discussion

Regarding the status-legitimacy hypothesis, we have reviewed and discussed three lines of research. By further clarifying the definitions of status and system justification, it may help to better clarify the independent and dependent variables, and make the relationship in question more specific. By examining moderators of the status-legitimacy relationship, it may help explain why there are divergent results of the correlation between status and system justification in previous studies. By introducing explanatory perspectives other than system justification motive, it may help to reveal the complex processes underpinning the status-legitimacy relationship, and why low-status groups justify or do not justify the status quo.

Although there has been some progress along these lines of research, the puzzle of status-legitimacy hypothesis has not yet been resolved. Even for some representative research findings, most have not been replicated by subsequent studies, and the current results in this field are fragmented and lack a unified theoretical framework to integrate them. Therefore, we believe that future research can further investigate the status-legitimacy relationship from the following aspects.


First, the moderator and mediator variables of the relationship between status and system justification should be further explored. Since the work of Brandt (2013), more studies have begun to move from simply focusing on the direct effect of the status-legitimacy hypothesis to paying more attention to its boundary conditions. This line of thought in research is worth an ongoing investigation.

Although there are relatively few robust conclusions from previous studies, some variables have been found to possibly play a role, such as the level of social inequality (e.g. Brandt, 2013; Caricati, 2017; Vargas-Salfate *et al.*, 2018). Moreover, because most current studies focus more on the moderating effects of the social factors, there is less attention paid to personal factors (such as personality and living circumstances) and cultural factors (such as individualism/collectivism and power distance), which are also worthy of further attention. Therefore, investigations based on non-European and non-American cultural groups are especially worthwhile. In addition, research on the psychological mechanism of status-legitimacy relationship also needs to be enhanced. Although there have been some opposing voices (e.g. Hussak & Cimpian, 2015; Owuamalam *et al.*, 2018), most studies are still based on the perspective of system justification theory. Thus, these opposing theoretical views need to be investigated by more empirical research.

Second, almost all of the current studies assume that the relationship between status and sense of system legitimacy is linear, but a few studies have found that the relationship between the two may be nonlinear. Using occupational prestige as the indicator, Li (2014) divided Chinese social classes into three levels: low, middle and high. The results showed that both high-class and low-class individuals tended to believe that the gap between the rich and the poor in China was mainly determined by personal factors, not by the social system, whereas middle-class individuals tended to think that the social system was responsible for the increasing gap between the rich and the poor, and thus were more dissatisfied with the social system. A study by Wang (2011) also found that the effect of income on an individual's sense of distribution fairness was not linear: the sense of distribution fairness of middle-income individuals was significantly lower than that of low-income individuals, while there was no significant difference between high-income individuals and low-income individuals. Such findings, though rare at present, may also deserve attention, because if the real relationship between status and sense of system legitimacy is nonlinear but is regarded as linear in research, then the difference in sampling will directly determine the direction of the effect, be it positive or negative. In other words, if some studies use samples only covering middle-class individuals, while others use samples only covering low- or high-class individuals, there will be disagreements between their results. Of course, this line of thought still requires more empirical support.

Lastly, more research paradigms and methods can be applied in future studies of this topic. Past studies related to the status-legitimacy hypothesis mainly used a correlation method. Although that method has great advantages in examining the question with large samples, the experimental method can establish causality and provide new evidence different from the past. Therefore, it is also worth the attention of researchers, and indeed some attempts have been made to utilize it. For instance, Owuamalam *et al.* (2017) tried to examine the variance in participants' system-justifying beliefs by manipulating their temporarily perceived (high or low) statuses. Moreover, as the dependent variables of the question are usually measured by questionnaires, after the introduction of experimental methods, dictator games and ultimatum tasks may also be used to examine participants' fairness judgment and fairness sensibility (cf. Blue *et al.*, 2016). All of these studies can provide new insights into the debate on the status-legitimacy hypothesis. In addition, it is particularly worth mentioning that the big-data method may also be considered in the future. Obtaining and using data on people's social status and social attitudes from relevant websites or social media through natural language processing may yield very

persuasive results. In conclusion, there are still numerous potential and interesting research entry points for future researchers to solve the puzzle of the status-legitimacy hypothesis.

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References

- Baryla W., Wojciszke B. and Cichocka A. (2015).** Legitimization and delegitimization of social hierarchy. *Social Psychological and Personality Science*, **6**, 669–676.
- Beierlein C. (2014).** System-justifying ideologies. In A.C. Michalos (Ed.), *Encyclopedia of Quality of Life and Well-Being Research* (pp. 6575–6579). Dordrecht, Netherlands: Springer.
- Blue P.R., Hu J., Wang X., van Dijk E. and Zhou X. (2016).** When do low status individuals accept less? The interaction between self- and other-status during resource distribution. *Frontiers in Psychology*, **7**, 1667.
- Brandt M.J. (2013).** Do the disadvantaged legitimize the social system? A large-scale test of the status-legitimacy hypothesis. *Journal of Personality and Social Psychology*, **104**, 765–785.
- Brandt M.J. and Reyna C. (2017).** Individual differences in the resistance to social change and acceptance of inequality predict system legitimacy differently depending on the social structure. *European Journal of Personality*, **31**, 266–278.
- Caricati L. (2017).** Testing the status-legitimacy hypothesis: A multilevel modeling approach to the perception of legitimacy in income distribution in 36 nations. *The Journal of Social Psychology*, **157**, 532–540.
- Chang H.I. and Kang W.C. (2018).** Why do the poor oppose income redistribution? An empirical test on the impacts of nationalism and fatalism. *The Social Science Journal*, **55**, 422–431.
- Day M.V. and Fiske S.T. (2017).** Movin' on up? How perceptions of social mobility affect our willingness to defend the system. *Social Psychological and Personality Science*, **8**, 267–274.
- Friesen J.P., Kay A.C., Eibach R.P. and Galinsky A.D. (2014).** Seeking structure in social organization: Compensatory control and the psychological advantages of hierarchy. *Journal of Personality and Social Psychology*, **106**, 590–609.
- Guo Y., Yang S. and Hu X. (2017).** Ideal balance versus realistic ladder: Social stratification and fairness researches based on psychological perspectives. *Bulletin of Chinese Academy of Sciences*, **32**, 117–127. (Published in Chinese)
- Henry P.J. (2011).** The role of stigma in understanding ethnicity differences in authoritarianism. *Political Psychology*, **32**, 419–438.
- Henry P.J. and Saul A. (2006).** The development of system justification in the developing world. *Social Justice Research*, **19**, 365–378.
- Hu X., Guo Y., Li J. and Yang S. (2016).** Perceived societal fairness and goal attainment: The different effects of social class and their mechanism. *Acta Psychologica Sinica*, **48**, 271–289. (In Chinese)
- Hussak L.J. and Cimpian A. (2015).** An early-emerging explanatory heuristic promotes support for the status quo. *Journal of Personality and Social Psychology*, **109**, 739–752.
- Jost J.T. (2011).** System justification theory as compliment, complement, and corrective to theories of social identification and social dominance. In D. Dunning (Ed.), *Social Motivation* (pp. 223–263). New York, NY: Psychology Press.
- Jost J.T. (2017).** Working class conservatism: A system justification perspective. *Current Opinion in Psychology*, **18**, 73–78.
- Jost J.T. (2018).** A quarter century of system justification theory: Questions, answers, criticisms, and societal applications. *British Journal of Social Psychology*. Advance online publication.
- Jost J.T. and Banaji M.R. (1994).** The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, **33**, 1–27.
- Jost J.T., Banaji M.R. and Nosek B.A. (2004).** A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, **25**, 881–919.
- Jost J.T., Hawkins C.B., Nosek B.A., Hennes E.P., Stern C., Gosling S.D. and Graham J. (2014).** Belief in a just God (and a just society): A system justification perspective on religious ideology. *Journal of Theoretical and Philosophical Psychology*, **34**, 56–81.
- Jost J.T. and Thompson E.P. (2000).** Group-based dominance and opposition to equality as independent predictors of self-esteem, ethnocentrism, and social policy attitudes among African Americans and European Americans. *Journal of Experimental Social Psychology*, **36**, 209–232.
- Jost J.T., Pelham B.W., Sheldon O. and Sullivan B. (2003).** Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology*, **33**, 13–36.
- Kay A.C. and Friesen J. (2011).** On social stability and social change understanding: When system justification does and does not occur. *Current Directions in Psychological Science*, **20**, 360–364.
- Kay A.C., Gaucher D., Napier J.L., Callan M.J. and Laurin K. (2008).** God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, **95**, 18–35.
- Kay A.C. and Jost J.T. (2003).** Complementary justice: Effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, **85**, 823–837.
- Kay A.C. and Jost J.T. (2014).** Theoretical integration in motivational science: System justification as one of many “autonomous motivational structures”. *Behavioral and Brain Sciences*, **37**, 146–147.
- Kraus M.W. and Callaghan B. (2014).** Noblesse oblige? Social status and economic inequality maintenance among politicians. *PLoS One*, **9**, e85293.
- Kraus M.W. and Tan J.J. (2015).** Americans overestimate social class mobility. *Journal of Experimental Social Psychology*, **58**, 101–111.
- Kraus M.W., Piff P.K., Mendoza-Denton R., Rheinschmidt M.L. and Keltner D. (2012).** Social class, solipsism, and contextualism: How the rich are different from the poor. *Psychological Review*, **119**, 546–572.
- Kraus M.W., Rucker J.M. and Richeson J.A. (2017).** Americans misperceive racial economic equality. *Proceedings of the National Academy of Sciences*, **114**, 10324–10331.
- Kraus M.W., Tan J.J. and Tannenbaum M.B. (2013).** The social ladder: A rank-based perspective on social class. *Psychological Inquiry*, **24**, 81–96.
- Landau M.J., Kay A.C. and Whitson J.A. (2015).** Compensatory control and the appeal of a structured world. *Psychological Bulletin*, **141**, 694–722.
- Lee I., Pratto F. and Johnson B.T. (2011).** Intergroup consensus/disagreement in support of group-based hierarchy: An examination of socio-structural and psycho-cultural factors. *Psychological Bulletin*, **137**, 1029–1064.
- Li J. (2014).** *Study on the Tendency of Attribution on the Gap Between the Rich and the Poor in Different Social Strata*. Guangzhou, China: World Publishing Corporation. (In Chinese)
- Li J., Lu M., Xia T. and Guo Y. (2018).** Materialism as compensation for self-esteem among lower-class students. *Personality and Individual Differences*, **131**, 191–196.
- Liu W., Wang H. and He L. (2014).** When one is dying, will h/she buy domestic products? Exploring whether, why and when the exposure to death-related information will (not) increase domestic brand choices. *Acta Psychologica Sinica*, **46**, 1748–1759. (Published in Chinese)
- Manuela S. and Sibley C.G. (2013).** The Pacific Identity and Wellbeing Scale (PIWBS): A culturally-appropriate self-report measure for Pacific peoples in New Zealand. *Social Indicators Research*, **112**, 83–103.
- Osborne D. and Sibley C.G. (2013).** Through rose-colored glasses: system-justifying beliefs dampen the effects of relative deprivation on well-being and political mobilization. *Personality and Social Psychology Bulletin*, **39**, 991–1004.
- Owamalam C.K., Rubin M. and Spears R. (2016).** The system justification conundrum: Re-examining the cognitive dissonance basis for system justification. *Frontiers in Psychology*, **7**, 1889.
- Owamalam C.K., Rubin M. and Spears R. (2018).** Addressing evidential and theoretical inconsistencies in system-justification theory with a social identity model of system attitudes. *Current Directions in Psychological Science*, **27**, 91–96.

- Owuamalam C.K., Rubin M., Spears R. and Weerabangsa M.M. (2017). Why do people from low-status groups support class systems that disadvantage them? A test of two mainstream explanations in Malaysia and Australia. *Journal of Social Issues*, **73**, 80–98.
- Sengupta N.K., Osborne D. and Sibley C.G. (2015). The status-legitimacy hypothesis revisited: Ethnic-group differences in general and dimension-specific legitimacy. *British Journal of Social Psychology*, **54**, 324–340.
- Shariff A.F., Wiwad D. and Akinin L.B. (2016). Income mobility breeds tolerance for income inequality: Cross-national and experimental evidence. *Perspectives on Psychological Science*, **11**, 373–380.
- Sutton R.M., Douglas K.M., Wilkin K., Elder T.J., Cole J.M. and Stathi S. (2008). Justice for whom, exactly? Beliefs in justice for the self and various others. *Personality and Social Psychology Bulletin*, **34**, 528–541.
- Tan X., Liu L., Huang Z. and Zheng W. (2017). Working for the hierarchical system: The role of meritocratic ideology in the endorsement of corruption. *Political Psychology*, **38**, 469–479.
- Tan X., Liu L., Huang Z., Zheng W. and Liang Y. (2016). The effects of general system justification on corruption perception and intent. *Frontiers in Psychology*, **7**, 1107.
- van der Toorn J. and Jost J.T. (2014). Twenty years of system justification theory: Introduction to the special issue on “Ideology and system justification processes”. *Group Processes & Intergroup Relations*, **17**, 413–419.
- van der Toorn J., Feinberg M., Jost J.T., Kay A.C., Tyler T.R., Willer R. and Wilmuth C. (2015). A sense of powerlessness fosters system justification: Implications for the legitimation of authority, hierarchy, and government. *Political Psychology*, **36**, 93–110.
- Vargas-Salfate S., Paez D., Liu J.H., Pratto F. and Gil de Zúñiga H. (2018). A comparison of social dominance theory and system justification: The role of social status in 19 nations. *Personality and Social Psychology Bulletin*, **44**, 1060–1076.
- Wang F. (2011). Perceptions of distributive justice of the residents in contemporary China’s large cities: An empirical study based on the survey in Shanghai. *Society*, **31**, 155–183. (In Chinese)
- Whyte M.K. and Han C. (2008). Popular attitudes toward distributive injustice: Beijing and Warsaw compared. *Journal of Chinese Political Science*, **13**, 29–51.
- Yang S., Guo Y., Hu X., Shu S. and Li J. (2016). Do lower class individuals possess higher levels of system justification? An examination from the social cognitive perspectives. *Acta Psychologica Sinica*, **48**, 1467–1478. (Published in Chinese)
- Zhou X., He L., Yang Q., Lao J. and Baumeister R.F. (2012). Control deprivation and styles of thinking. *Journal of Personality and Social Psychology*, **102**, 460–478.
- Zimmerman J.L. and Reyna C. (2013). The meaning and role of ideology in system justification and resistance for high- and low-status people. *Journal of Personality and Social Psychology*, **105**, 1–23.