Status As a Valued Resource*

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The striving for status has long been recognized in sociology and economics. Extensive theoretical arguments and empirical evidence propose that people view status as a sign of competence and pursue it as a means to achieve power and resources. A small literature, however, based on arguments from biology and evolutionary psychology, proposes that people pursue status as an (emotional) goal in itself, independent of competence and expressed by culturally flexible symbols. We present results of an experiment with human subjects from five different national cultures. We found that the subjects valued status independently of any monetary consequence and were willing to trade off some material gain to obtain it. Although this result was stable across the five cultures, the intensity of the status motive corresponded to Hofstede's power distance index of the respective culture. Finally, the amount of status seeking observed differed for men and for women, a preliminary but intriguing observation that deserves further study.

Humans strive not only for access to resources and material benefits but also for intangibles such as status, which is characterized by a rank-ordered relationship among people associated with prestige and deference behavior (e.g., Ridgeway and Walker 1995). Much of the research in sociology views status as a means to obtain future resources (e.g., Lin 1990, 1994); status also leads to power (e.g., Thye 2000). This implies that people should pursue status "rationally," as a symbol of ability and as a means to obtain resources.

It has also been suggested, however, that status may be not only a means to an end but

also an end in itself, an intrinsic component of an individual's utility function in addition to the pursuit of resources (e.g., Barkow 1989; Emerson 1962; Frank 1988). In this paper, we test experimentally whether status may represent an end in itself by showing that subjects are willing to trade off an ephemeral status symbol (which will not carry over into their lives after the experiment, and thus will not lead to resources) against an immediate resource (money). Thus status itself can be a valuable resource that generates direct utility for individuals. Intrinsic status seeking by individuals has important implications for social and economic systems because it can provide a powerful motivation to perform; it also can lead to unproductive competitions with no obvious social value, such as in the overconsumption of positional goods (Frank 1985; Loch, Huberman, and Stout 2000).

After briefly reviewing previous work on status-seeking behavior, we introduce the experimental model and hypotheses. Next, we discuss the results, and we conclude with suggested topics for further research.

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OVERVIEW OF RELATED WORK

In sociology, status structures are defined as "rank-ordered relationships among actors describing the interactional inequalities formed from actors' implicit valuations of themselves and one another according to some shared standard of value. Status refers to one's standing in a social hierarchy as determined by respect, deference and social influence" (Ridgeway and Walker 1995:281).

Early social scientists were quite willing to see status as an intrinsically valued social resource (e.g., Veblen 1899; Weber 1964).¹ Similarly, Emerson (1962, 1972) viewed status recognition as an "ego-reward," a highly valued (emotional) good that could be given by a lower-powered partner in an exchange to increase the higher-powered partner's "emotional investment" and make the power balance more equal.

Expectations state theory concentrates on how regularly observed inequalities (and associated expectations) govern opportunities, participation, evaluation, and influence in groups with a common goal (e.g., Bales 1953; Berger, Fisek, et al. 1977; Blau 1964); it does not focus on what motivates status striving. Although the theory is not inconsistent with the idea of status as an intrinsic emotional goal (Berger, Wagner, et al. 1985), it has not examined how individual status striving may pit group members against a common group goal.²

Other research has approached status simply as a rational tool: it can provide a signal about product quality and thus can help guide a consumer's choice of product (Podolny 1997). At the same time, status can be used as a means to gain valuable resources via a better hierarchical position in society (Lin 1990, 1994). Status leads to power (by increasing the value of a high-status individual's goods; e.g., Lovaglia 1994; Lovaglia 1997; Thye 2000). This point is consistent with studies in which people with higher status were conceded higher benefits in negotiations (Ball and Eckel 1996) and market interchanges (Ball et al. 2001), and were credited with different personality traits by their cosubjects (Gerber 1996). In Ridgeway's work on status construction theory (Ridgeway and Balkwell 1997, Ridgeway et al. 1998; Ridgeway and Erikson, 2000) in encounters between experimental subjects with different status levels, the lower-status subjects were willing to adopt beliefs that disfavored themselves in relation to their higher-status counterparts, and such beliefs could spread through a population via observation.5002204)

In summary, this work is consistent with the view of status as based on competence and serving as a means to an end such as power or resources (although not necessarily consciously). Some researchers, however, have called for acknowledgement of the role of emotions in group behavior: "Sociologists have unwisely elevated the rational over the emotional in attempting to understand and explain human behavior. It's not that human beings are not rational-we are. The point is that we are not only rational. What makes us human is the addition of a rational mind to a preexisting emotional base" (Massey 2002:2; also see Runciman 1998; Tooby and Cosmides 1990).

In line with this argument, work in economics has formalized status as a component of the utility function that people maximize (e.g., Bolton and Ockenfels 2000; Coelho and McClure 1993; Congleton 1989; Kahneman and Thaler 1991; Konrad and Lommerud 1993; Robson 1992). Kemper (1991) observed that status assigned to experimental subjects systematically causes positive emotions (if the subject is accorded status) or negative emotions (if status is lost or given to another subject). In keeping with Emerson's power dependence theory, Frank (1984) showed that workers' pay scales sometimes are compressed because low-status workers must be "paid" for giving high-status workers the pleasure of prestige. Frank (1988) argued that striving for status as a valuable resource could lead to strong motivational effects if status depends on workers' relative productivity (or performance). Loch et al. (2000) extended Frank's model to show that status also may reduce productivity if it rests on "political" criteria.

¹ Social relationships could rest on various affectual, emotional, or traditional bases (Weber 1964:137).

² In our experiment, participants pursue a status symbol that pits them against the group. There is no performance toward any group goal (see next section).

Some of this work draws on biology and anthropology and on the fact that status behavior is a general tendency among primates. Evolution favors efficient competition among group members, to be performed with as little risk of injury as possible. Determining which of two competing individuals would be likely to win in an encounter, without actual fighting, leads to a status hierarchy in primate groups. Human prestige has developed from the primate status tendency but has become symbolic and flexible (because ancient humans often migrated to different habitats). Status criteria are largely determined culturally-for example, by skills, knowledge, or the control of resources, or even arbitrarily (Barkow 1989). At the same time, the primate status bias favoring physical size still exists, though weakly: tall men tend to be listened to more than short men, are granted more respect, and, on average, enjoy better career progress (e.g., Cialdini 1993:181-82). Moreover, tall men tend to have more reproductive success: women actively select for stature in male partners (Pawlowski, Dunbar, and Lipowicz 2000).

People in all cultures crave respect and recognition (e.g., Cialdini 1993, 2001; Güth and Tietz 1990). This suggests that status sometimes may be based not merely on performance but on *any* culturally accepted symbol, and that people may pursue such a symbol not to gain resources but as an end in itself.

In summary, we find a strong theoretical basis as well as empirical support for the fact that status signals competence, provides access to power and resources, and therefore is pursued consciously in many situations. The social sciences, however, still lack empirical evidence for the pursuit of status as an (emotional) end in itself (an exception is Bakshi and Chen 1996 in the context of stock market prices). Our experiment attempts to address this situation.

A STATUS-SEEKING EXPERIMENT: MODEL AND HYPOTHESES

The experimental model consists of a two-stage game based on Tullock's (1980) "rent seeking" formulation, in which the participants try to win a risky all-or-none payoff.³ In the first stage, four players in a group compete against one another to win the right to participate in a lottery held in Stage 2 of the game. They do so by allocating to that goal a certain amount of their game card endowments, which are fixed and equal for all players (this is the Stage 1 "expenditure" or "investment"). From all the game cards allocated by the players in one group toward winning the first stage, the experimenter randomly pulls one card; the owner of that card is the winner of the first stage.

In the status condition of the experiment (but not in the no-status condition), the Stage 1 winner receives public recognition from all other players (announced by the facilitator at the outset) in the form of applause. Status (resting on prestige rather than on a formal position) is conveyed by an expression of recognition and approval from others, such as a standing ovation or applause (Barkow 1989:203; Frank 1995:113; Ridgeway and Walker 1995). Applause is a universally recognized way of expressing such approval.

In both conditions of the experiment the winner of Stage 1 is permitted to take part in a lottery (the second stage). In Stage 2 the experimenter replaces the cards that the Stage 1 winner spent in the first round with "loser cards," and then draws one card from the total combined stack of game cards and loser cards. If the player wins the lottery (that is, if one of his or her remaining game cards is drawn rather than a loser card), the player receives the prize for the game. Thus the chance of winning the prize decreases with an increase in the investment made to win the first stage. The participants therefore are forced to make a trade-off between allocating more of their budget to influence the outcome of Stage 1 and increasing their chances of winning in Stage 2.

³ The first stage modeled a contractor's investment in an effort to win a government contract; the second stage, the execution of the contract. Competition forces the contractors to overinvest (e.g., engage in influencing) in the first stage in order to win the contract; the overinvestment in turn, forces them to cut corners in the second stage so as not to lose money. Thus two-stage contracts ("rent seeking") may cause wasteful activity.

Our experiment shows that people are willing to overinvest in Stage 1, thus making a monetary trade-off for an arbitrary status symbol that carries no resource significance for the future. As a result, the status symbol *reduces* the group's performance by diminishing everyone's chances of winning the payoff. This behavior would be irrational unless people cared about it intrinsically.

To model a player's decision, suppose

that x_i is player *i*'s Stage 1 expenditure, $\sum_{j\neq i} x_j$ is the aggregate rent-seeking expenditure of the opponents in Stage 1, w_i is player *i*'s initial endowment, $w_i - x_i$ is the amount left for Stage 2, and U_p is the utility derived from the predetermined and publicly known prize P > 0.

In the status condition of the game, winning the first stage brings recognition and thus confers status. If status carries value, we would expect individuals to gain utility from achieving it, in addition to the utility derived from the final prize. We call this utility derived from status U_s . This is a special case of the utility function used in Loch et al. (2000): status is evaluated as per the definition *relative* to the other players; here, only being first (winning the stage) brings recognition, while no other ranks bring any. As the experimenter draws from all the game cards allocated by the players for the first round, the probability that player *i* wins the first

stage is $x_i / \left(x_i + \sum_{j \neq i} x_j\right)$.

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Given that the player has succeeded in reaching the second stage, the chance of winning the prize is expressed by the probability that one of the player's remaining cards is drawn, or $(w_i - x_i)/w_i$. Thus each player faces the following first-stage problem:

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$$\frac{Max_{k} \mathcal{E} U_{i}(x_{p} | x_{-i})}{x_{i} + \sum_{j \neq i} x_{j}} \left[\left(\frac{w_{i} - x_{i}}{w_{i}} \right) U_{p} + U_{S} \right].$$
(1)

In this utility function, status and monetary utility are additive, in keeping with previous models (e.g., Loch et al. 2000) and with empirical results in sociology (Berger, Fisek, et al. 1977). This point implies that the presence of status does not interact with risk preferences over money.

Formal Result

This game contains a unique Nash equilibrium that is characterized by

$$x_{i} = -\sum_{j \neq i} x_{j} + \sqrt{\left(\sum_{j \neq i} x_{j}\right)^{2} + w_{i} \cdot \sum_{j \neq i} x_{j} \left(1 + \frac{U_{s}}{U_{p}}\right)}, \quad (2)$$

$$for \ i = 1, \dots, n.$$

The following argument proves the formal result. Taking the actions x_j of the other players as given, the first derivative of player *i*'s objective function is $[(w_i - x_i) \sum_{j \neq i} x_j - x_i$ $(x_i + \sum_{j \neq i} x_j)] U_p + (x_i + \sum_{j \neq i} x_j) w_i U_s$. Setting the first derivative to zero for all players yields Eq. (2). Furthermore, it is a straightforward matter to show that the second derivative is negative; thus the objective function is strictly concave for each player. Therefore there exists a unique Nash equilibrium that is characterized by the first-order conditions (Harker and Pang 1990; Nash 1950). Note that in the no-status condition, Eq. (2) reduces to

$$x_i = -\sum_{j \neq i} x_j + \sqrt{\left(\sum_{j \neq i} x_j\right)^2 + w_i} \cdot \sum_{j \neq i} x_j$$

for i = 1,...,n. This proves the formal result. If the opponents' equilibrium expendi-

tures in Stage 1 are positive, inspection of Eq. (2) shows immediately that the equilibrium first-stage expenditures x_i must increase with the size of the status utility U_s relative to the monetary utility U_p . The main proposition, that status is an end in itself, translates into the following hypothesis in terms of the model:

Hypothesis 1: Status recognition via the applause symbol carries a positive intrinsic value, U_s ; thus the first-round expenditure is significantly higher in the status condition of the experiment than in the nonstatus condition.

We performed the experiment in five countries: the United States, Turkey, Hong Kong, and Germany, and with Swedish-speaking Finns at the Swedish School of Economics in Helsinki. Hypothesis 1 claims that the desire for status and prestige is a universal human characteristic (e.g., Barkow 1975, 1989); therefore we expect to find significantly higher expenditures in the first round in all cultures when a status symbol is available.

The *relative importance* of status, however, is influenced by culture, particularly national culture. A proxy for the importance of status in national cultures that is available for many countries is Hofstede's *power distance index* (Hofstede 1997).⁴ Delivered

The power distance index is defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept the fact that power is distributed unequally (Hofstede 1997:28). Of course, power is not the same as status, but Hofstede's results showed (consistent with Lovaglia 1994 and Thye 2000) that a country's power distance is correlated highly with the use, expectation, and approval of status differences (Hofstede 1997:37). Because this is the only measure available across many countries, it is justifiable to use power distance as a proxy for the importance of status in a culture. Out of 53 countries, Hong Kong ranked sixteenth (index 68), Turkey nineteenth (66), the United States thirtyeighth (40), Germany forty-second (35), and Finland/Sweden⁵ forty-sixth/forty-eighth (index 33/31) (Hofstede 1997:26).

We were unable to control the financial situation of the students who participated in five countries. We used US\$20 as the lottery prize, translated at current exchange rates into the appropriate national currency. This approach, however, leaves open the possibility that the amount of money as weighed against status was not comparable in effective purchasing power or utility. Therefore we cannot compare absolute values, but only the incremental changes in the Stage 1 expenditures when a status condition is imposed. This yields our second hypothesis:

Hypothesis 2: The intrinsic value of status is ranked across the countries as follows: U_s (Hong Kong) > U_s (Turkey) > U_s (United States) > U_s (Germany) > U_s (Sweden/ Finland). Thus the incremental difference in the first-round expenditures between the stalus condition and the no-status condition (x_i (4) (status) - x_i (no status)) is ranked in the same order 05...26.

DESIGN AND RESULTS

Procedure

The game was implemented as follows. The subjects had no a priori knowledge that they were being studied to clarify the nature of status. They were assigned randomly to the status/no-status conditions and, within conditions, to groups of four. Each player received 30 cards, which represented the endowment to be used throughout the game.

First, each player was allowed to choose how many of the cards he or she would spend in Stage 1 by sending the appropriate number of cards to the experimenter. The experimenter then mixed together all the cards for each group and chose one. This step determined the winner of the rent-seeking game in each group: cards sent to the experimenter were the Stage 1 investment that increased the chance of reaching Stage 2.

In the lottery of Stage 2, the winning player's remaining cards were mixed with blank "loser" cards to total the original endowment. If the lottery manager drew a card belonging to this player, he or she won \$20. The game ended after this drawing; participants were paid privately and were asked to leave the room.

In the first condition (no status), the game was conducted exactly as described above. In the second version (status), we introduced a status condition by stating at the beginning of the game that the winner of Stage 1 would be announced publicly, given a small tag saying "Winner," and congratulated

⁴ Hofstede's influential study of managers from more than 50 countries, conducted for the first time in 1980 and repeated since, found statistical factors for cultural characteristics, including the power distance index (PDI), individualism, the differentiation of gender roles, and uncertainty avoidance. The PDI captures fear of disagreement with superiors, autocratic management style, and preference for autocratic style by subordinates. (The measures cluster tightly.)

⁵ Swedish-speaking Finns, a minority of about eight percent in Finland, regard themselves as Finnish nationals but also have maintained a significant amount of Swedish culture.

by all participants with applause. The second stage of the experiment remained the same as in the no status treatment. In both treatments, participants were asked in a postgame questionnaire to explain their rationale for the decision. In the status condition, they also were asked what they felt when the winner was announced.

The experiments were conducted with undergraduate students in four major universities in the United States, Turkey, Hong Kong, and Germany, and at the Swedish School of Economics in Helsinki, Finland. In the first four countries, subjects were paid a show-up fee equivalent to \$5; the Finnish students received attendance credit in a management class. In all cases, the subjects were paid what they earned in the experiment. The experiment used a between-subjects design, so that no subject participated in more than one type of game. The games were conducted in a classroom in such a way that the subjects could not communicate with one another.

The Intrinsic Value of Status

Figure 1 shows the distribution of Stage 1 expenditures in the two conditions (status and no-status) for all treatments. The Shapiro-Wilk test statistic indicates that the distributions in the German treatments are not normal. To compare the distributions of Stage 1 expenditures between status and no-status conditions, we employ a nonparametric statistical test (Kruskal-Wallis) in the subsequent analysis.

The mean values (and standard deviations) of rent-seeking expenditures in each treatment are presented in Table 1, with ndenoting the number of participants. If individuals view status as a valuable resource, one should observe a higher (to the point of inefficiency) Stage 1 investment when the status condition is introduced into the game. To test this claim we compared the Stage 1 investments across the two conditions in each country. As seen in the table, the average investments are systematically higher in the status condition in four countries (Hong Kong, Turkey, the United States, and Germany). The Kruskal-Wallis test shows that this increase is statistically significant (p < .05) except for Germany (p = .22). The lower significance in Germany can be explained by the fact that the subject pool was considerably smaller than elsewhere, which resulted in a higher p value. Even though the statistical significance is not very strong, the difference still points in the right direction.⁶

Thus the results for the first four countries support our first hypothesis, while the investments for Swedish/Finnish Stage 1 stay constant over the two conditions. (The difference is slightly negative but is not statistically different from zero, p = .81. On the basis of Hypothesis 2, we expected the status effect to be weakest in this treatment.)

Because the only difference between the two experimental conditions is the presence or absence of a status component, our results show clearly that participants in the first four countries valued status independently of any monetary consequence and were willing to trade off some material gain to obtain it.

The higher spending in the first round of the game did not help to increase the expected payoff at the end. If participants spent too

Table 1.	Average	e Stage 1	Investment
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Experiment	U.S.	Turkey	Hong Kong	Germany	Sweden/Finland
No Status					
Average investment (game cards)	16.09	16.17	14.32	10.85	14.51
Standard deviation	3.67	5.27	3.39	6.45	5.06
n	44	36	28	20	76
Status					
Average investment (game cards)	17.72	19.32	18.17	13.26	13.38
Standard deviation	3.41	5.19	4.65	5.81	3.75
n	36	32	24	19	80

⁶ One could ask whether the variance of the status condition might increase because of added consideration for participation, resulting in an increase in confusion. This turned out not to be the case.



Figure 1. Distributions of Stage 1 Investments

much in the first round, they reduced the expected final payoff by not leaving enough cards for the lottery in the second round. Participants in the status condition of the game recognized this trade-off. In the postgame questionnaire, several participants explained it as follows: "On the one hand, you want to increase the chances of winning the money. On the other hand, you want to get recognition from your peers since you won't get anything by losing in the first game. If you pass, you get the applause and might also get the cash." Nor did the status-seeking behavior serve other purposes, such as increasing a player's future reputation: the participants separated after the game was over, and the result did not exert any further influence on their lives. Most participants returned the "winner" tag after the game because it carried no further value for them. Therefore these results show that the participants valued a generally recognized status symbol, such as applause or being acknowledged.

Cross-Cultural Differences in Status-Seeking by Behavior.

Our second hypothesis concerns the cross-cultural comparison of status-seeking behavior. We expect to see a decrease in levels of status seeking from Hong Kong to Turkey, the United States, Germany, and Sweden/Finland. To analyze this cross-cultural effect, we conducted an ordinary least squares regression analysis for each country, where Stage 1 expenditure was the dependent variable (y) and the presence of status the explanatory variable (x, where x = 0 in the no-status condition and x = 1 in the status condition).⁷ In the regression model for each country, the parameter estimate of the slope corresponds to an estimate for the incremental increase in the Stage 1 expenditure when a status symbol is introduced (Table 2). By comparing the slopes of the models, we check whether the relative effect of status symbols is different for each of the four countries.

The statistical significance of the regression coefficients repeats the results of the test of Hypothesis 1. The results for Germany are inconclusive because of the small sample size; thus we do not include Germany in the subsequent analysis. We include Sweden/ Finland, however, where status does not seem to increase the Stage 1 expenditures.

To test Hypothesis 2, we now compare the slope estimates across the four remaining countries. The average expenditure increase associated with the introduction of status is highest in Hong Kong, followed by Turkey and the United States, and lowest (about zero) in Sweden/ Finland. To check whether the slopes are statistically different, we conduct a Chow test between the three pairs of slopes closest together.

The Chow test shows whether two models differ structurally from one another or whether they could be combined into a single regression equation: in other words, whether the regression parameters are statistically different. When Hong Kong is compared with Turkey, Turkey with the United States, and the United States with Sweden/Finland, the respective slopes are significantly different (p< .05). This finding strongly supports our second hypothesis: the intrinsic valuation of (4) status (as weighed against a monetary benefit) in different countries is related to the countries' power distance indices.

We now discuss a possible explanation for the "disappearance" of status in the Finnish sample. This is related to the highly egalitarian nature of Scandinavian culture, which includes a feature known as "the laws of *Jante*" (*janteloven* in Norwegian, *jantelagen* in Swedish). This norm strongly encourages individuals to be modest, to keep a low profile, and not to act superior to others. The term was invented for a Norwegian novel describing a fictitious town (Sandemose 1933) and quickly entered the general vocabulary across Scandinavia because it struck an

Table 2. Stage 1 Investment as a Function of Status for Five Countries

Country	Regression Output	
Hong Kong		
Regression output	$\hat{y}_{HK} = 14.32 + 3.85 x_{HK}$	
Standard error	1.12	
IAN	52	
Turkey		
Regression output	$\hat{y}_{TR} = 16.18 + 3.14 x_{TR}$	
Standard error	1.13	
n	68	
U.S.		
Regression output	$\hat{y}_{US} = 16.09 + 1.63 x_{US}$	
Standard error	.96	
n	80	
Germany		
Regression output	$\hat{y}_{GER} = 10.85 + 2.41 x_{GER}$	
Standard error	1.97	
n	39	
Sweden/Finland		
Regression output	$\hat{y}_{FIN} = 14.51 - 1.14x_{FIN}$	
Standard error	.71	
n	156	

Note: y = Stage 1 expenditure; x = 1 for status, x = 0 otherwise.

⁷ The comparative analysis results also hold in a log-linear regression model, which we do not report here.

important chord in Scandinavian culture. *Jantelagen* expresses the idea that Scandinavians feel very uncomfortable when named publicly in front of a crowd. For example, the Swedish press has ascribed to the Wallenbergs, the richest and most powerful family in Sweden, the motto "Be but do not be seen!"⁸

The responses in the Scandinavian questionnaire support this interpretation. Twentyfive percent of the winners refused to answer the question about their feelings when they were announced as winners (although they were not shy about discussing their rationale for playing as they did). Thirty percent of the winners emphasized that they were lucky. Among all participants, not a single person mentioned the status symbol (the applause). Rather, thirty-one percent of the participants commented on winners' luck or the fairness of the game.

Thus Scandinavians are strongly averse to being acknowledged in public. Yet this does not necessarily imply that their desire for status disappears, but only that Scandinavians prefer to satisfy it in a small circle of people they know rather than in public. This interpretation would suggest that culture determines not only the weight of the status consideration but also the acceptable status symbols. This hypothesis must be tested in further research.

Observations on Gender Differences in Status-Seeking Behavior

In addition to the effect of status on rentseeking activities and the cross-cultural implications, our results prompted another intriguing observation: males and females responded differently to status. Table 3 shows the average Stage 1 investment in the no-status condition by country, separately for men and for women, as well as the increase in Stage 1 expenditure in the status condition. In the no-status treatment, the average Stage 1 expenditure is higher for males than for females in all countries (p < .05). (The Germany treatment is not included in the analysis because of the low level of female participation: three in the no-status condition and four in the status condition). In 35002204)

3. This finding is consistent with observations in anthropology and psychology (e.g., Barkow 1989; Campbell 2002; Maccoby 1998; Pawlowski et al. 2000; Wilson and Daly 1985) that males across situations are systematically more aggressive than females, and seek status more intensely.

In our experiment, men reacted more strongly to a salient status symbol than did women in all countries (even in the small German sample), except in the Swedish/Finnish sample. In the other countries, the comments in the postgame questionnaires support the statistical results. In the United States treatment, for instance, three of the five first-round male winners commented "It's nice to get applause"; and none made a negative comment. Of the four female first-round winners, only one made a positive comment; another stated "I was a bit embarrassed."

It remains unexplained why the women in the Swedish/Finnish sample seemed to be less averse to public acknowledgment than the men. On the one hand, this agrees with earlier findings in gender research, that behavioral gender differences are purely situational (Deaux and Lafrance 1998). On the other hand, it may indicate interesting interactions between underlying gender differences and national culture. Although we had

Table 3. Average Stage 1 Expenditures in "No Status" Condition and Average Increase in "Status" Cor	idition
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	Men		Women	
	No Status	Status Increase	No Status	Status Increase
Hong Kong	15.78	4.16	11.70	2.16
Turkey	20.17	1.30	15.75	.79
U.S.	16.70	3.0	15.31	06
Sweden/Finland	16.19	-2.82	12.33	1.05

⁸ Anecdotal conversations with American managers who have moved to Sweden suggest that "employee of the month" schemes backfire there because the employees are embarrassed to be singled out, even when the intent is positive.

not designed our experiment to examine gender differences (sample selection bias may exist because of differences in recruitment to academic programs for men and for women), we believe this topic deserves further study.

CONCLUSION

Does status have an intrinsic value that influences one's preferences? We have shown empirically that humans pursue status as an end in itself across cultures: status is worth a positive amount of material gain. Cross-cultural differences come into play in the relative importance of status, predicted accurately by Hofstede's cultural power distance index, and in the relative willingness to display status publicly. Thus our study of a "secondary" or "higher social" emotion (Damasio 2000) corresponds to previous cross-cultural studies of the so-called "basic emotions" (joy, anger, fear, sadness, disgust, guilt) that have been significantly stable across cultures, with some important "modulations, or variations around a universal theme". (See the experiment and overview reported in Scherer 1997:146.)

These results have implications beyond determining the nature of status. For example, status forms a basis for the existence of positional goods, serving as an additional source of value to those goods. For some positional goods, status may be the only value (like the applause in our experiment). In organizations, status symbols may be an important determinant of organizational performance (e.g., Loch et al. 2000), and statusseeking efforts are not always efficient. More specifically, if status symbols are political, they may encourage office politics, whereas merit-based symbols place value on contribution and group performance.

The experiments reported here imply that people tend to overinvest resources whenever "winning against others" is involved, because winning confers status. Our comparative analysis suggests some conditions under which this inefficient status-seeking behavior is aggravated, namely cultural and gender differences. Further empirical studies of different factors that influence status-seeking activities would provide further insight into the problem and would have significant implications for designing more efficient institutional arrangements. If individuals seek status as a value in itself, regardless of subsequent payoffs, an organization cannot be governed with material rewards and incentive systems alone; one also must consider emotional rewards such as recognition.

Under which circumstances may an individual perceive status as a means or as an end? One might reasonably hypothesize that both mechanisms are at work simultaneously all the time. Which one is more important at any given point probably depends strongly (4) on the situation: for example, the size of the rationally recognizable rewards and the salience and nature of the status symbol may influence what is included in a decision to act. This topic would be highly relevant for understanding when one can motivate people with incentives as opposed to emotions, but no theory currently addresses this question; it requires further research.

REFERENCES

- Bakshi, Gurdip and Zhiwu Chen. 1996. "The Spirit of Capitalism and Stock Market Prices." *American Economic Review* 86:133–57.
- Bales, Robert F. 1953. "The Equilibrium Problem in Small Groups." Pp. 111–61 in *Working Papers in the Theory of Action* edited by Talcott Parsons, Robert F. Bales, and Edward A. Shils. Glencoe, IL: Free Press.
- Ball, Sheryl B. and Catherine C. Eckel. 1996. "Buying Status: Experimental Evidence on Status in Negotiation." *Psychology and Marketing* 13:381–405.
- Ball, Sheryl B., Catherine C. Eckel, Philip J. Grossman and William R. Zame. 2001. "Status in Markets." *Quarterly Journal of Economics* 116:161–88.
- Barkow, Jerome H. 1975. "Strategies for Self Esteem and Prestige in Maradi, Niger Republic." Pp. 373-88 in *Psychological Anthropology* edited by T.R. Williams. The Hague: Mouton.
- ——. 1989. *Darwin, Sex, and Status*, Toronto: University of Toronto Press.
- Berger, Joseph, M. Hamit Fisek, Robert Z. Norman, and Morris Zelditch Jr. 1977. *Status Characteristics and Social Interaction: An Expectation States Approach*, New York: Elsevier.
- Berger, Joseph, David G. Wagner, and Morris Zelditch Jr., 1985. "Expectation states theory: Review and assessment." Pp. 1–72 in *Status, Rewards and Influence*, edited by

Joseph Berger and Morris Zelditch Jr. San Francisco: Jossey Bass.

- Blau, Peter M. 1964. *Exchange and Power in Social Life*. New York: Wiley.
- Bolton, Gary E. and Axel Ockenfels. 2000. "ERC: A Theory of Equity, Reciprocity and Competition." *American Economic Review* 90:166–93.
- Campbell, Anne. 2002. A Mind of Her Own: The Evolutionary Psychology of Women. Oxford: Oxford University Press.
- Cialdini, Robert B. 1993. *Influence*. New York: Morrow.
- ——. 2001. "The Science of Persuasion." Scientific American, February, pp: 62–67.
- Congleton, Roger D. 1989. "Efficient Status Seeking." Journal of Economic Behavior and Organization 11:175–90.
- Damasio, Antonio R. 2000. *The Feeling of What Happens*. New York: Vintage Books.
- Deaux, Kay, and Marianne Lafrance. 1998. "Gender." Pp. 788–827 in *The Handbook of Social Psychology*, vol.1, 4th ed., edited by D. T. Gilbert, Susan T. Fiske, and Gardner Lindzey. Oxford: Oxford University Press.
- Emerson, Richard M. 1962. "Power-Dependence Relations." *American Sociolgical Review* 27:31–40.
- 1972. "Exchange Theory II." Pp. 58–87 in Sociological Theories in Progress, vol. 2, edited by J. M. Berger, M. Zelditch, and B. Anderson. Boston: Houghton-Mifflin.
- Frank, Robert H. 1984. "Interdependent Preferences and the Competitive Wage Structure." *RAND Journal of Economics* 15:510–20.
- ——. 1985. "The Demand for Unobservable and Other Nonpositional Goods" *American Economic Review* 75:101–16.
- ------. 1988. Passions Within Reason. New York: Norton.
- ——. 1995. *The Winner-Take-All Society*. New York: Free Press.
- Gerber, Gwendolyn L. 1996 "Status in Same-Gender and Mixed-Gender Police Dyads." Social Psychology Quarterly 59:350-63.
- Güth, Werner and Reinhard Tietz. 1990. "Ultimatum Bargaining Behavior." Journal of Economic Psychology 11:417–49.
- Harker, Patrick T. and Jong-Shi Pang. 1990. "Finite-Dimensional Variational Inequality and Non-Linear Complementarity Problems." *Mathematical Programming* 48:161-220.
- Hofstede, Geert 1997. *Cultures and Organizations*. New York: McGrawHill.
- Kahneman, Daniel and Richard H. Thaler. 1991.

"Economic Analysis and the Psychology of Utility: Applications to Compensation Policy." *American Economic Review* 81:341-46.

- Kemper Theodore D. 1991. "Predicting Emotions From Social Relations." Social Psychology Quarterly 54:330–42.
- Konrad, Kai A. and Kjell E. Lommerud. 1993. "Relative Standing Comparisons, Risk Taking, and Safety Regulations." *Journal of Public Economics* 51:345–58.
- Lin, Nan 1990. "Social Resources and Social Mobility: A Structural Theory of Status Attainment." Pp. 247–71 in *Social Mobility* and Social Structure, edited by Ronald L. Breiger. Cambridge, UK: Cambridge University Press.
 - —. 1994. "Action, Social Resources and the Emergence of Social Structure." Pp. 67–85 in Advances in Group Processes, vol.11, edited by Barry Markovsky, Edward J. Lawler, Jodi O'Brien, Karen Heimer. Greenwich, Conn: JAI Press.
- Loch, Christoph H., Bernardo A. Huberman, and Suzanne K. Stout. 2000. "Status Competition and Performance in Work Groups." *Journal* of Economic Behavior and Organization 43:35–55.
- Lovaglia, M. J. 1994. "Relating Power to Status." Pp. 87–111 Advances in Group Processes, vol.11, edited by Barry Markovsky, Edward J. Lawler, Jodi O'Brien, Karen Heimer. Greenwich, Conn: JAI Press.
- ——. 1997. "Power and Influence: A Theoretical Bridge." Social Forces 76:571-603.
- Maccoby, Eleanor E. 1998. The Two Sexes: Growing Up Apart, Coming Together. Cambridge, MA: Belknap.
- Massey, Douglas S. 2002. "A Brief History of Human Society: The Origin and Role of Emotions in Social Life." *American* Sociological Review 67:1–29.
- Nash, John F., 1950. "Equilibrium Points in *n*-Person Games." *Proceedings of the National Academy of Sciences* 36:48–49.
- Pawlowski, B., R.I.M. Dunbar, and A. Lipowicz. 2000. "Tall Men Have More Reproductive Success." *Nature* 403: 156.
- Podolny, Joel M. 1997. "A Status-Based Model of Market Competition." American Journal of Sociology 98:829–72.
- Ridgeway, Cecilia L. and J. W. Balkwell. 1997. "Group Processes and the Diffusion of Status Beliefs." Social Psychology Quarterly 60: 14–31.
- Ridgeway, Cecilia L., Elizabeth H. Boyle, Kathy J. Kuipers, and Dawn T. Robinson. 1998. "How do Status Beliefs Develop?" *American Sociological Review* 63: 331–350.

- Ridgeway, Cecilia L. and Kristan G. Erickson. 2000. "Creating and Spreading Status Beliefs." *American Journal of Sociology* 106:579-615.
- Ridgeway, Cecilia L. and Henri A. Walker. 1995. "Status Structures." Pp. 281–310 in Sociological Perspectives on Social Psychology edited by K. Cook, G. Fine, and J. House. Upper Saddle River, NJ: Pearson Education.
- Robson, Arthur J. 1992. "Status, the Distribution of Wealth, Private and Social Attitudes to Risk." *Econometrica* 60:837–57.
- Runciman, Walter G. 1998. "The Selectionist Paradigm and Its Implications for Sociology." Sociology 32:163–88.
- Sandemose, Aksel. 1933. En Flyktnyng Krysser Sitt Spor. Oslo: Tiden Norsk Førlag.
- Scherer, Klaus R. 1997. "Profiles of Emotionantecedent Appraisal." *Cognition and Emotion* 11(2):113–50.
- Thye, Shane R. 2000. "A Status Value Theory of

Power in Exchange Relations." *American Sociological Review* 65:407–32.

- Tooby, John and Leda Cosmides. 1990. "The Past Explains the Present: Emotional Adaptations and the Structure of Ancestral Environments." *Ethology and Sociobiology* 11:375–424.
- Tullock, Gordon 1980. "Efficient Rent-Seeking." Pp. 97–112 and 269–82 in *Toward a Theory of* the Rent-Seeking Society, edited by J. M. Buchanan, R. D. Tollison, and G. Tullock. College Station: Texas A&M Press.
- Veblen, Thorstein 1899. *Theory of the Leisure Class*. New York: Macmillan.
- Weber, Max 1964. The Theory of Social and Economic Organization. New York: Free Press
- Wilson, Margo, and Martin Daly. 1985. "Competitiveness, Risk Taking and Violence: the Young Male Syndrome." *Ethology and Sociobiology* 6:59–73.

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