How Shame in Poverty Relates to Status Consumption

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Data and materials for all studies are available online at https://osf.io/b95df/.

Abstract

Shame in poverty is associated with a threatened self-image and a decrease in status. We examined whether financial shame relates to interest in status and status products, as a potential means of restoring the self-image and regaining status. Two survey studies found that financial shame was highly prevalent in U.S. samples: 35.2% of participants reported feeling at least somewhat ashamed of their financial situation. A structural equation model pointed to two separate effects of income on status consumption: a direct, positive effect, and an indirect, negative effect through financial shame, which increases the motivation to attain status.

Keywords: poverty, *shame*, *status*, *status consumption*

Shame in Poverty is Related to Status Consumption

All over the world, people living in poverty report feelings of shame (Walker et al., 2013). Shame is directly associated with a damaged self-image and with lower social status, as well as to a host of negative psychological and behavioral effects (Tangney, 1999). People experience shame when they themselves or others feel they are incompetent or transgressed a moral boundary, creating a threat to people's self-image (De Hooge, Zeelenberg, & Breugelmans, 2010). De Hooge et al. found that people can respond to this self-threat in two ways (see also Gausel, Vignoles, & Leach, 2015). If possible, people try to restore their self-image through approach behaviors (e.g., by buying products that are associated with status). Only when people believe restoring their self-image is not possible or too risky do they switch to protecting their self-image from further damage (e.g., by withdrawing from social situations). We examined how people deal with feelings of shame about their financial situation, which we call *financial shame*.

Surprisingly little is known about the behavioral consequences of financial shame. Most extant research is of a qualitative nature. It suggests several negative consequences of experiencing financial shame. For example, Walker and colleagues (2013) found common responses to include attempts to appear "normal" and keep up appearances, withdrawal, and derogation of others. Other behaviors associated with experiencing shame in poverty include a lower likelihood of claiming benefits (Baumberg, 2016), and refusing to visit a food bank (Purdam, Garratt, & Esmail, 2016). We believe that shame, as opposed to other emotions, may play a unique role in status consumption by the poor. Shame is likely (1) to be associated with status consumption and (2) to differ among income groups. Other negative emotions are either not likely to be related to status consumption (e.g., sadness), or to be especially prevalent among the poor (e.g., jealousy).

Research supports the idea that financial shame may lead to buying status products. Even people with very little to spend consume status product. For example, poor people are willing to pay more for exactly the same product if the packaging has a well-known brand logo (Van

Kempen, 2004) and extremely poor Indian farmers spend about 10% of their year on festivals (Banerjee & Duflo, 2007). The poor spend more money on social expenses when the local density of poor people is higher, indicating that they may spend this money in order to gain status (Brown, Bulte, & Zhang, 2011). People whose self-image is threatened or who feel powerless are also more interested in status products (Rucker & Galinsky, 2008, 2009; Sivanathan & Pettit, 2010).

Status products may allow poorer people to keep up appearances by hiding their financial situation. For example, data on conspicuous consumption across different ethno-cultural groups in the U.S. showed that "Blacks" and "Hispanics" spent relatively more on visible goods than "Caucasians", especially when the income of their ethno-cultural reference group was low (Charles, Hurst, & Roussanov, 2009). Moreover, status products may repair a threatened self-image. Symbolic self-completion theory argues that people can use symbols to affirm a part of their identity that is threatened (Wicklund & Gollwitzer, 1982). For example, British adolescents with lower incomes had a less clear self-concept than those with higher incomes, leading to an increased interest in buying the "correct" brands (Isaksen & Roper, 2008).

Clearly, status consumption also has its downsides. Each dollar spent on attaining status means not spending it on other, perhaps more pressing needs (Banerjee & Duflo, 2007). Status consumption can contribute to the emergence of poverty traps: spending money on status produces hinders the acquisition of a threshold income that allows one to structurally escape poverty (Moav & Neeman, 2008). Furthermore, conspicuous consumption is associated with lower subjective wellbeing. In a study with rural households in India, conspicuous consumption came at the cost of reducing consumption of basic needs (Linssen, Van Kempen, & Kraaykamp, 2010). Finally, status consumption is risky, because what constitutes as a status good in one group might be frowned upon by others (Han, Nunes, & Drèze, 2010).

Current research

We study whether experiencing financial shame is related to a stronger interest in status. We measured not only whether people spent money on status products (*status consumption*), but also whether they thought status is important (*status orientation*). Additionally, we measured wealth both objectively (*effective income*) and subjectively (*subjective wealth*), because these variables might show different relationships with shame and interest in status.

We predicted that low (subjective) wealth would be associated with more financial shame, which in turn would be associated with a stronger status orientation and more status consumption[1]. We tested this prediction in two correlational studies using Structural Equation Modeling (SEM). We expected financial shame to be influenced by (subjective) wealth, and to influence status consumption via status orientation. Furthermore, we expected income to positively relate to status consumption (because a higher income allows for more consumption). Therefore, we pre-specified a model in which income has both a direct effect on status consumption, and an indirect effect via financial shame and status orientation (see Figure **1**). In Study 2 we test the structural equation model from Study 1 with a newly constructed status consumption scale.

Method

Participants

Both studies recruited U.S. participants via Amazon Mechanical Turk (Study 1: $N = 299$, 45.8% female, $M_{age} = 36.6$, $SD_{age} = 11.4$; Study 2: $N = 304$, 47.0% female, $M_{age} = 36.6$, $SD_{age} = 11.4$). Power analyses were conducted with $\alpha = .05$ and $1 - \beta = .8$. For Study 1, sample size was based on the results of a previous study which found a positive correlation between status orientation and shame for financial situation, $r(204) = .22$ (Onderwater, 2016), suggesting $N_{min} = 253$. For Study 2, we based our power analysis on the correlation between

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[1] The preregistered hypothesis was phrased: "Shame for financial situation positively predicts status orientation and status consumption over and above effects of objective income and subjective income". See https://osf.io/g4dpy/register/565fb3678c5e4a66b5582f67

shame and status consumption in the first study, $r(297) = .16$, suggesting $N_{min} = 301$. Across

the two samples, there was substantial variation in household income of the participants:

17.6% of participants were from the first income quintile of the U.S. population, and 38.6,

16.9, 21.1, and 5.8% were from the second, third, fourth, and fifth quintiles, respectively

(Semega, Fontenot, & Kollar, 2017).

Procedure

In Study 1, participants either first answered the questions about their financial

situation and financial shame and then questions about status orientation and status

consumption, or vice versa. In Study 2, the order of these scales was fully randomized. In

both studies, participants then answered questions about household income, the number of

persons in their household, age and gender. *Subjective wealth* was measured with three

questions (1–7 rating scales with different anchors, e.g., "How would you describe your

current financial situation?", reliability[2]: $\omega_{t1} = .93$, $\omega_{t2} = .92$; Gasiorowska, 2014). All other

scales used a 7-point Likert format (1 = Strongly disagree, 7 = Strongly agree). For *shame of*

financial situation, we constructed seven items ($\omega_{t1} = .93$, $\omega_{t2} = .92$, all new constructed

scales are reported in Appendix A) asking people whether they were "ashamed of [their]

financial situation", how they felt about others (e.g., "I feel that others look down on me

because of my financial situation"), how they felt about themselves (e.g., "I feel bad about

myself for not having a better financial situation") and their behavioral tendencies (e.g., "I

want to avoid thinking about my financial situation"). *Status orientation* was measured using

a new scale (5 items, e.g., "I think status is an important indicator of how people are doing in

life", $\omega_{t1} = .89$, $\omega_{t2} = .89$). In Study 1, *status consumption* was measured with a scale by

Eastman, Goldsmith, and Flynn (1999), replacing the item "A product is more valuable to me

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[2] ω_t is a more accurate estimate of reliability than Cronbach's α, which makes assumptions that are often unrealistic, causing underestimation of reliability (McNeish, 2017). These values have the same interpretation as Cronbach's alpha. Cronbach's alphas are reported in Appendix A).

if it has some snob appeal" with "If I think about it, I spend quite a lot of money on products

that provide status", because we think the concept "snob appeal" is not closely related to

status consumption (5 items, ω_t = .92). In Study 2, we used a newly constructed scale (ω_t =

.88, see Appendix A), consisting of two questions on motivation to impress others (e.g., "I

buy products to impress others"), two questions on the trade-off when buying brand name

products (e.g., "I prefer to buy well-known brands, even though they are sometimes more

expensive"), and two questions on buying behavior (e.g., "What percentage of your purchases

are premium brands?"). All answers for this scale were standardized. We asked *household*

income in brackets of $10,000, with a highest category of $150,000 and above. Income was

estimated by taking the midpoint of every income bracket, except for the highest income

bracket, where we used a robust Pareto midpoint estimator (ca. $196,000; von Hippel,

Scarpino, & Holas, 2016). In all analyses we corrected for household size by using effective

income: household income divided by the square root of the number of people in the

household (Buhmann & Rainwater, 1988)[3].

Results

Order effects and missing values

In Study 1, scores on subjective wealth, financial shame, status orientation, and status

consumption did not depend on order (*p*-values ranging from .267 to .820, Cohen's *d* ranging

from -0.07 to 0.13). In Study 2, we regressed each of the scores on dummy variables for

position. Some of these order effects were significant, but adding them to our SEM model did

not increase model fit (see Appendix B). In Study 1, five participants did not answer the

household income question. In Study 2, five participants did not answer this question, and

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[3] We did not measure ethnicity, which might affect both income, status consumption, and shame.
Future research is needed to test the effects of ethnicity and whether shame causally affects status consumption.

four participants did not answer the sixth question on status consumption. As the number of

missing values was small, we used list-wise deletion in all analyses.

Structural equation models

The variables *financial shame*, *status orientation*, and *status consumption* were

modeled as latent variables with their respective scale items as indicators. Analyses were

conducted with the *lavaan* package, version 0.5.23.1097, for *R*, version 3.4.2 (R Core Team,

2016; Rosseel, 2012). For all analyses we used the following target values for fit indices

(Mueller & Hancock, 2008): SRMR ≤ 0.08, RMSEA ≤ .06, and CFI ≥ 0.95.

Assumptions. The variables showed only modest skewness (<1.6) and kurtosis

(<2.9); Mardia's test for multivariate kurtosis was significant in both studies (Study 1:

kurtosis = 563.01, z = 22.07, p < .001; Study 2: *kurtosis* = 625.50, z = 25.77, p < .001).

Therefore, we decided to use robust maximum likelihood estimation with the Satorra-Bentler

statistic (Satorra & Bentler, 2001). We did not delete any outliers[4].

Measurement model. Following Mueller and Hancock's recommendations (2008)

we used a two-phase analysis, first focusing on the measurement model (i.e., the definition of

the latent variables), and then adding a structural part (i.e., the relationships between the

variables). The measurement phase consisted of a series of confirmatory factor analyses (for

details, see Appendix B).

Structural model. For the structural model, we used the same specifications as for

the final measurement model, but added paths between the latent variables as in Figure 1. The

model fit the data well, and all measurement indices met the pre-specified thresholds (see

Table 2). The total effect of effective income on status consumption was not significant in

Study 1, it was in Study 2, β_1 = 0.035, β_2 = 0.105, suggesting that participants with higher

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[4] The pattern of results was the same when we removed multivariate outliers (Filzmoser, Maronna, & Werner, 2008): 56 cases in Study 1 and 67 in Study 2.

incomes were more interested in status consumption. However, this effect was composed of two mutually suppressing effects. In both SEM models, effective income had a small positive direct effect on status consumption, $\beta_1 = 0.091$, $\beta_2 = 0.151$. Income also affected status consumption negatively through shame and status orientation: Effective income was negatively related to financial shame, $\beta_1 = -0.378$, $\beta_2 = -0.412$, which was positively related to status orientation, $\beta_1 = 0.193$, $\beta_2 = 0.171$, which was, finally, positively related to status consumption $\beta_1 = 0.765$, $\beta_2 = 0.651$. The indirect effect of income via shame and status consumption was significantly negative, $\beta_1 = -0.056$, $\beta_2 = -0.046$.

The pattern of results is the same when we replace effective income with subjective wealth in the structural equation model, even though the correlations between effective income and subjective wealth are not very high ($r(292) = .46$, $p < .001$, and $r(297) = .52$, $p < .001$; for the analysis, see Appendix C). We also tested the alternative hypothesis that status orientation leads to financial shame, by exchanging the role of financial shame and status orientation. Model fit was worse than the original model (see Appendix D).

General Discussion

The results of two studies suggest that income has two mutually suppressing effects on status consumption. On the one hand, income has a positive direct effect on status consumption; a higher income allows for more opportunities to buy status products. On the other hand, income has a negative effect on status consumption; people with lower incomes are more likely to feel ashamed of their financial situation, which is related to higher interest in status, which is related to more reported status consumption. In other words, when we take out the effect of income or subjective wealth, people who feel ashamed of their financial situation are more likely to be interested in status and status consumption.

Future research is needed to test whether shame causally affects status consumption. However, these data support two important ideas. First, the data are in line with the idea that

poverty, through financial shame, may induce people to engage in status consumption.

Second, direct comparisons of the level of status consumption between more and less wealthy

people may not show this effect because of the two, opposite effects of income: more wealthy

people may engage more in status consumption because they have more discretionary

income, while less wealthy people may engage more in status consumption because of

financial shame. In other words, among income groups there may be different pathways

towards status consumption.

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Table 1

Pearson correlations, means, standard deviations, and ω_t Studies 1 and 2

Study	Variable	M (SD)	Status orientation	Status consumption	Subjective wealth	Effective income
1	Financial shame (1–7, ω_t = .93)	3.86 (1.53)	.163**	.035	-.750***	-.367***
	Status orientation (1–7, ω_t = .89)	3.97 (1.36)		.684***	-.044	-.032
	Status consumption (1–7, ω_t = .92)	2.88 (1.36)			.066	.064
	Subjective wealth (1–7, ω_t = .93)	3.97 (1.42)				.464***
	Effective income	36,024 (23,970)				
2	Shame (1–7, ω_t = .92)	3.76 (1.54)	.139*	.041	-.620***	-.394***
	Status orientation (1–7, ω_t = .89)	3.64 (1.46)		.604***	.173**	.095
	Status consumption (standardized, ω_t = .88)	-0.01 (0.79)			.307***	.177**
	Subjective wealth (1–7, ω_t = .92)	4.01 (1.40)				.521***
	Effective income	34,846 (23,746)				

Note: M = mean, *SD* = standard deviation. *: $p < .05$, **: $p < .01$, ***: $p < .001$.

Table 2

Parameter estimates and model fit for the structural equation models in Study 1 and Study 2

Parameter	Study 1				Study 2			
	Unstandardized (SE)	Standardized	p	R^2	Unstandardized (SE)	Standardized	p	R^2
Income → status consumption	0.059 (0.026)	0.091	.022	.583	0.084 (0.029)	0.151	.002	.433
Income → shame	-0.171 (0.033)	-0.378	< .001	.143	-0.190 (0.032)	-0.412	< .001	.170
Shame → status orientation	0.182 (0.065)	0.193	.004	.037	0.158 (0.065)	0.171	.011	.029
Status orientation → status consumption	1.162 (0.135)	0.765	< .001	.583	0.852 (0.105)	0.651	< .001	.433
Income → status consumption (via shame and status orientation)	-0.036 (0.014)	-0.056	.012		-0.026 (0.011)	-0.046	.015	
Income → status consumption (total)	0.023 (0.028)	0.035	.424		0.059 (0.031)	0.105	.049	
Model fit	*S-B correction* = 1.184, $\chi^2(130) = 232.52$, $p < .001$; SRMR = .043; RMSEA = .042, 90% CI [.030, .052]; CFI = .980				*S-B correction* = 1.213, $\chi^2(145) = 357.05$, $p < .001$; SRMR = .065; RMSEA = .059, 90% CI [.050, .068]; CFI = .952			

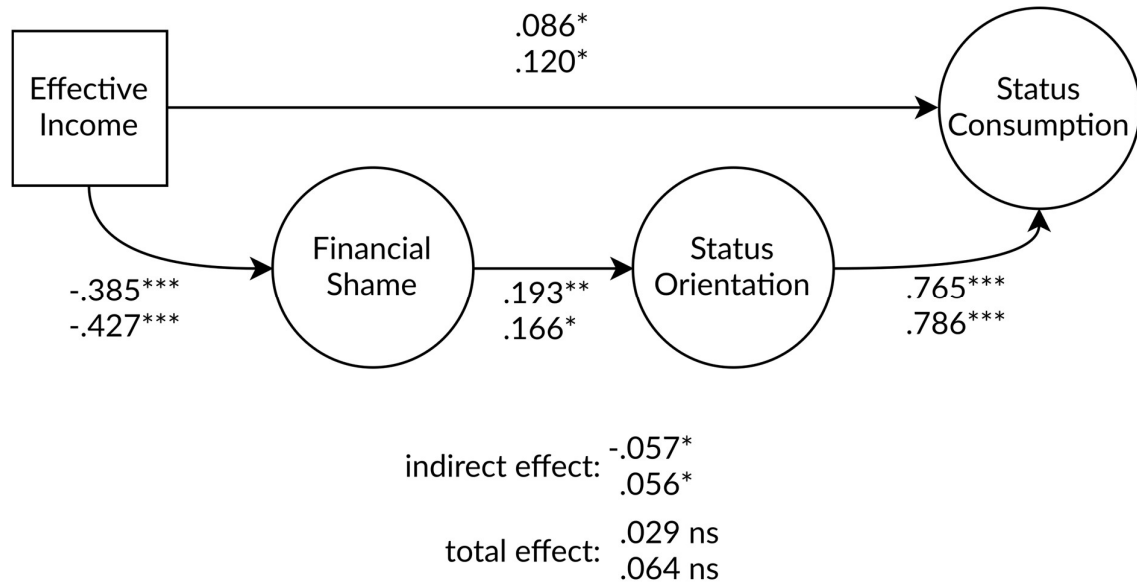*Note:* For each latent variable, the mean was fixed to 0 and the variance to 1.

Figure 1: Standardized coefficients for the Structural Equation Models (top: Study 1, bottom: Study 2). The latent variables are indicated by their scale items. *Indirect effect* is the effect of effective income on status consumption via financial shame and status orientation, whereas *total effect* is the total effect of effective income on status consumption.

Appendix A

Scales used and Cronbach's alphas

Subjective wealth (α_1 = .92, α_2 = .92; Gasiorowska, 2014)

1. How would you describe your current financial situation?

2. How would you describe your ability to make ends meet?

3. Do you feel your income adequately fulfills your needs and wants?

Financial shame (α_1 = .93, α_2 = .92)

1. I'm ashamed of my financial situation

2. I prefer others not to know about my financial situation

3. I feel that others look down on me because of my financial situation

4. I feel bad about myself for not having a better financial situation

5. When I think about my financial situation, I feel as if I have failed

6. I want to avoid thinking about my financial situation

7. I try to hide my financial situation from the people around me

Status orientation (α_1 = .89, α_2 = .89)

1. I think status is an important indicator of how people are doing in life

2. I am willing to spend much time and effort to acquiring high status

3. I admire people who have a lot of prestige

4. I find it important that others hold me in high regard

5. I care about the reputation that I have in the eyes of others

Status consumption (α = .92; Eastman et al., 1999)

1. I would buy a product just because it has status

2. I am interested in new products with status

3. I would pay more for a product if it had status

4. The status of a product is irrelevant to me

5. If I think about it, I spend quite a lot of money on products that provide status

Status consumption (new scale, α = .88)

1. I buy products to impress others

2. When buying a product, it is important to consider what other people will think of it

3. I prefer to buy well-known brands, even though they are sometimes more expensive

4. I am willing to pay more for brand name products

5. In general, what is the maximum you'd be willing to pay extra for a brand name product compared to a similar non-brand product?

6. What percentage of your purchases are premium brands?

Appendix B

Measurement phases Study 1 and Study 2

Study 1

We created a measurement model with a confirmatory factor analysis on the factors *financial shame*, *status orientation*, and *status consumption*, indicated by their respective scale items. The model fit did not yet meet our target values, *S-B correction* = 1.230, χ^2(116) = 328.52, *p* < .001; SRMR = .044; RMSEA = .066, 90% CI [.057, .075]; CFI = .952. Inspection of the standardized residuals and the modification indices revealed that restrictions on the relationship between the second and seventh items of the financial shame scale, and on the fourth and fifth items of the status orientation scale were problematic. Inspection of the standardized residuals and modification indices showed there were three problematic scales: financial shame and status orientation scales. We decided to allow the residual variance of each of the pairs of problematic items to covary. The new model showed significantly improved fit, χ^2(2) = 57.40, *p* < .001; Fit indices: *S-B correction* = 1.218, (114) = 217.94, *p* < .001; SRMR = .040; RMSEA = .044, 90% CI [0.032, 0.054]; CFI = .979; average variance extracted > .62 (> .50 recommended by Fornell & Larcker, 1981); maximal reliability > .90 (> .70 recommended by Hancock & Mueller, 2001).

Study 2

For the latent variables for financial shame and status orientation we used the same specification as in Study 1: Every scale item was an indicator for its latent variable, and we allowed the allowed the residual variance to covary for the second and seventh items of the financial shame scale and for the fourth and fifth items of the status orientation scale. As the latent variable for status consumption now used different indicators, we did investigate whether the measurement model for this variable was adequate. A first CFA showed poor model fit, *S-B correction* = 1.241, χ^2 (114) = 435.75, *p* < .001; SRMR = .050; RMSEA =

.083, 90% CI [.074, .092]; CFI = .919. After inspection of the standardized residuals and modification indices we found that the restrictions on relations between the first two items and the third and fourth item of the status consumption scale were problematic. We decided to allow the residual variances of these two pairs of items to covary. Model fit significantly improved, $\chi^2(2) = 859.61$, $p < .001$, and fit was now adequate, *S-B correction* = 1.260, $\chi^2(112) = 256.20$, $p < .001$; SRMR = .042; RMSEA = .052, 90% CI [.042, .062]; CFI = .968; average variance extracted > .53; maximal reliability > .87.

Order effects in Study 2

Because we found significant order effects for status orientation and status consumption in Study 2, we repeated the measurement phase and structural phase with order variables. Specifically, we added dummy variables for the position of the status orientation and status consumption scales, with first place as the reference category. The latent variables for status orientation and status consumption were regressed on these dummy variables. In the measurement phase, adding these dummy variables did not improve fit, original model: S-B correction = 1.248, chi2(128) = 342.82, p < .001; SRMR = .062; RMSEA = .062, 90% CI [.053, .071]; CFI = .952; new model: S-B correction = 1.140, chi2(230) = 458.74, p < .001; SRMR = .057; RMSEA = .050, 90% CI [.042, .057]; CFI = .954. Model comparison also showed that fit did not improve, $\chi^2(102) = 115.32$, $p = .173$; Original model: AIC = 20,918, BIC = 21,144; new model: AIC = 22,625, BIC = 22,973.

Appendix C

Structural equation models with subjective wealth instead of effective income

For both studies, we tested the structural equation models with subjective wealth instead of effective income. We started with a measurement model by performing a confirmatory factor analysis on the data for study 1. We added a latent factor subjective wealth, indicated by all subjective wealth items, to the measurement model from the manuscript. As the model fit well, *S-B correction* = 1.210, $\chi^2(162) = 287.17$, $p < .001$; SRMR = .039; RMSEA = .039, 90% CI [.029, .049]; CFI = .981, we continued to the structural phase by adding the structural effects. The structural model also fit well, and the pattern of results was the same as in the model with effective income (see Table A1). We repeated this procedure for Study 2, first adding subjective wealth to the measurement phase. This model fit well, *S-B correction* = 1.267, $\chi^2 (160) = 338.62$, $p < .001$; SRMR = .041; RMSEA = .047, 90% CI [.038, .056]; CFI = .970. Fit for the structural model was also acceptable, and the pattern of results was again the same as for the original model (see Table A1).

Table A1

Parameter estimates and model fit for the structural equation models with subjective wealth for Study 1 and Study 2

Parameter	Study 1				Study 2			
	Unstandardized (SE)	Standardized	p	R^2	Unstandardized (SE)	Standardized	p	R^2
Subjective wealth → status consumption	0.163 (0.072)	0.105	.023	.583	0.340 (0.096)	0.209	< .001	.621
Subjective wealth → shame	-1.416 (0.138)	-0.817	< .001	.667	-0.911 (0.105)	-0.673	< .001	.453
Shame → status orientation	0.108 (0.041)	0.184	.009	.034	0.113 (0.053)	0.151	.033	.023
Status orientation → status consumption	1.175 (0.131)	0.772	< .001	.583	1.255 (0.152)	0.781	< .001	.621
Subjective wealth → status consumption (via shame and status orientation)	-0.180 (0.066)	-0.116	.006		-0.129 (0.058)	-0.079	.025	
Subjective wealth → status consumption (total)	-0.017 (0.092)	-0.011	.855		0.211 (0.103)	0.130	.040	
Model fit	*S-B correction* = 1.209, χ^2(164) = 295.68, *p* < .001; SRMR = .046; RMSEA = .041, 90% CI [.031, .050]; CFI = .980				*S-B correction* = 1.262, χ^2(162) = 385.65, *p* < .001; SRMR = .079; RMSEA = .054, 90% CI [.046, .062]; CFI = .960			

Note: For each latent variable, the mean was fixed to 0 and the variance to 1.

Appendix D

Alternative structural equation model with the role of financial shame and status orientation

reversed

An alternative explanation could be that people who are more status oriented might be more prone to feel shame. To test this explanation, we reversed the role of financial shame and status orientation in the structural model. In Study 1, this model has a worse fit than the original model, *S-B correction* = 1.183, $\chi^2(130)$ = 469.83, p < .001; SRMR = .192; RMSEA = .084, 90% CI [.075, .092]; CFI = .918; AIC = 17,086 and BIC = 17,296 in the original model, AIC = 17,323 and BIC = 17,533 in the adjusted model. For Study 2, the alternative model again fit worse *S-B correction* = 1.201, $\chi^2(145)$ = 510.24, p < .001; SRMR = .166; RMSEA = .081, 90% CI [.073, .089]; CFI = .911; AIC = 21,863 and BIC = 22,102 in the original model, AIC = 22,026 and BIC = 22,255 in the adjusted model.

References

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