

Shame in Poverty and Social Withdrawal

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Code for all analyses is available online at <https://osf.io/g5aqe/>. In this paper we make use of data of the LISS (Longitudinal Internet Studies for the Social sciences) panel administered by CentERdata (Tilburg University, The Netherlands).

Abstract

We examine whether a poor financial situation is related to social withdrawal, and whether this is mediated by feelings of shame. We analyze existing data from a Dutch representative sample using a combination of cross-sectional and longitudinal analyses. Cross-sectionally, we find that people who are less satisfied with their financial situation are more socially withdrawn than people who are satisfied with their financial situation. This effect is partially mediated by feelings of shame. We model the longitudinal data using a Random Intercept Cross-Lagged Panel Model, so we can tease apart between-person from within-person effects. At a between-person level, people who score their financial situation as worse tend to be more socially withdrawn. At a within-person level, these two variables also negatively influence each other over time: when someone's financial situation was worse than their personal average in a certain year, they tended to score higher on social withdrawal in the next year. Similarly, more than average social withdrawal in one year predicted a worse than average financial situation in the next year.

Financial Shame and Social Withdrawal

People living in poverty often feel shame over their financial situation (Chase & Walker, 2012). Qualitative research into these experiences suggests that poor people might deal with their shame by withdrawing themselves from social situations; they shy away from interacting with others (Walker et al., 2013). In this article, we analyze quantitative data taken from a Dutch representative sample in order to test whether people who feel ashamed of their socioeconomic situation are indeed more likely to show social withdrawal. We additionally test how people's financial situation and social withdrawal predict one another over time by using a Random-Intercept Cross-Lagged Panel Model (RICLPM). We find that shame partially mediates the relationship between financial situation and social withdrawal. We also find evidence for a vicious cycle, with a worse financial situation predicting social withdrawal in the following year and vice versa.

Poverty and Shame

All over the world, people living in poverty report feelings of shame (Walker et al., 2013). We refer to the feeling of shame due to a lack of financial resources as *financial shame*. From research on emotions, we know that shame is associated with a specific experience (i.e., a threat to one's self-image) and with a specific set of behaviors, notably attempts to restore one's threatened self-image and social withdrawal (De Hooge, Zeelenberg, & Breugelmans, 2010; Tangney & Dearing, 2002). These two behaviors are related: People wish to restore their self-image and if this is not possible they engage in social withdrawal (De Hooge et al. 2010; Gausel, Vignoles, & Leach, 2015). These behaviors can also be observed in reaction to financial shame. For example, we found that, after controlling for income, people who experienced shame of their finances were more likely to be interested in status and status products that could restore their self-image (Plantinga, Breugelmans, &

Zeelenberg, 2018). However, for many people living in poverty such strategies are too risky or simply unavailable, leaving only social withdrawal.

Walker et al. (2013) interviewed poor people, asking, among other things, how they cope with financial shame. Strategies included trying to escape poverty, trying to keep up appearances, derogating others, and withdrawing from social situations. Another study by Reutter et al. (2009) found that many low-income residents of two large, Canadian cities reported they isolated themselves in order to avoid being judged or stigmatized by other members of society. Sutton, Pemberton, Fahmy, and Tamiya (2014) cite several Japanese studies showing that public welfare recipients are often reluctant “to ‘show their face in public’ (*seken*) due to intense feelings of shame, or because they were afraid of ‘welfare-bashing’” (p. 149).

The tendency towards social withdrawal in response to financial shame is not without risks and may relate to potentially dysfunctional behavior. For example, previous research has shown that stigmatization can prevent people from claiming benefits (Baumberg, 2016; Grogger & Currie, 2001; Stuber & Schlesinger, 2006) or from receiving aid such as going to a food bank (Hoogland & Berg, 2016; Purdam, Garratt, & Esmail, 2016; Van der Horst, Pascucci, & Bol, 2014). Such behaviors could deepen poverty, leading to a behavioral poverty trap: a situation in which poverty reinforces itself through its effects on decision making (Dalton, Ghosal, & Mani, 2010; Kraay & McKenzie, 2014).

Although the idea that poverty is related to financial shame and behavioral withdrawal is compelling and potentially important to policy makers, the empirical evidence at this moment is mostly anecdotal. There is no direct evidence on the effect of shame and financial problems on social withdrawal. This is what we address in the current paper. Using quantitative data from a large panel that is representative of the Dutch population, we tested on a between-person level whether people who feel their financial situation is worse are more

likely to show social withdrawal, and whether this effect is mediated by financial shame (cross-sectional analysis). Next, we test this hypothesis the within-person level, that is, whether feeling more dissatisfied with your own financial situation (compared to other years) predicts more social withdrawal over time for that same person, and vice versa (longitudinal analysis). Teasing apart between-person effect from within-person effects is important, because one effect cannot automatically be generalized to the other (see, e.g., Fisher, Medaglia, & Jeronimus, 2018).

Cross-Sectional Analysis

Data

Study units. We used data collected via the LISS panel (Longitudinal Internet Studies for the Social sciences, see www.lissdata.nl), administered by CentERdata (Tilburg University, the Netherlands). This is an internet panel consisting of 4,500 households that are representative of the Dutch population, comprising 7,000 individuals. If necessary, participants are provided with a computer and internet connection.

For the cross-sectional analysis, we combined four different study units. First, we used wave 6 from *Economic Situation: Income* (henceforth *income*), collected in June–July 2013, which contains questions on people’s income and their perception of their financial situation. The second unit, *Social Integration and Leisure* (henceforth *social integration*), contains questions on people’s social contacts and on how they spend their free time. For this analysis we use wave 6, collected in February–March 2013. Third, the study unit *Does stigmatization “explain” why low socioeconomic status is related to poor health?* (henceforth *stigmatization*) contains questions on perceived stigmatization, general shame, and social embarrassment. Data were collected in February–March 2013. Finally, we used the *Background Variables* data from February 2013 determine participants’ demographics. A total of 5,015; 5,759; and 2,096 people participated in the study units *income*, *social*

integration, and *stigmatization*, respectively. Of these participants, 53.7% were female and age ranged from 16 to 89 ($M_{\text{age}} = 51.6$, $SD = 17.1$). A total of 1,739 participated in all four study units. All available data were used in the analyses.

Measures

Financial satisfaction. To measure people's subjective perception of their financial situation, we use the following question from the *income* study unit: "How satisfied are you with your financial situation?". Participants answered on a scale of 0 (not at all) to 10 (entirely). For all items used, see Appendix A.

Financial shame. The *stigmatization* study unit contains a "perceived classism" scale, which we use as a proxy for financial shame. It measures whether people feel ashamed of their financial situation, education level, or occupation, on a 1–5 Likert scale. We used all items except item 3, "I never feel shy when I am among other people", because it does not reflect the concept of financial shame.

Social withdrawal. Three scales from the *social integration* study were candidates for inclusion in a social withdrawal index: a measure of *social satisfaction* ("How satisfied are you with your social contacts?", 1 = not at all satisfied to 10 = completely satisfied); the De Jong Gierveld Loneliness scale to measure *loneliness* 6 questions rated on a scale of 1 = yes, 2 = more or less, 3 = no; De Jong Gierveld & Tilburg, 2006); and a measure of the number of *social gatherings*, where participants indicated how often they spend time with family, people from the neighborhood, or with friends, and how often they visit a bar or café (1 = almost every day to 7 = never). For each scale, we recoded its items so a higher score means more social withdrawal.

An exploratory factor analysis of all items revealed that a unidimensional solution explained a lot of variance (Eigenvalue = 2.89, $R^2 = .82$). The factor loadings and communalities of the *social satisfaction* and *loneliness* items were all high (loadings > .57, h^2

> .33), but those of the *social contacts* items were all low (loadings < .32, $h^2 < .11$).

Combining into one index measure, reliability of all the items from wave 1 was fairly low ($\omega_t = .61^1$, Cronbach's $\alpha = .67$). Reliability was much higher and acceptable when combining only *social satisfaction* and *loneliness* ($\omega_t = .77$, $\alpha = .73$; for the other combinations: $\omega_t < .61$, $\alpha < .64$). Therefore, we calculated the mean scores for the *social satisfaction* and *loneliness* scales, rescaled the means so they ranged from 0 to 1, and averaged across them to create the *social withdrawal* variable².

Results

Descriptive statistics and correlations. A substantial group of participants reported feeling ashamed of their financial situation, education level or occupation. On a 1–5 scale, 7.9% of the participants scored on average at least 3, and 0.6% scored at least 4. Slightly more people were dissatisfied with their social contacts: 10.5% scored 5 or lower on a 10-point scale. Similarly, 10.6% scored at least or higher than the midpoint of the loneliness scale. Across the whole sample, we found a moderate, negative correlation between financial satisfaction and social withdrawal, $r(4525) = -.32$, $p < .001$, 95% CI [-0.35, -0.30], and a moderate, positive correlation between shame and social withdrawal, $r(2057) = .36$, $p < .001$, 95% CI [0.32, 0.39] (see Table 1 for all correlations).

Mediation analysis. We tested whether the effect of financial satisfaction on social withdrawal was mediated by financial shame using a Structural Equation Model (SEM), using the *lavaan* package, version 0.6-1.1189 (Rosseel, 2012), for *R*, version 3.4.3 (R Core Team, 2016). We tested a model in which financial satisfaction has both a direct effect on

¹ ω_t is a more accurate estimate of reliability than Cronbach's α (McNeish, 2017). The values are interpreted in the same way as Cronbach's α .

² The pattern of results is the same when we include the *social contacts* variable.

social withdrawal and an indirect effect via financial shame (see Figure 1). Standard errors were estimated using bootstrapping with 10,000 samples. In this model, there was a significant negative direct effect of financial satisfaction on social withdrawal, $\beta = -0.179$, $z = -6.03$, $p < .001$, 95% CI [-0.236, -0.123]. In addition, financial satisfaction had a negative effect on financial shame, $\beta = -0.393$, $z = -13.52$, $p < .001$, 95% CI [-0.443, -0.343], which in turn positively affected social withdrawal, $\beta = 0.292$, $z = 10.46$, $p < .001$, 95% CI [0.240, 0.343]. The pattern of results was identical when we used the social withdrawal components separately (loneliness or social satisfaction).

Longitudinal Analysis

Data

Study units. We used the *income* and *social integration* study units as in the cross-sectional analyses but added more waves. From *income*, we used waves 1–9, collected between June 2008 and June 2016. From *social integration*, we also used waves 1–9, collected between February 2008 and October 2013. A total of 13,243 people participated in at least one of the waves; we had data for social withdrawal or financial situation for 10,876 participants. Across the waves, the percentage of females ranged from 53.5 to 53.9%, and mean age ranged from 45.4 ($SD = 15.9$) in wave 1 to 50.3 ($SD = 18.2$) in wave 9. The number of participants for which we had data for either financial situation, social withdrawal, or both ranged from 5,953 to 7,591 per wave.

Results

Descriptive statistics. On average, people rated their financial situation a 6.66 ($SD = 1.83$) out of 10, and their social contacts a 7.31 out of 10 ($SD = 1.59$). They scored an average of 1.35 out of 3 on the loneliness scale ($SD = 0.40$). Linear mixed models with random intercepts and random slopes showed no evidence of a linear change over time for both financial satisfaction and social withdrawal (financial satisfaction: $b = -0.002$, $F(1, 37553) =$

0.46, $p = .498$; social withdrawal: $b = -0.0001$, $F(1, 42098) = 0.33$, $p = .563$). In all waves, financial satisfaction correlated negatively with social withdrawal ($-.33 < r < -.24$, p -values $< .0001$).

Random Intercept Cross-Lagged Panel Model. An RICLPM allowed us to separate within-person variance from between-person variance. Specifically, we could test whether financial satisfaction and social withdrawal affected each other over time after controlling for stable between-person differences. The intra-class correlations showed that 64.7% of the variance in financial satisfaction and 63.7% of the variance in social withdrawal could be explained by between-person differences; the remainder was explained by within-person differences. This means that a substantial part of the variance for these variables can be explained by within-person fluctuations over time.

Assumptions. In all waves, the variables showed only modest skewness (< 1.23) and kurtosis (< 2.78). However, Mardia's test for multivariate normality was significant in all waves (skewness > 2.34 , kurtosis > 12.96). Therefore, we decided to apply robust maximum likelihood estimation with the Yuan-Bentler statistic (Yuan & Bentler, 2000).

Model specification. Following Hamaker, Kuiper, and Grasman (2015), we constructed a RICLPM by creating separate latent variables for within-person and between-person variance, for both financial satisfaction and social withdrawal (see Figure 1). The random intercepts (RI) describe stable between-person differences in their financial satisfaction and social withdrawal. At the within-person level, the latent variables reflect scoring higher or lower than that person's average in a particular wave. We can examine stability effects (α and δ ; so-called carry-over stability), cross-lagged effects (β and γ), and correlated change effects (ϵ). The stability effects describe whether scoring higher than expected on a variable in a particular wave, predicts scoring higher than expected on that variable in the next wave for the same person. The cross-lagged effects show whether a

person's higher than expected score in a wave, predicts a higher score on a different variable in the next wave. Finally, the correlated change effects show whether a person's change in a variable from one wave to the next is related to that person's change in a different variable across the same time span. We again fit the models with the *lavaan* package, using Huber-White robust standard errors.

Model results. The model fits the data well, Yuan-Bentler correction = 1.68, $\chi^2(144) = 1167.82$, $p < .001$; SRMR = .060; RMSEA = .023, 90% CI [.022, .024]; CFI = .972; TLI = .970. Results are presented in Table 2. Following Keijsers (2016), we compared the RICLPM to a Cross-Lagged Panel Model (CLPM) without random intercepts. The CLPM does not fit the data well, Yuan-Bentler correction = 1.71, $\chi^2(140) = 5588.52$, $p < .001$; SRMR = .180; RMSEA = .054, 90% CI [.053, .055]; CFI = .849; TLI = .835. Inspection of information criteria confirms that the RICLPM provides a better fit than the CLPM (RICLPM: AIC = 87,983, BIC = 88,320; CLPM: AIC = 95,563, BIC = 95,929).

When we look at standardized effects, the strongest effect is between persons; there is a significant, negative relationship between the random intercepts for financial satisfaction and social withdrawal ($\beta = -0.433$). This means that people who are generally less satisfied with their financial situation are on average more socially withdrawn. At the within-person level, all effects are significant. (Note that the standardized estimates show variation across the waves as the variance also varies per wave). First, there are fairly strong stability paths for both financial satisfaction ($\beta = 0.224 - 0.283$) and social withdrawal ($\beta = 0.186 - 0.271$). Thus, in years in which people score higher than expected on financial satisfaction or social withdrawal, they tend to also score higher than expected on that variable in the following year. The cross-lagged effects, although smaller, are also significant. First, when people are less financially satisfied in a particular year, they tend to be more socially withdrawn in the following year ($\beta = -0.050 - -0.031$). Second, a person's social withdrawal in a particular

year is also related to less financial satisfaction in the following year ($\beta = -0.043 - -0.035$). The significantly negative correlated change effect between financial satisfaction and social withdrawal ($\beta = -0.070 - -0.051$) shows that when people become less financially satisfied from one year to the next, they tend to become more socially withdrawn as well. In sum, we find evidence that financial satisfaction and social withdrawal are related on both explain between-person variation, and within-person variation across different time points.

General Discussion

Poverty is a wicked problem (Rittel & Webber, 1973). In the past decades, scientists have studied the situations and processes underlying poverty, in order to inform effective interventions. In this article, we tested an important idea, namely that there exists a vicious cycle between the state of poverty, feelings of shame and social withdrawal using data from a representative sample of people from the Netherlands. We tested two models. The first, a structural equation model for a cross-sectional analysis, revealed that a worse financial situation was related to more social withdrawal, and that this relationship was mediated by feelings of shame. These results are in line with the idea that financial problems are related to shame, which can prompt people to withdraw themselves from social situations.

In order to explore the relationships between poverty and withdrawal over time, we analyzed longitudinal data across nine waves. The results from a Random Intercept Cross-Lagged Panel Model (RICLPM) are in line with relationships between one's financial situation and withdrawal at both a between-person and a within-person level. Comparing individuals at the between-person level, people who were generally less satisfied with their financial situation tended to be more socially withdrawn than people who were more satisfied. Within the same person, financial problems and social withdrawal influenced one another over time: when someone scored lower than their personal average on financial satisfaction in a certain year, they tended to score higher on social withdrawal in the next

year. This also held the other way around: when people scored higher on social withdrawal in the next year, they were less satisfied with their financial satisfaction the next year.

These findings are important because they corroborate ideas from qualitative research on how poverty may affect decision making. Furthermore, they are important to policy makers because they may shed light on the question why poor people frequently do not make use of the possibilities and projects that are offered to assist them (see Currie, 2006). This means that, in order to reach poor people, more has to be offered than just monetary aid; poverty clearly also is a social issue. In fact, research on shame suggests that there are clear opportunities in situations of financial shame. Social withdrawal is often only the second preferred coping strategy in shame, with approach and repair behaviors being first (De Hooge et al., 2010). So, if people could be approached in early stages of financial hardship, shame might actually motivate them to look for constructive ways to get out of their situation and avoid a vicious cycle of withdrawal, shame, and more financial problems.

In this article, we were able to draw upon data from a large, representative sample of the Dutch population. This has some clear advantages, but also some limitations. The advantage of working with a representative sample for issues of generalizability and validity are clear. The data also allowed us to use state-of-the-art techniques, such as RICLPM, which enabled us to tease apart between-person and within-person effects (Hamaker et al., 2015; Keijsers, 2016). So, we found not only that financial problems predict social withdrawal when analyzed across participants, but also that a particular person's financial situation in one year predicts their level of social withdrawal in the next year. One of the limitations of working with existing data is that we had no control over the design of data collection and the measurement of various constructs. For example, with regard to financial shame we would use a more detailed measure in future research and use experimental manipulations to test its causal effect on social withdrawal.

All in all, our analyses suggest that financial problems have important consequences for people's social lives, which could be caused by an increase in shame over their poor financial situation. These factors seem to be locked in a vicious cycle, with financial problems and shame leading to social withdrawal and vice versa. This might create a poverty trap that is hard to escape, even when policy measures or other types of aid are available to alleviate one's financial problems. These findings are not only interesting from a theoretical perspective, teaching us about the role of shame in financial behavior, but also from a practical perspective, emphasizing the need to address people's feelings about financial problems in addition to the financial problems themselves to help them get out of poverty.

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Table 1

Pearson correlations, means, and standard deviations for the cross-sectional analysis

	<i>M (SD)</i>	2	3	4	5	6	7	8
1. Financial satisfaction	6.646 (1.809)	-.398***	-.322***	.144***	.151***	.136***	.036*	-.109***
2. Shame	1.717 (0.681)		.356***	-.232***	-.235***	-.035	.025	.084***
3. Social withdrawal	0.006 (0.760)			-.078***	-.083***	-.031*	.012	.109***
4. Age	40.991 (22.085)				.966***	.255***	.001	.071***
5. Age2	2167.966 (1841.050)					.142***	.010	.062***
6. Education	3.151 (1.641)						.045***	.032**
7. Gender (1 = Male)	0.491 (0.500)							-.055***
8. Single (1 = Yes)	0.203 (0.402)							

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

Table 2

RICLPM on the relationship between financial satisfaction and social withdrawal

Parameters	<i>B</i>	<i>SE</i>	<i>p</i>	<i>CI_B</i>	β
Correlations					
Wave 1 within-person	-0.006	0.003	.044	[-0.011, -0.000]	-0.042
Between-person	-0.077	0.003	< .001	[-0.083, -0.071]	-0.433
Cross-lagged effects					
Fin. sat. $t_k \rightarrow$ Soc. wit. t_{k+1}	-0.004	0.001	< .001	[-0.005, -0.002]	-0.050 to -0.041
Soc. wit. $t_k \rightarrow$ Fin. sat. t_{k+1}	-0.477	0.101	< .001	[-0.675, -0.278]	-0.043 to -0.035
Stability paths					
Fin. sat. $t_k \rightarrow$ Fin. sat. t_{k+1}	0.250	0.012	< .001	[0.225, 0.274]	0.224 to 0.283
Soc. wit $t_k \rightarrow$ Soc. wit. t_{k+1}	0.226	0.012	< .001	[0.203, 0.250]	0.186 to 0.271
Correlated change					
Fin sat. $t_k \leftrightarrow$ Soc. wit t_k	-0.006	0.001	< .001	[-0.008, -0.004]	-0.070 to -0.051

Note: Fin. sat. = financial satisfaction, soc. wit. = social withdrawal, *B* = regression coefficient, *SE* = standard error, *CI_B* = 95% confidence interval around the regression coefficient, β = standardized regression coefficient, based on the variances of both observed and latent variables. Note that the standardized estimates show variation across the waves as the variances also vary per wave. *: $p < .05$, **: $p < .01$, ***: $p < .001$

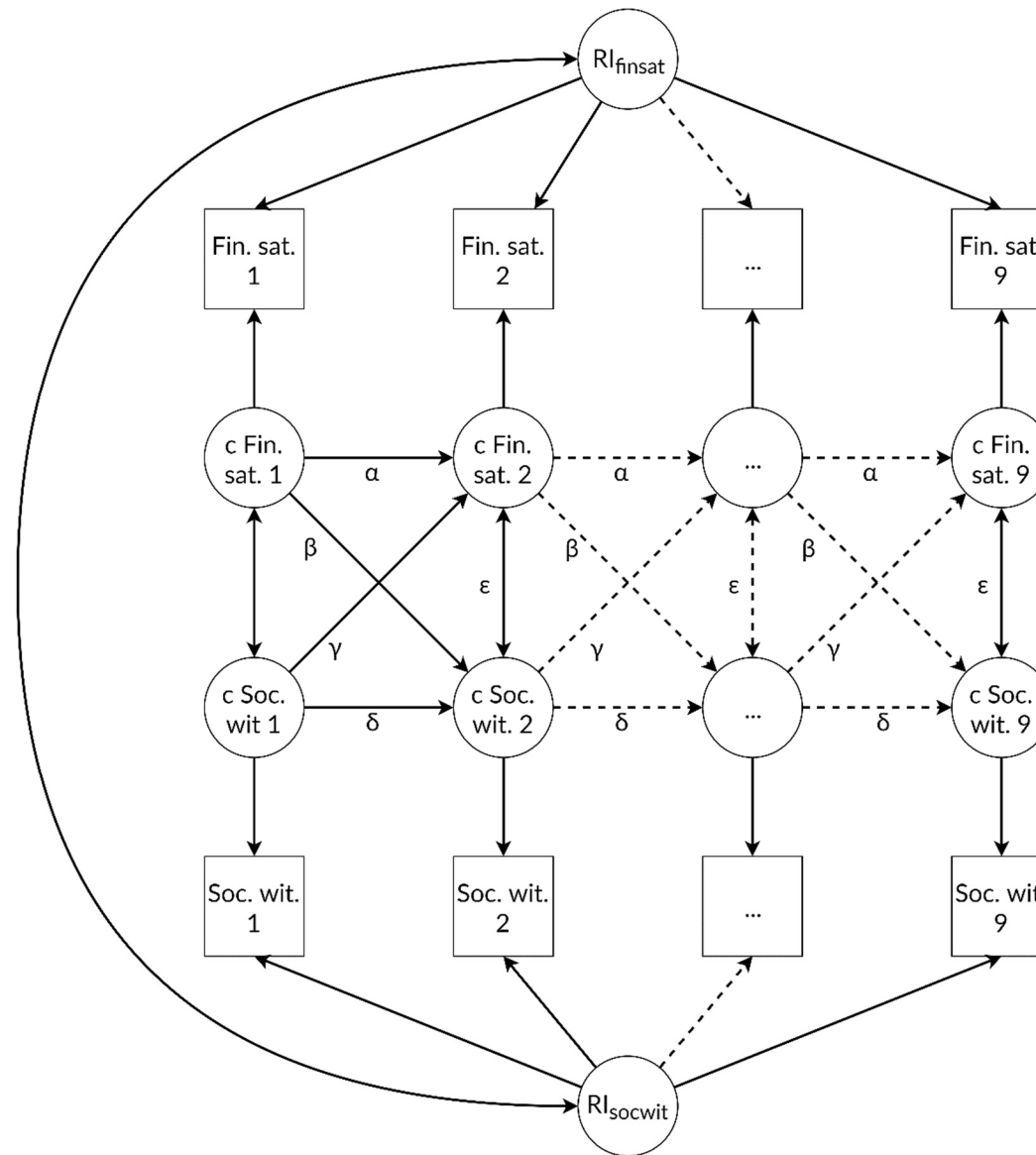


Figure 1: Random Intercept Cross-Lagged Panel Model

Appendix A

Items used from the different study units

Study unit	Variable	Item
Does stigmatization “explain” why low socioeconomic status is related to poor health?	Financial shame	1. I feel strange or abnormal on account of my financial situation, education level or occupation.
		2. There have been times that I felt ashamed of my financial situation, education level or occupation.
		3. I never feel ashamed because of my financial situation, education level or occupation.
		4. I feel that others look down on me because of my financial situation, education level or occupation.
		5. People treat me differently because of my financial situation, education level or occupation.
		6. It has happened that people said negative or unpleasant things about me behind my back because of my financial situation, education level or occupation.
		7. I have sometimes been excluded from work, education or family life because of my financial situation, education level or occupation.
Social Integration and Leisure	Satisfaction with social contacts	How satisfied are you with your social contacts?
	De Jong Gierveld Loneliness Scale	<ol style="list-style-type: none"> 1. I have a sense of emptiness around me 2. there are enough people I can count on in case of a misfortune 3. I know a lot of people that I can fully rely on 4. there are enough people to whom I feel closely connected 5. I miss having people around me 6. I often feel deserted
	Number of social gatherings (<i>not used in the final social withdrawal index</i>)	<ol style="list-style-type: none"> 1. Spend an evening with family (other than members of your own household) 2. Spend an evening with someone from the neighborhood 3. Spend an evening with friends outside your neighborhood 4. Visit a bar or café