

Sense of Control Requires Sense of Self

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Abstract

Personal control requires both an agentic self and a responsive environment. This paper proposes two pathways to low perceived control: perception of overpowering external forces, and lack of an agentic sense of self. Using nationally representative data (CPES; N = 4,904), identity disturbance served as a proxy for absent agentic self, and a hardship index served as a proxy for external constraint. Identity disturbance nearly eliminated high mastery, while hardship did not, and identity disturbance attenuated the established mastery–psychopathology link. These findings also expose a fatal flaw in the Lachman and Weaver Sense of Control Scale: its two-factor structure reflects item-wording polarity, not substantively distinct dimensions.

Keywords: personal mastery, sense of control, identity disturbance, locus of control, self-concept, perceived constraints

The Pearlin and Schooler (1978) *Personal Mastery* construct is defined as "the extent to which one regards one's life-chances as being under one's own control in contrast to being fatalistically ruled." It emphasizes a generalized sense of personal agency and control over life circumstances, positioning it as a key psychological resource for coping with stress. Mastery is closely related to constructs such as *Locus of Control* (Rotter, 1966) and *Self-Efficacy* (Bandura, 1977). Personal mastery is defined in terms that directly reflect an internal locus of control, though it is not explicitly labeled as such in the original work. Internal locus of control, originating from Rotter (1966), refers to the belief that life outcomes are primarily contingent on one's own actions, efforts, or abilities rather than external factors like luck. Pearlin and Schooler's mastery construct captures this by contrasting personal control with fatalism, which aligns with external locus of control. However, while the constructs are highly similar and often used interchangeably in research (Botha & Dahmann, 2023), some researchers caution against conflating them entirely (Roepke & Grant, 2011).

The original Pearlin Mastery scale measured a sense of personal agency versus fatalism as a single construct using seven items. Lachman and Weaver (1998) expanded that to 12 items in order to create a multidimensional measure. They split the scale into two subscales: Personal Mastery (focusing on perceived competence and efficacy in achieving goals) and Perceived Constraints (focusing on beliefs about external obstacles limiting control). This bifurcation was informed by theoretical work, such as Skinner's (1996) distinction between competence (internal capabilities) and contingency (external factors). By separating Mastery (internal focus) from Constraints (external focus), the new *Sense of Control Scale* was intended to allow for independent assessment of these dimensions, revealing how they differentially affect outcomes.

We argue that sense of control certainly needs to be split into perceptions of the internal self and perceptions of the external world. We use data from a large national survey to demonstrate the two different pathways to low sense of control. But this does not validate the

Lachman and Weaver *Sense of Control Scale*. We explain in the discussion why—given the results of this paper—the *Sense of Control Scale* is fatally flawed and not up to the task of differentiating between the two ways that a person can come to lack a sense of control. A sense of mastery/control plays an important role in many health, behavioral, and well-being outcomes (Assari et al., 2025). So there are broad practical stakes in understanding mastery/control and getting the measurement right.

1.2 Defining the two distinct pathways to low sense of control

- Pathway 1: Perception of powerful and oppressive external forces. Here, the individual attributes outcomes to overwhelming environmental or contextual factors, such as systemic barriers, luck, or the actions of others. For example, someone might believe "I can't advance in my career because the company leadership is unfair." The focus is on external contingencies that shape outcomes, even if the person feels personally capable. Kim et al. (2025) recently confirmed, using a large global data set, that hardship in childhood predicts low mastery in adulthood.
- Pathway 2: Lack of an agentic sense of self. Here, the lack of control stems from a diminished sense of personal agency. For instance, someone might think "I can't succeed because I'm just not capable of making things happen." This reflects a core belief about one's own ineffectiveness, independent of external realities. It should be noted that although the *cause* here is *internal* deficiency, that does not make *control* internal. Control requires an agentic self (capacity to intentionally choose and initiate action). The agentic self is the requisite equipment for control. Lacking this internal capacity leads to a low sense of control no matter how favorable the external conditions appear. Consistent with this, Jiang et al. (2023) demonstrated across five experiments that undermining self-concept clarity—a construct closely related to the experienced coherence of the self—directly impaired self-control, mediated by a reduced sense of self-continuity.

Personal control requires both (i) an agentic self and (ii) an environment responsive to action. Absence of these two requirements in turn are the two pathways to low sense of control. Either the "outside world" is inherently too imposing, or the "inner self" is inherently incapable of control from the inside. So the two subtypes of low mastery/control are 1. low mastery/control with agentic self, and 2. low mastery/control without agentic self.

1.3 Accounting for the spectrum

One might object that low mastery/control often involves a mix of Pathway 1 and Pathway 2, creating a spectrum rather than distinct categories. This is true. The two pathways to low mastery/control are dimensional, not categorical—but this doesn't refute the dual-pathway model. There are two reasons that a spectrum does not invalidate a model of two 'types' of low mastery/control. The first reason is simple: spectra can often be split into discrete categories for

some analytical purposes, e.g., liberal vs conservative, mental disorder vs no mental disorder, etc.

The second reason is that when an individual perceives both oppressive external conditions and a diminished self, it is the diminished self that is conceptually the more important determinant. Conceptually, a weakened self is sufficient to produce low mastery/control, regardless of external constraints. High mastery/control requires an agentic self; therefore, absent agency, mastery/control cannot be high.

Consider an analogy: Financial hardship can result from low income or excessive spending. However, in mixed cases (low income and a spending problem), one pathway is logically and practically more important. One can escape poverty despite high spending if she can increase her income enough. But one cannot escape poverty without income, no matter how frugal a spender she is.

Similarly, one can maintain high mastery/control despite perceiving powerful external forces if her sense of personal agency is strong enough. Think, “It matters not how strait the gate, how charged with punishments the scroll, I am the master of my fate, I am the captain of my soul” (Henley, 1888). But one cannot achieve high mastery/control without a sense of having an agentic self, regardless of how favorable external conditions may be. Take for example how a woman with *identity disturbance* describes her experience: “I can’t figure out what I want. When I am alone, I feel completely unable to make decisions” (Jørgensen & Bøye, 2021, p. 58). Similarly, another says, “When I have to make decisions concerning what’s right, what’s important in a situation like this, I have so many doubts, and everything gets mixed up. I can’t make up my mind, and usually I end up asking somebody else ‘what do you think is best, what should I choose?’ Because I can’t do it myself” (Jørgensen & Bøye, 2021, p. 58).

In these examples, the lack of agentic self makes low mastery/control highly likely, regardless of how the external world is. So when the agentic self is absent, that absence is what most determines the level of mastery/control. And so that is why it makes sense to define two subtypes of low mastery/control as 1. low mastery/control with agentic self, and 2. low mastery/control without agentic self. In order to test this characterization of mastery/control and its subtypes, analyses were done on a large nationally representative data set. The relationship between an absent self and low control is conceptual in the same way that the relationship between zero income and poverty is conceptual. The data's job is to test whether the predicted patterns show up, not to establish the causal direction.

1.4 A note on operationalizing the two pathways

Testing the dual-pathway model requires operationalizing the absent agentic self and perceptions of the external world in ways that are conceptually distinct from each other and from mastery itself. In the analyses that follow, identity disturbance indicators serve as a proxy for the absent agentic self, and a composite index of hardship events serves as a proxy for unaccommodating external forces. Two potential concerns about these operationalizations deserve direct comment.

First, one might worry that identity disturbance conceptually overlaps with mastery, making any association between them circular. This concern is understandable but misplaced. Since the theoretical claim is that identity coherence is a precondition for mastery, the two should be conceptually related, but here's how they're distinct: Of the five identity disturbance items, two mention making decisions, but none mention outcomes of decisions, nor outcomes in general. None mention anything actually happening to the subject (see Table 2). In contrast, six out of seven Mastery items mention outcomes and external events or forces (problems I have, being pushed around, things that happen to me, problems in life, what happens to me in the future, and the important things in my life; see Table 1).

The Mastery scale is all about controlling outcomes; the Identity Disturbance items have nothing to do with outcomes per se. For example, a person who “feels empty inside” has not reported anything about whether she can influence what happens to her—she has reported that the entity who would do the influencing barely exists. The relationship is analogous to the one between having an engine and achieving speed: engine presence and vehicle speed will be strongly correlated, but engine presence is not another way of measuring speed. It is a precondition for it.

For an analogy within the realm of psychometrics, take working memory capacity and fluid intelligence. The two correlate so highly at the latent level that some researchers initially proposed they were the same construct (Kyllonen & Christal, 1990). Subsequent work established instead that working memory is the attentional control substrate that fluid reasoning requires (Engle et al., 1999; Conway et al., 2003). More broadly, strong component–whole overlap is commonplace in personality measurement. Core Self-Evaluations (Judge et al., 1997), for example, comprise self-esteem, generalized self-efficacy, locus of control, and emotional stability, all of which correlate and conceptually overlap with each other and with the higher-order construct. No one treats this overlap as evidence of redundancy; it is the expected signature of a hierarchical structure in which each component accounts for part of the whole.

For Identity Disturbance and Mastery, it's the “precondition” structure, not just a general association that can be seen in the analysis results. Table 6 shows that high Identity Disturbance (lacking agentic self) nearly rules out high Mastery. But low Identity Disturbance (intact agentic self) does not at all rule out low Mastery. The asymmetry is an important confirmation of the conceptual logic: A car with an engine can go slow, but a car without an engine can't go fast; and engine possession is not the same thing as speed. Another result, in Section 3.5, also confirms the distinction. The component of Mastery that is neither aligned with Identity Disturbance nor Hardship is predictive of mental disorder diagnoses. So in terms of predicting real-life clinically significant outcomes, Identity Disturbance and Mastery are statistically different.

Aside from concerns about conceptual overlap, one might also object that the Hardship index—comprising financial strain, illness, victimization, and similar events—fails to capture the *psychological* dimension of external constraints, since Pathway 1 is supposed to concern *perceptions* of powerful external forces rather than the forces themselves. But actual hardship and perceived hardship are not independent. The items in the index are self-reported: respondents

who report not meeting basic expenses, being homeless, or being victimized by crime are not unaware of these experiences. Actual hardship increases the perception of hardship, which is what Pathway 1 describes. For the purpose of this paper (investigating the role of a coherent self in mastery/control) the hardship index need only vary in the same direction as perceived external constraint—and it does, as confirmed by its significant association with Mastery (see Table 8). This association itself demonstrates that the index tracks something psychological: if perceived constraints did not follow from reported hardships, then the hardship index should not predict mastery scores (which are entirely about general perceptions, not particular objective events), but it does. No conclusion in this paper depends on the hardship coefficient having any particular magnitude relative to the identity disturbance coefficient. The role of the hardship index is merely to confirm that compared to Identity Disturbance, a different component of Mastery varies in relation to Mastery in a different way.

2 Methods

2.1 Data and sample

Analyses used the Collaborative Psychiatric Epidemiology Surveys (CPES) (Alegria et al., 2007). All estimates were weighted using the CPES person weight which is included as a variable in the data set. Models were run on a complete-case subset with nonmissing values (unweighted N = 4,904). Standard errors and p values were computed using design-based Taylor linearization with the CPES sampling error strata and sampling error clusters/PSUs. Degrees of freedom were computed as clusters – strata (df = 54).

2.2 Measures

The CPES included Pearlin's and Schooler's seven *Personal Mastery* items scored so that higher values indicate greater perceived mastery (Table 1). Lack of agentic self was operationalized as a 5-item count (0–5) of endorsed identity disturbance indicators (Table 2). Perception of powerful and oppressive external forces was operationalized as a 10-item index combining financial strain, food insufficiency, homelessness, victimization, and serious health events; higher scores indicate greater hardship burden (Table 3). A binary lifetime mental disorder indicator was included as a covariate in regression models. Item wording and coding for the three indices are shown in Tables 1–3.

To interrogate the distributional tails relevant to the theory, weighted deciles were constructed for Personal Mastery, Identity Disturbance, and Hardship. Because the Identity Disturbance count is discrete, the 'top decile' required a random tie-break at the cutoff to yield an exact 10% group.

Table 1*Personal Mastery Items and Scoring*

Item	Reverse-scored	Variable
There is really no way I can solve some of the problems I have.	No	V06653
I feel that I'm being pushed around in life.	No	V06654
I have little control over the things that happen to me.	No	V06655
I can do just about anything I really set my mind to.	Yes	V06656
I often feel helpless in dealing with the problems of life.	No	V06657
What happens to me in the future mostly depends on me.	Yes	V06658
There is little I can do to change many of the important things in my life.	No	V06659

Note. Response options: 1=Strongly Agree, 2=Somewhat Agree, 3=Somewhat Disagree, 4=Strongly Disagree.

Table 2*Identity Disturbance Items and Scoring*

Item	Variable
I often feel "empty" inside.	V03234
I can't decide what kind of person I want to be.	V03240
I let others make my big decisions for me.	V03255
I usually feel uncomfortable or helpless when I'm alone.	V03256
I often seek advice or reassurance about everyday decisions.	V03257

Note. Response options: 1=True, 5=False. The Identity Disturbance score equals the count of items endorsed "True" across the five items. Scores were computed only for respondents with complete data on all five items. These items were selected because they index the experienced integrity of the self—the sense of existing as a coherent agent—rather than beliefs about control per se. The theoretical claim is that this self-integrity is a precondition for perceived control, so substantial empirical overlap is predicted rather than problematic.

Table 3*Hardship Items and Recoding Used to Construct the Hardship Index*

Item	Variable
In the past 12 months, was there a time when you didn't meet basic expenses (food, clothing, and shelter)	V07105
Do you think you are better off financially, about the same, or worse off now, than you were 10 years ago?	V07148
In the past 12 months, in your household was there enough to eat, sometimes not enough to eat, or often not enough to eat?	V07151
Did a doctor or other health professional ever tell you that you had cancer?	V04060

Did a doctor or other health professional ever tell you that you had epilepsy or seizures?	V04059
Suppose you sell everything you own (cars, houses, land, etc.) and you use the money to pay all your debts (credit cards, mortgage, etc.), would you still have any money left over after paying your debts?	V05312
At any time in your life, have you ever been unfairly fired?	V07018
Have you ever been homeless?	V05633
Over the past month or so, have you or your family been the victim of a crime?	V06761
In the past 12 months did you have an accident, injury or poisoning that required medical attention?	V04101

Note. Hardship component items were recoded into hardship scores (0, 0.5, or 1), with higher values indicating greater hardship. The hardship index equals the sum of non-missing hardship scores and was computed when at least three component items were observed; otherwise it was set to missing. The index is deliberately broad because Pathway 1 encompasses any external force that acts against the individual's will, including chance events like illness. The index need only serve as a proxy that varies in the right direction, not capture the full magnitude of experienced hardship.

2.3 Models

Continuous predictors were standardized (z-scored) within the analytic sample for comparability across scales. The primary model predicted Mastery from Identity Disturbance, hardship burden, their interaction, and any lifetime disorder: $E_z = \beta_0 + \beta_1 ID_z + \beta_2 H_z + \beta_3 (ID_z \times H_z) + \beta_4 D + \varepsilon$. A companion model reversed the outcome to characterize the degree to which hardship predicts identity disturbance after accounting for Mastery: $ID_z = \alpha_0 + \alpha_1 E_z + \alpha_2 H_z + \alpha_3 D + \varepsilon$.

3 Results

3.1

Table 4

Descriptive statistics for constructed measures (weighted).

Measure	N	M	SD	Min	Max
Mastery (7-item; 0–100)	4,904	77.61	19.59	0	100.00
Identity Disturbance Count	4,904	0.58	1.00	0	5
Hardship Burden Index	4,904	0.83	0.89	0	4.50
Any lifetime disorder (0/1)	4,904	0.27	—	0	1

Note. Mastery was scaled so that higher values indicate greater perceived personal control (Mastery).

Table 5

Composition of the low-mastery group and subgroup profiles (weighted).

Group within low Mastery decile	%	Mastery M	Hardship M	Any disorder %
Identity disturbance = 0	38.59	39.03	1.24	28.63
Identity disturbance ≥ 1	61.41	38.35	1.38	53.83

Note. Low mastery is defined as the bottom decile of Mastery using a random tie-break at the cutoff due to ceiling mass at 100. Within this tail, hardship did not differ reliably between the identity-intact and identity-disturbed subgroups ($p = .255$), whereas mental disorder prevalence differed strongly (odds ratio = 2.91, $p < .001$).

Table 6

High Mastery under high Identity Disturbance and low Mastery under low Identity Disturbance (weighted).

Condition	P(top Mastery decile) %
Identity disturbance top decile	0.75
Not in identity disturbance top decile	11.04
Hardship top decile	7.56
Not in hardship top decile	10.28
Condition	P(bottom Mastery decile) %
Identity disturbance bottom decile	10.22

Note. Deciles used random tie-breaks at cutoffs to preserve 10% tails under survey weights.

Table 7

High mastery (top Mastery decile) within high hardship, stratified by identity disturbance (weighted).

Condition	P(top Mastery decile) %	Interpretation
Hardship top decile & identity disturbance = 0	14.43	Hardship does not constrain mastery/control when identity disturbance is absent.
Hardship top decile & identity disturbance ≥ 1	1.39	High hardship + any identity disturbance rarely yields high mastery.

Note. These estimates use global decile cutoffs (not within-stratum deciles) to keep interpretations anchored to the overall distributions.

Table 8

Regression model predicting Mastery (SD units).

Predictor	b	SE	p
Identity disturbance (SD)	-0.340	0.020	< .001
Hardship burden (SD)	-0.178	0.020	< .001
Identity disturbance $\times$ Hardship burden	0.003	0.013	.833

Any lifetime disorder (0/1)	-0.081	0.037	.033
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Note. Model: $M_z = \beta_0 + \beta_1 ID_z + \beta_2 H_z + \beta_3 (ID_z \times H_z) + \beta_4 D + \epsilon$. Coefficients are weighted least squares estimates. Standard errors and p values use design-based Taylor linearization with sampling error strata and clusters/PSUs; $df = 54$ (clusters – strata).

3.2 Basic findings

Five empirical patterns support the idea of two subtypes of low mastery/control (with and without agentic self).

- (a) The low mastery/control tail is heterogeneous: within the bottom decile of Mastery, 38.59% of respondents endorsed zero Identity Disturbance items, consistent with a 'low mastery/control with agentic self' subtype alongside a 61.41% 'low mastery/control without agentic self' subtype that endorsed ≥ 1 Identity Disturbance indicators (see Table 5).
- (b) Identity Disturbance and Hardship burden are related but not redundant: Hardship does not meaningfully differentiate the two low mastery/control subgroups, supporting conceptual separability between oppressive external forces and diminished self (see Table 7).
- (c) Robust Mastery is rare under high Identity Disturbance: only 0.75% of the Identity Disturbance top decile falls in the Mastery top decile, consistent with the idea that internal control attributions are nearly ruled out when the agentic self is impaired (see Table 6). But low Identity Disturbance (intact agentic self) does not at all guarantee high Mastery nor rule out low Mastery. This asymmetry is an important confirmation of the “precondition” structure of the relationship between Identity Disturbance and Mastery.
- (d) High Hardship does not preclude robust mastery/control, especially when Identity Disturbance is absent: 7.56% of the Hardship top decile remains in the Mastery top decile, and this rises to 14.43% when Identity Disturbance is absent—an empirical analogue of Henley’s (1888) “Invictus.” Given an “unconquerable soul” (no endorsed Identity Disturbance), “it matters not how strait the gate, how charged with punishments the scroll, I am the master of my fate, I am the captain of my soul.”
- (e) In standardized models, Identity Disturbance is a robust predictor ($b = -0.340$) even after accounting for Hardship ($b = -0.178$) (see Table 8). This statistical result is consonant with the conceptual priority of agentic sense of self.

3.3 Identity Disturbance attenuates the Mastery–psychopathology association

With two types of low mastery/control identified, one natural next question is whether this distinction makes a difference in how mastery/control is associated with important outcomes. It is widely reported that mastery/control is associated with psychopathology (Cheng et al., 2013; Novic et al., 2022; Lindgren et al., 2023). If mastery/control and Identity Disturbance are conceptually intertwined in the way we have described, then their joint

association with psychopathology should not be simply additive. High Identity Disturbance should actually weaken the measurable association between Mastery and mental disorders. Since we argue that Identity Disturbance nearly entails low Mastery (but not the other way around), there will be less predictive information added by Mastery scores for those with Identity Disturbance. (The Mastery scores for these people will be consistently low.) There will be more predictive information added by Mastery scores for those without Identity Disturbance.

Survey-weighted quasi-Poisson regression (log link) predicted lifetime mental disorder diagnosis from standardized Mastery, centered Identity Disturbance, their interaction, and covariates (sex and age). Higher Mastery predicted lower disorder rate ($b = -0.242$, $SE = 0.032$, $p < .001$), Identity Disturbance predicted higher disorder rate ($b = 0.411$, $SE = 0.024$, $p < .001$), and the Mastery $\times$ Identity Disturbance interaction was positive ($b = 0.064$, $SE = 0.017$, $p = .00039$), indicating attenuation: Mastery is less protective at higher Identity Disturbance.

Simple slopes illustrate the attenuation. At Identity Disturbance = 0, a 1-SD increase in Mastery corresponded to $IRR = 0.785$ (95% CI [0.738, 0.835]). At Identity Disturbance = 2, the corresponding effect was smaller ($IRR = 0.891$, 95% CI [0.823, 0.965]). Adding hardship did not eliminate the interaction (Mastery $\times$ Identity: $b = 0.066$, $SE = 0.017$, $p = .00031$).

Table 9

Predicting mental disorder count: Identity Disturbance attenuates the Mastery–psychopathology association.

Predictor	b	SE	p / IRR
Mastery	-0.242	0.032	$p < .001$
Identity Disturbance	0.411	0.024	$p < .001$
Mastery $\times$ Identity Disturbance	0.064	0.017	$p < .001$
Mastery (with Hardship)	-0.175	0.030	$p < .001$
Hardship	0.265	0.024	$p < .001$
Mastery $\times$ Identity Disturbance (with Hardship)	0.066	0.017	$p < .001$
Slope @ Identity Disturbance = 0	-0.242	0.032	$IRR = 0.785$ [0.738, 0.835]
Slope @ Identity Disturbance = 2	-0.115	0.041	$IRR = 0.891$ [0.823, 0.965]

Note. Survey-weighted quasi-Poisson regression. Mastery was standardized, Identity Disturbance was centered, Hardship was standardized.

3.4 Measurement model for Identity Disturbance and Mastery items

To quantify how strongly the Identity Disturbance and Mastery items collapse onto a single common dimension (versus forming separable dimensions), confirmatory factor analyses (CFAs) were fit to the 12 ordinal indicators: five Identity Disturbance items and seven Mastery items. Models were estimated in lavaan using WLSMV (DWLS) with theta parameterization and standardized latent variances. Four models were compared: a one-factor model; a correlated two-

factor model (Identity; Mastery); the two-factor model with a residual covariance between the two reverse-keyed Mastery items (V06656 and V06658); and a bifactor model.

Fit comparisons favored multidimensional structure. The correlated two-factor model improved substantially over the one-factor model, and adding the residual covariance between the reverse-keyed items improved fit further. The bifactor model provided the best overall fit by conventional indices (see Table 10). In the correlated two-factor model, the latent correlation between Identity and Mastery was $r = 0.616$, indicating large overlap (consistent with the theorized ‘agentic-self’ pathway) but not redundancy. In practical terms, the measurement model supports treating Identity Disturbance and Mastery as distinct but strongly related constructs: Identity Disturbance tends to drag mastery/control beliefs downward, but mastery/control beliefs also vary for reasons not captured by Identity Disturbance (e.g., world constraints).

Table 10

CFA fit indices comparing one-factor, two-factor, two-factor with residual covariance, and bifactor models.

Model	χ^2 (scaled)	df	CFI	TLI	RMSEA	SRMR
One-factor	1914.963	54	0.895	0.872	0.084	0.109
Two-factor (ID, Mastery)	904.843	53	0.952	0.940	0.057	0.064
Two-factor + resid cov	500.215	52	0.975	0.968	0.042	0.051
Bifactor	316.298	42	0.985	0.976	0.036	0.037

Note. CFA models were estimated in lavaan using WLSMV (DWLS) with theta parameterization and standardized latent variances (std.lv = TRUE) in the Mastery7 analytic sample ($N = 4,904$). Reported χ^2 , CFI, TLI, and RMSEA are scaled (robust) statistics. The “two-factor + residual covariance” model includes correlated residuals between the two reverse-keyed Mastery items (V06656 and V06658).

3.5 Design-based decomposition of Mastery into Identity/Hardship-aligned and residual components

The moderation result (Identity Disturbance attenuating the Mastery–psychopathology association) can be re-expressed as a decomposition question: how much of Mastery is statistically aligned with the agentic-self pathway (Identity Disturbance) and with world constraints (Hardship), and does the remaining ‘leftover’ Mastery still matter? To address this, Mastery was decomposed using a survey-weighted projection. Specifically, Mastery was regressed on centered Identity Disturbance and Hardship using svyglm with strata, clusters, and sampling weights. The fitted values represent the portion of Mastery predictable from Identity Disturbance and measured Hardship; the residuals represent Mastery variance orthogonal to both predictors.

Mastery was projected onto centered Identity Disturbance and Hardship using a survey-weighted linear model to separate the component of Mastery aligned with these predictors from the residual component orthogonal to both. Lifetime mental disorder diagnosis count was then

modeled using survey-weighted quasi-Poisson regression. When entered jointly with identity disturbance and hardship, higher Mastery remained associated with lower diagnosis burden. Decomposing Mastery showed that the aligned component was strongly protective and the residual component was smaller but remained protective. (see Table 11).

Conceptually, these results integrate the moderation and measurement findings. The CFA confirms that Identity Disturbance and Mastery are not identical (they are separable latent dimensions), yet the large factor correlation and the projection results show that a nontrivial share of Mastery is attributable to Identity Disturbance and Hardship. The moderation effect is then expected: when Identity Disturbance is high, much of the clinically relevant Mastery variance is already present, so the incremental predictive value of Mastery shrinks. At the same time, the residual Mastery component continues to predict diagnosis count even after removing variance shared with Identity Disturbance and Hardship, implying that Mastery is not merely a disguised Identity Disturbance measure.

Table 11

Predicting lifetime mental disorder diagnoses with Mastery components (survey-weighted quasi-Poisson).

Mastery component	b	SE	p	IRR per 1 SD increase
Aligned Mastery	-1.170	0.044	< .001	0.605
Residual Mastery	-0.135	0.029	< .001	0.885

4 Discussion

4.1

So far, I've advanced a dual-pathway model of low mastery/control, positing that it emerges either from perceptions of overpowering external forces—such as systemic hardships—or from an intrinsic lack of agentic self, manifested in Identity Disturbance, where the individual perceives themselves as inherently incapable of exerting control. The model underscores that while these pathways can intermingle along a spectrum, the absence of an agentic self holds conceptual primacy, as internal control attributions fundamentally require a robust sense of personal agency, rendering external attributions inevitable in its absence. Empirical analyses of a nationally representative dataset substantiate this framework, revealing heterogeneity within low Mastery groups, the relative predictive strength of Identity Disturbance over hardship, and its moderating role in attenuating the well-established link between low Mastery and psychopathology. Measurement and decomposition approaches further affirm that while low Mastery and Identity Disturbance share substantial overlap, they remain distinct, with residual Mastery capturing additional variance.

4.2 Problems with the Sense of Control Scale

Now as mentioned in the introduction, it's necessary to address the major work that already pulled an inner efficacy component and an external constraints component out of the Mastery construct. Lachman and Weaver (1998) added five more items to the seven in the Pearlin and Schooler Mastery scale, then used a confirmatory factor analysis to identify two factors: a Mastery factor (for inner efficacy), and a Constraints factor (external constraints). Combined, these factors comprise the Sense of Control Scale. We argue, however, that this two-factor solution is an artifact of item-wording polarity rather than evidence of two substantively distinct constructs.

Consider first the content of the items themselves. On inspection, Mastery and Constraints items are not conceptually distinct. They are restatements of the same idea in opposite valences. The Constraints item "What happens in my life is often beyond my control" is simply a negation of the Mastery item "What happens to me in the future mostly depends on me." Both invoke the same causal schema: events that befall the respondent versus the respondent's own influence. Both can be read with emphasis on internal agency or on external force. "What happens in my life is often beyond my control" could mean "I lack the ability to control things" (an internal attribution) or "things happen for reasons that are too big, powerful, and distant to be controlled" (an external attribution). The same ambiguity applies to the Mastery counterpart. If the two subscales are supposed to separate inner agency from outer obstruction, the items themselves do not honor that distinction.

A more parsimonious explanation for the CFA results is a wording-direction method effect. Every Mastery item is positively keyed; every Constraints item is negatively keyed. A large literature demonstrates that reversed polarity alone can produce artifactual factors in Likert-type scales, even when all items tap a single construct. Gnamb and Schroeders (2024), in a meta-analysis of the Core Self-Evaluations Scale, showed that wording-direction factors systematically emerged from reversed items and correlated differentially with external criteria despite lacking substantive meaning. Zeng et al. (2024) provided item response theory evidence that positive and negative wordings elicit different response processes—chiefly acquiescence and inattention—that inflate between-factor distinctiveness. Steinmann et al. (2022) demonstrated via constrained factor mixture analysis that mixed-worded scales routinely yield spurious second factors traceable to inconsistent responding rather than to genuine latent dimensions. Given that the Mastery–Constraints split maps perfectly onto a positive–negative wording split, the documented two-factor structure of the Sense of Control Scale is exactly the kind of finding this literature warns against.

A quick test confirmed that these conceptual problems undermine the validity of the Mastery and Constraints subscales. Two of the items available in the CPES data (V06658, V06656) were assigned by Lachman and Weaver to their Mastery subscale, and five (V06659, V06657, V06655, V06653, V06654) were assigned to their Constraints subscale. If the Mastery–Constraints distinction is substantive, Mastery items should be relatively stronger predictors of Identity Disturbance (a deficiency of internal efficacy), and Constraints items should be relatively stronger predictors of Hardship (the unwanted things that happen).

But standardized regressions did not show this pattern. The item-level rank ordering of predictive strength was nearly identical across Identity Disturbance and Hardship. For Identity Disturbance, the five Constraints items occupied ranks 1 through 5, followed by the two Mastery items; for Hardship, the same five Constraints items again occupied the top five ranks, in almost the same order, followed again by the two Mastery items. The two Mastery items were the weakest predictors of both Identity Disturbance and Hardship. No crossover occurred: not a single Mastery item predicted Identity Disturbance more strongly than any Constraints item, and not a single Constraints item predicted Hardship more strongly than the other Constraints items predicted Identity Disturbance.

One result might initially appear favorable to Lachman and Weaver's framework: V06658 ("future depends on me") was nonsignificant as a predictor of Hardship ($b = .018, p = .326$), which could be read as evidence that a Mastery item appropriately fails to predict external circumstances. However, V06658 was also the weakest predictor of Identity Disturbance ($b = .101$), the very construct it should predict most strongly. And every item, without exception, had a stronger association with Identity Disturbance than with Hardship. V06658 predicted Identity Disturbance weakly. In line with all of the other items, it predicted Hardship more weakly. The pattern across all seven items is more consistent with a single underlying dimension whose apparent bifurcation is driven by response-style variance associated with item polarity.

Of course we do not dispute that personal agency and environmental constraints are theoretically distinguishable. That distinction has been the point of this paper. But the Sense of Control Scale does not accomplish this. Its two-factor structure is confounded with item polarity, its items are semantic mirrors rather than substantive contrasts, and its items fail to show divergent prediction when tested against criteria that should favor each factor.

4.3 Limitations on generality

These findings derive from a U.S. household sample collected in 2001–2003. The dual-pathway model is proposed as a general conceptual framework, but the specific effect sizes and distributional patterns reported here may not generalize to other cultural contexts, particularly those in which self-construal is more interdependent and perceived control carries different normative connotations (Cheng et al., 2013). The identity disturbance items available in the CPES were not designed as a validated clinical instrument; they are a subset of borderline personality indicators repurposed here as a dimensional proxy. A purpose-built measure of agentic self-integrity would likely yield stronger and more precise associations. Similarly, the hardship index is deliberately broad and cannot capture the full range of external constraint any individual experiences. Finally, the data are cross-sectional: the theoretical claim that a sense of self is a precondition for mastery rests on conceptual logic rather than temporal evidence. Longitudinal or experimental designs would be needed to test causal ordering directly.

4.4 Conclusion

The sense of personal control—whether it's called personal mastery, sense of control, locus of control, or something else—is necessarily composed of two factors: perceptions of the internal self, and perceptions of external forces. Items like those in the Pearlin and Schooler Personal Mastery Scale and the Lachman and Weaver Sense of Control Scale are not semantically equipped to disambiguate these two factors, but they work well for unidimensional measurement. For researchers and clinicians to get more specificity, we'll need a scale with some items that each explicitly focus on one aspect of control or the other. Given the results of analyses in this paper, the identity disturbance construct could be of use. Currently, identity disturbance is mostly thought of as one of nine categorical diagnostic criteria for borderline personality disorder (BPD), not a dimensional trait with consequences beyond diagnosable BPD. But this is beginning to change: Bogaerts et al. (2023) tracked identity development trajectories in over 2,000 adolescents and found that a diffused-identity class predicted the worst outcomes across self-esteem, resilience, and depression, leading the authors to emphasize the transdiagnostic value of identity functioning as a dimension relevant well beyond BPD. Continuing research on identity functioning could continue to open explanatory doors. Identity disturbance is statistically related to mastery/control in the way that it is because the sense of existing as a self is foundational to the sense of the self being in control. But the sense of existing as a self is foundational to quite a lot of things. What else might be better understood by applying the idea that people vary in their sensed existence?

Data availability

The data used in this study are from the Collaborative Psychiatric Epidemiology Surveys (CPES), which are publicly available through the Inter-university Consortium for Political and Social Research (ICPSR) at <https://doi.org/10.3886/ICPSR20240.v9>. Analysis code is available on the Center for Open Science Open Source Infrastructure (OSF) at https://osf.io/9m4qb/overview?view_only=b421dcbcb2e549c79ef68133a5f7e26b.

Declaration of competing interest

The authors declare no competing interests. No funding was secured for this study.

Preregistration

This study was not preregistered.

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