**Supplemental Materials**

# I am What I am.

# The Role of Essentialist Beliefs and Neurodivergent Identification on Individuals' Self-Efficacy

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# Supplemental Method

## Participants

### *Additional Details Regarding Exclusion Criteria*

In addition to the 105 participants who dropped out of the study after the screening questions, participants were excluded from analyses if they did not pass the initial screening questions (i.e., did not verify they were not a robot, were not 18 or older (n = 30); did not identify as neurodivergent (n = 31); or provided information later on that conflicted with their answers on the screening questions (e.g., identified self as a parent of a neurodivergent individual (n = 3). Additionally, participants were excluded from data analysis if more than one response came from the same IP address (n = 33) or if their open-ended and/or demographic answers were similar to other participants' (n = 84), indicating that the responses were possibly repeat entries and/or from "bots."

### *Demographics*

Table S1 demographic information reported by study participants. Demographic items are listed in order in which participants were asked. Some items allowed participants to elaborate on their responses (e.g., if "other" was selected for gender, participants could type their gender identity into a text box).

**Table S1.**

*Complete Demographic Characteristics of Sample*

| Characteristics | n | % | *M* | *SD* |
|---|---|---|---|---|
| **Gender** | | | | |
| *Male* | 111 | 35.1 | | |
| *Female* | 117 | 37.0 | | |
| *Self-Describe* | 15 | 4.7 | | |
| **Age** | 240 | | 29.20 | 6.98 |
| **Ethnicity** | | | | |
| *White non-Hispanic* | 118 | 37.3 | | |
| *African American* | 49 | 15.5 | | |
| *White Hispanic* | 37 | 11.7 | | |
| *American Indian or Alaska Native* | 18 | 5.7 | | |
| *Asian* | 14 | 4.4 | | |
| *Native Hawaiian or other Pacific Islander* | 10 | 3.2 | | |
| *Middle Eastern* | 7 | 2.2 | | |
| *Other* | 8 | 2.5 | | |
| **Marital Status** | | | | |
| *Married* | 89 | 28.2 | | |
| *Never Married* | 108 | 34.2 | | |
| *Widowed* | 21 | 6.6 | | |
| *Divorced* | 14 | 4.4 | | |
| *Separated* | 13 | 4.1 | | |

| Characteristics | n | % | *M* | *SD* |
|---|---|---|---|---|
| **Education** | | | | |
| *Some High School* | 24 | 7.6 | | |
| *High School* | 31 | 9.8 | | |
| *Some College* | 63 | 19.9 | | |
| *Bachelor's Degree* | 70 | 22.2 | | |
| *Associate Degree* | 29 | 9.2 | | |
| *Master's Degree* | 22 | 7.0 | | |
| *Professional Degree* | 3 | 0.9 | | |
| *Doctorate Degree* | 3 | 0.9 | | |
| **Employment** | | | | |
| *Full-time Student with Further Employment* | 27 | 8.5 | | |
| *Full-time Student without Further Employment* | 28 | 8.9 | | |
| *Part-time Student with Additional Employment* | 25 | 7.9 | | |
| *Part-time Student without Additional Employment* | 9 | 2.8 | | |
| *Self-employed Part-time* | 31 | 9.8 | | |
| *Part-time Employment within Organization* | 16 | 5.1 | | |
| *Full-time within Organization* | 46 | 14.6 | | |
| *Self-employed Full-time* | 37 | 11.7 | | |
| *Unemployed* | 26 | 8.2 | | |

| Characteristics | n | % | *M* | *SD* |
|---|---|---|---|---|
| **Income** | | | | |
| *Earn Below U.S. Average* | 90 | 28.5 | | |
| *Earn U.S. Average* | 128 | 40.5 | | |
| *Earn Above U.S. Average* | 24 | 7.6 | | |
| **Region** | | | | |
| *City* | 151 | 47.8 | | |
| *Suburb* | 71 | 22.5 | | |
| *Rural* | 23 | 7.3 | | |

*Note.* Table provides demographic information reported by all participants included in the final sample. Percentages do not always sum to 100%, reflecting the fact that some participants did not report their demographics.

***Professions***

In addition to the demographic information reported in Table S1, participants reported being involved in a variety of professions, including but not limited to trade careers (e.g., warehouse worker, waiter, cashier, plumber, retail, Lyft driver), artistic careers (e.g., fashion designer, painter, writer) medical and scientific careers (neurologist, physicist, researcher, nurse, zoologist), technology-based careers (e.g., software developer, data analyst, digital shopper, computer scientist, cyber security), among others.

***Participants' Neurodivergencies***

As part of the study's open-ended questions, participants were given the option to disclose their specific diagnoses. A total of 181 participants reported their specific medical and psychiatric diagnoses, with most participants reporting having multiple conditions/diagnoses (e.g., ADHD, Tourette Syndrome, epilepsy; see Table S2).

**Table S2**

***Participants' Neurodivergencies***

| Disorder | n | % |
|---|---|---|
| ADHD | 30 | 9.5 |
| Anxiety | 7 | 2.2 |
| Autism | 15 | 4.7 |
| Depression | 9 | 2.8 |
| Dyslexia | 8 | 2.5 |
| Epilepsy | 9 | 2.8 |
| Tourette's Syndrome | 5 | 1.6 |
| Other Psychiatric | 11 | 3.5 |
| Other Medical | 5 | 1.6 |
| Multiple conditions/diagnoses | 66 | 20.9 |
| Only Symptoms Reported (e.g., forgetfulness, mania) | 16 | 5.1 |

*Note.* Table provides demographic information reported by all participants included in the final sample. Percentages do not always sum to 100%, reflecting the fact that some participants did not report their demographics.

## Method

### *Post-survey Procedure*

Following the main survey, we provided participants with mental health resources because we anticipated the study questions might have induced negative emotions. Finally, participants were invited to be redirected to a separate survey to enter a raffle to win one of several $25 Amazon gift cards. All responses on the initial survey were anonymous. Participants were invited to contact the researchers with any further questions.

## Measures

### *Covariate: Experiences with Stigmatization*

We reasoned that experiences with public stigma could be negatively associated with self-reported self-efficacy; therefore, we measured experiences with public stigma as a covariate. The seven items with the highest factor loadings from King et al.'s (2007) Stigma Scale were adapted to evaluate perceived public stigma towards neurodivergent individuals. Of these seven items, participants answered three items pertaining to discrimination (e.g., "People have avoided me because of my neurodivergence"), two items pertaining to disclosure of one's neurodivergent status (e.g., "I find it hard telling people I am neurodivergent"), and two items related to positive aspects of public stigma (e.g., "My neurodivergence has made me more accepting of other people"). Each item was rated on a Likert-like scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The adapted version of the scale was reliable ($\alpha = .72$) and was averaged to form a composite ($M = 3.44$. $SD = 0.67$).

# Supplemental Results

## Supplemental Analysis Overview

In this section, we report supplemental results not reported in the main text. First, we report the main moderation analyses reported in the main paper, this time including "Experiences with Stigma" (described above) as a covariate. Second, we report two additional moderation analyses, one with each self-efficacy scale (Chen et al., 2001; Schwarzer et al., 1995) entered as a separate dependent variable. We report these analyses to explore whether similar results are observed among two different ways of conceptualizing self-efficacy: one that focuses on more global perceptions of possible success and another which focuses on perceived ability to overcome challenges.

As in the analyses reported in the main text, we performed all regression analyses using PROCESS Model Macro Model 1 (Hayes, 2013). Essentialist beliefs, neurodivergent identification, and their interaction were entered as predictor variables and were mean centered. Experiences with stigma was additionally included in the first regression model. When significant interactions emerged between essentialist beliefs and neurodivergent identification, we tested simple slopes to examine associations at low (-1 SD below the mean), moderate (mean) and high (+1 SD above the mean) levels of neurodivergent identification. Zero-order correlations between all variables are provided in Table S1.

***Experiences with Stigma as a Covariate***

As depicted in Table S1, experience with stigma was positively correlated with self-efficacy. This was contrary to our expectation: we expected that experiences with stigma might be negatively associated with self-efficacy, such that perceiving that one's group is stigmatized could reflect back messages about the self which undermine one's sense of self-efficacy.

Given the positive, significant zero-order correlation, we proceeded to include experiences with stigma as a covariate in a regression model testing the role of essentialist beliefs, neurodivergent identification, and their joint influence, on self-efficacy. There was no main effect of experiences with stigmatization ($b$ = 0.07, 95% CI [-0.03, 0.18], $t(291) = 1.34$, $p = .180$) in this model. Consistent with the effects reported in the main text, we observed a main effect of essentialist beliefs, such that higher endorsement of essentialist beliefs was associated with increased self-efficacy ($b$ = 0.42, 95% CI [0.29, 0.55], $t(291) = 6.45$, $p < .001$). There was no main effect of neurodivergent identification ($b$ = 0.03, 95% CI [-0.06, 0.12], $t(291) = 0.57$, $p = .570$). However, the interaction between essentialist beliefs and neurodivergent identification was significant ($b$ = 0.26, 95% CI [0.14, 0.38], $t(291) = 4.24$, $p < .001$).

In testing simple slopes, we found that there was a significant relationship between essentialist beliefs and self-efficacy at low ($b$ = 0.20 , 95% CI [0.03, 0.36], $t$(291) = 2.28, $p$ = .023), mean ($b$ = 0.42, 95% CI [0.29, 0.55], $t$(291) = 6.45, $p$ < .001), and high ($b$ = 0.64, 95% CI [0.48, 0.80], $t$(291) = 7.89, $p$ < .001) levels of neurodivergent identification.

**Table S1**

***Correlations Between Measures***

| Measures | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| (1) Neurodivergent Identification | — | | | | | |
| (2) Essentialist Beliefs | 0.46*** | — | | | | |
| (3) Self-Efficacy (Composite) | 0.24*** | 0.43*** | — | | | |
| (4) Chen Self-Efficacy | 0.21*** | 0.38*** | 0.94*** | — | | |
| (5) Schwarzer Self-Efficacy | 0.25*** | 0.43*** | 0.95*** | 0.78*** | — | |
| (6) Stigma | 0.31*** | 0.32*** | 0.20** | 0.21*** | 0.17** | — |

*Note* *$p$ < .05, **$p$ < .01, *** $p$ < .001 (all 2-tailed)

***Self-Efficacy Scale 1: Perceptions of Goal Accomplishment (Chen et al., 2001)***

We observed a main effect of essentialist beliefs on the Chen et al (2001) measure of self-efficacy, such that higher endorsement of essentialist beliefs was associated with increased self-efficacy around how much one believes they can achieve their goals ($b$ = 0.42, 95% CI [0.28, 0.55], $t$(292) = 5.96, $p$ < .001). There was no main effect of neurodivergent identification on self-efficacy ($b$ = 0.03, 95% CI [-0.07, 0.13], $t$(292) = 0.59, $p$ = .558). However, as expected, the relationship between essentialism and self-efficacy depended on participants' levels of neurodivergent identification, as evidenced by a significant positive interaction between

essentialist beliefs and neurodivergent identification ($b$ = 0.27, 95% CI [0.14, 0.40], $t(292)$ = 3.99, $p < .001$).

In testing simple slopes, we found that there was a significant relationship between essentialist beliefs and self-efficacy at low ($b$ = 0.18, 95% CI [0.00, 0.37], $t(292)$ = 2.00, $p$ = .046), mean ($b$ = 0.42, 95% CI [0.28, 0.55], $t(292)$ = 5.96, $p < .001$), and high ($b$ = 0.65, 95% CI [0.47, 0.82], $t(292)$ = 7.28, $p < .001$) levels of neurodivergent identification, such that essentialist beliefs were more strongly related to increased self-efficacy with increasing levels of neurodivergent identification.

**Self-Efficacy Scale 2: *Coping with Difficulties* (Schwarzer et al., 1995).** We observed a main effect of essentialist beliefs such that higher endorsement of essentialist beliefs was associated with increased self-efficacy regarding how much one believes they can overcome challenges ($b$ = 0.45, 95% CI [0.32, 0.58], $t(298)$ = 6.73, $p < .001$). There was no main effect of neurodivergent identification on self-efficacy ($b$ = 0.05, 95% CI [-0.05, 0.14], $t(298)$ = 1.03, $p$ = .306). However, as expected, the relationship between essentialism and self-efficacy depended on participants' levels of neurodivergent identification, ($b$ = 0.25, 95% CI [0.12, 0.37], $t(298)$ = 3.82, $p < .001$).

In testing simple slopes, we found that there was a significant relationship between essentialist beliefs at low ($b$ = 0.24, 95% CI [0.06, 0.41], $t(298)$ = 2.68, $p$ = .008), mean ($b$ = 0.45, 95% CI [0.32, 0.58], $t(298)$ = 6.73, $p < .001$), and high ($b$ = 0.66, 95% CI [0.50, 0.83], $t(298)$ = 7.82, $p < .001$) levels of neurodivergent identification, such that essentialist beliefs were more strongly related to increased self-efficacy with increasing levels of neurodivergent identification.

## Supplemental Discussion

The results reported in this supplement are similar to those reported in the main text. Chiefly, there is a significant relationship between essentialist beliefs at low, mean, and high levels of neurodivergent identification, and the relationship is stronger as people identify more with their neurodivergent identity. Consistent with the main text, there was not a main effect of neurodivergent identification. Further, controlling for experiences with stigma did not alter this pattern of results. Finally, the results from both self-efficacy scales—Chen et al., (2001), which focuses more on perceptions of possible success—and Schwarzer et al., (1995), which focuses more on the perceived ability to overcome challenges—were similar. From these results, we can conclude that the interaction between essentialist beliefs and neurodivergent identification is associated with similar outcomes across these two ways of conceptualizing self-efficacy.

## Appendix A: Measures Used in the Study

Table S3 lists the measures used in our study, instructions given to participants on Qualtrics when responding to each measure, anchors for the items, and a list of the items. Measures are in order of appearance, with self-efficacy scales (Chen et al., 2001 and Schwarzer et al., 1995) being counterbalanced.

**Table S3.**

*Items for Measures Used in Study*

| Measure | Instructions | Anchors | Items | |
|---|---|---|---|---|
| Essentialist Beliefs (Haslam et al., 2000) | Rate the following statements according to what degree you disagree or agree with them. | Likert-like scale from 1 (strongly disagree) to 5 (strongly agree) | 1. "Membership in the neurodivergent category is clear-cut, definite, and of an 'either/or' variety; people either belong to this category or they do not." (Natural Kinds; Discreteness)<br><br>2. "Neurodivergent people have many things in common." (Homogeneity; Uniformity)<br><br>3. "Knowing that someone calls themself neurodivergent tells us a lot about that person." (Homogeneity; Informativeness)<br><br>4. "Being neurodivergent is natural, whereas other social categories are more man-made." (Natural Kinds; Naturalness) | 5. "It is difficult for members of the neurodivergent community." (Natural Kinds; Immutability)<br><br>6. "Neurodivergent people have always existed and their characteristics have not changed much throughout history." (Natural Kinds; Stability)<br><br>7. "Although neurodivergent people have similarities and differences on the surface, underneath they are basically the same." (Homogeneity; Inherence) |

| Measure | Instructions | Anchors | Items | |
|---|---|---|---|---|
| | Rate the following statements according to what degree you disagree or agree with them. | Likert-like scale from 1 (*strongly disagree*) to 5 (*strongly agree*) | 8. "Without certain characteristics, someone cannot be called neurodivergent." (Natural Kinds; Necessity) | 9. "Belonging to the 'neurodivergent' category excludes a person from other categories." (Homogeneity; Exclusivity) |
| Neurodivergent Identification (Doosje et al.,1995) | Rate the following statements below according to how much you relate to them. | Likert-like scale from 1 (*not at all*) to 5 (*extremely*) | 1. "I identify with other neurodivergent individuals."<br><br>2. "I see myself as neurodivergent." | 3. "I am glad to be neurodivergent."<br><br>4. "I feel strong ties with neurodivergent people." |
| Stigmatization (King et al., 2007) | Rate the following statements below according to what degree you disagree or agree with them. | Likert-like scale from 1 (*strongly disagree*) to 5 (*strongly agree*) | 1. "People have avoided me because of my neurodivergence." (Discrimination)<br><br>2. "People have insulted me because of my neurodivergence." (Discrimination)<br><br>3. "I am angry with the way people have reacted to my neurodivergence." (Discrimination)<br><br>4. "I find it hard telling people that I am neurodivergent." (Disclosure) | 5. "I am scared of how other people will react if they find out I am neurodivergent." (Disclosure)<br><br>6. "Having had problems with my neurodivergence has made me a more understanding person." (Positive Aspect)<br><br>7. "My neurodivergence has made me more accepting of other people." (Positive Aspect) |

| Measure | Instructions | Anchors | Items | |
|---|---|---|---|---|
| Self-efficacy (Chen et al., 2001) | Rate the following statements below according to what degree you disagree or agree with them. | Likert-like scale from 1 (*strongly disagree*) to 5 (*strongly agree*) | 1. "I will be able to achieve most of the goals that I set for myself." | 5. "I will be able to successfully overcome many challenges." |
| | | | 2. "When facing difficult tasks, I am certain that I will accomplish them." | 6. "I am confident that I can perform effectively on many different tasks." |
| | | | 3. "In general, I think that I can obtain outcomes that are important to me." | 7. "Compared to other people, I can do most tasks very well." |
| | | | 4. "I believe I can succeed at most any endeavor to which I set my mind." | 9. "Even when things are tough, I can perform quite well." |
| Self-efficacy (Schwarzer et al., 1995) | Rate the following statements below according to what degree you disagree or agree with them. | Likert-like scale from 1 (*strongly disagree*) to 5 (*strongly agree*) | 1. "I can always manage to solve difficult problems if I try hard enough." | 5. "Thanks to my resourcefulness, I know how to handle unforeseen situations." |
| | | | 2. "If someone opposes me, I can find the means and ways to get what I want." | 6. "I can solve most problems if I invest the necessary effort." |
| | | | 3. "It is easy for me to stick to my aims and accomplish my goals." | 7. "I can remain calm when facing difficulties because I can rely on my coping abilities." |
| | | | 4. "I am confident that I could deal efficiently with unexpected events." | 8. "If I am in trouble, I can usually think of a solution." |

| Measure | Instructions | Anchors | Items |
|---|---|---|---|
| | Rate the following statements below according to what degree you disagree or agree with them. | Likert-like scale from 1 (*strongly disagree*) to 5 (*strongly agree*) | 9. “I can usually handle whatever comes my way.” |

## References

King, M., Dinos, S., Shaw, J., Watson, R., Stevens, S., Passetti, F., Weich, S., & Serfaty, M. (2007). The Stigma Scale: development of a standardised measure of the stigma of mental illness. *The British Journal of Psychiatry: The Journal of Mental Science*, 190, 248–254. https://doi.org/10.1192/bjp.bp.106.024638