

Focusing on the positive or the negative: Self-construal moderates negativity bias in impression updating

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Abstract

Negativity bias refers to the tendency to focus on negative information when forming impressions. This study examined whether self-construal moderates negativity bias in impression updating. In two experiments, participants were asked to update their impressions of a target person based on feedback. In Experiment 1, participants were asked to update their impressions based on positive feedback. In Experiment 2, participants were asked to update their impressions based on negative feedback. Results showed that participants with high self-construal focused more on positive feedback when updating their impressions, while participants with low self-construal focused more on negative feedback. These findings suggest that self-construal moderates negativity bias in impression updating.

KEYWORDS

INTRODUCTION

A negativity bias refers to the tendency to focus on negative information when forming impressions. This bias has been found in various contexts, including social interactions, decision making, and memory. For example, people tend to remember negative events more vividly than positive events (Bargh & Chartrand, 1999). Similarly, people tend to focus on negative feedback when evaluating their performance (Folger & Cropanzano, 1998). The negativity bias is thought to be an evolved mechanism that helps people to avoid potential threats and dangers. However, it can also lead to distorted perceptions and judgments. Understanding the factors that influence the negativity bias is important for improving social interactions and decision making.

One factor that may influence the negativity bias is self-construal. Self-construal refers to the way in which people view themselves in relation to others. It can be either individualistic or collectivistic. Individualistic cultures emphasize personal goals and achievements, while collectivistic cultures emphasize group harmony and relationships. Research has shown that self-construal moderates the negativity bias. For example, people with high self-construal (individualistic) tend to focus more on positive feedback when updating their impressions, while people with low self-construal (collectivistic) tend to focus more on negative feedback (Wu et al., 2013; Mael-Fleury & Tardif, 2016). This finding suggests that self-construal plays a role in how people process and respond to feedback.

T (N , 2006), (J , 2013; K , 2020). E (C , 1995; S , 2020; V & S , 2013). I . S . I . R . (P , , A , , 2015; P , , G , , , 2015). T . T . I . I . (M , , 2010) (M , , 2022). I . I . O . P . Y . (2020) , R . I . H , (P , , 2021). F , (H , , 2017; M , , 2015). T . H , (.) (H , , 2017; M , , 2022). E . W . I . I , (S , , 2018), F ,

W . I . I , (S , , 2018), F ,

P. (S., 2018). T. M. (DGM), (S., 2003). B. DGM, (LMM). I. 2, 1, (K., 2020; M.-S., 2013; M.-S. & T., 2016).

STUDY 1

Method

[illegible]

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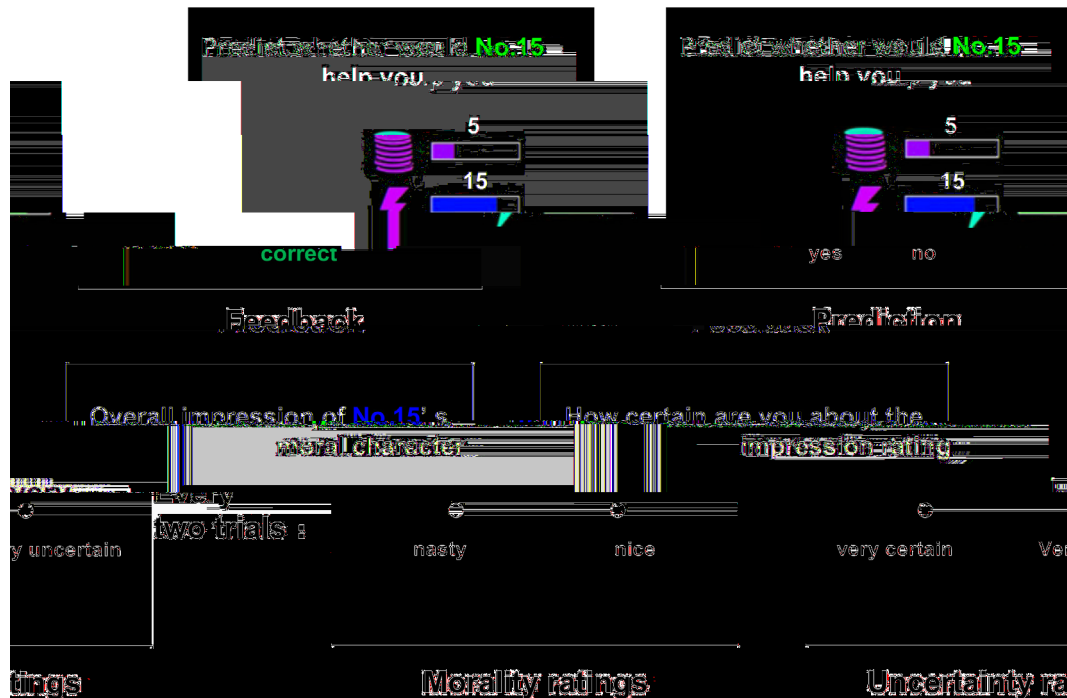


FIGURE 1 E₁ and U₁ are the first eigenvalues of the Laplacian on the domain Ω and on the boundary ∂Ω, respectively. The eigenvalues are ordered as follows: $\lambda_1 < \lambda_2 \leq \lambda_3 \leq \dots$ and $\mu_1 < \mu_2 \leq \mu_3 \leq \dots$.

$K)$. W $(K = 0.8$
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 $0.25 \text{ CNY} _ 1 \text{ CNY. H}$,
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 κ , κ , 0.5 . T
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 $\kappa = 0.5$.

[illegible]

IIID, $\mathcal{W} \rightarrow \mathcal{D}_{S1}$ (Liu, 2018; Miao, 2014; Tian, 2021). Tian, Wang, and Wu (2021) show that the IIID condition is satisfied by the \mathcal{W} and \mathcal{D}_{S1} distributions.

LMM → ...

[illegible]

With LMM, $\mathbf{y} = \mathbf{X}\boldsymbol{\beta} + \boldsymbol{\varepsilon}$, $\boldsymbol{\varepsilon} \sim \text{N}(\mathbf{0}, \sigma^2 \mathbf{I}_n)$, $\boldsymbol{\beta} \sim \text{N}(\mathbf{0}, \sigma^2 \mathbf{I}_p)$, $\sigma^2 \sim \text{IG}(\nu, \nu)$, $\nu = 10^{-3}$, $\mathbf{X} \in \mathbb{R}^{n \times p}$, $\mathbf{y} \in \mathbb{R}^n$, \mathbf{I}_n and \mathbf{I}_p are identity matrices of size n and p , respectively. \mathbf{X} is generated from $\text{N}(\mathbf{0}, \mathbf{I}_p)$, \mathbf{y} is generated from $\text{N}(\mathbf{0}, \mathbf{I}_n)$. $\mathbf{B} \in \mathbb{R}^{n \times n}$ and $\mathbf{C} \in \mathbb{R}^{p \times p}$ are generated from $\text{N}(\mathbf{0}, \mathbf{I}_n)$ and $\text{N}(\mathbf{0}, \mathbf{I}_p)$, respectively.

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Method

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E_____ 2772 _____ (_____, _____). A_____

T_____ C_____ P_____
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 C_____ S_____, P_____ U_____.

M_____

B_____, _____, 166. _____

M_____S_____ (_____, _____). W_____

C_____ A_____ 40 _____ 206

(_____, H_____, _____). F_____ (22 _____), _____ 18–
 28 _____ ($M = 22$ _____, $SD = 2.99$)

_____ : _____, _____ (_____, _____).

A_____ 90 (45 _____, 45 _____).

T_____

T_____ 18 _____,

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T_____ T_____

(_____, _____, $F_{(1, 30)} = 0.193$,

T₁ (Cohen, 2021). H₀: $\beta_1 = 0$. T₁ = 0.721, $SD = 0.789$, $p = .000$. P₁ = 18. B₁ = 0.000, $SD = 0.000$. E₁ = 0.000, $SD = 0.000$. P₂ = 0.000, $SD = 0.000$. A₁ = 0.000, $SD = 0.000$. (1 = 0.000, 9 = 0.000). T₂ = 0.000, $SD = 0.000$. (1 = 0.000, 9 = 0.000). T₃ = 0.000, $SD = 0.000$. W₁ = 0.000, $SD = 0.000$. (1 = 0.000, 9 = 0.000); I₁ = 0.000, $SD = 0.000$. (1 = 0.000, 9 = 0.000). P₃ = 0.000, $SD = 0.000$. T₄ = 0.000, $SD = 0.000$. A₂ = 0.000, $SD = 0.000$.

Results

LMM₁ = 0.000, $SD = 0.000$. A₁ = 1, $SD = 0.000$. LMM₂ = 0.000, $SD = 0.000$. (M₁ = -S₁, $SD = 0.000$). W₁ = LMM₁, $SD = 0.000$. (1 = 0.000, 9 = 0.000). B₁ = 0.000, $SD = 0.000$. T₁ = 0.000, $SD = 0.000$. W₂ = A₁, $SD = 0.000$. F₁ = 0.000, $SD = 0.000$. n₁ = M₁, $SD = 0.000$. T₂ = LMM₂, $SD = 0.000$. T₃ = 4. T₄ = 9645.40. T₅ = 0.000, $SD = 0.000$. IID₁ = 2, $SD = -0.062$, $F_{(1, 240.17)} = 0.071$, $SD = .790$; $SD = -0.161$, $F_{(1, 10)} = 0.859$, $SD = .376$. B₂ = 0.000, $SD = 0.000$. 1, $SD = 0.000$. IID₂ = 0.200, $F_{(1, 2518.00)} = 7.248$, $SD = .007$. S₁ = 0.000, $SD = 0.000$.

(M₁ = 4.298, $SD = 2.338$; M₂ = 4.030, $SD = 2.524$), $SD = -0.283$, (2585) = -4.308, $SD < .001$; IID₁ = 0.000, $SD = 0.000$.

(M₁ = 4.333, $SD = 2.342$; M₂ = 4.295, $SD = 2.408$), $SD = -0.039$, (2585) = -0.598, $SD = .550$ (T₁ = 4, F₁ = 5). I₁ = 0.000, $SD = 0.000$.

C₁ = 0.000, $SD = 0.000$. IID₁ = 0.000, $SD = 0.000$.

A₁ = 1, $SD = 0.000$. IID₁ = 0.000, $SD = 0.000$. T₁ = 0.000, $SD = 0.000$. 1: IID₁ = 0.000, $SD = 0.000$. (230 = -0.156, $SD = .018$). A₂ = 0.000, $SD = 0.000$. 2, $SD = 0.000$. IID₁ = 0.000, $SD = 0.000$.

Discussion

S₁ = 2, $SD = 0.000$. 1. T₁ = 0.000, $SD = 0.000$. 2, $SD = 0.000$. 1, $SD = 0.000$. IID₁ = 0.000, $SD = 0.000$. T₂ = 0.000, $SD = 0.000$. (C₁ = 0.000, $SD = 0.000$). H₀ = 0.000, $SD = 0.000$. S₂ = 0.000, $SD = 0.000$. 1, $SD = 0.000$. 2, $SD = 0.000$. T₃ = 0.000, $SD = 0.000$.

GENERAL DISCUSSION

W₁ = 0.000, $SD = 0.000$. T₁ = 0.000, $SD = 0.000$. T₂ = 0.000, $SD = 0.000$. T₃ = 0.000, $SD = 0.000$. T₄ = 0.000, $SD = 0.000$. T₅ = 0.000, $SD = 0.000$. T₆ = 0.000, $SD = 0.000$. T₇ = 0.000, $SD = 0.000$. T₈ = 0.000, $SD = 0.000$. T₉ = 0.000, $SD = 0.000$. T₁₀ = 0.000, $SD = 0.000$. T₁₁ = 0.000, $SD = 0.000$. T₁₂ = 0.000, $SD = 0.000$. T₁₃ = 0.000, $SD = 0.000$. T₁₄ = 0.000, $SD = 0.000$. T₁₅ = 0.000, $SD = 0.000$. T₁₆ = 0.000, $SD = 0.000$. T₁₇ = 0.000, $SD = 0.000$. T₁₈ = 0.000, $SD = 0.000$. T₁₉ = 0.000, $SD = 0.000$. T₂₀ = 0.000, $SD = 0.000$.

TABLE 4 | LMM Estimates of the Relationship Between Interdependence and Impression Updating

Fixed effects	Estimate	SE	95% CI	F	p
Interdependence	4.153	0.184	3.956, 4.672	547.139	.000
IIID	-0.062	0.232	-0.516, 0.392	0.071	.790
Direction	-0.161	0.174	-0.511, 0.189	0.859	.376
IIID × Direction	0.200	0.074	0.054, 0.345	7.248	.007
Random effects			Variance	SD	
Intercept (Interdependence)			4.343	2.084	
Intercept (Direction)			0.085	0.291	
Residual			1.411	1.188	

Note: Model: $Y_{ij} = \beta_0 + \beta_1 \text{Interdependence} + \beta_2 \text{Direction} + \beta_3 \text{IIID} + \beta_4 \text{Interdependence} \times \text{Direction} + \epsilon_{ij}$.
Abbreviations: CI = confidence interval; IIID = interaction between Interdependence and Direction.

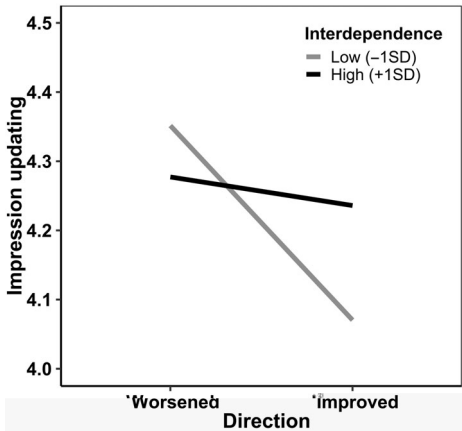


FIGURE 5 | Interaction plot showing the relationship between Interdependence (Low (-1SD) and High (+1SD)) and Direction (Worsened and Improved) on the x-axis, and Impression updating (Y-axis, 4.0 to 4.5).

Interdependence (IIID). The results of the LMM analysis showed a significant main effect of Interdependence ($F(1, 100) = 547.139, p < .001$), but no significant main effect of Direction ($F(1, 100) = 0.859, p = .376$) or IIID ($F(1, 100) = 0.071, p = .790$). The interaction between Interdependence and Direction was significant ($F(1, 100) = 7.248, p = .007$). The simple effects analysis showed that for Low interdependence, the relationship between Direction and Impression updating was negative ($F(1, 100) = 547.139, p < .001$). For High interdependence, the relationship between Direction and Impression updating was positive ($F(1, 100) = 7.248, p = .007$). The results of the LMM analysis are summarized in Table 4.

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(), \mathbf{H} , \mathbf{F} , \mathbf{F}_1 , \mathbf{F}_2 , \mathbf{F}_1 , \mathbf{F}_2 , \mathbf{S} , \mathbf{A} , \mathbf{H} , \mathbf{M} , \mathbf{G} (G, 2001). \mathbf{T} , \mathbf{I} , \mathbf{E} , \mathbf{S} , \mathbf{T} , \mathbf{F}_1 , \mathbf{H} , \mathbf{L} , \mathbf{P} , \mathbf{I} , \mathbf{S} , \mathbf{C} , \mathbf{T} , \mathbf{P} , \mathbf{B} , \mathbf{M} & \mathbf{M} , \mathbf{C} , \mathbf{H} , \mathbf{P} & \mathbf{Y} , \mathbf{T} , \mathbf{H} & \mathbf{K} , \mathbf{L} & \mathbf{C} , \mathbf{S} , \mathbf{K} , \mathbf{T} , \mathbf{I} .

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 (B-N & H, 2010), (M, 2015), (W, 2013), (P &
 Y, 2020) (C, 2012). B
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(H [2017](#); X [2019](#)). O [2019](#), [2020](#), [2021](#), [2022](#), [2023](#), [2024](#), [2025](#), [2026](#), [2027](#), [2028](#), [2029](#), [2030](#), [2031](#), [2032](#), [2033](#), [2034](#), [2035](#), [2036](#), [2037](#), [2038](#), [2039](#), [2040](#), [2041](#), [2042](#), [2043](#), [2044](#), [2045](#), [2046](#), [2047](#), [2048](#), [2049](#), [2050](#), [2051](#), [2052](#), [2053](#), [2054](#), [2055](#), [2056](#), [2057](#), [2058](#), [2059](#), [2060](#), [2061](#), [2062](#), [2063](#), [2064](#), [2065](#), [2066](#), [2067](#), [2068](#), [2069](#), [2070](#), [2071](#), [2072](#), [2073](#), [2074](#), [2075](#), [2076](#), [2077](#), [2078](#), [2079](#), [2080](#), [2081](#), [2082](#), [2083](#), [2084](#), [2085](#), [2086](#), [2087](#), [2088](#), [2089](#), [2090](#), [2091](#), [2092](#), [2093](#), [2094](#), [2095](#), [2096](#), [2097](#), [2098](#), [2099](#), [2100](#), [2101](#), [2102](#), [2103](#), [2104](#), [2105](#), [2106](#), [2107](#), [2108](#), [2109](#), [2110](#), [2111](#), [2112](#), [2113](#), [2114](#), [2115](#), [2116](#), [2117](#), [2118](#), [2119](#), [2120](#), [2121](#), [2122](#), [2123](#), [2124](#), [2125](#), [2126](#), [2127](#), [2128](#), [2129](#), [2130](#), [2131](#), [2132](#), [2133](#), [2134](#), [2135](#), [2136](#), [2137](#), [2138](#), [2139](#), [2140](#), [2141](#), [2142](#), [2143](#), [2144](#), [2145](#), [2146](#), [2147](#), [2148](#), [2149](#), [2150](#), [2151](#), [2152](#), [2153](#), [2154](#), [2155](#), [2156](#), [2157](#), [2158](#), [2159](#), [2160](#), [2161](#), [2162](#), [2163](#), [2164](#), [2165](#), [2166](#), [2167](#), [2168](#), [2169](#), [2170](#), [2171](#), [2172](#), [2173](#), [2174](#), [2175](#), [2176](#), [2177](#), [2178](#), [2179](#), [2180](#), [2181](#), [2182](#), [2183](#), [2184](#), [2185](#), [2186](#), [2187](#), [2188](#), [2189](#), [2190](#), [2191](#), [2192](#), [2193](#), [2194](#), [2195](#), [2196](#), [2197](#), [2198](#), [2199](#), [2200](#), [2201](#), [2202](#), [2203](#), [2204](#), [2205](#), [2206](#), [2207](#), [2208](#), [2209](#), [2210](#), [2211](#), [2212](#), [2213](#), [2214](#), [2215](#), [2216](#), [2217](#), [2218](#), [2219](#), [2220](#), [2221](#), [2222](#), [2223](#), [2224](#), [2225](#), [2226](#), [2227](#), [2228](#), [2229](#), [2230](#), [2231](#), [2232](#), [2233](#), [2234](#), [2235](#), [2236](#), [2237](#), [2238](#), [2239](#), [2240](#), [2241](#), [2242](#), [2243](#), [2244](#), [2245](#), [2246](#), [2247](#), [2248](#), [2249](#), [2250](#), [2251](#), [2252](#), [2253](#), [2254](#), [2255](#), [2256](#), [2257](#), [2258](#), [2259](#), [2260](#), [2261](#), [2262](#), [2263](#), [2264](#), [2265](#), [2266](#), [2267](#), [2268](#), [2269](#), [2270](#), [2271](#), [2272](#), [2273](#), [2274](#), [2275](#), [2276](#), [2277](#), [2278](#), [2279](#), [2280](#), [2281](#), [2282](#), [2283](#), [2284](#), [2285](#), [2286](#), [2287](#), [2288](#), [2289](#), [2290](#), [2291](#), [2292](#), [2293](#), [2294](#), [2295](#), [2296](#), [2297](#), [2298](#), [2299](#), [2300](#), [2301](#), [2302](#), [2303](#), [2304](#), [2305](#), [2306](#), [2307](#), [2308](#), [2309](#), [2310](#), [2311](#), [2312](#), [2313](#), [2314](#), [2315](#), [2316](#), [2317](#), [2318](#), [2319](#), [2320](#), [2321](#), [2322](#), [2323](#), [2324](#), [2325](#), [2326](#), [2327](#), [2328](#), [2329](#), [2330](#), [2331](#), [2332](#), [2333](#), [2334](#), [2335](#), [2336](#), [2337](#), [2338](#), [2339](#), [2340](#), [2341](#), [2342](#), [2343](#), [2344](#), [2345](#), [2346](#), [2347](#), [2348](#), [2349](#), [2350](#), [2351](#), [2352](#), [2353](#), [2354](#), [2355](#), [2356](#), [2357](#), [2358](#), [2359](#), [2360](#), [2361](#), [2362](#), [2363](#), [2364](#), [2365](#), [2366](#), [2367](#), [2368](#), [2369](#), [2370](#), [2371](#), [2372](#), [2373](#), [2374](#), [2375](#), [2376](#), [2377](#), [2378](#), [2379](#), [2380](#), [2381](#), [2382](#), [2383](#), [2384](#), [2385](#), [2386](#), [2387](#), [2388](#)

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W → D I, C.B. E. → — — — — —

CONFLICT OF INTEREST STATEMENT

[illegible]

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