

Perfectionism and Thoughts About Having Cosmetic Surgery Performed¹

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Trait perfectionism, perfectionistic self-presentation, and thoughts about having cosmetic surgery performed (TAHCSP) were examined. In Study 1, perfectionistic self-promotion (PSP) and nondisplay of imperfection (NDP) correlated with TAHCSF in 292 university women. Both Study 2 ($N = 527$ university women and 209 university men) and Study 3 ($N = 43$ gym-going women and 52 gym-going men) replicated findings from Study 1. Studies 2 and 3 extended Study 1 by showing that (a) socially prescribed perfectionism (SPP) correlated with TAHCSF and (b) PSP, NDP, and SPP correlated with TAHCSF in women only. PSP and NDP mediated the relation between SPP and TAHCSF in studies 2 and 3. Results held after controlling for age and body mass index. Perfectionists' pursuit of appearance ideals, fault-finding predilection, and concern over others' evaluations may generate and maintain TAHCSF.

More and more people are contemplating and undergoing cosmetic surgery (American Society of Plastic Surgeons [ASPS], 2003a). For example, between

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1994 and 1998, the number of cosmetic surgery patients per year in America increased 153% (McGrath & Mukerji, 2000). In 2002, 6.6 million Americans (85% women) underwent either a surgical cosmetic procedure such as nose reshaping or a nonsurgical cosmetic procedure such as collagen injection (ASPS, 2003b). All told, Americans spent more than \$7.1 billion on surgical and/or nonsurgical cosmetic procedures during 2002 (ASPS, 2003a). Moreover, similar trends exist in other countries. For instance, an estimated 7% of 45- to 50-year-old Australian women have undergone cosmetic surgery (Schofield, Hussain, Loxton, & Miller, 2002), while, in Korea, "at least one in 10 adults have received some form of [cosmetic] surgical upgrade" (Cullen, 2002, p. 2).

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Although there is an abundance of research on the business and prevalence of cosmetic surgery (ASPS, 2003a, 2003b), little is known about the personality traits and interpersonal dynamics linked to considering and undergoing cosmetic surgery (Sarwer, Pertschuk, Wadden, & Whitaker, 1998; Sarwer, Wadden, Pertschuk, & Whitaker, 1998). In this investigation, we begin to fill that void by examining whether perfectionism is associated with contemplating cosmetic surgery.

We maintain that perfectionists' unrelenting self-scrutiny, concern over others' evaluations, harsh self-criticism, need for others' approval, and unrealistic expectations predispose them to consider cosmetic surgery (Hewitt, Sherry, Flett, & Shick, 2003). Two findings that consistently emerge from perfectionism studies broadly support our position. First, perfectionists are often displeased with their bodies. For example, body dissatisfaction (Ruggiero, Levi, Ciuna, & Sassaroli, 2003), social physique anxiety (Haase, Prapavessis, & Owens, 2002), and dysmorphic symptomatology (Hanstock & O'Mahony, 2002) are related to perfectionism. Second, perfectionists frequently attempt to transform their bodies. For instance, disordered eating (Cockell et al., 2002), bodybuilding (Davis & Scott-Robertson, 2000), and excessive exercise (Gulker, Laskis, & Kuba, 2001) are linked to perfectionism (see also Flett & Hewitt, 2005). In view of such evidence, investigators (Goldwyn, 1991; Hewitt, Sherry, et al., 2003) have asserted that perfectionism and contemplating cosmetic surgery are connected, although, to date, researchers have not empirically tested that assertion.

For perfectionists, thoughts about cosmetic surgery may arise from a desire to perfect the self or to eliminate perceived imperfections from the self. Cosmetic surgery may also enable perfectionists to change aspects of their bodies that cannot be altered through dieting or exercise (e.g., nose shape). More generally, contemplating cosmetic surgery may be understood as a manifestation of perfectionists' chronic predisposition toward dissatisfaction (Hewitt, Sherry, et al., 2003).

Defining Perfectionism

Before perfectionism and considering cosmetic surgery are discussed in detail, trait perfectionism and perfectionistic self-presentation should be defined. Hewitt and Flett (1991) conceptualized trait perfectionism as three distinct and stable dimensions: self-oriented perfectionism or SOP (i.e., requiring perfection of oneself), other-oriented perfectionism or OOP (i.e., requiring perfection from others), and socially prescribed perfectionism or SPP (i.e., perceiving others require perfection of oneself). In addition, Hewitt, Flett, et al. (2003) conceptualized perfectionistic self-presentation as three separate and enduring facets: perfectionistic self-promotion or PSP (i.e., promoting an image of perfection to others), nondisclosure of imperfection or NDC (i.e., concealing verbal disclosures of imperfection from others), and nondisplay of imperfection or NDP (i.e., concealing behavioral displays of imperfection from others).

Despite overlapping conceptually and empirically, trait perfectionism is distinguishable from perfectionistic self-presentation. For example, a desire to actually be perfect (as in SOP) may involve a desire to appear as perfect (as in PSP), but the former does not invariably involve the latter and vice versa. Moreover, research involving university students and psychiatric patients has demonstrated that trait perfectionism and perfectionistic self-presentation are distinct (Hewitt, Flett, et al., 2003).

Objectives and Hypotheses

This investigation had four main objectives. Our first objective was to offer novel evidence relating perfectionism to contemplation of cosmetic surgery. Through such evidence, we sought to open a new area of empirical inquiry and to substantiate prior theory linking perfectionism and cosmetic surgery (Goldwyn, 1991; Hewitt, Sherry, et al., 2003). Specifically, we hypothesized that SOP, SPP, PSP, and NDP would correlate with considering cosmetic surgery, although our rationale for each prediction was different. That is, we believe that central components of SOP (e.g., rigid, unrealistic self-expectations), SPP (e.g., concern over others' perfectionistic evaluations), PSP (e.g., prideful representation of self), and NDP (e.g., defensive concealment of flaws) each represent distinct motives underlying contemplation of cosmetic surgery. Finally, neither OOP nor NDC was hypothesized to relate to considering cosmetic surgery, since both are unlikely to result in self-focused appearance concerns.

Our second objective was to test whether the association between perfectionism and considering cosmetic surgery held after controlling for demographic variables known to influence the desire for cosmetic surgery—namely, age (ASPS, 2003b) and body mass index (BMI; Sarwer, Wadden, et al., 1998). In light of previous research showing that the relation between perfectionism and

body dissatisfaction is independent of BMI (Sherry, Hewitt, Besser, McGee, & Flett, 2004), we predicted that the link between perfectionism and contemplating cosmetic surgery would remain after partialling out age and BMI.

Our third objective was to examine whether the hypothesized connection between perfectionism and considering cosmetic surgery was unique to women or generalized to men. Consistent with Brownell's (1991) assertion that female perfectionists are especially prone to appearance concerns, we hypothesized that the link between perfectionism and contemplating cosmetic surgery would be specific to women. Evidence that the findings are specific to women would be in keeping with other data indicating that appearance-related concerns are more important to females (Pliner, Chaiken, & Flett, 1990), and it would accord with other evidence of gender differences indicating that female gender is associated with actual or intended cosmetic surgery (Davis & Vernon, 2002).

Our final objective was to test two mediational models. Specifically, we predicted that (a) PSP would mediate the relation between SPP and considering cosmetic surgery and (b) NDP would mediate the link between SPP and considering cosmetic surgery. According to Baron and Kenny (1986), a mediator (e.g., PSP) specifies how or why a predictor (e.g., SPP) influences a criterion (i.e., contemplating cosmetic surgery). Thus, in testing the above models, we aimed to identify PSP and NDP as "the generative mechanism through which" (Baron & Kenny, 1986, p. 1173) SPP exerts its influence on considering cosmetic surgery.

Method

Participants

In Study 1, 292 university women (i.e., women attending university) participated. Women averaged 19.52 years of age ($SD = 3.53$) and 1.77 years of university education ($SD = 0.99$). Women had a mean BMI (kg/m^2) of 20.98 ($SD = 3.70$).

In Study 2, 527 university women and 209 university men (i.e., men attending university) participated. Men averaged 19.60 years of age ($SD = 2.99$) and 1.80 years of university education ($SD = 0.98$). Men had a mean BMI of 22.72 ($SD = 3.33$). Women averaged 19.56 years of age ($SD = 3.20$) and 1.71 years of university education ($SD = 0.87$). Women had a mean BMI of 20.82 ($SD = 3.18$).

In Study 3, 43 women and 52 men were recruited from members of a gym or fitness facility. Men averaged 30.12 years of age ($SD = 10.07$) and 12.29 years of formal education ($SD = 6.28$). Men had a mean BMI of 26.23 ($SD = 3.76$). Women averaged 24.86 years of age ($SD = 8.76$) and 10.87 years of formal education ($SD = 6.10$). Women had a mean BMI of 23.54 ($SD = 4.05$).

Instruments

In Study 1, participants completed the following measures.

Perfectionistic Self-Presentation Scale (PSPS; Hewitt, Flett, et al., 2003). The PSPS is a 27-item self-report measure divided into three subscales: PSP (10-items), NDC (7-items), and NDP (10-items). Respondents provide their selection on a scale from 1 (*disagree*) to 7 (*agree*); thus, a higher score signifies a higher level of perfectionistic self-presentation. Evidence has confirmed the discriminant validity, incremental validity, convergent validity, predictive validity, internal consistency, test–retest reliability, and factorial stability of the PSPS (Hewitt, Flett, et al., 2003). NDC was excluded from this investigation because neither theory (Hewitt, Flett, et al., 2003) nor evidence (Hewitt, Sherry, & Flett, 2002) indicates that it should correlate with contemplating cosmetic surgery.

Considering or contemplating cosmetic surgery was quantified using a face valid, single-item measure: “Have you ever thought about having cosmetic surgery performed?” We refer to scores on this scale using the acronym TAHCSPP (i.e., Thoughts About Having Cosmetic Surgery Performed). Participants offer their response on a scale where 1 = *never*, 2 = *sometimes*, 3 = *frequently*, and 4 = *all the time*; thus, a higher score represents a greater frequency of TAHCSPP. Although the use of a single item could be regarded as problematic, other individual differences research has shown that single-item measures with high face validity can yield interpretable and predictable findings (Burisch, 1984; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). The convergent validity of our measure is corroborated by its positive, moderate correlation with body dissatisfaction, social physique anxiety, public self-consciousness, and dysmorphic symptomatology, whereas the discriminant validity of our measure is supported by its lack of association with OOP, NDC, aggression, procrastination, and Machiavellianism (Hewitt et al., 2002). Further, the reliability of our measure is substantiated by its 6-month test–retest correlation of .65 in 162 university students (Hewitt et al., 2002).

In studies 2 and 3, in addition to the aforementioned measures, participants completed the following measure.

Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991). The MPS is a 45-item self-report measure separated into three subscales: SOP (15-items), OOP (15-items), and SPP (15-items). Participants offer their response on a scale from 1 (*disagree*) to 7 (*agree*); thus, a higher score indicates a higher level of trait perfectionism. Research has determined the factorial stability, test–retest reliability, internal consistency, predictive validity, convergent validity, incremental validity, and discriminant validity of the MPS (Hewitt & Flett, 1991). In this research, OOP was omitted since neither theory (Hewitt & Flett, 1991) nor evidence (Hewitt et al., 2002) suggests that it should relate to TAHCSPP.

Table 1

Descriptive Statistics and Correlational Analyses for Perfectionism and Thoughts About Having Cosmetic Surgery Performed (Study 1)

Study 1	University women ($n = 292$)				
	TAHCSP ^a	TAHCSP ^b	<i>M</i>	<i>SD</i>	α
PSP	.18* (.24)	.20*	38.60	11.00	.88
NDP	.17* (.23)	.19*	43.46	11.06	.87
TAHCSP	–	–	1.42	0.60	–

Note. PSP = perfectionistic self-promotion; NDP = nondisplay of imperfection; TAHCSP = thoughts about having cosmetic surgery performed. Bivariate correlations disattenuated for unreliability appear in parentheses. A Bonferroni correction was applied to Table 1 (.05/4 = .01).

^aBivariate correlations. ^bPartial correlations controlling for age and BMI.

* $p < .01$.

Procedure

Study 1's and Study 2's sample was recruited from the participant pool of the Department of Psychology at the University of British Columbia in Vancouver, Canada. Study 3's sample was recruited from a large community fitness facility in Vancouver, Canada. In each study, participation was voluntary and confidential. All participants were thoroughly debriefed.

Results

Means, standard deviations, and coefficients alpha are displayed in tables 1 and 2 and are similar to previous research utilizing the MPS (Hewitt & Flett, 1991), the PSPS (Hewitt, Flett, et al., 2003), and our measure of TAHCSP (Hewitt et al., 2002). Notably, 37% of the 292 university women in Study 1, 37% of the 527 university women in Study 2, and 34% of the 43 gym-going women in Study 3 reported some form of TAHCSP.

For women in all three studies, bivariate correlations indicated that PSP and NDP were associated positively with TAHCSP (tables 1 and 2). In studies 2 and 3, SPP was correlated with TAHCSP, whereas SOP was unrelated to TAHCSP (Table 2). Partial correlations controlling for age and BMI produced similar results (tables 1 and 2). Finally, bivariate correlations were disattenuated for unreliability, and an increase in the magnitude of each correlation was observed (tables 1 and 2). Cohen, Cohen, West, and Aiken's (2003) formula for disattenuating bivariate

correlations was utilized. For our measure of TAHCSPP, test-retest reliability (i.e., .65) was substituted for alpha reliability when disattenuating correlations (Robins, Hendrin, & Trzesniewski, 2001).

For men in studies 2 and 3, bivariate correlations showed that trait perfectionism and perfectionistic self-presentation were unrelated to TAHCSPP (Table 2). Partial correlations controlling for BMI and age yielded comparable findings (Table 2). Lastly, for both genders, the magnitude of the bivariate correlation between perfectionism (i.e., SOP, SPP, PSP, and NDP) and TAHCSPP in gym-goers was noticeably greater (but not significantly greater) than the magnitude of the bivariate correlation between perfectionism and TAHCSPP in university students (Table 2). To conserve space, z -scores and p -values for comparisons of correlation magnitudes are not reported; a Bonferroni correction was applied to each family of comparisons.

For women in each study, PSP mediated the relationship between SPP and TAHCSPP (Baron & Kenny, 1986). Thus, as exhibited in Table 3, (a) SPP significantly predicted PSP; (b) PSP significantly predicted TAHCSPP; (c) PSP significantly predicted TAHCSPP after accounting for the effect of SPP; (d) SPP significantly predicted TAHCSPP; and (e) SPP no longer predicted TAHCSPP after taking into account the mediating role of PSP. Sobel's (1982) test of mediation indicated that PSP significantly mediated the association between SPP and TAHCSPP ($z = 4.42, p < .001$ for university women; $z = 2.02, p < .05$ for gym-going women). Further, for women in each study, NDP mediated the connection between SPP and TAHCSPP (Baron & Kenny, 1986). Thus, as displayed in Table 3, (a) SPP significantly predicted NDP; (b) NDP significantly predicted TAHCSPP; (c) NDP significantly predicted TAHCSPP after accounting for the effect of SPP; (d) SPP significantly predicted TAHCSPP; and (e) SPP no longer predicted TAHCSPP after taking into account the mediating role of NDP. Sobel's test of mediation showed that NDP significantly mediated the relationship between SPP and TAHCSPP ($z = 3.56, p < .001$ for university women; $z = 2.07, p < .05$ for gym-going women). Thus, to summarize, for women in this investigation, both PSP and NDP were shown to explain the link between SPP and TAHCSPP. Finally, betas and p -values for mediational models were essentially unchanged after controlling for age and BMI. This suggests that demographic variables do not unduly influence the mediational models presented earlier.

Discussion

This investigation examined trait perfectionism, perfectionistic self-presentation, and contemplation of cosmetic surgery in three studies involving 1,332 participants from two different populations (i.e., university students and gym-goers). This research showed the following: In studies 1, 2, and 3, PSP and NDP correlated with considering cosmetic surgery. Studies 2 and 3 expanded on

Table 2
 Descriptive Statistics and Correlational Analyses for Perfectionism and Thoughts About Having Cosmetic Surgery Performed (Studies 2 and 3)

Study	TAHCSP ^a	TAHCSP ^b	M	SD	α	TAHCSP ^a	TAHCSP ^b	M	SD	α
Study 2										
University women (n = 527)										
SOP	.08 (.11)	.08	68.71	14.22	.88	-.03 (-.04)	-.02	65.84	11.82	.82
SPP	.15** (.20)	.15**	54.85	12.93	.84	.05 (.07)	.04	57.28	10.16	.74
PSP	.24** (.32)	.25**	41.50	10.50	.87	.13 (.18)	.16	40.70	9.47	.84
NDP	.21** (.28)	.22**	43.51	10.27	.86	.08 (.11)	.09	41.71	9.78	.84
TAHCSP	—	—	1.41	0.59	—	—	—	1.16	0.43	—
University men (n = 209)										
SOP	.25 (.33)	.28	67.39	13.43	.87	-.23 (-.30)	-.23	69.52	15.10	.88
SPP	.50** (.68)	.53**	50.52	12.63	.84	.22 (.30)	.22	49.87	11.89	.82
PSP	.53** (.69)	.59**	37.48	11.61	.91	.24 (.34)	.24	37.92	28.80	.78
NDP	.54** (.72)	.56**	38.32	10.61	.86	.21 (.28)	.22	37.17	10.98	.84
TAHCSP	—	—	1.43	0.73	—	—	—	1.22	0.54	—
Gym-going men (n = 52)										

Note. SOP = self-oriented perfectionism; SPP = socially prescribed perfectionism; PSP = perfectionistic self-promotion; NDP = non-display of imperfection; TAHCSP = thoughts about having cosmetic surgery performed. Bivariate correlations disattenuated for unreliability appear in parentheses. A Bonferroni correction was applied to each quadrant (i.e., each set of correlational analyses) in Table 2 (.05/8 = .006).

^aBivariate correlations. ^bPartial correlations controlling for age and BMI.
 ** p < .006.

Table 3

Mediational Analyses: Either PSP or NDP Mediating the Relationship Between SPP and TAHCSP

Study	R^2	F	β	t
Study 2				University women ($n = 527$)
SPP predicting PSP	.33	253.17***	.57	15.91***
PSP predicting TAHCSP	.06	33.06***	.24	5.75***
PSP predicting TAHCSP ^a	.06	16.51***	.24	4.61***
SPP predicting TAHCSP	.02	11.33***	.15	3.37***
SPP predicting TAHCSP ^b	–	–	.01	0.19
Study 2				University women ($n = 527$)
SPP predicting NDP	.27	198.30***	.52	14.08***
NDP predicting TAHCSP	.04	24.21***	.21	4.92***
NDP predicting TAHCSP ^c	.05	12.58***	.18	3.68***
SPP predicting TAHCSP	.02	11.33***	.15	3.37***
SPP predicting TAHCSP ^d	–	–	.05	0.97
Study 3				Gym-going women ($n = 43$)
SPP predicting PSP	.38	25.91***	.62	5.09***
PSP predicting TAHCSP	.28	16.48***	.53	4.06***
PSP predicting TAHCSP ^a	.33	10.11***	.36	2.20†
SPP predicting TAHCSP	.25	14.08***	.50	3.75***
SPP predicting TAHCSP ^b	–	–	.28	1.72
Study 3				Gym-going women ($n = 43$)
SPP predicting NDP	.42	29.76***	.64	5.46***
NDP predicting TAHCSP	.29	17.43***	.54	4.18***
NDP predicting TAHCSP ^c	.33	10.23***	.37	2.24†
SPP predicting TAHCSP	.25	14.08***	.50	3.75***
SPP predicting TAHCSP ^d	–	–	.26	1.56

Note. SPP = socially prescribed perfectionism; PSP = perfectionistic self-promotion; NDP = nondisplay of imperfection; TAHCSP = thoughts about having cosmetic surgery performed. A Bonferroni correction was applied to each set of mediational analyses (.05/10 = .005). Significance levels were relaxed to $p < .05$ in two instances. Given the smaller sample in Study 3 (and the associated decrease in statistical power) we believe that relaxing our strict Bonferroni correction to the conventional level of significance is justifiable.

^aThe relation between PSP and TAHCSP after accounting for the effect of SPP. ^bThe relation between SPP and TAHCSP after accounting for the effect of PSP. ^cThe relation between NDP and TAHCSP after accounting for the effect of SPP. ^dThe relation between SPP and TAHCSP after accounting for the effect of NDP.

† $p < .05$. *** $p < .005$.

Study 1 by demonstrating that SPP correlated with contemplating cosmetic surgery. Further, PSP and NDP mediated the link between SPP and considering cosmetic surgery in studies 2 and 3. The above results were specific to women, and all findings held after controlling for age and BMI. Finally, contrary to our prediction, SOP was not directly linked to contemplating cosmetic surgery, suggesting that SOP may be unrelated to contemplating cosmetic surgery or that the impact of SOP on contemplating cosmetic surgery may only become apparent when certain moderators are specified (e.g., narcissism).

This investigation provided novel evidence that supported earlier theory relating perfectionism to cosmetic surgery (Goldwyn, 1991; Hewitt, Sherry, et al., 2003). It is noteworthy that all findings from this research were twice or thrice replicated, indicating that our results provide a solid foundation on which to build. For example, the link between PSP and considering cosmetic surgery was reproduced three times in this research. Findings from this investigation also suggest that perfectionists may go to extreme lengths as part of their pursuit of bodily perfection (e.g., cosmetic surgery is a costly, often irreversible procedure). Lastly, our results fit nicely with previous research demonstrating that self-presentational concerns are elevated in cosmetic surgery patients (Culos-Reed, Brawley, Martin, & Leary, 2002).

Although SPP, PSP, and NDP are consistently and comparably associated with contemplating cosmetic surgery, we believe that each facet of perfectionism represents a distinct motive underlying contemplation of cosmetic surgery. For instance, among socially prescribed perfectionists, external contingencies such as acceding to others' perceived unrealistic expectations or susceptibility to societal pressures for perfect appearance may initiate consideration of cosmetic surgery. However, for perfectionistic self-promoters, who tend to act in a prideful, narcissistic manner (Hewitt, Flett, et al., 2003), contemplation of cosmetic surgery may arise from a desire to transform their bodies into a means of garnering attention and/or admiration. Moreover, physical attractiveness is seemingly an asset for anyone seeking to present him or herself in such an acquisitive, attention-seeking fashion. Lastly, NDP may instigate consideration of cosmetic surgery when physical defects or age-related changes (e.g., forehead wrinkles) are detected, especially if such perceived imperfections are salient to others. In fact, cosmetic surgery may be understood as an extreme form of NDP, where perceived imperfections are eliminated through surgical procedures. Clearly, a logical extension of this research would be to explore the role of the various dimensions of perfectionism in terms of specific motives for cosmetic surgery and the anticipated benefits of cosmetic surgery.

Notably, results from this investigation held after controlling for two putative correlates of contemplating and undergoing cosmetic surgery—namely, age (ASPS, 2003a) and BMI (Sarwer, Wadden, et al., 1998). Such evidence testifies to the robustness of the association between perfectionism and considering cosmetic

surgery and suggests the importance of this personality style in potentially motivating pursuit of cosmetic surgery. This research also examined the generalizability of the connection between perfectionism and contemplating cosmetic surgery by evaluating hypotheses in (a) men and women and (b) two different populations (i.e., university students and gym-goers). All significant findings in this investigation were restricted to women, suggesting that perfectionism may not be related to considering cosmetic surgery in men. Male and female perfectionists may experience and respond to appearance concerns in different ways. For example, female perfectionists may experience concerns over facial attractiveness and respond by contemplating and/or undergoing cosmetic surgery, whereas male perfectionists may experience concerns over muscularity and respond by bodybuilding (Davis & Scott-Robertson, 2000). Finally, our results indicate that the relationship between perfectionism and considering cosmetic surgery generalizes across university students and gym-goers, with the magnitude of that link being noticeably greater (but not significantly greater) in gym-goers.

In samples 2 and 3, (a) PSP mediated the link between SPP and contemplating cosmetic surgery and (b) NDP mediated the relationship between SPP and contemplating cosmetic surgery, suggesting that PSP and NDP function as “the generative mechanism through which” (Baron & Kenny, 1986, p. 1173) SPP exerts its influence on contemplating cosmetic surgery. We believe that one plausible response to actual or perceived unrealistic expectations from others (i.e., SPP) is to attempt to present oneself as perfect to others (i.e., PSP or NDP). For several reasons (e.g., complying with others’ expectations, eliciting approval from others, or responding to societal pressures), socially prescribed perfectionists are likely to actively promote their alleged perfection to others (i.e., PSP) and/or to defensively conceal their perceived imperfections from others (i.e., NDP). Further, because physical attractiveness is key to promoting or to defending an image of perfection to others, contemplation of cosmetic surgery is likely to arise from PSP and NDP. Thus, according to the mediational model supported in this investigation, SPP, PSP (or NDP), and considering cosmetic surgery form a relational system wherein (a) SPP leads to PSP (or NDP) and (b) PSP (or NDP) results in considering cosmetic surgery (thereby explaining how or why SPP influences considering cosmetic surgery).

Future researchers should address several limitations in this investigation. First, using a single-item measure of contemplating cosmetic surgery may have attenuated findings in this research. However, at present, no alternative multi-item measure exists. Moreover, our face-valid, single-item measure of considering cosmetic surgery produced consistent results across three studies and is supported by reliability and validity data (Method section). Second, this investigation focused only on people who were contemplating cosmetic surgery. Future studies should examine whether perfectionism predicts actually undergoing cosmetic surgery, and then it will be important to distinguish patients who undergo surgery for

appearance motives versus health-based motives (Culos-Reed et al., 2002). That said, considering cosmetic surgery necessarily precedes undergoing cosmetic surgery, and offers an interesting outcome in its own right. For example, contemplating cosmetic surgery is an inclusive outcome that avoids barriers faced by many potential cosmetic surgery patients (e.g., high costs).

Contemplating cosmetic surgery may be understood as the starting point of a process that begins with contemplating cosmetic surgery, progresses to consulting with a cosmetic surgeon, and ends with actually undergoing cosmetic surgery. Thus, this investigation represents an important first step in understanding the perfectionism–cosmetic surgery nexus. We believe that perfectionism not only initiates consideration of cosmetic surgery but also influences each step along the aforementioned process. For example, perfectionism may affect cosmetic surgery patients' postoperative adjustment and satisfaction, with perfectionists' unrelenting self-scrutiny, unrealistic expectations, and fault-finding predilection transforming an aesthetically successful surgery into a distressing perceived failure, and fueling a desire for additional operations. Such a pattern is in keeping with perfectionists' chronic predisposition toward dissatisfaction (Hewitt, Sherry, et al., 2003).

In conclusion, from bodybuilding perfectionists who perceive themselves as scrawny despite their bulk (Davis & Scott-Robertson, 2000) to anorexic perfectionists who regard themselves as overweight despite their starvation (Cockell et al., 2002), evidence shows that perfectionists are often displeased with their bodies and frequently try to alter them. Results from this investigation complement and extend that literature, and suggest that further research on perfectionism and cosmetic surgery is warranted.

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