UNIVERSITY OF LEEDS

This is a repository copy of *Perfectionistic self-presentation and emotional experiences in music students: A three-wave longitudinal study*.

Perfectionistic self-presentation and emotional experiences in music students: A

three-wave longitudinal study

Andrew P. Hill[1], Karen Burland[2], Elaine C. King[3], & Stephanie E. Pitts[4]

[1]York St John University, UK

[2]University of Leeds, UK

[3]University of Hull, UK

[4]University of Sheffield, UK

Running head: Perfectionism and music

Keywords: motivation, achievement striving, performing art

Word count: 4459

Author Note

Correspondence concerning this article should be addressed to Andrew P. Hill, York St John

University, York, YO31 7EX. E-mail: a.hill@yorksj.ac.uk. The data collection associated

with this project was undertaken while the lead author was at the University of Leeds.

1   Abstract

2   Research has found perfectionism predicts emotional experiences among amateur,

3   professional, and adolescent musicians. In examining these relationships, previous research

4   has measured trait perfectionism and employed cross-sectional designs. The current study

5   builds on existing research by examining whether perfectionistic self-presentation (as

6   opposed to trait perfectionism) predicts negative and positive emotional experiences in music

7   students over time. One hundred and forty-three music students (M age 18.92 years, $SD =$

8   2.96) enrolled in music-related degree programmes completed measures of perfectionistic

9   self-presentation (perfectionistic self-promotion, nondisplay of imperfection, and

10   nondisclosure of imperfection) and emotional experiences (positive and negative feelings) at

11   the start, middle, and the end of the academic year. Path analysis revealed that perfectionistic

12   self-promotion at the start of the year predicted lower positive feelings in the middle of the

13   year, and nondisclosure of imperfection in the middle of the year predicted lower positive

14   feelings at the end of the year. In addition, negative feelings in the middle of the year also

15   predicted higher nondisclosure of imperfection at the end of the year. The findings suggest

16   that the desire to present oneself perfectly and avoid disclosure of imperfections may

17   contribute to less positive emotional experiences among music students.

18

19

20

21

22

23

24

1   Perfectionistic self-presentation and emotional experiences in music students: A three-wave

2   longitudinal study

3   When students enrol on music-related degrees they might reasonably expect the

4 experience to be a challenging but ultimately rewarding experience. Research suggests,

5 however, that the experiences of music students differ considerably with many students

6 reporting mixed and/or negative experiences (e.g., Burt & Mills, 2006). These experiences

7 extend to the emotions music students have and whether they come to develop positive or

8 negative feelings towards the study of music. In the current study, we sought to better

9 understand the factors that might contribute to the emotional experiences of music students.

10 We did so by examining whether positive and negative feelings towards studying music were

11 predicted by the perfectionistic self-presentational styles exhibited by music students across

12 the first year of university.

13 *Multidimensional perfectionism and musicians*

14   Perfectionism is a personality characteristic broadly defined as a combination of a

15 commitment to exceedingly high standards and a preoccupation with harsh self-critical

16 evaluation (Frost, Marten, Lahart, & Rosenblate, 1990). It is typically considered to be a trait

17 in that in reflects consistency in thoughts, feelings, and emotions evident across contexts and

18 time (McAdams & Pals, 2006). There are multiple models and measures that have been used

19 to examine perfectionism. These models and measures often differ in terms of their content

20 and place varying degrees of emphasis on personal and interpersonal dimensions. However,

21 in line with the broad definition of perfectionism, researchers typically differentiate between

22 dimensions of perfectionism that encapsulate striving towards very high personal standards

23 or flawlessness (referred to as perfectionistic strivings) and dimensions of perfectionism that

24 encapsulate self-evaluative concerns, doubts, and perceived pressures from others (referred to

25 as perfectionistic concerns) (Stoeber & Otto, 2006).

1   Research examining these two dimensions of perfectionism attests to their importance

2   in a number of contexts (e.g., sport and education; Hill, Mallinson-Howard, & Jowett, 2018;

3   Speirs Neumeister, 2007). This research has typically found perfectionistic concerns to be

4   associated with maladaptive correlates, processes, and outcomes (e.g., neuroticism, avoidant

5   coping, and burnout). By contrast, research has typically found perfectionistic strivings to be

6   more complex and associated with a mix of adaptive and maladaptive correlates, processes,

7   and outcomes (e.g., conscientiousness, problem-focussed coping, and better performance

8   versus self-criticism, worry, and anxiety). There is also evidence that some dimensions of

9   perfectionistic strivings may make people vulnerable to motivation, performance, and well-

10   being issues under some circumstances (e.g., Curran & Hill, in press). Overall, then,

11   perfectionistic concerns and perfectionistic strivings are distinct and both need to be taken

12   into account when considering the likely consequences of perfectionism.

13   A small number of studies have examined perfectionism among musicians including

14   professional musicians, amateur musicians, and talented adolescent musicians (Kenny,

15   Davis, & Oates, 2004; Kobori, Yoshie, Kudo, & Ohtsuki, 2011; Stoeber & Eismann, 2007).

16   The findings of these studies are generally consistent with research in other contexts.

17   Specifically, research has found that perfectionistic strivings can be highly motivating and

18   have some desirable achievement-related benefits (e.g., hours spent practicing and awards

19   received associated with music; Stoeber & Eismann, 2007; Kobori, Yoshie, Kudo, &

20   Ohtsuki, 2011). By contrast, perfectionistic concerns have no such benefits and are instead

21   associated with more negative emotional experiences such as performance anxiety (Stoeber

22   & Eismann, 2007). Qualitative research has also corroborated these findings with evidence

23   that professional musicians (along with other elite performers) considered their perfectionism

24   to be both central to their success and a source of significant problems in their professional

25   and personal lives (Hill, Witcher, Gotwals, & Leyland, 2015).

1   *Limitations of previous research*

2   While studies are beginning to emerge that suggest perfectionism is important to the

3   experiences of musicians, there is considerable scope for additional research. Two

4   particularly notable areas that need to be addressed are that (i) research to date has focused

5   exclusively on trait perfectionism and (ii) previous studies have adopted cross-sectional

6   designs.

7   In terms of the first limitation of existing research, although examination of trait

8   perfectionism is most common, perfectionism is thought to manifest in a number of other

9   ways. Hewitt et al. (2003) have argued, for example, that perfectionism is also evident in the

10   manner in which individuals seek to present themselves to others. Perfectionistic self-

11   presentation is a separate, expressive, and distinctly interpersonal aspect of perfectionism. It

12   is an attempt to create and maintain an image of perfection in public settings. There are three

13   facets of perfectionistic self-presentation: perfectionistic self-promotion (seeking to

14   demonstrate one's perfection), nondisplay of imperfection (minimising the public display of

15   mistakes, flaws, and shortcomings), and nondisclosure of imperfection (minimising

16   admission of mistakes, flaws, and short-comings). The first facet is thought to be approach-

17   oriented and the other two facets are thought to be avoidance-oriented (i.e., motivation to

18   demonstrate competence or avoid demonstrating incompetence). In differentiating between

19   perfectionistic self-presentation and dimensions of perfectionism like perfectionistic

20   standards and strivings, Hewitt et al. consider perfectionistic self-presentation to provide

21   "expressive" aspects of perfectionism, rather than "content-related" aspects (i.e., it is

22   concerned with whether an individual seeks to project a perfect image to others, rather than

23   whether someone pursues perfection).

24   Research examining perfectionistic self-presentation has provided a number of

25   noteworthy findings. In particular, unlike for trait perfectionism, there is much less ambiguity

1   regarding its implications as facets of perfectionistic self-presentation are almost always

2   associated with maladaptive correlates, processes, and outcomes. This includes negative

3   emotional experiences (e.g., negative affect and anxiety; Hewitt et al., 2003) as well as more

4   severe pathological experiences (e.g., depression and suicide ideation; Flett, Besser &

5   Hewitt, 2014; Roxborough et al., 2012). In addition, facets of perfectionistic self-presentation

6   have been found to predict a range of outcomes after taking trait perfectionism into account

7   (anxiety, depression, self-esteem; Hewitt et al., 2003). Finally, when considered

8   independently (i.e., controlling for the relationship between the facets), the two avoidance-

9   based facets (nondisplay and disclosure of imperfection) tend to be the most problematic (see

10   Hewitt et al., 2003). Overall, then, research suggests that perfectionistic self-presentation is

11   an important dimension of perfectionism that warrants examination alongside, and in

12   addition to, trait perfectionism.

13   In terms of the second limitation of existing research, the weaknesses of cross-

14   sectional designs are well documented. Cross-sectional designs do not allow inference of

15   causality between variables as there is no temporal component in the design (i.e., all

16   variables are measured at the same time point). In addition, as these designs provide only a

17   static 'snapshot' of the relationship, they offer no means of assessing whether the magnitude

18   or direction of the relationships change over time or whether variables act on one another to

19   varying degrees over time (i.e., whether reciprocal effects exist). Such reciprocal effects have

20   begun to receive attention in perfectionism research with some evidence emerging of how

21   perfectionism and its various outcomes may often influence each other (e.g., Nordin-Bates,

22   Hill, Cummings, Aujla, & Redding, 2014). Longitudinal designs are required to examine

23   reciprocal relationships and, although such designs do not have sufficient control to rule out

24   the influence of other variables, they also provide a necessary further step towards

25   establishing causal relationships.

1   To our knowledge, only one study has examined the relationship between

2   perfectionistic self-presentation and emotional experiences longitudinally (in the form of a

3   broader concept of well-being). Specifically, Mackinnon and Sherry (2012) examined

4   whether overall perfectionistic self-presentation (a combination of all three facets) mediated

5   the relationship between perfectionistic concerns and well-being in undergraduate students

6   over three time points. They found support for the proposed mediation and, importantly for

7   the current study, also found a negative relationship between overall perfectionistic self-

8   presentation and well-being over time. In the current study we do not focus on trait

9   perfectionism or mediation, but extend the model proposed by Mackinnon and Sherry by (1)

10   examining the unique relationships of the three facets of perfectionistic self-presentation

11   (rather than overall perfectionistic self-presentation) with emotional experiences, (2)

12   examining both negative and positive emotional experiences over time (not just positive

13   emotional experiences), and (3) examining possible reciprocal relationships between facets

14   of perfectionistic self-presentation and emotional experiences over time (not just

15   unidirectional relationships).

16   *Present study*

17   The purpose of the current study was to examine the relationships between facets of

18   perfectionistic self-presentation and positive and negative emotional experiences in music

19   students over time. Based on the above reasoning and research, it was hypothesised that

20   facets of perfectionistic self-presentation would predict decreases in positive feelings and

21   increases in negative feelings. In regards to reciprocal relationships, no hypotheses were

22   offered as this element of the study was considered exploratory.

23   Method

24   *Participants and procedures*

1   Participants were 143 (75 males, 68 females) students enrolled in the first year of

2   music-related programmes at three universities in the UK (age *M* = 18.92, *SD* 2.96, range 18-

3   51). The music-related programmes were similar in that they all had a broad musical

4   curriculum incorporating elements of Western music history, theory and analysis,

5   ethnomusicology and music psychology alongside performance and composition. Entry on to

6   the programmes was also based on academic qualifications rather than performance skill. All

7   participants played one or more musical instruments. The most common instruments were

8   voice, piano, and guitar. The average number of hours they reported practising was 8.08 hrs

9   per week (*SD* = 2.96 hrs). Participants completed a multi-section questionnaire that contained

10   measures of perfectionistic self-presentation and emotional experiences at the beginning,

11   middle, and end of the academic year (weeks 3, 10, and 15 of a 22 week academic year or

12   weeks 1, 8, and 20 calendar months; all data collection +/- 2 weeks). Of the 143 students in

13   the study, 44 completed the questionnaire on one occasion, 21 on two occasions, and 78 on

14   all three occasions. Institutional ethical approval was gained prior to conducting the research.

15   Participants were recruited on a voluntary basis in taught sessions on their degree

16   programmes. All participants provided informed written consent.

17   *Measures*

18   *Perfectionistic self-presentation.* The Perfectionistic Self-presentation Scale

19   developed by Hewitt et al. (2003) was used to measure a perfectionistic self-presentational

20   style. The scale includes 27-items that measure the three facets of perfectionistic self-

21   presentation: perfectionistic self-promotion (10-items; "I strive to look perfect to others"),

22   nondisplay of imperfection (10-items; "I hate to make errors in public"), and nondisclosure

23   of imperfection (7-items; "Admitting failure to others is the worst possible thing").

24   Responses are scored on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly*

25   *agree*). Hewitt et al. (2003) have provided evidence of the validity and reliability of the scale.

1   *Emotional experiences.* The Scale of Positive and Negative Experience (SPANE)

2   developed by Diener et al. (2010) was used to measure feelings of well-being and ill-being.

3   The scale includes 12-items that measure positive emotions (6-items; "Happy") and negative

4   emotions (6-items; "Sad"). Respondents are asked to think about what they have been doing

5   and experiencing during the last 4 weeks. Here they were instructed to think about their

6   experiences on their university programme. Responses are scored on a five-point Likert scale

7   (1 = *very rarely or never* to 5 = *very often or always*). Two scores are derived as these

8   experiences are considered partially independent (Diener et al., 2010). Diener et al. (2010)

9   have provided evidence of the validity and reliability of the scale.

10   *Analyses*

11   The hypothesised model was examined using AMOS (24.0; Arbuckle, 2014). Full

12   Information Maximum Likelihood (FIML) estimation was used to assess the model. FIML is

13   an excellent means of estimation when data includes missing data (e.g., Enders & Bandelos,

14   2001). In the analyses, all variables were included as manifest variables. As in Mackinnon

15   and Sherry (2012), both within-trait, cross-wave correlated error (e.g., perfectionistic self-

16   promotion at time one error correlated with perfectionistic self-promotion at time two error)

17   and same-trait, within-wave correlated error (e.g., perfectionistic self-promotion at time one

18   error correlated with perfectionistic self-promotion at time two error) were included in the

19   model. These correlated errors account for violations of the independence assumption within

20   longitudinal designs (same-trait, within-wave correlated error) and common unmodelled

21   explanatory factors (within-trait, cross-wave correlated errors) (Cole & Maxwell, 2003). Fit

22   of the proposed model was assessed using conventional criteria with adequate fit indicated

23   when χ^2 p <.05, χ^2/df < 3, Comparative Fit Index (CFI) >. 90, Tucker-Lewis Index (TLI)

24   >.90, and Root Mean Square Error of Approximation (RMSEA) <.10.

25   Results

Preliminary analysis

The data were screened for univariate and multivariate outliers (see Tabachnick &

Fidell, 2007). Standardised z-scores larger than 3.29 (p <.001, two-tailed) were used as

criteria for univariate outliers and Mahalanobis distance χ^2 (15) = 37.70 (p <.001, two-tailed)

was used as criterion for multivariate outliers. This led to the removal of three participants.

The remaining data (n = 140) were considered to be approximately univariate normal with

three instances of non-normality: positive emotions time 2 (zskew = -2.22), negative

emotions time 1 and 2 (zskew = 2.02 and 2.37). After transformation, these variables were

normally distributed (all +/-SQRT transformations). Transformed variables and original

variables were almost perfectly correlated. Transformed variables were used for bivariate

correlations and path analysis. Finally, internal reliability analysis (Cronbach's alpha) was

performed on each scale. All instruments demonstrated sufficient internal consistency ($\alpha \geq$

.70 for scales with 10 items or more and $\alpha \geq$ .60 for scales with 5 items or more; Loewenthal,

2001). Cronbach's alphas are displayed in Table 1.

Descriptive Analyses and bivariate correlations

The descriptive statistics and bivariate correlations are displayed in Table 1.

Participants scored low-to-moderate levels of perfectionistic self-promotion. Scores were

highest for nondisplay of imperfection. Participants also reported moderate-to-high positive

feelings and low-to moderate negative feelings. Mean scores were similar across all three

time points.

Bivariate correlations revealed statistically significant positive correlations between

the facets of the perfectionistic self-presentation and statistically significant negative

correlations between positive and negative feelings at all time points. In addition, at time 1,

nondisplay and nondisclosure of imperfections had significant positive correlations with

negative feelings. At time 2, nondisplay of imperfections had a significant positive

1 correlation with negative feelings (though the size of the correlation for nondisclosure of

2 imperfections was almost identical). At time 3, nondisplay and nondisclosure of

3 imperfections had significant positive correlations with negative feelings. Additionally, all

4 facets of perfectionistic self-presentation had a significant negative correlation with positive

5 feelings.

6 *Path analysis*

7   The results of the path analysis are displayed in Figure 1 and Table 2. Path analysis

8 revealed three statistically significant cross-lagged paths: (i) perfectionistic self-promotion at

9 time 1 negatively predicted positive feelings at time 2, (ii) nondisclosure of imperfection at

10 time 2 negatively predicted positive feelings at time 3, and (iii) negative feelings at time 2

11 positively predicted nondisclosure of imperfection at time 3. No other cross-lagged paths

12 were statistically significant (see Table 2). Total variance explained in perfectionistic self-

13 promotion and positive/negative feelings ranged between 18% and 43% (time 1) and 34%

14 and 59% (time 2). The fit of the model was adequate: χ^2 (42) = 52.45, p >.05, χ^2/df = 1.25,

15 CFI = .99, TLI = .96 and RMSEA = .04, 90% CI = .00, .08.

16   Discussion

17   The purpose of the current study was to examine the relationships between facets of

18 perfectionistic self-presentation and positive and negative emotional experiences in music

19 students over time. It was hypothesised that facets of perfectionistic self-presentation would

20 predict decreases in positive feelings and increases in negative feelings. Reciprocal

21 relationships were also examined but this element of the study was considered exploratory.

22 *Perfectionistic self-presentation on emotions over time*

23   In support of the hypotheses, perfectionistic self-promotion at the start of the

24 academic year predicted decreases in positive feelings in the middle of the academic year and

25 nondisclosure of imperfection in the middle of the academic year predicted decreases in

1   positive feelings at the end of the year. These particular findings are consistent with those of

2   Mackinnon and Sherry (2012) who found total perfectionistic self-representation predicted

3   decreases in total well-being over time (a composite of positive affect, negative affect, and

4   life satisfaction). However, our findings also build on their work by indicating that in order to

5   better understand the relationship between perfectionistic self-presentation and emotional

6   experiences, distinguishing between its three facets may be required. In this regard, our

7   findings allude to a more complex pattern of relationships whereby different facets of

8   perfectionistic self-presentation are important at different times. Here, actively proclaiming

9   perfection initially detracted from the development of positive feelings, later when students

10   became more accustomed to the setting it was the more defensive concealment of

11   shortcomings that was problematic.

12   Another noteworthy finding was that facets of perfectionistic self-presentation

13   predicted changes in positive feelings but not changes in negative feelings. This is something

14   that is potentially lost when examining total well-being. Why perfectionistic self-presentation

15   was important to positive feelings but not negative feelings is not clear, especially when

16   previous research has found facets of perfectionistic self-presentation to predict negative

17   affect (e.g., Hewitt et al., 2003). However, it is important to note that it is not uncommon for

18   individuals to express a mix of positive and negative emotions and the absence of positive

19   emotions does not necessitate the presence of negative emotions or vice versa (Larsen,

20   McGraw, & Cacippo, 2001). Therefore, instances when factors influence one but not the

21   other are possible. Lower positive or negative emotions might, for example, be considered to

22   reflect indifference ("I feel neither enthusiastic nor apprehensive about my study"). If so,

23   here we may have identified a scenario in which facets of perfectionistic self-promotion are

24   not sufficient to arouse increases in negative feelings but nonetheless detract from the

25   development of more positive feelings.

1   In terms of reciprocal effects, negative feelings in the middle of the academic year

2   predicted decreases in nondisclosure of imperfection at the end of the academic year. This is

3   an especially novel finding in that it is the first instance, to our knowledge, in which a

4   reciprocal effect involving perfectionistic self-presentation has been observed (reciprocal

5   effects were not examined by Mackinnon and Sherry, 2012). In terms of possible

6   explanations for this finding, it may be that negative feelings exacerbate interpersonal

7   sensitivity and threat so to create a greater sense that deficiencies should be hidden and not

8   shared with others. It is also possible that increasing negative feelings reinforce the low self-

9   regard thought to underpin the need to hide deficiencies from others (see Hewitt et al., 2003).

10   Regardless, in combination with other relationships in the model, the model provides

11   evidence of a possible downward spiral of feelings and facets of perfectionistic self-

12   presentation acting on each other in an undesirable manner over time.

13   *Limitations and future research*

14   The findings must be considered alongside the study's limitations. The current study

15   examined the relationship between perfectionistic self-promotion and emotional experiences

16   in a specific context (studying music at university). Future research may wish to explore the

17   degree to which these findings extend to other settings and samples (e.g., conservatoire

18   students). In the meantime, caution is required in regards to generalising the findings beyond

19   the current context.

20   The study also included a large amount of dropout across the three time points. Any

21   systematic difference between students who completed the study and those who dropped out

22   will influence the generalisability of the findings. For example, it is possible that the music

23   students who did not complete some of the later questionnaires were not present in classes

24   when the questionnaires were distributed. This could be for any number of reasons but might

25   include factors relevant to the current study such as more negative emotional experiences on

1   the programme. As such, our findings may only apply to students who are more likely to

2   attend and complete the first year of the programme.

3   The modest sample size means smaller effect sizes were not statistically significant

4   and, indeed, the ability to detect smaller effects decreased across time due to dropout. This is

5   evident in that one of the relationships is notable in regards to its size but was not statistically

6   significant (nondisplay of imperfection to positive feelings). This relationship is consistent

7   with the findings that other facets of perfectionistic predict changes in positive feelings but

8   not negative feelings. Employing strategies in future research to help retain participants

9   across time points (e.g., participant incentives or targeted follow-up of non-completers) will

10 help address this issue as well as help ensure a more representative sample.

11   Finally, the lack of control of other variables, a common problem in non-experimental

12 research, means that unmeasured variables may account for the observed relationships. To

13 address this issue, future research might include a wider array of variables and covariates.

14 Based on research examining perfectionism, variables worth considering include trait

15 perfectionism and perfectionistic cognitions (ruminative thoughts about the need to be

16 perfect; Flett, Hewitt, Blankstein, & Gray, 1998).

17 *Conclusion*

18   The study examined whether perfectionistic self-presentation predicted changes in

19 positive and negative emotional experiences in music students over time. It was found that

20 the desire to present oneself perfectly and avoid disclosure of imperfections was related to

21 decreases in positive feelings while studying music. No facets of perfectionistic self-

22 presentation were associated with changes in negative feelings. As such, facets of

23 perfectionistic self-presentation may influence the experience of students on music-related

24 degrees primarily by decreasing positive feelings but not necessarily by affecting negative

25 feelings. Attesting to the importance of examining these relationships over time, just as facets

1 of perfectionistic self-presentation may act on positive feelings, negative feelings were found

2 to increase a desire to avoid disclosure of imperfections during the academic year.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

References

Arbuckle, J. L. (2014). Amos (Version 24.0) [Computer Program]. Chicago: IBM SPSS.

Burt, R., & Mills, J. (2006). Taking the plunge: The hopes and fears of students as they begin music college. *British Journal of Music Education*, *23*(1), 51-73.

Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: questions and tips in the use of structural equation modeling. *Journal of abnormal psychology*, *112*(4), 558.

Curran, T. & Hill, A. P. (in press). A test of perfectionistic vulnerability following competitive failure among college athletes. *Journal of Sport and Exercise Psychology.*

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, *97*(2), 143-156.

Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimates for missing data in structural equation models. *Structural Equation Modeling, 8*, 430-457.

Flett, G. L., Besser, A., & Hewitt, P. L. (2014). Perfectionism and interpersonal orientations in depression: An analysis of validation seeking and rejection sensitivity in a community sample of young adults. *Psychiatry*, *77*(1), 67-85.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of personality and social psychology*, *75*(5), 1363.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, *14*(5), 449-468.

1 Kenny, D. T., Davis, P., & Oates, J. (2004). Music performance anxiety and occupational

2   stress amongst opera chorus artists and their relationship with state and trait anxiety and

3   perfectionism. *Journal of Anxiety Disorders*, *18*(6), 757-777.

4 Kobori, O., Yoshie, M., Kudo, K., & Ohtsuki, T. (2011). Traits and cognitions of

5   perfectionism and their relation with coping style, effort, achievement, and performance

6   anxiety in Japanese musicians. *Journal of Anxiety Disorders*, *25*(5), 674-679.

7 Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., ... & Stein, M.

8   B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation

9   and psychological distress. *Journal of Personality and Social Psychology*, *84*(6), 1303.

10 Hill, A. P., Mallinson-Howard, S. H., & Jowett, G. E. (2018). Multidimensional

11   perfectionism in sport: A meta-analytical review. *Sport, Exercise, and Performance

12   Psychology, 7*, 235-270.

13 Hill, A. P., Witcher, C. S., Gotwals, J. K., & Leyland, A. F. (2015). A qualitative study of

14   perfectionism among self-identified perfectionists in sport and the performing arts.

15   *Sport, Exercise, and Performance Psychology*, *4*(4), 237.

16 Jowett, G. E., Mallinson, S. H., & Hill, A. P. (2016). An Independent Effects Approach to

17   Perfectionism in Sport, Dance, and Exercise. In A. P. Hill (Ed.), *The Psychology of

18   Perfectionism in Sport, Dance, and Exercise* (pp. 85-149). London: Routledge.

19 Larsen, J. T., McGraw, A. P., & Cacioppo, J. T. (2001). Can people feel happy and sad at the

20   same time?. *Journal of personality and social psychology*, *81*(4), 684.

21 Loewenthal, K. M. (2001). *An introduction to psychological tests and scales*. London: UCL

22   Press.

23 Mackinnon, S. P., & Sherry, S. B. (2012). Perfectionistic self-presentation mediates the

24   relationship between perfectionistic concerns and subjective well-being: A three-wave

25   longitudinal study. *Personality and Individual Differences*, *53*(1), 22-28.

1   McAdams, D. P., & Pals, J. L. (2006). A new big five: Fundamental principles for an

2   integrative science of personality. *American psychologist*, *61*(3), 204-217.

3   Nordin-Bates, S. M., Hill, A. P., Cumming, J., Aujla, I. J., & Redding, E. (2014). A

4   longitudinal examination of the relationship between perfectionism and motivational

5   climate in dance. *Journal of Sport and Exercise Psychology*, *36*(4), 382-391.

6   Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., &

7   Sherry, D. L. (2012). Perfectionistic self-presentation, socially prescribed perfectionism,

8   and Suicide in Youth: A Test of the Perfectionism Social Disconnection Model. *Suicide*

9   *and Life-Threatening Behavior*, *42*(2), 217-233.

10   Speirs Neumeister, K. (2007). Perfectionism in gifted students: An overview of current

11   research. *Gifted Education International*, *23*(3), 254-263.

12   Stoeber, J., & Eismann, U. (2007). Perfectionism in young musicians: Relations with

13   motivation, effort, achievement, and distress. *Personality and Individual Differences*,

14   *43*(8), 2182-2192.

15   Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence,

16   challenges. *Personality and social psychology review*, *10*(4), 295-319.

17   Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Allyn &

18   Bacon/Pearson Education.

19

20

21

22

23

24

25

Table 1 *Descriptive statistics and bivariate correlations for perfectionistic self-presentation and emotional experiences*

			Wave 1							Wave 2							Wave 3					
Variable	*M*	*SD*	1	2	3	4	5	*M*	*SD*	1	2	3	4	5	*M*	*SD*	1	2	3	4	5
1. Perfectionistic self-promotion	3.69	0.92	.80					3.71	0.98	.86					3.52	1.10	.90				
2. Nondisplay of imperfection	4.59	0.99	.61**	.85				4.49	0.88	.66**	.82				4.32	1.05	.73**	.87			
3. Nondisclosure of imperfection	3.10	0.91	.59**	.54**	.73			3.24	0.96	57**	51**	.78			3.16	0.99	.65**	.63**	.79		
4. Positive feelings	3.89	0.68	-.06	-.10	-.18	.86		3.84	0.56	-.17	-.15	-.16	.83		3.91	0.59	-.29**	-.27*	-.32**	.85	
5. Negative feelings	2.25	0.77	.07	.29**	.20*	-.50**	.86	2.41	0.78	.17	.20*	.20	-.60**	.85	2.40	0.70	.21	.41**	.25*	-.59**	.82

Note. * $p < .05$, ** $p < .01$, two-tailed. Cronbach's α is reported on the diagonals.

1 Table 2 *Cross-lagged standardised path coefficients for model*

Paths	β
Time 1 to Time 2	
Perfectionistic self-promotion to positive feelings	-.27*
Nondisplay of imperfection to positive feelings	.20
Nondisclosure of imperfection to positive feelings	-.14
Perfectionistic self-promotion to negative feelings	.06
Nondisplay of imperfection to negative feelings	.06
Nondisclosure of imperfection to negative feelings	.12
Positive feelings to perfectionistic self-promotion	.03
Negative feelings to perfectionistic self-promotion	-.05
Positive feelings to Nondisplay of imperfection	.03
Negative feelings to Nondisplay of imperfection	.01
Positive feelings to Nondisclosure of imperfection	.01
Negative feelings to Nondisclosure of imperfection	-.06
Time 2 to Time 3	
Perfectionistic self-promotion to positive feelings	-.01
Nondisplay of imperfection to positive feelings	.09
Nondisclosure of imperfection to positive feelings	-.26*
Perfectionistic self-promotion to negative feelings	-.07
Nondisplay of imperfection to negative feelings	-.01
Nondisclosure of imperfection to negative feelings	.03
Positive feelings to perfectionistic self-promotion	-.06
Negative feelings to perfectionistic self-promotion	.11
Positive feelings to Nondisplay of imperfection	-.05
Negative feelings to Nondisplay of imperfection	.17
Positive feelings to Nondisclosure of imperfection	-.03
Negative feelings to Nondisclosure of imperfection	.21*

Note. * $p < .05$, ** $p < .01$, two-tailed.
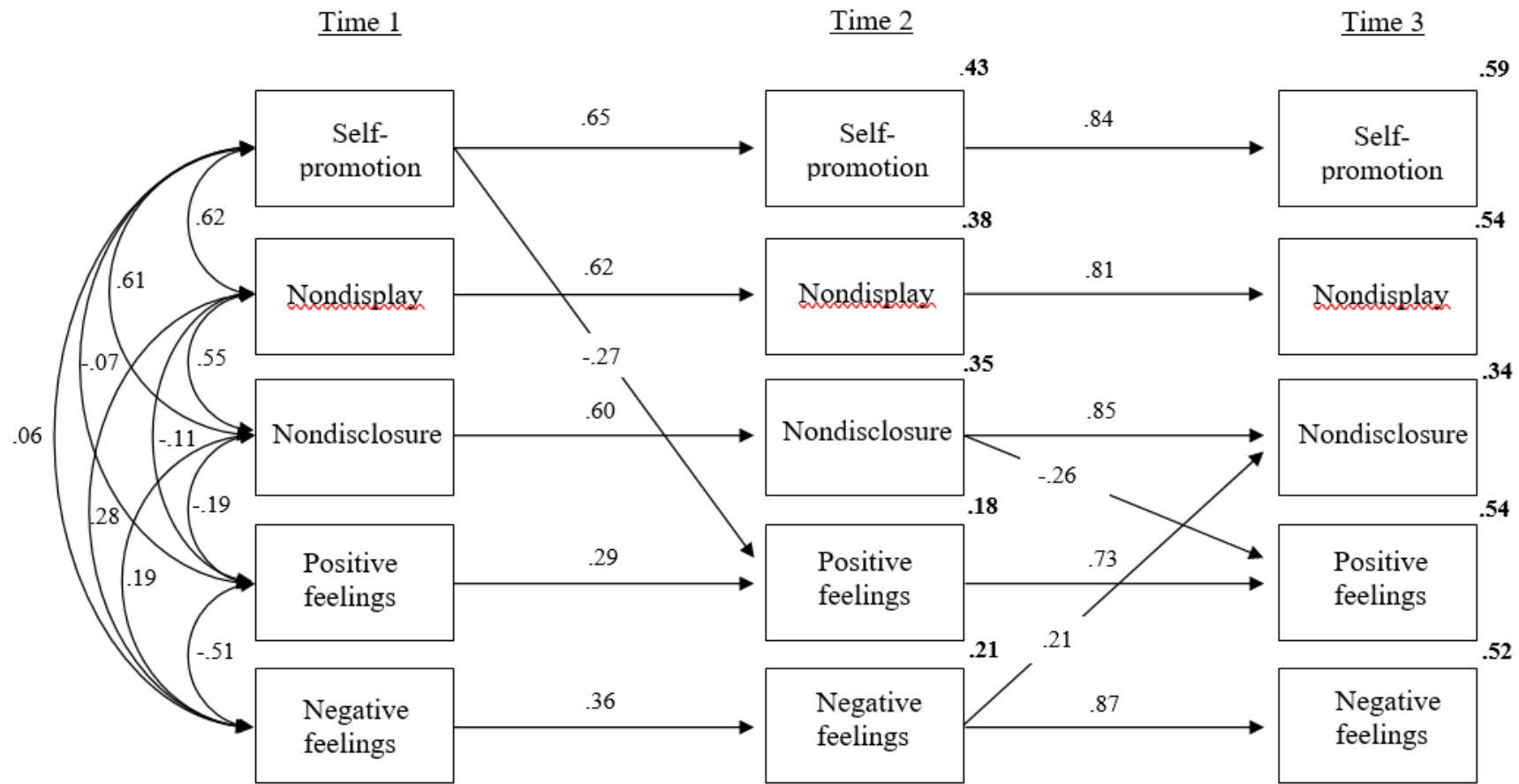
2

Figure 1. Perfectionistic self-promotion and positive/negative feelings over time. Standardised paths coefficients are displayed. All path coefficients are statistically significant (*p* <.05). Correlations among variables (time 1) below .12 are not statistically significant (*p* >.05). Residual errors not displayed. Non-significant path coefficients are not displayed (*p* <.05). Bolded values denote variance explained by predictor variables.