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Title:

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Date:

2021-01-01

Citation:

Mikszta, P., Evans, P. & McPherson, G. E. (2021). Motivation to pursue a career in music: The role of social constraints in university music programs. *Psychology of Music*, 49 (1), pp.50-68. <https://doi.org/10.1177/0305735619836269>.

Persistent Link:

<https://hdl.handle.net/11343/283402>

Motivation to pursue a career in music: The role of social constraints in university music programs

Psychology of Music

1–19

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DOI: 10.1177/0305735619836269

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Abstract

The purpose of this study was twofold: (1) to describe university music students' perceptions of competitiveness, perfectionism, and teacher control in conservatory-style learning environments, and (2) to test a theoretical model of a network of relationships among perceptions of competitiveness, perfectionism, teacher control, quality of motivation, and intentions to pursue a career in music. Participants were undergraduate and graduate music majors from schools of music in the Midwestern United States and Australia. Results revealed that commitment to a career in music was strong, autonomous motivation orientations were more strongly endorsed than controlled motivation orientations, reports of teacher control and socially prescribed perfectionism were weak, whereas reports of competitiveness were strong. Path analyses indicated that those with stronger career intentions also have stronger autonomous motivation orientations and perceive their teachers as more controlling. Autonomous motivation orientations were stronger for those who perceive their environment to be more competitive and weaker for those who experience more perfectionism and teacher control. Participants reporting greater perceptions of teacher control and more perfectionism tended to report weaker career intentions by virtue of the indirect relationships of the variables through autonomous motivation. In contrast, those who experienced greater degrees of perfectionism tended to report stronger controlled motivation orientations.

Keywords

Motivation, self-determination theory, perfectionism, competitiveness, career intentions

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Scholars have described conservatories and university music programs as “hothouse” learning environments, in which career preparation is undertaken within a demanding and stressful setting (Gembris & Davidson, 2002; Kemp, 1996). Within such environments it is common to hear stories of overbearing and abusive teachers or conductors, extreme pressure to achieve perfection in performance, and a cut-throat sense of competition among students who are encouraged to outdo one another as performers. Accordingly, university musicians often report a variety of maladaptive learning tendencies and health problems such as depression, physical overuse injuries, and performance anxiety (Ginsborg, Spahn, & Williamon, 2012). Perhaps as a result of working from the assumptions of a “hothouse” perspective, researchers examining the impact of the learning environment on university music students have tended to approach the issue from what could be described as a deficit perspective, aiming to discover the frequencies of problems but not necessarily exploring how students could be nurtured toward their career goals. Consequently, research regarding how various environmental constraints might serve to mitigate students’ problems and support their motivational aspirations is lacking.

Theoretical framework

Ryan and Deci’s (2002) self-determination theory offers a framework for examining the features of a learning environment that could support students’ optimal functioning. This metatheoretical approach to understanding motivation assumes that individuals have a desire to build an identity in the world that is aligned to their internal sense of self and that further, all individuals have an innate propensity toward psychological health and well-being (Deci & Ryan, 1985). Particularly relevant to the potential impact of educational settings, Ryan and Deci have also specified that an individual’s social context can serve to fulfill or thwart one’s basic psychological needs for competence, relatedness, and autonomy, which are necessary for optimal functioning (see Evans, 2015). The need for competence refers to a desire to have abilities as well as be effective in a social environment, whereas the need for relatedness refers to a desire to bond with others and have a place within a community. The need for autonomy refers to a desire to exercise volitional choice and control over one’s own behavior.

Ryan and Deci (2000) describe intrinsic motivation (e.g., motive for mastery, satisfaction of interests, exploration) as the ideal form of self-determined motivation, because it is internally regulated and autonomously derived. Theoretically, intrinsic motivation is positioned as a manifestation of the positive potential of individuals and is associated with many beneficial outcomes, including engagement, persistence, performance achievement, and creativity (Deci & Ryan, 2008). They contrast intrinsic motivation with amotivation (i.e., passive, purposeless) and four functionally distinct types of extrinsic motivation that reflect varied degrees of external regulation and control of behavior as well as a lack of integration of external values with one’s sense of self.

The types of extrinsic motivation Ryan and Deci (2000) propose are (a) external regulation, (b) introjected regulation, (c) identified regulation, and (d) integrated regulation. External regulation is the least autonomous form of motivation which involves individuals behaving to satisfy some external contingency and feeling highly controlled. Introjected regulation refers to a drive rooted in externally regulated criteria and preserving a sense of externally referenced self-worth. Identified regulation involves some degree of autonomy in that an individual consciously perceives the value of external criteria and begins to internalize that value. Finally, integrated regulation is described as a motivational disposition in which external regulations/criteria are not only identified, but also integrated with one’s sense of self. The quality of motivation (e.g., amotivation, extrinsic, intrinsic) individuals experience is thought to be largely due

to the degree to which their social environment supports their needs and whether their behavior and environmental conditions are aligned with their sense of self.

Literature review

Research dealing with motivational dispositions and the career aspirations of university music students is relatively scarce. Moreover, although research incorporating self-determination theory in music learning contexts is growing in general (e.g., Evans, 2009; Evans, McPherson, & Davidson, 2013; Valenzuela, Codina, & Pestana, 2018), as far as can be determined, only one study has been published applying self-determination to the study of university musicians' career interests. Bonneville-Roussy, Evans, Verner-Filion, Vallerand, and Bouffard (2017) examined relationships among the motivational dispositions and vocational interests of 265 students. Most relevant to the current study, Bonneville-Roussy et al. (2017) found that students with a relatively stronger sense of autonomous motivation were more likely to employ adaptive coping styles when dealing with stress and were more likely to report stronger musical career intentions. In contrast, students with a relatively stronger sense of controlled motivation were more likely to employ maladaptive coping styles (e.g., disengagement/avoidance) and report weaker career intentions. The authors suggest exploring how environmental conditions (i.e., autonomy-supportive vs. controlling) could serve as determinants of career motivation and other educational outcomes as next steps.

Bonneville-Roussy et al.'s (2017) findings resonate with those from researchers working with younger populations in the context of general education. For example, Lavigne, Vallerand, and Miquelon (2007) found that 10th grade science students who had relatively stronger interests in a career in science reported (a) stronger intrinsic and identified motivation, (b) stronger perceptions of competence and autonomy, and (c) receiving more autonomy support from teachers. Those students with relatively weaker interests in a career in science were more likely to experience amotivation and introjected motivation. Moreover, the relationship between teacher autonomy support and students' career intentions was mediated by the students' perceptions of competence and autonomy. Other researchers have found similar positive relationships between strength of career intentions and intrinsic-focused learning contexts (i.e., mastery oriented; Lazarides & Watt, 2015) as well as autonomy supportive parents and peers (Guay, Senecal, Gauthier, & Fernet, 2003). Wang (2012) found that 6th through 12th grade students' aspirations for a career in math were predicted by their sense of competence and intrinsic motivation which were, in turn, predicted by perceived teacher support.

While self-determination frameworks have rarely been applied to the study of university musicians' career intentions, researchers have investigated university musicians' motivational beliefs from a variety of complementary theoretical perspectives. For example, Schmidt, Zdzinski, and Ballard (2006) examined the relationships between university music education majors' commitment to music teaching as a career and several motivation constructs. However, no relationships were found between career commitment and any of the constructs measured. Parkes and Jones (2011, 2012; Jones & Parkes, 2010) conducted a series of studies to explore relationships between motivation, identity formation, and career decisions of university music performance and music education students from the perspective of expectancy-value theory (see Wigfield & Eccles, 2000). In a pair of parallel studies, Jones and Parkes (2010) and Parkes and Jones (2011) report on the reasons undergraduate performance and education students gave for considering a career in their respect fields. The themes that emerged from the responses included a broad range of topics, with both groups emphasizing topics such as enjoyment, ability, and having a way to give back to the world. The music education majors' responses also

emphasized topics such as having an opportunity to work with children and having a relatively safe and stable career choice.

Parkes and Jones (2012) followed their earlier pair of articles with a correlational study employing the music education and performance major participants of their previous studies as a single sample. Participants reported the likelihood they would be teaching classroom music and the likelihood they would be performing as a career following graduation. The participants also completed measures of the primary constructs of expectancy value theory for both career contexts. In order of strength, participants' reports of attainment value (e.g., how important it was for them to do well), intrinsic value, and expectancy for success were predictors of their likelihood of being a classroom music teacher, with attainment value the strongest predictor by far explaining 69% of the variation. Expectancy of success, attainment value, and intrinsic interest were predictors of their likelihood of being a music performer as well, with expectancy of success the strongest predictor explaining a moderate 54% of the variation.

Miksza and Hime (2015) analyzed data from a Strategic National Arts Alumni Project (SNAAP) survey of undergraduate music performance and education program alumni to determine perceptions of their university preparation and their subsequent career satisfaction as music performers or teachers. Participants reported being particularly satisfied with the instructors they worked with and the opportunities they had to perform during their studies, which are characteristics of the learning environment that would naturally serve to support relatedness and competence needs, respectively. Regarding their worklife following graduation, 83% of respondents believed their first work experiences were a good match to their career preferences and were most satisfied with the aspects of their jobs that emphasized contributing to a greater good, opportunities to be creativity, and tasks that were consistent with their personal interests and values. The job qualities the participants were pleased with align nicely with qualities of intrinsic motivation dispositions as defined by self-determination theorists.

Purpose and hypotheses

The main objective of this study was to explore how environmental constraints are related to university musicians' motivational disposition and career aspirations (music teachers, performers, etc.). We approached this problem through the lens of self-determination theory, which suggests that the degree of external regulation and control of behavior present in a social environment can contribute to the quality of motivation individuals experience and serve to support or thwart one's ability to flourish as a learner. The research purpose of this study was twofold. The first was exploratory, we aimed to describe university musicians' perceptions of competitiveness, perfectionist expectations, and teacher control to ascertain the general control and external regulation that students perceive in conservatory-style learning environments. Our second purpose involved testing and validating a theoretical model that includes a network of relationships among perceptions of competitiveness, socially prescribed perfectionist expectations, teacher control, students' quality of motivation, and the strength of their intentions to pursue a career in music. Our model specifies that the environmental constraints of competitiveness, socially prescribed perfectionist expectations, and teacher control will be directly related to students' motivation orientation and indirectly related to intentions to pursue music as a career. We hypothesized that those with relatively weaker perceptions of competitiveness, perfectionist expectations, and teacher control will be more likely to report an autonomous motivation orientation and, in turn, those with relatively stronger autonomous motivation orientations (as opposed to controlled) will have stronger intentions to pursue music as a career.

Method

Participants

The participants for this study were volunteer respondents to one of two administrations of an online survey given to undergraduate and graduate music majors from schools of music in the Midwestern United States and Australia. The schools can generally be categorized as conservatory-style institutions. One survey administration (i.e., sample one) was given at the beginning of the first term during the 2016–2017 school year, whereas the other (i.e., sample two) was given at the start of the second term of the same school year. There was no overlap in the participants who responded at sample one and sample two. As such, the respondents to the two online survey administrations represent relatively independent samples. This study was approved by the second author's institutional ethics board and all participants provided informed consent.

Sample one. The mean age of sample one respondents ($N = 386$) was 20.7 years ($SD = 3.57$) with a fairly wide distribution ranging from 17 to 43 years. They had been enrolled in school for an average 3.75 semesters ($SD = 4.29$), although the maximum reported was 22 semesters. On average, they had accrued 10.24 years of private lessons ($SD = 4.76$). The sample was predominantly female, with approximately 59% indicating female, 39% indicating male, and 1% indicating other or “wish not to say.” String (27%), woodwind (22%), and piano players (19%) were most represented, followed in decreasing frequency by vocalists (15%), brass (10%), organ (< 1%), conducting (< 1%), and composition majors (< 1%).

Sample two. The sample gathered from the second online survey administration was substantially smaller than the first ($N = 74$). However, the characteristics of the sample were very similar to that from the first administration with participants reporting an average age of 22.88 years ($SD = 5.74$) and with a similarly broad distribution ranging from 18 to 48 years. Females were also more heavily represented than males at sample two, consisting of approximately 67% of the sample. The participants reported having accrued 11.57 years of private study ($SD = 5.20$), on average. String players (27%), vocalists (24%), and pianists (21%) were most common followed in descending order by woodwinds (12%), brass (8%), organ (2%), percussion (1%), and conducting (1%). There were no composition majors in this sample.

Measures

Career intentions. The participants' strength of intentions to pursue a career in music was measured via three items adapted from a scale developed by Bonneville-Roussy et al. (2017) for a similar purpose. Using a 7-point, Likert-type scale ranging from *Strongly disagree* to *Strongly agree*, participants reported the degree to which they agreed with the following statements: “I intend to pursue a career related to my degree,” “I am actively preparing for a career related to my degree,” and “I am looking forward to a career related to my degree.” Internal consistency of this scale was excellent, Cronbach's $\alpha = .91$ at sample one and $.95$ at sample two.

Motivation for studying music. Autonomous and controlled motivation orientations for music study were measured with adaptations of items from Sheldon, Osin, Gordeeva, Suchkov, and Sychev's (2017) Relative Autonomy Index (RAI). The original version of the RAI consisted of 24 items total, with four items devoted to each of the following motivational orientations specified

by self-determination theorists (Ryan & Deci, 2000): amotivation, external, introjected, identified, and intrinsic. Items pertaining to the external, introjected, identified, and intrinsic orientations were adapted for the current study. The phrasing of some of the items from Sheldon et al.'s measure was adapted by referencing the discipline of music (e.g., studying music, being a musician), whereas for others the original item wordings were altered to reflect musical studies for the sake of career attainment more explicitly. For example, the original identified motivation item ending "because it is personally important to me" was altered to be "because studying music is important to my future" (see Appendix). Each statement was preceded by the prompt, "Why do you study music at university?" and participants responded with a 7-point, Likert-type scale ranging from *Strongly disagree* to *Strongly agree*.

The mean ratings for the two relatively autonomous orientations, intrinsic and identified, were averaged together to create a composite autonomous motivation orientation measure. The mean ratings for the two relatively controlled orientations, introjected and external, were averaged together to create a composite controlled motivation orientation measure. As such, higher scores on the composite variables represent relatively stronger orientations of each. Cronbach's alpha internal consistency for the autonomous motivation measure was $\alpha = .89$ at sample one and $.95$ at sample two, whereas Cronbach's alpha for controlled measure was $\alpha = .83$ at sample one and $.84$ at sample two.

Teacher control. The degree to which participants perceived their studio lesson teachers to be controlling was measured with the Teacher Control Questionnaire (TCQ; Jang, Reeve, Ryan, & Kim, 2009). The TCQ was originally developed to study the effect of external control on Korean students' self-determined motivation for their academic studies (Jeon, 2004). This measure consists of four items corresponding to controlling teaching behavior (e.g., "My teacher tries to control everything I do") that participants answered using a 7-point, Likert-type scales ranging from *Strongly disagree* to *Strongly agree*. The TCQ demonstrated adequate reliability in the current study (Cronbach's $\alpha = .76$ and $.79$ at sample one and two, respectively).

Competitiveness. A researcher-designed measure was used to assess the participants' perceptions of the competitiveness present in their learning environment. The measure requires the participants to answer the following four items with regard to "where they study music": "The environment is very competitive," "There is pressure to be the best," "I am conscious of my ability in relation to other students," and "It is clear who the best musicians are." Exploratory factor analysis revealed that all four items loaded strongly onto a single factor (loadings $.52$ to $.80$ for both sample one and two data) and Cronbach's alpha for the four items indicated adequate reliability ($\alpha = .76$ at sample one and $.76$ at sample two).

Social-prescribed perfectionism. The participants' sense of socially prescribed perfectionism was measured with an adaptation of Cox, Enns, and Clara's (2002) brief version of Hewitt and Flett's (1991) multidimensional perfectionism measure. Five items from Cox et al.'s (2002) measure were adapted to refer to the context of music, specifically (see Appendix). Each item preceded with the following prompt: "Please rate the following statements about playing music" with their response mode being a 7-point, Likert-type scale ranging from *Strongly disagree* to *Strongly agree*. Internal consistency of this scale was good, Cronbach's alpha = $.80$ at sample one and $.82$ at sample two.

Table 1. Descriptive and Correlational Analyses of All Variables at Sample One and Sample Two.

	Career intentions	Autonomous	Controlled	Teacher control	Competitiveness	Perfectionism	M	SD
Career intentions	–	.42***	–.14	–.19	–.05	–.10	5.68	1.74
Autonomous	.62***	–	–.11	–.23*	–.09	–.38***	5.99	1.15
Controlled	–.08	–.16**	–	.39***	.10	.54***	2.96	1.33
Teacher control	.01	–.15**	.21***	–	.19	.54***	2.85	1.46
Competitiveness	.05	.08	.27***	.26***	–	.38***	5.10	1.27
Perfectionism	–.03	–.11	.43***	.41***	.49***	–	3.22	1.45
M	6.35	6.21	2.67	2.80	5.15	3.32		
SD	1.09	0.87	1.23	1.26	1.24	1.30		

Note. Sample one data presented below the diagonal with descriptive statistics below the correlation matrix as well, sample two data presented above the diagonal with descriptive statistics to the right of the correlation matrix.
 Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Results

Descriptive analyses

Descriptive statistics and pairwise Pearson correlations for the variables measured among both samples were examined to address the first purpose of this research: to describe the degree of external regulation university music students perceive in their learning environments (Table 1). Given that the participants' responses are strikingly similar across the two samples, descriptive trends will be discussed in the aggregate. Unsurprisingly, the participants' commitment to following a career in music was very strong with means of 6.35 and 5.68 out of a possible 1 to 7 range. The participants endorsed autonomous motivation orientations for the study of music much more strongly than controlled motivation orientations with means on the autonomous scale more than double that of the controlled scale for both samples. Regarding sources of external regulation, the mean values for reports of perceived teacher control and socially prescribed perfectionism were relatively weak as they were below the mid-point of 4 on the 7-point scale for each variable. In contrast, the participants reported somewhat strong perceptions of competitiveness in their environments with means just above 5 on the 7-point scale.

Pairwise correlations among the variables were similar across the two samples as well. Moderate, positive significant relationships were found between autonomous motivation orientations and career intentions, whereas no significant relationship was found between controlled motivation orientations and career intentions. Reports from both samples revealed weak negative relationships between perceptions of teacher control and autonomous motivation orientations and moderate positive relationships between perfectionism and controlled motivation. Moderate positive correlations were also detected between perfectionism and teacher control and competitiveness. Regarding inconsistencies, three weak relationships ($r < .30$) were significant in the sample one data that were not in the sample two data (i.e., controlled and autonomous motivation, competitiveness and controlled motivation, competitiveness and teacher control), whereas one was significant in the sample two data that was not in the sample one data (i.e., perfectionism and autonomous motivation).

Path analyses

Path analyses were conducted with the data from respondents at sample one to test our theoretical model of the relationships among perceptions of competitiveness, perfectionist expectations, teacher control, students' quality of motivation, and the strength of their intentions to pursue a career in music. Models were estimated using maximum likelihood with robust standard errors and the Satorra–Bentler scaled Chi square test statistic via the lavaan package (Rosseel, 2012) in R (R Core Team, 2013). Model Chi square tests, root mean square error of approximation (RMSEA), standardized root mean residual (SRMR), and the comparative fit index (CFI) were assessed for determining model fit. In addition, Chi square difference tests were conducted to compare nested models.

Model 1 included paths representing direct relationships between competitiveness, perfectionist expectations, and teacher control to each of the motivation measures as well as paths representing direct relationships from each of the motivation measures to career expectations (Figure 1). All but three path coefficients were significant ($p < .05$): the paths from controlled motivation to career intentions, teacher control to controlled motivation, and competitiveness to controlled motivation. Fit indices for Model 1 suggested marginal fit (Table 2) with the model

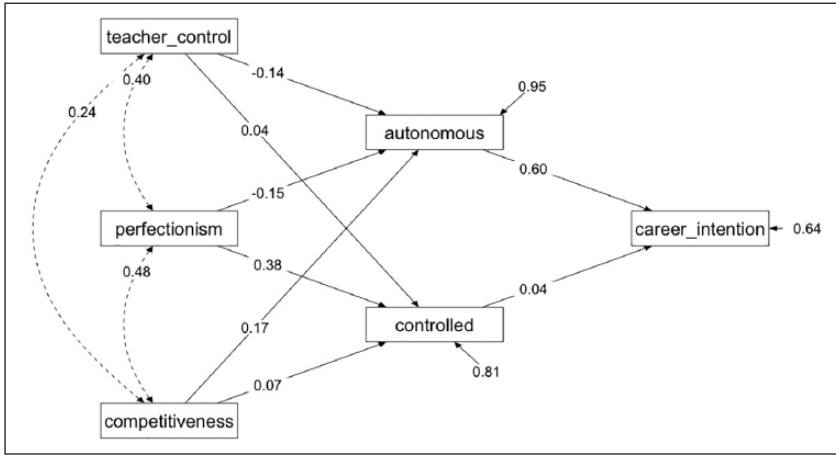


Figure 1. Sample One: Model 1—Original Hypotheses.

Table 2. Fit Indices for Path Analysis Models.

Model	χ^2	df	p	RMSEA	SRMR	CFI	$\Delta\chi^2$	Δdf	p
Sample One: Model 2	6.02	3	.111	.06	.03	.98	9.13 ^a	1	.002
Sample One: Model 1	13.93	4	.007	.09	.04	.94	—	—	—
Sample Two: Model 2	3.84	3	.280	.07	.04	.97	—	—	—

Note. a = Model 2 vs. Model 1.

accounting for approximately 36.4% of the variance in career intentions. Modification indices suggested that a direct relationship between teacher control to career intentions would serve to increase model fit. Given that such a relationship is theoretically plausible, Model 2 was estimated with an additional direct path from teacher control to career intentions (Figure 2). The additional path was significant ($p < .05$) and the indices of overall fit for Model 2 suggested an excellent fit (Table 2). Model 2 accounted for slightly more of the variance in career intentions (37.9%) than Model 1 and a Chi square difference test comparing Model 1 and 2 indicated that Model 2 was a superior fit to the data. Indirect effects from teacher control ($B = -0.08$) and perfectionism ($B = -0.08$) through autonomous motivation to career intentions were small but significant ($p < .05$) whereas, the indirect effect from competitiveness to autonomous motivation to career intentions was not significant. Also, the three paths that were found to be non-significant in Model 1 were again non-significant in Model 2.

Model 2 indicates that those with relatively stronger career intentions also tend to have relatively stronger autonomous motivation orientations and perceive their teachers to be more controlling (Table 3). Autonomous motivation orientations also tend to be stronger for those who perceive their environment to be relatively more competitive and weaker for those who experience relatively greater degrees of perfectionism and teacher control. Moreover, participants reporting stronger senses of teacher control and perfectionism also tended to report weaker career intentions by virtue of the indirect relationships of the two variables through autonomous motivation. In contrast, those who experience relatively greater degrees of perfectionism tended to report relatively stronger controlled motivation orientations.

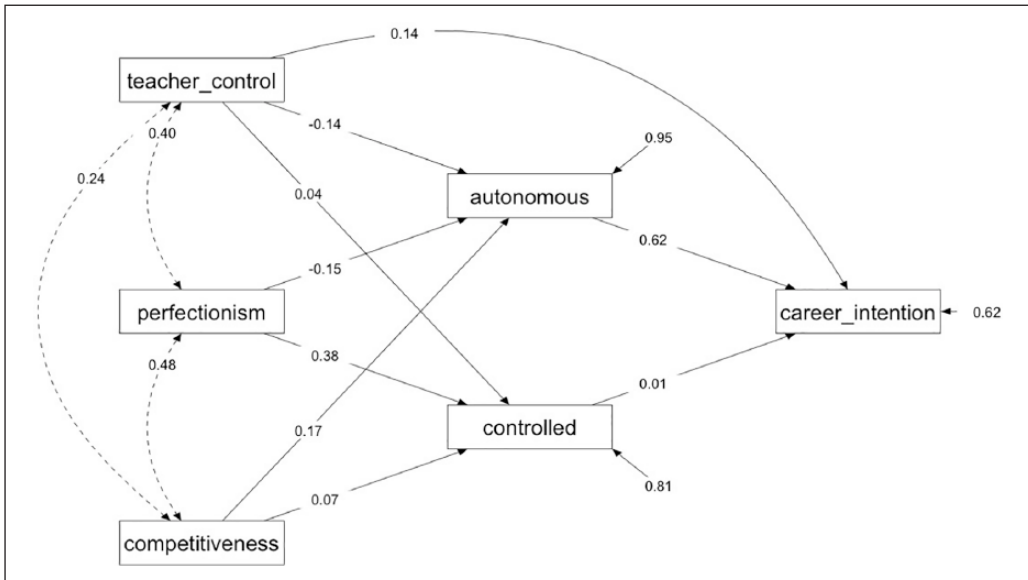


Figure 2. Sample One: Model 2—Additional Path from Teacher Control to Career Intention.

We also explored the validity of Model 2 by fitting it to the sample two data. The overall fit indices revealed that Model 2 was also an excellent fit to the sample two data (Table 2). The parameters resulting from the sample two data generally indicated similar trends to those from the sample one data with a few exceptions (Table 4). The paths between teacher control and career intentions, teacher control and autonomous motivation, and competitiveness and autonomous motivation were not significant when fit to the sample two data. The indirect effect from perfectionism (-0.18) through autonomous motivation approached significance ($p = .051$), but the indirect effect from teacher control through autonomous motivation was not significant. Also, although non-significant, the path coefficient for the direct relationship between teacher control and career intentions was negative, whereas it was positive and significant with the sample one data. Less of the variance in career intentions responses from the sample two sample was accounted for by this model (19%) as compared to the analyses with the data from sample one. Overall, the relationships between controlled and autonomous motivation and career intentions were similar with sample two and sample one and, with the exception of the relationship between teacher control and career intentions, the direction of relationships among the variables in the model followed similar trends.

Discussion

The present study was motivated by the need to understand potentially problematic aspects common to university schools of music—competitiveness, perfectionism, and controlling teaching. These characteristics may be damaging to student motivation at a time where motivation is crucial to sustain study and where career trajectories are being committed to (Bennett, 2008; Evans, 2015; Miksza, 2011). The study hypothesized a model in which competitiveness, perfectionism, and controlling teaching predicted students' motivation to study music, which

Table 3. Sample One: Parameter Estimates and Hypothesis Test Results for Model Two.

			<i>B</i>	<i>se</i>	β	<i>p</i>
<i>Direct effects</i>						
Career intentions	←	Autonomous motivation	.80	.09	.62	< .001
	←	Controlled motivation	.01	.04	.01	.243
	←	Teacher control	.12	.04	.14	.003
Autonomous motivation	←	Teacher control	-.09	.04	-.14	.016
	←	Perfectionism	-.10	.04	-.15	.026
	←	Competitiveness	.11	.06	.17	.050
Controlled motivation	←	Teacher control	.04	.06	.04	.485
	←	Perfectionism	.36	.07	.38	< .001
	←	Competitiveness	.07	.07	.07	.251
<i>Indirect effects</i>						
Career intentions	←Autonomous motivation	←Teacher control	-.08	.03	-.09	.020
	←Autonomous motivation	←Perfectionism	-.08	.04	-.10	.033
	←Autonomous motivation	←Competitiveness	.09	.05	.10	.060

Table 4. Sample Two: Parameter Estimates and Hypothesis Test Results for Model Two.

			<i>B</i>	<i>se</i>	β	<i>p</i>
<i>Direct effects</i>						
Career intentions	←	Autonomous motivation	.60	.20	.40	.002
	←	Controlled motivation	-.09	.15	-.07	.567
	←	Teacher control	-.09	.17	-.07	.610
Autonomous motivation	←	Teacher control	-.03	.15	-.04	.844
	←	Perfectionism	-.30	.15	-.39	.048
	←	Competitiveness	.07	.15	.08	.623
Controlled motivation	←	Teacher control	.12	.16	.13	.466
	←	Perfectionism	.49	.20	.55	.016
	←	Competitiveness	-.18	.15	-.17	.233
<i>Indirect effects</i>						
Career intentions	←Autonomous motivation	←Teacher control	-.02	.09	-.02	.847
	←Autonomous motivation	←Perfectionism	-.18	.09	-.15	.051
	←Autonomous motivation	←Competitiveness	.04	.09	.03	.616

in turn predicted their intentions to pursue a music career. The hypothesized model was tested with data from students in three institutions, and replicated with a second sample. The model was largely supported by the data, but there were some surprising findings: competitiveness was positively associated with autonomous motivation, and controlling teaching was positively associated with career intentions.

Descriptive statistics

Before proceeding to the more substantive aspects of the research findings, it is worth pointing out some of the descriptive features of the data. A majority of students expressed the maximum score on the scale for career intentions. On the one hand, this not surprising given that the students are studying in highly specialized degree programs with competitive entry standards; students in the Bonneville-Roussy et al. (2017) study expressed similarly high levels of career intentions on a similar measure. On the other hand, it means that as students are progressing through their degree programs, their outlook does not seem to be particularly negative. Similarly, the quality of their motivation was relatively high, indicated by high mean levels of autonomous motivation and low mean levels of controlled motivation. It seems fair to conclude that students are not expressing agreement with any statements that would indicate low career intentions, low autonomous motivation, or high controlled motivation. So, the majority of students, at least in these institutions, endorse the goal of a music career, and their motivation is high in quality.

When we examined the three conservatory characteristics we were interested in—perfectionism, competitiveness, and teacher control—we found mixed results at a descriptive level. Teacher control was mostly below the midpoint ($M = 2.85$, $SD = 1.46$ on a scale of 1 to 7), similar to the results from studies examining teacher control in high school classrooms (Cheon & Reeve, 2014; Cheon, Reeve, & Song, 2016), and a result that seems to belie the impression that master teachers can be perceived as impossibly demanding and intimidating (Burwell, 2012). Students perceived their institutions as being highly competitive ($M = 5.10$, $SD = 1.27$ on a scale of 1–7), which was conceptualized as a problem in the present study. But as noted below, this may not be consequential for student motivation when accounting for the correlation with perfectionism. Socially prescribed perfectionism peaks around the middle of the scale, which may be of some concern given the close associations with maladaptive outcomes like depression and other mental health concerns (Limburg, Watson, Hagger, & Egan, 2017), and this result is in line with Araújo et al.'s (2017) study on music students in the UK.

The literature on music conservatories is replete with statements about how highly competitive, perfectionistic, and controlling music conservatories seem to be (Bennett, 2008; Kemp, 1996). However, at a descriptive level, the data in this study suggest that this is not the case, at least at the institutions sampled. These observations are limited by the fact that there are no published norms for the measures used. But based on observing large majorities of the responses in strong disagreement with statements about controlling teaching and controlled motivation, and very few responses in agreement (or vice versa for career intentions and autonomous motivation), the overall message from these descriptive statistics seems to counter the hothouse narrative present in the literature.

Effects of student motivation on career intentions

The quality of motivation appears to be a good explanation for students endorsing a career, with autonomous motivation strongly associated with higher intentions to pursue a music career, but seemingly no effect of controlled motivation. This implies that students are pursuing the goal of a music career because they personally endorse the goal and that they identify a music career with their sense of self. Some students may also experience controlled motivation for studying music—pressured by others to pursue a career, studying music to fuel their ego or because they feel there would be negative consequences if they did not—but in this case, that controlled motivation does not appear to affect their career intentions. Thus, any attempts to

intervene to help students focus on their long-term career goals may be well-advised to focus on developing the more positive aspects of their motivation, rather than searching for aspects of controlled motivation to reduce. One caution to note with interpreting this result is that, as noted above, these students appeared to be relatively low in controlled motivation overall. Further study of students who are high in controlled motivation may find that it begins to negatively predict their career intentions. In university music schools, controlled motivation has been associated with greater stress, greater use of ineffective coping strategies when dealing with stress, lower examination grades, and negative affect (Bonnevill-Roussy et al., 2017). In another study, an index of controlled–autonomous motivation predicted more practice and better practice quality by students (Evans & Bonneville-Roussy, 2016). So students with a controlled motivation to study music may maintain their career goals as much as anybody else, but they may pay a considerable price: controlled motivation more generally is associated with negative outcomes including low wellbeing, mental illness, and disengagement (Ryan & Deci, 2017).

Effects of conservatory environment on student motivation

Three problems related to music conservatories often emerge from the literature: they are highly competitive, studio teachers can be demanding and controlling, and students can exhibit maladaptive perfectionistic tendencies. We sought to examine what kind of effects these characteristics might have on student motivation. We expected to see an insidious picture of their influence, but results were mixed in terms of both the presence of these features in general and their effects on motivation and career intentions.

Competitiveness did not predict controlled motivation as hypothesized, but it did predict autonomous motivation positively, with a small effect. Theoretically (Evans, 2015; Ryan & Deci 2017), competitiveness is supposed to shift the motivational focus away from the intrinsic goal of, for example, studying music because it is enjoyable, because it is useful to a music career, and because students see it as an important part of their identity, and instead motivates students for reasons external to the task itself: to out-perform their peers, to seek out opportunities to display their high ability, or to avoid failure, as observed in Schmidt et al.'s (2006) study of undergraduate musicians. But in this case, there were high levels of competitiveness which seemed to energize students' autonomous reasons to study music, albeit with a small effect.

It is possible that after years of familiarity and learning within the domain of music, and with very high performance standards among students in conservatories, students have simply become resilient to the social pressures associated with competitiveness. It may also be that even though most students perceive their environment to be competitive, they may also perceive themselves as doing relatively well compared to the others, and the negative effects of competition may only arise when students know they are falling behind. In response to a meta-analytic finding of no (or small) influence of competitiveness on performance (Murayama & Elliot, 2012), performance goals were investigated as a potential mediator (Elliot, Jury, & Murayama, 2018). Elliot et al. (2018) found that undergraduate psychology students who adopted performance approach goals in response to competitiveness performed better than students who adopted performance-avoidance goals. In light of this and given the mixed results in the literature on competitiveness in music education, we suggest caution in interpreting this result, and that further research more closely examines a range of outcomes and mediators that could potentially be associated with competitiveness.

In contrast, our results pertaining to perfectionism displayed a clear alignment with what was expected. It had a small negative effect on autonomous motivation and a moderate positive

effect on controlled motivation. In this study, we particularly focused on socially prescribed perfectionism of a kind that might be found in the motivational climate of conservatories. Socially prescribed perfectionism is communicated through the social environment, including through interactions with studio teachers—indeed, it was correlated with controlling teaching in this study. In research on school students, socially prescribed perfectionism has been associated with test anxiety, acceptability of cheating, and academic procrastination (Bong, Hwang, Noh, & Kim, 2014). It seems clear that high levels of perfectionism have negative effects on student motivation and wellbeing, which is supported by the results of the present study. Further research needs to examine precisely which other factors may be able to mediate the negative effects of perfectionism on motivation that may be present in university environments.

Teacher control was examined because it has been noted as an environmental influence that could lead to maladaptive motivation orientations (Evans, 2015). Teacher control negatively predicted autonomous motivation as expected, but it did not account for any variance in controlled motivation. This may be because although studio teachers are important to students, they are just one of a range of significant others in their sphere of influence, including other instructors, peers, friends, and family. Students may also accept that alongside their motivational orientation toward being a music student, they will encounter challenges such as teachers who are demanding and sometimes unreasonable. Because students generally have many years of experience working with studio teachers, they may be experienced enough at negotiating the relationship that they can be resilient to undue controlling behavior—thus not allowing it to affect their motivation too much, and adopting stronger career goals in spite of this. However, these interpretations are somewhat speculative and further research is needed to understand the scope and impact of teacher control on student outcomes.

Limitations

Several methodological limitations must be considered when interpreting the findings reported here. This study employed a self-report methodology. Although the bulk of similar research uses self-report methodology as a legitimate form of inquiry, future research could benefit from more objective measures such as expert observers or external raters. We adopted a cross-sectional design for the present study, which is a useful method in its own right for ascertaining relationships between various constructs and putative causal relationships, but further support for causality is required from longitudinal approaches. An additional methodological limitation is with the sampling for the study, which was limited to three institutions across two countries. It would make sense to expand the number of institutions, because there may be inter-institutional differences in motivational orientations that could be examined empirically. Similarly, it would be interesting to investigate whether the trends revealed in this study would be different if various strata of the university music student population were examined (e.g., undergraduate vs. graduate students vs. alumni) or if the population were differentiated according to more specific career aspirations (e.g., performer vs. teacher).

Regarding measurement, we adopted a mix of established measures (i.e., perfectionism, teacher control, autonomous and controlled motivation) and measures with limited use prior to the present study (i.e., competitiveness, career intentions). Although some degree of construct validity was clear (e.g., the zero-order correlations were in the expected directions), further research needs to validate these measures before interpretations can be strongly relied upon. We particularly note the skewed distribution of the career intentions reports, pointing to the need for future research to develop a more finely discriminating measure. In addition, there

are several ways for conceptualizing the measurement of the motivational constructs specified by self-determination theory; which is a compelling research topic on its own. Examining more subtly distinct constructs than autonomous and controlled motivation orientations (i.e., amotivation, external regulation, introjected regulation, identified regulation, integrated regulation) in relation to career motivation would be interesting.

Implications for conservatories

The present study arose from a research problem cited in the literature: that of controlling teachers, perfectionism, and competitiveness. In light of this, it is worth reprising the findings based on our descriptive analyses. Teacher control occurred at very low levels and had limited impact on student motivation. It may be that in places where teacher control is higher, it has a greater and more deleterious impact. Alternatively, students often seek out studio teachers who they perceive are likely to push them and may be willing to accept (or reinterpret) a teacher's controlling behavior if they feel it is moving them toward their goals of emulating the teacher's mastery and artistry. It is also possible that students' admiration for their artist teacher is so great that they would interpret controlling behavior as evidence that their teacher is simply invested in their success. That said, it also may be worth investigating whether teacher control is indeed prevalent in conservatories more generally—if not, the image of the overbearing studio teacher threaded in the hothouse conservatory narrative may be unfair. Controlling teaching seemed to have a positive effect on career intentions, but the fact that it also seemed to damage student autonomous motivation could be of greater concern given the other motivational benefits of autonomous motivation.

Reports of perfectionism and competitiveness were relatively prominent, as might be expected among students in an aesthetic performance domain. Socially prescribed perfectionistic tendencies are almost always negative (Limburg et al., 2017), as demonstrated in the present study's findings. University music programs can consider interventions that could reduce socially prescribed perfectionism while maintaining high expectations and high standards of performance excellence. For example, programs could ensure that their teaching emphasizes the pursuit of mastery and focuses students on their own intrinsic goals while also explicitly discouraging socially prescribed standards of comparisons.

Interestingly, competitiveness seemed to have an adaptive influence on the participants' motivation as indicated by the positive relationship to autonomous motivation. Participating in a university music program involves fairly constant peer comparison (e.g., ensemble playing, group masterclass performances, mock auditions) and as such may help students develop a sense of competition through which they learn to grow from the challenges implied from their peers' performance. Competition is also informational in the sense that it communicates competence-relevant feedback about one's abilities. Nonetheless, it is important to monitor students' dispositions regarding competition so as to be sure they serve an adaptive function rather than become a source for dysfunctional learning behavior. Fortunately, methods for cultivating healthy and adaptive motivational dispositions within conservatory environments is a topic that continues to gain popularity among practitioners (e.g., Beching, 2010) as well as researchers (e.g., Kokotsaki & Hallam, 2007; Zander, Voltmer, & Spahn, 2010).

Finally, the outcome of focus in the present study was student career intentions. An obvious indicator of success in a university music performance program is that its students are committed to a long-term music career. Autonomous motivation was a considerable predictor of this in the present study. When students feel they are studying music because they

want to, because they enjoy it, and because it is aligned with their sense of self, then they are more committed to their career. The motivation literature consistently suggests that if students adopt an autonomous motivational orientation to their careers, their engagement with the domain is of higher quality—behaviorally, affectively, and cognitively. Controlled motivation was not related to career intentions, but other ill effects of controlled motivation are well-documented in the literature, particularly relating to wellbeing and mental health (Ryan & Deci, 2017).

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was funded by the Australian Government through an Australian Research Council (grant number DP150103330). This study is part of a larger study funded by an Australian Research Council Discovery Project (DP-150103330) held by the first, second, and third authors.

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Appendix

Relative Autonomy Index (RAI) items adapted from Sheldon et al. (2017)

Prompt: Why do you study music at university?

Response mode: 7-point, Likert-type scale ranging from *Strongly disagree* to *Strongly agree*

- Intrinsic orientation
 - Because I enjoy studying music
 - Because I love studying music
 - Because studying music is fun
 - Because studying music is interesting
- Identified orientation
 - Because studying music will help me increase my skills
 - Because it will be useful to me
 - Because I want to become a better musician
 - Because studying music is important to my future
- Introjected orientation
 - Because I want people to think I'm good at music
 - So I can show off if I do well
 - Because I will feel bad or guilty if I don't
 - Because I will feel ashamed of myself if I don't
- External orientation
 - Because I have no other choice
 - Because my parents, teachers, or peers expect me to
 - Because I am supposed to
 - Because I have to

Socially prescribed perfectionism items adapted from Cox et al. (2002)

Prompt: Please rate the following statements about playing music

Response mode: 7-point, Likert-type scale ranging from *Strongly disagree* to *Strongly agree*

- In music, anything that I do that is less than excellent will be seen as poor performance by those around me
- In music, I feel that people are too demanding of me
- Although they may not show it, other people get very upset with me when I slip up
- My family expects me to be perfect at playing music
- In music, people expect nothing less than perfection from me