Assessing Psychological Flexibility with the Musician's Acceptance and Action Questionnaire (MAAQ)

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INTRODUCTION

- University student musicians are faced with numerous psychological challenges during their training, including music performance anxiety (MPA), low motivation to practice, stressful auditions & exams, perfectionism, and others.
- Newer research involving Acceptance & Commitment Therapy (ACT) suggests that remaining psychologically flexible in the presence of these stressors enables music students to better cope with them (Juncos et al., 2017; Juncos & Markman, 2015; Osborne et al., 2021; Shaw et al., 2020).
- Thus far, no measures exist for assessing psychological flexibility (PF) within music performance and practice, aside from more general measures of psychological flexibility, i.e., the Acceptance & Action Questionnaire-II (Bond et al., 2011). Specific measures of PF — AAQ for substance abuse (AAQ-SA; Luoma et al., 2011) and the work-related AAQ (WAAQ; Bond et al., 2013) — show stronger psychometric properties than the AAQ-II.
- A newer measure was created for measuring PF specifically in music performance & practice settings:
  — **Musician's Acceptance & Action Questionnaire (MAAQ).**

PRESENT STUDY

It was predicted that:
- The MAAQ would have adequate psychometric properties.
- The MAAQ would better predict scores on an adjudicated music exam than the AAQ-II.
- The MAAQ would better predict avoidant behavior in performance & practice settings than the AAQ-II.
- The MAAQ would better predict a history of treatment for matters related to music performance, i.e., MPA, than the AAQ-II.

METHOD

Participants

Two samples of English-speaking, university musicians (N = 128; 67.79% female, Mage = 21.77, SD = 4.58; Myears of music training = 11.81, SD = 5.13) participated in this research project. Students were music majors from an American university (Butler University) and an Australian conservatory (Melbourne Conservatorium of Music), respectively. Ethics approval was obtained from both schools' IRB's.

Measures

Students completed a 44-item, pilot version of the **MAAQ,** along with a measure of **psychological inflexibility** (AAQ-II; Bond et al., 2011), **MPA** (KMPAI-R; Kenny, 2009), **perfectionism** (FMPS; Frost et al., 1990), and **flow** (SDFS-2; Jackson et al., 2008). Students' age, gender, and years of music training were noted. Also, students were asked to quantify the number of hours they **avoided music practice** each day within in the most recent week (or each day during a typical week, if they were currently on a break).

RESULTS

Table 1. MAAQ's construct & discriminant validity

	1	2	3	4	5
1. Musician's Psychological Flexibility (MAAQ)	-				
2. Psychological Inflexibility (AAQ-II)	-.511 *	-			
3. Flow (DFS-2, both practice & performance)	.534 *	-.360 *	-		
4. Music Performance Anxiety (KMPAI)	-.808 *	.712 *	-.445 *	-	
5. Perfectionism	-.456 *	.406 *	n.s.	.625 *	-

*. Correlation is significant at 0.001 level (2-tailed)

Table 2. MAAQ's incremental predictive validity: Grades from a recent, adjudicated music exam

	N	Mean Rank	Mann-Whitney U test	Z score	p
MAAQ					
The top grade	27	45.20	539.00 *	-2.01	.04
Lower grades	55	33.96			
AAQ-II					
The top grade	27	38.92	600.50 *	-1.402	.16
Lower grades	55	46.76			

* A Mann-Whitney U test indicated that the difference in MAAQ scores was statistically significant, whereas AAQ-II did not differ statistically.

Table 3. MAAQ's incremental predictive validity: Flow during a musical performance

	B	SE_B	β	t	p	spr^2
Performance Flow						
AAQ-II	-.261	.048	-.453	-5.475	.000	0.205
MAAQ	.458	.049	.659	9.448	.000	.434
Practice Flow						
AAQ-II	-.129	0.048	-.246	-2.705	.008	.061
MAAQ	.205	.056	.322	3.634	.000	.104

Notes. spr^2 = squared semipartial correlation. Bolded text indicates statistical significance reached after applying Bonferroni corrections controlling for multiple comparisons.

DISCUSSION

- As hypothesized, the MAAQ had adequate psychometric properties, i.e., good internal consistency (α = .84), good construct & discriminant validity.
- Compared to the AAQ-II, the MAAQ was a significant predictor of the highest ranked grades for students on a recent, adjudicated music exam, whereas the AAQ-II was not.
- The MAAQ was a better predictor than the AAQ-II of flow experiences within both performance and practice settings.
- The MAAQ predicted students' avoidant behavior within performance and practice settings equally well as the AAQ-II.
- Although the results were not significant, the MAAQ appeared to predict a history of psychotherapy (p=.12) and medications (p=.07) for performance-related matters, i.e., MPA, better than the AAQ-II (p=.72 & p=.33, respectively).
- **Limitations**: Small sample size; Combining two samples (there were no significant differences among most of the variables between the two samples, however, the samples differed significantly on age, years of music training and adaptive perfectionism mean score); Item-parceling was used to form latent variables in the mediation analyses, which is a common but controversial practice.

CONCLUSION

The MAAQ appears to be a psychometrically valid measure of PF within music performance and practice settings, and it appears to better predict outcomes of interest for university student musicians. In spite of these promising results, larger musician samples would be useful in further establishing the MAAQ's utility as an alternative to the often used AAQ-II.

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