Testing a Path Analysis Involving a Nonmusical Outcome and Liking Sad Music

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Introduction

- **Testing Levinson (1997)**
  - Levinson (1997) states that people like listening to sadness-inducing music because the music induces positive, hedonic rewards. There are eight of these rewards:
    1. Mediated Process
    2. Catharsis
    3. Savoring Feeling
    4. Emotional Understanding
    5. Emotional Practice
    6. Emotional Resolution
    7. Expressive Potency
    8. Emotional Communion
  - From these rewards, we interpreted a path diagram that leads to liking sadness-inducing music and simplified it to make it testable.
  - Our interpretation of Levinson states that the evoked sadness will create a nonmusical outcome, which creates liking (Reward #1), that increased sadness will lead to increased satisfaction, which leads to liking and the nonmusical outcome (Reward #6), and that absorbing oneself into the music helps create the nonmusical outcome and leads to liking (Reward #8).
- **Testing Clair and Memmott (2008)**
  - Clair and Memmott (2008) stated, " When musical experiences are unsuccessful, of poor quality, or judged to be unsatisfying by the participants, little probability exists that participants will continue to engage, and if participation does not continue, there is little chance of meeting the needs of the individual participants" (p. 6).
  - In other words, they said that low satisfaction will lead to low engagement, which will lead to weaker nonmusical outcomes.

Method

- **Participants**
  - The data in this study were drawn from data presented at the 2014 Great Lakes Region Conference. The data have been reanalyzed to present new information.
  - We had 85 undergraduate students (72 females, 13 males; Mean Age = 20.07, *SD* = 2.34; 79% Caucasian) from a Psychology Department at a Midwestern university participate in this study for partial course
- **Materials and Procedure**
  - The participants listened to Debussy's *Des Pas sur la Neige,* which was previously shown to induce more sadness than happiness.
  - After listening to the song, the participants rated how much they felt happiness, sadness, satisfaction, and engagement on 1 (*Not Felt at All*) to 5 (*Extremely Intense Emotion*).
  - They also rated their absorption levels using Sandstrom and Russo's (2013) Absorption in Music Scale and their liking of the song using Schafer and Sedlmeier's (2010) Preference subscale. The nonmusical outcome was Schafer and Sedlmeier's (2010) Communication subscale, which has items such as "This music helps me connect with others" and "This music provides me with interesting or important information" on 1 (*Disagree A Lot*) to 10 (*I totally agree)* scales.

Results

- **Testing Levinson (1997)**
  - Using Lisrel 8.8, this model (Figure 1) did not converge in less than 2500 iterations. Therefore, it was not an accurate depiction of the path leading to the nonmusical outcome and liking.
- **Revising Levinson (1997)**
  - After including happiness in the model and removing sadness's effect on communion, the model converged. This new model (Figure 2) shows that happiness felt during the sadness-inducing song, satisfaction, and absorption are important to generating nonmusical outcomes and liking the song. This model fits the data well, $\chi^2(3) = 2.62$, RMSEA = .00, CFI = 1.00, SRMR = .04.
- **Testing Clair and Memmot (2008)**
  - Satisfaction predicted engagement (B = .54, $p < .001$), which predicted communication, B = .83, $p < .001$, R^2mediation = .10, $p < .05$. See Figure 3.

Discussion

- **Testing Levinson (1997)**
- The purpose of this analysis was to test an interpretation of Levinson (1997). The original interpretation did not converge. So, additional measures needed to be included.
- The inclusion of felt happiness from the sad-inducing song makes theoretical and empirical sense, because "sad" songs do not just evoke sadness. Sad songs can be seen as a pleasant experience (Vieillard, Peretz, Gosselin, & Khalfa,2008), and music listeners feel both happiness and sadness at the same time (Hunter, Schellenberg, & Schimack, 2008).
- The finalized model supports several of Levinson's (1997) premises.

- **Testing Clair and Memmott (2008)**
- Testing Clair and Memmot's (2008) path suggests our finalized model is incomplete. Adding happiness to our interpreted Levinson (1997) model was justified because Levinsons discusses happiness. Levinson does not discuss engagement, so engagement could not be tested within Levinson's model. Because Clair and Memmot's (2008) path shows engagement might influence the nonmusical outcome, our finalized version Levinson's (1997) path might need engagement.
- These paths show that music therapists should consider the client's satisfaction, happiness, and engagement levels when designing interventions and choosing music. Consequently, music therapists should work to increase happiness, satisfaction, and engagement when using sadness-inducing music to bring about stronger nonmusical outcomes rather than just using preferred music.
- As Clair and Memmot state, "Satisfaction with the musical experience is the motivating force for continued commitment to the therapeutic process. Music therapists, therefore, design music therapy applications that provide experiences that are desirable, motivating, and appropriate for the program participants" (p. 6–7).

Figure 1
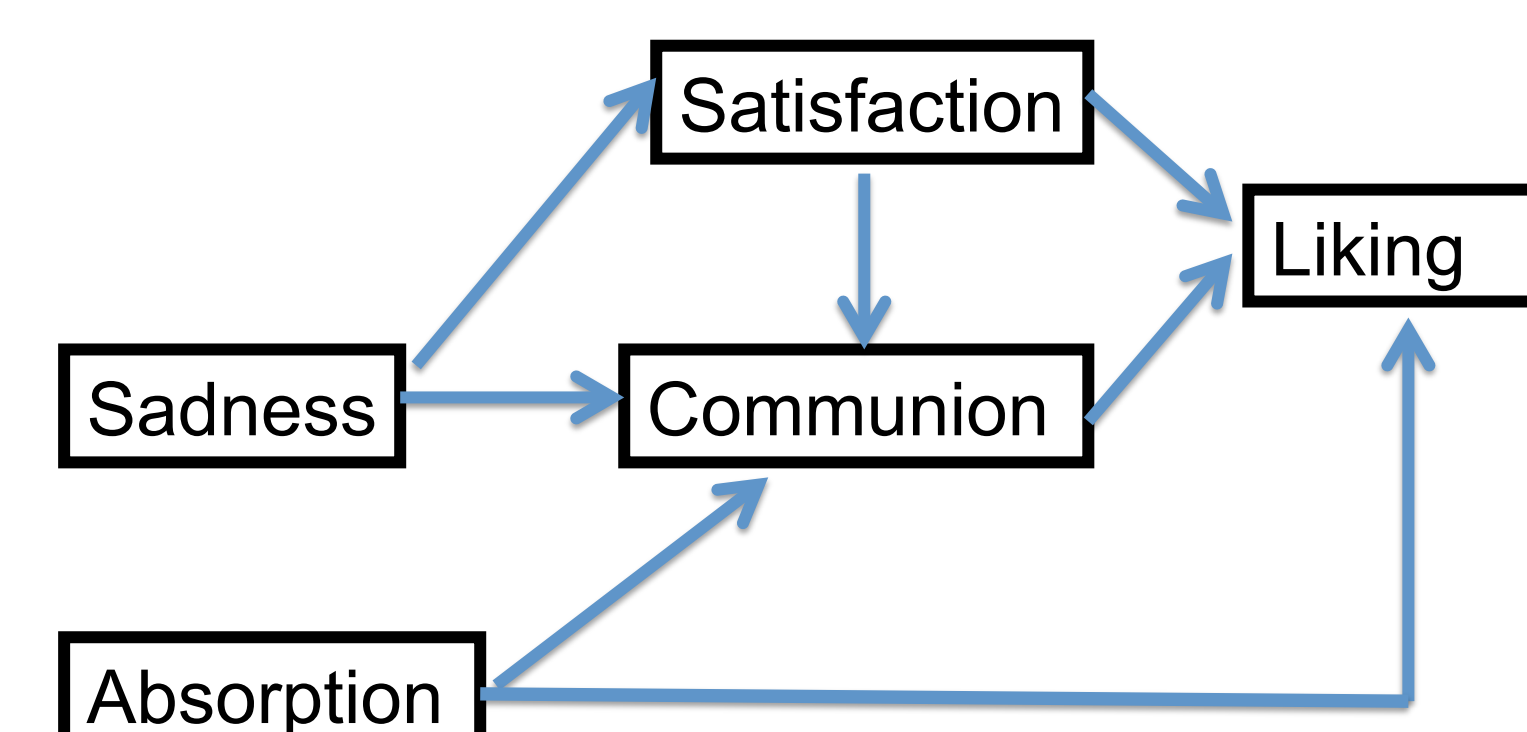
Original model loosely derived from Levinson (1997)

Figure 2
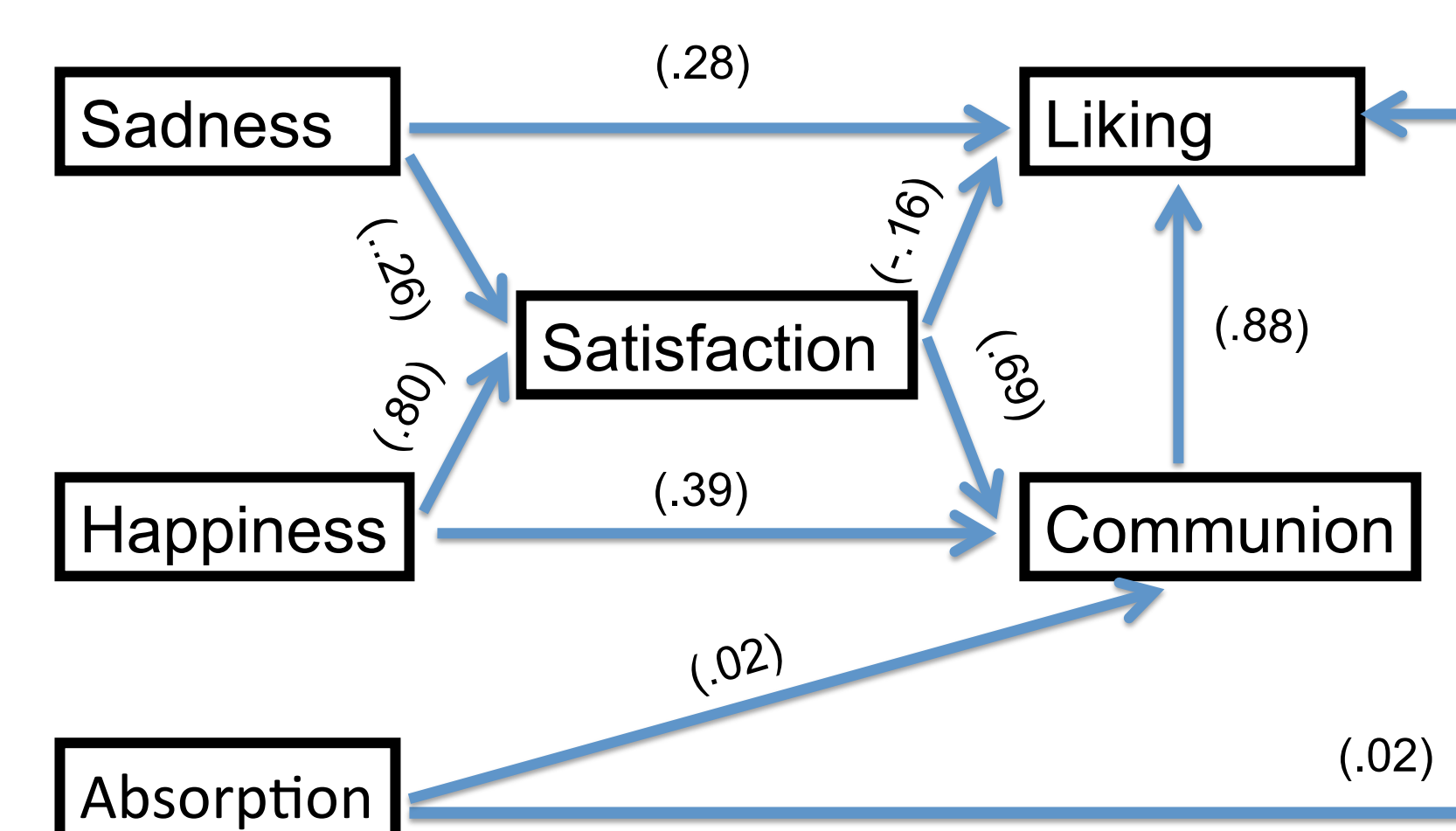
Finalized model

Figure 3

Clair and Memmot's (2008) mediated path

References

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