Individual Differences in Preference for Harmony

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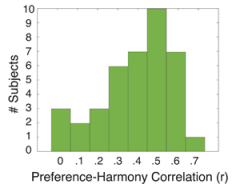
Background

Preference for Color Harmony

People's mean ratings of preference for and harmony of color pairs are closely related (r = +.79).

But individuals differ in the degree to which they prefer harmony, with correlations ranging from -.03 to +.75.

(Schloss & Palmer, submitted)



Research Questions

Is preference for *internal coherence* in one domain (such as preference for harmony in color pairs) related to preference for internal coherence in other domains (e.g., spatial simplicity and musical harmony)?

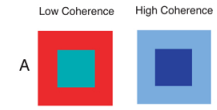
What is the effect of specific training (e.g., Art Practice vs. Psychology) on people's preferences for internal coherence in these domains?

Stimuli

Displays differing in coherence were constructed in 4 domains

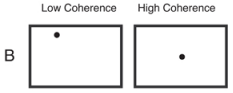
A. Color Harmony: 56 color pairs from the BCP sample (all combinations of 4 light and 4 saturated colors), including pairs with maximal and minimal ratings of color harmony.

(Schloss & Palmer, submitted)



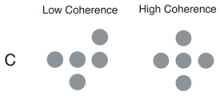
B. Spatial Fit: 35 images of a single dot at one of 35 positions (5 x 7 grid) inside a rectangular frame (B).

(Palmer, 1991)



C. Figural Goodness: 22 Garner dot patterns, each consisting of 5 dots arranged within a 3 x 3 grid (C).

(Garner, 1970)

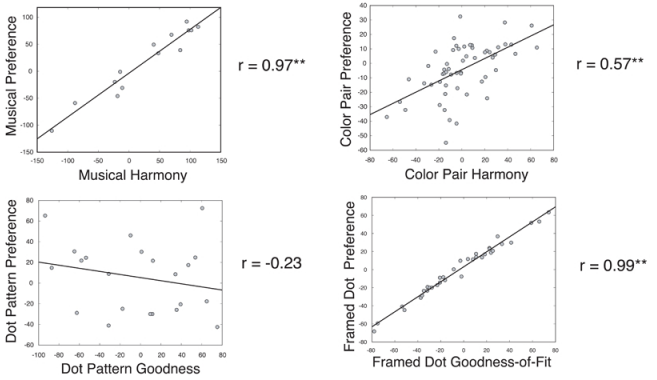


D. Musical Harmony: 14 clips of solo piano music, that varied systematically in (1) tempo (fast or slow), (2) mode (major or minor), and (3) style (classical, romantic, transitional, or atonal).

Methods & Within-Domain Results

Participants: *20 Psychology undergraduates, 20 Art Practice undergraduates*

Stimuli:	Color Pairs	Framed Dots	Dot Patterns	Music
Rating:	Harmony	Goodness-of-Fit	Goodness	Harmony

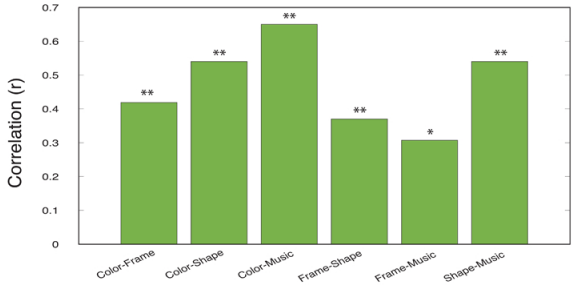


Cross-Domain Correlations

To measure preference for harmony across domains, for each participant we computed his/her average difference score (D_i) in domain i as the average absolute value of the difference between his/her preference ratings ($Pref_s$) and coherence ratings ($Cohere_s$) for each stimulus (s) in domain i:

$$D_i = \frac{\sum_{s=1}^{n} |Pref_s - Cohere_s|}{n}$$

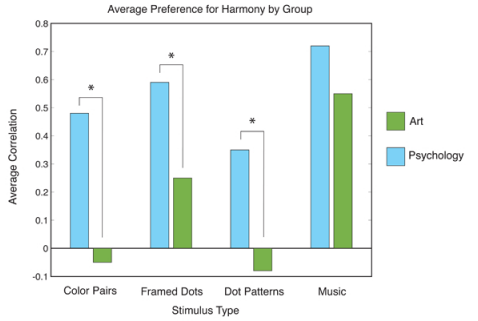
Difference scores were reliably correlated over individuals for each pair of domains:



Aesthetic Style: People who like coherence/harmony in one domain tend to like it in other domains, although some domains are more closely associated than others.

Group/Expertise Differences

Average preference for internal coherence (as measured by correlations) was significantly higher in Psychology students for the color pairs, frame images, and dot patterns, but not for the music.



Conclusions and Future Research

Although average preference for internal coherence is not the same across domains, individual participants' preferences are highly intercorrelated across domains.

Among the domains, color harmony and musical harmony show the closest relationship. Perhaps this is due to shared emotional associations between colors and music (Lawler, Schloss and Palmer, VSS-2008) .

Training in art is correlated with a decreased preference for internal coherence in color, shape and spatial fit. Future research will investigate whether musical training has a similar effect on preference for harmony in music.

References and Acknowledgements

References:

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