

**February 15, 2021**

Walter J. Dowling  
School of Behavioral & Brain Sciences  
Psychology

**Educational History:**

A. B., June, 1963, Northwestern University, Departmental Honors in Psychology  
Thesis: *The Mind-Body Problem in the Comparative Psychology of Knowledge Processes*,  
Donald T. Campbell, advisor  
A. M., June, 1966, Harvard University, Social Psychology  
Ph. D., January, 1968, Harvard University, Social Psychology  
Dissertation: *Rhythmic Fission and the Perceptual Organization of Tone Sequences*, Donald  
A. Norman, advisor

**Employment History – principal positions since the Bachelor’s degree:**

Teaching Fellow, 1964-1966, Harvard University,  
Instructor, 1963-1966, College of William & Mary Summer Band School  
Assistant Professor, 1966-1973, University of California, Los Angeles  
Assistant Professor, 1973-1975, California State University, Los Angeles  
Assistant Professor, 1975-1978, University of Texas at Dallas  
Associate Professor, 1978-1989, University of Texas at Dallas  
Professor, 1989-present, University of Texas at Dallas  
(Program Head, Psychology, 1976-77, 1987-2000; Program Head, Graduate Program in  
Applied Cognition & Neuroscience, 1990-2000; Program Head, Program in  
Cognitive Science, 1992-2000),

**Employment History – concurrent temporary or visiting appointments, consultantships:**

sabbatical, Spring, 1972, Stanford University  
Visiting Professor, Spring, 2003, Jan-Dec 2006, LEAD-CNRS, Université de Bourgogne,  
Dijon, France

**Professional recognitions and honors (study, teaching, research, service):**

Woodrow Wilson Fellow, 1963  
J. P. Guilford Award for Theoretical Papers in Psychology, 1965, American Psychological  
Association  
Predoctoral Fellow, 1965-1966, NIMH  
Innovation in Instruction Award, 1971, University of California  
Life-Time Achievement Award, 2017, Society for Music Perception and Cognition

**Professional memberships:**

Acoustical Society of America (Fellow), 1968-present  
Psychonomic Society (Fellow) 1970-present  
Society for Music Perception & Cognition, 1983-present  
Auditory Perception & Cognition Society 2017-present

### **Achievements in original investigation:**

#### **Books authored or co-authored, etc.:**

1. Dowling, W. J., & Harwood, D. L. *Music Cognition*. New York: Academic Press, 1986.
2. Francès, R. *The Perception of Music*. Translated from the French editions of 1958, 1972, & 1984 by W. Jay Dowling. Hillsdale, NJ: Erlbaum, 1988.
3. Abdi, H., Edelman, B., Valentin, D., & Dowling, W.J. *Experimental Design and Analysis for Psychology*. New York: Oxford University Press, 2009.

#### **Books edited or co-edited; exhibitions curated, etc.:**

1. Tighe, T. J., & Dowling, W. J. (Eds.) *Psychology and Music: The Understanding of Melody and Rhythm*. Hillsdale, NJ: Erlbaum, 1993.

#### **Journal special issues edited or co-edited, etc.:**

1. Dowling, W. J., & Carterette, E. C. (Eds.) *The Understanding of Melody and Rhythm*. Special Issue of *Perception & Psychophysics*, June, 1987, 41(6).
2. Bigand, E., Lalitte, P., & Dowling, W. J. (Eds.) *Music and Language: 25 Years After Lerdahl & Jackendoff's GTTM*. Special Issue of *Music Perception*, 2009, 26(3).

#### **Articles in refereed journals; juried exhibition entries; juried film festival entries; theatrical productions, etc.:**

1. Ranken, H. B. & Dowling, W. J. Language and thinking: The interaction of naming with relevance and concreteness. *Psychonomic Science*, 1965, 3, 459-460.
2. Dowling, W. J. & Fujitani, D. S. Contour, interval, and pitch recognition in memory for melodies. *Journal of the Acoustical Society of America*, 1971, 49, 524-531.
3. Dowling, W. J. Recognition of inversions of melodies and melodic contours. *Perception & Psychophysics*, 1971, 9, 348-349.
4. Dowling, W. J. Recognition of melodic transformations: Inversion, retrograde, and retrograde inversion. *Perception & Psychophysics*, 1972, 12, 417-421.
5. Dowling, W. J. Rhythmic groups and subjective chunks in memory for melodies. *Perception & Psychophysics*, 1973, 14, 37-40.
6. Dowling, W. J. The perception of interleaved melodies. *Cognitive Psychology*, 1973, 5, 322-337.
7. Dowling, W. J., & Hollombe, A. W. The perception of melodies distorted by splitting into several octaves: Effects of increasing proximity and melodic contour. *Perception & Psychophysics*, 1977, 21, 60-64.
8. Dowling, W. J. Scale and contour: Two components of a theory of memory for melodies. *Psychological Review*, 1978, 85, 341-354.
9. Dowling, W. J. Dichotic recognition of musical canons: Effects of leading ear and time-lag between ears. *Perception & Psychophysics*, 1978, 23, 321-325.
10. Dowling, W. J. The cognitive psychology of music. *Humanities Association Review/La Revue de l'Association des Humanités*, 1979, 30, 58-67.
11. Bartlett, J. C., & Dowling, W. J. The recognition of transposed melodies: A key-distance effect in developmental perspective. *Journal of Experimental Psychology: Human Perception & Performance*, 1980, 6, 501-515.
12. Dowling, W. J., & Bartlett, J. C. The importance of interval information in long-

- term memory for melodies. *Psychomusicology*, 1981, 1(1), 30-49.
13. Dowling, W. J. Contour in context: Comment on Edworthy. *Psychomusicology*, 1982, 2(2), 47-48.
  14. Dowling, W. J. Musical experience and tonal scales in the recognition of octave-scrambled melodies. *Psychomusicology*, 1984, 4, 13-32.
  15. Dowling, W. J. Assimilation and tonal structure: Comment on Castellano, Bharucha, & Krumhansl. *Journal of Experimental Psychology: General*, 1984, 113, 417.
  16. Dowling, W. J. Context effects on melody recognition: Scale-step versus interval representations. *Music Perception*, 1986, 3, 281-296.
  17. Dowling, W. J., Lung, K. M.-T., & Herrbold, S. Aiming attention in pitch and time in the perception of interleaved melodies. *Perception & Psychophysics*, 1987, 41, 642-656.
  18. Bartlett, J. C., & Dowling, W. J. Scale structure and similarity of melodies. *Music Perception*, 1988, 5, 285-314.
  19. Dowling, W. J. Simplicity and complexity in music and cognition. *Contemporary Music Review*, 1989, 4, 247-253.
  20. Dowling, W. J. Programming small computers to produce experiments in music cognition. *Psychomusicology*, 1989, 8(2), 113-120.
  21. Dowling, W. J. Expectancy and attention in melody perception. *Psychomusicology*, 1990, 9, 148-161.
  22. Drake, C., Dowling, W. J., & Palmer, C. Accent structures in the reproduction of simple tunes by children and adult pianists. *Music Perception*, 1991, 8, 315-334.
  23. Andrews, M. W., & Dowling, W. J. The development of perception of interleaved melodies and control of auditory attention. *Music Perception*, 1991, 8, 349-368.
  24. Dowling, W. J. Tonal strength and melody recognition after long and short delays. *Perception & Psychophysics*, 1991, 50, 305-313.
  25. Dowling, W. J., Kwak, S.-Y., & Andrews, M. W. The time course of recognition of novel melodies. *Perception & Psychophysics*, 1995, 57, 197-210.
  26. Halpern, A. R., Bartlett, J. C., & Dowling, W. J. Aging and expertise in the perception of musical transpositions. *Psychology & Aging*, 1995, 10, 325-342.
  27. Bartlett, J. C., Halpern, A. R., & Dowling, W. J. Recognition of familiar and unfamiliar melodies in normal aging and Alzheimer's disease. *Memory & Cognition*, 1995, 23, 531-546.
  28. Ziegler, L., & Dowling, W. J. The hierarchical nature of perceiving direction of motion in depth from optic flow. *Vision Research*, 1995, 35, 1435-1446.
  29. Halpern, A. R., Kwak, S.-Y., Bartlett, J. C., & Dowling, W. J. The effects of aging and expertise on the representation of tonal hierarchies. *Psychology & Aging*, 1996, 11, 235-246.
  30. Andrews, M. W., Dowling, W. J., Bartlett, J. C., & Halpern, A. R. Identification of speeded and slowed familiar melodies by younger, middle-aged, and older musicians and nonmusicians. *Psychology & Aging*, 1998, 13, 462-471.
  31. Halpern, A. R., Bartlett, J. C., & Dowling, W. J. Perception of mode, rhythm, and contour in unfamiliar melodies: Effects of age and experience. *Music Perception*, 1998, 15, 353-355.
  32. Dowling, W. J., Tillmann, B., & Ayers, D. Memory and the experience of hearing music. *Music Perception*, 2001, 19, 249-276.
  33. Dowling, W. J., & Tillmann, B. Les rôles de l'apprentissage perceptif et de l'expertise dans la mémoire des sons, de la musique, et de la poésie. *Revue de Neuropsychologie*, 2004, 14(2), 169-190.
  34. Tillmann, B., & Dowling, W. J. Memory decreases for prose, but not for poetry. *Memory & Cognition*, 2007, 35(4), 628-639.

35. Dowling, W. J., Bartlett, J. C., Halpern, A. R., & Andrews, M. W. Melody recognition at fast and slow tempos: Effects of age, experience, and familiarity. *Perception & Psychophysics*, 2008, 70, 496-502.
36. Marmel, F., Tillmann, B., & Dowling, W. J. Tonal expectations influence pitch perception. *Perception & Psychophysics*, 2008, 70, 841-852.
37. Dowling, W. J. My life in music cognition research. *Psychomusicology: Music, Mind & Brain*, 2009, 20(1), 54-63.
38. Dowling, W. J. Qualia as intervening variables in the understanding of music cognition. *Musica Humana*, 2010, 1-20.
39. Schulze, K., Dowling, W. J., & Tillmann, B. Working memory for tonal and atonal sequences during a forward and a backward recognition task. *Music Perception*, 2012, 29(3), 255-268.
40. Tillmann, B., Dowling, W. J., Lalitte, P., Molin, P., Schulze, K., Poulin-Charronnat, B., Schoen, D., & Bigand, E. Influence of expressive versus mechanical musical performance on short-term memory for musical excerpts. *Music Perception*, 2013, 30, 419-425.
41. Korsakova-Kreyn, M., & Dowling, W. J. (2014). Emotional processing in music: Study in affective responses to tonal modulation in controlled harmonic progressions and real music. *Psychomusicology: Music, Mind, and Brain*, 2014, 24(1), 4-20.
42. Dowling, W. J., & Tillmann, B. Memory improvement while hearing music: Effects of structural continuity on feature binding. *Music Perception*, 2014, 32(1), 11-32.
43. Raman, R., & Dowling, W. J. Real-time probing of modulations in South Indian classical (Carnātic) music by Indian and Western musicians. *Music Perception*, 2016, 33(3), 369-395.
44. Dowling, W. J., Magner, H., & Tillmann, B. Memory improvement with wide-awake listeners and with non-classical guitar music. *Psychomusicology: Music, Mind & Brain*, 2016, 26(1), 26-34.
45. Raman, R., & Dowling, W. J. Perception of modulations in South Indian classical (Carnātic) music by student and teacher musicians: A cross-cultural study. *Music Perception*. 2017, 34(4), 424-437,
46. Layman, S. L., & Dowling, W. J. Did you hear the vocalist? Differences in processing between short segments of familiar and unfamiliar music. *Music Perception*, 2018, 35, 607-621.
47. Raman, R., Kriegsman, M. A., Abdi, H., Tillmann, B., & Dowling, W. J. Bach, Mozart, and Beethoven: Sorting piano excerpts based on perceived similarity using DiSTATIS. *New Ideas in Psychology*, 2020, 57, 100757.

**Articles appearing as chapters in edited volumes; self-mounted exhibitions, etc.:**

1. Dowling, W. J., & Roberts, K. The historical and philosophical background of cognitive approaches to psychology. In E. C. Carterette & J. P. Friedman (Eds.) *Handbook of Perception*, Vol. 1. New York: Academic Press, 1974, pp. 243-254.
2. Dowling, W. J. Mental structures through which music is perceived. In *Documentary Report of the Ann Arbor Symposium: Applications of Psychology to the Teaching and Learning of Music*. Reston, VA: Music Educators National Conference, 1981, pp. 144-149.
3. Dowling, W. J. Music, meaning and use. In D. O'Hare (Ed.) *Psychology and the arts*. Sussex, England: Harvester, 1981, pp 175-191.
4. Dowling, W. J. Melodic information processing and its development. In D. Deutsch (Ed.) *The psychology of music*. New York: Academic Press, 1982, pp. 413-429. (Japanese translation, 1987).

5. Dowling, W. J. Musical scales and psychophysical scales: Their psychological reality. In T. Rice & R. Falck (Eds.) *Cross-cultural perspectives on music*. Toronto: University of Toronto Press, 1982, pp. 20-28.
6. Dowling, W. J. Development of musical schemata in children's spontaneous singing. In W. R. Crozier & A. J. Chapman (Eds.) *Cognitive processes in the perception of art*. Amsterdam: North-Holland, 1984, pp.145-163.
7. Dowling, W. J. Entwicklung von Melodie-Erkennen und Melodie Produktion. [The development of melodic understanding and production.] In H. Bruhn, R. Gerter & H. Rösing (Eds.) *Musikpsychologie: Ein Handbuch in Schlüsselbegriffen*. Munich: Urban & Schwarzenberg, 1985, pp. 216-222.
8. Dowling, W. J. Scala e linea melodica: Due componenti della memoria per la melodie. In L. M. Lorenzetti & A. Antonietti (Eds.) *Processi cognitivi in musica*. Milano: Franco Angeli, 1986, pp.185-206. [Italian translation of Dowling, 1978]
9. Dowling, W. J. Attending to hidden melodies. *Encyclopaedia Britannica Yearbook of Science and the Future*, 1988, pp. 192-203.
10. Dowling, W. J. Tonal structure and children's early learning of music. In J. Sloboda (Ed.) *Generative processes in music*. Oxford: Oxford University Press, 1988, pp. 113-128.
11. Dowling, W. J. Simplicité et complexité en musique et en cognition. In I. Deliège & S. MacAdam (Eds.) *La Musique et les Sciences Cognitives*, 1989, pp. 232-240. (French translation of Dowling, 1989).
12. Dowling, W. J. Pitch structure. In P. Howell, R. West, and I. Cross (Eds.) *Representing Musical Structure*. London: Academic Press, 1991, pp. 33-57.
13. Dowling, W. J. Perceptual Grouping, Attention and Expectancy in Listening to Music. In J. Sundberg (Ed.) *Gluing Tones: Grouping in Music Composition, Performance and Listening*. Publications of the Royal Swedish Academy of Music, no. 72, 1992, pp. 77-98.
14. Dowling, W. J. Procedural and declarative knowledge in music cognition and education. In Tighe, T. J., & Dowling, W. J. (Eds.) *Psychology and Music: The Understanding of Melody and Rhythm*. Hillsdale, NJ: Erlbaum, 1993, pp. 5-18.
15. Dowling, W. J. La structuration melodique: Perception et chant. In A. Zenatti (Ed.) *Psychologie de la Musique*. Paris: Presses Universitaires de France, 1994, pp. 145-176.
16. Dowling, W. J. Melodic contour in hearing and remembering melodies. In R. Aiello & J. Sloboda (Eds.) *Musical Perceptions*. New York: Oxford University Press, 1994, pp. 173-190.
17. Dowling, W. J. The development of music perception and cognition. In D. Deutsch (Ed.) *The Perception of Music* (2nd ed.). Orlando, FL: Academic Press, 1999, pp. 603-625.
18. Dowling, W. J., Barbey, A., & Adams, L. Melodic and rhythmic contour in perception and memory. In S. W. Yi (Ed.) *Music, Mind, and Science*. Seoul: Seoul National University Press, 1999, pp. 166-188.
19. Dowling, W. J. Music perception. In E. B. Goldstein (Ed.) *Handbook of perception*. Oxford: Blackwell, 2001, pp. 469-498.
20. Dowling, W. J. Music perception. In W. Kintsch (Ed.) *International encyclopedia of the social and behavioral sciences, vol. 21: Cognitive psychology and cognitive science*. London: Elsevier, 2001, ch. 20.
21. Dowling, W. J. Entwicklung der musikalischen Kognition: Melodie, Klangfarbe und Harmonie. In R. Oerter & T. H. Stoffer (Eds.) *Spezielle Musikpsychologie*. Göttingen: Hogrefe, 2005, pp. 57-88.
22. Dowling, W. J. Musical development In R. A. Shweder (Ed.), *The Child: An*

- Encyclopedic Companion*. Chicago: University of Chicago Press, 2009, pp. 657-658.
23. Dowling, W. J. Melody perception. In E. B. Goldstein (Ed.), *Encyclopedia of Perception*. Thousand Oaks, CA: Sage Publications, 2009.
  24. Dowling, W. J. *La perception de la musique et la mémoire des mélodies*. In L. Guirard (Ed.), *50 ans de psychologie de la musique : l'école de Robert Francès*. Paris, Éditions ALEXITERE, 2010, pp. 109-128.
  25. Dowling, W. J. Music perception. In C. Plack (Ed.), *Oxford Handbook of Auditory Science: Hearing*, Oxford: Oxford University Press, 2010, pp. 231-248.

**Refereed conference publications or abstracts and refereed talks/presentations at professional meetings:**

1. Dowling, W. J. Rhythmic fission and perceptual organization. *Journal of the Acoustical Society of America*, 1968, 44, 361. (abstract)
2. Harwood, D. L., & Dowling, W. J. Musical structure and emotional response in several cultures. Western Psychological Association, Los Angeles, April, 1970.
3. Dowling, W. J. Two processes in melody recognition. *Journal of the Acoustical Society of America*, 1970, 48, 49. (abstract)
4. Dowling, W. J. Musicians' learning of perceptual skills using a computer-based teaching machine, *Journal of the Acoustical Society of America*, 1972. 51, 138. (abstract)
5. Dowling, W. J. The 1215-cent octave: Convergence of western and nonwestern data on pitch scaling. *Journal of the Acoustical Society of America*, 1973, 53, 373. (abstract)
6. Dowling, W. J., & Bartlett, J. C. Memory for Beethoven Quartets: Effects of excerpt length and structure. Psychonomic Society, San Antonio, November, 1978.
7. Dowling, W. J. Listeners' successful search for melodies scrambled into several octaves. *Journal of the Acoustical Society of America*, 1978, 64, S146. (abstract)
8. Dowling, W. J. & Bartlett, J. C. A key-distance effect in melody recognition: Its development and dependence on inferred sets of pitches. Psychonomic Society, Phoenix, November, 1979.
9. Dowling, W. J. & Bartlett, J. C. Assimilation of brief atonal melodies to tonal prototypes: Asymmetrical effects on judgment. Psychonomic Society, Philadelphia, November, 1981.
10. Dowling, W. J. Chroma and interval in melody recognition: Effects of acquiring a tonal schema. (invited paper for symposium) *Journal of the Acoustical Society of America*, 1982, 72 (abstract)
11. Dowling, W. J. Tonal scale step encoding and the recognition of octave-scrambled melodies. *Journal of the Acoustical Society of America*, 1984, 75, S9. (abstract)
12. Dowling, W. J. Temporal control of attention in cued recognition of interleaved melodies. Psychonomic Society, San Antonio, November, 1984.
13. Dowling, W. J. Assimilation of quarter-steps to half-steps by musically untrained listeners. Paper presented to the Psychonomic Society, Boston, November, 1985.
14. Dowling, W. J. Knowledge, expectancy, and attention in the understanding of melodies. Paper presented in a symposium organized by W. J. Dowling and T. J. Tighe, American Association for the Advancement of Science, Philadelphia, May, 1986.
15. Dowling, W. J. Directing attention in pitch and time: Effects on the perception of

- hidden melodies. *Journal of the Acoustical Society of America*, 1988, 83, S50-S51 (Abstract).
16. Andrews, M. W., & Dowling, W. J. The development of attention to hidden melodies. *Proceedings of First International Conference on Music Perception and Cognition*, Kyoto, Japan, 1989, pp. 203-206.
  17. Drake, C., & Dowling, W. J. Accent structure and children's reproduction of melodies and rhythms. *Proceedings of First International Conference on Music Perception and Cognition*, Kyoto, Japan, 1989, pp. 207-210.
  18. Dowling, W. J., & Andrews, M. W. Tempo range for recognition of interleaved melodies. Paper presented at meetings of the Psychonomic Society, New Orleans, November, 1990.
  19. Dowling, W. J., Andrews, M. W., & Kwak, S.-Y. Rhythm and tonality in children's recognition of intact and distorted melodies. Paper presented at meetings of the Society for Research in Child Development, Seattle, April, 1991.
  20. Halpern, A. R., Bartlett, J. C., & Dowling, W. J. Expertise and age differences in perception and memory for melodies. Paper presented at meetings of the Psychonomic Society, St. Louis, November, 1992.
  21. Dowling, W. J., Bartlett, J. C., Halpern, A. R., & Andrews, M. W. Perception of speeded and slowed familiar melodies. Paper presented at meetings of the Psychonomic Society, Washington, November, 1993.
  22. Dowling, W. J. The development of melodic perception and production. *Proceedings of the Third International Conference for Music Perception and Cognition*, Liège, Belgium, July, 1994.
  23. Abdi, H., Piat, F., & Dowling, W. J. Interference in the early time course of memory for melodies. *Proceedings of the Third International Conference for Music Perception and Cognition*, Liège, Belgium, July, 1994.
  24. Andrews, M. W., Dowling, W. J., Bartlett, J. C., & Halpern, A. Attentional focus in the perception of rapid tone sequences by young and elderly musicians and nonmusicians. *Proceedings of the Third International Conference for Music Perception and Cognition*, Liège, Belgium, July, 1994, pp. 29-30.
  25. Halpern, A. R., Dowling, W. J., Bartlett, J. C., & Kwak, S. Effects of aging and expertise on the representation of tonal hierarchies. Paper presented at meetings of the Psychonomic Society, St. Louis, MO, November, 1994.
  26. Dowling, W. J. Pitch Judgments of Sine Waves Interleaved with Distractors. Paper presented at meetings of the Society for Music Perception and Cognition, Berkeley, June, 1995.
  27. Abdi, H., Piat, F. & Dowling, W. J. Interference in Memory for Melodies. Paper presented at meetings of the Society for Music Perception and Cognition, Berkeley, June, 1995.
  28. Bartlett, J. C., Dowling, W. J., Halpern, A. R., & McDaniel, E. Aging and knowing versus conscious remembering of well-known and novel tunes. Paper presented at meetings of the Psychonomic Society, Los Angeles, November, 1995.
  29. Dowling, W. J. Improvement in memory for melodies with time. Paper presented to the Armadillo Conference, UT/Dallas, May, 1997.
  30. Dowling, W. J. Improvement in memory for melodies with time. Paper presented at meetings of the Psychonomic Society, Philadelphia, November, 1997.
  31. Dowling, W. J. Melodic and rhythmic contour in perception and memory. *Proceedings of the Fifth International Conference for Music Perception and Cognition*, Seoul, Korea, August, 1998, pp. 47-52.
  32. Dowling, W. J. Improvement in memory for novel melodies over time. Paper presented at meetings of the Society for Music Perception and Cognition, Evanston, IL, August,

- 1999.
33. Poulin, B., Bigand, E., Dowling, W. J., D'Adamo, D. A., & Madurell, F. Do musical experts take advantage of global musical coherence in a recognition test? Paper presented at meetings of the Society for Music Perception and Cognition, Kingston, Ontario, August, 2001.
  34. Dowling, W. J., Tillmann, B., & Smith-Berry, S. Memory improves for poetry and music, but not for prose. Paper presented to the meetings of the Psychonomic Society, Orlando, FL, November, 2001.
  35. Dowling, W. J., Bisschop, M., & Tillmann, B. Detecting pitch changes in rhythmically varying targets after different delays. Paper presented to the meetings of the Psychonomic Society, Kansas City, MO, November, 2002.
  36. Dowling, W. J. Les rôles de l'apprentissage perceptif et de l'expertise dans la mémoire de la musique et de la poésie. Paper presented to conference of the CNRS, Lyon, March, 2003.
  37. Dowling, W. J. & Tillmann, B. Time course of stimulus-driven and knowledge-driven auditory attention. Paper presented to the meetings of the Psychonomic Society, Vancouver, BC, November, 2003.
  38. Magner, H., Dowling, W. J. & Tillmann, B. Circadian rhythms, testing time of day, and memory for music. Paper presented to the Auditory Perception, Cognition & Action Meetings, Vancouver, BC, November, 2003.
  39. Dowling, W. J. & Tillmann, B. Stimulus-driven and knowledge-driven processes in attention to warbles. *Journal of the Acoustical Society of America*, 2003, (Abstract).
  40. Dowling, W. J., & Tillmann, B. Rhythmic linkage of cues and targets in auditory attention. *Proceedings of the 8<sup>th</sup> International Conference on Music Perception & Cognition*. Evanston, IL, August, 2004, pp. 139-144.
  41. Tillmann, B., Abdi, H., & Dowling, W. J. Musical style perception by a linear auto-associator model and human listeners. *Proceedings of the 8<sup>th</sup> International Conference on Music Perception & Cognition*. Evanston, IL, August, 2004, pp. 189-191.
  42. Dowling, W. J., & Tillmann, B. Implicit rhythmic cues and explicit pitch cues in the aiming of auditory attention. Paper presented to Armadillo conference, University of Texas at Arlington, October, 2004.
  43. Dowling, W. J., & Tillmann, B. Rhythmic oscillation in auditory attention. Paper presented to APCAM conference, Minneapolis, November, 2004.
  44. Dowling, W. J., & Tillmann, B. Memory improvement for popular music with wide-awake listeners. *Abstracts of the Psychonomic Society*, **9** (2004) 93. Minneapolis, November, 2004.
  45. Dowling, W. J. Temporal judgments of streaming interleaved melodies. Paper presented to APCAM conference, Toronto, November, 2005.
  46. Dowling, W. J., & Tillmann, B. Effects of Tempo on Rhythmicity of Auditory Attention. *Abstracts of the Psychonomic Society*, **10** (2005). Toronto, November, 2005.
  47. Dowling, W. J., & Tillmann, B. Memory improvement while hearing music: Effects of musical structure. 9<sup>th</sup> International Conference on Music Perception & Cognition (ICMPC9), Bologna, Italy, August, 2006.
  48. Dowling, W. J., & Tillmann, B. Gradual binding of musical features during continued listening. Society for Music Perception & Cognition, Montréal, July, 2007.
  49. Dowling, W. J., & Tillmann, B. Feature binding and list length in memory for musical phrases. Psychonomic Society, Long Beach, CA, November, 2007.
  50. Korsakova-Kreyn, M., Dowling, W. J., & Dunlop, J. Affective response to tonal modulation. International Conference on Music Perception & Cognition, Sapporo, Japan, August, 2008.
  51. Dowling, W. J. Are melodies remembered as contour-plus-intervals or as contour-plus-

- pitches? Auditory Perception, Cognition & Action Meetings, Chicago, November 13, 2008.
52. Dowling, W. J., & Tillmann, B. Improved melody recognition: Feature binding or feature accessibility? Psychonomic Society, Chicago, November, 2008.
  53. Raman, R., & Dowling, W. J. Age and experience as determinants of sensitivity to shifts in tonality in South Indian classical (Carnatic) music. Auditory Perception, Cognition & Action Meetings, Boston, November, 2009.
  54. Dowling, W. J. Directing auditory attention in terms of pitch, time, and tonal scale membership. Psychonomic Society, Boston, November, 2009.
  55. Dowling, W. J., Laymann, S., Lopez, R., & Jerger, J. Slower Decision Processes after Delayed Test Indicated by ERPs: Converging Evidence for Slow Feature Binding in Music. poster presented at Neuromusic IV, Edinburgh, June, 2011
  56. Raman, R., & Dowling, W. J. Analyzing Modulation in Scales (Rāgams) in South Indian Classical (Carnātic) Music: A Behavioral Study. International Conference for Music Perception & Cognition, Thessaloniki, Greece, August, 2012.
  57. Dowling, W. J. Influence of a Short Delay on the Time Course of Recognition Memory for Melodies. Psychonomic Society, Minneapolis, November, 2012.
  58. Raman, R., & Dowling, W. J. Probing modulations in South Indian classical music by Indian and Western musicians. Auditory Perception, Cognition & Action Meetings, Toronto, November, 2013.
  59. Dowling, W. J., Raman, R., Ramesh, A., & Tillmann, B. The time course of responses to modulation in classical music. Paper presented to meetings of the Psychonomic Society, Chicago, November, 2015.
  60. Raman, R., Kriegsman, M., Abdi, H., Dowling, W. J., & Tillmann, B. Sorting excerpts of Western classical music based on perceived similarity. Paper presented to the Auditory Perception, Cognition, & Action Meetings, Chicago, November, 2015.
  61. Dowling, W. J., Raman, R., & Tillmann, B. The effect of familiarity on the time course of responses to modulation in classical music. Paper presented to the International Conference on Music Perception & Cognition, San Francisco, July, 2016.
  62. Raman, R., Herndon, K., & Dowling, W. J. Effects of familiarity, key membership, and interval size on perceiving wrong notes in melodies. Paper presented to the International Conference on Music Perception & Cognition, San Francisco, July, 2016.
  63. Dowling, W.J., & Raman, R. Progress from analytic to global perception of modulations with increased familiarity with music. Paper presented to the Auditory Perception, Cognition, and Action Meetings (APCAM), Boston, November, 2016.
  64. Dowling, W. J., & Raman, R. Detection of wrong notes in melodies that have out-of-key notes in them. International Meeting of the Psychonomic Society, Amsterdam, May, 2018.
  65. Raman, R., Nourani, S., & Dowling, W. J. Detection of wrong notes in familiar Persian melodies. International Conference for Music Perception & Cognition, Montréal, August, 2018.
  66. Raman, R., & Dowling, W. J. Wrong notes in melodies: Asymmetries in detection of up and down alterations. Poster presented to APCAM (Auditory Perception, Cognition & Action Meetings), New Orleans, November, 2018.
  67. Dowling, W. J. Music & Consciousness: Shifting Representations in Memory for Melodies. Talk presented to APCAM (Auditory Perception, Cognition & Action Meetings), Montréal, November, 2019.

**Writings (not including abstracts):**

1. Dowling, W. J. *The mind-body problem in the comparative psychology of knowledge*

- processes*. Honors Thesis, Northwestern University, 1963.
2. Dowling, W. J. Two models of cognition contrasted in the light of contemporary theoretical requirements in psycholinguistics. J. P. Guilford Award Paper, 1965.
  3. Dowling, W. J. *Rhythmic fission and the perceptual organization of tone sequences*. Ph. D. Dissertation. Department of Social Relations, Harvard University, 1968.
  4. Dowling, W. J. Review of *The social psychology of music* by P. S. Farnsworth. *Contemporary Psychology*, 1970, 15, 546-547.
  5. Dowling, W. J. Review of *Experimental research in the psychology of music* by E. Gordon (Ed.) *Contemporary Psychology*, 1971, 16, 801-802.
  6. Dowling, W. J. Review of *Basic musical functions and musical ability*. *Music Perception*, 1983, 1, 123-126.
  7. Dowling, W. J. Review of *The psychology of musical ability* by R. Shuter-Dyson & C. Gabriel. *American Journal of Psychology*, 1984, 97, 144-146.
  8. Dowling, W. J. Review of *The Musical Mind* by J. Sloboda. *Science*, 1986, 231, 279.
  9. Dowling, W. J. Review of *Musical Structure and Cognition* by P. Howell, I. Cross, & R. West (Eds.). *British Journal of Psychology*, 1986, 77, 411.
  10. Dowling, W. J. The convergence of musicology and music cognition: Review of *Perception and cognition of music* by I. Deliège & J. Sloboda (Eds.). *Musicae Scientiæ*, 1998, 2, 95-98.
  11. Dowling, W. J. Review of *Music, Cognition, and Computerized Sound: An Introduction to Psychoacoustics* by P. R. Cook (Ed.). *Contemporary Psychology*, 2002, 47, 36-38.
  12. Dowling, W. J. Review of L. M. Zbikowski *Conceptualizing Music: Cognitive Structure, Theory and Analyses*. *Psychology of Music*, 2006, 34, 285-288.
  13. Dowling, W. J. Review of P. N. Juslin & J. A. Sloboda *Handbook of Music and Emotion*. Oxford: Oxford University Press, 2010, 976 pp. *Music Perception*, 2011, 29, 319-322.
  14. Dowling, W. J., & Bigand, E. In Memoriam: Robert Francès (1919-2012). *Music Perception*, 2013, 30(3).

#### **Works in progress:**

1. Raman, R., Tillmann, B., & Dowling, W. J. Schematic and veridical information in detecting wrong notes in melodies.(under revision).
2. Sun, A., Qin, S., Dowling, W. J., & Basak, C. Encoding Specificity, Updating and Musical Expertise for Melodies in Working Memory: An fMRI Study. Paper presented to Dallas-Austin-Area Memory Meetings, August, 2020.

#### **Invited talks/presentations at professional meetings, seminars, or colloquia assemblies:**

1. Dowling, W. J. Infants' attention to melodic patterns. Developmental Psychology Colloquium, Stanford University, February, 1972.
2. Dowling, W. J. The computer production of music. Junior Science and Humanities Symposium, California Museum of Science and Industry, Los Angeles. November, 1972.
3. Dowling, W. J. Discussion: Non-music. Conference on the Contemporary Revolution in the Performing Arts. University of Southern California, March, 1974.
4. Dowling, W. J. Musical scales and contours. Invited paper for symposium, Music Educators National Conference, San Francisco, February, 1975.
5. Dowling, W. J. The cognition of music. Invited paper for Conference on New American Music, University of Wyoming, June, 1977.
6. Dowling, W. J. The musical scale as a cognitive schema. Invited paper for symposium, Western Psychological Association, San Francisco, April, 1978.
7. Dowling, W. J. Discussion: Cognitive skills. National Symposium on the Applications of

- Psychology to the Teaching and Learning of Music, Ann Arbor, October, 1978.
8. Dowling, W. J. Report on the Ann Arbor Symposium. Texas Music Educators Association, San Antonio, February, 1980.
  9. Dowling, W. J. Melodic intervals in long- and short-term memory. Colloquium, University of Minnesota, April, 1980.
  10. Dowling, W. J. (chair) Mental representations of musical structure in various cultures (symposium). American Psychological Association, Montreal, September, 1980.
  11. Dowling, W. J. Nontraditional curricula and career opportunities in music-related fields. Invited paper for symposium, Texas Association of Music Schools, Houston, March, 1981.
  12. Dowling, W. J. Contributions of research to the understanding of the learning of music. Invited paper for symposium, Music Educators National Conference, San Antonio, February, 1982.
  13. Dowling, W. J. (chair) Cognition of complex event sequences, especially music. Invited symposium, International Conference on Psychology and the Arts, Cardiff, Wales, September, 1983.
  14. Dowling, W. J. The development of musical schemata in children's spontaneous singing. Invited paper for symposium, International Conference on Psychology and the Arts, Cardiff, Wales, September, 1983. (Also presented in colloquia at Queen's University, Kingston, Ontario; McMaster University, Hamilton, Ontario; and Erindale College of the University of Toronto).
  15. Dowling, W. J. The perception of interleaved melodies: An attentional window in tonal pitch and time. Colloquium, Music Department, University of Washington, Seattle, May, 1985; and Conference on Mind, Body, and the Performing Arts, New York University, July, 1985.
  16. Dowling, W. J. Aiming auditory attention in the perception of interleaved melodies. Invited colloquium, Central Institute for the Deaf, St. Louis, May, 1987; Psychology Department, SMU, September, 1987.
  17. Dowling, W. J. The aiming of auditory attention in pitch and time. Invited address, Deutsche Gesellschaft fu"r Musikpsychologie, Hamburg, November, 1987.
  18. Dowling, W. J. Simplicity and complexity in music and cognition. Invited comments for symposium, IRCAM, Paris, April, 1988.
  19. Dowling, W. J. Music cognition and music education. Invited address for American Psychological Association convention, Atlanta, August, 1988.
  20. Dowling, W. J. Music cognition and the brain. Invited paper for symposium for the Cognitive Science Society, Montreal, August, 1988.
  21. Dowling, W. J. The cognitive framework for musical scales in various cultures. *Journal of the Acoustical Society of America*, 1988, 84 (Abstract). Invited paper for symposium at Acoustical Society convention, Honolulu, November, 1988.
  22. Dowling, W. J. Attention and knowledge in music cognition. (invited address). *Proceedings of First International Conference on Music Perception and Cognition*, Kyoto, Japan, 1989, pp. 325-330.
  23. Dowling, W. J. Attention, expectancy, and knowledge. Invited paper for seminar at the Royal Swedish Academy of Music, Stockholm, May, 1991.
  24. Dowling, W. J. Tonality and the time course of memory for melodies. (invited address). *Proceedings of the Second International Conference on Music Perception and Cognition*, Los Angeles, February, 1992.
  25. Dowling, W. J. Form and memory. Invited paper for seminar at the meeting of the Society for Music Theory, Kansas City, October, 1992.
  26. Dowling, W. J. The time course of memory for melodies. Invited keynote address, *Proceedings of the Third International Conference for Music Perception and Cognition*,

- Liège, Belgium, July, 1994.
27. Dowling, W. J. Babies who do mental arithmetic and other natural wonders. Developmental Psychology Brown Bag Talk, UT/Dallas, October, 1997.
  28. Dowling, W. J. Improvement over time in memory for melodies. Invited lecture presented at IRCAM, Salle Stravinski, Paris, December, 1997.
  29. Dowling, W. J. Hypermnnesia in the recognition of novel melodies. Cognitive Science Colloquium, Northwestern University, February 10, 1999.
  30. Dowling, W. J. Memory for melodies, poetry, faces, and other complicated things. *Journal of the Acoustical Society of America*, 1999, 105 (Abstract). Invited contribution to a symposium at the joint meetings of the Acoustical Society of America and the European Acoustical Association, Berlin, March, 1999.
  31. Dowling, W. J. Memory and the experience of time. *Journal of the Acoustical Society of America*, 1999, 105 (Abstract). Invited contribution to a symposium at the meetings of the Acoustical Society of America, Columbus, OH, November, 1999.
  32. Dowling, W. J. Music and the stream of consciousness. Invited presentation to MIND meeting, University of Texas at Dallas, March, 2000.
  33. Dowling, W. J. Early improvement in memory after hearing novel music. Invited presentation to MIND meeting, University of Texas at Dallas, March, 2000.
  34. Dowling, W. J. Entendre la musique. Cretin Scholar address, Dijon, Bourgogne, November, 2001; paper presented to the Psychology Department, University of Reims, France, March, 2003.
  35. Dowling, W. J. Écouter la musique. Perception et mémorisation des formes musicales. Paper presented to the Psychology Department, University of Besançon, France, March, 2004.
  36. Dowling, W. J. Aiming auditory attention in pitch and time. Colloquium, McGill University, Montréal, March, 2005.
  37. Dowling, W. J. La mémoire musicale pour la psychologie cognitive. Invited address to Journée: Rencontre sur le thème “musique et mémoire” (RTP “Musique, cognition, société”), ESPCI, Paris, February, 2006.
  38. Dowling, W. J. Memory improvement while hearing music: Effects of musical structure. Research Presentation, Laboratory for the Study of Learning and Development (LEAD), Université de Bourgogne, March, 2006.
  39. Dowling, W. J. Tempo and the rhythmicity of auditory attention, Research Presentation, CNRS-UMR 5020, Université Claude Bernard Lyon 1, May, 2006.
  40. Dowling, W. J. Music, pattern, and gestalt psychology. Invited address for symposium to celebrate the 50<sup>th</sup> anniversary of the publication of Leonard Meyer’s *Emotion and Meaning in Music*, Northwestern University, Evanston, IL, October, 2006.
  41. Dowling, W. J. The time course of encoding musical phrases in memory: The gradual binding of features. Research Presentation, Department of Psychology, Université de Lille 3, Lille, France, October, 2006.
  42. Dowling, W. J. Feature binding in auditory memory. Research Review, Réunion ANR, Université Claude Bernard Lyon 1, November, 2006.
  43. Dowling, W. J. How we remember melodies. UTD School of Behavioral & Brain Sciences Distinguished Lecture, May, 2013.
  44. Dowling, W. J. Encoding and retrieval in memory for melodies. Invited presentation for symposium at the Southern Society for Philosophy & Psychology, San Antonio, TX, March, 2018.
  45. Dowling, W. J. The experience of hearing melodies: Is it what we remember? Invited presentation for Music Perception & Cognitive Science Workshop, SMU, March, 2019.

**Teaching:****Doctoral advisement/direction:**

2015-2016 Kieth Gryder  
2016-2017 Kieth Gryder  
2017-2018 Kieth Gryder,  
2018-2019 Kieth Gryder, Brendon Mizener  
2019-2020 Kieth Gryder, Brendon Mizener, Melanie Holmes

**Classroom teaching:**

2014 Fall PSY 3360 Historical Perspectives on Psychology  
HCS 7372 Music & Human Experience (with Prof. Robert Rodriguez)  
2015 Spring HCS 6332 Perception  
PSY 3393 Experimental Projects in Psychology  
2015 Fall PSY 3360 Historical Perspectives on Psychology  
PSY 3393 Experimental Projects in Psychology  
2016 Spring HCS 6334 Attention  
PSY 3393 Experimental Projects in Psychology  
2016 Fall PSY 3360 Historical Perspectives on Psychology  
PSY 3393 Experimental Projects in Psychology  
2017 Spring HCS 6332 Perception  
PSY 3393 Experimental Projects in Psychology  
2017 Fall PSY 3360 Historical Perspectives on Psychology  
PSY 3393 Experimental Projects in Psychology  
2018 Spring HCS 6334 Attention  
PSY 3393 Experimental Projects in Psychology  
2018 Fall PSY 3360 Historical Perspectives on Psychology  
PSY 3393 Experimental Projects in Psychology  
2019 Spring HCS 6332 Perception  
PSY 3393 Experimental Projects in Psychology  
2019 Fall PSY 3360 Historical Perspectives on Psychology  
PSY 3393 Experimental Projects in Psychology  
2020 Spring HCS 6334 Attention  
PSY 3393 Experimental Projects in Psychology

**Service:**

2014-2018 University Budget Committee  
2014-2020 School Committee on SONA-Systems Guidelines  
2016-2018 University Academic Program Review Committee (chair 2017-18)  
2016-2018 Dean's Academic Advisory Committee  
2019-2020 Academic Senate  
2019-2020 Committee on Educational Policy

2014-2020 Associate Editor, *Music Perception* (published by the University of California Press)  
Associate Editor, *Psychomusicology: Music, Mind & Brain* (published by the American Psychological Association)

2018-2020 Board Member, Auditory Perception & Cognition Society