

# [Auditory functions](https://assignbuster.com/auditory-functions/)

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Auditory functions Auditory functions Discuss research that shows similarity of pitch and timbre affects auditory grouping. Sound can be characterized by loudness, quality and pitch. Timber describes the characteristics of sound which makes the ear distinguish the difference in loudness and pitch. Pitch, the perceptual associate with the fundamental frequency, which plays an important when delivering a speech, animal vocalizations and in music. The change in fundamental frequency over the time assists in defining musical strains and speech prosody while contrasts of simultaneous fundamental frequency are critical for musical harmony, and for segregating competing sound voices.   
Pitch models are based on spectral information temporal information, or both have absorbed on correctly expecting the perception of the pitch of the isolated sounds. In such models, it is either implicitly assumed that when a listener is comparing the pitches of the two sounds, the pitch of the two tones if first extracted, and the two pitches are later compared. Another important similarity the two models, do not address, but it relates to the effect of the temporal relationship between the tones. However, the arguments can also be used in the prediction of the opposite pattern of the result. Finally, the most important is the present findings which indicate that the human sensitivity for the fundamental frequency or differences in the pitch critically upon perception organization process.   
2. Discuss two sources of the variability problem and provide example of each   
The inconsistency problem is a speech related matter which arises between auditory and the actual sounds we hear, which causes confusion in our comprehension of sound information. The source of the problem is the audio signal, which is produced by air produced by vocal cord and the vocal tract when being pushed up through them. The signal consists of signal of phoneme, the smallest unit of speech which changes the meaning of the word. The English alphabet entails forty seven phonemes thirteen being the major vowel sound, and twenty four being the consonant sounds. Having known this, the variability problem describes how an alteration in the spoken sound can change the meaning of the word or phrase. The nature of variability of the spoken language is of a particular concern for the speech perception theories. One reason making this very important it is because classifiers assume that deviations from the prototypical patterns for a category are random.   
The first variability rises from coarticulation and context they refer to the pitch which at which a certain phoneme is pronounced when followed by another phoneme. For example, we understand “ t” to be “ t “ but it sound different when followed other letters. Thinking of letter “ t” in the word “ task” and compare it with the word “ mint”, the “ t” sounds the same because in the first word it is accompanied with the letter “ a” while as in the second one its followed by “ n”. The second factor which creates variability is the understanding of sound in speech derivers from the person speaking. Think about an Australian accent versus an American accent. Some of the pronunciation sound differently. How does it elaborate the misunderstanding which arises from the native and nonnative speakers? This could have to do with the sex of the person speaking, and at what speed they are speaking, the enunciation and the dialect.   
References