

Annoyance 반응에 의한 중량충격음 평가척도 구성  
Establishing Evaluation Modifiers for the Annoyance Responses to  
Heavyweight Impact Noise

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**Key Words** : Modifiers (평가어휘), Heavy-weight impact noise (중량충격음), Auditory Experiment (청감실험), Seven Point Scale (7점 척도), Subjective Intensity Level (주관적 소음강도), Limitation (한계치)

ABSTRACT

The auditory experiments based on the subjective annoyance responses were undertaken for the establishment of the adverb modifiers of the heavy-weight impact noises. The standard heavy weight impact noise, impact ball noise and adult walking noise were recorded by dummy head at a newly-built apartment and were presented to the subjects by headphones. The levels of the three impact noises were varied from 30 to 60dB(A) and the subjects matched one of the adverb modifiers to each level of the noise sources. As a result, seven scale modifiers were established and the intervals between the modifiers were found as equal. In addition, it was found that the lower annoyance noise limits for the heavyweight impact, impact ball and walking were 40-45dB ( $L_{iFmax,AH}$ ), which is 6dB lower than in the previous study. The background noise level was as low as 21dB(A) in the test booth, therefore, the testing conditions need to be concerned for evaluation of floor impact noise.