The International Affective Digitized Sounds (2nd Edition; IADS-2): Affective Ratings of Sounds and Instruction Manual

Margaret M. Bradley & Peter J. Lang
NIMH Center for the Study of Emotion and Attention
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with the assistance of: Andy Bertron, Jason Zack, Salvatore Gintoli, Jana Axelrad, John Cason, Trevor Brollia, Sarah Hayden, Brittany Thorne, Marie Karlsson, & Alisson Bittiker.

Introduction

The International Affective Digitized Sounds (IADS-2) was developed to provide a set of normative emotional stimuli for experimental investigations of emotion and attention. The goal is to develop a large set of standardized, emotionally-evocative, internationally-accessible sound stimuli that include contents across a wide range of semantic categories. The IADS-2 (**pronounced eye-ads**) is being developed and distributed by the NIMH Center for Emotion and Attention (CSEA) at the University of Florida in order to provide standardized materials that are available to scientific researchers. The existence of this collection of normatively rated affective stimuli should: 1) allow better experimental control in the selection of emotional stimuli, 2) facilitate the comparison of results across different studies conducted in the same or different laboratory, and 3) encourage and allow exact replications within and across research labs who are assessing basic and applied problems in psychological science.

In an undertaking of this nature, choices have to be made regarding the emotional judgments selected for standardization. We began by relying on a relatively simple dimensional view, which assumes emotion can be defined by a coincidence of values on a number of different strategic dimensions. This view is founded in Osgood's (Osgood, Suci, & Tanenbaum, 1957) seminal work with the semantic differential, in which factor analyses conducted on a wide variety of verbal judgments indicated that the variance in emotional assessments were accounted for by three major dimensions: The two primary dimensions were one of affective valence (ranging from pleasant to unpleasant) and one of arousal (ranging from calm to excited). A third, less strongly-related dimension was variously called 'dominance' or 'control' . Dimensional views of emotion have been advocated by a large number of theorists through the years, including Wundt (1898), Mehrabian and Russell (1974) and Tellegen (1985)

To assess the three dimensions of pleasure, arousal, and dominance, the Self-Assessment Manikin (SAM), an affective rating system devised by Lang (1980) was used (see also Bradley & Lang, 1994). In this system, a graphic figure depicting values along each of the 3 dimensions on a continuously varying scale is used to indicate emotional reactions.

SAM ranges from a smiling, happy figure to a frowning, unhappy figure when representing the affective valence dimension. For the arousal dimension, SAM ranges from an excited, wide-eyed figure to a relaxed, sleepy figure. For the dominance dimension, SAM ranges from a large figure (in control) to a small figure (dominated). The subject can select any of the 5 figures comprising each scale, or between any two figures, which results in a 9-point rating scale for each dimension. Ratings are scored such that 9 represents a high rating on each dimension (i.e., high pleasure, high arousal, high dominance), and 1 represents a low rating on each dimension (i.e., low pleasure, low arousal, low dominance).

Using SAM, subjects have rated the sounds currently in the IADS-2 on the dimensions of pleasure, arousal, and dominance. **Figure 1** illustrates the shape of the affective space that results when each sound is plotted in terms of its

mean pleasure and arousal rating. There are several characteristic features of the resulting space. First, these stimulus materials evoke reactions across the entire range of each dimension: mean pleasure ratings for these sounds range from very unpleasant to very pleasant , and are distributed fairly evenly across the space. Similarly, these materials elicit a wide range of arousal levels. Secondly, it is clear that pleasant sounds range continuously along the arousal dimension: The upper half of emotional space has exemplars at many positions along this dimension. These data suggest that the degree of arousal is not linearly correlated with the pleasantness of the sound. Sounds depicting unpleasant events, however, show a tendency to cluster in the quadrant of emotional space indicating high arousal: There are relatively fewer unpleasant items located in the calm quadrant of emotional space. Finally, for sounds rated as neutral in valence (i.e., those occurring at and near the midline of the valence dimension), arousal ratings do not attain the high levels associated with either pleasant or unpleasant materials.

Normative rating procedure for IADS-2

This overview of the rating procedure is an example of how each normative study is conducted. In general, each sound set that was rated consisted of approximately 60 different sounds that varied in pleasure and arousal. SAM ratings of pleasure, arousal, and dominance were made immediately after each sound was presented. This version of the IADS-2 includes ratings for 167 sounds, which were rated in 3 separate rating studies.

Tables 1, 2, & 3 list the mean ratings for these sounds for all subjects (Table 1), for female subjects (Table 2) and for male subjects (Table 3).

Participants. College students were female and male students attending Introductory Psychology classes at the University of Florida, who participated as part of a course requirement. At least 100 participants rated each sound, of which approximately half were female.

Design. Subjects were run in groups ranging in size from 6 to 25, with an effort to include both sexes in each session. Three different stimulus orders were used, which balanced the position of a particular exemplar within the series across subjects. The three SAM dimensions served as dependent measures.

Materials and Equipment. Criteria for selecting the sounds included in the IADS-2 were: 1). Selection of a broad sample of contents across the entire affective space, and 2) The sounds were relatively easy to resolve and communicated affective quality relatively quickly. Physical properties of the sounds were controlled in order to prevent clipping, and to control for loudness (see Table 4).

In addition to the exemplars rated in each set of stimuli, 3 practice sounds were heard prior to the experimental ratings (birds, female sigh, baby cry). These sounds provided subjects with a rough range of the types of contents that were presented, as well as serving to anchor the emotional rating scales.

Each trial included presentation of the following preparation and rating instructions immediately before and after the presentation of each sound:

1. (preparation) **Rate the next sound on row n (5 s)**

2. (stimulation): *Sound Stimulus* **(6 s)**

3. (rating) **Please rate the sound on all 3 dimensions (15s)**

A laptop computer controlled presentation and timing of the instructions and the sounds.

Each rating trial lasted 26 seconds, consisting of a 5 s preparation interval, a 6 s sound presentation interval, and a 15 s rating interval.

Procedure**.** The Self-Assessment Manikin (Lang, 1980; Bradley & Lang, 1994) was used to acquire affective ratings. The dimensions of pleasure, arousal and dominance are graphically rendered by 5 SAM figures for each scale. The participant can select any of 9 points on the rating scale by bubbling in the circle for the appropriate figure or bubbling in between any of the figures.

Subjects were seated in rows approximately 3 ft from the speakers from which the sounds were projected.

Each trial began with a preparation sound ("Please rate the next sound on row n') that was presented for 5 seconds. Then, the sound to be rated was presented for 6 s, and immediately AFTER the sound terminated, a rating instruction was heard ("Please rate the sound on all three dimensions") and the subject made their ratings of pleasure, arousal, and dominance using SAM. A standard 15 s rating period was used, which allowed ample time for subjects to make the three SAM ratings.

Instructions

We thank you for coming today and appreciate your participation in this experiment. In this study, we are interested in how people respond to sounds that represent a lot of different events that occur in life. For about the next 40 minutes, you will be listening to different sounds coming from the speakers in front of you, and you will be rating each sound in terms of how it made you feel while listening it. There are no right or wrong answers, so simply respond as honestly as you can. Before we start, I'd like you to read and sign the informed consent that accompanies your rating booklet. When you are finished reading the consent form, please sign your name on the appropriate line on the third page if you wish to participate in this study. (pause)

Now let me explain your involvement in more detail.

If you'll look at the loose sheet with the cartoon figures on them, you will see 3 sets of 5 figures, each arranged along a continuum. We call this set of figures SAM, and you will be using these figures to rate how you felt while listening to each sound. You will use one row--make all 3 ratings -- for *each* sound that you hear. SAM shows three different kinds of feelings: Happy vs. Unhappy, Excited vs. Calm, and Controlled vs. In-control.

"You can see that each SAM figure varies along each scale. The first SAM scale is the happy-unhappy scale, which ranges from a smile to a frown. At one extreme of the happy vs. unhappy scale, you felt happy, pleased, satisfied, contented, hopeful. If you felt completely *happy* while listening to the sound, you can indicate this by bubbling in the blue dot in the figure furthest to the left. The other end of the scale is when you felt completely unhappy, annoyed, unsatisfied, melancholic, despaired, bored. You can indicate feeling completely *unhappy* by bubbling in the blue dot in the figure at the right. If, in your judgment, your feeling of pleasure or displeasure falls *between* two of the pictures bubble in the blue dot in any of the other figures. If you felt completely neutral, neither happy nor sad, bubble in the blue dot in the figure in the middle. The figures allow you to describe intermediate feelings of pleasure by bubbling in the blue dot *in between* any of the pictures. This permits you to make more finely graded ratings of how you feel in reaction to the sounds.

"The excited vs. calm dimension is the second type of feeling displayed here. At one extreme of the scale you felt stimulated, excited, frenzied, jittery, wide-awake, aroused. If you felt completely *aroused* while listening to the sound, bubble in the blue dot in the figure at the left of the row. On the other hand, at the other end of the scale, you felt

completely relaxed, calm, sluggish, dull, sleepy, unaroused. You can indicate you felt completely *calm* by bubbling in the blue dot in the figure at the right of the row. As with the happy-unhappy scale, you can represent intermediate levels of arousal by bubbling in the blue dot in any of the other figures. If you are not at all excited nor at all calm, bubble in the blue dot in the figure in the middle of the row. Again, if you wish to make a more finely tuned rating of how excited or calm you feel, you can bubble in any of the blue dots *in between* the pictures.

The last scale of feeling that you will rate is the dimension of controlled vs. in-control. At one end of the scale you have feelings characterized as completely controlled, influenced, cared-for, awed, submissive, guided. Please indicate feeling *controlled* by bubbling in the blue dot in the figure at the left. At the other extreme of this scale, you felt completely controlling, influential, in control, important, dominant, autonomous. You can indicate that you felt *dominant* by bubbling in the blue dot in the figure at the right of the row. Note that when the figure is large, you feel important and influential, and that it will be very small when you feel controlled and guided. If you feel neither in control nor controlled you should bubble in the blue dot in the middle picture. Remember you can also represent your feelings between these endpoints. Either bubble in the blue dots over any of the intermediate figures, or *between* them.

Some of the sounds you hear may prompt emotional experiences; others may seem relatively neutral. Your rating of each sound should reflect your immediate personal experience, and no more. Please rate each one *AS YOU ACTUALLY FELT WHILE YOU HEARD THE SOUND*.

The procedure will be as follows: *Before* each of the sounds which you will rate, there will be a *warning sound* that indicates the row number you should use to rate the upcoming sound. At these times, you should always be certain that the *sound number* corresponds to the *ratings row number*. For example, when you hear "Rate the next slide on row 10", you should make sure you are on row 10 of your ratings booklet.

"The warning sound should *also* prompt you to quickly complete the previous rating and pay close attention for the next sound. You'll have only a few seconds to hear each sound. Please listen to the sound for the *entire* time it is on and make your ratings immediately *after* the sound is terminated. If, for some reason, you should *miss* hearing any sound, please leave that ratings row *blank*.. Remember: Your ratings row number must *always* have the same number as the sound.

"*After* each sound, you'll hear an instruction, 'Please rate the sound on all three dimensions'. Take this time to record your emotional experience of the sound in the booklet, as I've already said. It is very important *not* to dwell on your ratings of the sounds, since there will not be much time. Also remember that you will need to check the correct row number given on the warning sound for the next trial.

Remember, we are interested in your own *personal* ratings of the sounds. Therefore, please don't make any comments, which might influence the ratings that other people make. You can understand how this might bias our results."

"Before we begin, here are examples of the kinds of sounds you will be hearing and rating. Right now, I'd like you to take your sample rating sheet and practice rating the following sounds, all on the same sheet. This is just to help you get a feel for how the ratings are done."

Are there any questions before we begin? (pause) Just a reminder before we begin; when the warning sound comes on, make sure the sound number and the ratings row number match. Then listen to the sound for the entire time it is on. After the sound is off, make your ratings on all 3 dimensions as quickly as possible and get ready for the next sound. It is important that we have information from each of you on all of these sounds. There are no right or wrong answers; so *rate every sound on all three dimensions*."

Figures and Tables

Table 1. Means and standard deviations of each sound in the IADS-2 for All subjects

Table 2. Means and standard deviations of each sound in the IADS-2 for Female subjects.

Table 3. Means and standard deviations of each sound in the IADS-2 for Male subjects.

Table 4. Physical properties of the sounds in the IADS-2.

Figure 1. Each sound in the IADS2 plotted in the affective space defined by its mean pleasure and arousal rating.

International Affective Digitized Sounds-2: All Participants

Table 1

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
Cat	102	4.63	2.17	4.91	1.97	5.36	1.73
Panting	104	4.96	1.68	5.37	1.66	5.06	1.82
Puppy	105	2.88	2.14	6.40	2.13	3.80	2.17
Growl1	106	3.37	1.64	6.39	1.62	3.54	1.84
Dog	107	5.47	2.22	5.85	1.81	5.08	1.90
Carousel	109	6.40	2.13	5.64	1.84	5.69	1.93
Baby	110	7.64	2.10	6.03	1.98	6.14	1.88
MusicBox	111	6.01	2.19	5.65	1.91	5.42	2.02
Kids1	112	6.84	1.72	4.46	2.13	6.07	1.68
Cows	113	5.45	1.71	4.88	1.95	5.36	1.64
Cattle	114	5.01	1.85	6.04	1.81	4.56	1.75
Bees	115	2.16	1.33	7.03	1.91	2.67	1.71
Buzzing	116	3.02	1.65	6.51	2.13	4.14	2.11
Rooster	120	5.20	2.10	5.41	2.13	5.04	1.93
Pig	130	4.64	2.11	4.93	1.98	5.00	1.91
Chickens	132	5.64	1.76	4.77	1.73	5.96	1.82
Growl2	133	3.79	1.69	6.23	1.84	3.61	1.80
RattleSnake	134	3.55	1.99	6.98	1.67	3.50	1.82
Seagull	150	6.95	1.64	4.38	2.22	5.91	1.80
Robin	151	7.12	1.56	4.47	2.27	5.73	1.92
Tropical	152	5.23	2.28	5.51	2.23	4.78	2.10
Night	170	5.31	2.12	4.60	2.07	4.53	1.81
CountryNight	171	5.59	1.79	3.71	2.05	5.52	1.77
Brook	172	6.62	1.69	3.36	2.07	6.21	1.86
EroticCouple	200	6.31	1.93	7.10	1.66	5.92	2.00
EroticFem1	201	6.70	2.22	7.31	1.86	5.93	2.40
EroticFem2	202	6.81	2.08	7.13	1.89	6.16	2.18
EroticFem4	204	5.68	2.16	6.82	1.71	5.34	2.13
EroticFem3	205	6.47	1.98	6.46	2.06	5.81	1.94
Shower	206	6.20	1.60	4.40	1.82	5.62	1.61
EroticMale1	210	5.72	2.26	6.64	1.83	5.39	2.21
EroticCouple2	215	6.47	2.12	7.32	1.81	6.02	2.02
EroticCouple3	216	5.97	2.06	6.84	1.53	5.31	2.05
BoyLaugh	220	7.28	1.91	6.00	1.99	5.99	1.88
MaleLaugh	221	6.56	1.75	5.05	1.91	5.34	1.63
Kids2	224	6.11	1.90	5.64	1.89	5.49	1.82
ClapGame	225	5.96	1.51	4.83	1.93	5.49	1.56
Laughing	226	7.78	1.37	5.42	2.13	6.32	1.82
Giggling	230	7.05	1.44	4.84	1.86	5.77	1.55
MaleCough	241	2.46	1.53	5.87	2.06	3.52	2.07
FemaleCough	242	2.80	1.86	5.39	1.91	3.76	1.81
CoupleSneeze	243	3.86	1.70	5.19	2.06	4.23	1.90
ManWheeze	244	2.44	1.34	6.31	1.85	3.16	1.97
Hiccup	245	4.18	1.85	5.05	1.82	4.26	1.81
HeartBeat	246	4.83	1.81	4.65	2.49	5.07	1.86
MaleSneeze	250	3.54	1.57	4.94	1.90	4.08	1.67
NoseBlow	251	4.16	2.02	5.14	2.11	4.44	1.89
MaleSnore	252	4.01	1.87	4.75	2.39	4.33	1.99
VideoGame	254	6.17	1.65	5.58	1.99	6.25	2.05
Vomit	255	2.08	1.78	6.59	2.08	3.23	1.98
BabiesCry	260	2.04	1.39	6.87	2.13	3.46	2.31
BabyCry	261	2.75	1.68	6.51	1.96	3.91	1.97
Yawn	262	5.26	1.58	2.88	1.74	4.87	1.83
Whistling	270	6.10	1.83	4.23	2.06	5.85	1.93
Scream	275	2.05	1.62	8.16	2.15	2.55	2.01
FemScream2	276	1.93	1.63	7.77	1.50	2.69	2.02
FemScream3	277	1.63	1.13	7.79	1.63	2.32	1.78
ChildAbuse	278	1.57	1.43	7.27	1.60	3.49	2.48
Attack1	279	1.68	1.31	7.95	2.22	2.30	1.94
WomanCrying	280	3.65	1.87	5.33	1.46	4.37	1.95
Attack3	281	3.43	2.63	7.33	1.89	3.52	2.52
Fight2	282	2.92	2.34	7.20	1.63	3.92	2.31
Fight3	283	3.05	1.72	6.20	1.60	3.85	2.05
Attack3	284	2.01	1.48	7.05	1.65	2.99	2.00
Attack2	285	1.80	1.56	7.79	2.01	2.41	2.02
Victim	286	1.68	1.18	7.88	1.72	2.31	2.03
Creep	288	2.71	1.75	6.82	1.63	3.59	2.21
GunShot	289	3.08	1.71	6.57	1.80	3.55	2.07
Fight1	290	1.65	1.27	7.61	1.99	2.89	2.05
Prowler	291	3.67	1.70	6.35	1.76	3.86	1.87
MaleScream	292	1.99	1.41	7.28	1.74	2.82	1.78
ManSobbing	293	3.08	1.92	5.74	1.69	3.94	1.82
CoupleSobbing	295	3.27	2.39	5.79	1.81	3.94	2.10
WomenCrying	296	2.06	1.22	6.07	1.97	3.24	1.96
Crowd1	310	3.89	2.32	6.78	2.02	3.86	2.00
Crowd2	311	7.65	1.58	7.12	1.83	6.09	2.18
Crowd3	312	3.89	2.13	6.89	1.88	3.68	1.94
Office2	319	3.56	1.44	6.08	1.39	3.82	1.79
Office1	320	4.23	1.56	5.48	1.95	4.81	1.85
TypeWriter	322	5.01	1.82	4.79	2.16	5.35	1.98
Applause1	351	7.32	1.62	5.55	2.08	6.74	1.71
SportsCrowd	352	7.17	1.97	7.07	2.12	5.77	2.08
Baseball	353	7.38	1.53	6.62	1.42	6.04	1.86
Crowd4	355	6.77	1.84	6.32	1.66	5.70	2.00
Writing	358	4.52	1.34	4.87	1.98	5.04	1.94
RollerCoaster	360	6.94	2.25	7.54	1.97	4.73	2.39
Restaurant	361	5.36	1.62	5.01	1.65	5.25	1.60
HorseRace	363	6.10	1.88	6.32	2.00	5.05	1.67
Bar	364	5.19	1.85	5.62	1.75	4.83	1.67
Party	365	6.97	1.90	6.32	1.90	5.73	1.76
Casino1	366	7.09	1.73	6.26	1.63	6.08	2.19
Casino2	367	7.33	1.74	6.72	2.03	6.41	1.98
Crowd5	368	5.15	1.33	4.75	1.84	4.60	1.66
CourtSport	370	5.94	1.66	4.44	1.72	5.83	1.78
Paint	373	5.09	1.55	4.65	2.17	5.69	1.78
Sink	374	5.60	1.35	4.23	1.89	5.75	1.63
Polaroid	375	5.99	1.60	4.48	1.74	5.67	1.95
Lawnmower	376	4.88	1.62	4.60	1.93	5.19	1.63
Rain1	377	5.84	1.73	3.93	1.87	5.70	1.89
Doorbell	378	6.06	2.01	6.15	2.22	5.47	1.83

International Affective Digitized Sounds-2: All Participants
Table 1

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
JackHammer	380	3.70	1.88	6.33	1.73	4.18	1.93
Shovel	382	4.33	1.42	4.64	1.88	4.95	1.73
Jet	400	6.02	1.49	5.38	1.87	4.86	1.86
Helicopter1	403	5.57	1.83	5.56	1.99	5.31	1.96
Helicopter2	410	4.86	1.48	5.89	2.06	4.59	1.55
Countdown	415	6.46	1.67	6.55	1.56	4.80	2.25
CarHorns	420	2.34	1.51	7.08	2.06	2.70	1.80
TireSkids	422	2.22	1.47	7.52	1.90	2.62	1.77
Injury	423	3.31	1.79	6.23	1.60	4.22	1.89
CarWreck	424	2.04	1.52	7.99	1.66	2.29	1.74
Train	425	5.09	1.42	5.15	1.54	4.67	1.72
Wind	500	4.32	2.03	5.40	1.93	4.24	1.75
PlaneCrash	501	2.74	1.76	6.93	1.91	3.12	1.96
EngineFailure	502	3.15	2.01	6.32	1.87	3.23	2.10
BikeWreck	600	2.13	1.55	7.28	1.90	2.62	1.80
ColonialMusic	601	6.53	1.66	5.84	1.80	5.73	1.58
Thunderstorm	602	5.99	2.23	3.77	1.74	4.85	2.27
CowboyIndians	610	5.94	2.02	6.48	2.11	5.31	1.77
BattleTaps	611	3.02	2.06	5.34	1.75	3.67	1.99
AirRaid	624	2.82	1.75	7.10	2.10	3.41	2.03
MayDay	625	3.35	2.03	6.94	1.77	3.26	2.13
Explosion	626	3.37	1.98	6.61	1.71	3.40	1.86
Rain1	627	4.83	1.89	4.65	2.12	4.53	1.65
Rain2	698	5.18	1.94	4.12	1.98	4.85	1.96
Bomb	699	3.59	2.07	6.15	2.36	3.47	1.97
Toilet	700	4.68	1.61	4.03	2.36	5.62	1.92
Fan	701	4.95	1.47	4.41	2.06	5.27	1.62
Belch	702	4.45	2.57	5.37	1.95	5.23	2.04
BusySignal	703	2.65	1.59	5.68	1.89	3.26	1.92
Phone1	704	5.49	1.98	6.54	2.17	5.51	1.92
Phone2	705	5.35	1.43	4.15	1.72	5.68	1.81
War	706	4.16	1.68	5.30	1.83	4.55	1.82
Clock	708	4.34	1.42	3.51	2.05	4.64	2.06
AlarmClock	709	2.78	1.93	7.54	2.28	3.95	2.24
Cuckoo	710	4.27	2.04	6.24	1.88	4.20	1.77
Siren1	711	2.61	1.59	7.39	2.02	2.93	1.82
Buzzer	712	2.42	1.62	7.98	1.99	2.84	2.11
Sirens	713	2.95	1.71	6.98	1.53	3.27	1.77
Siren2	714	3.10	1.67	6.94	1.85	3.56	1.73
Alarm	715	4.30	2.50	6.99	1.79	3.87	2.02
SlotMachine1	716	7.00	2.17	6.44	1.73	6.54	2.03
SlotMachine2	717	7.32	1.64	6.56	2.19	6.39	2.30
DentistDrill	719	2.89	1.67	6.91	2.02	2.92	2.03
BrushTeeth	720	4.86	1.80	4.18	1.79	5.76	2.20
Beer	721	6.71	1.75	5.00	2.12	5.96	1.71
Walking	722	4.83	1.22	4.97	1.82	4.66	1.49
Radio	723	4.52	1.47	4.42	1.92	4.93	1.90
Chewing	724	5.34	1.97	4.91	1.74	5.80	1.85
SodaFizz	725	6.61	1.80	4.55	2.17	6.30	1.95
CorkPour	726	6.82	1.60	4.51	2.08	6.36	1.71
Paper1	728	4.72	1.26	4.35	2.09	5.40	1.60
Paper2	729	4.30	1.69	5.79	1.90	5.33	2.27
GlassBreak	730	3.22	1.45	6.23	1.78	4.10	1.87
Crash	732	2.89	1.68	6.98	1.75	3.32	1.88
NativeSong	802	6.17	1.99	5.29	1.74	5.72	1.80
Bugle	808	6.32	1.76	6.35	2.15	5.64	1.75
Harp	809	7.44	1.41	3.36	1.84	6.29	1.87
Beethoven	810	7.51	1.66	4.18	2.38	6.07	1.92
Bach	811	7.40	1.63	4.95	2.46	6.14	1.87
Choir	812	6.90	1.69	3.43	2.56	5.69	1.90
Wedding	813	7.20	1.86	5.89	2.40	5.51	1.95
RockNRoll	815	7.90	1.53	6.85	2.16	6.86	1.99
Guitar	816	6.98	1.90	5.23	2.08	5.84	1.88
Bongos	817	7.67	1.46	7.15	2.11	6.44	1.73
FunkMusic	820	6.94	1.98	5.87	1.92	5.97	1.80
BagPipes	826	6.21	2.12	5.07	2.06	5.61	1.88
Electricity	910	3.86	1.83	6.18	2.27	4.03	1.8484

International Affective Digitized Sounds-2: Female Participants

Table 2

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
Cat	102	4.60	2.19	5.02	1.93	5.34	1.67
Panting	104	4.72	1.54	5.40	1.57	4.73	1.57
Puppy	105	2.63	1.98	6.49	2.21	3.65	2.14
Growl1	106	3.11	1.52	6.51	1.71	3.25	1.83
Dog	107	5.53	2.32	5.73	1.89	4.93	1.94
Carousel	109	6.70	2.06	5.83	1.72	5.66	1.75
Baby	110	7.98	2.04	6.13	2.02	6.20	2.01
MusicBox	111	6.22	2.10	5.59	1.90	5.36	1.97
Kids1	112	7.29	1.62	4.60	2.25	6.22	1.58
Cows	113	5.80	1.70	4.95	1.93	5.38	1.21
Cattle	114	5.09	1.90	5.93	1.87	4.67	1.67
Bees	115	1.98	1.32	7.20	1.91	2.58	1.75
Buzzing	116	2.80	1.45	6.57	2.11	4.21	2.05
Rooster	120	5.11	2.22	5.36	2.07	5.09	1.85
Pig	130	4.63	2.25	4.94	2.00	5.02	2.02
Chickens	132	5.67	1.67	4.64	1.65	6.16	1.65
Growl2	133	3.67	1.74	6.16	2.01	3.33	1.81
RattleSnake	134	3.58	2.16	6.91	1.67	3.35	1.73
Seagull	150	7.18	1.69	4.27	2.41	6.07	1.99
Robin	151	7.29	1.65	4.49	2.45	5.76	1.68
Tropical	152	5.35	2.37	5.51	2.21	4.90	2.14
Night	170	5.18	2.49	4.78	2.09	4.22	1.67
CountryNight	171	5.58	1.74	3.67	2.09	5.33	1.75
Brook	172	6.98	1.63	3.15	2.07	6.25	1.86
EroticCouple	200	5.95	2.00	6.75	1.71	5.60	1.94
EroticFem1	201	5.96	2.23	6.79	1.94	4.94	2.21
EroticFem2	202	6.00	2.10	6.73	1.88	5.31	2.03
EroticFem4	204	5.11	1.94	6.49	1.62	4.55	1.93
EroticFem3	205	6.15	1.94	6.02	1.99	5.27	1.88
Shower	206	6.85	1.35	4.31	1.95	5.76	1.59
EroticMale1	210	5.89	2.15	6.87	1.70	5.40	2.26
EroticCouple2	215	5.77	2.18	7.32	1.57	5.44	1.91
EroticCouple3	216	5.83	1.95	6.60	1.59	5.07	1.84
BoyLaugh	220	7.64	1.86	6.01	2.15	6.17	1.79
MaleLaugh	221	6.47	1.89	5.05	1.98	5.20	1.64
Kids2	224	6.74	1.72	5.93	1.77	5.73	1.75
ClapGame	225	6.24	1.55	5.00	1.97	5.57	1.56
Laughing	226	7.90	1.31	5.42	2.26	6.46	1.91
Giggling	230	7.46	1.30	5.13	1.83	5.90	1.42
MaleCough	241	2.27	1.46	6.17	1.99	3.33	2.00
FemaleCough	242	2.60	1.99	5.67	2.00	3.64	1.90
CoupleSneeze	243	3.82	1.85	5.28	2.17	4.21	1.98
ManWheeze	244	2.18	1.10	6.45	1.89	2.86	1.94
Hiccup	245	4.16	2.09	5.09	1.91	4.27	1.95
HeartBeat	246	4.79	1.88	4.76	2.44	4.89	1.68
MaleSneeze	250	3.41	1.34	5.09	1.82	3.98	1.64
NoseBlow	251	3.83	1.84	5.10	2.16	4.27	1.91
MaleSnore	252	4.11	1.72	4.68	2.30	4.32	1.81
VideoGame	254	6.09	1.73	5.33	2.22	6.04	2.22
Vomit	255	1.71	1.76	7.29	1.91	2.64	1.58
BabiesCry	260	1.87	1.25	7.18	1.81	3.10	2.21
BabyCry	261	2.73	1.58	6.51	1.64	4.07	2.02
Yawn	262	5.31	1.80	2.65	2.17	4.82	1.82
Whistling	270	6.14	1.72	4.07	2.13	5.88	2.04
Scream	275	1.65	1.16	8.35	1.32	2.11	1.74
FemScream2	276	1.84	1.83	7.87	1.61	2.27	1.82
FemScream3	277	1.49	0.90	7.94	1.33	2.08	1.57
ChildAbuse	278	1.42	1.32	7.35	2.31	3.14	2.42
Attack1	279	1.49	1.36	8.00	1.60	1.82	1.55
WomanCrying	280	3.55	2.00	5.36	1.86	4.25	1.97
Attack3	281	2.86	2.30	7.34	1.57	2.73	2.06
Fight2	282	2.29	2.13	7.36	1.76	3.95	2.56
Fight3	283	2.67	1.60	6.19	1.69	3.67	2.07
Attack3	284	1.64	0.98	7.36	1.85	2.44	1.70
Attack2	285	1.76	1.60	7.99	1.54	2.21	2.07
Victim	286	1.36	0.73	8.05	1.57	1.73	1.52
Creep	288	2.39	1.48	7.02	1.83	2.92	1.96
GunShot	289	2.82	1.58	6.57	2.01	3.32	1.93
Fight1	290	1.46	0.98	7.78	1.74	2.29	1.76
Prowler	291	3.53	1.95	6.45	1.97	3.67	1.98
MaleScream	292	1.59	0.94	7.49	1.66	2.37	1.47
ManSobbing	293	2.51	1.77	6.02	1.80	3.62	1.88
CoupleSobbing	295	3.14	2.47	6.02	2.00	3.88	2.21
WomenCrying	296	2.01	1.34	6.33	1.90	3.27	1.93
Crowd1	310	3.76	2.41	6.96	1.64	3.58	1.88
Crowd2	311	7.64	1.64	7.06	2.02	5.99	2.19
Crowd3	312	3.60	2.37	7.04	1.45	3.45	1.91
Office2	319	3.65	1.30	6.33	1.80	3.91	1.79
Office1	320	4.29	1.50	5.29	2.11	5.02	1.76
TypeWriter	322	5.18	1.94	4.84	2.00	5.53	1.96
Applause1	351	7.71	1.36	5.77	2.03	6.90	1.65
SportsCrowd	352	7.55	2.04	7.22	1.51	5.96	2.16
Baseball	353	7.64	1.65	6.82	1.71	6.02	2.05
Crowd4	355	6.90	1.87	6.31	2.10	5.85	1.96
Writing	358	4.67	1.29	4.89	1.95	4.91	1.87
RollerCoaster	360	6.91	2.26	7.71	1.44	4.49	2.35
Restaurant	361	5.58	1.51	5.20	1.89	5.20	1.51
HorseRace	363	6.13	2.00	6.27	1.86	5.00	1.75
Bar	364	5.23	1.81	5.76	2.00	4.86	1.58
Party	365	7.36	1.80	6.56	1.62	5.96	1.90
Casino1	366	6.92	1.80	5.93	2.15	5.98	2.00
Casino2	367	7.36	1.68	6.92	1.64	6.33	2.10
Crowd5	368	5.00	1.06	4.91	1.54	4.35	1.61
CourtSport	370	5.96	1.73	4.45	2.34	5.88	1.83
Paint	373	5.07	1.56	4.26	1.88	5.76	1.79
Sink	374	5.55	1.37	4.23	1.78	5.67	1.69
Polaroid	375	6.17	1.66	4.40	1.83	5.84	1.85
Lawnmower	376	4.85	1.67	4.78	1.95	5.20	1.63
Rain1	377	5.75	1.65	3.89	2.22	5.57	1.79
Doorbell	378	6.47	2.08	6.45	1.80	5.55	1.89

International Affective Digitized Sounds-2: Female Participants

Table 2

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
JackHammer	380	3.44	2.00	6.44	2.00	4.16	1.91
Shovel	382	4.19	1.51	4.72	1.96	5.00	1.82
Jet	400	5.94	1.45	5.48	1.88	4.77	1.65
Helicopter1	403	5.30	1.71	5.38	2.15	5.12	1.86
Helicopter2	410	4.75	1.43	5.85	1.78	4.45	1.51
Countdown	415	6.24	1.67	6.46	2.02	4.72	2.26
CarHorns	420	2.15	1.33	7.27	1.83	2.46	1.53
TireSkids	422	1.86	1.27	7.88	1.38	2.46	1.72
Injury	423	2.73	1.45	6.36	1.75	3.73	1.89
CarWreck	424	1.57	0.90	8.21	1.35	1.93	1.39
Train	425	4.95	1.24	5.20	1.68	4.41	1.33
Wind	500	4.09	2.21	5.71	1.91	4.02	1.79
PlaneCrash	501	2.22	1.35	7.04	1.93	2.90	1.76
EngineFailure	502	3.11	2.06	6.41	1.91	3.30	2.14
BikeWreck	600	1.60	1.05	7.56	1.68	1.89	1.18
ColonialMusic	601	6.59	1.56	5.84	1.65	5.53	1.55
Thunderstorm	602	5.98	2.40	4.04	2.27	4.56	2.32
CowboyIndians	610	5.71	2.09	6.51	1.62	4.96	1.74
BattleTaps	611	2.71	1.78	5.50	1.95	3.57	1.68
AirRaid	624	2.74	1.81	7.09	1.72	3.32	1.94
MayDay	625	2.98	1.93	6.84	1.83	2.99	2.06
Explosion	626	2.88	1.71	6.69	1.86	3.20	1.64
Rain1	627	4.91	2.08	4.69	2.03	4.47	1.44
Rain2	698	5.09	1.92	3.89	2.23	4.73	1.81
Bomb	699	3.10	1.94	6.09	2.56	3.21	1.82
Toilet	700	4.40	1.52	4.08	2.01	5.44	1.88
Fan	701	4.90	1.61	4.21	2.00	5.39	1.61
Belch	702	4.24	2.70	5.31	2.12	5.24	2.34
BusySignal	703	2.45	1.72	5.95	2.34	3.18	1.85
Phone1	704	6.20	1.90	6.80	1.38	5.85	2.15
Phone2	705	5.56	1.47	4.39	1.77	5.76	1.74
War	706	3.93	1.54	5.13	1.95	4.29	1.81
Clock	708	4.24	1.19	3.72	2.29	4.48	1.84
AlarmClock	709	2.65	2.11	7.64	1.89	3.82	2.30
Cuckoo	710	4.37	2.22	6.44	1.96	4.12	1.74
Siren1	711	2.18	1.39	7.35	2.13	2.72	1.82
Buzzer	712	2.35	1.64	8.20	1.48	2.35	1.71
Sirens	713	2.45	1.37	7.16	1.81	2.91	1.57
Siren2	714	3.06	1.65	7.00	1.69	3.41	1.61
Alarm	715	4.24	2.47	7.24	1.62	3.75	1.97
SlotMachine1	716	6.83	2.19	6.06	2.35	6.53	2.03
SlotMachine2	717	7.22	1.76	6.57	1.96	6.35	2.28
DentistDrill	719	2.76	1.63	6.86	1.79	2.92	2.08
BrushTeeth	720	4.83	1.97	4.21	2.21	5.86	2.24
Beer	721	7.09	1.53	5.16	1.75	6.04	1.56
Walking	722	5.02	1.19	4.87	1.86	4.85	1.41
Radio	723	4.59	1.43	4.55	1.60	4.74	1.80
Chewing	724	5.53	2.06	4.95	2.18	5.80	1.89
SodaFizz	725	6.52	1.84	4.26	2.04	6.19	2.04
CorkPour	726	6.74	1.47	4.67	2.05	6.22	1.72
Paper1	728	4.63	1.19	4.46	1.88	5.28	1.51
Paper2	729	4.33	1.84	5.85	1.86	5.39	2.24
GlassBreak	730	2.85	1.09	6.39	1.54	3.87	1.80
Crash	732	2.45	1.44	7.03	1.80	2.94	1.54
NativeSong	802	6.26	1.94	5.32	2.25	5.87	1.89
Bugle	808	6.30	1.65	6.39	1.71	5.53	1.63
Harp	809	7.65	1.18	3.41	2.43	6.08	1.85
Beethoven	810	7.70	1.61	3.99	2.60	6.16	1.96
Bach	811	7.55	1.65	5.02	2.66	5.84	1.77
Choir	812	7.08	1.62	3.36	2.38	5.68	1.95
Wedding	813	7.65	1.79	6.07	2.23	5.82	1.92
RockNRoll	815	8.13	1.41	6.75	2.28	6.99	1.99
Guitar	816	7.15	1.96	5.13	2.10	5.58	1.86
Bongos	817	8.01	1.03	7.49	1.68	6.55	1.63
FunkMusic	820	7.11	1.86	5.75	2.16	6.03	1.90
BagPipes	826	6.17	2.17	5.11	2.25	5.63	1.78
Electricity	910	3.42	1.45	6.11	1.90	3.86	1.77

International Affective Digitized Sounds-2: Male Participants

Table 3

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
Cat	102	4.67	2.17	4.77	2.03	5.38	1.82
Panting	104	5.32	1.81	5.32	1.80	5.55	2.05
Puppy	105	3.24	2.32	6.27	2.02	4.00	2.21
Growl1	106	3.65	1.74	6.27	1.52	3.86	1.83
Dog	107	5.39	2.07	6.03	1.68	5.29	1.83
Carousel	109	6.00	2.17	5.40	1.98	5.73	2.15
Baby	110	7.27	2.13	5.92	1.95	6.08	1.74
MusicBox	111	5.67	2.29	5.73	1.92	5.51	2.12
Kids1	112	6.23	1.68	4.27	1.95	5.86	1.79
Cows	113	5.06	1.64	4.82	1.99	5.33	2.03
Cattle	114	4.92	1.81	6.16	1.74	4.43	1.85
Bees	115	2.45	1.29	6.76	1.88	2.80	1.64
Buzzing	116	3.30	1.85	6.42	2.17	4.05	2.21
Rooster	120	5.32	1.92	5.48	2.23	4.95	2.05
Pig	130	4.65	1.91	4.92	1.97	4.97	1.75
Chickens	132	5.61	1.88	4.92	1.82	5.73	1.99
Growl2	133	3.92	1.64	6.31	1.66	3.92	1.75
RattleSnake	134	3.51	1.80	7.06	1.69	3.67	1.92
Seagull	150	6.69	1.56	4.51	2.00	5.73	1.55
Robin	151	6.94	1.45	4.45	2.07	5.69	2.17
Tropical	152	5.04	2.13	5.51	2.28	4.60	2.05
Night	170	5.45	1.62	4.39	2.06	4.88	1.90
CountryNight	171	5.62	1.85	3.77	2.01	5.77	1.78
Brook	172	6.20	1.67	3.59	2.07	6.16	1.87
EroticCouple	200	6.71	1.78	7.49	1.52	6.29	2.03
EroticFem1	201	7.87	1.62	8.13	1.36	7.48	1.80
EroticFem2	202	7.90	1.48	7.67	1.80	7.30	1.85
EroticFem4	204	6.33	2.22	7.18	1.75	6.22	1.99
EroticFem3	205	6.84	1.98	6.96	2.04	6.41	1.84
Shower	206	5.47	1.56	4.51	1.67	5.47	1.63
EroticMale1	210	5.46	2.41	6.28	1.97	5.37	2.15
EroticCouple2	215	7.42	1.61	7.32	2.09	6.79	1.91
EroticCouple3	216	6.12	2.18	7.10	1.42	5.57	2.25
BoyLaugh	220	6.77	1.87	5.99	1.76	5.75	1.99
MaleLaugh	221	6.65	1.59	5.04	1.85	5.49	1.62
Kids2	224	5.25	1.80	5.26	1.99	5.15	1.86
ClapGame	225	5.52	1.35	4.55	1.85	5.37	1.58
Laughing	226	7.60	1.46	5.43	1.92	6.09	1.65
Giggling	230	6.49	1.44	4.44	1.83	5.59	1.71
MaleCough	241	2.76	1.61	5.40	2.10	3.83	2.16
FemaleCough	242	3.02	1.70	5.08	1.77	3.90	1.72
CoupleSneeze	243	3.91	1.46	5.05	1.88	4.26	1.78
ManWheeze	244	2.83	1.57	6.09	1.77	3.62	1.94
Hiccup	245	4.19	1.54	5.00	1.72	4.26	1.65
HeartBeat	246	4.89	1.69	4.48	2.58	5.35	2.07
MaleSneeze	250	3.71	1.83	4.73	2.00	4.21	1.71
NoseBlow	251	4.67	2.18	5.19	2.02	4.70	1.86
MaleSnore	252	3.88	2.06	4.84	2.51	4.34	2.23
VideoGame	254	6.27	1.56	5.86	1.67	6.49	1.84
Vomit	255	2.49	1.73	5.80	2.09	3.90	2.18
BabiesCry	260	2.28	1.54	6.44	2.09	3.95	2.37
BabyCry	261	2.78	1.81	6.51	1.87	3.70	1.88
Yawn	262	5.20	1.31	3.12	1.92	4.92	1.87
Whistling	270	6.04	1.99	4.49	2.18	5.81	1.77
Scream	275	2.49	1.94	7.96	1.67	3.04	2.19
FemScream2	276	2.04	1.38	7.65	1.65	3.16	2.15
FemScream3	277	1.85	1.41	7.55	1.93	2.72	2.04
ChildAbuse	278	1.78	1.57	7.16	2.11	3.96	2.49
Attack1	279	1.90	1.23	7.90	1.31	2.84	2.18
WomanCrying	280	3.81	1.65	5.28	1.94	4.57	1.91
Attack3	281	4.28	2.87	7.31	1.71	4.69	2.69
Fight2	282	3.63	2.38	7.02	1.41	3.90	2.00
Fight3	283	3.67	1.73	6.21	1.59	4.15	2.00
Attack3	284	2.51	1.85	6.63	2.14	3.71	2.16
Attack2	285	1.87	1.50	7.49	1.91	2.68	1.92
Victim	286	2.04	1.46	7.69	1.69	2.96	2.33
Creep	288	3.18	2.01	6.52	1.73	4.60	2.21
GunShot	289	3.48	1.84	6.57	1.98	3.91	2.23
Fight1	290	1.92	1.54	7.38	1.76	3.70	2.15
Prowler	291	3.84	1.37	6.22	1.46	4.06	1.74
MaleScream	292	2.60	1.74	6.97	1.70	3.49	1.99
ManSobbing	293	3.71	1.90	5.43	1.79	4.31	1.69
CoupleSobbing	295	3.45	2.27	5.47	1.89	4.03	1.94
WomenCrying	296	2.12	1.02	5.69	2.14	3.20	2.02
Crowd1	310	4.07	2.19	6.55	2.06	4.23	2.15
Crowd2	311	7.66	1.50	7.21	1.65	6.24	2.18
Crowd3	312	4.22	1.78	6.73	1.32	3.94	1.96
Office2	319	3.42	1.61	5.74	2.10	3.70	1.80
Office1	320	4.16	1.64	5.69	2.21	4.57	1.95
TypeWriter	322	4.73	1.58	4.72	2.21	5.07	2.00
Applause1	351	6.79	1.80	5.26	2.22	6.51	1.78
SportsCrowd	352	6.76	1.82	6.90	1.31	5.55	1.99
Baseball	353	7.10	1.34	6.39	1.59	6.06	1.64
Crowd4	355	6.60	1.81	6.33	1.80	5.49	2.04
Writing	358	4.35	1.38	4.84	2.01	5.18	2.02
RollerCoaster	360	6.98	2.27	7.29	1.91	5.09	2.42
Restaurant	361	5.07	1.71	4.75	2.12	5.30	1.73
HorseRace	363	6.06	1.76	6.37	1.64	5.10	1.60
Bar	364	5.14	1.92	5.40	1.75	4.80	1.82
Party	365	6.53	1.94	6.04	1.62	5.47	1.57
Casino1	366	7.33	1.60	6.72	1.77	6.23	2.45
Casino2	367	7.29	1.84	6.42	2.08	6.54	1.79
Crowd5	368	5.36	1.62	4.53	1.93	4.93	1.69
CourtSport	370	5.92	1.57	4.41	1.92	5.76	1.70
Paint	373	5.12	1.54	5.25	1.74	5.57	1.76
Sink	374	5.69	1.32	4.23	1.69	5.86	1.55
Polaroid	375	5.73	1.47	4.59	2.08	5.41	2.07
Lawnmower	376	4.90	1.57	4.39	1.78	5.18	1.64
Rain1	377	5.97	1.84	3.99	2.22	5.89	2.02
Doorbell	378	5.59	1.85	5.82	1.59	5.39	1.77

International Affective Digitized Sounds-2: Male Participants

Table 3

Description	Sound No.	Pleasure Mean	Pleasure SD	Arousal Mean	Arousal SD	Dominance Mean	Dominance SD
JackHammer	380	4.00	1.71	6.20	1.74	4.20	1.98
Shovel	382	4.55	1.25	4.51	1.73	4.87	1.60
Jet	400	6.15	1.54	5.22	2.16	4.98	2.15
Helicopter1	403	5.95	1.95	5.81	1.92	5.57	2.09
Helicopter2	410	4.98	1.53	5.94	1.30	4.73	1.59
Countdown	415	6.80	1.63	6.68	2.12	4.92	2.24
CarHorns	420	2.62	1.73	6.80	1.99	3.06	2.10
TireSkids	422	2.72	1.60	7.01	1.77	2.84	1.84
Injury	423	3.98	1.93	6.08	1.56	4.79	1.74
CarWreck	424	2.74	1.94	7.68	1.74	2.82	2.05
Train	425	5.29	1.61	5.08	2.23	5.03	2.10
Wind	500	4.57	1.78	5.06	1.88	4.49	1.68
PlaneCrash	501	3.47	2.02	6.79	1.80	3.44	2.18
EngineFailure	502	3.21	1.93	6.18	1.89	3.10	2.05
BikeWreck	600	2.73	1.80	6.96	1.89	3.43	2.02
ColonialMusic	601	6.44	1.79	5.85	1.85	5.99	1.59
Thunderstorm	602	6.00	2.05	3.47	1.89	5.16	2.19
CowboyIndians	610	6.23	1.91	6.44	1.91	5.78	1.72
BattleTaps	611	3.42	2.34	5.12	2.28	3.81	2.34
AirRaid	624	2.92	1.69	7.10	1.84	3.51	2.13
MayDay	625	3.94	2.07	7.09	1.50	3.67	2.20
Explosion	626	4.03	2.12	6.49	2.42	3.66	2.10
Rain1	627	4.73	1.67	4.61	1.96	4.59	1.87
Rain2	698	5.31	1.97	4.46	2.53	5.03	2.16
Bomb	699	4.28	2.07	6.24	2.05	3.85	2.13
Toilet	700	5.12	1.67	3.96	2.14	5.91	1.98
Fan	701	5.03	1.24	4.69	1.85	5.11	1.62
Belch	702	4.69	2.43	5.43	1.61	5.22	1.66
BusySignal	703	2.88	1.41	5.39	1.93	3.35	2.02
Phone1	704	4.69	1.77	6.24	2.02	5.12	1.56
Phone2	705	5.02	1.31	3.76	1.87	5.55	1.91
War	706	4.52	1.84	5.56	2.19	4.94	1.76
Clock	708	4.46	1.68	3.22	2.25	4.86	2.33
AlarmClock	709	2.92	1.71	7.43	1.89	4.10	2.17
Cuckoo	710	4.11	1.72	5.92	2.09	4.33	1.83
Siren1	711	3.23	1.67	7.45	1.77	3.23	1.78
Buzzer	712	2.51	1.62	7.73	1.56	3.39	2.38
Sirens	713	3.63	1.90	6.73	1.89	3.75	1.91
Siren2	714	3.15	1.71	6.86	1.94	3.78	1.89
Alarm	715	4.37	2.56	6.71	1.83	4.00	2.08
SlotMachine1	716	7.27	2.12	7.06	1.75	6.57	2.05
SlotMachine2	717	7.47	1.48	6.56	2.11	6.44	2.35
DentistDrill	719	3.09	1.71	6.99	1.80	2.91	1.97
BrushTeeth	720	4.91	1.54	4.13	2.01	5.61	2.14
Beer	721	6.29	1.89	4.82	1.89	5.88	1.87
Walking	722	4.61	1.22	5.08	2.00	4.45	1.56
Radio	723	4.41	1.53	4.22	1.93	5.22	2.02
Chewing	724	5.05	1.80	4.84	2.16	5.79	1.81
SodaFizz	725	6.74	1.75	5.01	2.07	6.47	1.80
CorkPour	726	6.92	1.78	4.29	2.13	6.55	1.69
Paper1	728	4.86	1.34	4.17	1.93	5.58	1.71
Paper2	729	4.27	1.51	5.71	1.71	5.27	2.33
GlassBreak	730	3.78	1.72	6.00	2.01	4.45	1.93
Crash	732	3.58	1.81	6.91	1.66	3.91	2.20
NativeSong	802	6.01	2.09	5.25	2.00	5.49	1.64
Bugle	808	6.35	1.92	6.29	2.03	5.82	1.92
Harp	809	7.16	1.62	3.30	2.32	6.58	1.86
Beethoven	810	7.24	1.70	4.44	2.23	5.95	1.87
Bach	811	7.24	1.60	4.88	2.45	6.49	1.94
Choir	812	6.63	1.77	3.52	2.44	5.69	1.83
Wedding	813	6.69	1.83	5.69	2.07	5.16	1.95
RockNRoll	815	7.56	1.65	7.00	1.77	6.67	2.00
Guitar	816	6.80	1.84	5.35	2.14	6.12	1.87
Bongos	817	7.22	1.80	6.68	2.13	6.29	1.84
FunkMusic	820	6.67	2.13	6.06	1.91	5.88	1.63
BagPipes	826	6.27	2.06	5.00	2.31	5.59	2.02
Electricity	910	4.52	2.12	6.28	2.06	4.29	1.93

Table 4: Sound properties

Sound	min sample dB	max sample dB	peak amp dB	clipped peaks	min RMS db	max RMS db	avg RMS db
102.wav	-0.692	0.7071	-3.104	0	-74.31	-8.99	-26.25
104.wav	-0.7071	0.6634	-3.283	0	-32.58	-15.72	-22.63
105.wav	-0.6332	0.7083	-3.469	0	-88.64	-7.627	-21.26
106.wav	-0.7071	0.5981	-3.707	0	-52.17	-14.11	-21.72
107.wav	-0.5735	0.7071	-3.873	0	-88.83	-13.26	-32.96
109.wav	-0.7071	0.6974	-3.07	0	-27.11	-8.691	-14.55
110.wav	-0.7065	0.6039	-3.673	0	-78.57	-11.94	-25.44
111.wav	-0.5648	0.7115	-3.901	0	-37.87	-10.68	-18.98
112.wav	-0.7075	0.6724	-3.224	0	-30.24	-9.993	-19.39
113.wav	-0.7089	0.7284	-2.87	0	-88.81	-10.57	-16.82
114.wav	-0.7	0.7071	-3.054	0	-25.17	-12.87	-17.57
115.wav	-0.7383	0.7168	-2.763	0	-39.68	-8.685	-16.7
116.wav	-0.641	0.4882	-4.965	0	-25.95	-16.1	-18.07
120.wav	-0.7071	0.6927	-3.099	0	-69.89	-10.31	-20.27
130.wav	-0.7071	0.6942	-3.09	0	-65.67	-13.6	-29.06
132.wav	-0.6855	0.7071	-3.144	0	-39.99	-8.77	-19.11
133.wav	-0.609	0.7071	-3.635	0	-26.21	-11.55	-16.84
134.wav	-0.7071	0.6648	-3.274	0	-43.15	-15.55	-21.07
150.wav	-0.6766	0.7071	-3.2	0	-35.58	-8.506	-23.06
151.wav	-0.7071	0.6985	-3.063	0	-43.14	-11	-21.65
152.wav	-0.668	0.7071	-3.254	0	-27.9	-10.68	-17.64
170.wav	-0.478	0.4556	-6.617	0	-42.33	-18.78	-20.1
171.wav	-0.6854	0.7071	-3.145	0	-44.99	-14.97	-22.83
172.wav	-0.5945	0.7071	-3.731	0	-41.96	-14.56	-28.12
200.wav	-0.7067	0.5413	-4.096	0	-64.86	-10.02	26.1
201.wav	-0.7071	0.6859	-3.1 42	0	-78.27	-7.456	-25.22
202.wav	-0.7071	0.6676	-3.256	0	-66.01	-8.821	-18.31
204.wav	-0.7071	0.6269	-3.518	0	-45.12	-10.76	-27.16
205.wav	-0.7071	0.6255	-3.527	0	-65.61	-10.37	-23.26
206.wav	-0.7072	0.6396	-3.434	0	-28.55	-9.473	-17.91
210.wav	-0.7071	0.414	-5.028	0	-91.63	-14.59	-30.12
215.wav	-0.6974	0.7071	-3.07	0	-61.83	-7.184	-17.21
216.wav	-0.6403	0.7071	-3.431	0	-64.64	-10.03	-24.44
220.wav	-0.7071	0.7623	-2.678	0	-65.99	-9.639	-21.79
221.wav	-0.5296	0.7071	-4.176	0	-61.81	-15.63	-34.23
224.wav	-0.6258	0.7071	-3.525	0	-35.77	-11.58	-21.11
225.wav	-0.6779	0.7071	-3.192	0	-49.08	-10.89	-26.06
226.wav	-0.6397	0.7071	-3.434	0	-72.81	-15.4	-24.75
230.wav	-0.6643	0.6456	-3.676	0	-51.4	-10.68	-21.27
241.wav	-0.661	0.7072	-3.266	0	-66.7	-12.81	-23.93
242.wav	-0.5935	0.7071	-3.738	0	-66.14	-11.86	-26.66
243.wav	-0.7055	0.7071	-3.02	0	-65.13	-10.76	-27.83

Table 4: Sound properties

Sound	min sample dB	max sample dB	peak amp dB	clipped peaks	min RMS db	max RMS db	avg RMS db
244.wav	-0.7071	0.598	-3.708	0	-36.1	-17.59	-23.75
245.wav	-0.6187	0.7071	-3.571	0	-92.02	-19.37	-36.01
246.wav	-0.7067	0.7072	-3.013	0	-29.95	-11.24	-16.48
250.wav	-0.7109	0.705	-3	0	-88.8	-10.54	-25.56
251.wav	-0.8298	0.8482	-1.525	0	-66.54	-8.636	-21.84
252.wav	-0.7071	0.5009	-4.379	0	-56.4	-14.27	-24.59
254.wav	-0.7053	0.7039	-3.041	0	-29.48	-11.74	-16.73
255.wav	-0.6105	0.7071	-3.625	0	-50	-11.57	-26.35
260.wav	-0.6888	0.7071	-3.123	0	-36.77	-8.094	-18.98
261.wav	-0.7071	0.6042	-3.666	0	-78.52	-12.23	-22.16
262.wav	-0.7071	0.661	-3.298	0	-60.11	-9.879	-24.59
270.wav	-0.7071	0.7067	-3.013	0	-83.17	-6.498	-19.27
274.wav	-0.7071	0.6403	-3.666	0	-53.56	-8.788	-21.56
275.wav	-0.618	0.623	-4.145	0	-40.23	-10.46	-16.39
276.wav	-0.7316	0.628	-3.353	0	-91.98	-8.679	-16.44
277.wav	-0.7071	0.6635	-3.283	0	-38.5	-8.428	-18.21
278.wav	-0.7082	0.6776	-3.187	0	-88.89	-7.036	-18.68
279.wav	-0.707	0.6821	-3.166	0	-46.31	-10.16	-18.17
280.wav	-0.6325	0.7127	-3.445	0	-88.74	-11.8	-20.62
281.wav	-0.7071	0.6554	-3.334	0	-66.37	-9.282	-21.33
282.wav	-0.6415	0.6272	-3.953	0	-51.09	-8.131	-20.48
283.wav	-0.4477	0.5399	-6.129	0	-33.09	-13.69	-22.75
284.wav	-0.7071	0.664	-3.302	0	-49.41	-8.678	-21.39
285.wav	-0.6807	0.7071	-3.174	0	-81.71	-8.146	-17.02
286.wav	-0.7071	0.6316	-3.487	0	-88.45	-10.6	-19.25
288.wav	-0.6889	0.7071	-3.117	0	-47.18	-9.649	-20.56
289.wav	-0.7071	0.684	-3.154	0	-85.35	-14.75	-35.43
290.wav	-0.7071	0.6902	-3.115	0	-63.74	-8.703	-19.77
291.wav	-0.5463	0.7071	-4.059	0	-91.82	-13.64	-24.5
292.wav	-0.6441	0.7072	-3.406	0	-91.97	-9.001	-20.81
293.wav	-0.7072	0.6662	-3.265	0	-45.6	-12.53	-21.07
295.wav	-0.7071	0.6468	-3.389	0	-41.27	-12.85	-21.37
296.wav	-0.7071	0.6865	-3.138	0	-40.42	-12.74	-23.63
310.wav	-0.6112	0.6086	-4.295	0	-77.59	-11.54	-17.95
311.wav	-0.7071	0.6431	-3.413	0	-24.4	-14.54	-17.3
312.wav	-0.7071	0.6712	-3.234	0	-36.69	-12.22	-15.84
319.wav	-0.6568	0.7071	-3.325	0	-36.55	-13.47	-18.72
320.wav	-0.7071	0.6725	-3.226	0	-32.83	-14.75	-22.09
322.wav	-0.7071	0.707	-3.011	0	-88.85	-16.46	-23.79
351.wav	-0.7071	0.6858	-3.142	0	-37.72	-19.8	-23.61
352.wav	-0.7071	0.7056	-3.019	0	-36.83	-12.48	-15.86
353.wav	-1	1	0	3	-44.68	-13.97	-17.63

Table 4: Sound properties

Sound	min sample dB	max sample dB	peak amp dB	clipped peaks	min RMS db	max RMS db	avg RMS db
355.wav	-0.5374	0.7071	-4.121	0	-32.66	13.91	-18.8
358.wav	-0.6786	0.707	-3.188	0	-45.46	-15.6	-25.1
360.wa	-0.8154	0.9931	-0.8742	0	-31.06	-10.53	-15.53
361.wav	-0.7071	0.5999	-3.695	0	-34.67	-13.01	-19.13
363.wav	-0.5607	0.7071	-3.959	0	-30.43	-14.46	-18.18
364.wav	-0.7071	0.6913	-3.108	0	-21.3	-12.06	-15.02
365.wav	-0.7621	0.6541	-2.998	0	-30.28	-12.28	-20.23
366.wav	-0.7071	0.6027	-3.677	0	-32.87	-18.35	-25.32
367.wav	-0.7386	0.8283	-2.12	0	-34.17	-10.7	-24.68
368.wav	-0.4905	0.5426	-5.737	0	-30.45	-14.04	-22.45
370.wav	-0.6636	0.7071	-3.282	0	-52.26	-16.92	-33.54
373.wav	-0.7071	0.6402	-3.432	0	-65.08	-22.04	-25.86
374.wav	-0.5896	0.7071	-3.764	0	-50.45	-19.17	-22.59
375.wav	-0.8402	0.9987	-0.729	0	-83.04	-15.25	-33.39
376.wav	-0.7071	0.3531	-5.513	0	-39.88	-21.89	-26.06
377.wav	-0.7071	0.5299	-4.173	0	-54.03	-26.66	-35.9
378.wav	-0.3364	0.3459	-9.341	0	-46.05	-15.13	-16.4
380.wav	-0.7071	0.6742	-3.215	0	-38.81	-14.45	-18.71
382.wav	-0.6688	0.7071	-3.249	0	-48.11	-11.63	-24.35
400.wav	-0.6922	0.7071	-3.102	0	-33.35	-12.4	-17.72
403.wav	-0.6113	0.75	-3.342	0	-22.74	-16.11	-19.89
410.wav	-0.7441	0.666	-3.035	0	-50.09	-14.66	-20.91
415.wav	-0.6964	0.7017	-3.11	0	-69.22	-9.038	-17.46
420.wav	-0.7071	0.6731	-3.222	0	-31.32	-13.58	-16.64
422.wav	-0.7071	0.6847	-3.149	0	-64.04	-8.832	-16.4
423.wav	-0.7071	0.6577	-3.32	0	-58.33	-5.401	-27.64
424.wav	-0.6995	0.7071	-3.057	0	-37.6	-9.65	-18.2
425.wav	-0.7057	0.7071	-3.019	0	-51.6	-12.14	-18.33
500.wav	-0.7071	0.7056	-3.019	0	-31.24	-6.932	-16.47
501.wav	-0.6784	0.7071	-3.188	0	-54.82	-11.57	-16.84
502.wav	-0.5966	0.7075	-3.715	0	-55.04	-13.54	-22.51
600.wav	-0.6788	0.708	-3.181	0	-27.17	-10.13	-16.94
601.wav	-0.6638	0.7071	-3.281	0	-32.9	-11.6	-18.34
602.wav	-0.7071	0.7067	-3.013	0	-36.54	-8.022	-15.8
610.wav	-0.6951	0.7071	-3.084	0	-31.15	-13.19	-16.18
611.wav	-0.7071	0.6373	-3.45	0	-21.81	-13.17	-17.32
624.wav	-0.7071	0.6008	-3.689	0	-50.01	-10.92	-15.81
625.wav	-0.5976	0.7071	-3.71	0	-22.13	-12.94	-14.96
626.wav	-0.6846	0.7071	-3.15	0	-46.61	-10.66	-17.23
627.wav	-0.6821	0.7071	-3.165	0	-52.41	-12.81	-18.54
698.wav	-0.5139	0.7071	-4.286	0	-19.96	-15.07	-17.47
699.wav	-0.7068	0.7072	-3.012	0	-47.22	-9.129	-18.29

Table 4: Sound properties

Sound	min sample dB	max sample dB	peak amp dB	clipped peaks	min RMS db	max RMS db	avg RMS db
700.wav	-0.7071	0.6809	-3.173	0	-42.25	-9.892	-22.58
701.wav	-0.7071	0.7041	-3.029	0	-34.17	-14.2	-20.71
702.wav	-0.6861	0.8576	-2.249	0	-91.95	-10.15	-20.09
703.wav	-0.7071	0.6569	-3.324	0	-59.51	-10.23	-15.95
704.wav	-0.5324	0.5421	-5.397	0	-87.88	-15.7	-19.45
705.wav	-0.7071	0.3793	-5.3	0	-68.02	-24.67	-36.87
706.wav	-0.707	0.6461	-3.394	0	-36.44	-14.73	-19.3
708.wav	-0.7071	0.5723	-3.881	0	-91.8	-21.77	-43.67
709.wav	-0.6733	0.7071	-3.22	0	-84.32	-11.38	-19.83
710.wav	-0.707	0.6798	-3.18	0	-39.13	-9.639	-17.37
711.wav	-0.7104	0.6377	-3.426	0	-34.6	-10.9	-15.85
712.wav	-0.5312	0.5814	-5.094	0	-91.76	-12.2	-14.89
713.wav	-0.616	0.7071	-3589	0	-29.75	-12.23	-19.9
714.wav	-0.7072	0.6889	-3.248	0	-20	-11	-13.5
715.wav	-0.7071	0.6962	-3.078	0	-22.38	-13.4	-17.55
716.wav	-0.7071	0.7036	-3.032	0	-57.04	-10.12	-26.43
717.wav	-0.9668	0.748	-1.336	0	-53.99	-16.28	-26.26
719.wav	-0.6744	0.7071	-3.214	0	-57.16	-11.43	-18.09
720.wav	-0.7071	0.6753	-3.208	0	-46.77	-11.11	-21.88
721.wav	-0.7047	0.7071	-3.025	0	-65.66	-11.69	-26.32
722.wav	-0.6747	0.7071	-3.212	0	-67.84	-22.65	-39.25
723.wav	-0.7071	0.6896	-3.119	0	-58.92	-10.32	-27.76
724.wav	-0.5906	0.7071	-3.757	0	-60.82	-17.31	-29.04
725.wav	-0.7071	0.6597	-3.307	0	-53.74	-19.82	-32.78
726.wav	-0.7071	0.67636	-3.219	0	-66	-11.13	-31.23
728.wav	-0.6782	0.7071	-3.19	0	-62.43	-18.85	-26.36
729.wav	-0.6298	0.7071	-3.498	0	-62.82	-14.05	-26.98
730.wav	-0.6989	0.6758	-3.256	0	-59.49	-10.84	-22.77
732.wav	-0.6916	0.7071	-3.106	0	-69.38	-10.59	-21.3
802.wav	-0.6658	0.7071	-3.268	0	-47.68	-8.549	-19.01
808.wav	-0.5385	0.7071	-4.113	0	-75.86	-16.29	-22.61
809.wav	-0.6689	0.7071	-3.249	0	-35.29	-11.95	-19.33
810.wav	-0.6964	0.709	-3.065	0	-28.54	-9.752	-16.62
811.wav	-0.7071	0.6639	-3.28	0	-30.73	-12.11	-20.65
812.wav	-0.7071	0.6244	-3.534	0	-26.94	-13.99	-20.42
813.wav	-0.3695	0.3225	-9.219	0	-28.75	-16.58	-23.29
815.wav	-0.5303	0.5302	-5.51	0	-91.49	-8.002	-15.4
816.wav	-0.642	0.7094	-3.405	0	-30.35	-10.74	-19.18
817.wav	-0.7071	0.6972	-3.072	0	-30.71	-6.624	-15.41
820.wav	-0.6581	0.576	-4.194	0	-86.81	-11.16	-20.47
826.wav	-0.6297	0.7059	-3.507	0	-44.27	-11.52	-15.61
910.wav	-0.4379	0.7071	-4.844	0	-45.75	-17.19	-25.47

Table 4: Sound properties

Sound	min sample dB	max sample dB	peak amp dB	clipped peaks	min RMS db	max RMS db	avg RMS db

Values in the table above were calculated using Amadeus@ sound editing software. Information regarding these values is included below.

The “Minimum/Maximum Sample Value” is the minimal/maximal value of the sample. These values are normalized such that the clipping values are ±1.

The “Peak Amplitude” is the amplitude of the difference between the maximum and the minimum sample value. This amplitude is given in dB with respect to its maximal value (which is 2).

“Possibly Clipped Samples” indicate the number of samples that take the external values ±1.

“Minimum/Maximum/Average RMS Power” gives the minimum/maximum/average value of the root mean square power in the selection. These values are given in dB with respect to their maximal values (which are attained for a square wave with maximal amplitude).

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dBFS - dB Full Scale

0 dBFS represents the highest possible level in digital gear. All other measurements expressed in terms of dBFS will always be less than 0 dB (negative numbers).

0 dBFS indicates the digital number with all digits ="1", the highest possible sample.
The lowest possible sample is (for instance for 16 bit audio):
0000 0000 0000 0001, which equals -96 dBFS. Therefore the dynamic range for 16-bit IADS sounds is 96 dB.

Levels in a digital audio signal are usually expressed in dB, measured by their relationship to 0 dB, the highest possible level.
One of the rules of digital audio is that a signal can never exceed 0 dB.
If the level of a signal is raised too much, the peaks will be clipped at the 0 dB level.

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