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Bumplettrunk

a suite of children's songs
Neil Aldridge

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Abstract

This exegesis follows my journey writing and producing a suite of children's songs in order to maximise potential commercial success. It explores the theoretical and creative considerations addressing my target audience, and how I developed and produced a suite of children's songs ready to take to market alongside an accompanying book proposal.

1 Introduction

For my Master of Creative Enterprise, I produced a suite of children's songs ready for commercial release with accompanying book proposal. I set out to create a product that addresses the developmental interests and musical tastes of children and adults to optimise success. I defined success as recouping the money outlaid on the project, and followed the definition of children's music as music made for children by adults (Vestad, 2017).

Music plays a large and important role in the life of children and young people and there is mounting empirical evidence that active engagement with music positively impacts their intellectual, social and personal development (Barrett, 2009; de Vries, 2009; Hallam, 2010; Legg 2009). Interactions with music are multimodal (using sound, sight, emotion, memory, and movement), and processing those interactions utilise numerous areas of the brain. This type of processing assists brain and neurological development and integrates the brain's hemispheres, and the younger the child, the earlier this cumulative process can begin (Campbell, 2000; Harris, 2009). Playing music to children also entertains, soothes, calms, and can also provide understanding of the human condition (de Vries, 2009; Hesmondhalgh, 2013; Hodges & Wilkins, 2015). Flohr and Persellin argue that "preschools and elementary schools have an obligation to introduce children to music at the earliest possible time and to treat the arts as fundamental — not optional — curriculum areas" (Flohr & Persellin, 2011, p.17).

This exegesis presents my exploration of the marketplace from an academic perspective to support the project, and documents the development and

production process. Section 2 describes the methodology I employed including gathering data from interviews and focus groups to guide technical and aesthetic decisions that have enhanced the potential commercial success of my project; Section 3 details my survey of the literature about children's song production, and here I investigated the literature in the areas of early childhood development, education theory, and the psychology of listening to define and determine criteria for my creative process. Section 4 documents my market analysis of two children's playlists from Spotify, using what Spotify defines as audio features (Spotify, n.d. -a) to determine the crossover between music made for children and adult music. In Section 5, I define the creative framework I derived from the literature review and market analysis; Section 6 follows my creative process and data collection; and Section 7 concludes the exegesis with a discussion of the process.

2 Method

2.1 Overview

Having decided to produce a suite of children's songs aimed at children *and* their caregivers, I settled on the following process: a literature review and market analysis; a primary composition stage; data collection using interviews and focus groups; a second, refining composition stage; an iterative mixing process; and lastly mastering (see fig.1). Following the data collection stage, I commissioned an illustrator to produce a sample double page spread for a potential accompanying book.

2.2 Literature Review and Market Analysis

The literature review (see Section 3) revealed the scarcity of information on the production of children's songs, so I expanded into the fields of early childhood development, education theory, and the psychology of listening.

To help me determine the commonalities between music made for children and adult music also enjoyed by children, I examined the audio features of songs contained in two Spotify playlists (see Section 4).

2.3 Primary Composition Stage

The outcome of the literature review and the market analysis allowed me to construct a creative framework which I carried forward to the primary composition stage (see Section 5).

Method Overview

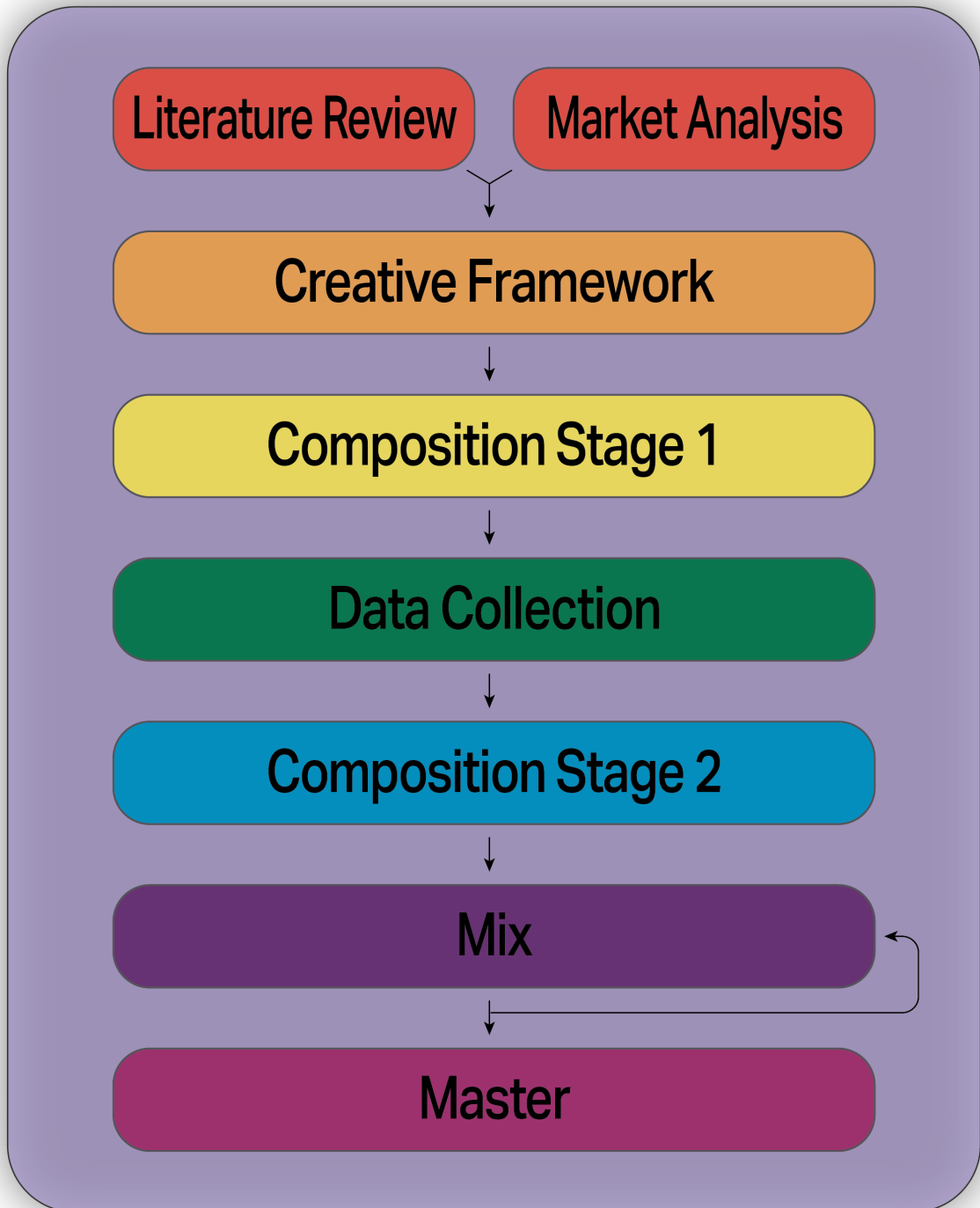


Fig. 1 Method Overview

The primary composition stage consisted of: song title selection; lyric writing; backing track and melody composition; guide vocal and instrument recording; editing; and lastly a rough mix.

The lyric writing, backing track and melody composition, and guide vocal and instrument recording stages were designed as an iterative process (see fig.2). The editing stage determined which parts of the songs would be led by female or male vocals, which harmonies worked best together, and how the backing track would be modified to allow adequate space for vocals.

To assist with lyric development, I contacted three celebrated, commercially successful children's authors — Lynley Dodd (*Hairy Maclary and Friends*), Julia Donaldson (*The Gruffalo*), and Diana Neild (*Piggity Wiggity Jiggety Jig*) — to ask if they would be a lyric mentor. I selected these authors because of their commercial success, sophisticated vocabulary and clever rhyming and scanning. Lynley Dodd and Julia Donaldson didn't respond, but Diana Neild agreed. She would analyse the rough mixes and lyrics with an ear to vocabulary, scanning, discernibility, and engagement.

A rough mix ensured when data collection took place, the respondents were listening to a balanced mix to better evaluate the specific area they were being asked to comment on.

Composition Stage 1



Fig. 2 Composition Stage 1

I composed using Logic Pro and recorded, edited, and mixed using Pro Tools. All recording took place in Massey University's recording studios (see fig.3).



Massey University Cluster 1 Live Room

2.4 Data Collection

I employed two data collection approaches — interviews and focus groups — with my three target audiences — children, parents, and early childhood educators (see fig.4). I used the data collected to inform the refining composition stage. Other methodologies I considered were case study, longitudinal study, and participant observation. However, these techniques are beyond the scope of this research, both financially and logistically, so were rejected.

Data Collection

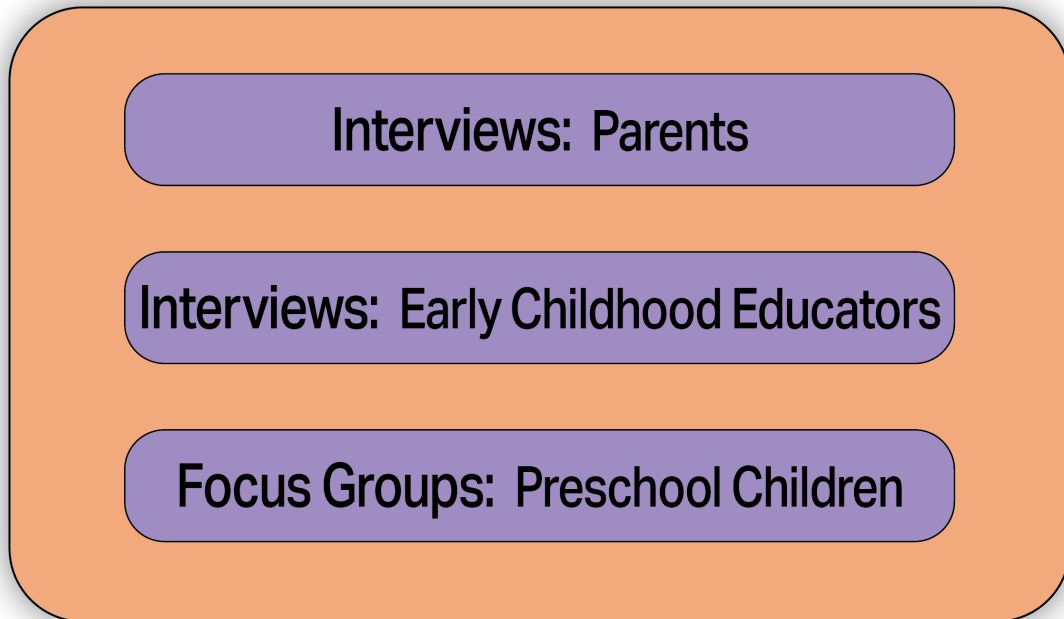


Fig. 4 Data Collection

2.4.1 Interviews

I approached three local early learning centres in different suburbs (Thorndon, Mount Cook, and Newtown) and recruited an early childhood educator from each. These interviews focused on the integration of music education in their centres (and thus potential educational and engagement aspects) and feedback on the lyrics and the songs-in-progress.

I recruited three parents through notices in the early learning centres and word of mouth. These interviews provided me with insight into listening habits (time; place; playback medium; and content) and feedback on the lyrics and the songs-in-progress.

2.4.2 Focus Groups

It was important to road-test the songs in front of the target range children so I carried out two focus groups/music sessions at the same early childhood centre two weeks apart. The same twenty children were present for both sessions, and each comprised three songs.

Advantages of conducting the focus groups in an early childhood setting included: the children were in a familiar environment; with trained professionals present to help with any child-related issues that might have arisen; consent from parents was obtained well in advance; and the children were used to taking part in music sessions. Both an early childhood setting or a new entrants classroom in a primary school would have fitted my age range of 2- to 7-year-olds, but I was already in touch with three early childhood centres, the number of parents to obtain consent from was fewer, and the more flexible timetabling made it easier to conduct a music session convenient to my timetable.

I introduced myself to the children, then played a song, singing along and performing actions. Then I engaged the children in discussion to find out what connection they had made with the song, whether they remembered any of the lyrics, how it made them feel, and lastly whether they wanted to hear the song again. If I got a positive response, I played and performed the song again.

2.4.3 Ethics

All data collection was carried out in accordance with the Massey University's ethical standards. Approval numbers: 4000021579 (interviews) and SOB 21/27 (focus groups). Because the focus groups took place in an early childhood centre,

I needed to get vetted by the police, and there were a number of ethical issues to take into consideration: the power dynamic between researcher and participant, and between adult and child; privacy and consent; issues of involving children in research the outcome of which may be monetised; and the issue of participation throughout the sessions.

2.5 Refining Composition Stage

Based on the outcome of these data, I moved to the refining composition stage (see fig.5), where I made any necessary changes to lyrical or musical content, speed or song key. Then I recorded and edited the main vocals, using the final vocalists, lining up and tuning where necessary. The vocalists were engaged as session singers so that all rights remained with me.

Composition Stage 2



Fig. 5 Composition Stage 2

2.6 Mixing and Mastering

Once composition, recording, and editing were complete, I mixed the songs using an iterative method (see fig.1). A mix would be completed, then played in different environments (car, phone, laptop, studio, home stereo, Bluetooth speaker) to

ensure it translated to all places. I made notes after each listening session, and addressed these at the next mix session.

The original plan involved outsourcing mastering to Mike Gibson at Munki Studios, but when the time came, I made the decision not to get the suite mastered by a third party. I outline the reasons for this in the process section (see section 6.7).

2.7 Book Proposal

Following the early childhood educator interviews, I recognised the benefit of a book to accompany the songs. In an early childhood music session, the book provides a visual focal point for the children, and lyrics for the educator to sing along to. After the music session, the children can return to the book and browse the pictures at their leisure, familiarising themselves with the content.

I found a graphic design graduate whose work I liked, and commissioned him to illustrate a sample double-page spread for one verse of *Rainbow*.

I made this into a 'dummy' book with blank pages and a cover, and the illustrated centre spread, to demonstrate how an associated book might look and feel. I also made a small scale version to demonstrate how a 'reversible' book might work — with *Rainbow* from one end, and *The Counting Song* from the other. This version would have a centre page spread that could be viewed from either way up.

2.8 Branding & Merchandise

I developed a logo and colour palette for the Bumbletrunk brand, and made artist impressions for various contexts — social media, packaging, posters, and merchandise.

3 Literature Review

3.1 Children's Music Production

In contrast to the wealth of literature discussing song writing for mainstream commercial music (Davidson & Heartwood, 1996; Pattison, 2010; Perricone, 2018; Peterik et al., 2020), there is little information available on writing or producing songs for children. This is variously attributed to gender stereotyping — because raising and educating children, and children's culture is still identified as the domain of women — or the tendency to perceive pedagogically intentional music as being of low aesthetic value (Maloy, 2020; Vinge 2017).

From the children's music production literature, I gathered the following recommendations. Burgess (2005) highlights the importance of road-testing songs during the production process and making children's music as good as it can be — defining this as "sophisticated and varied productions featuring very high standards of musicianship" (Burgess, 2005, p.241). Blume (2004) and Harris (2019) state when writing children's music, it is generally accepted that the melody be simple, memorable, and singable. However Acker and Nyland (2020) observe that it can contain more demanding intervals. Writing for children's books (as children's songs) can employ three ways of addressing the audience: single-address — the child is addressed as the sole audience; double-address — the child is addressed, but the presence of an adult audience is acknowledged; and dual-address — child and adult alike are addressed and a dual audience is achieved (Wall, 1991). For children's songs, it is generally agreed lyrical content should fall into either single-, or dual-address mode, and be without irony or

condescension (Blume, 2004; Harris, 2019; Heti, 2015). Lastly, Vinge (2017) defines the subject matter of children's songs as either: pedagogically intentional — explicitly intended to help the child learn something; pedagogically functional — the child will learn something, but the music is not explicit in this aim; or non-pedagogical or anti-pedagogical — music that encourages rebellious or socially inappropriate behaviour.

Vinge (2017) also considers engagement with children's songs in terms of the intergenerational appeal of the music. He advocates 'craftsmanship' and the ability to move audiences using rich, acoustic instruments, diversity of styles and genre, and lyrics that reflect appropriate and relevant childhood themes. He argues that music that successfully engages a cross-generational audience does so because of its "multifaceted, deep, cohesive, and authentic structures of meaning offering different aesthetic experiences to different people" (Vinge, 2017, p.13).

3.2 Early Childhood Development

To help write engaging, educating, and entertaining children's songs I needed to understand the developmental stages of the children for whom I planned to produce music. Piaget, Montessori, Steiner, and Erikson all believed children had discreet developmental stages that must be approached individually, although their theories differ in ranges, emphases, and attributes.

Piaget's four stages of cognitive development have been instrumental in forming an overall perception of how children think (Kohler, 2014). His preoperational stage appeared most relevant to my project. It refers to two- to seven-year-old

children, whose thinking and actions are characterised as egocentric. Children in this stage gather information from experience and understand the world around them only as it relates to them. Accordingly, and because preoperational children are likely to believe what they see and focus attention on one attribute of a person or object at a time, they have a tendency to overgeneralise and interpret words literally (Kohler, 2014). Ültanir (2012) points out that during this stage, rapid language development occurs and "symbolic function" and "intuitive thought" emerge. That is, as children create images in their minds they begin to associate them with other things and draw relationships between descriptions of objects or thoughts.

Studies indicate that preschool children may be more open-eared than older children and adults (Hargreaves, 1982; Kopiez & Lehmann, 2008), suggesting that young children's musical preference is inclusive of a wide musical spectrum, diverse in style and form. According to Arriaga-Sanz et al. (2017), "children start to exhibit a preference for the music of their own culture at approximately two years during the period in which they start developing specialised verbal processing" while at the same time "... display a tendency to like simple songs with defined and predictable themes" (Arriaga-Sanz et al., 2017, p.310). In a cross cultural study Yim and Ebbeck (2009) found that children preferred dancing and moving to music over singing, listening and playing instruments. Notably, when listening to music, they found that all children preferred quieter music. However, as it is teachers and family who act as the mediators between music and young children it is important to acknowledge that a child's exposure to different forms of musical activities and the choice of repertoire curated by teachers will significantly influence the

construction of children's musical taste and formation of preference (Arriaga-Sanz et al., 2017).

Rhythm and tempo

Most music contains the suggestion of a beat (McAuley, 2010) and as Zentner and Eurola (2010, p.5768) observe, "humans have a unique ability to coordinate their motor movements to an external auditory stimulus, as in music-induced foot-tapping or dancing." The tempo range that enables children to synchronise movement with the music (rhythmic entrainment) is narrower than that for young adults (McAuley, 2010). However infants as young as five-months-old exhibit rhythmic entrainment much more readily with music stimuli than with adult- or infant-directed speech (Zentner & Eurola, 2010; Ilari, 2015). Tempo also has a direct effect on the perceived emotion (McAuley, 2010) with the effects being observed amongst children as young as four-years-old (Mote, 2011). With children's natural ability and preference to move to music, rhythm and tempo are significant criteria to consider in the compositional process.

Instrumentation and voice

While far greater research has focused on the vocal aspect of children's music rather than the instrumental (Collie & Slater, 1987; Coyle & Gracia, 2014; Flohr and Persellin, 2011; Griffiths, 2012; Read et al., 2018; Weiss et al., 2012), Gordon (1990) emphasises the importance of exposing young children to a variety of musical styles and instrumentation to provide "as rich sources of musical stimulation as possible" (Gordon, 1990 quoted in Gembris & Davidson, 2002).

Turning to the voice, Weiss et al. (2012) found that adults remembered melodies better when presented as sung melodies rather than played melodies. In a study focusing on two groups of 5–6-year-old and 7–8-year-old children, Weiss et al. (2015) found the younger group overwhelmingly associated more with the human voice than an instrument. They attribute this to “inherently amplified attention to the voice [generating] feelings of familiarity” (Weiss et al., 2015, p.374). This was further confirmed by Weiss et al., (2016) by using pupil dilation tracking to determine engagement and the preference for voice as the privileged signal.

Maloy (2018) observes “the favouring of short melodic ranges, predictable diatonic scale-wise melodies and short intervals between consecutive notes increases the ‘singability’ of the song and promotes vocal participation in children” (Maloy, 2018, p.38). These studies confirmed the need for my songs to adopt a diverse timbral range of instrumentation and a strong focus on the human voice, with vocals front and centre.

A good deal of research has highlighted links between songs or singing and the development of verbal skill, language acquisition, and other beneficial uses of songs in the classroom (Collie & Slater, 1987; Coyle & Gracia, 2014; Griffiths, 2012; Read et al., 2018). Flohr and Persellin (2011, p.14) assert that “singing appears to have a positive effect on language development, speech, and comprehension” with young children. Legg (2009) observes how songs can improve the ability to learn and memorise words and phrases in a foreign language. Alisaari and Heikkola (2017) assert that singing is considered by teachers to be more effective than reciting poems in the instruction of vocabulary, poetic structure, pronunciation, comprehension and the introduction of a new topic. Rhyme and meter are also

important. As McGlone and Tofighbakhsh (2000) discovered in their research, when rhymes are used, sayings are considered more truthful.

Given the educational potential of songs for young children, a focus on language in terms of quality and richness, combined with conveying messages with correct and intriguing information was a crucial part in the development of my songs lyrics.

3.3 Progressive Education Theory

Progressive education theory suggested my approach to children's music composition. It focuses on a child-centred curriculum and pedagogy, adapting teaching to the students requirements and curiosity. The child's education is seen as critical to allow them to develop to their full potential (Collins & O'Brien, 2011; Guthrie, 2002; Howlett, 2013).

I investigated the theories and practices of John Dewey, Maria Montessori, Erik Erikson, Jean Piaget, and Lev Vygotsky to better understand prominent ideas pertaining to the nature of children, how they learn, and what factors they consider constitute a quality educational experience.

Dewey's central role in the development of the progressive education movement in the US mirrored that of Montessori, Vygotsky, and Piaget in Europe. The core ideas of this movement include concepts such as: "education should be child-centred; education must be both active and interactive; and education must involve the social world of the child and community" (Mooney, 2013, p.27).

Founders of the progressive education movement perceived learning first and foremost, as an active process. That is, effective learning should be based on

children's interests, taking place through their life experiences, and through interactions with others (Platz & Arellano, 2011).

Central to these educators' theories were notions of naturalistic learning and the importance they placed on learning through play, utilising the child's own sensory exploration within a natural environment. They argued that self-discovery and the use of the senses were critical processes in educating young children, believing that sensory exploration enabled children to experience sensation and reflection and these two experiences were important in helping the child make connections and progress their thinking (Platz & Arellano, 2011). Building on Montessori's work, Piaget believed that children construct their own knowledge by according meaning to their experiences of being and doing, arguing that "construction is superior to instruction" (Hendrick 1992, p. 476 cited in Mooney, 2013). Piaget, Montessori, and Vygotsky all shared similar views about the role a teacher should assume in a child's life — namely that of an observer and enabler — someone who nurtures inquiry and supports a child's search for answers in learning environments. What these theorists share in common is the importance of designing curriculum around the interests of children.

From a compositional perspective, factors that engage children correspond to Dewey's definition of an educational experience (Mooney, 2013). One that:

- is based on the children's interest and grows out of their existing knowledge and experience;
- supports the child's development;
- helps the children develop new skills;

- adds to the children's understanding of their world; and
- prepares the children to live more fully.

In other words, engaging children through music is about enabling experiences that are appropriate, relevant, and meaningful to a child's world.

3.4 Psychology of Listening

Despite the prevalence of entertainment in society today, scholarly research into entertainment is still in its infancy. There is for example, "no theoretical consensus yet of what exactly constitutes an entertainment experience, by which processes it is driven and how it should be measured" (Vorderer & Reinecke, 2015, p.449).

Bryant and Vorderer (2013) posit that intrinsic motivation is one cause of entertainment. That is, when children are active and interested, they will be inclined to carry out activities that are intrinsically motivated. Not only do these behaviours assist in learning but are also interpreted as entertaining (Deci & Ryan, 2010). According to Oliver and Raney (2011), there has been a paradigm shift from traditional notions of entertainment as purely pleasure seeking to truth-seeking.

Vorderer and Reinecke (2015) agree acknowledging "besides the hedonic striving for positive affect and optimized mood, more complex forms of entertainment experience refer to intrinsic human needs, such as self-determination, psychological growth and meaning of life" (Vorderer & Reinecke, 2015, p.449).

They posit that interpreting entertainment as extending beyond the purpose of self-gratification to self-improvement allows for greater understanding and scope of what entertainment products may do to, and for, their users.

This interpretation of entertainment as serving both hedonic and introspective and contemplative functions underscores the approach I took when considering the entertainment value in the creation of my songs.

Sonic and technical quality are important to how audio is received and interpreted. Newman and Schwarz (2018) found that when the audio quality of science communication was degraded, the audience evaluated the research and the researcher less favourably. Clear enunciation and delivery was also a key technical consideration. Lev-Ari and Keysar (2010) demonstrated that trivia statements delivered with a non-native accent were believed less than those delivered without.

Burgess (2005) and Swedien (2003) both stress the importance of a good vocal recording — combining sound engineering skill and quality equipment.

3.5 Conclusion

The literature highlighted theories and approaches on how best to educate, engage, and entertain children. By identifying the developmental stages defined in the fields of education and psychology, I was able to determine my target audience age range of 2- to 7-years-old. I was also able to attribute empirically-based definitions to my criteria as listed below:

- be entertaining — serving both hedonic and introspective functions;
- be educational — based on the child's interests and growing out of their existing knowledge and experience; supporting the child's development; helping the children develop new skills; adding to the child's understanding of their world; and preparing the child to live more fully;

- be engaging — reflecting meaningful relevant childhood themes in the overarching concepts of each song; garnering an emotional response; ensuring diversity in volume, tempo and styles;
- be lyrically rich — with a focus on language and vocabulary in terms of variety and quality, and conveying accurate and intriguing information;
- be musically rich — using a diverse range of instrumentation with a strong focus on the human voice; and
- be sonically rich — utilising industry-standard, world-class equipment, software, recording and mixing spaces, and industry professionals of long-standing.

4 Market Analysis

The latest available figure for the total retail sales from all New Zealand music is \$172,000,000 (PwC Consulting, 2021). In the US, children's music retail sales represents 1.2% of the total market (MRC Data, 2021). Assuming this figure translates to the New Zealand market, the annual New Zealand children's music market for retail sales is worth \$2,064,000.

Music is consumed in four main ways: streaming; physical product; digital downloads; and sync (dissemination via TV and film). I have only covered streaming and the reasons for this are twofold. Firstly, streaming has been increasing steadily since 2010, representing 87% of US children's music industry revenue in 2021 (MRC Data, 2021), and physical product, digital downloads, and sync combined to make just 13% (MRC Data, 2021). And secondly, access to data for analysis was more readily available for the streaming market.

The UK Official Charts (Official Charts, n.d.) doesn't include a children's music chart, and the Billboard Kid's album charts (Billboard, n.d.) is for subscribers only, so I decided to use Spotify for my project. I chose Spotify because of the enormous range of songs available on the platform, and because, using data collected from users' listening habits, Spotify continually updates and modifies their playlists. This makes it a good indicator of what is popular in genres that may not have ranking indication elsewhere. I used it to help with three aspects of my project: to survey the market; enterprise considerations; and to investigate the crossover between music made for children and adult music enjoyed by children.

Spotify is the world's leading music streaming company, available in 184 markets with 182 million paid subscribers, 422 million active monthly users, and in excess of 82 million tracks (Spotify, n.d.-a). It curates playlists in many genres and for many activities using what it calls an 'algotorial' approach combining music analysis using proprietary algorithms, with human editorial input.

At the time of initial investigation (August 2019), in the 'Kids and Family' section, Spotify had fifteen playlists, which covered a variety of genres or situations. Most of these weren't representative of the mix of tunes I wanted for my suite of songs. There were five playlists aimed at specifically calming or helping babies to sleep, four Disney-only playlists, and six which covered particular activities (workout, car journey, etc.). The two playlists from this section I decided to analyse were Toddler Tunes, and Kid's Party (since renamed 'It's Time to Party'). Toddler Tunes ("packed full of sing-a-long [sic] songs, sure to put a smile on the face of your little one" (Spotify, n.d.-b)) was comprised of fifty songs made specifically for children, and Kid's Party ("watch the kids go wild for these party tunes!" (Spotify, n.d.-c)) was made up of sixty adult songs that Spotify deems appropriate for a children's party. Investigating the audio features of these two lists would help me determine what characteristics Spotify thought popular adult music had which would appeal to children, and how these aligned with music made specifically for children.

I also compared these playlists against the Spotify catalogue as a whole, to see if any differences or correlations in the playlists I looked at aligned with the whole catalogue.

Spotify modifies playlists on a regular basis, and bearing that in mind, I did some more investigation into Toddler Tunes July 2022 as a comparison. I chose just

Toddler Tunes, to compare the songs specifically composed for the children’s market. The comparison was interesting for a couple of reasons. Firstly, although the playlist had grown from 50 songs to 95, 45 of the songs from the 2019 playlist appeared on the 2022 playlist — in the same order on both playlists. It appears that in this case, the playlist was simply added to rather than curated in any meaningful way. Secondly, although streams of all the songs increased, there was a huge difference in how much change there was from 2019 to 2022, ranging from a 278,691 increase at the low end to a 28,404,401 increase at the most. This indicates that if I managed to get a song onto the Toddler Tunes playlist, it would be likely to stay there for some time, but while streaming numbers would increase as time went on, the increase would not be dependent solely on playlist inclusion, and parallel promotion would be helpful.

4.1 Limitations

4.1.1 Sample Size

The sample sizes of the two playlists are very small relative to the entire Spotify catalogue, but from Spotify’s point of view, they represented — at the time of downloading — the best offerings in their respective categories.

4.1.2 Playlist Genre

While the Toddler Tunes playlist fits my music well, the Kid’s Party playlist is music aimed at a party environment. One would expect intuitively, and the figures bear this out, that the values for Danceability, Valence, Energy, Tempo, and Loudness would be high for this second playlist. Having said that, there is nevertheless a

strong correlation between Toddler Tunes and Kid's Party for Danceability, Valence, and Loudness.

4.1.3 Streaming Service

This analysis considers Spotify as the sole data source. There are a number of other popular streaming services (Apple Music, Tidal, etc.) however at the time of download for analysis, there was no music-focused service as big as Spotify.

4.2 Music Made For Children

To find out what the market is looking for in music made specifically for children, I investigated the Toddler Tunes playlist. I looked at number of plays, release year, average length, and record label, and found that:

- the average length of a Toddler Tunes song is 1:58;
- the average (rounded) speed of a Toddler Tunes song is 121 beats per minute (bpm);
- the playlist is dominated by recent releases. 56% of the songs were released in the previous five years, rising to 78% in the previous ten years;
- only 3 of the tunes in the playlist were released prior to 2000; and
- the playlist is also dominated by The Wiggles and Wiggles-related acts — making up 30% of the songs.

I was interested to find that virtually all the tunes listed (92%) were released by ABC Kids, an Australian record label. Spotify localise their content (United Language Group, n.d.), and this appeared consistent with that policy (New Zealand

being included with Australia due to size considerations). To discover what songs were included for other territories, I accessed the Toddler Tunes playlist in England, Holland, and America. Interestingly, the playlist was identical for all four territories. It seems that not only is the playlist internationally identical, it is also dominated by ABC Kids. This discovery informed my decision to approach ABC Kids with the finished suite of songs.

Working out number of plays per year was interesting, and results ranging from 1,190,727 to 7,122, indicating that a song need not be a huge streaming success for inclusion, but also that inclusion on the playlist need not guarantee huge streaming success.

4.3 Music Made For Adults And Enjoyed By Children

To work out where Spotify identifies the crossover between music made specifically for children in my age range, and music made for adults, but enjoyed by children in my age range, I looked more in depth at the two playlists I had identified, and the wider Spotify catalogue.

In 2014, Spotify acquired The Echo Nest, a music analysis company born out of the MIT Media Lab, and incorporated much of its technology into their platform. Among this was the ability to get 9 quantifiable 'audio features' in 3 categories from every track in their catalogue. While the exact determination of these features is proprietary, Spotify do publish information and definitions for developers (Spotify, n.d.-d). These are summarised below and detailed definitions can be found in Appendix 9a.

Mood: Danceability, Valence, Energy, Tempo

Properties: Loudness, Speechiness, Instrumentalness

Context: Liveness, Acousticness

From Spotify, I was able to download the distribution for the whole catalogue of all the audio features (except tempo and liveness), and using the website Tunebat (n.d.), I was able to find out values for the nine audio features for almost all of the songs. I was unable to find details for two of the songs in the Toddler Tunes playlist, so my analysis was carried out on the remaining forty-eight.

I listed the values of all of these attributes for the songs on both playlists and compared them with the spread for the Spotify catalogue. Plotting this data on histograms with standardised heights allowed me to make a meaningful comparison. The data and charts for these comparisons can be found in Appendices 9b, 9c, and 9d.

There were two attributes that were not relevant to this study. Speechiness determines how much spoken word is contained in a Spotify track. A podcast might be high in speechiness, but both playlists and the wider Spotify catalogue were strongly skewed to 'not speechiness'. Liveness determines the presence of a live audience. Both playlists and the wider Spotify catalogue were strongly skewed toward 'not liveness' indicating no presence of a live audience.

4.3.1 Danceability

The distribution of values for this attribute showed a high level of correlation between both playlists and the Spotify catalogue. Even though the Toddler Tunes playlist is not specifically aimed at dancing, there appears to be a high level of danceability to all the children's music listed. There is no surprise that the Kid's Party playlist is strongly skewed to high danceability, but it is interesting that the majority of the Spotify catalogue also has a high value of danceability.

4.3.2 Valence & Tempo

Both Kid's Party and Toddler Tunes exhibit a negatively skewed distribution for valence, with Toddler Tunes showing the more exaggerated tendency. Spotify describes high valence tracks as being "happy, cheerful, euphoric" (Spotify, n.d.-a). It is commonly accepted, and had been for decades, since Hevner's ground-breaking research (Hevner, 1935; Hevner, 1936; Hevner, 1937), that a faster tempo and major mode are associated with musical positiveness. Although many researchers have found this effect to be cross-cultural (Balkwill & Thompson, 1999; Balkwill et al., 2004; Fritz et al., 2009; Mehr et al., 2019), others have found it more likely to be culturally mediated (Smit et al., 2022), and yet others have found it related to the listener's motivations for listening (Juslin & Laukka, 2004).

Van der Zwaag et al. (2011) added percussiveness to tempo and mode in their 2011 study, using Skowronek and McKinney's definition of percussiveness as a short sound having a sharp attack-decay characteristic (Skowronek & McKinney, 2006) and discovered that more percussiveness in music reinforced the positive effect of tempo and mode. One might expect then, given the high degree of positive valence for the Toddler Tunes playlist, that tempo values for this playlist

would also be high. However, comparing tempo for the two playlists in question, Toddler Tunes had a much wider tempo range, and more tracks with a lower tempo than Kid's Party — and a generally more even spread. This indicates that the other factors determining a high valence (mode and percussiveness) are likely to be very high for Toddler Tunes, and increased, but perhaps not as high for Kid's Party.

4.3.3 Energy

Energy is an area where one of the limitations of the analysis come into play. The Kid's Party playlist is full of songs meant to be played in a party situation, and consequently Energy values are strongly negative skewed towards the more energetic end of the scale, and in fact, there are no values below the half-way mark. The Toddler Tunes playlist has a much more even distribution, which given the presence of both dance songs and lullaby-type songs, makes sense.

4.3.4 Loudness

Both playlists and the wider Spotify catalogue are strongly skewed towards loud songs. Given that Kid's Party playlist and the Toddler Tunes playlist both contain mostly modern songs, and the trend in modern mastering for maximising loudness (Huber & Runstein, 2018), this does not come as a surprise.

4.3.5 Instrumentalness

The histograms for this value overwhelmingly all indicate a very high level of vocal content (sung or rapped) in all the music included, with Toddler Tunes and Kid's Party almost 100% non-instrumental songs.

4.3.6 Acousticness

The Kid's Party playlist distribution closely follows that of the Spotify distribution. The charts indicate a high level of non-acoustic tracks in both samples, and listening to the Kid's Party playlist bears this out. Given that the Kid's Party tunes are aimed at a party situation, being skewed away from acoustic tracks, which may well be more relaxing than electric-based tracks, makes sense.

The Toddler Tunes playlist shows a high proportion of tunes either at one end of the scale — fully non-acoustic — or at the other end of the scale — fully acoustic, with a smattering of tunes midway. The indication here is that the music made for children seems to be mostly either fully acoustic, or not.

4.3.7 Conclusion

Comparing the audio attributes for the Toddler Tunes and Kid's Party playlists allows for an interesting way to determine which attributes are important when considering the crossover between music made for children, and adult music enjoyed by children. There should be: a high level of danceability, valence, tempo, loudness, and vocal content; either a high, medium, or low level of energy; either a fully acoustic or fully electronic make-up to the tracks. This comparison feeds directly into my Creative Framework (section 5).

5 Creative Framework

Taking my findings from the literature review and market analysis, and based on the age range for my child audience of 2- to 7-years old, I made guidelines to follow for my creative process.

5.1 General

- to make the music to as professional a standard as I can — produce using the most appropriate techniques, and best equipment and spaces available
- song length should be between 2 and 3 minutes
- music should be mastered to a modern level of loudness
- emotion should tend towards positive, happy, and euphoric
- to road test the songs during production — to both children and adults
- some energetic, some more relaxing

5.2 Lyrical Elements

- defined, predictable, and meaningful themes
- a mix of pedagogically intentional and pedagogically functional
- based on children's interests and/or life experiences
- single- or dual-address lyrics, without irony or condescension
- rhyming and meter are important

5.3 Musical Elements

- simple, memorable, and singable melodies
- intervals should generally be short, but can be more demanding
- vocals more important than instruments
- diverse in style, form, and instrumentation using a mix of acoustic and electronic timbres
- having rhythmic stability, beat strength, and overall regularity
- tempo range between 85bpm and 168bpm, tending higher
- tending to being quieter

6 Process

6.1 Initial Composition

Using my creative framework, I came up with a number of song titles from which I selected twelve to take to the initial composition stage. This first list included four seasons songs, which, after having progressed to the rough mix stage, I decided would be best left for a follow-up release as they were more sophisticated than the other songs, and lent themselves to an older age range. This left eight songs, and after I had rough versions of these, I played them to a music education academic for feedback. She observed that the songs were 'quite English' (taking the use of 'lorry' as an example), but noted that since my cultural background is English, that is understandable. We discussed the possible use of Te Reo Māori, and I said that while I would be keen at some point to collaborate with a fluent Te Reo speaker, I felt it would be inappropriate for this project, as I was doing it alone. She also suggested producing a slow version of *The Counting Song*, for children with English as a second language, or neurodiverse children. This stripped back version would be comprised of minimal instrumentation (solo acoustic piano), male and female lead vocals without harmonies, and no sound effects. Ideally this would enable children to focus more on the key learning outcomes of the song removing potentially confusing counter-melodies and multiple voices. I took this advice on board, and so the resulting suite ended up as nine songs:

- 1 The Counting Song
- 2 Under The Sea
- 3 The Travelling Song
- 4 Rainbow
- 5 Let's Dance
- 6 Tell Me A Snory
- 7 Bath Time
- 8 Tidying Up
- 9 The Counting Song (slow)

6.2 Lyric Mentor

My lyric review sessions with Diana Neild were very productive. She made numerous tweaks — getting rid of extraneous words, and simplifying where possible and/or appropriate. We had three review sessions, each covering two to three songs. I found that following the first session I was able to apply a lot of the guidance that she gave me to subsequent songs, meaning she was giving me less structural or administrative notes, and more creative guidance, which was also helpful. I incorporated some of her creative direction into rewrites of the lyrics.

6.3 Parent Interviews

The sample of parents I had for this study was small, but representative of the larger population I was targeting. All of them had children in the target age range,

felt that music was important for their children, and were active in introducing music to them.

With the exception of content, there was no overall consensus on listening habits. One child's primary location for music consumption was the car, which determined time and medium (CD). The other two children listened at home. One in the evening with the parents from a streaming platform via a Bluetooth speaker, and the other listened to a home-made music playback device, determining their own content from a parent-curated selection.

In terms of content, all three parents played children's songs from their childhoods, more modern children's songs, and music made for adults that they enjoyed.

The lyrics and songs I presented for feedback were well-received, and all the parents agreed the songs were age-appropriate and would enjoy playing them to their children.

6.4 Early Childhood Educator Interviews

The early childhood educators recognised the importance of music as part of the educational experience, but had different approaches to music sessions at their centres.

One had fully integrated music into every aspect of the day and always had instruments out. The second had regular music sessions carried out by different teachers. And the last had regular music sessions, taken by the same teacher.

All three teachers were open to being led by the children in terms of what they wanted to hear, but at the same time all of them moderated the choices, steering the children away from specific songs or albums that they either didn't like, or those of which they doubted the educational merit.

All were enthusiastic about my lyrics and songs-in-progress, and said they would play them at their centres.

6.5 Early Childhood Focus Groups

6.5.1 Session 1 —

The Counting Song, Rainbow, The Travelling Song

The children started the first session seated, but were all voluntarily standing by the end of the first song.

Observations from the first playthrough of *The Counting Song* included some children finger counting, some counting pre-emptively, and some answering the questions posed in the lyrics (see Appendix 9f). In discussion, the children remembered the lyrics associated with three numbers. All the children were eager to hear the song again, and during the second performance, some were guessing the answer to the questions and mimicking the actions.

The children were more subdued for *Rainbow*, and appeared to be concentrating more. Some children just stood and watched the performance, others sat on cushions to listen, whilst others mimicked the actions. One child left the room to return with two fire engines in reference to the lyrics. The children remembered four of the seven colours and the lyrics associated with them, and the discussion

turned to other objects of the same colour, then other colours. On the second performance, one child sang along word for word.

By the end of the first playthrough of *The Travelling Song*, most of the children were singing along with the choruses, all of the children listened attentively, and some jumped around. When talking about the song, one child remembered having heard it before (which while obviously impossible was a good indication she found it familiar and enjoyed it), and the children enjoyed trying to remember which animals and objects had been in the 'I Spy' section. During the second play, all the children answered the 'I Spy' questions, and about half of the children danced along with the song. Again most of the children joined in with the choruses, and the youngest child present — a two-year-old — stood watching and mouthing along with the words they could remember.

6.5.2 Session 2 — *Let's Dance, Tidying Up, Tell Me A Snory*

The second session took place two weeks after the first. The same children were present. I started the session by asking what they remembered from the previous session. Without prompting, they remembered "rainbows", "going for drives on the road", and "numbers".

Everyone joined in with *Let's Dance*, smiling the whole way through. They all copied the actions I made for the song. They said the song made them feel "sunny" and "silly". They remember the "duck dance", and the "hopping dance". They all joined in again for the second play.

For *Tidying Up*, about half the children stood up unprompted and copied the actions, the other half sat still, watching and listening to the performance. The

children were asked where the tidying up took place, to which many of the called out "on the moon!".

I asked the children to lie down and listen to the words of *Tell Me A Snory*, and they all stayed still and listened intently for the duration of both plays of the song.

6.5.3 Discussion

From an educational standpoint, the songs proved a rich source of discussion—often generating ideas outside the immediate focus or subject matter of the songs. Given the recall that occurred between the first and second sessions, and the fact that no reinforcing had taken place between sessions, I think that over time, the educational value of these songs would be high. The child singing along to *Rainbow* suggested the lyrics were memorable and the language structure targeted at the right level.

In terms of engagement, over the course of both forty-five minute sessions, all the children in the centre were present initially, and only one left before one session had finished. The head teacher said that the high level of engagement that the children exhibited was most unusual. Also, the enthusiasm with which all the children joined in with *Tidying Up* indicated that the juxtaposition of the mundane task with the fantastic location and storyline promoted a great degree of engagement

And lastly, in terms of entertainment, the children's emotional responses (laughing and smiling), singing along, getting up voluntarily and dancing, and imitating actions, but also being quiet and attentive, showed a strong indication of pleasure.

Trying to find out how the songs made the children feel was not as successful as I had hoped. In retrospect, I should have paid more attention to how I structured my questions, because once the children had decided that one song made them feel silly and stupid, they all gave the same response for all of the remaining songs.

One of the biggest successes from the first session was recounted to me when I got in touch with the centre after the session. I was told that a 6-year-old child had been playing in the sand pit much later in the day, and was singing one of my songs to herself.

6.6 Refining Composition Stage

Following the lyric reviews, interviews, and focus groups, I reworked some lyrics, arriving at the final versions (see Appendix 9f), simplified some of the instrumentation, and in one case, slowed the tempo of one song down. Once these changes had been made, I recorded the final male and female vocalist.

6.7 Mixing and Mastering

The mixing stage went as expected. I mixed the tunes in-the-box, which meant that I could recall mixes for tweaks without trouble. The mixes were undertaken primarily in my home studio, but regular bounces were referenced on my phone, laptop, home stereo, car stereo, Bluetooth speaker, and also at the studios at Massey. This ensured a high level of translation for all possible listening environments.

I got a quote for mastering, but ultimately decided not to go ahead with it. I have mixed tracks which have been mastered, and also mixed tracks that have

remained unmastered, and listening back on Spotify to both outputs, I decided that the extra \$1,000 would make commercial success (recouping costs on the project) unattainable. To that end, I made sure that the integrated LUFS level for the tracks was -14, and the overall level didn't go over -1dBFS to comply with Spotify specifications, and left the finished songs unmastered.

6.8 Book Proposal

I am thrilled with the finished artwork, and think the book dummy provides a great physical product for demonstrating what an accompanying book could look like, however I don't think that it will enhance my chances of getting signed by a record label or get the songs placed on film or TV.

Nevertheless, if I am not able to get the project signed to a record company, I will self-release, and engage the illustrator to complete illustrations to be able to make a book from two of the songs — *Rainbow* and *The Counting Song*. I plan to have this book ready for release five months after the music release. This will provide a boost to sales and increase market penetration. To make the book profitable, I will engage the illustrator to finish *Rainbow*, and my wife and children will illustrate *The Counting Song*. The figures in the Pitch Deck are based on a retail price of \$35 per unit, and manufacturing costs of \$10 per unit.

The contract with the illustrator means that I will also be able to use elements of the illustrations for promotional purposes or merchandise.



7 Discussion

My aim with the MCE was to compose and produce a suite of children's songs that would maximise potential commercial success. By creating a product that was well-received by children in the target age range, and also by early childhood educators and parents, I feel I achieved my goal.

The finished suite of nine songs fulfilled the criteria I set out to meet: to be educational, entertaining, and engaging to the target age range of 2- to 7-year-old children, as determined in two music sessions in an early childhood centre; and be lyrically rich, musically rich, and sonically rich, as judged by the six parents and early childhood educators. Having also played the finished suite to two separate children's entertainers, they were very impressed, and both felt that the product would be a success.

The songs were completed to specifications laid out by Spotify, the streaming service used for analysis during my composition process, and combined with the book proposal, I have a package that I think will be compelling for a record company to release and promote. Failing that, I am confident that self-releasing the music and book will generate enough money to break even about a year-and-a-half after release, and justify a follow-up EP, working towards establishing my brand in the children's entertainment field.

From here, I will be submitting the songs for consideration to the ABC Kids record company, and while I wait to hear back from them, I will also submit to other record companies I have identified as a good fit. I have also already started work on a

four-track EP based on the seasons, and will follow the same release strategy for these songs. Lastly, If the book is a success, I will develop a follow-up book from the initial release.

The most significant hurdle throughout this project has been COVID. However, the delays and postponements gave me more time to develop the creative aspect of the output, and I think that ultimately, it made for a better end result.

Over the course of this Master of Creative Enterprise, I have also made some valuable connections, and new friends in the children's entertainment field, for which I am grateful and appreciative.

8 Bibliography

Acker, A., & Nyland, B. (2020). *Adult Perspectives on Children and Music in Early Childhood* (Vol. 33). Springer Nature.

Alisaari, J. & Heikkola, L.M. (2017). Songs and poems in the language classroom: Teachers' beliefs and practices. *Teaching and Teacher Education*, 63, 231–242. <https://doi.org/10.1016/j.tate.2016.12.021>

Arriaga-Sanz, C., Riaño-Galán, M. E., Cabedo-Mas, A., & Berbel-Gómez, N. (2017). Songs are taught, songs are learnt: musical preferences in early childhood. *Music Education Research*, 19(3), 309-326.

Balkwill, L. L., & Thompson, W. F. (1999). A cross-cultural investigation of the perception of emotion in music: Psychophysical and cultural cues. *Music perception*, 17(1), 43-64.

Balkwill, L. L., Thompson, W. F., & Matsunaga, R. I. E. (2004). Recognition of emotion in Japanese, Western, and Hindustani music by Japanese listeners
1. *Japanese Psychological Research*, 46(4), 337-349.

Barrett, M.S. (2009). Sounding lives in and through music: A narrative Inquiry of the 'everyday' musical engagement of a young child. *Journal of Early Childhood Research*, 7(2), 115–134. <https://doi.org/10.1177/1476718X09102645>

Billboard. (n.d.). *Charts | Billboard*. <https://www.billboard.com/charts>

Blume, J. (2004). *6 Steps to Songwriting Success: The Comprehensive Guide to Writing and Marketing Hit Songs*. Billboard Books.

Bryant, J., & Vorderer, P. (Eds.). (2013). *Psychology of entertainment*. Routledge.

Burgess, R. J. (2005). *The art of music production: The theory and practice*. Omnibus Press.

Campbell, D. (2000). *The Mozart Effect for Children: Awakening Your Child's Mind, Health, and Creativity with Music*. HarperCollins Publishers.

Collie, J., & Slater, S. (1987). *Literature in the language classroom: A resource book of ideas and activities*. Cambridge, MA: Cambridge University Press

Collins, J. W., & O'Brien, N. P. (2011). *The Greenwood dictionary of education*. ABC-CLIO.

Coyle, Y., & Gracia, R.G. (2014). Using songs to enhance L2 vocabulary acquisition in preschool children. *ELT Journal*. 68(3), 276–285.

<https://doi.org/10.1093/elt/ccu015>

Davidson, J., & Heartwood, K. (1996). *Songwriting for Beginners: An Easy Beginning Method*. Alfred Music.

- de Vries, P. (2009). Music at home with the under fives: what is happening?. *Early Child Development and Care*, 179(4), 395–405.
<https://doi.org/10.1080/03004430802691914>
- Deci, E. L., & Ryan, R. M. (2010). Self-determination. *The Corsini encyclopedia of psychology*, 1-2.
- Flohr, J.W., & Persellin, D.C. (2011). Applying brain research to children’s musical experiences. In S.L. Burton & C.C. Taggart (Eds.), *Learning from young children* (pp. 3–22). Plymouth, United Kingdom: Rowman & Littlefield Education.
- Fritz, T., Jentschke, S., Gosselin, N., Sammler, D., Peretz, I., Turner, R., ... & Koelsch, S. (2009). Universal recognition of three basic emotions in music. *Current biology*, 19(7), 573-576.
- Gembris, H., & Davidson, J. W. (2002). Environmental influences. *The science and psychology of music performance*, 17-30.
- Griffiths, C. (2012). Using songs in the language classroom. *Procedia — Social and Behavioural Sciences*. 70, 1136–1143.
<https://doi.org/10.1016/j.sbpro.2013.01.169>
- Guthrie, J. W. (2002). *Encyclopedia of Education (8 Volumes)*, James W. Guthrie, 2002, Macmillan Reference USA. Macmillan Reference USA.

- Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International journal of music education*, 28(3), 269-289.
- Hargreaves, D. J. (1982). The development of aesthetic reactions to music. *Psychology of Music*.
- Harris, M. (2009). *Music and the young mind: Enhancing brain development and engaging learning*. R&L Education.
- Harris, S. (2019). *Christopher Renshaw on Composing Kids Music for Children's Brands*. Hook Research. <https://www.hookresearch.co.uk/christopher-renshaw-on-composing-music-for-kids-media/>
- Hesmondhalgh, D. (2013). *Why music matters*. John Wiley & Sons.
- Heti, S. (2015). *Finding Raffi*. New York Magazine.
<https://www.vulture.com/2015/12/finding-raffi-c-v-r.html>
- Hodges, D. A., & Wilkins, R. W. (2015). How and why does music move us? Answers from psychology and neuroscience. *Music Educators Journal*, 101(4), 41-47.
- Howlett, J. (2013). *Progressive education: A critical introduction*. A&C Black.
- Huber, D. M., & Runstein, R. E. (2018). Modern recording techniques (Audio Engineering Society presents). UK: Taylor & Francis.

- Ilari, B. (2015). Rhythmic engagement with music in early childhood: A replication and extension. *Journal of Research in Music Education*, 62(4), 332-343.
- Juslin, P. N., & Laukka, P. (2004). Expression, perception, and induction of musical emotions: A review and a questionnaire study of everyday listening. *Journal of new music research*, 33(3), 217-238.
- Kohler, R. (2014). *Jean Piaget*. Bloomsbury Publishing.
- Kopiez, R., & Lehmann, M. (2008). The 'open-earedness' hypothesis and the development of age-related aesthetic reactions to music in elementary school children. *British Journal of Music Education*, 25(2), 121-138.
- Legg, R. (2009). Using music to accelerate language learning: an experimental study. *Research in Education*, 82(1), 1–12. <https://doi.org/10.7227/RIE.82.1>
- Lev-Ari, S., & Keysar, B. (2010). Why don't we believe non-native speakers? The influence of accent on credibility. *Journal of experimental social psychology*, 46(6), 1093-1096.
- Maloy, L. (2018). The Children's Music Quotient: Quantifying the Childness of Music Recordings Made for Children. *International Research in Children's Literature*, 11(1), 33-46.
- Maloy, L. (2020). *Spinning the Child: Musical Constructions of Childhood Through Records, Radio and Television*. Routledge.

- McAuley, J. D. (2010). Tempo and rhythm. In *Music perception* (pp. 165-199). Springer, New York, NY.
- McGlone, M. S., & Tofiqbakhsh, J. (2000). Birds of a feather flock conjointly (?): Rhyme as reason in aphorisms. *Psychological science*, 11(5), 424-428.
- Mehr, S. A., Singh, M., Knox, D., Ketter, D. M., Pickens-Jones, D., Atwood, S., ... & Glowacki, L. (2019). Universality and diversity in human song. *Science*, 366(6468), eaax0868.
- Mooney, C. G. (2013). *Theories of Childhood: An Introduction to Dewey, Montessori, Erikson, Piaget & Vygotsky*. Redleaf Press.
- Mote, J. (2011). The effects of tempo and familiarity on children's affective interpretation of music. *Emotion*, 11(3), 618.
- MRC Data. (2021). Year-End Report: U.S. 2021. https://mrcdatareports.com/wp-content/uploads/2022/01/MRC_YEAREND_2021_US_FNL.pdf
- Newman, E. J., & Schwarz, N. (2018). Good sound, good research: How audio quality influences perceptions of the research and researcher. *Science Communication*, 40(2), 246-257.
- Official Charts. (n.d.). *Official Charts – Home of the Official UK Top 40 Charts*. <https://www.officialcharts.com>

- Oliver, M. B., & Raney, A. A. (2011). Entertainment as pleasurable and meaningful: Identifying hedonic and eudaimonic motivations for entertainment consumption. *Journal of Communication, 61*(5), 984-1004.
- Pattison, P. (2010). *Writing better lyrics*. Writer's Digest Books.
- Perricone, J. (2018). *Great Songwriting Techniques*. Oxford University Press.
- Peterik, J., Austin, D., & Austin, C. L. (2020). *Songwriting for dummies*. John Wiley & Sons.
- Platz, D., & Arellano, J. (2011). Time Tested Early Childhood Theories and Practices. *Education, 132*(1).
- PwC Consulting. (2021). *Economic contribution of the New Zealand music industry in 2019 and 2020: A report for Recorded Music New Zealand*. Recorded Music New Zealand. <https://www.recordedmusic.co.nz/wp-content/uploads/2022/01/PwC-NZ-Music-economic-contribution-2020.pdf>
- Read, K., Sarah, J., & Weaver, A. (2018). Pie, fry, why: Language play in 3- to 5-year-old children. *Journal of Early Childhood Research, 16*(2), 122–135, <https://doi.org/10.1177/1476718X16664556>
- Smit, E. A., Milne, A. J., Sarvasy, H. S., & Dean, R. T. (2022). Emotional responses in Papua New Guinea show negligible evidence for a universal effect of major versus minor music. *Plos one, 17*(6), e0269597.

Spotify. (n.d.-a). *Spotify — About Spotify*. Retrieved 5 July 2022, from <https://newsroom.spotify.com/company-info/>

Spotify. (n.d.-b). *Spotify — Toddler Tunes*. Retrieved 19 August 2019, from <https://open.spotify.com/playlist/37i9dQZF1DXaPT961y2178>

Spotify. (n.d.-c). *Spotify — Kid's Party*. Retrieved 19 August 2019, <https://open.spotify.com/playlist/37i9dQZF1DX8scDqTzxoFw>

Spotify. (n.d.-d). *Web API Reference | Spotify for Developers*. Retrieved 11 October 2019, <https://developer.spotify.com/documentation/web-api/reference/#object-audiofeaturesobject>

Swedien, B. (2003). *Make mine music*. Hal Leonard Corporation.

Tunebat. (n.d). *Key & BPM of any song - Music Database by Tunebat*. <https://tunebat.com>

Ültanir, E. (2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *International Journal of Instruction*, 5(2).

United Language Group. (n.d.). *The Spotify Localization Strategy*. <https://www.unitedlanguagegroup.com/blog/spotify-localization-strategy>

- Vestad, I. L. (2017). Introduction: Children's music—an emerging field of research. *Nordic Journal of Art and Research*, 6(2).
- Vinge, J. (2017). What is good and bad children's music? Exploring quality and value in music for children. *Nordic Journal of Art and Research*, 6(2), 1–15, <https://doi.org/10.7577/information.v6i2.2278>
- Vorderer, P., & Reinecke, L. (2015). From mood to meaning: The changing model of the user in entertainment research. *Communication Theory*, 25(4), 447-453.
- Wall, B. (1991). Problems of audience. In *The Narrator's Voice*(pp. 20-36). Palgrave Macmillan, London.
- Weiss, M. W., Schellenberg, E. G., Trehub, S. E., & Dawber, E. J. (2015). Enhanced processing of vocal melodies in childhood. *Developmental Psychology*, 51(3), 370.
- Weiss, M. W., Trehub, S. E., & Schellenberg, E. G. (2012). Something in the way she sings: Enhanced memory for vocal melodies. *Psychological Science*, 23(10), 1074-1078.
- Weiss, M. W., Trehub, S. E., Schellenberg, E. G., & Habashi, P. (2016). Pupils dilate for vocal or familiar music. *Journal of Experimental Psychology: Human Perception and Performance*, 42(8), 1061.

Yim, H. Y. B., & Ebbeck, M. (2009). Children's preferences for group musical activities in child care centres: A cross-cultural study. *Early Childhood Education Journal*, 37(2), 103-111.

Zentner, M., & Eerola, T. (2010). Rhythmic engagement with music in infancy. *Proceedings of the National Academy of Sciences*, 107(13), 5768-5773.

9a Appendix a

Spotify's Audio Features Definitions

9a.1 Mood

9a.1.1 Danceability

'Danceability describes how suitable a track is for dancing based on a combination of musical elements including tempo, rhythm stability, beat strength, and overall regularity. A value of 0.0 is least danceable and 1.0 is most danceable'. (Spotify, n.d.-d)

9a.1.2 Valence

'A measure from 0.0 to 1.0 describing the musical positiveness conveyed by a track. Tracks with high valence sound more positive (e.g. happy, cheerful, euphoric), while tracks with low valence sound more negative (e.g. sad, depressed, angry)'. (Spotify, n.d.-d)

9a.1.3 Energy

'Energy is a measure from 0.0 to 1.0 and represents a perceptual measure of intensity and activity. Typically, energetic tracks feel fast, loud, and noisy. For example, death metal has high energy, while a Bach prelude scores low on the scale. Perceptual features contributing to this attribute include dynamic range, perceived loudness, timbre, onset rate, and general entropy'. (Spotify, n.d.-d)

9a.1.4 Tempo

'The overall estimated tempo of a track in beats per minute (BPM). In musical terminology, tempo is the speed or pace of a given piece and derives directly from the average beat duration'. (Spotify, n.d.-d)

9a.2 Properties

9a.2.1 Loudness

'The overall loudness of a track in decibels (dB). Loudness values are averaged across the entire track and are useful for comparing relative loudness of tracks. Loudness is the quality of a sound that is the primary psychological correlate of physical strength (amplitude). Values typical range between -60 and 0 db'. (Spotify, n.d.-d)

9a.2.2 Speechiness

'Speechiness detects the presence of spoken words in a track. The more exclusively speech-like the recording (e.g. talk show, audio book, poetry), the closer to 1.0 the attribute value. Values above 0.66 describe tracks that are probably made entirely of spoken words. Values between 0.33 and 0.66 describe tracks that may contain both music and speech, either in sections or layered, including such cases as rap music. Values below 0.33 most likely represent music and other non-speech-like tracks'. (Spotify, n.d.-d)

9a.2.3 Instrumentalness

'Predicts whether a track contains no vocals. "Ooh" and "aah" sounds are treated as instrumental in this context. Rap or spoken word tracks are clearly "vocal". The

closer the instrumentalness value is to 1.0, the greater likelihood the track contains no vocal content. Values above 0.5 are intended to represent instrumental tracks, but confidence is higher as the value approaches 1.0'. (Spotify, n.d.-d)

9a.3 Context

9a.3.1 Liveness

'Detects the presence of an audience in the recording. Higher liveness values represent an increased probability that the track was performed live. A value above 0.8 provides strong likelihood that the track is live'. (Spotify, n.d.-d)

9a.3.2 Acousticness

'A confidence measure from 0.0 to 1.0 of whether the track is acoustic. 1.0 represents high confidence the track is acoustic'. (Spotify, n.d.-d)

9b Appendix b

Playlist Data From Spotify

9b.1 Toddler Tunes

Track	Artist	BPM	Length	Plays	Year
The Teddy Bear's Picnic	Juice Music	108	2:24	1,402,638	2006
ABC Animals	Regurgitator's Pogogo Show	160	3:06	8,124	2019
Hey Hey, Let's Play	Nay Nay	93	1:50	301,170	2015
Three Little Fishies	Missy Higgins	136	2:24	331,596	2016
If You're Happy and You Know It	Juice Music	135	1:22	1,678,970	2006
(Can You Do) The Peanut	The Sticker Club	91	1:52	107,801	2018
Wiggly Party	The Wiggles	128	2:14	221,045	2016
Nali	Dan Sultan	110	1:56	135,388	2019
Heads, Shoulders, Knees And Toes	Genni Kane, Johanna Connolly, Libby Ashton-Jones	95	0:54	989,288	2004
Hula, Hula Baby	The Wiggles	126	1:49	401,718	2016
Put On A Happy Face	Juice Music	85	2:18	284,121	2015
Shoelaces	Teeny Tiny Stevies	149	3:05	113,139	2018
Peanut Butter	The Wiggles	128	2:04	1,753,352	2013
Watermelon	Justine Clarke	135	2:36	1,508,319	2012
I'm A G'Nu	Jimmy Barnes, The Wiggles	125	1:49	342,386	2017

Track	Artist	BPM	Length	Plays	Year
The Toilet Song	The Wiggles	89	2:19	238,396	2019
Never Smile At A Crocodile	Jay Laga'aia	104	1:45	335,534	2014
Bananas For You	The Green Bananas	not found!		56,015	2017
Kookaburra Sits In The Old Gum Tree	Play School	138	0:55	917,936	2016
The Seasons	Holly Throsby	89	2:53	224,654	2010
Peg + Cat Theme Song	Peg + Cat	168	0:41	246,992	2016
We Have Fun	The Roots	92	2:22	191,309	2007
Elmo's Rap Alphabet	Elmo	94	1:30	2,881,170	1997
Rocking Robin	Ali McGregor	92	2:49	190,716	2014
Monkey Man	The Wiggles, Kylie Minogue	144	2:22	1,088,936	2017
There Were Ten In The Bed	The Wiggles	136	2:16	732,739	2017
Silly Song	Justine Clarke	92	1:35	292,267	2017
Go Gigglesaurus	Giggle and Hoot	140	1:04	255,383	2012
Exploring Time	The Wiggles	145	1:08	247,780	2018
Hot Potato	The Wiggles	85	1:19	3,939,345	2009
The Shimmie Shake!	Dorothy the Dinosaur	164	2:30	192,311	2010
Dinosaurs A To Z	Dinosaur Train	not found!		213,248	2017
I'm a Little Teapot	Juice Music	123	0:56	1,660,491	2006
Bananas in Pyjamas	Bananas In Pyjamas	101	0:56	1,112,862	2015
Incy Wincy Spider	Play School	107	1:05	2,113,590	2011
Please Don't Call Me a Koala Bear	Don Spencer	129	2:24	202,990	1991
Da Glumph Went The Little Green Frog	Sugar Kane Music	152	0:59	277,615	2018
I'm A Believer	Bernie Hayes, Amelia McMurray, Mark Walmsey	160	2:58	157,566	2018
Bwindi	Dan Sultan	143	2:07	85,212	2019
The Ants Go Marching	Sugar Kane Music	121	1:10	176,349	2018

Track	Artist	BPM	Length	Plays	Year
Sing A Rainbow	Jay Laga'aia	104	1:43	200,486	2012
Twinkle, Twinkle Little Star	The Wiggles	101	2:16	6,045,473	2013
Mr Clicketty Cane	Peter Combe	136	2:31	1,023,476	1984
Give Me A Home Among The Gum Trees	John Kane	125	3:09	231,071	2000
Get Ready to Wiggle	The Wiggles	87	2:05	6,157,666	2009
Surfer Bop	The Wiggles	155	1:29	225,110	2018
Dolls and Fairies On Parade	The Wiggles	142	2:04	232,975	2018
The Lion Sleeps Tonight	Jay Laga'aia	123	3:50	213,218	2014
Rock-a-Bye Your Bear	The Wiggles	120	1:26	5,358,270	2015
Hoot's Lullaby	Giggle and Hoot	92	1:13	745,395	2018

9b.2 Kids Party

Track	Artist	BPM	Length	Year
Shotgun	George Ezra	116	3:21	2018
Happier	Marshmello	100	3:34	2018
Youngblood	5 Seconds of Summer	120	3:23	2018
Blank Space	Taylor Swift	96	3:51	2014
My My My!	Troye Sivan	103	3:24	2018
Can We Dance	The Vamps	130	3:13	2014
Don't You Worry 'Bout A Thing	Tori Kelly	127	4:01	2016
Uptown Funk	Mark Ronson	115	4:29	2015

Track	Artist	BPM	Length	Year
Can't Stop the Feeling	Justin Timberlake	113	3:57	2016
Better When I'm Dancin'	Meghan Trainor	128	2:56	2015
Happy Now	Zedd	88	3:27	2018
Friends Are Family	Oh, Hush!	160	2:23	2017
What Makes You Beautiful	One Direction	125	3:18	2012
Think About You	Delta Goodrem	109	3:08	2018
All Star	Smash Mouth	104	3:20	1999
I Like To Move It	will.i.am	127	3:41	2008
Sunshine	Ricki-Lee	169	3:02	2005
Roar	Katy Perry	90	3:43	2013
I'm a Lady	Meghan Trainor	175	2:44	2017
A Friend Like You	Andy Grammer	89	3:40	2017
Don't Wanna Know	Maroon 5, Kendrick Lamar	100	3:34	2018
Brave	Sara Bareilles	93	3:40	2013
no tears left to cry	Ariana Grande	122	3:25	2018
Change the World	The Veronicas	126	3:07	2018
Freedom	Pharrell Williams	86	2:42	2015
Y.M.C.A.	Various Artists	120	2:55	2013
Lips Are Movin	Meghan Trainor	139	3:02	2015
This Is Me	Keala Settle	96	3:54	2017
Every Girl's a Super Girl	JoJo Siwa	128	2:56	2018
How Far I'll Go	Alessia Cara	91	2:55	2016
Try Everything	Shakira	115	3:16	2016
Boom Clap	Charli XCX	92	2:49	2014
High Five	Sigrid	150	2:49	2018
Cool Kids	Echosmith	130	3:57	2013
2002	Anne-Marie	96	3:06	2018

Track	Artist	BPM	Length	Year
Cheap Thrills	Sia	90	3:31	2016
Scream	Various Artists, CeeLo Green	120	3:41	2013
Wings	Little Mix	115	3:39	2013
ABC	The Jackson 5	94	2:57	1970
Cheerleader	OMI	118	3:00	2015
In My Mind Part 3	Flo Rida	128	3:13	2018
On Top Of The World	Imagine Dragons	100	3:09	2012
Green Light	Lorde	129	3:54	2017
They Don't Know	Ariana Grande	98	3:17	2016
Don't Leave Me Alone	David Guetta	128	3:03	2018
You're My Best Friend	Glee Cast	126	2:43	2013
Falling To Pieces	Rita Ora	92	4:21	2018
Havana	Camila Cabello	105	3:37	2018
Finesse	Bruno Mars	105	3:11	2016
Barbie Girl	Aqua	130	3:17	1997
Échame La Culpa	Luis Fonsi	96	2:53	2017
Baby, You Make Me Crazy	Sam Smith	170	3:27	2017
Rise	Jonas Blue	106	3:14	2018
I'm A Believer	Smash Mouth	165	3:05	2001
Faith	Stevie Wonder	158	2:42	2016
Good Time	Owl City, Carly Rae Jepsen	126	3:25	2012
Last Friday Night (T.G.I.F.)	Katy Perry	126	3:50	2012
Don't Wanna Know	Maroon 5	100	3:34	2018
Meant to Be	Bebe Rexha	154	2:43	2017
Think Before I Talk	Astrid S	122	3:04	2017

9c Appendix c

Playlist Data From Tunebat.com

9c.1 Toddler Tunes

Track	Energy	Danceability	Happiness	Loudness (dB)	Acousticness	Instrumentalness	Liveness	Speechiness
The Teddy Bear's Picnic	28	70	96	-11	79	0	10	25
ABC Animals	90	71	89	-6	26	0	4	12
Hey Hey, Let's Play	93	73	89	-2	3	0	26	8
Three Little Fishies	52	63	75	-7	81	0	39	28
If You're Happy and You Know It (Can You Do) The Peanut	27	95	96	-12	58	0	12	14
Wiggly Party	92	53	75	-5	2	0	42	11
Nali	72	69	96	-5	2	0	7	11
Heads, Shoulders, Knees And Toes	59	78	25	-5	32	0	4	3
Hula, Hula Baby	35	88	96	-12	74	0	27	11
Put On A Happy Face	71	71	93	-8	23	0	31	4
Shoelaces	54	73	71	-7	69	0	10	20
Peanut Butter	56	75	94	-8	69	0	6	4
Watermelon	81	72	98	-5	13	0	25	4
I'm A G'Nu	51	69	86	-6	52	0	30	5
The Toilet Song	91	67	85	-5	3	15	32	5
Never Smile At A Crocodile	60	53	48	-9	38	0	36	32
Bananas For You	24	88	69	-9	93	0	13	5
Kookaburra Sits In The Old Gum Tree				not found!				
The Seasons	21	85	80	-12	73	0	10	5
Peg + Cat Theme Song	43	66	59	-10	81	0	42	3
We Have Fun	61	70	65	-8	73	0	67	48
Elmo's Rap Alphabet	91	73	96	-3	2	1	54	6
Rocking Robin	66	91	89	-9	10	0	16	11
Monkey Man	75	45	77	-8	75	0	19	18
	83	66	92	-6	1	0	9	5

Track	Energy	Danceability	Happiness	Loudness (dB)	Acousticness	Instrumentalness	Liveness	Speechiness
There Were Ten In The Bed	55	83	61	-8	13	0	10	4
Silly Song	64	70	91	-8	52	0	12	18
Go Gigglesaurus	80	72	73	-6	13	0	7	12
Exploring Time	65	78	41	-9	8	1	11	12
Hot Potato	85	56	97	-5	5	0	31	5
The Shimmie Shake!	84	52	89	-3	16	0	32	3
Dinosaurs A To Z				not found!				
I'm a Little Teapot	13	94	96	-13	74	0	7	12
Bananas in Pyjamas	56	49	43	-8	12	0	9	11
Incy Wincy Spider	30	87	71	-9	85	0	6	6
Please Don't Call Me a Koala Bear	20	73	88	-18	78	0	22	10
Da Glumph Went The Little Green Frog	22	84	87	-13	81	0	9	17
I'm A Believer	74	64	93	-6	50	0	8	3
Bwindi	72	59	70	-3	39	0	11	3
The Ants Go Marching	30	95	93	-12	94	0	10	7
Sing A Rainbow	19	77	77	-10	83	0	10	5
Twinkle, Twinkle Little Star	38	30	38	-7	54	0	22	3
Mr Clicketty Cane	73	75	92	-13	30	0	29	4
Give Me A Home Among The Gum Trees	49	82	90	-7	80	0	12	4
Get Ready to Wiggle	92	56	66	-4	11	0	38	22
Surfer Bop	83	62	96	-7	1	10	41	7
Dolls and Fairies On Parade	69	63	79	-6	15	0	10	4
The Lion Sleeps Tonight	52	37	83	-11	76	0	13	9
Rock-a-Bye Your Bear	61	77	71	-7	30	0	17	4
Hoot's Lullaby	26	29	49	-12	75	0	8	3

9c.2 Kids Party

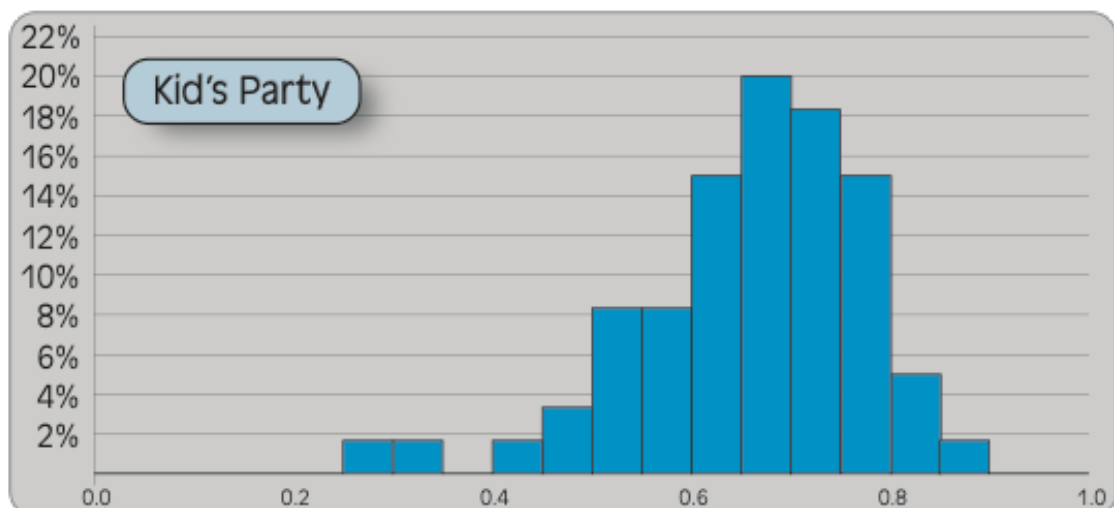
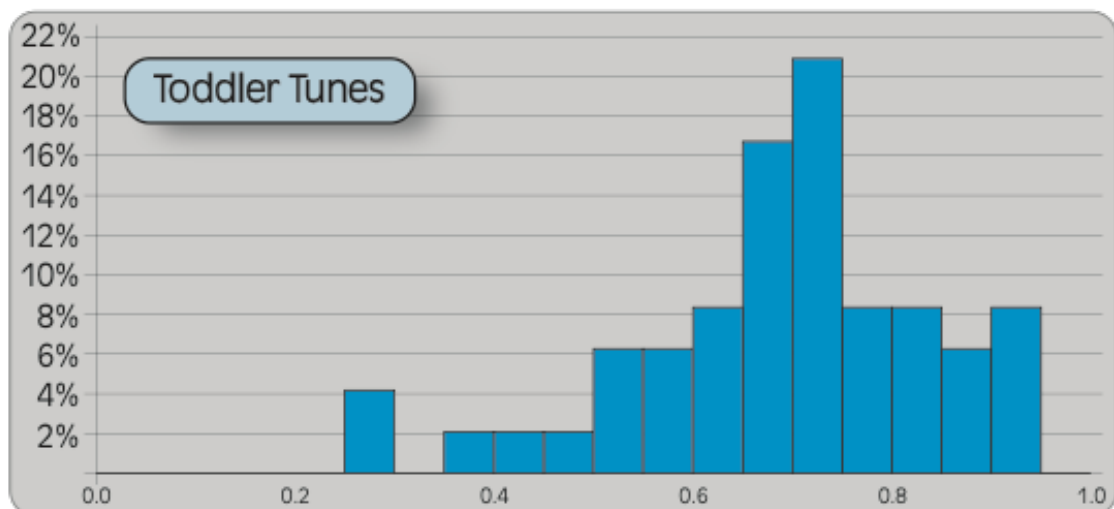
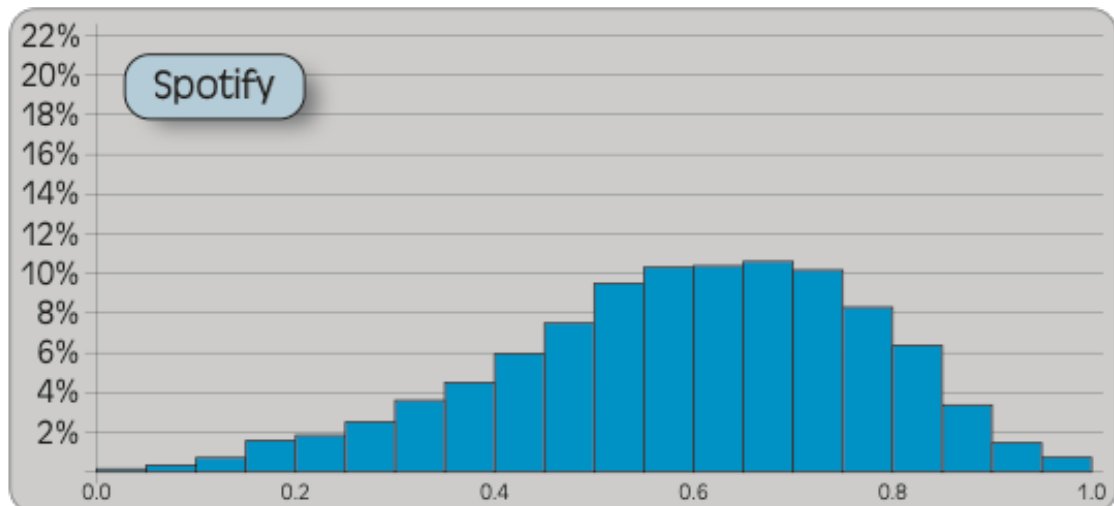
Track	Energy	Danceability	Happiness	Loudness 9dB)	Acousticness	Instrumentalness	Liveness	Speechiness
Shotgun	74	67	75	-5	29	0	24	5
Happier	79	69	67	-3	19	0	17	5
Youngblood	85	60	15	-5	2	0	12	46
Blank Space	70	76	57	-5	10	0	9	5
My My My!	46	70	48	-8	0	0	5	8
Can We Dance	84	64	55	-5	0	0	23	5
Don't You Worry 'Bout A Thing	83	62	57	-4	2	0	12	9
Uptown Funk	61	86	93	-7	1	0	3	8
Can't Stop the Feeling	83	67	70	-6	1	0	10	7
Better When I'm Dancin'	79	76	87	-7	53	0	16	3
Happy Now	74	50	46	-5	58	0	7	5
Friends Are Family	90	59	95	-4	0	0	8	26
What Makes You Beautiful	77	73	87	-2	1	0	9	7
Think About You	56	85	79	-6	5	0	22	7
All Star	86	73	78	-6	3	0	8	3
I Like To Move It	79	84	95	-5	43	0	10	4
Sunshine	82	52	85	-6	2	0	26	7
Roar	77	55	46	-5	0	0	35	4
I'm a Lady	69	61	25	-5	4	0	19	12
A Friend Like You	75	78	81	-6	32	0	11	18
Don't Wanna Know	61	78	42	-6	34	0	10	7
Brave	84	55	76	-4	1	0	4	5
no tears left to cry	71	70	35	-6	4	0	29	6
Change the World	89	46	43	-4	0	0	12	6
Freedom	56	43	61	-6	40	0	14	7
Y.M.C.A.	91	71	88	-6	0	0	5	4
Lips Are Movin	82	77	95	-5	5	0	11	5
This Is Me	70	28	10	-7	1	0	4	19
Every Girl's a Super Girl	91	74	83	-4	3	0	5	4
How Far I'll Go	56	32	13	-10	12	0	7	40
Try Everything	61	70	48	-5	3	0	8	3
Boom Clap	91	66	58	-2	15	0	19	8
High Five	63	65	51	-6	17	0	6	10

Track	Energy	Danceability	Happiness	Loudness 9dB)	Acousticness	Instrumentalness	Liveness	Speechiness
Cool Kids	67	72	79	-6	4	0	12	3
2002	68	70	60	-3	4	0	14	12
Cheap Thrills	70	63	73	-6	5	0	9	10
Scream	72	72	88	-7	14	0	36	3
Wings	88	74	54	-3	0	0	28	13
ABC	69	74	95	-12	52	0	12	4
Cheerleader	68	78	59	-6	14	0	14	3
In My Mind Part 3	87	68	23	-3	6	0	5	18
On Top Of The World	93	63	76	-6	9	0	9	15
Green Light	72	59	25	-8	2	0	9	10
They Don't Know	71	67	71	-7	0	0	14	28
Don't Leave Me Alone	74	66	48	-5	12	0	12	5
You're My Best Friend	83	58	56	-5	14	0	12	3
Falling To Pieces	70	65	36	-6	1	0	22	3
Havana	52	76	39	-4	18	0	13	3
Finesse	80	74	94	-5	1	0	2	7
Barbie Girl	95	81	96	-6	1	28	22	4
Échame La Culpa	89	73	65	-4	3	0	9	4
Baby, You Make Me Crazy	65	52	54	-8	1	0	17	9
Rise	78	69	67	-5	32	0	20	3
I'm A Believer	98	51	93	-2	2	0	26	7
Faith	87	74	95	-4	12	0	7	17
Good Time	88	56	63	-4	3	0	61	16
Last Friday Night (T.G.I.F.)	81	65	76	-4	0	0	67	4
Don't Wanna Know	61	78	42	-6	34	0	10	7
Meant to Be	78	64	58	-6	5	0	8	9
Think Before I Talk	60	77	53	-6	36	0	15	15

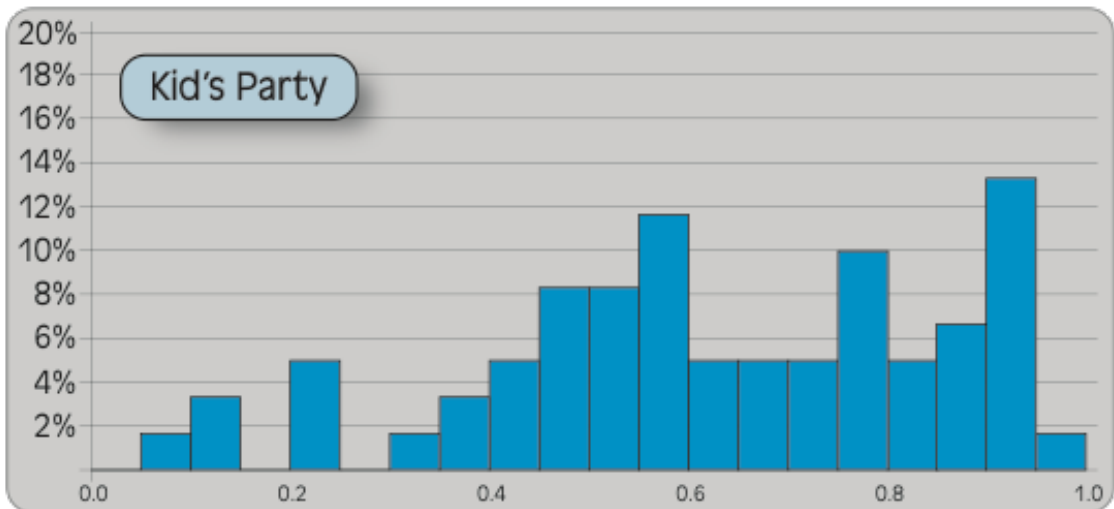
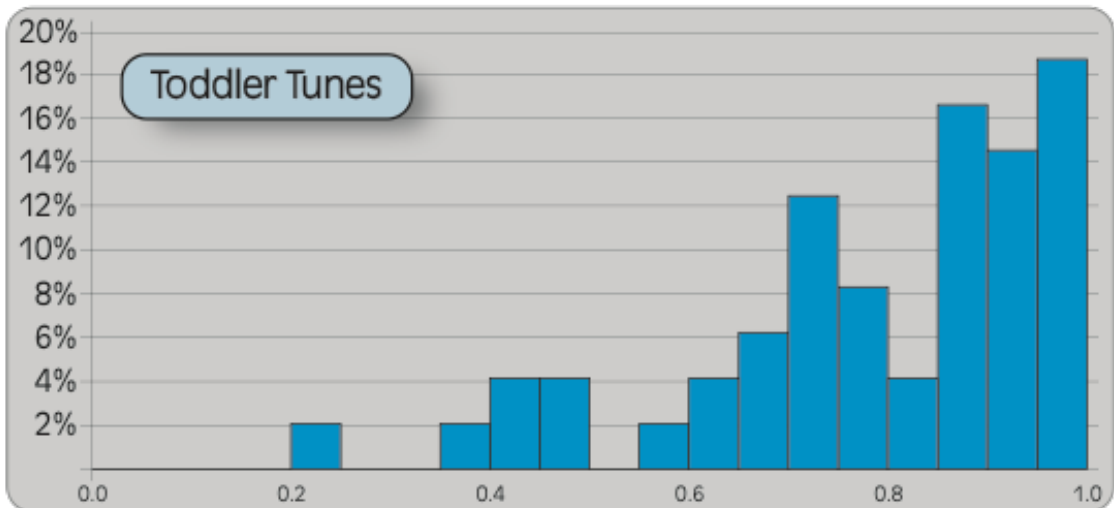
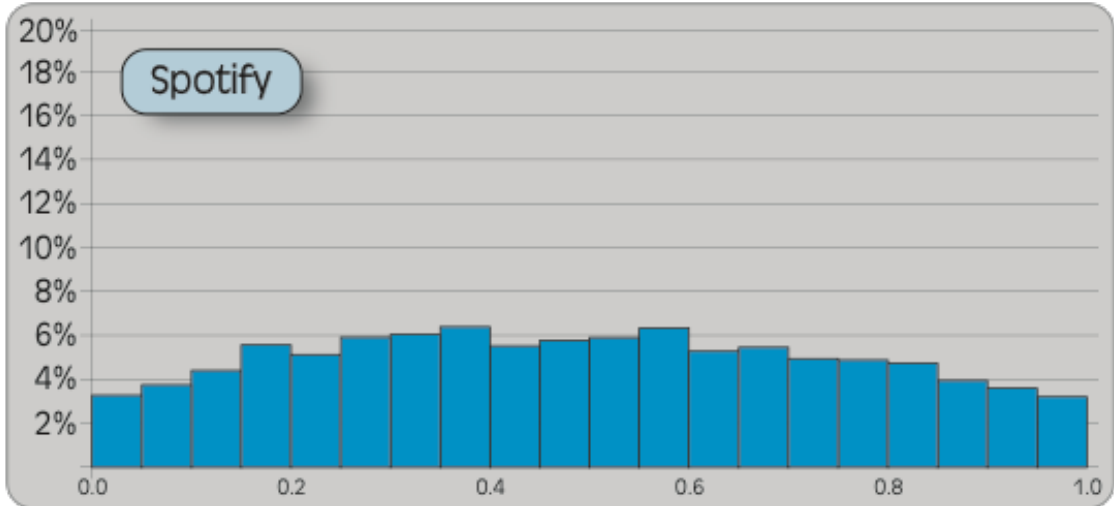
9d Appendix d

Playlist Comparison Histograms

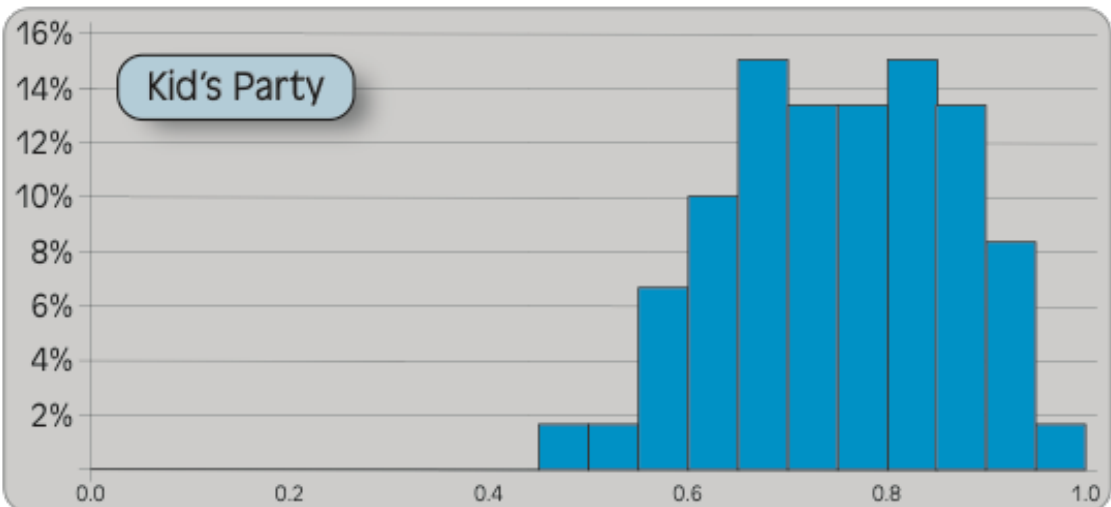
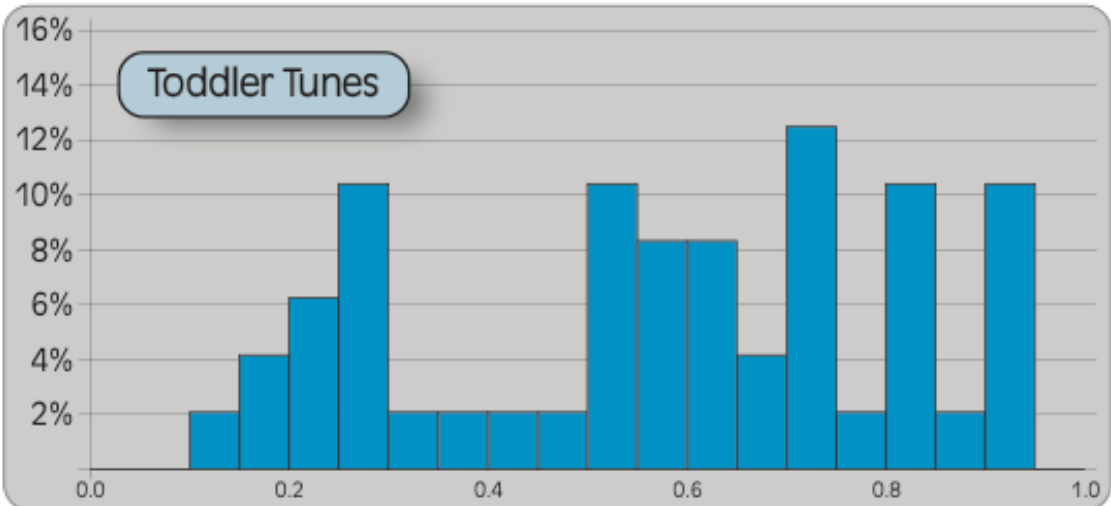
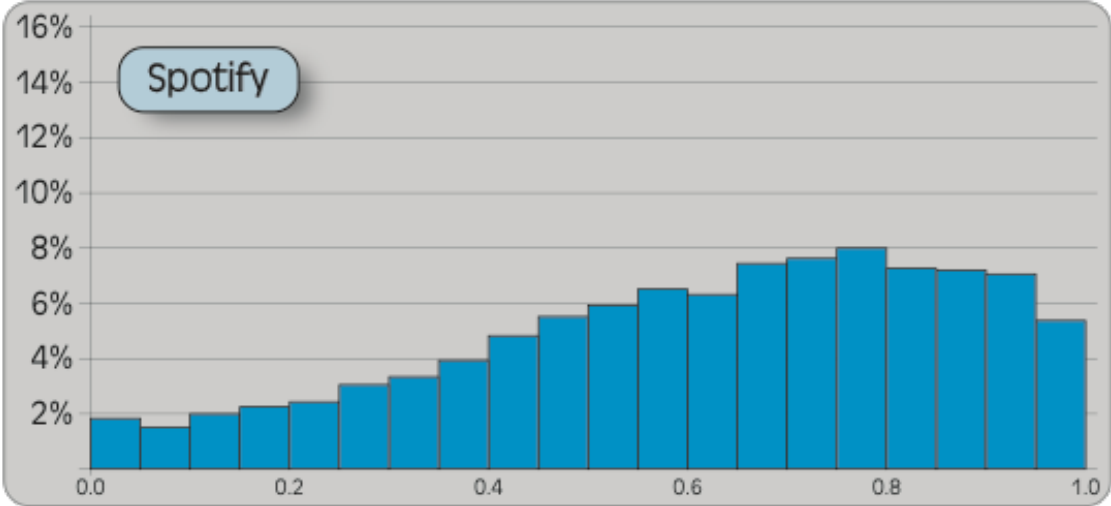
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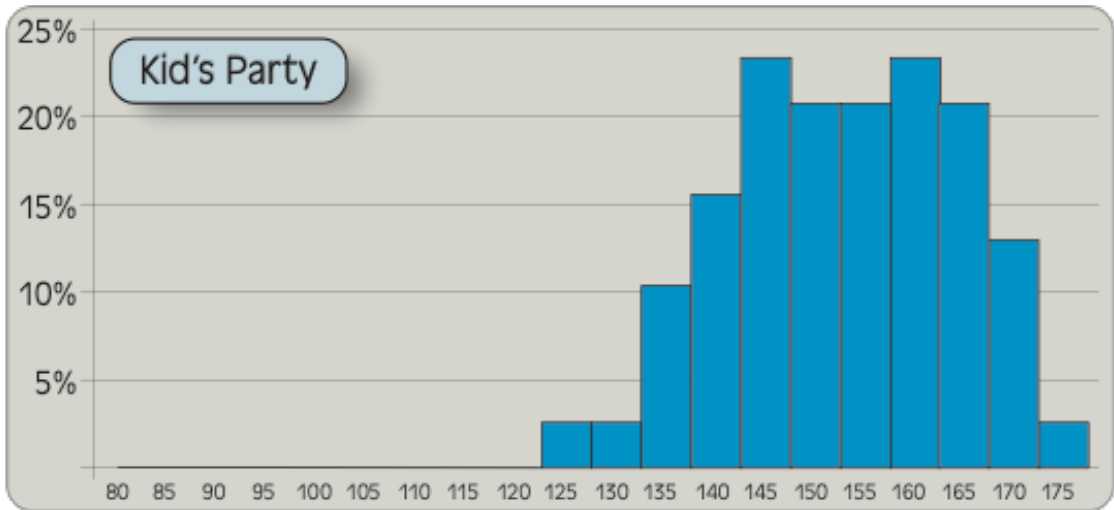
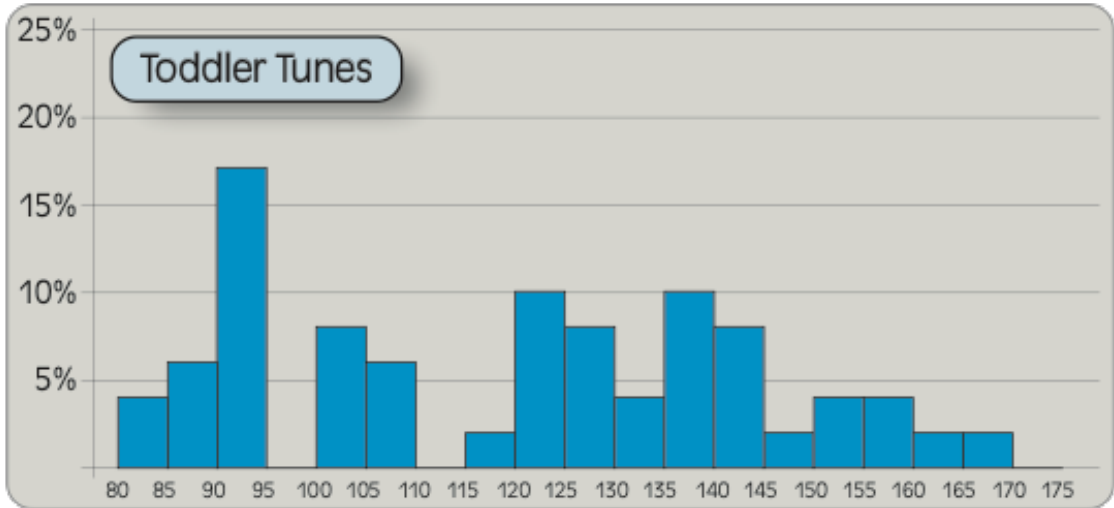
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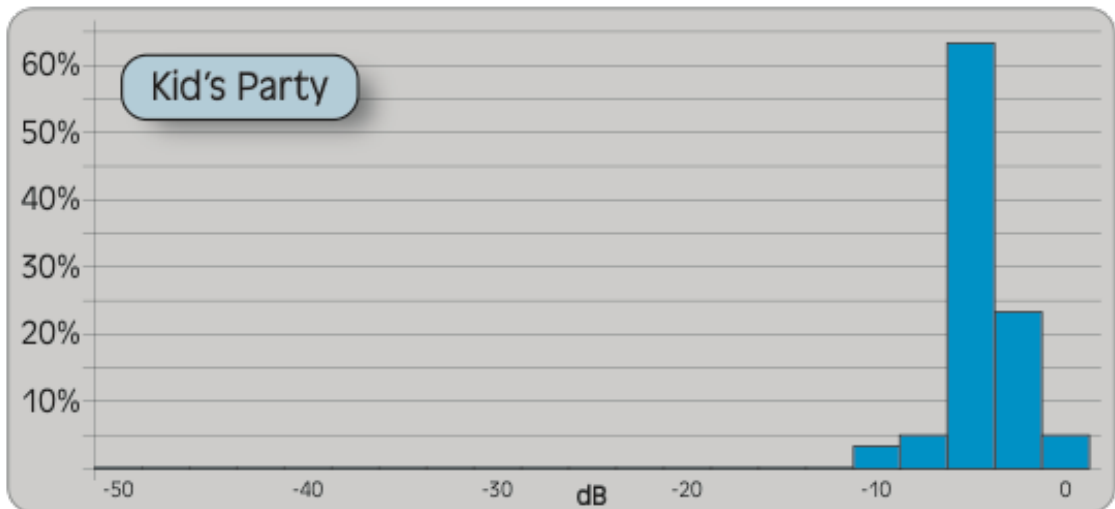
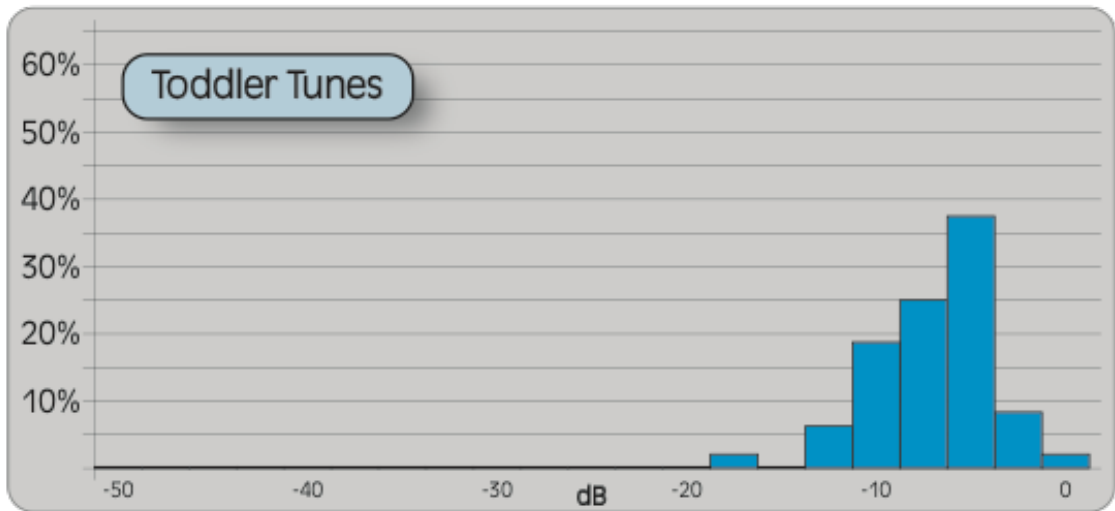
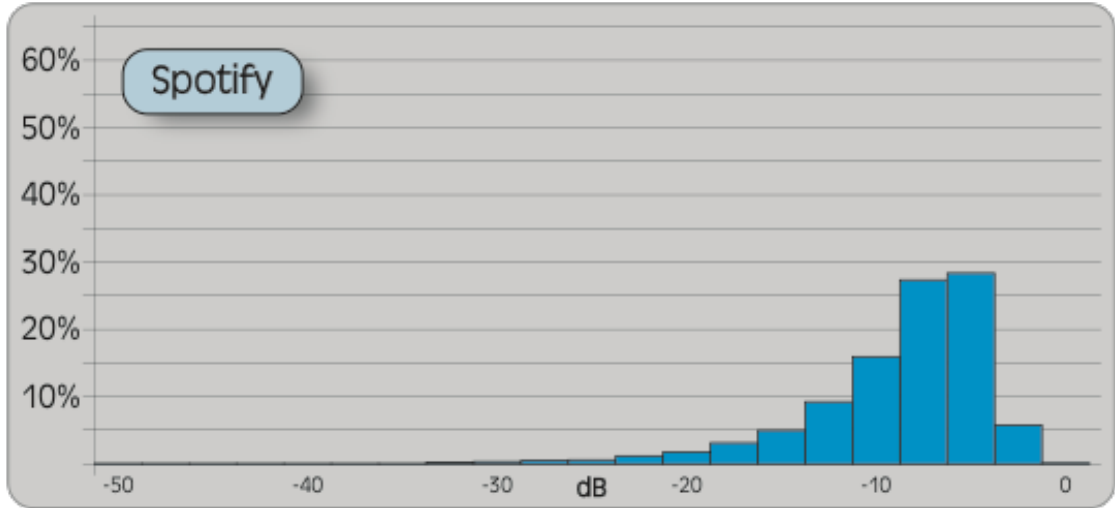
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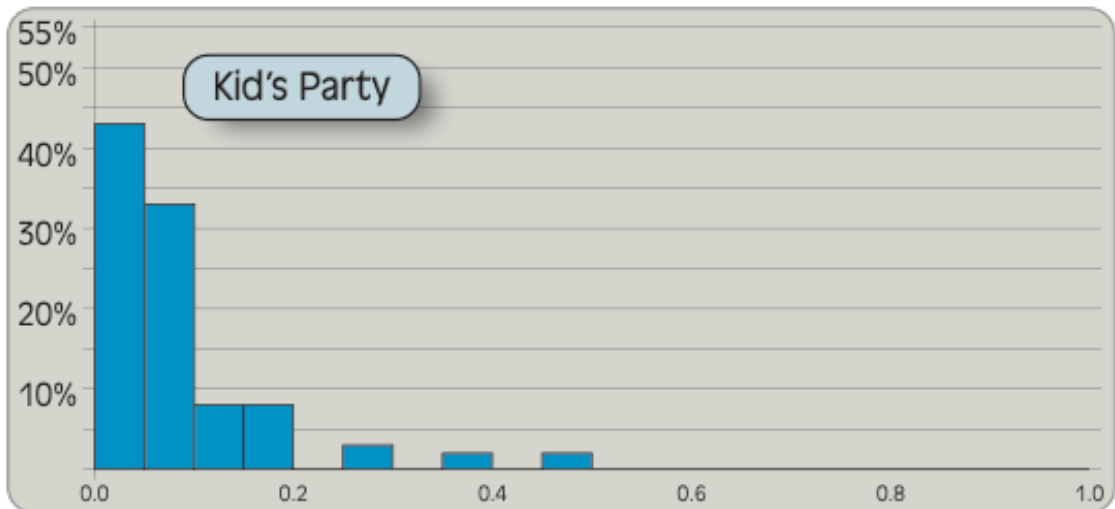
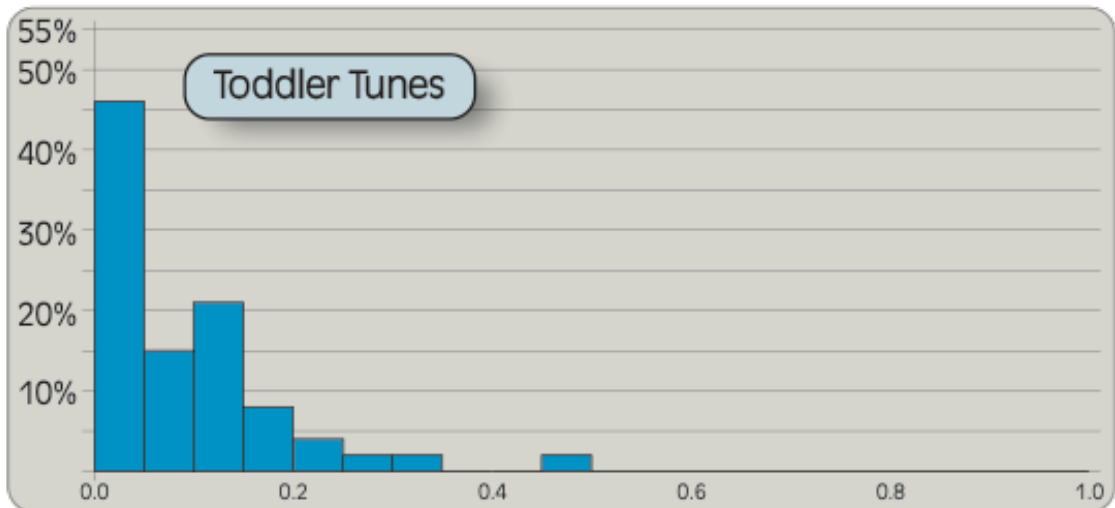
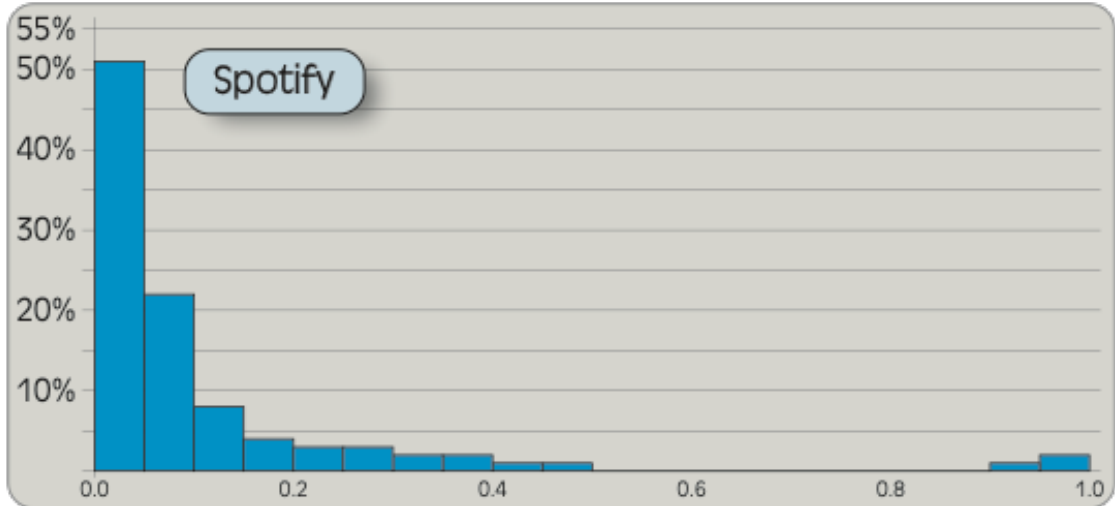
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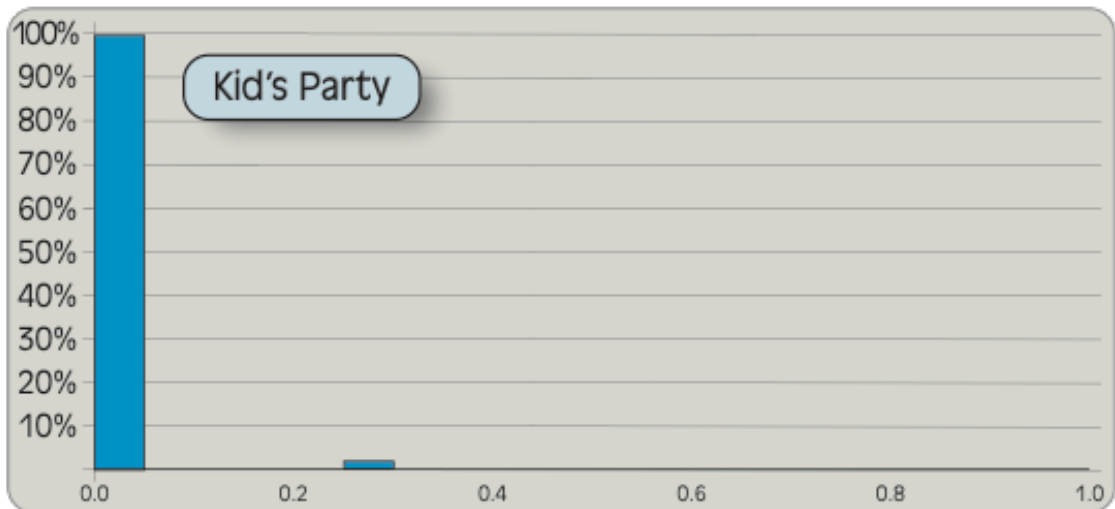
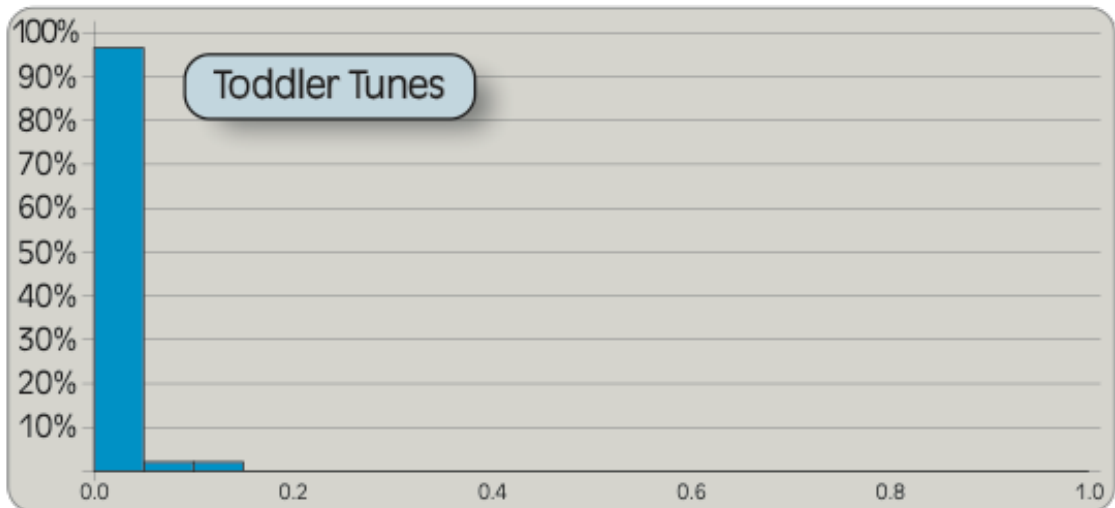
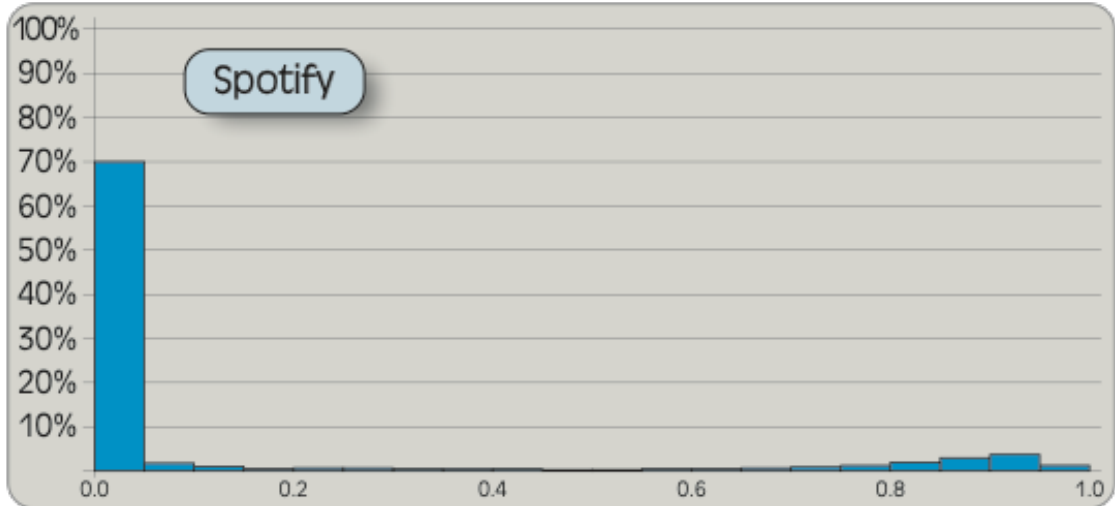
Loudness



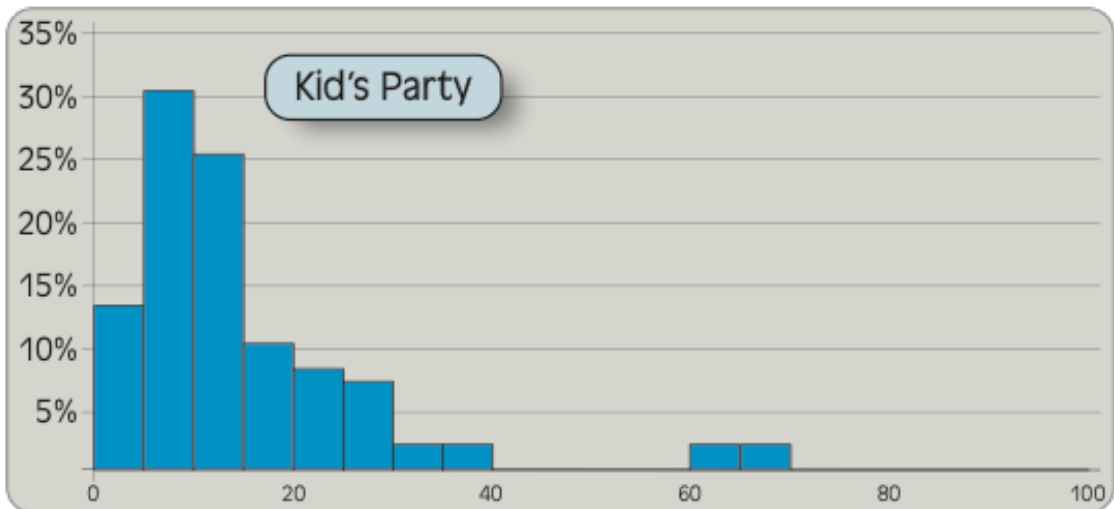
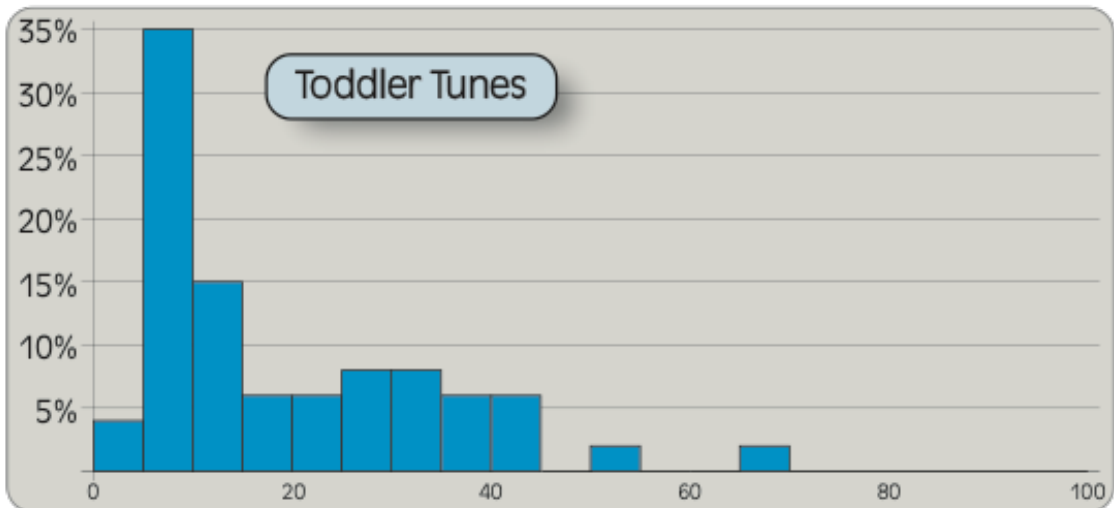
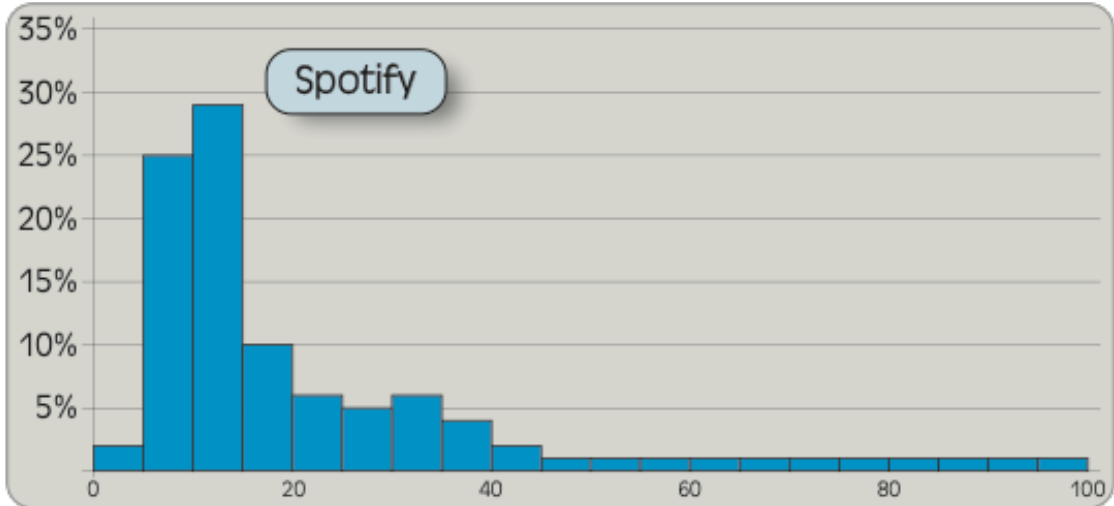
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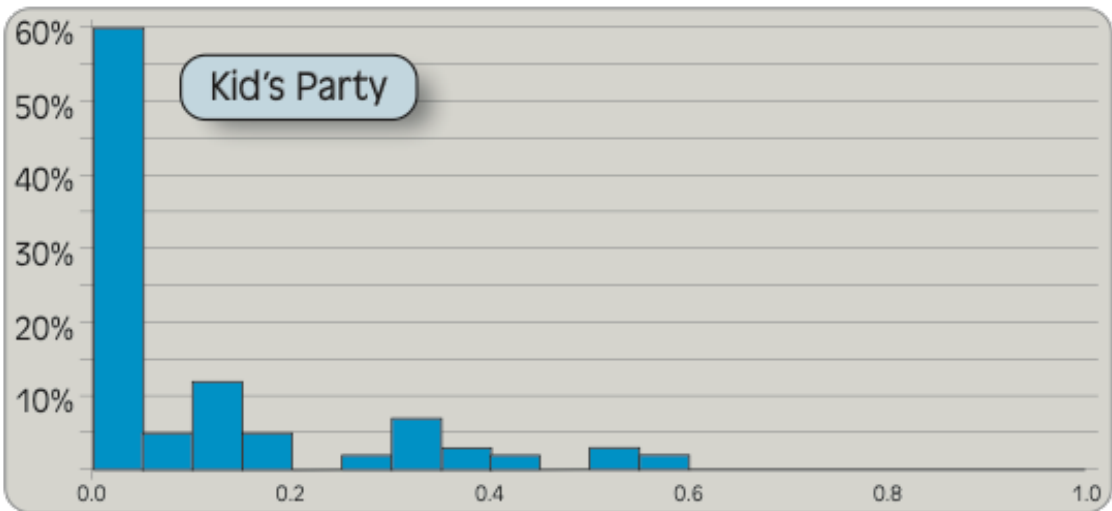
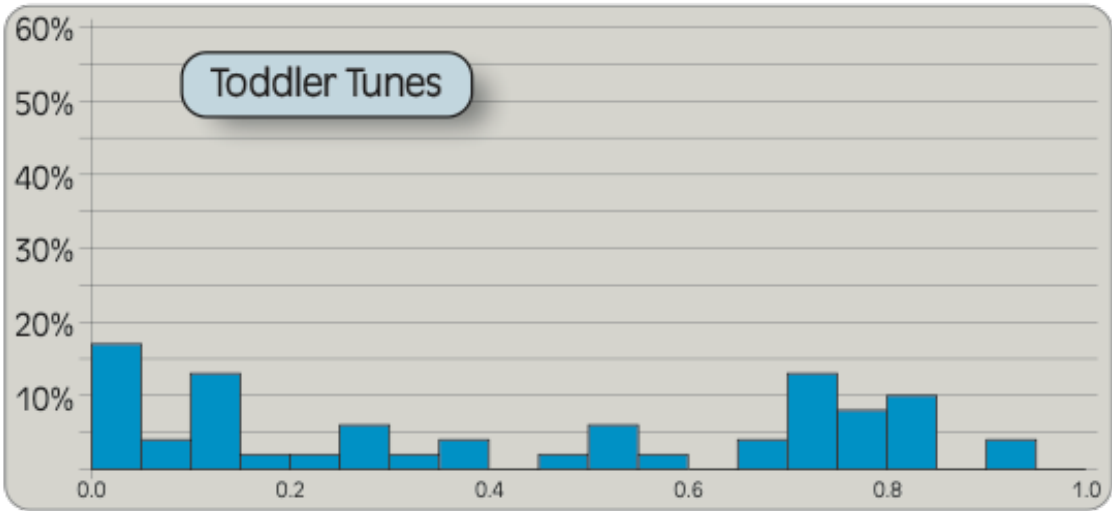
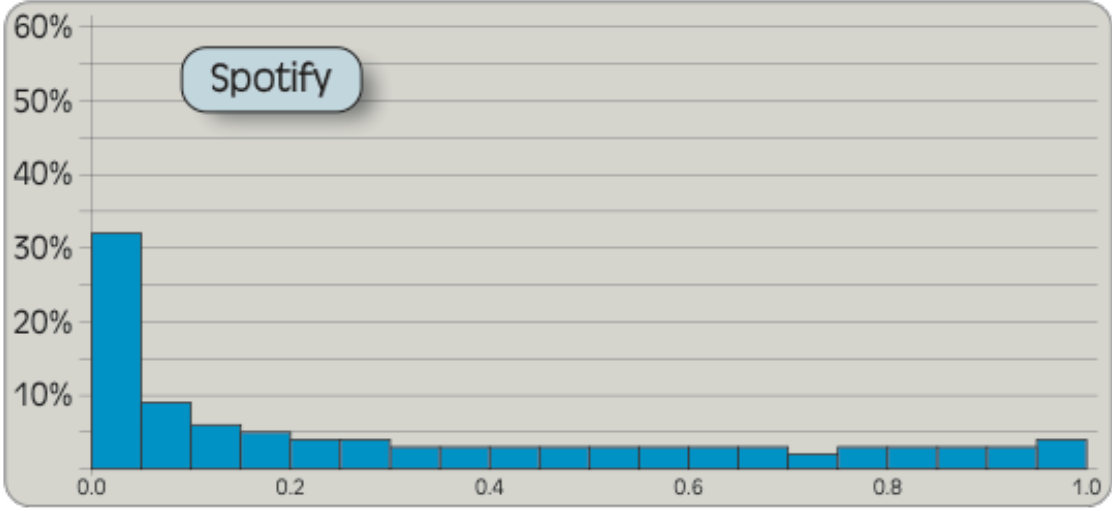
Instrumentalness



Liveness



Acousticness



9e Appendix e

Bumpletrunk Song Statistics

Song	Beats per minute (bpm)	Length (min:sec)
Counting Slow	100	1:58
Under The Sea	115	2:12
The Travelling Song	119	2:55
Let's Dance	120	2:12
Tidying Up	125	2:56
Rainbow	129.5	2:09
Tell Me A Snory	127	2:49
Bath Time	140	3:17
The Counting Song	150	2:57

Average BPM = 125 (Toddler Tunes = 121)

Average length = 2:32 (Toddler Tunes = 1:58)

9f Appendix f

Bumpletrunk Song Lyrics

9f.1 The Counting Song (& slow version)

We're going to play 'The Counting Song'
Let's all join in and sing along
We'll help you learn to count from 'one'
Right up to 'ten'

We're going to have a lot of fun

One, two, three, four, five,
Six, seven, eight, nine, ten,

One, two, three, four, five,
Six, seven, eight, nine, ten,

How many noses on your face?	<i>one</i>
How many legs to run a race?	<i>two</i>
How many wings does a triplane need?	<i>three</i>
How many hooves on a galloping steed?	<i>four</i>
How many senses do we use?	<i>five</i>
How many strings to play the blues?	<i>six</i>
How many colours in a rainbow sky?	<i>seven</i>
How many shoes would a spider buy?	<i>eight</i>
How many lives does a cat possess?	<i>nine</i>
What about the last number? Take a guess...	<i>ten</i>

One, two, three, four, five,
Six, seven, eight, nine, ten,

One, two, three, four, five,
Six, seven, eight, nine, ten,

9f.2 Under The Sea

Swim with me through the wild blue sea
Take a ride on the jellyfish journey
Come with me, discover my friends
In a magical world where the tide never ends

Lurking in the dark, his eyes so black
The watchful shark, a fin on his back
Beneath the sand of a bay with majestic wings
Lies the sleepy stingray, take care, she stings!

Swim with me through the wild blue sea
Take a ride on the jellyfish journey
Come with me, discover my friends
In a magical world where the tide never ends

Clinging to the rocks nestled in its shell
The oyster loiters, safe from the swell
The seahorse glides above the ocean floor
The scurrying crab heads to the shore

Swim with me through the wild blue sea
Take a ride on the jellyfish journey
Come with me, discover my friends
In a magical world where the tide never ends

We've seen eels and seals all looking for meals
Enormous whales with tails and giant sea snails
We've come to the end, with a twirl and a swish
I see a star, make a jellyfish wish!

9f.3 The Travelling Song

Following the white line snaking on its way
Watching out for road signs and doing what they say
Driving over bridges looking down below
Tooting through the tunnel all the lights aglow

Are we there yet? It's not too far to go
Are we there yet? The journey's been so slow
Are we there yet? It's just around this bend
Are we there yet? We're nearly at the end

Can you see the sea? Can you see the sky?
Can you see the mountain? Let's all play I spy
Can you see a reindeer? Can you see a moose?
Can you see an elephant? Can you see a goose... on the loose?

Are we there yet? It's not too far to go
Are we there yet? The journey's been so slow
Are we there yet? It's just around this bend
Are we there yet? We're nearly at the end

Bicycles have two wheels, there are four wheels on a car
You'll find six wheels on some lorries, some have more by far
If I had my pick of transport, there's no doubt in my mind
A one-wheel unicycle with a strong wind from behind

Are we there yet? It's not too far to go
Are we there yet? The journey's been so slow
Are we there yet? It's just around this bend
Are we there yet? We're nearly at the end

Are we there yet? Are we there yet?
Are we there yet? Are we there yet?
Are we there yet? Are we there yet?
Are we there yet? Are we there yet?

9f.4 Rainbow

Red, Orange, Yellow, Green, Blue, Indigo, Violet
Look outside up to the sky
Red, Orange, Yellow, Green, Blue, Indigo, Violet
A multi-coloured lullaby

Rainbow! Rainbow!
Seven colours in a row
Rainbow! Rainbow!
Come outside and watch the show

Red like a fire engine rushing down the street
Or a juicy, ripe tomato, so very good to eat
Orange like a traffic cone to tell you where to drive
Or a crunchy, fresh carrot, to help you grow and thrive

Next comes yellow like the sun far away
Or the yolk inside an egg that the chicken laid today
Green like a frog, hopping all around
Or a tasty slender bean, growing from the ground

Red, Orange, Yellow, Green, Blue, Indigo, Violet
Rainbow arching overhead
Red, Orange, Yellow, Green, Blue, Indigo, Violet
A panoply of cosmic thread

Blue like the sky when there's not a cloud in sight
Indigo's the colour of the ocean at night
Violet a bunch of grapes hanging on the vine
That's the seven colours all strung out in a line — it's a...

Rainbow! Rainbow!
Seven colours in a row
Rainbow! Rainbow!
Come outside and watch the show

Red, Orange, Yellow, Green, Blue, Indigo, Violet
Look outside up to the sky
Red, Orange, Yellow, Green, Blue, Indigo, Violet
A multi-coloured lullaby

9f.5 Bath Time

I know a duck, Batholomew King
Who loves to go adventuring
In his waterproof, yellow coat
Hops in the bath and starts to float

Chorus

Wash yourself head to toe
Rub and scrub until you glow
A friendly duck to be your guide
Batholomew King is at your side

Batholomew King splashes through your hair
Brown or black, red or fair
Behind your ears, under your chin
Turn and give a cheeky grin

Chorus

Batholomew King paddles down the tub
It's time to give your arms a scrub
At the end, stop and linger
Take your time with every finger

Chorus

Batholomew King swims in the breeze
He's dived right down to both your knees
Rub-a-dub, clean your feet
All ten toes, scrubbed and neat!

Chorus

I know a duck, Batholomew King
With his help you've washed everything
Now float around and have a rest
Before drying off and getting dressed

Chorus

9f.6 Let's Dance

Let's dance *I'm here to show you how*
Let's dance *I'll show you right now*
Let's dance *Come on, you're in luck*
Let's dance *We're going to dance like a duck*

Swing your elbows in and out
Flap your arms all about
Now waggle your knees if you dare
Dive for a fish with your tail in the air
Everybody STOP!
It's the Waterfowl Waddle, it's the Mallard Bop

Let's dance *Do the Mallard Bop*
Let's dance *Do the Mallard Bop*
Let's dance *Do the Mallard Bop*
Let's dance *Do the Mallard Bop*

Let's dance *I'm here to show you how*
Let's dance *I'll show you right now*
Let's dance *This next one's really funny*
Let's dance *We're going to dance like a bunny*

Push out your tail and shake it around
Snuffle your nose, but don't make a sound
Now jump in the air and take a leap
Fall to the ground and land in a heap
Everybody STOP!
It's the Rabbit Boogaloo, it's the Bunny Hop

Let's dance *Do the Bunny Hop*
Let's dance *Do the Bunny Hop*
Let's dance *Do the Bunny Hop*
Let's dance *Do the Bunny Hop*

9f.7 Tell Me A Snory

I'll tell you a snory to send you to sleep
A king and a queen, trapped in the keep
A fire-breathing dragon, barring the way
A knight in shining armour, saving the day

I'll tell you a snory
I'll tell you a snory
I'll tell you a snory
Please tell me a snory

I'll tell you a snory to send you to sleep
Set in the future with robots that beep
Teleportation, our travel technique
Hop in our time machine, come back last week

I'll tell you a snory
I'll tell you a snory
I'll tell you a snory
Please tell me a snory

I'll tell you a snory to send you to sleep
A desert adventurer, driving a jeep
Sand dunes and cacti stretch onwards for miles
Villainous nomads with dastardly smiles

I'll tell you a snory
I'll tell you a snory
I'll tell you a snory
Please tell me a snory

I'll tell you a snory to send you to sleep
Lying awake, counting hundreds of sheep
I'd like you to travel to worlds in your mind
We can explore there — what will we find?

9f.8 Tidying Up

Visiting the man in the moon
A clear starry night, sometime in June
Bouncing around in very low gravity
Piles of moondust in every cavity

I was struck by the chaos, the state of upheaval
Space junk way back to the early medieval

Time to tidy
Time to put things away
Time to tidy
So we can find them another day

It seemed I'd arrived not a moment too soon
I turned and addressed the man in the moon
I said, 'Bernard, please listen'
'Help me to tidy and make it glisten'

'Let's put all your things where they belong'
'While we clean we can sing this song'

Time to tidy
Time to put things away
Time to tidy
So we can find them another day

At last we revealed a Sea of Tranquillity
Thanks to Bernard's uncanny ability
Then I heard him mutter
'It's good to be rid of all this clutter'

'It's great to have a crater to put my spaceship in'
'Where I know I'll find it later, to take it for a spin'

Time to tidy
Time to put things away
Time to tidy
So we can find them another day