



## The Effect of Hip-Hop Songs on Fat Burning Through Zumba Exercise

### Case Study: "Mic Drop" by BTS as Zumba accompaniment

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ABSTRACT	ARTICLE INFO
<p>This essay examines the correlation between hip-hop music and Zumba, with a specific focus on how the tempo of the music affects calorie burning and the overall workout experience. The study used a qualitative approach to examine the impact of participating in Zumba sessions with hip-hop genre music, namely "Mic Drop" by BTS, on calorie expenditure and exercise enjoyment. This investigation is based on current literature and audio-visual content available on YouTube. The results demonstrate that integrating fast-paced hip-hop music into Zumba workouts can burn roughly 1,440 calories each week. It is consistent with prior studies showing the beneficial impact of fast-paced music on heart rate and perceived physical exertion. Additionally, the research emphasizes the significance of choosing songs with appropriate tempos, such as hip-hop, to improve the exercise experience and facilitate more effective calorie expenditure during Zumba sessions. Nevertheless, it emphasizes the necessity for additional research to comprehensively comprehend music's influence on physical performance and physiological reactions during exercise. This study enhances our comprehension of the impact of music tempo on exercise motivation and outcomes by incorporating knowledge from academic literature and audio-visual materials available on platforms such as YouTube. This study provides a basis for future research and highlights the potential of using fast-paced music in Zumba exercise to maximize the advantages of physical activity.</p> <p>© 2022 Kantor Jurnal dan Publikasi UPI</p>	<p><b>Article History:</b> <i>Submitted/Received 30 Sep 2022</i> <i>First Revised 15 Oct 2022</i> <i>Accepted 30 Oct 2022</i> <i>First Available online 20 Nov 2022</i> <i>Publication Date 25 Nov 2022</i></p> <p><b>Keyword:</b> <i>Korean Hip-Hop music,</i> <i>Zumba exercise,</i> <i>fat burning,</i> <i>MIC drop.</i></p>

## 1. INTRODUCTION

According to a study published in the journal "Psychology of Music" in 2017, energetic and rhythmic rap/hip-hop music is associated with increased enthusiasm (Jones *et al.*, 2017). This is why many people turn to rap/hip hop as a genre of music for exercise. We found that listening to fast-paced music while exercising resulted in the highest heart rate and the lowest perceived physical effort awareness, compared to those who did not listen to music.

Another study was also presented by Ljubojevic *et al.*, (2014) entitled Effects of Zumba fitness program on body composition of women with the subject of 12 women aged 25-35 years. Zumba training was conducted for eight weeks, 60 minutes for each exercise. From this study, it was found that with Zumba training, the average body weight decreased by 0.77 kg, fat presentation by 1.05%, fat mass by 1.01 kg and fat-free mass (which consists of muscle, bone, tissue, water and other non-fat mass) increased by 0.22 kg. The amount of body water increased by 0.15 kg. A previous study from the University of Osnabrück, Germany, also found that the best music for exercise has one star (Schmidt & Walter, 2015). Research published in Frontiers in Psychology states that playing faster-tempo music makes exercise feel lighter.

Zumba exercise is a combination of Latin music and dance with aerobic steps, so the movements performed are a combination of styles from samba, cumbia, merengue, salsa, reggae, hip-hop, mambo, rumba, flamenco, and calypso dances. Because the movements created feel more fun (Trieha, 2014). Researchers found that Zumba burns an average of 369 calories or about 9.5 kcal per minute (Anggraini, 2022). The average heart rate is 154 beats per minute (bpm). This Zumba exercise is done 32-52 minutes in one exercise. When practising Zumba gymnastics, you will sweat and burn more calories. Zumba training three times a week in one month can help lose 3 kg of weight (Luetzgen *et al.*, 2012). This study highlights the relationship between hip-hop songs, specifically the song MIC Drop as Zumba accompaniment, and its impact on fat burning through Zumba exercise.

## 2. METHODS

We use qualitative methods to study literature online and gather relevant materials and sources from websites and academic journals. We employed a methodology that involved formulating the problem and research objectives, subsequently identifying issues within the research topic, and establishing the purpose of the study. The data for this research was sourced from several internet platforms. In order to collect data via the internet, we seek all the requisite information about the research subject and societal phenomena that take place online.

## 3. RESULTS

Music consists of several elements, namely melody, harmony, rhythm, and timbre. Music is a type of intuition phenomenon; it is an art form to create, improve, and present (Juwita, *et al.*, 2019). Music is a work of art in the form of sound in the form of a song or composition that expresses the thoughts and feelings of its creator through the main elements of music, namely rhythm, melody, harmony, and song form or structure and expression as a unit (Jamalus, 1988). The general definition of music is time in sound. Music is the sound received by each person and varies based on history, location, culture and one's taste (Wibowo, 2020).

Hip-hop is a form of musical expression that originated in the African American and Hispanic-American communities during the 1970s in New York City (Rhizky, 2020). Hip-hop music is also inseparable from rap music, a fast singing technique (Kayowanana *et al.*, 2022).

Cultural elements in hip-hop history include rap music, DJ music, beatbox techniques, breakdancing, and graffiti writing. At the same time, Rap music is closely related to Hip-Hop music, although Hip-Hop is not always Rap and vice versa. Initially, Hip-Hop music was just a Rap technique or singing fast with rhythm. Hip-Hop then developed into a culture. In addition to Rap, Beatbox singing techniques and DJ music are also known. *Hip-hop* can be defined as a music genre as it is today.

Hip-hop music began by recycling existing songs with DJ techniques, Rap, Sampling, and Beatbox to use Turntables and Drums. The early generation of Hip-Hop musicians, such as Grandmaster Flash, The Sugarhill Gang, The Furious Five, and DJ Kool Herc, began to emerge. The revival of hip-hop music started in the 80s when hip-hop music became internationally famous. Other Hip-hop genres, such as R&B, Rock, and Pop, also influence Hip-Hop and rock. The golden generation of Hip-Hop in the 80s gave rise to famous Hip-Hop musicians such as LL Cool J, Run-DMC, A Tribe Called Quest, Beastie Boys, and Public Enemy. Hip-hop began to become famous all over the world. In Indonesia, the history of Hip-Hop was also first popular in the 90s through local musician Iwa K (Fanany & Damajanti, 2017).

*Sports* are activities that train the human body to be healthier and more robust, both physically and mentally (Salahudin & Rusdin, 2020). Zumba is an aerobic sport partly derived from aerobic movements (Indreswari, et al., 2020). The basis of the Zumba gymnastics movement is dance and aerobic gymnastics, so it falls into the dance fitness category (Amir & Baharuddin, 2020). Zumba is favored because it has many advantages, such as burning and tightening muscles (Alizah & Saefudin, 2019). Besides that, the type of music and Zumba dance that has a pleasant tone can increase the production of endorphins in the body (Sternlicht, et al., 2013), making your body active and energetic (Sanders & Prouty, 2012), thus burning more calories (Yaduchand & Praveen, 2018).

The history of Zumba Gymnastics was first performed by Alberto Beto Perez from Columbia, South America (2001). The word "Zumba" comes from the Columbia language, which is commonly referred to as "Zum-zum," which means "Fast Movement" (Alizah & Saefudin, 2019). The history of Zumba gymnastics began with a unique situation where, one day, Beto wanted to teach aerobics (Yaduchand & Praveen, 2018). However, that day, it turned out that he did not bring the CD (Compact Disc) Aerobic exercise he usually did. He did not lose his mind, and then Beto took the initiative to take all the CDs in his car, including Latin, salsa, merengue, rumba, and reggaeton genres. Then Beto tried to make gymnastic movements mixed with Latin dance movements in the aerobics class.

Moreover, after the gymnastics class ended, it turned out that he got a positive response from his students. Then, the history of Zumba was finally created, and Perez patented this Zumba class in 2001 (Sadlier, 2020). Since then, Zumba has grown in 125 countries (Benham, et al., 2013) and has become an industry that provides dance training, instructor training, games, and Zumba clothing (Inouye, et al., 2013). The types of dance used are increasingly varied, including Latin music, Samba, Aqua Zumba, Cumbia, Merengue, Salsa, Reggae, Hip-hop, Mambo, Rumba, Flamenco, and Calypso.

Zumba was popular in 2003 in America and was brought to Indonesia in 2009, but many Indonesians have attended Zumba classes since the beginning of 2012. The benefits of Zumba exercise One of the benefits of this activity is that it burns calories and fat, can help you lose weight, and can help you maintain or shape the body of your dreams (Anggraini, 2020). In addition, this zumba exercise can also improve coordination between your body members because of its dance-like movements, which can automatically help you increase or form body muscle mass. Body fitness will also be maintained through this Zumba exercise (Setianingsih, et al., 2019).

## 4. DISCUSSION

### 4.1 Song Analysis

BTS, the internationally acclaimed South Korean boy band, teamed up with Steve Aoki to produce "MIC Drop," a track that skillfully combines hip-hop and electronic dance music (EDM) genres. This song not only showcases their triumph and perseverance in challenging circumstances but also makes a strong statement about their achievements. Debuted on November 24, 2017, "MIC Drop" has come to represent BTS's rapid ascent to stardom and their unwavering self-assurance.

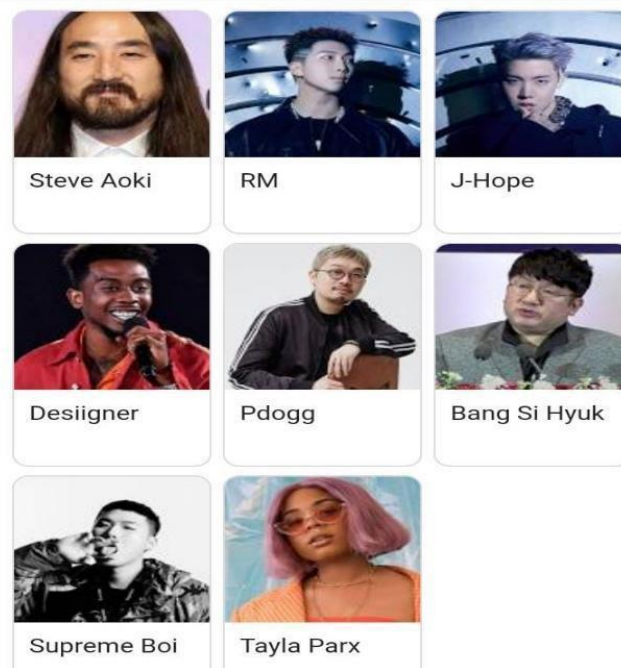
"MIC Drop" is distinguished by its confident and stylish attitude, lively pace, and dynamic atmosphere, all of which reflect an apparent American influence. The song is recorded in both Korean and Japanese, showcasing BTS's international appeal. "MIC Drop" has a tempo of around 170 beats per minute (BPM), which classifies it as a Presto tempo, signifying a breakneck speed. The composition is organized in the key of F# Major and adheres to a six-chord scale, which enhances its energetic and vibrant character. The song's duration, which is around 3 minutes and 58 seconds, guarantees that it engages listeners from beginning to end.

The lyrics of "MIC Drop" exalt BTS's achievements and serve as a resolute retort to those who questioned their abilities. The act of lowering the microphone after a performance serves as a symbol of their unwavering self-assurance and aggressiveness. Throughout the song, BTS establishes their supremacy in the music industry, highlighting their progression from underdogs to worldwide icons. Phrases such as "Have you observed my bag?" Have you observed my bag? The abundance of trophies serves as a monument to their hard work and dedication, highlighting their countless distinctions and successes.

The partnership between BTS and Steve Aoki, an American DJ and record producer, brings a distinct element to the song "MIC Drop." Aoki's proficiency in electronic dance music complements BTS's hip-hop style, resulting in a combination of genres that attracts a diverse audience. In addition, the participation of other highly skilled individuals, such as Desiigner, Pdogg, Tayla Parx, Supreme Boi, and Bang Si-hyuk, enhances the song's depth and intricacy.

Steve Aoki's work as the "MIC Drop" producer demonstrates his adeptness in flawlessly integrating diverse musical styles. The partnership between him and BTS showcases a cultural interchange that surpasses geographical limits, reinforcing the group's worldwide influence. Pdogg's multifaceted function as a record producer, composer, and songwriter significantly influences the song's sound and meaning. The collaboration among these innovative intellects yields a potent and enthralling composition that strikes a chord with global audiences.

"MIC Drop" by BTS featuring Steve Aoki goes beyond just a mere song; it serves as a declaration of victory, perseverance, and confidence. "MIC Drop" captures BTS's path to stardom and their unwavering self-assurance through its blend of hip-hop and EDM, dynamic musical components, and empowering lyrics. BTS's ongoing success in surpassing boundaries and reshaping the international music scene is exemplified by their song "MIC Drop," which serves as a monument to their exceptional skill and determination.



**Figure 1.** Composer and Producer  
(Source: Google)

#### 4.2 The Impact of the MIC Drop Song on Zumba

Zumba is a form of physical activity that involves dancing to lively music ([Alizah & Saefudin, 2019](#)). Zumba incorporates both rapid and slow motions ([Donath, et al., 2014](#)), as well as varying levels of intensity, resulting in a higher calorie burn compared to dances that maintain a consistent pace. Zumba enhances muscle hypertrophy and improves muscular strength ([Indreswari, et al., 2020](#)). Engaging with lively music might result in increased calorie expenditure as your body instinctively synchronizes its movements with the rhythm. It is typical for lively music to evoke excitement and a desire to dance. Listening to music enhances physical movement ([Higuti, et al., 2021](#)). Consequently, the amount of calories expended will be more significant. Zumba exercises require songs from the hip-hop genre to ignite passion and effectively burn calories in the body.

Hip-hop songs typically have a rapid tempo, as shown by tracks like "MIC Drop," with a tempo of 170 BPM, or "Presto," which denotes a rapid pace. If the Mic Drop song is played during a Zumba session, it would be highly appropriate as the song has a rapid tempo, which aligns well with the energetic movements of Zumba exercises. The Mic Drop song's tempo might intensify our spirit, resulting in increased fat burning. Zumba workouts, including hip-hop music, have the potential to mitigate stress and elicit the release of endorphins, which can alleviate pain and promote a sense of positive vitality ([Gurusthya, 2019](#)). If the workout regimen consists of 160 minutes per week, it can be distributed evenly over four days, with a minimum duration of 40 minutes per day. By engaging in 40 minutes of Zumba exercise each day, one can effectively burn approximately 369 calories. Therefore, if this exercise routine is repeated four times, it will result in the burning of a total of 1,440 calories. We utilize Zumba fitness video resources on the social media platform YouTube, namely on a YouTube channel named Sunny Funny Fitness.



**Figure 2.** Mic Drop zumba video reference  
(Source: Sunny Funny Fitness)

The provided video is a Zumba workout session featuring the song "Mic Drop" by BTS. Sunny created the choreography, and they performed a dance cover of BTS. The duration of this video is 4 minutes and 5 seconds. To implement the 160-day zumZumbaek approach, we can watch this video 10 times. Our Zumba exercise session lasts for 40 minutes and 50 seconds, including breaks. During this period, we burn around 369 calories. If we repeat this activity four times a week, we will burn a total of 1,440 calories.

Prior studies have demonstrated that hip-hop music, characterized by its rapid rhythm, can enhance enthusiasm and energy levels during physical activity (Ljubojevic et al., 2014). Furthermore, a study conducted by the University of Osnabrück in Germany indicates that music characterized by a pronounced rhythm can create the perception of reduced effort during physical activity. This study aligns with research that suggests that listening to fast-paced music during exercise leads to the maximum heart rate and the lowest felt physical exertion (Ardigò, 2020).

Zumba, a physical activity that integrates Latin dance movements with step aerobics, has proven to be successful in both calorie-burning and enhancing physical fitness (Luetzgen, et al., 2012). Varying the speed of movements throughout a workout can increase the intensity and result in a higher calorie burn compared to dances that maintain a consistent pace (Cavanagh, et al., 1998). Utilizing hip-hop music, such as MIC Drop, as a complement to Zumba might enhance the beneficial outcomes of the workout. The song "MIC Drop" has a rapid tempo of 170 beats per minute (BPM) and exudes high energy, making it well-suited for the requirement of quick and consistent movements in Zumba. Therefore, utilizing this song can enhance the energy and intensity of physical activity and expedite the process of burning fat. Zumba movements have other advantages, such as enhancing the body's endorphin generation, resulting in stress reduction and heightened positive energy. Therefore, the fusion of hip-hop music with Zumba movements facilitates the process of burning fat and enhances overall physical and mental health. Nevertheless, it is essential to note that this study was dependent on internet-based analysis and data obtained from diverse web sources.

## 5. CONCLUSION

Hip-hop music and Zumba share a connection. Hip-hop music is characterized by its rapid tempo, but Zumba is a physical activity that blends dance moves with the musical beat. This study utilizes the song "Mic Drop" by BTS, which belongs to the hip-hop genre. Based on the findings of this investigation, engaging in Zumba sessions with hip-hop genre songs, namely the song "MIC Drop," can result in burning around 1,440 calories in a week. This finding aligns with previous research indicating that listening to fast-paced music during exercise leads to a higher heart rate and a lower perception of physical effort. However, it is essential to highlight that this study offers a further understanding of the connection between music tempo and the body's response to exercise. These results imply that incorporating fast-paced music may be crucial for enhancing performance and comfort during physical activity. When engaging in Zumba fitness, which combines Latin dance music and movements with aerobic activity, choosing songs with a suitable tempo, such as hip-hop music, can enhance the exercise experience and increase the possibility for more efficient calorie burning. Nevertheless, additional investigation is required to comprehend the impact of music on physical performance and physiological responses during exercise. This study establishes a basis for comprehending the impact of music on enhancing exercise motivation and results, and it also serves as a driving force for future investigations.

## 6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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