# DNB311 Research Report on Salsa and Bachata



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### **Authenticity Statement**

This is to certify that to the best of my knowledge, the content of this report is my own work. This report has not been submitted for any subject or for other purposes. I certify that the intellectual content of this report is the product of my own work and that all the assistance received in preparing this report and sources have been acknowledged.

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### Background

The focus of this design solution is to aid in the learning, teaching, and practice of the partner dances of Salsa and Bachata. These source music's originates from the Dominican Republic and Cuba, with Afro-Cuban elements being cultivated into a dance in places like New York and Santo Domingo, (Susan V. Cashion, 2023). Heavily influenced by neighbouring countries of as well as South America other communities who have adopted these dances spanning from Europe to Australia, both styles heavily incorporate spontaneous and fluid communication through physical touch and comprehensive connection the to musical rhythm (Chiara Giovanni, 2022).



This is an area with a number of chances for improvement and innovation. As with any teaching and learning environment, there will always be inefficiencies and opportunities advancing, for with particularly an activity as intricate and multifaceted as partner dancing. Ranging from keeping rhythm with the music that determines dancers movements, to the fluid change of posture and isolated movements, any design solution would have far reaching prospects in fields like music, sports, and the arts.

### Aim

My aim for this design solution is to pinpoint a common problem or opportunity for improvement within the Salsa and Bachata experience and create an invention or system that eliminates the issue or assists in mastering it. From early research and personal experience in Salsa and Bachata dancing, early ideas have revolved around keeping track of the musical rhythm, enforcing proper frame, or improving spatical awareness. Sources like SalsaAsst, (Yudi Dong, 2017), and Dance Tracking and Pose Estimation, (Zhang, Liangliang, 2022), further reinforce the idea these are potential areas to investigate. Despite this, I strongly desire the input and experience of more students like myself, and especially that of teachers in these fields for a more conclusive direction for design.

### **Literature Review**

Though Bachata has only recently been developed and risen to prominence in the last 15 years, (Paul Cavanagh, 2023), salsa has a long and rich history that has engendered a number of literary sources over the years. Despite largely focusing on the societal and cultural significance and impact of these dances, there are a few resources which analyse the tactical and technical dynamics of theses dances, allowing for a greater design solution focus from reputable sources.

### Foundation

The concept of these dances and the foundation of most moves is relatively simple, "Salsa, as improvised in a club setting, is a partner dance where the lead provides physical cues to the follow who then responds by completing the requested move." (Rebecca Simpson, 2019). The Trust and ability to communicate between partners requires skills and education. Though these abilities vary greatly between leading and following, a few commonalities are found such as spatial awareness and hearing rhythm, "How will they know not to hit a wall or another pair of people dancing? How will they know what the next step is without talking to their partner?" (Ogilvie, 2017). Where skills diverge between partners lies in the roll each plays within the social interaction. Leads primary responsibilities are to balance focus between predicting rhythm, remembering dance moves, communicating movement to the follow, avoiding obstacles, and keeping frame. (Rebecca Simpson, 2019). Almost the inverse of this, followers have relatively few active skills engaged throughout the dance with the exception of frame, which acts as the medium to interpret the leads movement. This ability to let go of self-directed movement, and instead interpret a physical language is a more flexible and passive skill that, though is initially faster to learn, requires dedicated learning and experience to improve, (Rebecca Simpson, 2019).

### **Musicality**

Dance is the practice of communicating music through physical movement. Musicality dictates the way a dance unfolds and the synergy between individual partners as well as their individual and collective relationship to the music, (Simon Senecal, 2018). Salsa is a music type that has many overlapping rhythmic patterns, instruments, and varying tempos, both within a single track, as well as across a variety of Salsa songs. This inherent quality of Salsa makes the education of this dance type difficult to learn without a background in musicality, or the time and dedication needed to develop an 'ear' for tracking rhythm. This is made all the more difficult due to its layered and complex quality, (Yudi Dong, 2017). Common practice is for teachers to verbally count out the beats, translating musicality into a language new students can understand, (Yudi Dong, 2017).

### **Trust and Communication**

Multiple sources stress that for any system involving two or more people to operate effectively, a level of trust needs to be present. Both for the safety of the participants involved, as well as the comfort and enjoyment of the experience, (Miriam Giguere, 2019). This trust relies on clear, respectful communication between participants, as such, one of, if not the most functionally important aspects of partner dancing both in salsa and any partner dance, is non-verbal communication, "The base of dancing with a partner lies in trusting and listening to them. I have found that in order to put trust in someone you need to have a solid, nonverbal system of communication." (Ogilvie, 2017).

This communication comes from a shared education, not only in movements working in tandem between partners, but the leads ability to clearly communicate different moves, and their followers ability to interpret this while complementing the lead with styling of their own, (Ogilvie, 2017). This not only means leads require the ability to physically manipulate their follower with the correct preparation, but in a way that is both safe and comfortable for their follower. This includes carefully gauging the amount of pressure and force implemented when pushing or pulling follows, placement on the body to ensure it is both clear and appropriate, as well as deciding the speed at which the dance is being performed, as well as countless other factors, (Ogilvie, 2017). Followers experience and ability heavily influence both the sophistication of the moves able to be performed, based on their ability to interpret the leads communication, as well as their ability to keep pace with the music at the same time can affect the speed of the dance, (Ogilvie, 2017). Though many other skills and practices are needed to learn this language, physical dialogue and perception is the foundation of partner dancing, most especially in improvisational dance.

#### **Body Mechanics**

Every physical activity ranging from sports to dance requires coordination and economy of movement, both required to learn and perform complex movement such as isolated body movement. As this education is commonly performed in classes and often lacks speciality observation and tuition, having a history in activities that require body control accelerates this process, "To Learn a couple dance, such as Salsa, is a challenge for the modern human as it requires to learn all the different mechanicocognitivo-interactive parameters from a teacher in mainly collective classes only, which is less effective to spot errors on individual students." (Simon Senecal, 2018). Further connections between body movement are also being made between the human body and robotic systems, "Aside from social sciences and related fields, the study of social couple dances are also interesting in the fields of bio-mechanics, human robot interactions" (Simon Senecal, 2018). These analyses of body movement and the intricacies of isolated movement highlight the coordination and skill required for many advanced Salsa and Bachata dance moves.

### Research

Using a combination of surveys and semi-structured interviews, I have helped clarify many of the literary source information. Furthermore, a more firsthand analysis allowed me to find variations between academic sources more general breakdown of these dances, compared to the constantly evolving fluidity of Salsa and Bachata.

Two approaches to this firsthand research were used, one of which was 15-20 minute interviews with Salsa and Bachata teachers in Brisbane. All participants have multiple years of experience both in learning as well as teaching their respective fields and were asked many of the same questions. Four participants with varying levels of experience and speciality were able to give their time for in person interviews at Dance Culture, the dance school they teach at. This included Paul Cavanagh, a Salsa and Bachata dance teacher with 10 years of experience, Isabella MacKrill, a Sensual Bachata teacher with a teaching certificate from Korke and Judith (creators of Bachata Sensual) and with 7 years of experience. Avanka Wickramanayaka is another Salsa and beginners Bachata teacher with over 2 years of experience, and Dom Milne who specialises in numerous dance styles ranging from ballet to tap-dancing, as well as Bachata with 2 years of experience in this style. The environment for these interviews took place before and after their routine dance classes, often times with Salsa and Bachata music being played loudly close by. Due to this disturbance, I used a combination of my phones voice recorder and its interview setting to record a clearer interview. This ensured the ambient noise would be reduced in playbacks, as well as helping distinguish between said noise and the voices of myself and the interviewees. I chose this style of interview and these tools as it both lined up most effectively with the available time for both myself and these teachers, as well as providing a familiar location to conduct the interview that was accessible for all.

This did come with some drawbacks as previously mentioned, including loud music and dancing, as well as few places to place my tools like tables or desks. This resulted in a need to manually hold my recording device between myself and the participants, limiting my ability to manually type or write notes throughout the interview. Fortunately, programs like Otter, which transcribe audio files to a written format ensured I copied most of the notes with only minor errors occurring due to a lack of perfect audio recording.

The second form of firsthand research was in the form of a short-answer type survey, conducted on students at varying levels of Salsa and Bachata at Dance Culture, the same dance school as taught at by the interviewed teachers. A short survey was the most effective medium for gathering the relevant data by balancing the students willingness and available time for this task. To accomplish this task and reach an optimal number of participants, I employed the use of Google Documents to create and disseminate a 10 question, 5–10-minute survey. After gathering preliminary commonalities from my first two interviews, further reinforced by my academic sources, I was able to create a more relevant avenue of questions for potential end users. To achieve a high enough volume of feedback across both Leads and Follows, as well as multiple levels of education; I received permission from Dance Culture to send out a link and request for students in the Salsa level 4, Bachata Level 5, and a Salsa Shines class group chats on Messenger. In total 26 surveys were completed with 6 Leads, 13 Follows, and 6 who practice both.

Limitations of these research processes is that most of the data comes from the same school and city. Participants of the survey also were largely between level 3-5, meaning I have fewer current low-level responses. Despite more advanced students having been through the same process, this would have still provided useful insight that may have been forgotten or overlooked by those who have grown beyond these early difficulties.

# Analysis

My findings are centred around two primary potential end users, Salsa and Bachata teachers, and their students. Though whether both or either demographic will benefit from any potential design directly or indirectly, both perspectives are critical for a holistic and multifaceted design solution.

As both groups were researched through different mediums, slightly different analysis techniques were used to distil common topics and issues that affect dancers. For teachers who provided a more in-depth interview, a natural conversation was able to unfold, delving into experience and philosophies more deeply for a conceptual feeling for this industry. This provided a balanced counterpoint to academic resources that struggle to enunciate the fluidity and constantly evolving nuances of these dances and cultures. To ensure a more streamlined analysis could be performed upon completion of the research, a guiding list of written questions was asked of all teachers to cover relevant areas without hindering their ability to provide in depth and layered answers. Though analysing these interviews takes varying lengths of time and often touches on different experiences and concepts, being able to categorize each under broad areas aids significantly in cross analysing common responses or feedback.

#### **Summary Key Words**

Paul

dance, students, teachers, teaching, level, problems, focus, technique, learning, body, ability, give, music, skills, class, step, inherently, environment, area, handling

#### Isabella

teachers, students, class, teaching, cater, issue, years, school, learn, dance, teach, technique, big, create, develop, style, foundations, started, information, attention span

#### Avanka

dance, students, learning, teaching, spatial awareness, body, level, teacher, syllabus, instruments, tennis ball, work, give, solidify, move, content, instructors, helps, classes, experience

#### Dom

learning, frame, dance, people, movement, sense, understand, leaders, awareness, students, body, feel, class, issues, hard, skills, dancer, understanding, followers, question

(Table 1, 2023).

A number of similarities and overlap was observed between all interview participants, particularly in areas such as common issues, education structure and limitations, as well as some similar experiences. Many of the problems students appear to encounter, particularly in the early stages of their dance education, is fundamental skills that lay the foundation for accelerated learning.

#### Musicality

From Paul, one of these factors was detailed as, "Many people who don't have a dance or music background don't actually have an ear for the timing of the music". This sentiment is shared by many of the others, with Dom saying, "timing for men, like understanding music is so huge, right?". Avanka further reinforcing this sharing, "someone who either grew up learning music or learning to play an instrument or something like that, will most definitely even if they're struggling with the specific style of dance, they'll at least be able to find the one they'll be able to be on time".



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#### **Classroom structure limitations**

This simple concept belies the inherent difficulty of not just tracking rhythm but incorporating it into specific movements. Though it is critical to learning to dance, music timing is often left to develop over weeks or months to focus on other critical areas such as steps and frame. This is not to say these other areas are able to be accomplished perfectly either, as classroom structure has its own challenges. Paul articulates this by highlighting the challenges teachers juggle in dance specifically, "It's tough to deliver content in a non-standard classroom environment while catering to all the different learning styles like, especially for specific mediums such as dance specific content". Similar sentiments are shared across all of the interviews conducted, with Dom specifying, "it's the class sizes. Like people would learn so much better one on one. In a class we have to generalize everything". Avankas' point of view showcases the difficulty of incorporating more content in the context of a business needing to judge student availability and the profitability of a business, "We used to run four classes a night, and that was great, because we could fit a lot. But everyone was exhausted, dead towards the end. So only the I found the diehards would stay till the very end". These findings show inherent challenges of the education structure and limitations in play, as well as how they link to specific challenges students face. The need to generalise in an already atypical classroom clearly results in some students missing concepts or failing to emulate the finer points of these dances like hearing music.

#### Body movement/control

Other key practices that may go overlooked due to the limitations of a large classroom are body movement. Avanka shared that this is a challenging concept in any area, "I think body movement is definitely one of the hardest things. Just because it's another level of understanding of your own body. Especially like learning a new skill, as an adult is hard to begin with. Let alone learning to dance, but then when you add another layer of like learning isolations, or body rolls, or you know, things like that". Dom illustrates this from her experience of practical application, "In the early levels, students learn all of the rules of dance. They learn how to step to the beat, how to move in a specific way, and how to break those rules in the higher levels. In the beginning levels, they learn basic information, such as how to hold a frame, and then how to be receptive to it". This insight from Dom shows not only foundational body movement like frame requires intricate understanding and practice but is critical to further skills and movements that build upon these. Though Salsa and Bachata practice body isolation and unique body movement as a foundational element, in a large classroom setting, it seems to only be treated as another component of the greater whole, rather than a critical and inherently difficult skill unto itself. This is a theme that is shared with tracking rhythm and an understanding of musicality that was previously touched on, and likely other concepts as of yet to be identified.

### Teacher design ideas

When asked about their own ideas for an innovative concept or design, a few immediately took a broader approach and looked at changing the current education system as a whole, while others looked at more innovative tools to incorporate into classes directly.

Tied strongly to improvements to the current education curriculum and environment, as well as how students approach the Salsa and Bachata scene as a whole. Isabella's idea was rooted in broadening students exposure to different teachers and education styles to best fit the student, "I would create an app that shows all dance classes together from different schools, and encourages students to go to every school. It will create an environment where students begin to learn from all teachers, because the more teachers you learn from the better dancer will become".

Paul shared an idea in a similar vein but had a vision more focused on automating student progression using a dance schools established criteria, "I would have an automated tracker for our curriculums, our new block system that has been put into place if people have attended what looks like enough classes using our silence system, and then flag when they get to, like an entry level".

Avanka being one of the coordinators at Dance Culture is also in the process of incorporating a change to the school's current syllabus. This aims to prevent attrition in early levels while enhancing the school's ability to teach and judge students' abilities, "Essentially, we work in blocks of four weeks. And what I'm just about to do is now that that syllabus is finally done, is going to distribute a little handout to each of the students that actually has each of the content for the levels that they're currently in. So that they can have like a checklist of sorts. Yeah. So, when it comes time to leveling up, they can have a look at that".

Dom has already started incorporating innovative tools to improve the education experience, particularly in demonstrating and practicing keeping frame. This was achieved using balloons to prevent students' arms collapsing into their bodies when splitting their attention, "So we literally use the balloons to find how this feels right? Get it in the body, and then take the balloons away and hold the shape".

#### Surveys

Surveys, while less detailed, was more effective in getting an idea of what issues and observations are shared across different subgroups of dancers. Multiple teachers' responses from initial interviews helped inform the direction that these questions focused in. This combined foundational questions that helped segment and classify each participant into broader subgroups such as lead, follow, and experience level; while at the same time, allowed for more directed questions at problems highlighted emphasised by industry professionals.

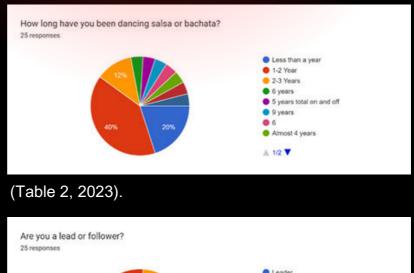
Classifying questions such as preferred dance and roll helped correlate what issues were largely follow or lead specific as well as ones shared across both demographics.

As can be seen in table 2, most participants have been dancing salsa and bachata between 1-3 years with another 20% having even less experience.

Of this demographic, the majority are or have some form of experience and knowledge of following while a little less than half have experience leading (Table 3, 2023).

When asked about common challenges when learning these dances, a number of varying responses were shared. Some roll were specific such as, "interpreting a leads movement", but many voiced challenges in similar areas.

These were musicality, with feedback sharing, "Keeping with the rhythm of the song", "Timing of Salsa music", and "Musicality, body movement, advanced technique".





#### (Table 3, 2023).





Another area of difficulty was linked to the connection and communication between lead and follow. From one side, key challenges in the roll of the lead included, "Perfecting technique to clearly lead the follower", "Coordinating multiple body movements at the same time / multitasking", and, "Memory Retention of steps". A combination of learning steps as well as the numerous other factors that rely on multitasking paint a clear picture of why attempting to learn and progress is so challenging, especially in new and early dancers who lack many of the skills experienced dancers no longer have to consciously think about. These challenges strongly tie to many components of following as well, though manifesting in different ways. This includes, "Not pre-empting the lead, following body movement lead through different points of contact", "Back leading", and "Understanding the lead". Though some are hesitant to incorporate a teaching tool, particularly if it is invasive or uncomfortable to wear/use, a large majority would be open to incorporating it into their education if it provides improvement. With a number of different sources sharing similar feedback of challenges coming from foundational areas such as musicality, classroom makeup, and learning to isolate and manipulate the body in a new way, a common theme can be observed in how these areas overlap and influence one another.

## Discussion

When compared with literature on the subject, a few areas strongly reflect one another such as the musicality and body movements, and to a lesser extent the structure in which it is taught. Similarly, the literature review showed a strong focus on respect and trust between partners, while firsthand research, though touching on this a few times, was not one of the primary areas of focus. After further questioning and clarification, I found that many of the areas that did have the highest areas of desired improvement strongly linked to a leads ability to lead followers safely, and followers' ability in interpreting these movements correctly. In this sense, much of my literature findings and primary research not only support one another but help clarify and fill in gaps where one was missing or unable to answer curtain areas of research. As both were carried out simultaneously, some areas of my primary research were designed to aid in answering areas of inquiry that trusted and published work was unable to answer within the sources I was able to find and analyse.

# **Design Implications**

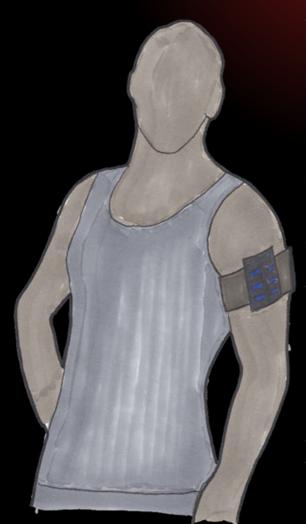
Based on these findings, it appears the greatest area in need of design solutions revolves around foundational skills that take time and experience to learn, as well as an improved or individualised mode of learning to flexibly integrate into a dynamic learning environment. Issues in particular I have inspired initial concept sketches include solutions to keeping time with rhythm, reinforcement of shoulder and elbow position in frame, and a way for both teachers and students to more accurately observe and measure the precision of foot placement and weight distribution when dancing.







### Arm Band



This product is inspired by runner strap on phone holders and uses a combination of microphones and tactile pulses on the skin to surface face to translate rhythm into measurable and predictable timing that new leads and follows can interpret. This aims to solve both the inherent. It also allows new dancers to sidestep a common problem of being unable to practice dance moves without the assistance of a teacher counting out loud for them. This will encourage students to practice more effectively without developing bad habits when away from the eyes of a teacher, as well as having the confidence to go to social dancing environments without the fear of being unable to interpret music being played. As Salsa and Bachata music are measured in counts of 3's and 4's out of 8, the shape or pattern of the pulses can be designed to give a sense of which specific count the song is on as well as when these counts occur.

Using a combination of elastic and Velcro for adjustable sizing and location placement, as well as the partially flexible nature of the pad, this design is able to be fit in various locations on the arms or legs, while remaining out of the way while dancing. As it is relatively inconspicuous, any self-consciousness or embarrassment of needing a teaching aid can be avoided with sleeves, long pants, etc.

### Foot Tracker

This design is inspired existing Salsa by an product called shoe socks which allows for non-specially design salsa shoes such as have the runners to correct amount of traction on wooden floors to simulate suede soles. То further improve this concept, integrating pressure sensitive sensers into the sole of external shoe socks will allow for accurate real time feedback of weigh distribution, length of steps, and accuracy of step sequence depending the on particular move the dancer is attempting to learn.



Ball: 72% Heel: 28% 83% correct

This would work for both leaders and followers and would work most effectively when paired with body tracking technology such as smart watches for instant and accurate feedback. This allows for students to make minor improvements and adjustments when dancing outside of class but would also open up numerous opportunities to improve the effectiveness of tracking students accuracy within large classes, as well as having a better idea of specific things for to work on individuals.

### **Joint Locker**



Similar in appearance to physiotherapy joint braces, these constrictive fabric bands would increase resistance to the movement of the joints at the elbow and wrist. Though these would have to be adjusted in strength in higher skill levels when moving beyond basic moves, early learners would benefit greatly from a tool that helped keep and reinforce frame. As keeping the muscle memory of firm frame is a common difficulty to many, this would aid in reducing this learning curve in the classroom.

### **Frame Vest**



Similar to a workout vest, this wearable teaching tool inflatable uses cushions under the armpits as well as shoulder reinforcements to aid in keeping frame and correct posture similar to the previous design. In the same vein as a workout vest or even sports padding, it is likely to add small to moderate а amount of bulk to the user, making it most suited to the classroom rather than a more social setting.

This limits its ability to be different used in circumstances, but as its primary purpose is to reinforce foundational salsa and bachata posture, it can be used in other ways. This could be worn around the house, while working, etc. as it keeps the limbs, core, and back engaged to help with muscle memory.



# Conclusion

After in-depth research on current Salsa and Bachata data as well as thorough exploration of local students and teachers' beliefs, experiences, and interpretations, I have found a number of potential problems to solve for and design opportunities that these could involve. With primary areas of investigation leading me to issues of classroom structure, foundational body movement, Musicality, and trust/communication, as well as firsthand accounts further supporting these findings, I am to design exclusively in these areas. My primary objective will be to solve one or more of these common issues in an inexpensive and attainable fashion, with a secondary objective of accomplishing multiple solutions within the one design, though this initiative will only occur after ensuring this first solution has no further room for improvement within my capabilities to design for.

Though a slight disconnect between academic sources and my interviews and surveys is clear to see, it is logical due to the relatively niche area of research, as well as the short history of Bachata specifically. Salsa and Bachata, as dance form, are in constant flux in both practice and cultural due to their strong ties and dependency on social evolution, occurring at both the actual movement level, as well as the intangible components like musicality and regularly borrowing from other art forms. This constant change means written sources are able to look at long lasting foundational practices and their importance such as frame and history, while a more firsthand and current approach to research is required for more actionable data such as current body movement, frame, etc.

When reconciling both through in-depth analysis, an insightful understanding of what both Salsa and Bachata is, as well as how it might evolve in the future can aid in developing a more long lasting and effective design solution.

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