

## ARTICLE

# Applying Social Identity Leadership Theory to Explore Students' Engagement and Motivation in Dance

Athari M Z N Z Alshemmari<sup>1</sup>, Dave Collins<sup>1,2,\*</sup>, Wendy M Timmons<sup>1</sup>

<sup>1</sup> Moray House School of Education and Sport, University of Edinburgh, Edinburgh, UK

<sup>2</sup> Grey Matters Performance Ltd., Stratford upon Avon, England

\*Corresponding author. Email: [Dave.Collins@ed.ac.uk](mailto:Dave.Collins@ed.ac.uk)

Received: 16 December 2025, Accepted: 21 January 2026, Published: 3 February 2026

## Abstract

Dance is increasingly popular, with learners enrolling in dance classes to engage with diverse dance styles and acquire corresponding skills. However, as with any form of Physical Activity (PA), engagement in dance learning is influenced by a range of factors, including the leadership offered by teachers and coaches. Finally, it is important to see how this form of activity can be most effectively developed in non-Western societies. Accordingly, the purpose of this study was to apply Social Identity Leadership Theory (SIL) to explore Kuwaiti students' engagement in dance, as reflected in the perceived influence of their teachers. Data were collected from 230 Kuwaiti school students using a modified form of the Identity Leadership Inventory–Youth (ILI-Y). Analyses revealed a positive impact of SIL principles on students' motivation to continue dancing, suggesting that students are more engaged when teachers foster a strong group identity, promote unity, and create an inclusive, supportive environment.

**Keywords:** Group Cohesion; Teacher Leadership; Prototypicality; Encouragement; Improvement

## 1. INTRODUCTION

Dance participation has grown significantly over the years, driven by the development of dance styles and the establishment of an increasing number of dance centres. In schools, dance education is regularly incorporated into the Physical Education (PE) curriculum as a form of Physical Activity (PA) that benefits participants' physical, social, and mental well-being [6,27]. Dance education contributes significantly to students' physical, emotional, and social development [24]. Research shows that dance enhances creativity, self-expression, discipline, identity formation, and collaborative skills. Globally, WHO reports an increasing integration of arts- and movement-based programmes into school curricula, driven by evidence of improved student wellbeing and engagement [12].

With dance education becoming a prominent part of the PE curriculum worldwide, researchers have sought to understand the extent of student engagement in this curricular area and, in particular, the factors that may influence it [28]. As with other curricular areas, engagement in dance-specific activities (the level of attention, interest, and passion among students during learning) [4] is crucial for progress and performance. A higher level of engagement indicates that learners are more attentive and passionate about their learning. This, in turn, enhances their performance and the wider positive impact which can result from the activity [1]. To fully realise these benefits, SIL theory has recently emerged as a useful tool for understanding and promoting students' engagement in dance, with receiving preliminary support from survey data among Kuwaiti dance teachers [2].

### 1.1. SIL Theory

SIL theory is derived from Social Identity Theory (SIT) [19], which proposes that individuals derive meaning, behaviour, and motivation from their membership in social groups [51]. Leadership research grounded in SIT argues that effective leaders shape group behaviour by defining, representing, and advancing a shared identity “us” rather than relying on personal authority [17]. The SIL framework suggests that a leader's success is dependent on their ability to mobilise and unite people around the

collective “we” [55]. This implies that the leader must demonstrate that they are part of the group by demonstrating authentic investment towards the group’s norms and values.

There are four dimensions: Prototypicality, Advancement, Innovation, and Impresarioship. Prototypicality refers to the extent to which a leader is perceived as embodying the group’s values, norms, and identity [17]. In a dance education context, a teacher who is seen as “one of us” and as representing what it means to belong to the class is more likely to be trusted and followed [54]. This sense of shared identity is expected to enhance students’ emotional attachment to the group and increase their willingness to participate, persist, and invest effort in learning activities.

Identity advancement concerns the leader’s commitment to acting in the group’s best interests and to helping the group and its members improve [15]. In dance classes, this is reflected in teachers who are perceived as prioritising students’ development, confidence, and collective success over personal authority or status [17]. Such leadership is expected to foster students’ sense of being valued and supported, which is a well-established predictor of intrinsic motivation, persistence, and engagement in learning.

Identity innovation refers to the leader’s ability to actively shape and redefine what the group stands for in ways that are meaningful and motivating [15]. In dance education, this may involve framing dance as expressive, culturally relevant, enjoyable, or empowering, and constructing a positive and inclusive identity around participation [54]. This dimension is expected to be particularly important in contexts where dance may be socially or culturally contested, as it allows teachers to make group membership more meaningful and motivational for students.

Identity impresarioship concerns the extent to which leaders create practical structures, activities, and environments that make the shared identity tangible and lived in everyday practice [54]. In dance classes, this includes creating a supportive, safe, and inclusive climate, organising performances or group activities, and encouraging collaboration and mutual support. Such practices are expected to directly enhance behavioural and emotional engagement by making students feel that they belong and that their participation matters.

SIL has been supported in sport [13], education [43], and youth development contexts, demonstrating reliable predictive value for motivation, engagement, and team cohesion. Despite extensive application across these domains, SIL has not yet been applied to dance education, representing a gap this study seeks to address.

## **1.2. Application of SIL Theory to Understand Students’ Engagement and Motivation in Dance**

Building on these ideas, SIL has the potential to enhance students’ engagement in dance, increase motivation and performance, and yield broader benefits for students overall [20]. Students viewing the leader, in this case the teacher, as one of their own is likely to motivate them to take up and then engage more in the dance activities the teacher suggests [26]. This is possibly because, as a leader, the teacher is not only informing learners what to do, but also demonstrating it [47]. It implies that the teacher’s ability as a social identity leader to encourage learners to participate in dance activities is demonstrated by his/her willingness and ability to take part in these activities [46]. The teacher must also demonstrate belief in the benefits of these dances.

Social identity leaders can also improve students’ engagement in dance by prioritising these learners’ needs [18]. Feeling that the teacher, as their leader, is invested in their success and is genuinely concerned about their well-being [50], exerts a positive influence on student motivation. The teacher listens to their concerns, acknowledges their efforts, and creates opportunities that allow them to improve their performance [26]. Prior studies in sport and PE suggest that the practice of such identity-based leadership among teachers is associated with increased student motivation and commitment [45]. As stated earlier, this has received support from dance teachers, with SIL approaches reported as a feature of their perceived behaviour [2].

Students’ engagement as a consequence of SIL may also be improved, as this leadership style creates a sense of belonging among learners [38]. With the teacher as leader shaping and emphasising the group’s identity, norms, and values, this approach creates an environment in which learners feel comfortable [50]. For these learners, dance is more than an activity [14]; it serves as a vehicle for expressing their identity, motivating them to continue engaging in dance [47]. Creating a group identity that learners can relate to also reduces dropout rates from dance classes [14], a concern of particular

concern during adolescence [47]. In essence, by applying SIL theory to understand students' motivation to dance, implementation will enhance students' engagement level in dance education.

### **1.3. Purpose of this Study**

Previous research has established the application of SIL by teachers [2], but its potential impact on students as the target of these methods remains unestablished. Furthermore, we sought to adapt tools developed for team games to examine processes in this individual activity. Finally, we were interested in how SIL, a method developed in Western culture, might function in other settings. The purpose of this study was to apply SIL theory to explore students' engagement with SIL and its perceived impact on dance. Our rationale was to determine whether SIL is an effective strategy for improving students' self-perceived engagement and performance in dance within a particular cultural and educational context.

## **2. METHOD**

### **2.1. Participants**

A total of 230 participants were recruited for this study. All participants were female, aged 11-14 years [11], and were recruited from state schools in Kuwait. The other inclusion criterion was that all participants had the opportunity to engage in dance practice, at least as a curricular subject, and for many, as an after-school club or activity.

The participants had varied levels of prior exposure to dance. The majority were engaged in school-based dance classes as part of the PE or arts curriculum, rather than in pre-professional conservatory training. Most students reported between one and three years of prior dance experience, primarily in recreational or curricular settings, with limited formal technical specialisation. Overall, the sample represents typical early adolescent learners in a school-based dance education context rather than elite or professionally oriented dancers.

Positioning this study within the Kuwaiti context was important because cultural norms, educational structures, and gender expectations influence how dance is taught and how leadership is experienced by students. Additionally, cultural expectations regarding respect for authority, teacher-student hierarchy, and collective behaviour may influence students' perceptions of leadership, group identity, and motivation. Understanding these contextual factors is crucial for interpreting the study's findings, particularly because concepts such as identity prototypicality, group belonging, and collective motivation may manifest differently in Kuwait. Integrating this context not only situates the research appropriately but also strengthens its cultural and educational relevance.

The sample included only female students because dance in Kuwait is taught only in girls' state schools. In Kuwait, government schools from Year 1 to Year 12 are segregated by gender. In other words, there are either boys-only or girls-only schools. Since dance was taught only in girls' middle schools, it was not possible to include male participants in the study. The selected age range was limited to middle schools. Most learners at this educational level are aged 11-14 years.

In the UK, ethical approval for this study was obtained from The Moray House School of Education and Sport Research Ethics Committee on 28th November 2024, under approval reference number AALS13092024. All procedures complied with institutional and international ethical standards for research involving human participants. In Kuwait, ethical approval from the Ministry of Education (MoE) – Educational Research and Curricula Sector was obtained to conduct a survey of Kuwaiti state middle schools. No parental approval was required because the Ministry of Education (MoE) approved the survey. The MoE is the guardian in Kuwait state schools, and the survey was conducted at the school during school hours.

### **2.2. Developing the Survey Instrument**

The survey instrument was developed using a multi-step process to promote its validity. The first step was carrying out a literature review. This helped to identify key constructs related to SIL in dance and led us to the Identity Leadership Inventory – Youth [5]. This metric was designed to be appropriate for our target age group of interest. Unfortunately, pilot testing showed that the wording of the items (targeted at football players) was inappropriate for our target population, namely, young female dancers.

Accordingly, the second step was drafting new items based on the questions. Constructs were identified from the ILY-Y and customised for the target population of dancers, drawing on insights from our earlier qualitative and quantitative studies [1,2]. The items were first created by a group of specialists in talent development, pedagogy, and dance practice. Their revisions were then scrutinised by a panel of dance-teaching experts to clarify the content and remove ambiguity.

In the third phase, the survey tool was tested with five individuals in the United Kingdom who were the appropriate age and had relevant dance experience to assess its reliability and effectiveness. The respondents were asked to provide comments on any challenges they encountered while completing the items. Their feedback was taken into consideration, and two questions were updated.

Since the research was conducted in Kuwait, the instrument was translated into Arabic and subsequently into English using the systematic approach outlined by [52]. The instrument was translated in accordance with the International Test Commission (ITC) Guidelines for Test Adaptation [21]. The initial and back-translated versions were analysed to identify inconsistencies, thereby enabling subsequent revisions. Two bilingual subject-matter experts independently translated the items into the target language; a third bilingual reviewer then performed the back-translation. Discrepancies were resolved through consensus meetings involving all translators to ensure semantic and conceptual equivalence [56]. The original instrument (in English) was piloted because the initial testing or validation was conducted with participants who understood English. Similarly, a pilot test with a small group of participants in Kuwait was conducted on the translated version to assess clarity, cultural appropriateness, and item interpretation. Feedback from both pilots, including suggestions on clarity of wording and cultural alignment, informed minor revisions to the translated items before the main data collection commenced.

The most important aspect of any instrument is its validity: the degree to which an instrument accurately measures what it is intended to measure. We focused on content validity, a thorough, expert-driven evaluation of whether an instrument's content effectively measures all aspects of the construct it is intended to measure [5]. The steps taken to ensure content validity are highlighted. The first was to examine the construct and its measurement through a literature review. The second step, as indicated, was the use of the Identity Leadership Inventory – Youth (ILI-Y): an instrument validated to measure identity leadership in youth sports contexts. This instrument evaluates how leaders, captains, and coaches foster a shared sense of identity through actions such as building a shared vision [5]. Using the ILI-Y as a reference and in accordance with research-informed practice in dance settings [1,2], we developed relevant and valid items to measure the use of SIL in dance. Lastly, we engaged a panel of experts to develop and revise the items. This provided expertise in social psychology/SIL and in dance teaching, with three experts in each area.

The survey instrument focused on three main aspects: students' experience with SIL in dance, students' engagement, and the perceived impact of SIL among learners [31]. In particular, the instrument was designed to assess five main concepts: Prototypicality, Innovation, Improvement, Encouragement, and Motivation. Scores were based on learners' perceptions of these variables. In this study, Prototypicality, Innovation, Improvement, and Encouragement are used to examine the level of SIL as perceived by the learners involved. Two aspects of motivation were examined, Mot. 1 and Mot. 2. Mot 1 examines whether SIL improves the level of motivation, while Mot. 2 examines whether SIL does not have any impact on motivation. As such, Mot. 1 indicates the presence of motivation, and Mot. 2 indicates its absence. The survey instrument is presented in Appendix A. Students' engagement and the impact of SIL are reflected in their motivation to continue with dance classes [32]. Consistent with the ILI-Y, a 6-point Likert scale was employed, with responses indicating the level of each factor [31]. 1 on the scale was used to denote Strongly Disagree, while 6 was used to denote Strongly Agree.

The survey was administered using a standardised procedure to ensure consistency across participants. Trained research assistants distributed the survey in classroom settings and provided uniform written and verbal instructions outlining the purpose of the study, confidentiality protections, and response procedures. Participants completed the survey individually within approximately 10–15 minutes. To ensure data quality, surveys were checked immediately for completeness; cases with more than 20% missing responses were excluded using listwise deletion, and isolated missing items were treated as missing at random. All procedures adhered to the International Test Commission (ITC) Guidelines for Test Adaptation. In accordance with FAIR principles, the de-identified dataset, survey

materials (original and translated), and analysis code have been uploaded to an open-access repository and are available via the Edinburgh DataShare.

### **2.3. Data Analysis**

Data were analysed using SPSS Version 29. First, a reliability test was conducted to assess the extent to which the developed questions tested the constructs [59]. Secondly, descriptive statistics were used to compute the mean score for each variable; our goal was to determine the level of each aspect examined [36]. For example, the mean score provided insight into the level of prototypicality among teachers. Prototypicality is a situation in which the leader, in this case the teacher, represents the group's values through their actions and behaviours [44]. In simple terms, the leader demonstrates that they are part of the group rather than merely its leader. Finally, correlational and exploratory factor analyses were completed to establish the relationship between SIL and students' engagement [59]. Our overall objective was to determine whether the use of SIL influences students' engagement and impact in dance.

## **3. RESULTS**

### **3.1. Demographic Information**

The only demographic information collected in this study was the participants' age. Gender was not considered a key factor because all participants were female. Another potential demographic factor to consider is school type. However, this was also irrelevant to this study, as all participants were derived from Kuwaiti state schools. Table 1 shows a breakdown of participants' ages.

Participants' ages were distributed relatively evenly across age groups. Accordingly, the risk of age bias, which could have affected the responses, appeared to be low.

### **3.2. Reliability Analysis**

Reliability was assessed using Cronbach's alpha for items measuring each variable. Table 2 shows the Cronbach's alpha value for each variable. The alpha values demonstrate high reliability for all variables. Usually, a Cronbach's alpha value of 0.7 and higher is acceptable. Cronbach's alpha values between 0.5 and 0.6 indicate poor reliability, while those between 0.6 and 0.7 suggest questionable reliability. Values below 0.5 show unacceptable reliability.

We also examined the nature of the data and its suitability for more complex factor analysis. These outcomes are shown in Table 3.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.906, which is excellent [35], showing that the data were suitable for factor analysis. The Bartlett's Test of Sphericity was statistically significant ( $< 0.001$ ), which further supports the suitability for factor analysis.

#### **3.2.1. Communalities**

In the next step, we checked the data for communality. Usually, a value above 0.50 is acceptable, while a value above 0.70 is very strong. An examination of the communalities showed that three items, that is, Imp. 3 (0.466), Imp. 5 (0.356), and Enc. 1 (0.454) had communality values below 0.5. This suggests that they are not well-represented by the factor solution. In contrast, communalities for most items exceeded 0.5, indicating that their variance is significantly explained by the extracted factors. For example, Enc. 4 has a communality value of 0.821, which is very strong. Table 4 presents the communality value of each item.

#### **3.2.2. Factor Loadings**

A rotated component matrix was used to examine the factor loadings. Factor loadings analysis produced four components. Variables with strong loadings on component 1 were Proto. 3 (0.703), Inn. 2 (0.726), Inn. 3 (0.724), and Inn. 4 (.626). These items primarily represent the Innovation (Inn.) and Prototyping (Proto.) constructs.

Key loadings on component 2 included: Proto. 1 (0.636), Proto. 2 (0.543), Imp. 2 (0.724), Inn. 1 (0.580), and Inn. 5 (0.580). This component combines items from Prototyping (Proto.), Implementation (Imp.), and Innovation (Inn.). The high loading of Imp. 2 (.724) and moderate contributions from Proto.



1 and Proto. 2 suggest that this factor reflects preparedness and functionality. Dominant loadings on component 3 were Enc. 1 (0.512), Enc. 2 (0.599), Enc. 4 (0.794), and Enc. 5 (0.773). These variables are all from the Encouragement (Enc.) scale, suggesting that the component emphasises the encouragement aspect of the study.

Items strongly loading on component 4 were Proto. 4 (0.736), Proto. 5 (0.788), Imp. 4 (.553), and Enc. 3 (0.565). This is a mixed factor, drawing on the Prototyping, Implementation, and Encouragement domains. This factor appears to reflect a “Practical Execution” focusing on how prototyped ideas are actualised. However, cross-loadings are significant in the items used. For example, proto1 loads on both factors 1 and 2 (factor 1 = 0.446; factor 2 = 0.636). On the other hand, Imp. 1 cross-loads significantly on factors 1 and 3 (0.411 and 0.551, respectively). This is problematic because it indicates that these items may overlap conceptually. In other words, they measure more than one concept, which makes them ambiguous. We consider ways in which this limitation could be addressed within the limitations section later in the paper. For the present, readers are encouraged to recognise the potential for ambiguity associated with the cross loadings of these particular factors

For the present purpose, however, the presence of some cross-loadings also suggests that students may not sharply distinguish between different identity leadership behaviours in practice, but rather experience them as an integrated leadership style. This is consistent with the theoretical premise of SIL, which conceptualises these dimensions as complementary and mutually reinforcing rather than as strictly independent constructs. The adapted scale, therefore, demonstrates acceptable construct validity and reflects the contextual specificity of leadership enactment in dance education. Data are presented in Table 5.

### **3.3. Descriptive Statistics**

As indicated, descriptive analysis was focused on determining the mean score for each variable. Table 6 shows the mean and standard deviation for each of the variables.

The mean scores for Mot. 1, encouragement, prototypicality, improvement, and innovation are over 5. The high scores suggest that most participants believe their teachers demonstrate prototypicality, contribute to learners’ improvement, and are innovative. Furthermore, most surveyed learners believe that dance classes at their schools have motivated them to continue. The mean score for Mot. 2 is 1.94, indicating that most respondents disagreed that their motivation for dance cannot be improved.

As part of the descriptive analysis, we also tested whether mean scores for the variables differed significantly across age groups. Table 7 presents the mean scores for each variable across different age groups. A series of one-way ANOVAs showed that none of the differences were statistically significant (all  $p > .05$ ). This indicates that participants’ scores on Mot. 1, Mot. 2, Prototypicality, Improvement, Innovation, and Encouragement did not vary meaningfully as a function of age.

### **3.4. Correlation Analysis**

Finally, correlation analysis was conducted to determine the relationships among variables. This was aimed at establishing how different factors related to SIL and dance influence each other. Table 8 shows the correlation analysis results. These data show a positive relationship between Mot. 1 and elements of SIL. Based on the correlation coefficients, the strength of the relationships ranges from weak to moderate, with improvement having the weakest positive relationship with Mot. 1. On the other hand, Mot. 2 has a weak negative relationship with all four elements of SIL. For example, the correlation coefficient between Mot. 2 and prototypicality is -0.45, while the coefficient between Mot. 2 and improvement is -0.073.

## **4. DISCUSSION**

This research aimed to investigate how SIL is viewed within dance education in Kuwait and to evaluate its impact on student engagement and motivation. Based on the SIL theory and by modifying the Identity Leadership Inventory–Youth (ILI-Y) to fit a dance setting, this study examined how students perceive the performance of their teachers with regard to the main dimensions in SIL (Prototypicality, Innovation, Improvement, and Encouragement) and how SIL influences these students’ participation in dance. All findings support the relevance of SIL in dance education and highlight the

importance of identity-based leadership practices in promoting learner engagement in dance. This discussion analyses the findings in the context of existing theory and research, places them within the Kuwaiti educational context, and highlights the study's implications and limitations

#### **4.1. Interpreting the Key Findings**

##### **4.1.1. Perceptions of SIL in Dance Education**

Descriptive statistics indicate that students rated their dance teachers very favourably on all four SIL-related constructs. Mean scores of over 5 on a 6-point Likert scale for Prototypicality, Improvement, Innovation, and Encouragement suggest that most respondents perceived their instructors as identity leaders who promote group values, attend to students' needs, present new ideas, and encourage student development. Such findings correlate with previous studies that have proved that identity leadership behaviours by teachers are likely to develop motivation and cohesion among learners [26,45].

The prototypicality scores are high (mean = 5.1983), which implies that students perceive their teachers as part of themselves. This also meets the key expectation of the SIL theory [17]. Students tend to open up to teachers and internalise their instructions when teachers behave in ways consistent with group norms. In the dance context, where aptitude demonstration, mutual engagement, and embodied learning play crucial roles, this prototypicality is particularly salient. Teachers who dance with students and engage in experiential movement are likely perceived as sincere members of the group, thereby supporting the collective we identity, as supported by SIL [19].

Innovation and improvement scales were also high (mean scores = 5.3217 and 5.1670, respectively), indicating that students perceived their teachers as effective in fostering development through innovative instructional methods and practices. As a field that inherently invites experimentation, invention, and repeated learning, dance offers fertile ground for such innovation. Those teachers who adopt it indicate that group identity is based on the premise of unceasing learning, exploration, and growth, which consequently promotes psychological safety, i.e. students feel safe to take risks and experiment with new movements, thus resulting in increased engagement [47].

Encouragement was also a salient factor (mean score = 5.0391). According to SIL theory, leaders must represent the group, promote their members' success, and uphold positive norms [17]. The attitude toward strong support by the students may represent the consideration of the instructors for the progress of the students, their ability to address their individual needs, and their focus on the well-being of the students, which has been reported to contribute to increased motivation and sense of belonging [50].

##### **4.1.2. The Correlation Between SIL and Student Motivation**

Correlation analysis found that Mot. 1 (presence of motivation) and all SIL dimensions had a statistically significant positive relationship (Prototypicality, coefficient = 0.406, p-value = 0.01; Improvement, coefficient = 0.265, p-value = 0.01; Innovation, coefficient = 0.302, p-value = 0.01; and Encouragement, coefficient = 0.452, p-value = 0.01). The directionality of this relationship aligns with the SIL theorisation and prior research in the sport and education domains, although the strength of these associations was weak to moderate in some cases [13,43]. For example, encouragement has the strongest positive relationship with motivation, with a coefficient value of 0.452 (p-value = 0.01). The positive relationships between SIL dimensions and motivation imply that when students see their teacher as an identity leader, that is, the teacher is a representative of the group, innovative, promoting growth and defending their interests, they become more motivated to continue participating in dance. However, the moderate-to-weak strength of the relationship indicates that SIL influences motivation only to a limited extent.

Mot. 2 (lack of or depletion of motivation), by contrast, correlated negatively with the SIL constructs. This suggests that when SIL practice is deficient or perceived as weak, students' motivation is diminished. Such strong negative correlation between Motivation 2 and prototypicality implies that those students who fail to perceive their teacher as a group member might become disengaged, which is also in line with social identity studies that reveal that outsider leaders are less likely to have the trust of their students, influence, and the ability to make learners more committed [54].

#### **4.1.3. Age Differences in Perceptions of SIL**

Learner age did not have a statistically significant effect on students' perceptions across all variables under investigation. This observation suggests that the meanings assigned to SIL behaviours may be similar across different age groups. Since the sample consisted of individuals aged 11 to 14, an age of development when cognitive, social, and identity changes occur, this consistency is noteworthy. It indicates that SIL can be universally understood and appreciated across these ages. This may be because identity-based leadership appeals to adolescents, who crave a sense of belonging and acceptance within a group [38].

#### **4.2. Situating Findings in the Kuwaiti Educational Context**

To interpret these results, it is necessary to consider Kuwait's sociocultural dynamics. As indicated, there is gender segregation within the schools and dance classes are only offered to girls in the state schools. Strong norms regarding authority, collectivism, and respect can shape the teacher's role in these situations. Students' perception of teachers as powerful identity leaders may be linked to these cultural expectations, as teachers have traditionally served as moral and social leaders [11].

In addition, SIL behaviours, including nurturing group identity, expressing a sense of belonging, and promoting collective well-being, may be deeply felt in cultures that value group cohesion and collective values. In Kuwait, dance teaching can serve as a safe channel for expression, creativity, and physical exercise, which may be the opposite of the West. As a result, the high motivation rates in this case may reflect a combination of SIL and the relevance of dance to female adolescents in the context of identity, expression, and community within an organised school setting.

The results obtained in this study are consistent with recent empirical and theoretical studies in PE, dance education, and motivation. In particular, research based on Self-Determination Theory (SDT) models has shown that teachers' autonomy, competence, and inclusive behaviours (such as encouragement, feedback, and an accommodating climate) significantly improve students' motivation, involvement, and long-term commitment. For example, a research study by Amado et al. [3] reported that intrinsic motivation and perceptions of connectedness/autonomy improved following motivation-based teacher training.

Specifically, the influence of encouragement and associated connectedness-support behaviours in dance or sports education is evident in existing research studies. Dong et al. [10] found that perceived teacher-relatedness support had strong and positive relations with intrinsic and identified motivation, and a negative relationship with external regulation and amotivation. The discovery supports the explanation that relational and emotionally nurturing leadership behaviours are more motivational salient than structural or innovation-based leadership behaviours in movement-motivated learning settings, e.g., Physical Education or dance.

Furthermore, a recent study shows that higher rates of student engagement and motivation are associated with more frequent use of PE teachers of need-supportive and autonomy-supportive instructional styles (i.e., providing choices, providing positive feedback, and considering students' opinions) [7].

Development of a motivational climate focused on cooperation, relatedness, and competence-support, even with newer or innovative pedagogies such as dance or Creative Physical Education (CPE), has been associated with enhanced out-of-school PA and enjoyment [25]. The fact that innovation recorded the highest mean score, therefore, could be the result of students valuing progressive and creative leadership behaviours. However, the higher correlation between encouragement and motivation is that perceived emotional support, validation, and relational presence, which are most highlighted in SDT-based and relational pedagogies, might be more decisive in motivational promotion than just innovation. This is consistent with findings in dance education, where supportive teacher behaviour, rather than creative or novel instruction, is central to maintaining motivation and persistence.

Lastly, the absence of age-dependent variation across all variables (ANOVAs for Motivation, Prototypicality, Improvement, Innovation, and Encouragement) indicates that the patterns may be relatively stable during early adolescence (ages 11–14). This aligns with cross-sectional studies in PE that show that need-supportive leadership and motivational climate have identical effects on motivation among adolescent age groups [3]. Taken together, the findings confirm the hypothesis that in a PE and



dance-based learning situation, identity- and relationship-oriented leadership, specifically encouragement and relatedness support, can be more motivating than structural aspects such as innovation or prototypicality. This is an extension of the SIL theory, as it emphasises relational processes through which leadership effectiveness can affect learner motivation in movement-based educational settings.

### **4.3. Implications of the Study**

#### **4.3.1. Theoretical Implications**

This research has added to the SIL literature by applying it to dance education, a field that has not been explored. It shows that SIL is also relevant beyond team-based sports and can be used to increase interest in individual, arts-based activities. These findings also indicate that SIL constructs can work together in a reciprocating manner in creative learning settings.

#### **4.3.2. Educational and Practical Implications**

For teachers, the results indicate that identity-based instructional practices can improve student motivation and engagement. On the other hand, the professional development aspects of SIL that may help dance teachers, and which they should implement, include showing prototypicality by actively participating in dance activities; building collective identity and belonging; fostering student development by offering constructive feedback; using innovation to promote creativity; and representing the interests of students in the school setting. Such practices can reduce the rate of student dropouts and maintain student involvement in dance programmes.

#### **4.3.3. Cross-Cultural Implications**

Given that SIL has been theoretically grounded in Western psychology, the successful implementation in Kuwait suggests that the principles of identity leadership can be applied to diverse cultural contexts. However, additional studies are still necessary to identify the dynamics of cultural expression and its influence on the application and effectiveness of SIL in dance education.

### **4.4. Limitations of the Study**

This study is limited in terms of methodology. The use of self-reported survey data raises concerns about social desirability bias, particularly given that the participants are young people. Such artefacts may be due to fear of punishment for speaking ill of their teacher or to a desire to portray their teachers in a favourable light. Furthermore, the analysis was limited to the SIL variable and excluded other potential determinants of engagement, including intrinsic passion, family support, and cultural context. This delimited focus limits the ability to enhance engagement to leadership factors alone. The study was also limited to females. Although dance is limited to girls in Kuwait and state schools are segregated by gender, it is difficult to generalise the results because boys' experiences in dance are likely to differ from those of girls.

Moreover, the study is cross-sectional in nature; therefore, it was difficult to draw causal conclusions. Correlations can be used to indicate associations between variables. However, it does not necessarily imply that SIL directly increases engagement. Causality must be established using an experimental or longitudinal design. For example, a comparison of the results of groups exposed to SIL-trained instructors with those of control groups might provide stronger evidence. Observational methods could also provide deeper insights into the practice of SIL behaviours. Notwithstanding these issues, the present study offers promising avenues for further research.

Finally, although the development of a new scale was not our primary purpose, the presence of cross-loadings on some items need consideration. Several steps can be considered. Firstly, as we suggested earlier, the underlying philosophy and findings of the original study (in our case, the ILI-Y) [5]. In simple terms, is there a logic to considering the factors as intertwined, reporting the results but with caution. Other options include the use of different rotations, the deletion of these items, or changing the number of extracted factors. Such refinements await further study, focused specifically on the evolution of a dance-specific instrument.

#### **4.5. Future Directions**

Further studies should explore the interaction between SIL and other variables, such as intrinsic passion, cultural identity, and career motivations. It could also be helpful to discuss SIL across various dance genres, as the nature of individuality and group integration can differ between, for example, ballet and gymnastics. Outside the field of dance, the investigation of SIL in classroom teaching, athletic training, or work teams may elucidate the general relevance of the results. Mixed-methods techniques, including surveys, observations, and interviews, may be used to obtain a more detailed view of the mechanisms by which SIL influences engagement. Future research should employ longitudinal and experimental designs to yield more insightful results on the subject.

Lastly, while the present study focused on female students due to contextual constraints, SIL theory is not inherently gender-specific. Future research should examine how identity leadership operates in mixed-gender and male-only dance contexts, where leaders may need to actively construct inclusive or counter-stereotypical group identities. Such work would help establish the model's broader applicability and test whether different dimensions of SIL become more or less salient depending on group composition.

#### **5. CONCLUSION**

The purpose of this study was to apply SIL theory to explore students' engagement with SIL and its perceived impact in dance. Our rationale was to determine whether SIL is an effective strategy for improving students' self-perceived engagement and performance in dance within a particular cultural and educational context. The results indicate that all four dimensions were positively perceived by students, with Innovation receiving the highest mean rating ( $M = 5.32$ ). Notably, the SIL dimension of Encouragement emerged as the most influential predictor of motivation, showing a moderate-to-strong correlation with motivation ( $r = .452, p < .01$ ). Factor analysis confirmed the conceptual distinctiveness of each dimension, and no significant age-related differences were observed among early adolescent participants. Overall, this paper suggests that SIL is an effective framework for leadership in dance teaching. Teachers who model and encourage a common identity inspire trust, affiliation, and motivation among students. Results show that although all dimensions of SIL are applicable, encouragement has a significantly stronger impact on maintaining engagement. We also recognise the methodological shortcomings of self-report information. However, the facts indicate that SIL may increase both engagement and performance not only in dance contexts but also in a wide range of group-related situations. Considerable development and study of the SIL could make it a valuable tool for teachers and leaders seeking to improve motivation, participation, and collective achievement among their learners and followers.

The results move SIL theory beyond its initial Western/team-sport-related background and thus show that identity-related leadership principles can be successfully implemented in individual, movement-oriented learning experiences and across diverse cultural contexts. The paper emphasises that relational leadership activities, especially encouragement and supportive feedback, are vital for promoting motivation and engagement, and implies that the effects of SIL extend to other areas of education and related activities. By measuring the impact of encouragement and verifying the flexibility of SIL constructs in a new setting, this study both contributes to theory and practice and guides educators seeking to improve student engagement through identity-based leadership approaches. Future research should conduct SIL intervention studies using longitudinal, experimental designs and include qualitative elements to clarify how relational leadership behaviours are enacted across different cultural and educational contexts.

Overall, this study provides practical implications for teacher training and educational policy in PE and dance. By demonstrating that SIL principles enhance motivation and engagement, educators can be trained to apply these strategies intentionally, and curricula can be designed to embed identity-based leadership practices. Such interventions have the potential to transform dance pedagogy globally, fostering more inclusive, motivating, and effective learning environments for students across cultural and activity contexts.

**Table 1.** Breakdown of Participants' Age

This table presents participants' ages and the number of participants in each age group. Data points are presented as frequencies and percentages.

Age	Frequency	Percent
11	41	17.8
12	56	24.3
13	83	36.1
14	50	21.7
<b>Total</b>	230	100.0

**Table 2.** Cronbach's Alpha Values

This table presents the Cronbach's alpha values for the four variables. This reveals the reliability of the items used to measure the variables.

Variable	Number of items	Cronbach's alpha value
<b>Prototypicality</b>	5	0.775
<b>Improvement</b>	5	0.772
<b>Innovation</b>	5	0.781
<b>Encouragement</b>	5	0.817

**Table 3.** KMO and Bartlett's Test

This table presents the results of preliminary tests assessing the suitability of the data for factor analysis.

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.906
Bartlett's Test of Sphericity	Approx. Chi-Square	2173.185
	Df	190
	Sig.	.000

**Table 4.** Communalities

This table shows the communalities after extraction in a factor analysis. Each value represents the proportion of variance in a variable that is explained by the extracted factors.

	<b>Extraction</b>
Proto. 1	.536
Proto. 2	.591
Proto. 3	.610
Proto. 4	.671
Proto. 5	.712
Imp. 1	.608
Imp. 2	.696
Imp. 3	.466
Imp. 4	.506
Imp. 5	.356
Inn. 1	.602
Inn. 2	.594
Inn. 3	.597
Inn. 4	.578
Inn. 5	.568
Enc. 1	.454

**Table 4.** Communalities (continued)

	<b>Extraction</b>
Enc. 2	.688
Enc. 3	.598
Enc. 4	.821
Enc. 5	.695

**Table 5.** Factor Loadings

This table presents the Rotated Component Matrix from the Principal Component Analysis (PCA) with Varimax rotation. Each variable has loadings on the extracted components (factors). A loading represents the strength of the relationship between a variable and a component. A higher loading score shows a stronger relationship between the variable and the respective component.

<b>Rotated Component Matrix<sup>a</sup></b>				
	Component			
	1	2	3	4
<b>Proto. 1</b>	.275	.636	.078	.224
<b>Proto. 2</b>	.446	.543	.172	.260
<b>Proto. 3</b>	.703	.126	.142	.282
<b>Proto. 4</b>	.027	.267	.238	.736
<b>Proto. 5</b>	.267	.086	.110	.788
<b>Imp. 1</b>	.411	.367	.551	.034
<b>Imp. 2</b>	.049	.724	.243	.331
<b>Imp. 3</b>	.385	.240	.273	.432
<b>Imp. 4</b>	.231	.369	.105	.553
<b>Imp. 5</b>	.311	.387	.109	.312
<b>Inn. 1</b>	.406	.580	.292	.126
<b>Inn. 2</b>	.726	.082	.178	.170
<b>Inn. 3</b>	.724	.181	.180	.091
<b>Inn. 4</b>	.626	.393	.055	.171
<b>Inn. 5</b>	.121	.580	.452	.112
<b>Enc. 1</b>	.266	.347	.512	.004
<b>Enc. 2</b>	.064	.470	.599	.324
<b>Enc. 3</b>	.331	.235	.336	.565
<b>Enc. 4</b>	.196	-.027	.794	.390
<b>Enc. 5</b>	.121	.189	.773	.217
The Extraction Method used was Principal Component Analysis with Varimax Rotation and Kaiser Normalisation.				
Rotation converged in 6 iterations.				

**Table 6.** Descriptive Statistics

This table shows the descriptive statistics for the study variables. The data is presented as mean and standard deviation. This presents the overall score for each variable, reflecting participants' perceptions of that variable.

<b>Descriptive Statistics</b>		
	N	Mean (S.D)
Mot. 1	230	5.29 (1.120)
Mot. 2	230	1.94 (1.314)
Encouragement	230	5.0391 (0.99520)
Prototypicality	230	5.1983 (0.79606)
Improvement	230	5.1670 (0.82724)
Innovation	230	5.3217 (0.68148)
<b>Valid N (listwise)</b>	230	

**Table 7. ANOVA**

This ANOVA table shows whether there are statistically significant differences across age groups for each variable. This is reflected in the significance value. Usually, a significance value of 0.05 or 0.01 indicates a statistically significant difference between groups, in this case, age groups.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
<b>Mot. 1</b>	Between Groups	4.118	3	1.373	1.096	.351
	Within Groups	282.943	226	1.252		
	Total	287.061	229			
<b>Mot. 2</b>	Between Groups	4.542	3	1.514	.876	.454
	Within Groups	390.605	226	1.728		
	Total	395.148	229			
<b>Prototypicality</b>	Between Groups	2.955	3	.985	1.566	.198
	Within Groups	142.164	226	.629		
	Total	145.119	229			
<b>Improvement</b>	Between Groups	2.905	3	.968	1.423	.237
	Within Groups	153.803	226	.681		
	Total	156.709	229			
<b>Innovation</b>	Between Groups	2.302	3	.767	1.667	.175
	Within Groups	104.049	226	.460		
	Total	106.351	229			
<b>Encouragement</b>	Between Groups	3.403	3	1.134	1.147	.331
	Within Groups	223.405	226	.989		
	Total	226.808	229			

**Table 8. Mean Score of Variables**

This table presents the mean scores and standard deviations of the study variables across the four age groups. Each score shows how participants in each group perceived the factor. For example, a score of 5.51 among participants aged 11 indicates that the majority of these participants were highly motivated.

		N	Mean (S.D)
<b>Mot. 1</b>	11	41	5.51 (0.925)
	12	56	5.23 (1.348)
	13	83	5.33 (0.951)
	14	50	5.10 (1.233)
	Total	230	5.29 (1.120)
<b>Mot. 2</b>	11	41	1.90 (1.044)
	12	56	1.89 (1.461)
	13	83	1.83 (1.177)
	14	50	2.20 (1.539)
	Total	230	1.94 (1.314)
<b>Prototypicality</b>	11	41	5.2390 (0.59029)
	12	56	5.3786 (0.71114)
	13	83	5.1205 (0.87286)
	14	50	5.0920 (0.87990)
	Total	230	5.1983 (0.79606)



**Table 8.** Mean Score of Variables (continued)

		N	Mean (S.D)
<b>Improvement</b>	11	41	5.2927 (0.61335)
	12	56	5.2786 (0.85253)
	13	83	5.1325 (0.89947)
	14	50	4.9960 (0.81365)
	Total	230	5.1670 (0.82724)
<b>Innovation</b>	11	41	5.3268 (0.63680)
	12	56	5.4893 (0.58455)
	13	83	5.2627 (0.76313)
	14	50	5.2280 (0.65902)
	Total	230	5.3217 (0.68148)
<b>Encouragement</b>	11	41	5.1854 (0.64713)
	12	56	5.1679 (1.04779)
	13	83	4.9759 (1.03989)
	14	50	4.8800 (1.08421)
	Total	230	5.0391 (0.99520)

**Table 9:** Correlation Analysis Results

This table shows the correlation coefficients between the Motivation variables (Mot. 1 and Mot. 2) and the other constructs (Prototypicality, Improvement, Innovation, Encouragement). This shows how these four SIL constructs influence Motivation.

		Prototypicality	Improvement	Innovation	Encouragement
<b>Mot. 1</b>	Pearson Correlation	.406**	.265**	.302**	.452**
<b>Mot. 2</b>	Pearson Correlation	-.045	-.073	-.111	-.034

\*\* Significance at 0.01

**Funding Statement:** This research received no external funding.

**Contribution:** The author was solely responsible for the conceptualisation, methodology, data collection, analysis, interpretation, and writing of the manuscript.

**Informed Consent Statement:** Informed consent was obtained from all participants involved in the study.

**Data Availability Statement:** The data supporting the findings of this study have been submitted to the University of Edinburgh DataShare repository and are currently under review; a DOI is pending. Until the DOI is issued, access to the data can be requested from the corresponding author, subject to ethical approval and confidentiality considerations.

**Conflict of Interest Statement:** The author declares no conflict of interest.

## REFERENCES

1. Alshemmari, A. M. Z. N. Z., Collins, D., & Timmons, W. M. (2025). Leading the dance: application of social identity leadership theory in dance teaching. *Research in Dance Education*, 26(1), 30–40. <https://doi.org/10.1080/14647893.2025.2455673>
2. Alshemmari, A. M. Z. N. Z., Timmons, W. M., & Collins, D. (2025). Sensing the direction of leadership and social identity in dance education. *Research in Dance Education*, 1–13. <https://doi.org/10.1080/14647893.2025.2570125>
3. Amado, D., Molero, P., Del Villar, F., Tapia-Serrano, M. Á., & Sánchez-Miguel, P. A. (2020). Implementing a Teacher-Focused Intervention in Physical Education to Increase Pupils' Motivation towards Dance at School. *Sustainability*, 12(11), 4550. <https://doi.org/10.3390/su12114550>

4. Axelson, R. D., & Flick, A. (2011). Defining student engagement. *Change: The Magazine of Higher Learning*, 43(1), 38–43. <https://doi.org/10.1080/00091383.2011.533096>
5. Butalia, R., Miller, A., Steffens, N. K., Haslam, S. A., Bruner, M. W., McLaren, C. D., Boen, F., Slater, M. J., Dunn, K., & Fransen, K. (2024). Measuring leadership in sport: Development and validation of the Identity Leadership Inventory – Youth (ILI-Y). *Psychology of Sport and Exercise*, 73, 102630. <https://doi.org/10.1016/j.psychsport.2024.102630>
6. Chen, Y., Wang, S. Ametefe, S.S. & John, D. (2024). Impact of Dancing on Physical and Mental Health: A Systematic Literature Review. *Dance Research*, 42, 2, [doi.org/10.3366/drs.2024.0432](https://doi.org/10.3366/drs.2024.0432)
7. Cheon, S. H., Reeve, J., & Vansteenkiste, M. (2020). When teachers learn how to provide classroom structure in an autonomy-supportive way: Benefits to teachers and their students. *Teaching and Teacher Education*, 90, 103004. <https://doi.org/10.1016/j.tate.2019.103004>
8. Demirel, D. H., & Yildiran, I. (2013). The philosophy of physical education and sport from ancient times to the Enlightenment. *European Journal of Educational Research*, 2(4), 191–202. <https://doi.org/10.12973/eu-jer.2.4.191>
9. Dils, A. (2007). Social history and dance as education. In L. Bresler (Ed.), *International handbook of research in arts education* (pp. 103–119). Springer. [https://doi.org/10.1007/978-1-4020-3052-9\\_7](https://doi.org/10.1007/978-1-4020-3052-9_7)
10. Dong, W., Xiang, C., Kamaruddin, A. Y., et al. (2024). The relationship between perceived teacher relatedness-support behavior (RSB) and learning motivation of dancesport students in universities. *Scientific Reports*, 14, 28043. <https://doi.org/10.1038/s41598-024-79507-8>
11. Druckman, J. N., & Kam, C. D. (2011). Students as experimental participants. In J. N. Druckman, D. P. Green, J. H. Kuklinski, & A. Lupia (Eds.), *Cambridge handbook of experimental political science* (pp. 41–57). Cambridge University Press. <https://doi.org/10.1017/CBO9780511921452.004>
12. Fancourt D, Finn S. (2019). What is the evidence on the role of the arts in improving health and well-being? A scoping review. Copenhagen: WHO Regional Office for Europe; 2019 (Health Evidence Network (HEN) synthesis report 67)
13. Fransen, K., Haslam, S. A., Steffens, N. K., Vanbeselaere, N., De Cuyper, B., & Boen, F. (2015). Believing in “us”: Exploring leaders’ capacity to enhance team confidence and performance by building a sense of shared social identity. *Journal of Experimental Psychology: Applied*, 21(1), 89–100. <https://doi.org/10.1037/xap0000033>
14. Haslam, S. A., & Platow, M. J. (2001). The link between leadership and followership: How affirming social identity translates vision into action. *Personality and Social Psychology Bulletin*, 27(11), 1469–1479. <https://doi.org/10.1177/01461672012711008>
15. Haslam, S. A., & Reicher, S. D. (2016). Rethinking the psychology of leadership: From personal identity to social identity. *Daedalus*, 145(3), 21–34. [https://doi.org/10.1162/DAED\\_a\\_00394](https://doi.org/10.1162/DAED_a_00394)
16. Haslam, S. A., Platow, M. J., Turner, J. C., Reynolds, K. J., McGarty, C., Oakes, P. J., & Veenstra, K. (2001). Social identity and the romance of leadership: The importance of being seen to be “doing it for us.” *Group Processes & Intergroup Relations*, 4(3), 191–205. <https://doi.org/10.1177/1368430201004003002>
17. Haslam, S. A., Steffens, N. K., Peters, K., Boyce, R. A., Mallett, C. J., & Fransen, K. (2017). A social identity approach to leadership development. *Journal of Personnel Psychology*, 16(3), 113–124. <https://doi.org/10.1027/1866-5888/a000176>
18. Hirst, G., Van Dick, R., & Van Knippenberg, D. (2009). A social identity perspective on leadership and employee creativity. *Journal of Organizational Behavior*, 30(7), 963–982. <https://doi.org/10.1002/job.600>
19. Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5(3), 184–200. [https://doi.org/10.1207/S15327957PSPR0503\\_1](https://doi.org/10.1207/S15327957PSPR0503_1)
20. Houston, C. (2025). Examining implicit leadership theories in a dance and dance education context. *Research in Dance Education*, 1–19. <https://doi.org/10.1080/14647893.2025.2455679>
21. ITC (2017). ITC Guidelines for Translating and Adapting Tests (Second Edition). *International Journal of Testing*, 18(2), 101–134. <https://doi.org/10.1080/15305058.2017.1398166>
22. Johnston, R. S. (1906). *A history of dancing*. Simpkin, Marshall, Hamilton, Kent, & Company.
23. Kassing, G. (2007). *History of dance: An interactive arts approach*. Human Kinetics.
24. Koff, S. R. (2000). Toward a Definition of Dance Education. *Childhood Education*, 77(1), 27–32. <https://doi.org/10.1080/00094056.2000.10522134>
25. Kokkonen, J., Gråstén, A., Quay, J., & Kokkonen, M. (2020). Contribution of Motivational Climates and Social Competence in Physical Education on Overall Physical Activity: A Self-Determination Theory Approach with a Creative Physical Education Twist. *International Journal*

- of *Environmental Research and Public Health*, 17(16), 5885. <https://doi.org/10.3390/ijerph17165885>
26. Krug, H., Haslam, S. A., Otto, K., & Steffens, N. K. (2021). Identity leadership, social identity continuity, and well-being at work during COVID-19. *Frontiers in Psychology*, 12, 684475. <https://doi.org/10.3389/fpsyg.2021.684475>
  27. Leonard, A. E. (2022). Taking on the Challenges of Our Present: Dance Education for Children and Youth. *Journal of Dance Education*, 22(3), 141–143. <https://doi.org/10.1080/15290824.2022.2095792>
  28. Lobo, J., Bernardo, B. D., Buan, E., Ramirez, D., Ang, G., Alfonso, X. J., & Malig, J. (2022). The role of motivation to dance engagement and psychological well-being. *American Journal of Youth and Women Empowerment*, 1(1), 22–29. <https://doi.org/10.54536/ajywe.v1i1.835>
  29. Maksimovic, J., & Evtimov, J. (2023). Positivism and post-positivism as the basis of quantitative research in pedagogy. *Research in Pedagogy*, 13(1), 208–218. <https://doi.org/10.5937/IstrPed2301208M>
  30. Maretha, C. (2023). Positivism in philosophical studies. *Journal of Innovation in Teaching and Instructional Media*, 3(3), 124–138. <https://doi.org/10.52690/jitim.v3i3.716>
  31. Mazhar, S. A., Anjum, R., Anwar, A. I., & Khan, A. A. (2021). Methods of data collection: A fundamental tool of research. *Journal of Integrated Community Health*, 10(1), 6–10. <https://doi.org/10.24321/2319.9113.202101>
  32. Morgan, G. A., & Harmon, R. J. (2001). Data collection techniques. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(8), 973–976. <https://doi.org/10.1097/00004583-200108000-00020>
  33. Murray, S. C. (2015). Sport and education in ancient Greece and Rome. In K. Christesen & L. J. Samons (Eds.), *A companion to ancient education* (pp. 430–443). Wiley-Blackwell. <https://doi.org/10.1002/9781119023913.ch29>
  34. Nikitaras, N., Kamberidou, I., & Skordilis, E. (2008). The joy of dance (Terpsichore): Dance and gymnastics, constituent elements of education in the classical era. *Italian Journal of Sport Sciences*, 1–17. [http://scholar.uoa.gr/sites/default/files/ikamper/files/the\\_joy\\_of\\_dance\\_2008.pdf](http://scholar.uoa.gr/sites/default/files/ikamper/files/the_joy_of_dance_2008.pdf)
  35. Nkansah, B. K. (2018). On the Kaiser-Meier-Olkin's measure of sampling adequacy. *Mathematical Theory and Modeling*, 8(7), 52–76. <https://core.ac.uk/download/pdf/234680607.pdf>
  36. Ott, R. L., & Longnecker, M. (2010). *An introduction to statistical methods and data analysis* (6th ed.). Cengage Learning.
  37. Park, Y. S., Konge, L., & Artino, A. R., Jr. (2020). The positivism paradigm of research. *Academic Medicine*, 95(5), 690–694. <https://doi.org/10.1097/ACM.0000000000003093>
  38. Platow, M. J., & Van Knippenberg, D. (2001). A social identity analysis of leadership endorsement: The effects of leader ingroup prototypicality and distributive intergroup fairness. *Personality and Social Psychology Bulletin*, 27(11), 1508–1519. <https://doi.org/10.1177/01461672012711011>
  39. Pruiksmā, R. (2021). Rethinking burlesque forms in Louis XIII ballets: Dance, music, and politics in burlesque ballets, 1625–1635. *Études Épistémè. Revue de littérature et de civilisation (XVIe–XVIIIe siècles)*, (39). <https://doi.org/10.4000/episteme.11284>
  40. Reddish, P., Fischer, R., & Bulbulia, J. (2013). Let's dance together: Synchrony, shared intentionality and cooperation. *PLoS ONE*, 8(8), e71182. <https://doi.org/10.1371/journal.pone.0071182>
  41. Reicher, S., Haslam, S. A., & Hopkins, N. (2005). Social identity and the dynamics of leadership: Leaders and followers as collaborative agents in the transformation of social reality. *The Leadership Quarterly*, 16(4), 547–568. <https://doi.org/10.1016/j.leaqua.2005.06.007>
  42. Risner, D. (2023). Dance Education Matters: Rebuilding Postsecondary Dance Education for Twenty-First Century Relevance and Resonance. In D. Risner (Ed.), *Dancing mind, minding dance* (pp. 49–64). Routledge.
  43. Slater, M. J., & Barker, J. B. (2019). Doing Social Identity Leadership: Exploring the efficacy of an identity leadership intervention on perceived leadership and mobilization in elite disability soccer. *Journal of Applied Sport Psychology*, 31(1), 65–86. <https://doi.org/10.1080/10413200.2017.1410255>
  44. Slater, M. J., Coffee, P., Barker, J. B., & Evans, A. L. (2014). Promoting shared meanings in group memberships: A social identity approach to leadership in sport. *Reflective Practice*, 15(5), 672–685. <https://doi.org/10.1080/14623943.2014.944126>
  45. Steffens, N. K., Haslam, S. A., Ryan, M. K., & Kessler, T. (2018). Leader performance and prototypicality: Their inter-relationship and impact on leaders' identity entrepreneurship. *European Journal of Social Psychology*, 43(7), 606–613. <https://doi.org/10.1002/ejsp.1985>

46. Steffens, N. K., Munt, K. A., Van Knippenberg, D., Platow, M. J., & Haslam, S. A. (2021). Advancing the social identity theory of leadership: A meta-analytic review of leader group prototypicality. *Organizational Psychology Review*, 11(1), 35–72. <https://doi.org/10.1177/2041386620962569>
47. Stevens, M., Rees, T., & Cruwys, T. (2021). Social Identity Leadership in sport and exercise: Current status and future directions. *Psychology of Sport and Exercise*, 55, 101931. <https://doi.org/10.1016/j.psychsport.2021.101931>
48. Stevens, M., Rees, T., Coffee, P., Haslam, S. A., Steffens, N. K., & Polman, R. (2018). Leaders promote attendance in sport and exercise sessions by fostering social identity. *Scandinavian Journal of Medicine & Science in Sports*, 28(9), 2100–2108. <https://doi.org/10.1111/sms.13217>
49. Stevens, M., Rees, T., Coffee, P., Haslam, S. A., Steffens, N. K., & Polman, R. (2018). Leaders promote attendance in sport and exercise sessions by fostering social identity. *Scandinavian Journal of Medicine & Science in Sports*, 28(9), 2100–2108. <https://doi.org/10.1111/sms.13217>
50. Subašić, E., Reynolds, K. J., Turner, J. C., Veenstra, K. E., & Haslam, S. A. (2011). Leadership, power and the use of surveillance: Implications of shared social identity for leaders' capacity to influence. *The Leadership Quarterly*, 22(1), 170–181. <https://doi.org/10.1016/j.leaqua.2010.12.014>
51. Tajfel, H., & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Brooks/Cole.
52. Toma, G., Guetterman, T. C., Yaqub, T., Talaat, N., & Fetters, M. D. (2017). A systematic approach for accurate translation of instruments: Experience with translating the Connor–Davidson Resilience Scale into Arabic. *Methodological Innovations*, 10(3), 2059799117741406. <https://doi.org/10.1177/2059799117741406>.
53. Turner, J. C., Brown, R. J., & Tajfel, H. (1979). Social comparison and group interest in ingroup favouritism. *European journal of social psychology*, 9(2), 187–204.
54. van Dick, R., & Kerschreiter, R. (2016). The social identity approach to effective leadership: An overview and some ideas on cross-cultural generalizability. *Frontiers of Business Research in China*, 10(3), 363–384. <https://doi.org/10.3868/S070-005-016-0013-3>
55. Van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in Organizational Behavior*, 25, 243–295. [https://doi.org/10.1016/S0191-3085\(03\)25006-1](https://doi.org/10.1016/S0191-3085(03)25006-1)
56. Vegsund, H. K., Rannestad, T., Reinfjell, T., Moksnes, U. K., Wallin, A. E., & Eilertsen, M. E. B. (2018). Translation and linguistic validation of a Swedish study-specific questionnaire for use among Norwegian parents who lost a child to cancer. *Social Sciences*, 7(10), 187. <https://doi.org/10.3390/socsci7100187>
57. Wagner, A. L. (1997). *Adversaries of dance: From the Puritans to the present*. University of Illinois Press. <https://doi.org/10.2307/2568106>
58. Wells, J. E., & Aicher, T. J. (2013). Follow the leader: A relational demography, similarity attraction, and social identity theory of leadership approach of a team's performance. *Gender Issues*, 30(1–2), 1–14. <https://doi.org/10.1007/s12147-013-9112-8>
59. Wickham, H. (2016). Data analysis. In H. Wickham, *ggplot2: Elegant graphics for data analysis* (pp. 189–201). Springer. [https://doi.org/10.1007/978-3-319-24277-4\\_9](https://doi.org/10.1007/978-3-319-24277-4_9)
60. Winerock, E. F. (2011). Staging dance in English Renaissance drama. In *Proceedings of the 34th Society of Dance History Scholars Annual Conference* (pp. 259–266).

## **APPENDIX**

### **Appendix A: English Survey**

#### **Survey Title: Applying Social Identity Leadership Theory to Explore Students' Engagement and Motivation in Dance**

Please note that this copy will be presented in the Arabic language in the survey. The translation will be translated and back-translated for reliability of language and meaning [1].

#### **Introduction of Social Identity Leadership Theory (SIL)**

The concept of Social Identity Leadership theory (SIL) explains how individuals can build a common social identity in order to lead other members of a community and influence them. This theory may, therefore, be useful in environments where the development of dance education and engagement is shaped.

The focus of this survey is to explore SIL theory and leadership practices in Physical Education and dance environments. In this survey, we refer to those who lead the dance sessions as teachers or coaches. Likewise, the term 'dance team' refers to any organised group, squad, class, or group of dancers who work together on a regular basis, such as weekly or more frequently. This definition includes groups that practice, rehearse, and perform together regularly, but it does not include typical one-off 'drop-in' style classes where participants come and go without a consistent commitment to a group. Throughout the survey, we will use the term 'dance team' to refer to these regularly practising groups. In addition, the term "dance" encompasses all exercises and movements accompanied by music, including ballet, gymnastics, folk art, and modern art.

Please be assured that your responses to this survey will be completely confidential, as we will collect no data which can be used to identify you. By completing the survey and submitting your results, you are agreeing to our use of the data anonymously for analysis as part of my thesis and for the production of papers, reports, and other outputs. However, you have the right to request that your data is not used in this study. If you do, your information will be excluded from the study.

**For parents & guardians:** I agree for my child to take part in this survey **(Yes or No)**



**Section 1: Demographics**

Section 1: Demographics		
Age (In Years)	( ) Years	
Sex (Choose One)	Female	Male
Type of School (Choose One)	State School	Private School
Type of Classes (Choose One)	Mixed Class	Single Sex Class
I agree to participate in this survey (Choose One)	Yes	No

**Section 2: Prototypicality**

Section 2: Prototypicality (6 Likert Scale)							
Statements		1 Strongly Disagree	2 Disagree	3 Disagree Slightly	4 Agree Slightly	5 Agree	6 Strongly Agree
Proto. 1	Our teacher/coach effectively represents the values and standards of our dance team.						
Proto. 2	Our teacher/coach consistently serves as an exemplary role model for team members.						
Proto. 3	Our teacher/coach exemplifies the ideal behaviours and attitudes expected of dancers in our team.						
Proto. 4	Our teacher/coach helps dancers clearly understand the standards and expectations of being part of our team.						
Proto. 5	Our teacher/coach articulates and reinforces what being an essential team member means.						

**Section 3: Improvement**

Section 3: Improvement (6 Likert Scale)							
Statements		1 Strongly Disagree	2 Disagree	3 Disagree Slightly	4 Agree Slightly	5 Agree	6 Strongly Agree
Imp. 1	Our teacher/coach actively contributes to the personal and professional growth of the dancers.						
Imp. 2	Our teacher/coach provides unwavering support for the initiatives and goals of our team.						
Imp. 3	Our teacher/coach advocates for the interests and needs of our team members.						
Imp. 4	Our teacher/coach's actions are consistently aimed at the betterment and success of our team.						
Imp. 5	Our teacher/coach helps us develop positive relations with one another.						

**Section 4: Innovation**

Section 4: Innovation (6 Likert Scale)							
Statements		1 Strongly Disagree	2 Disagree	3 Disagree Slightly	4 Agree Slightly	5 Agree	6 Strongly Agree
Inn. 1	Our teacher/coach innovatively organises activities that foster team unity and collaboration.						
Inn. 2	Our teacher/coach initiates and arranges events that improve our team’s performance and dynamics.						
Inn. 3	Our teacher/coach is adept at managing and coordinating team-related activities and events.						
Inn. 4	Our teacher/coach strategically plans activities contributing to the team’s objectives.						
Inn. 5	Our teacher/coach helps team members set and achieve personalised dance-related goals.						

**Section 5: Encouragement**

Section 5: Encouragement (6 Likert Scale)							
Statements		1 Strongly Disagree	2 Disagree	3 Disagree Slightly	4 Agree Slightly	5 Agree	6 Strongly Agree
Enc. 1	Our teacher/coach cultivates a strong sense of unity and belonging within the team.						
Enc. 2	Our teacher/coach provides clear, effective instructions that enhance our dance training.						
Enc. 3	Our teacher/coach creates an encouraging and motivating environment conducive to learning.						
Enc. 4	Our teacher/coach makes the process of learning dance engaging and enjoyable.						
Enc. 5	Our teacher/coach inspires team members to strive for excellence in their dancing.						

**Section 6: Motivation and Experience**

Section 6: Motivation and Experience (6 Likert Scale)							
Statements		1 Strongly Disagree	2 Disagree	3 Disagree Slightly	4 Agree Slightly	5 Agree	6 Strongly Agree
Mot. 1	The dance classes at my school have motivated me to continue afterwards.						
Mot. 2	My motivation for dance classes cannot be improved.						

**Final Page:**

Once completed, please ensure that you click Submit to send in your results.

Remember that once submitted, we will be unable to find and remove your data, so please ensure that you are comfortable with its use for the purposes outlined at the start of this survey.

## Appendix B: Arabic Survey

### مقدمة في نظرية قيادة الهوية الاجتماعية (SIL) Social Identity Leadership Theory (SIL)

يشرح مفهوم نظرية قيادة الهوية الاجتماعية (SIL) Social Identity Leadership Theory كيف يمكن للأفراد بناء هوية اجتماعية مشتركة من أجل قيادة أفراد آخرين في المجتمع والتأثير عليهم. لذلك، قد تكون هذه النظرية مفيدة في البيئات التي يتم فيها تشكيل تطوير تعليم الرقص والمشاركة. ينصب تركيز هذا الاستبيان على استكشاف نظرية SIL وممارسات القيادة في بيئات التربية البدنية والرقص.

في هذا الاستبيان، نشير إلى أولئك الذين يقودون جلسات الرقص كمعلمين أو مدربين. وبالمثل، يشير مصطلح "فريق الرقص" إلى أي مجموعة منظمة، أو فرقة، أو فصل، أو مجموعة من الراقصين الذين يعملون معاً بشكل منتظم، مثل أسبوعياً أو أكثر تكراراً. يتضمن هذا التعريف المجموعات التي تمارس وتتدرب وتتؤدي معاً بانتظام، لكنه لا يتضمن الفصول الدراسية التقليدية التي تُعقد لمرة واحدة بأسلوب "القدوم والذهاب"، حيث يأتي المشاركون ويذهبون دون التزام ثابت تجاه المجموعة. طوال الاستبيان، سنستخدم مصطلح "فريق الرقص" للإشارة إلى هذه المجموعات التي تتدرب بانتظام. بالإضافة إلى ذلك، نشير في مصطلح "الرقص" إلى جميع

التمرينات والحركات التي يصاحبها موسيقى، والتي تشمل الباليه، الجيمباز، الفن الشعبي، الفن الحديث، إلخ.

يرجى التأكد من أن إجاباتك على هذا الاستبيان ستكون سرية تماماً، حيث لن نقوم بجمع أي بيانات يمكن استخدامها لتحديد هويتك. من خلال إكمال الاستبيان وإرسال نتائجك، فإنك توافق على استخدامنا للبيانات بشكل مجهول للتحليل كجزء من أطروحتي وإنتاج الأوراق والتقارير وغيرها من المخرجات. نظراً لعدم وجود تفاصيل عن هويتك، فلا يمكننا تحديد نتائجك الشخصية ولن نتمكن من إزالة بياناتك من التحليل. لذلك، فإن جمع بياناتك عند الانتهاء يمنحنا الإذن باستخدام بيانات المشاركين لأغراض البحث والتحليل المرتبطة بالأهداف الموضحة أعلاه.

**القسم 1: البيانات الديموغرافية – Demographics**

القسم 1: البيانات الديموغرافية		
1. العمر (بالسنوات)	( ) سنة	
2. الجنس	أنثى ( )	ذكر ( )
3. نوع المدرسة	مدرسة حكومية ( )	مدرسة خاصة ( )
4. نوع الفصل	مختلط الجنس ( )	أحادي الجنس: إناث فقط أو ذكور فقط ( )
5. أوافق على المشاركة في هذا الاستبيان	نعم ( )	لا ( )

**القسم 2: النموذجية – Prototypicality**

1 لا أوافق بشدة، 2 لا أوافق، 3 لا أوافق قليلاً، 4 أوافق قليلاً، 5 أوافق، 6 أوافق بشدة: 6 Likert Scale

القسم 2: النموذجية	لا أوافق بشدة 1 =	لا أوافق 2 =	لا أوافق قليلاً 3 =	أوافق قليلاً 4 =	أوافق 5 =	أوافق بشدة 6 =
6. معلمنا/مدرينا يجسد بفاعلية القيم والمعايير لفريق الرقص لدينا.						
7. معلمنا/مدرينا يمثل قدوة مثالية لأعضاء الفريق باستمرار.						
8. معلمنا/مدرينا يجسد السلوكيات والمواقف المثالية المتوقعة من الراقصين في فريقنا.						
9. معلمنا/مدرينا يساعد الراقصين على فهم المعايير والتوقعات بوضوح لكونهم جزءاً من فريقنا.						
10. معلمنا/مدرينا يوضح ويعزز ما يعنيه أن تكون عضواً أساسياً في الفريق.						

**القسم 3: التقدم – Improvement**

1 لا أوافق بشدة، 2 لا أوافق، 3 لا أوافق قليلاً، 4 أوافق قليلاً، 5 أوافق، 6 أوافق بشدة: 6 Likert Scale

القسم 3: التقدم	لا أوافق بشدة 1 =	لا أوافق 2 =	لا أوافق قليلاً 3 =	أوافق قليلاً 4 =	أوافق 5 =	أوافق بشدة 6 =
11. معلمنا/مدرينا يساهم بشكل فعال في النمو الشخصي والمهني للراقصين.						
12. معلمنا/مدرينا يقدم دعمًا ثابتًا لمبادرات وأهداف فريقنا.						
13. معلمنا/مدرينا يدافع عن مصالح واحتياجات أعضاء فريقنا.						
14. تصرفات معلمنا/مدرينا تهدف باستمرار إلى تحسين ونجاح فريقنا.						
15. معلمنا/مدرينا يساعدنا في تطوير علاقات إيجابية مع بعضنا البعض.						

**القسم 4: الإبداع والابتكار – Innovation**

1 لا أوافق بشدة، 2 لا أوافق، 3 لا أوافق قليلاً، 4 أوافق قليلاً، 5 أوافق، 6 أوافق بشدة: 6 Likert Scale

القسم 4: الإبداع والابتكار	لا أوافق بشدة 1 =	لا أوافق 2 =	لا أوافق قليلاً 3 =	أوافق قليلاً 4 =	أوافق 5 =	أوافق بشدة 6 =
16. معلمنا/مدرينا ينظم بطرق مبتكرة أنشطة تعزز الوحدة والتعاون بين الفريق.						
17. معلمنا/مدرينا يبادر بتنظيم الفعاليات التي تحسن أداء فريقنا وديناميكيته.						
18. معلمنا/مدرينا يتمتع بالمهارة في إدارة وتنسيق الأنشطة والفعاليات المتعلقة بالفريق.						
19. معلمنا/مدرينا يخطط بشكل استراتيجي للأنشطة التي تساهم في تحقيق أهداف الفريق.						
20. معلمنا/مدرينا يساعد أعضاء الفريق في تحديد وتحقيق أهدافنا الشخصية المتعلقة بالرقص.						

**القسم 5: التشجيع والتحفيز – Encouragement**
**6 Likert Scale:** 1 لا أوافق بشدة، 2 لا أوافق، 3 لا أوافق قليلاً، 4 أوافق قليلاً، 5 أوافق، 6 أوافق بشدة

أوافق بشدة 6 =	أوافق 5 =	أوافق قليلاً 4 =	لا أوافق قليلاً 3 =	لا أوافق 2 =	لا أوافق بشدة 1 =	القسم 5: التشجيع والتحفيز
						21. معلماً/مدريناً يعزز شعوراً قوياً بالوحدة والانتماء داخل الفريق.
						22. معلماً/مدريناً يقدم تعليمات واضحة وفعالة تعزز تدريباً على الرقص.
						23. معلماً/مدريناً يخلق بيئة مشجعة ومحفزة تساهم في التعلم.
						24. معلماً/مدريناً يجعل عملية تعلم الرقص ممتعة ومشوقة.
						25. معلماً/مدريناً يلهم أعضاء الفريق للسعي لتحقيق التميز في رقصهم.

**القسم 6: الدافع والخبرة – Motivation and Experience**
**6 Likert Scale:** 1 لا أوافق بشدة، 2 لا أوافق، 3 لا أوافق قليلاً، 4 أوافق قليلاً، 5 أوافق، 6 أوافق بشدة

أوافق بشدة 6 =	أوافق 5 =	أوافق قليلاً 4 =	لا أوافق قليلاً 3 =	لا أوافق 2 =	لا أوافق بشدة 1 =	القسم 6: الدافع والخبرة
						26. دروس الرقص في مدرستي حفزتني على الاستمرار بعد ذلك.
						27. لا يمكن تحسين دوافعي لدروس الرقص.

شكراً على المشاركة في هذا الاستبيان.

تذكر أنه بمجرد تقديم البيانات، لن نتمكن من العثور عليها وإزالتها، لذا يرجى التأكد من أنك مرتاح لاستخدامها للأغراض الموضحة في بداية هذا الاستبيان.

**REFERENCES**

1. Soto, S., Linas, K., Jacobstein, D., Biel, M., Migdal, T., & Anthony, B. J. (2014). A review of cultural adaptations of screening tools for autism spectrum disorders. *Autism*, 19(6), 646–661. <https://doi.org/10.1177/1362361314541012> (Original work published 2015)