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Examining the Transferability of Westernised Language Learner Autonomy (WLLA) Models to Saudi Arabian Students of English as Foreign Language

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Abstract

The autonomy of language learners is an important element in the successful acquisition of a second language, but model development in this area has primarily occurred in Western, thus individualistic and learner-centred, contexts. In Saudi Arabia, second language learning is typically teacher-centred and shaped by a collectivist culture. This study examined the structure and cross-cultural validity of a language learner autonomy model that originated in the West, using two independent samples of Saudi learners of English as a foreign language (EFL): a confirmatory sample (N = 230) and an exploratory sample (N = 166). Confirmatory factor analysis of the main sample showed a mixed-model fit. Discriminant validity was assessed using both the Fornell-Larcker criterion and the heterotrait-monotrait ratio, which showed agreement. Linguistic Confidence and Social Comparison emerged as stable, distinct factors, whereas Information Literacy, Metacognition and Self-Reliance were strongly intercorrelated. Locus of Control demonstrated weak reliability and validity and was closely associated with Social Comparison. A four-factor solution emerged, in which Information Literacy, Metacognition and Self-Reliance were all loaded onto a single dominant factor, while Social Comparison and Linguistic Confidence remained distinct. This indicates that language learning autonomy should not be treated as a universal construct. Saudi EFL students appear to conceptualise autonomy as reactive, scaffolded and socially mediated, reflecting a context in which autonomous second language learning develops through structured instructional support.

1. Introduction

Language learners' autonomy (Holec, 1981; Benson, 2001; Little, 1991; Littlewood, 1999) is a fundamental element in the study and practice of second language teaching. Language learner autonomy is typically defined as the student's ability to take control of their own learning goals, learning content, learning methods, and the assessment of their learning (Holec, 1981; Benson, 2011). The concept has been applied to language learning, learner motivation, the use of learning strategies, and learning outcomes across diverse educational settings (Cotterall, 1995; Dickinson, 1994; Little, 1991; Littlewood, 1999; Oxford, 2017), and an important research finding is that some learning autonomy is essential for the learner's progression and development in foreign-language acquisition. This is particularly important in

learning environments where the primary source of exposure to the target language is through classroom instruction (Huang & Benson, 2013; Little, 2007). Importantly, the literature indicates that autonomous language learning is a context-sensitive construct, influenced by local cultural attitudes, practices and policies. Therefore, it is important to examine the extent to which language learning autonomy models, which have been developed primarily in Western and therefore individualistic social contexts, remain valid and useful in non-Western contexts (Benson, 2001; Holliday, 2003; Palfreyman & Smith, 2003; Pennycook, 1997).

Scholars have not yet determined whether Western-derived concepts of language learners' autonomy are directly applicable to EFL learners in Saudi Arabia. Recent studies in the Saudi context have produced conflicting findings. Some researchers state that Saudi EFL learners lack a satisfactory level of autonomy (Alrabai, 2017; Alzubi et al., 2017; Asiri & Shukri, 2020; Mohammed, 2022); others argue that they show autonomous, self-regulated learning and a positive attitude to learning autonomy (Halabi, 2018; Mahmudul Haque et al., 2023). These contradictions raise questions about the validity of language learner autonomy models in the Saudi context. The current situation may be due to the use of Western-developed instruments without sufficient assessment of their construct validity and/or consideration of how Saudi EFL learners conceptualise language learning autonomy. Therefore, the primary aim of this study is to examine whether language learner autonomy, as a Westernised construct, shows construct validity in the Saudi EFL context. The second aim is to analyse how EFL learners in Saudi Arabia conceptualise language learner autonomy, and which aspects of their second language learning are most reflective of self-regulated learning. The authors hope t his will encourage future research, and help to establish the need to assess the meaning of language acquisition constructs within a specific context. The current paper will also present suggestions for practical and theoretical responses to its findings.

2. Literature Review

2.1 Language Learner Autonomy

Research on language learners' autonomy has sought to identify the technical, psychological and political factors that enable learners to engage in the autonomous learning that occurs beyond teacher-led instruction. Accordingly, this line of research has highlighted the central role, within the process of second language learning, of learners' capacity to manage and control their own learning (Benson, 1997, 2001, 2011; Holec, 1981; Little, 1991). The technical dimension of learner autonomy refers to learners' ability to manage their learning by setting learning goals, selecting appropriate learning methods and applying productive learning strategies (Benson, 1997; Macaro, 1997), while the psychological dimension refers to learners' metacognitive awareness, confidence, reflection and attitudes toward taking charge of their own learning (Little, 1991; Wenden, 1991). The political dimension refers to learners' control over learning content and the extent of their freedom to make decisions about their learning (Benson, 2001).

The autonomy of language learners has been positively associated with motivation, effective strategy use, confidence and language-related achievement across multiple learning contexts (Cotterall, 1999; Dafei, 2007; Little, 2007; Zhang & Li, 2004). In the Saudi setting, autonomous foreign language learning is deemed valuable from an educational perspective, because English is largely learned as a foreign language, yet formal exposure within classrooms if often limited, and so learners are expected to develop their language skills beyond classroom contact hours (Alrabai, 2016, 2017; Al-Seghayer, 2021; Alruwaili, 2025). Recent Saudi studies have linked such learning autonomy with achievement and motivation. For example, Alrabai (2017) found that low levels of language achievement were associated with a relatively low level of autonomy, while Alqahtani (2024) reported that intrinsic motivation and autonomy accounted for a sizeable proportion of the variance in language acquisition among preparatory-year EFL learners. Nevertheless, most work in this field has operationalised existing models

without adequately addressing whether these models reflect how EFL learners in Saudi institutions understand language learners' autonomy within their own sociocultural and educational settings. Such attention is necessary, because the relationship between language learner autonomy and language achievement cannot be interpreted with confidence unless the underlying model has been validated for the target population. The present study seeks to address this issue.

2.2 The Need to Examine Language Learner Autonomy as a Westernised Construct in Saudi Arabia

Early concerns about language learner autonomy as a universal construct included fears that it was closely tied to Western political and educational systems, in which individualism, self-direction and personal responsibility are emphasised (Benson, 2001; Crabbe, 1993; Sinclair, 2000). For Westerners, proactive autonomy is viewed as the ideal form of language learner autonomy, in which learners independently set their own goals, choose learning resources and monitor and evaluate their own learning (Littlewood, 1999). In collectivist societies like Saudi Arabia, however, this description may not adequately capture autonomous second language learning. Littlewood (1999) points out that reactive autonomy is more salient in non-Western contexts, with learners working independently towards goals set by teachers or institutions. This conception of 'reactive autonomy' resembles what Holliday (2003) describes as a social trait of autonomy, which is especially evident in group work and emerges from learners' relationships.

In Saudi Arabia, education is generally teacher-centred, exam-oriented and characterised by respect for hierarchical relationships (Al-Seghayer, 2021; Halabi, 2018). Thus, the development of language learner autonomy may depend more on teacher, peer and family scaffolding systems, as well as the educational constraints of the institution, than is the case in Western contexts (Alrashidi & Phan, 2015; Al-Seghayer, 2021; Halabi, 2018; Nouraldeen & Elyas, 2014). This is consistent with the view that language learner autonomy is a dynamic construct (Borges, 2022; Little, 1991) that varies in both degree and form across contexts.

A low level of Westernised language learner autonomy (WLLA) in non-Western contexts should not, therefore, be immediately interpreted as lack of capacity for autonomous learning in those populations. Such an interpretation risks conflating characteristics of the local culture with a limited capacity for independent learning. Saudi EFL learners may not conceptualise autonomy primarily as full detachment from the teacher or as individual control over all learning decisions. Instead, language learner autonomy may be expressed through socially mediated forms of learning, including help-seeking, comparison with peers, collaboration with more capable others, and the strategic use of available resources (AL-Seghayer, 2021; Halabi, 2018).

This position is supported by previous Saudi studies, which suggest that Saudi EFL learners often prefer collaborative learning, compare their performance with peers, and use social comparison as a benchmark for self-assessment (Aljabri, 2025; Halabi, 2018; Otair & Aziz, 2017). It also aligns with the sociocultural perspective of learning that views learner agency as emerging through mediation and social interaction, rather than through independence from others (Dam et al., 2017; Oxford, 2017).

Scholars have developed multiple frameworks to operationalise language learner autonomy through multidimensional theoretical models (e.g., Benson, 2001, 2011; Holec, 1981; Macaro, 1997) and assessment scales (e.g., Cotterall, 1995; Dixon, 2011; Murase, 2015; Oxford, 2017; Zhang & Li, 2004). These models commonly include technical, psychological and sociocultural dimensions. The technical dimensions include the use of learning strategies (Cotterall, 1995; Oxford, 2003), the ability to locate and use learning resources (Cooker, 2015; Dixon, 2011; Breen & Mann, 1997), planning and implementing learning activities (Borges, 2022; Murase, 2015; Tassinari, 2015), and metacognition (Dixon, 2011; Nguyen & Habok, 2021). The psychological dimensions encompass self-efficacy, learning styles, attitudes,

motivation (Borges, 2022; Cooker, 2015; Cotterall, 1995; Dixon, 2011; Oxford, 2015; Murase, 2015; Nguyen & Habok, 2021; Tassinari, 2015), metacognitive awareness and critical reflection (Breen & Mann, 1997), and locus of control, self-reliance and social comparison (Dixon, 2011). Sociocultural dimensions include the ability to negotiate learning needs within a learning group (Breen & Mann, 1997), ability to adapt through interaction with the environment and others (Borges, 2022; Murase, 2015; Tassinari, 2015), and learners' beliefs about their own and their teachers' roles (Cotterall, 1995; Nguyen & Habok, 2021).

However, the factor structure of a construct developed in one sociocultural context may not remain stable in, and thus may not be immediately transferable to, other sociocultural contexts. Cross-cultural studies have shown this effect to be particularly marked in the transfer from individualist to collectivist contexts. Dimensions that appear theoretically distinct in one context may merge or be conceptualised differently elsewhere (Byrne & Watkins, 2003; Chan et al., 2012; Heo et al., 2012; Wu, 2015). In the research literature on language learner autonomy, this observation is particularly relevant because some dimensions, such as self-reliance and an internal locus of control, have been conceptually grounded in individualistic assumptions about learner agency. If these dimensions function differently or exhibit different psychometric properties among Saudi EFL learners, it is rational to infer that existing autonomy measurement scales may misrepresent the localised forms of learner autonomy that are socially mediated, reactive or technically oriented.

This concern is particularly salient in structural equation modelling (SEM) studies, where poor model fit may reflect differences in the underlying representation of the construct, rather than a merely cultural misfit (e.g., Heo et al., 2012; Putnick & Bornstein, 2016). The need to examine the construct's validity in the Saudi context is further reinforced by contradictory findings reported in previous studies. While Alrabai (2017), Alzubi et al. (2017), Asiri and Shukri (2020), and Mohammed (2022) have reported low levels of learner autonomy among Saudi EFL learners, Mahmudul Haque et al. (2023) reported substantially higher levels of learner autonomy. Such inconsistency may be attributed to methodological differences and to the ways in which the construct was defined and operationalised across studies. A recent study in Saudi Arabia found that gifted secondary school students demonstrated high levels of English language learning autonomy across technical, psychological, political-philosophical and sociocultural dimensions (Alfares & Alzobiani, 2025), which indicates that Saudi learners cannot be uniformly characterised as lacking autonomy.

Examining construct validity can therefore help to determine whether WLLA should be operationalised as a stable, universal construct or treated as a culturally adapted concept that takes different forms across contexts. This examination could also inform the practice of EFL teaching in Saudi classrooms, by revealing whether autonomy is best understood as independent control over learning, a scaffolded and socially mediated process, or a combination of both.

Accordingly, the present study addresses two research questions:

RQ1: Does language learner autonomy, as a Westernised construct, retain the same factorial structure and psychometric properties within the Saudi EFL context?

RQ2: How do Saudi EFL learners conceptualise language learner autonomy?

3. Methodology

3.1 Participants

To test the WLLA model, the authors conducted six-factor confirmatory factor analysis (CFA) using a primary sample of 230 respondents. This study focused on Saudi Arabian EFL learners from universities and other institutions teaching English as a second language within Saudi Arabia. This sample provides an appropriate context for examining the cross-cultural transferability of WLLA because, in this context, exposure to English inside and outside the classroom is generally limited, and English language instruction is typically teacher-centred.

Participants were selected using a convenience sampling method. English teachers from the participating institutions helped to distribute the online questionnaires used in this study. Potential respondents were told that participation was voluntary and that they could withdraw from the study at any time. Incomplete questionnaires were excluded, resulting in a final sample of 230 participants.

In addition, an independent exploratory sample of 166 respondents was drawn from the same target population of Saudi EFL learners, but comprising different participants. This sample was recruited using the same convenience sampling procedure and online questionnaire as the confirmatory sample. It was used to conduct an exploratory factor analysis (EFA) to examine whether the underlying factor structure of WLLA differed from Dixon's (2011) original six-factor model. The EFA findings provided complementary evidence for interpreting the CFA results obtained from the primary confirmatory sample.

3.2 Measures

3.2.1 Language Learner Autonomy

In the current study, language learning autonomy was measured using Dixon's (2011) Short List Scale of Language Learner Autonomy. This scale was selected because it provides a comprehensive multidimensional operationalisation of the language learner autonomy construct (Cooker, 2015) and incorporates dimensions that reflect dominant Western assumptions about autonomous language learning. Dixon's initial scale drew on established subscales measuring the Strategy Inventory for Language Learning (Oxford, 1990), metacognition (Sinclair, 1999), motivation (Dornyei, 2001; Gardner & MacIntyre, 1993), locus of control (Williams & Burden, 1997), and learners' beliefs (Cotterall, 1995), among others (Dixon, 2011, p. 166).

The original EFA and CFA as reported by Dixon (2011) identified six factors: Linguistic Confidence, Information Literacy, Social Comparison, Internal Locus of Control, Metacognition and Self-Reliance. These dimensions are particularly relevant to the present study because they represent the technical and psychological aspects of language learner autonomy to be examined in the Saudi EFL context. Participants completed a 38-item questionnaire using a five-point Likert scale ranging from strongly disagree to strongly agree.

For the purposes of the current study, Dixon's scale was translated into Arabic by three experts, all of whom had PhDs in English–Arabic translation. One expert produced the initial Arabic translation, and the other two reviewed it for accuracy and clarity. To preserve semantic equivalence, each translated item was presented alongside its original English version. The Arabic version was then used in a pilot study with 40 participants. Feedback from that pilot study indicated that several items were confusing, so brief explanatory annotations were added to clarify these.

Before the reliability, validity, EFA and CFA analyses were carried out, all of the reverse-worded items in the Linguistic Confidence (LC), Social Comparison (SC), and Locus of Control (LOC) subscales were reverse-scored. Thus, for the five-point response scale, responses were recoded as follows: 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. This ensured that higher scores consistently represented higher levels of the corresponding construct.

3.2.2 Model Testing

In the current study, CFA was used to validate the structure proposed by Dixon (2011). That model comprised six factors: Linguistic Confidence, Information Literacy, Social Comparison, Locus of Control, Metacognition and Self-Reliance. The analysis was conducted using the lavaan package in R. The model was evaluated by examining indicator reliability, construct reliability, and construct validity, including convergent and discriminant validity (Awang, 2012; Hair et al., 2010).

Indicator reliability was assessed by examining standardised item loadings. Standardised loadings of 0.70 or higher were considered acceptable; loadings of 0.50 or less suggested that

an item contributed relatively weakly to its intended construct. Items with standardised loading of 0.40 or below were recommended for removal during model refinement, unless strong theoretical justification supported their retention (Hair et al., 2010; Hair et al., 2021; Hair & Alamer, 2022). Items were removed one at a time because the removal of a single item can alter the standardised loadings of the remaining items (Awang, 2012).

Cronbach's alpha, composite reliability (Joreskog's rho_c) and rho_A (Dijkstra & Henseler, 2015) were calculated to evaluate the reliability of the reflective latent constructs. Cronbach's alpha values between 0.60 and 0.70 are generally considered acceptable in exploratory research, whereas values above 0.70 indicate satisfactory internal consistency, and values above 0.80 indicate good reliability (Hair et al., 2021; Hair & Alamer, 2022; Ursachi et al., 2015). While Cronbach's alpha provides a relatively conservative estimate of internal consistency, composite reliability provides a less restrictive estimate because it does not assume equal indicator loadings (Hair et al., 2021). The recommended threshold for composite reliability is 0.70 (Fornell & Larcker, 1981).

Overall model fit was assessed using standard goodness-of-fit indices. Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) values of 0.90 or higher were considered acceptable (Hu & Bentler, 1999). Convergent validity was assessed using the average variance extracted (AVE) (Awang, 2012). AVE values greater than 0.50 generally indicate adequate convergent validity, although slightly lower values may be acceptable when composite reliability is satisfactory (Hair et al., 2010). Discriminant validity was assessed using the Fornell-Larcker criterion, whereby the square root of each construct's AVE was compared with its correlation with other constructs (Fornell & Larcker, 1981). This was subsequently cross-checked using the heterotrait-monotrait ratio of correlations (HTMT), with values below 0.85 considered acceptable (Henseler, Ringle, & Sarstedt, 2015; Hair & Alamer, 2022).

3.2.3 Exploratory Factor Analysis Procedure

In addition to the CFA conducted on the primary confirmatory sample, an EFA was carried out on the independent exploratory sample (N = 166), to determine whether an alternative factor structure would represent the data better than Dixon's (2011) original six-factor model. Before the EFA, the correlation matrix was assessed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. A KMO value greater than 0.60 and a significant Bartlett's test ($p \leq .05$) indicated that the data were suitable for factor analysis (Awang, 2012; Hair et al., 2010).

The number of factors to retain in this study was determined using three methods: parallel analysis (PA), Kaiser's rule (eigenvalues > 1), and inspection of the scree plot. The extracted factors were rotated using the Promax method, an oblique rotation method that allows factors to correlate and is appropriate here because expectation was that the WLLA dimensions would be related (Costello & Osborne, 2005). Items with primary loadings below 0.40 or substantial cross-loadings on multiple factors were considered for removal or reassignment. These criteria were consistent with those applied in the confirmatory analysis.

4. Results

4.1 Measurement Model Evaluation and Adjustment: Covariance-Based CFA

The CFA revealed that the original six-factor model showed mixed goodness-of-fit indices. Although the CFI and TLI values (0.93) were deemed acceptable, the root mean square error of approximation (RMSEA) value (0.09) exceeded the recommended threshold of 0.08, indicating that the overall model fit was not fully satisfactory.

Table 1 shows the standardised factor loadings of the indicators with regard to their intended constructs. Most indicators showed satisfactory loadings. Reflective indicators with loadings below 0.40 are generally removed, whereas indicators with loadings between 0.40 and 0.70 are removed only if their deletion improves composite reliability or the AVE (Hair et al., 2011). In the current study, where necessary, indicators were removed sequentially, beginning

with those showing the lowest loadings, while ensuring that each construct retained a sufficient number of indicators to permit model identification. As shown in Table 1, two indicators had loadings below 0.40: LOC_1_R (0.225) My way of learning will never change (reverse-worded), and MET_6 (0.375) I have changed the way I learn after thinking about it.

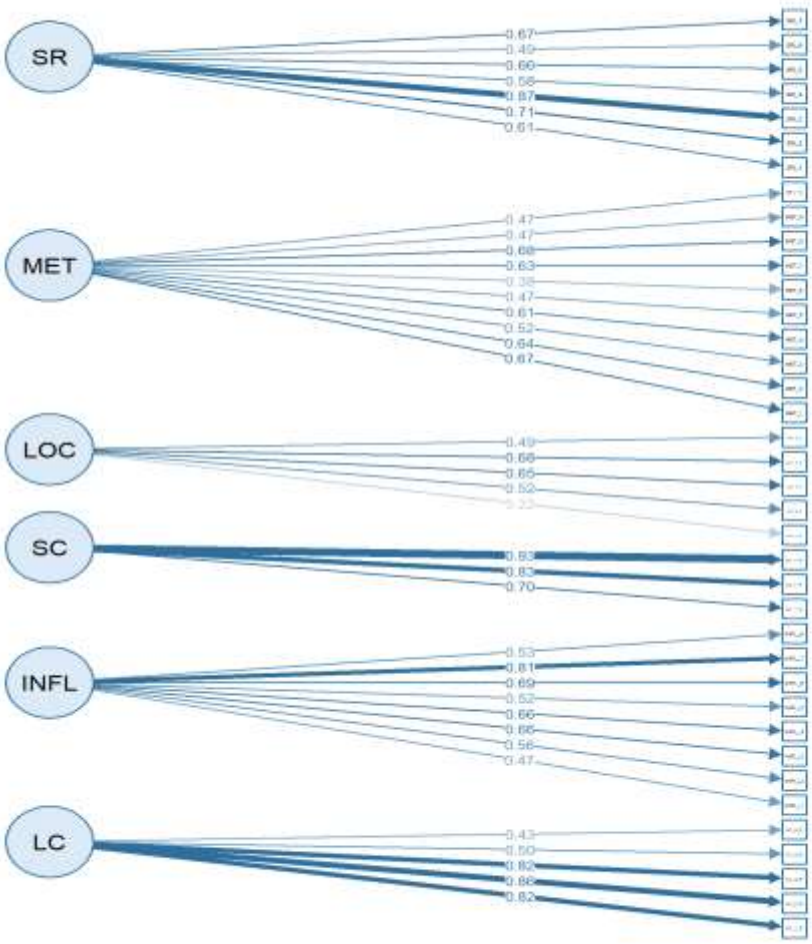

Figure 1. CFA path diagram for Dixon's (2011) original six-factor model, with standardised loadings (weighted least squares mean and variance adjusted [WLSMV] estimator, N = 230)

Table 1. Standardised loadings, composite reliability omega, and rho_A statistics for the original Dixon model (six latent constructs, 38 items)

Factor	Item	Loading	Flag	p-value
LC	LC_1_R	0.817		< .001
LC	LC_2_R	0.865		< .001
LC	LC_3_R	0.822		< .001
LC	LC_4_R	0.499		< .001
LC	LC_5_R	0.429		< .001
INFL	INFL_1	0.465		< .001
INFL	INFL_2	0.556		< .001
INFL	INFL_3	0.656		< .001
INFL	INFL_4	0.661		< .001
INFL	INFL_5	0.516		< .001

INFL	INFL_6	0.694		< .001
INFL	INFL_7	0.808		< .001
INFL	INFL_8	0.526		< .001
SC	SC_1_R	0.699		< .001
SC	SC_2_R	0.831		< .001
SC	SC_3_R	0.934		< .001
LOC	LOC_1_R	0.225	< 0.4	0.002
LOC	LOC_2_R	0.520		< .001
LOC	LOC_3_R	0.650		< .001
LOC	LOC_4_R	0.677		< .001
LOC	LOC_5_R	0.492		< .001
MET	MET_1	0.670		< .001
MET	MET_2	0.642		< .001
MET	MET_3	0.522		< .001
MET	MET_4	0.614		< .001
MET	MET_5	0.471		< .001
MET	MET_6	0.375	< 0.4	< .001
MET	MET_7	0.625		< .001
MET	MET_8	0.677		< .001
MET	MET_9	0.467		< .001
MET	MET_10	0.468		< .001
SR	SR_1	0.605		< .001
SR	SR_2	0.708		< .001
SR	SR_3	0.869		< .001
SR	SR_4	0.582		< .001
SR	SR_5	0.661		< .001
SR	SR_6	0.494		< .001
SR	SR_7	0.670		< .001

Note. Linguistic Confidence (LC). Information Literacy (INFL). Social Comparison (SC). Locus of Control (LOC). Metacognition (MET). Self-Reliance (SR). Items marked with the suffix "_R" were reverse-worded and reverse-scored before the statistical analyses.

Table 2 shows Cronbach's alpha, composite reliability (Joreskog's rho_c) statistic, rho_A (Dijkstra & Henseler, 2015), and the AVE. The rho_A value falls between Cronbach's alpha and composite reliability because Cronbach's alpha provides a relatively conservative estimate of internal consistency, whereas composite reliability provides a less restrictive estimate (Hair et al., 2021).

Table 2. Reliability indicators for Dixon's model

Factor	Items	Cronbach's α	Composite Reliability	AVE
LC	5	0.745	0.827	0.505
INFL	8	0.781	0.829	0.384
SC	3	0.807	0.865	0.683
LOC	5	0.616	0.649	0.289
MET	10	0.767	0.817	0.316
SR	7	0.776	0.843	0.442

Note. Linguistic Confidence (LC). Information Literacy (INFL). Social Comparison (SC). Locus of Control (LOC). Metacognition (MET). Self-Reliance (SR).

Table 2 shows that Cronbach's alpha values exceeded the recommended threshold of 0.70 for all constructs except Locus of Control (LOC), indicating satisfactory internal consistency. The LOC construct showed relatively lower internal consistency ($\alpha = 0.616$), but was retained in the analysis due to its theoretical importance. Although they fall below the conventional 0.70 criterion, alpha values between 0.60 and 0.70 have been considered acceptable for newly developed or exploratory constructs (Hair et al., 2021; Hulin et al, 2001; Ursachi et al, 2015). Similar levels of internal consistency for LOC have also been reported by Dixon (2011) and

Alzubi et al. (2017) (α = 0.642 and 0.69, respectively). The relatively lower level of internal consistency of the LOC construct suggests that its operationalisation may demand refinement when applied in the Saudi context.

In the current study, although composite reliability exceeded the recommended threshold of 0.70 for most constructs, only Social Comparison (SC) and Linguistic Confidence (LC) achieved AVE values above the recommended cutoff of 0.50. The removal of weak loading indicators did not substantially improve AVE values. Nevertheless, Fornell and Larcker (1981) have noted that convergent validity may still be adequate when composite reliability exceeds 0.70, despite AVE values below 0.50. Accordingly, Information Literacy (INFL), Locus of Control (LOC), Metacognition (MET), and Self-Reliance (SR) showed evidence of weak convergent validity (AVE < 0.50), with LOC demonstrating the weakest measurement quality because it also failed to meet the recommended composite reliability threshold.

Discriminant validity was assessed using the Fornell-Larcker criterion (Table 3). According to this, the square root of the AVE for each construct (diagonal) should exceed its correlations with other constructs (off-diagonal).

Table 3. Fornell-Larcker Criterion (square root of AVE on diagonal)

Factor	LC	INFL	SC	LOC	MET	SR
LC	0.71	0.17	0.39	0.36	0.03	0.16
INFL	0.17	0.62	0.41	0.28	0.80	0.72
SC	0.39	0.41	0.83	0.70	0.16	0.43
LOC	0.36	0.28	0.70	0.54	-0.03	0.21
MET	0.03	0.80	0.16	-0.03	0.56	0.83
SR	0.16	0.72	0.43	0.21	0.83	0.66

Note. Linguistic Confidence (LC). Information Literacy (INFL). Social Comparison (SC). Locus of Control (LOC). Metacognition (MET). Self-Reliance (SR).

Table 3 shows the assessment of discriminant validity among the WLLA dimensions. Linguistic Confidence (LC) and Social Comparison (SC) were the only constructs that fully satisfied the Fornell-Larcker criterion. For the remaining constructs, at least one inter-construct correlation exceeded the square root of the construct AVE. In particular, the correlations among Information Literacy (INFL), Metacognition (MET), and Self-Reliance (SR) exceeded their corresponding square roots of AVE, which suggests that these dimensions were not empirically distinguishable in the present context. Overall, Dixon's (2011) original six-factor WLLA model produced an RMSEA value above the recommended threshold, including indicators with loadings below 0.40, and demonstrated weakness in both convergent and discriminant validity.

Because the Fornell-Larcker criterion compares each inter-factor correlation with the square root of a construct's AVE, it is sensitive to the convergent validity of the construct itself. When a construct has a low AVE, its square root of AVE is small, so the criterion can flag a discriminant validity 'failure' that is in fact produced by weak item convergence rather than genuine overlap between two distinct constructs (Henseler, Ringle, & Sarstedt, 2015). Given that INFL, LOC, MET and SR all returned AVE values below 0.50 in the present study (Table 3), the discriminant validity of the model was cross-checked using the heterotrait-monotrait ratio of correlations (HTMT). The HTMT expresses the average correlation between items across different constructs relative to the average correlation within each construct, and is therefore not depressed by low AVE. Following Henseler et al. (2015), HTMT values below 0.85 indicate that two conceptually distinct constructs are empirically distinct, while values approaching 0.90 indicate a lack of such distinction. The HTMT matrix for the original six-factor model is given in Table 4.

Table 4. Heterotrait-Monotrait Ratio (HTMT) for the original six-factor model (diagonally weighted least squares estimator)

Factor	LC	INFL	SC	LOC	MET	SR
LC	—	0.24	0.41	0.38	0.16	0.17
INFL	0.24	—	0.26	0.23	0.78	0.74
SC	0.41	0.26	—	0.56	0.24	0.33
LOC	0.38	0.23	0.56	—	0.24	0.25

MET	0.16	0.78	0.24	0.24	—	0.82
SR	0.17	0.74	0.33	0.25	0.82	—

Note. Linguistic Confidence (LC). Information Literacy (INFL). Social Comparison (SC). Locus of Control (LOC). Metacognition (MET). Self-Reliance (SR). The diagonal does not apply to HTMT; values below 0.85 support discriminant validity.

In the current study, the HTMT outcomes place the discriminant validity issue in the same general area as the Fornell-Larcker criterion, but with greater detail. Most pairs of constructs were completely separate, showing HTMT values of 0.41 or less, including Linguistic Confidence with the other dimensions, and Social Comparison and Locus of Control with the remaining dimensions. Higher HTMT values were restricted to three constructs: Information Literacy, Metacognition and Self-Reliance: Metacognition and Self-Reliance returned an HTMT of 0.82, and Information Literacy correlated 0.78 with Metacognition and 0.74 with Self-Reliance.

It should be noted that reading the two criteria jointly does not suggest conflict. The Fornell-Larcker criterion indicates more apparent violations (see Table 3) due to low AVE values for INFL, LOC, MET and SR. When considered in the context of the reliability-adjusted HTMT, the Social Comparison/Locus of Control pair is not a concern (HTMT = 0.56), and the focus narrows to the Information Literacy-Metacognition-Self-Reliance grouping. The two criteria are compatible, as they both affirm that the Saudi sample does not allow the empirical separation of these three dimensions. The apparent difference is actually a matter of degree, in light of the constructs' low convergent validity. Thus, given low convergent validity, the Fornell-Larcker and HTMT discriminant validity findings, and the model's marginal fit (RMSEA = 0.09), the Saudi sample's response to Dixon's (2011) six-factor model suggests significant over-differentiation. Saudi respondents provided answers indicative of a single broad dimension, whereas the model specifies multiple dimensions. The EFA reported in the following section provides a more direct test of this interpretation, using a fully independent sample.

4.2 Exploratory Factor Analysis of WLLA (Independent Sample)

To further examine whether the factorial structure of WLLA may take an alternative form when Dixon's (2011) theoretical constraints are not imposed, the authors conducted EFA on the independent exploratory sample (N = 166). The suitability of the data for factor extraction was first assessed via the KMO measure and Bartlett's test of sphericity. The results indicated adequate sampling adequacy (KMO = 0.830) and a statistically significant Bartlett's test ($\chi^2(703) = 2933$, $p < .001$) confirmed that the correlation matrix was appropriate for factor extraction.

The EFA supported the extraction of four factors, which were subsequently rotated using the Promax oblique rotation method. Collectively, the four factors accounted for 41.1% of the total variance, with the first factor explaining 18.5%, the second explaining 7.8%, and the third and fourth factors explaining 7.5% and 7.3%, respectively (see Table 5).

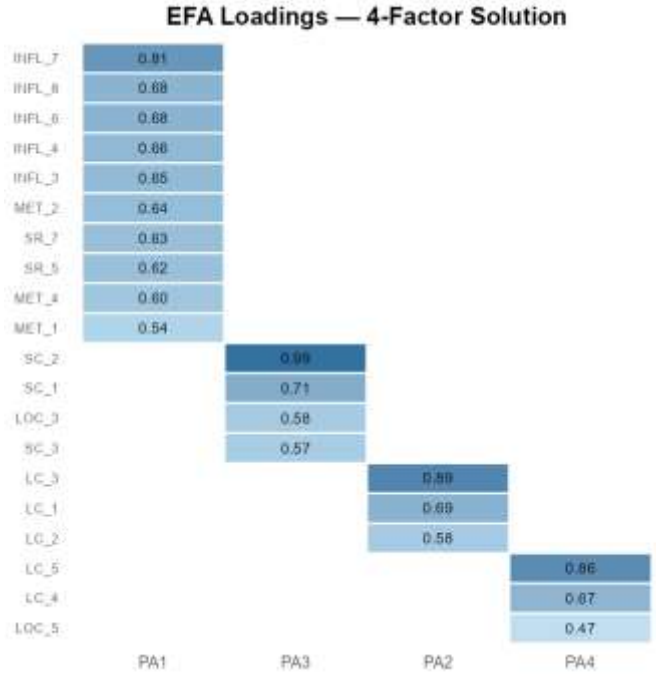

Figure 2. Factor-loading diagram for the exploratory four-factor solution (principal-axis factoring, Promax rotation)

Table 5. Factor loadings from EFA (four-factor solution, independent samples, N = 166)

Item	Factor 1	Factor 2	Factor 3	Factor 4	Uniqueness
LC_1_R			0.767		0.443
LC_2_R			0.706		0.476
LC_3_R			0.815		0.428
LC_4_R			0.540		0.632
LC_5_R			0.532		0.658
LOC_5_R			0.512		0.536
SC_1_R		0.598			0.617
SC_2_R		0.851			0.322
SC_3_R		0.578			0.574
LOC_1_R		0.472			0.751
LOC_2_R		0.466			0.617
LOC_3_R		0.795			0.398
LOC_4_R		0.567			0.654
MET_1				0.519	0.561
MET_2				0.473	0.485
MET_3				0.360	0.651
MET_6				0.308	0.736
SR_4				0.661	0.615
SR_6				0.479	0.647
INFL_1	0.359				0.695
INFL_2	0.604				0.624
INFL_3	0.575				0.634
INFL_4	0.593				0.590
INFL_5	0.466				0.606
INFL_6	0.473				0.605
INFL_7	0.655				0.403
INFL_8	0.692				0.579
MET_4	0.719				0.503

MET_5	0.687				0.641
MET_7	0.669				0.616
MET_8	0.513				0.635
MET_9	0.439				0.686
MET_10	0.432				0.798
SR_1	0.760				0.522
SR_2	0.507				0.619
SR_3	0.436				0.629
SR_5	0.466				0.604
SR_7	0.668				0.589
Eigenvalues	9.066	4.675	2.294	1.804	
Sum sq. Loadings	7.033	2.974	2.843	2.773	
Proportion var.	0.185	0.078	0.075	0.073	
Cumulative	0.185	0.263	0.338	0.411	

Note. Extraction method: principal-axis factoring with PA; rotation method: Promax (oblique). Loadings below .30 are omitted for clarity.

Ultimately, the first factor emerged as the dominant dimension and comprised most of the items originally associated with Information Literacy, Metacognition and Self-Reliance. This pattern indicates that, independent of the confirmatory analysis reported above, Saudi EFL learners tend to perceive information-seeking skills, self-monitoring processes and independent learning behaviours as interconnected components of a broader cognitive-autonomy construct and not as three distinct dimensions. In the current study, the second factor combined all Social Comparison items with most Locus of Control indicators, echoing the correlation between these two dimensions that had already been observed in the Fornell-Larcker and HTMT matrices (Tables 3 and 4), and reinforcing the interpretation that Saudi EFL learners' sense of control over their learning is closely bound to Social Comparison, rather than experienced as an independent, internally driven construct. The third factor was defined almost exclusively by the Linguistic Confidence items, which loaded strongly and consistently on a distinct factor, thereby corroborating the stability of this dimension already observed in the confirmatory analysis. The fourth factor comprised a smaller subset of Metacognition and Self-Reliance items, which suggests a narrower, more specific facet of self-regulated learning that remains partly distinguishable from the broader cognitive-autonomy factor.

Taken together, the exploratory findings obtained from this independent sample converge with the confirmatory findings reported in Tables 1, 2, 3 and 4. Both analyses indicate that Saudi EFL learners do not clearly distinguish Information Literacy, Metacognition and Self-Reliance, and that Locus of Control is more closely tied to Social Comparison than to an independent sense of internal control. This convergence – across two independent samples and two different analytic approaches – provides strong evidence that WLLA does not retain Dixon's (2011) six-factor structure when used with Saudi EFL learners, and that a more parsimonious, contextually grounded structure – one that preserves Linguistic Confidence and a socially mediated Social Comparison/Locus of Control dimension, while merging Information Literacy, Metacognition and Self-Reliance into a broader construct – may better represent language learner autonomy in the Saudi context.

5. Discussion of Findings

The present study aimed to investigate the transferability of WLLA, a construct rooted in individualist Western cultures, to a collectivist setting, namely the Saudi EFL context. Some researchers have pointed out that WLLA is not transferable across learning contexts and should therefore be adapted to fit local cultural values and learning experiences (e.g., Palfreyman & Smith, 2003; Pennycook, 1997; Sinclair, 1997).

In contrast, many studies seem to have been designed on the assumption that existing WLLA measurement models and their theoretical factor structures are immediately valid in other cultural settings. The current study has examined this assumption and the authors have formulated conclusions and suggestions in response.

The findings in this study showed statistical issues regarding construct validity across cultural contexts. Although some goodness-of-fit indices were within the acceptable threshold, the model exhibited an unacceptable RMSEA, suggesting a possible model misfit. In addition, the findings revealed significant issues around convergent and discriminant validity. These findings, taken together, indicate a need to respecify or adapt a theoretical model of WLLA to reflect local learners' perceptions and align with their cultural values.

The findings of the Fornell-Larcker criterion of discriminant validity generate a foundation for understanding how Saudi EFL learners understand language learner autonomy. The correlations among Information Literacy, Metacognition and Self-Reliance indicate that Saudi Arabian learners conceptualise these subconstructs, which are recognised elsewhere as distinct, as a single construct. In other words, these collectivist learners appear to perceive metacognitive abilities such as reflection and monitoring the learning process, and self-reliance, in terms of the seeking, locating and use of relevant information.

The assessment of Dixon's (2011) model with Saudi learners also revealed significant issues with the convergent validity of the four dimensions. The weak convergence among indicators suggests that some observed indicators may not have adequately represented their intended factors. Participants may have understood some indicators of these constructs differently from the way that was intended, or they may have treated related, but distinct, constructs as reflecting the same underlying idea. This interpretation is supported by previous cross-cultural studies, which have shown that a theoretical construct developed in one cultural setting may not retain its psychometric properties when measured in another (Leitgob et al., 2023). Such issues may result from poor item translation, item ambiguity, the inapplicability of item content across cultures (Leitgob et al., 2023), and differences in how the measured construct and its indicators are understood (Riordan & Vandenberg, 1994). Therefore, the limited convergent validity of WLLA constituents revealed in this study implies potential variation in how these constituents are constructed or defined in the Saudi, as opposed to Western, context.

However, other goodness-of-fit indices and the reliability coefficients exceeded recommended thresholds in the current study. Fornell and Larcker (1981) noted that convergent validity of a construct may still be adequate when its composite reliability coefficient exceeds 0.70. Therefore, the limited shared variance among items can be attributed to how Saudi EFL learners define and experience the dimensions that are measured by these items.

In this study, the only dimension with low values for both AVE and reliability coefficients was Locus of Control (LOC). Given the rigorous method of expert translation and the clarity of the items, this finding can be attributed to LOC's items being inappropriate or inapplicable when seeking to measure this construct in the Saudi context. These items reflect an internal locus of control, whereas Saudi learners tend towards an external locus of control (Alkorashy & Alotaibi, 2023; Alzubi et al., 2017). This finding is supported by the correlation between LOC and SC shown in Table 3.

Several studies conducted in the Saudi context, including Alkorashy and Alotaibi (2023) and Alzubi et al. (2017), have identified an external LOC amongst Saudi EFL learners. Alzubi et al. (2017) attributed this to the teacher-centred approach and the students' passive role in the process of making decisions around learning. In this type of learning environment, students may not have adequate skills and resources to self-evaluate and thus depend on the teacher and on (social) comparison with peers.

According to Dixon (2011), negative peer comparison can make students feel incompetent and lead them to attribute success and failure to external factors. Dixon cited Deci et al. (1991), who stated that if learners can control their behaviour, they perceive LOC as internal. In

contrast, if external factors control their behaviour, they perceive LOC as external. From this, it can be inferred that the Saudi EFL data reflect a perspective on LOC that differs from that in the West. Saudi learners seem to understand LOC as something generated within social contexts, including social comparison, the teaching and learning context, and teacher support. Thus, the modification or reconstruction of LOC elements is required if the concept is to be evaluated in this context.

Factorial analysis of WLLA was also conducted in the current study. According to the discriminant validity results from the Fornell-Larcker criterion and the HTMT ratio, although Information Literacy, Metacognition and Self-Reliance are WLLA components that are theoretically related, the correlations among them exceeded the indicative limits. This suggests that, in this sample of Saudi EFL learners, these components were not perceived as separate constructs but as one, more unified or integrated, construct. In a general sense, this sample of Saudi EFL learners seemed to interpret and understand Self-Reliance and Metacognition as meaning 'the ability to find learning-related information'. The independent EFA mentioned above is consistent with this result; in a different sample, the original six-factor model was reduced to a four-factor model, indicating that this variation in factor structure is not sample-specific.

This study is therefore consistent with other research that has used EFA, in which the integration of various components, or the splitting of previously unified components into separate components, has occurred when a conceptual model was applied in novel learning environments. For example, Chan et al. (2012) evaluated a Western-origin scale of the temporal experience of pleasure in a Chinese population, and found the scale to have both a two-factor and a four-factor model. In the context of language learning and teaching, Heo et al. (2012) examined the factor structure of the Strategy Inventory for Language Learning (Oxford, 1990) with immigrant Korean language learners in the United States. The study found that the six-factor model collapsed into a one-factor construct. Murase (2015) similarly developed an instrument to measure autonomy in Japanese EFL learning, based on a Western theoretical model comprising interrelated technical, psychological, political-philosophical and sociocultural dimensions. Murase reported that the psychological and political-philosophical dimensions of autonomy were strongly and significantly correlated (r = .990), suggesting that these two dimensions should be merged into a single, broader, dimension.

Within the Saudi context, Alrabai (2017) used an existing questionnaire to examine Saudi EFL learners' autonomy. Using EFA, the study found that only two dimensions underpinned this construct, namely capacity for independent learning and self-efforts in learning English (p. 226). These two factors were highly correlated (r = 0.83). The existing literature on language learner autonomy shows that WLLA is often theorised as a multidimensional construct; however, Alrabai's study revealed that Saudi EFL learners conceptualised it as comprising just two highly correlated factors rather than as a multidimensional construct with clearly distinct dimensions. Essentially, Alrabai's findings support those of the present study – that the factorial structure of WLLA may take a different form when used in Saudi settings. The strong correlation among Information Literacy, Metacognition and Self-Reliance suggests that these factors should be integrated into one broader construct. Such an integration would form a feedback loop, in which metacognition ignites self-reliance, self-reliance leads to seeking learning resources, and using learning resources is, in turn, reinforced by metacognition.

Reflection upon one's learning in an EFL context is often triggered by external assessment, usually introduced by teachers. Thus, autonomous English learning in the present study's setting appears to be influenced and driven by the teacher-centred learning environment. This form of autonomous learning aligns with reactive autonomy (Littlewood, 1999).

The findings of the current study have identified Social Comparison as a stable and distinct factor, with the highest reliability and convergent validity ($\alpha = 0.807$, AVE = 0.683). Saudi Arabia has a collectivist culture, and one feature of this is the substantial power difference that

lies between learners and their teachers (Halabi, 2018). Hofstede (2001) and Triandis (1988) stated that people in collectivist cultures tend to define themselves through their relationships with others, and this makes social comparison a vital tool for evaluating their abilities and guiding their learning. This position is supported by an empirical study conducted by Chung and Mallery (1999), which reported that higher collectivism scores correlated with social comparison, particularly upward comparison.

In addition to the collectivist nature of Saudi society, another factor that may explain the prevalence of Social Comparison among Saudi learners may be insufficient training on self-assessment. In this context, peers seem to serve as a benchmark for comparison. The dominant teaching methods used in Saudi EFL are highly teacher-centred, and learners are not trained to evaluate themselves as learners. Ultimately, such students seek external sources of evaluation, which tend to be teachers' evaluations or comparing their performance with others (Alrabai, 2017; Al-Seghayer, 2021).

Little (1991) has argued, from a social-constructivist perspective, that autonomous language learning can be enhanced and internalised through social interaction. The impact of the social factor is also evident in Halabi's (2018) study, which reported that Saudi EFL learners compared their linguistic performance not only with peers, but also with EFL learners worldwide. In addition, Aljabri (2025) showed that collectivist-culture learners prefer to regulate their learning with peers and attributed this practice to a lack of opportunities to practice English outside the classroom. Such co-regulation leads learners to compare their linguistic abilities and performance with others. Al-Seghayer (2021) points out that Saudi EFL learners prefer peer and cooperative learning; since such a learning style triggers social comparison (Jansen et al., 2022) it reinforces learners' tendency to compare their performance with others.

In the current study, as is shown in Table 3, Linguistic Confidence (LC) was a distinct and stable factor ($\alpha = 0.745$, CR = 0.827, AVE = 0.505). In addition, LC was the only factor that showed discriminant validity (see Tables 3 and 4). In the Saudi context, several researchers have shown that confident learners are more likely to develop learning autonomy. Notably, Saudi EFL teachers perceive learner autonomy as being related to learners' L2 proficiency (Alwasidi & Alnaeem, 2022), which supports the findings of Cotterall (1995) and Dixon (2011) that learners' confidence is related to their ability to control and direct their own learning.

5.1 Conclusions

The present study has examined the claim that the Western-defined, or Westernised, form of language learner autonomy (WLLA) cannot be directly and immediately applied in some non-Western cultures. A six-factor WLLA model (Dixon, 2011) was applied in the Saudi context and assessed using CFA on a main sample (N = 230), while an independent EFA was conducted on a second, non-overlapping sample (N = 166) to test whether an alternative structure would better represent the data. The study found that WLLA cannot be assumed to function as a universal, static construct in the Saudi context.

Although some global fit indices were acceptable in the current study, the results revealed critical statistical issues regarding RMSEA and both convergent and discriminant validity. The latter was confirmed by two independent criteria, namely the Fornell-Larcker approach and the more conservative HTMT ratio. Among the six dimensions, only Social Comparison and Linguistic Confidence were stable and distinct constructs with acceptable psychometric properties, which suggests that WLLA operates differently in the Saudi EFL context.

The study also showed that, when applied to Saudi EFL learners, a variation arose in the factor structure of WLLA. Information Literacy, Metacognition and Self-Reliance showed strong correlations with one another in the confirmatory sample, and the independent exploratory analysis reflected the same pattern, with these three dimensions loading onto a single dominant factor. Locus of Control showed significant reliability and validity issues in the CFA sample and when merged with Social Comparison in the EFA sample. This suggests

that an individualised, internal locus of control definition should be adapted to fit the socially mediated form of learning autonomy found in this collectivist context. Such convergence across two independent samples and two analytic approaches implies that the appearance of these issues is not merely a matter of technical measurement, but reflects how language learner autonomy is conceptualised and structured among Saudi EFL students.

The current study therefore contributes to the literature on autonomous learning in second language students by showing that conventional forms of measurement, as defined in models and frameworks of Western origin, may misrepresent or blur the true picture when applied in different contexts. Thus, an inappropriate level of individualised autonomy, as conventionally measured, should not be interpreted as evidence that Saudi EFL learners lack autonomy altogether. In the Saudi context, autonomous language learning appears to be reactive, socially mediated and culturally sensitive. The findings of the current study indicate a need for further investigation of what form of autonomy is locally valid and pedagogically meaningful.

5.2 Implications for Educational Practice

Researchers working in Saudi Arabian and other non-Western contexts should consider validating Western-derived constructs before applying them. Further exploratory factor studies in this context should be conducted, to identify the factor structure of language learner autonomy from the perspectives of local EFL learners. The findings of this study suggest that explicit attention should be given to Social Comparison, Linguistic Confidence, a socially mediated locus of control, and the fact that Information Literacy, Metacognition and Self-Reliance function as a single broad construct. Measurement invariance should also be examined across gender, language proficiency and educational levels before firm conclusions are drawn.

The study has also revealed that Saudi EFL learners adopt a reactive form of autonomy. Therefore, curriculum designers and EFL programs within that setting should promote a scaffolded form of learning autonomy, wherein teacher support is gradually withdrawn.

The existing relationships of Information Literacy, Metacognition and Self-Reliance indicate that Saudi EFL learners understand and consider these elements as a single construct. These integrated elements ought to be incorporated into the same task. For example, an instructor might create a single, guided, reflective task that requires learners to plan, gather and assess information and reflect on the outcome through their self-evaluation. Learners' completion of this task should be presented to the class, with the instructor fostering a positive, constructive environment for peer assessment and modelling.

Self-confidence is a prerequisite for engaging in self-directed learning activities, as learners are more likely to take personal responsibility for their learning when they have a high degree of confidence in their abilities. A learner's confidence might be developed through the instructor providing tasks that learners perceive as easy. Rather than provide learners with predetermined vocabulary lists to memorise, teachers could ask them to create a reflective learning logbook. Initially, learners might be given a simple word (e.g., ‘note’) and guided to use available resources to explore its meaning, grammatical functions and how to use it in different contexts. Subsequently, learners could provide a report explaining what they have learned, how they learned it and evaluating their strategies as effective or ineffective. In the next class, teachers could facilitate peer and whole-class discussions based on these reflective reports. At the end of that lesson, teachers should ask learners to repeat the same process with a new word or phrase, aligned with their personal interests. Such an activity seamlessly integrates Information Literacy, Metacognition and Self-Reliance, thereby enhancing learners’ confidence in their ability to manage their own learning process.

Furthermore, teachers can, sequentially and gradually, withdraw support. Following Nunan’s (1997) model, they should first raise learners’ awareness by explicitly stating, to those learners, the educational goal of the task and using Common European Framework of Reference for Languages (CEFR) can-do checklists to help them identify their starting points.

Then, the instructors could promote learners' involvement by allowing students to select vocabulary connected with topics that interest them. Finally, learners should be encouraged to intervene and modify the learning tasks they allocate in ways that better suit their students' individual learning needs and interests. Finally, teachers should move their students towards creation, enabling learners to create their own learning tasks according to their individualised learning agendas.

It is equally important for the instructor to create an environment in which learners perceive their mistakes as part of the learning process, and are encouraged to set a goal that leads them towards a greater level of self-directed learning. This confidence is particularly valuable in a collectivist society, where apprehension about being evaluated can inhibit self-directed learning.

5.3 Limitations and Future Research

Despite the undoubted value of the current study's results, particularly for those in Saudi EFL settings, several limitations should be noted. First, the study relied on self-report questionnaire data, which tapped into learners' perceptions of language learner autonomy rather than direct observations of actual learning behaviours. Second, the study examined one existing model with six Western-rooted factors; the findings should therefore not be generalised to other measurement models that may comprise different factors. The results do not indicate that WLLA as a whole is inapplicable to the Saudi context, rather they suggest that it requires contextual examination and adaptation.

The study was also limited by its cross-sectional design. Since learning autonomy is a complex construct that develops over time, a single-time measurement may not fully capture how learners' autonomy emerges and evolves. In addition, although the two-sample design strengthens confidence that the collapsed-factor structure is not an artefact of a single dataset, the current study still infers local understanding of autonomy from psychometric analyses alone. Although these analyses yielded informative and convergent results, they should be complemented with qualitative data, to interpret the variation in the factor structure of WLLA and to examine how learners experience this concept.

Future research could helpfully explore the factor structure of a localised model of autonomy and validate it using CFA in a new sample. Following this step, empirical studies will be needed, to determine whether scaffolded training in socially mediated learner autonomy can eventually enable learners to take greater responsibility for their own learning. Such research would help relevant stakeholders to move beyond the simple transfer of Western models of language learner autonomy, achieving a more accurate representation of localised models and a more precise account of how language learners' autonomy can be measured and promoted in the Saudi EFL context.

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Conflicts of Interest

The authors declare no conflict of interest.

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