

The role of psychosocial factors on language use among adult Welsh learners

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Adult learners of Welsh are an important part of the Welsh Government's strategy to increase the number of speakers and frequency of daily use. Despite this, it is known that many learners often face social and psychological barriers to using the language. The aim of this study was to investigate the frequency of use among learners and explore the influence of psychosocial factors thereon. An online questionnaire was completed by 746 learners. The results indicated that daily or weekly use of Welsh was higher with friends and family and in the workplace than with other people in less formal situations. More frequent use of Welsh was more likely among learners who lived in Wales, and were at intermediate or advanced levels. Conversely, more frequent use was less likely among learners over 60 and those who reported higher levels of anxiety around speaking the language. We discuss the implications of the results for minority-language revitalization and call for a more systematic approach to the influence of psychological factors on language use in the Welsh context.

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Introduction

The [Welsh Government's \(2017\)](#) strategy for the Welsh language aims to increase the number of Welsh speakers to one million by 2050 and increase daily use of the language. As well as emphasis on family language transmission and the statutory education system, the strategy assumes that 1,000 adults will become Welsh speakers every year and aims to 'develop post-compulsory education provision which increases rates of progression and supports everyone, whatever their command of the language, to develop Welsh language skills for use socially and in the workplace' ([Welsh Government 2017](#): 42).

Despite previous work on the motivations of adult learners of Welsh (henceforth, learners, e.g. Baker et al. 2011; Tung 2025), their experiences of learning Welsh (e.g. Trosset 1986; Pritchard Newcombe 2007), and language practices outside of formal tuition (e.g. Jones 2015; Williams and Cooper 2021), there is little focus on language use among learners nor the effect of social and psychological factors thereon. Insights into the frequency and patterns of language use among learners are useful insofar as they provide an overview of the opportunities learners have to strengthen their language skills through both input and interaction and also highlight the ways in which these opportunities might be increased through language policy. An examination of the possible effects of social (e.g. place of residence or age) and psychological (e.g. general levels of extraversion or specific anxiety about speaking Welsh) factors contributes to our understanding of the barriers that impede willingness to communicate (MacIntyre et al. 1998) and which might be tackled through increased support for learners.

Psychosocial factors influencing language use among learners

It is well known that there are cognitive, social, and psychological factors which influence the acquisition and use of a second language (see, e.g. Ortega 2013 for an overview). With regards to the latter, referred to as individual differences (Ellis 2015: Chapter 13), there is evidence for the positive role of general personality traits (captured by the so-called Big Five model, e.g. Rammstedt and John 2007) on L2 learning, particularly openness to experience, conscientiousness, extraversion, and agreeableness (Chen et al. 2022).

A learner's use of a second language in any given context is described by the willingness-to-communicate (WTC) model (e.g. MacIntyre et al. 1998; Clément et al. 2001). According to this model, a learner's communicative confidence comprises how confident (or anxious) they feel about using the L2 and how competent (or incompetent) they view themselves (MacIntyre et al. 1998: 549). In turn, communicative competence and, to a lesser degree, learner attitudes towards the L2 influence WTC (Ortega 2013: 204). Similarly, communication in the L2 is known to be an important predictor and consequence of WTC, suggesting that those who have fewer opportunities to use the L2 have less confidence in using the language (Clément et al. 2001).

Language use has also been discussed through the lens of behavioural psychology and, specifically, the Theory of Planned Behaviour (TPB, e.g. Ajzen 1991). The TPB postulates that the intention to engage in a certain behaviour can be influenced by attitudes towards that behaviour, social norms, and how much a person believes they can perform the behaviour (Perceived Behavioural Control). Evas et al. (2017) used the TPB model to examine language use among 60 Welsh-English bilingual parents. They found that psychological variables were less predictive of the use of Welsh by parents with their children but that a strong identification with the Welsh language and habitually speaking Welsh were 'marginally significant' (Evas et al. 2017: 96).

New speakers and minority-language bilingualism

In minority-language contexts, Kircher et al. (2024: 514–15) note that there has been a shift among researchers and language planners from a focus solely on reversing language shift (particularly through intergenerational language transmission) to revitalization and the creation of 'new speakers' who acquire the language outside of the home (e.g. O'Rourke and Pujolar 2013). It is evident from a growing body of research across languages that new and traditional speakers may differ in patterns of speech production to varying degrees depending on the context of acquisition (e.g. Nance 2015; Kasstan 2019; Tomé Lourido and Evans 2019; Morris 2021; Mooney In Press) and also in their orientation towards the minority-language community and their patterns of language use (e.g. Morris 2014; Dunmore 2018; O'Rourke and Ramallo 2018).

A further challenge is that the minority-language community are often bilingual and may not be accustomed to using the minority language with learners. In their study of the use of Frisian among new speakers, for instance, Kircher et al. (2024: 525) report that traditional speakers often refused to engage with new speakers in Frisian, corrected mistakes, and laughed at new speakers whose

variety of Frisian they often felt was inauthentic or incorrect. This is mirrored in other studies of contexts where new speakers have been seen by other members of the community as less 'authentic' (e.g. [Hornsby 2015](#); [Kasstan 2019](#); [Mooney 2023](#): 201). A further complication is that traditional speakers might also carry feelings of inadequacy that their command of the minority language is not good enough (e.g. [Dajko and Carmichael 2014](#): 163).

It is clear, therefore, that learning a minority language might present a different set of challenges to other contexts. Ensuring that learners have the opportunity to acquire the language and have the confidence to use it outside of formal tuition is an important aspect of the [Welsh Government's \(2017\)](#) strategy. It is therefore this gap which we wish to address in this paper in order to shed light on the factors which aid the transition from being a learner into a new speaker of Welsh.¹

The Welsh context

The results of the last (2021) census suggest that around 538,300 people in Wales aged three or over speak Welsh, which corresponds to 17.8 per cent of the population ([Welsh Government 2022](#)). There have been a number of civic and political movements to revitalize the Welsh language during the twentieth century, particularly those focused on increasing the opportunities to use Welsh in official settings, education, and the media as well as safeguarding Welsh-speaking communities (see [Durham and Morris 2016](#) for an overview). The formalization of a governmental strategy for language revitalization can largely be traced back to Welsh devolution in 1999. The responsibility for the Welsh language falls on the Welsh Government and has resulted in the [Welsh Language \(Wales\) Measure \(2011\)](#), which states that both Welsh and English are official languages of Wales and which created the office of Language Commissioner to oversee, among other things, the implementation of language standards in a number of public-sector organizations ([Welsh Language Commissioner 2025](#)).

We will not attempt to outline the long history of Welsh in education here but it is relevant to note that Welsh is a statutory subject in Wales until the age of 16 (see [Davies 2014](#) for an overview). Most students in Wales study Welsh, therefore, either as a 'first' or 'second' language (see [Welsh Government 2021](#)). There has been much discussion about the suitability of Welsh Second Language teaching and assessment (now renamed 'Core Cymraeg', see [WJEC 2025](#)) for creating functional speakers of Welsh ([Davies 2013](#)) and, despite options to study the language in Further and Higher Education settings, the majority of students in Wales who attend English-medium schools leave compulsory education with little functional ability (see [Rhys and Smith 2022](#) for further discussion).

Until recently, much of the provision for Welsh learners over school age was provided by Learn Welsh (previously Welsh for Adults), a government-funded body responsible for provision across Wales. Since 2016, Learn Welsh provision at the community level is overseen by the National Centre for Learning Welsh² (henceforth NCLW) who work with local course providers to deliver courses on their behalf. Data from NCLW show that the number of unique learners on Welsh courses was 20,445 in 2024–25. Of the learners registered in 2024–25 who provided age data, 84 per cent were aged 16–64 ($n = 17,350$). No gender data appears to be available ([National Centre for Learning Welsh 2026a](#)).

The profile of Welsh learners on Learn Welsh courses is also heavily skewed towards beginners: in 2024–25, 61 per cent of learners were at entry level and a further 14 per cent were at foundation level. The mode of learning has also diversified since COVID-19, when Learn Welsh introduced on-line learning and hybrid courses to a greater degree. According to the latest data, 34 per cent of learners attended face-to-face lessons compared to 40 per cent who attended virtual classrooms, and 20 per cent who were studying independently using Learn Welsh materials. A further 3 per

¹ We differentiate between the terms 'learner' and 'new speaker' here in order to highlight the developmental nature of language learning. We accept that the definitions of both terms may overlap.

² The National Centre for Learning Welsh will transfer to a new body, the National Institute for Learning Welsh, on 1 August 2027.

cent attended courses which featured blended learning and 3 per cent attended residential courses (National Centre for Learning Welsh 2026a).

While Learn Welsh are the main providers of Welsh lessons for adults, there are other providers of online provision for Welsh learners. SaySomethinginWelsh (henceforth SSIW) has provided online provision since 2010 and has grown in popularity to include a number of other languages (SaySomethingin Ltd 2025). Similarly, Duolingo initiated a Welsh course, which has reportedly attracted over three million learners (Price 2023).

Beyond formal provision, it should be kept in mind that there are specific opportunities for learners to use Welsh outside of formal tuition. The *Siarad* Scheme, organized by NCLW, also offers opportunities for intermediate and advanced learners to be paired with a more confident speaker over a period of 10 hours to increase confidence. Learn Welsh centres, local language initiatives (*Mentrau Iaith*), and other private groups and institutions also organize activities for learners at different levels as well as for the wider Welsh-speaking public.

Previous studies of Welsh learners

Previous studies of Welsh learners include both qualitative and quantitative approaches to investigating motivations and language use. Baker et al. (2011) took a survey approach to explore the motivations and challenges for Welsh learners and found that integrative reasons tended to be seen as more important reasons to learn Welsh (see also Pritchard Newcombe 2007). More specifically, learning the language to help children with their homework or to integrate with the local community was a more powerful motivator than accessing Welsh-language media or to gain skills for the workplace (which was also found in Morris et al. 2024).

Rosiak (2018, 2023) and Tung (2025) examined the motivations of recent migrants from outside of the UK for learning Welsh. Rosiak found that Polish participants were motivated by integration into the (predominantly Welsh-speaking) community, although some were disincentivized by the fact that all Welsh speakers also speak English (Rosiak 2023: 43). Tung's (2025) survey of migrants in Cardiff similarly found that a desire to integrate was an important motivation, but also that Welsh was seen as an important workplace skill (Tung 2025: 265), reflecting, perhaps, an increase in the linguistic capital of Welsh in a devolved Wales (see also Bermingham and Higham 2018).

Despite integrative motivations for learning Welsh being prevalent among learners, a key challenge for learners, according to previous research, is integration (Mac Giolla Chríost et al. 2012: 24–5). Learners of Welsh often face difficulties in using Welsh outside of formal tuition, mainly due to limited opportunities or a tendency for fluent Welsh speakers to switch to English (Mac Giolla Chríost et al. 2012: 33), particularly with beginners (Williams and Cooper 2021: 16). On the one hand, reluctance among learners to use the language with other speakers can be due to a lack of willingness or, indeed, anxiety (Pritchard Newcombe 2007: 33). On the other hand, non-native accents are often more negatively evaluated, or indeed stigmatized, than other accents (see Robert 2009 and Mayr et al. 2026 for Welsh). In the case of minority-language bilingualism, anxiety, or reluctance on the part of new speakers to use the language may go beyond anxiety and relate to perceptions that they lack legitimacy (see *New speakers and minority-language bilingualism*). There is much evidence for this in the case of new speakers of Welsh, both among those who acquired the language through Welsh-medium education (e.g. Hornsby and Vigers 2018; Daly 2025) and among learners (e.g. Pritchard Newcombe 2007).

Pritchard Newcombe (2007: 110–11) aimed to examine the challenges facing learners outside of formal tuition and found that the range of dialectal diversity encountered outside of formal tuition was often seen as a barrier to communication. A number of other issues came to the fore, however, namely anxiety and a lack of confidence speaking Welsh, a lack of opportunity to use the language in social and workplace settings, and a lack of understanding about the importance of language use in second language acquisition.

Jones (2015) focused on the online use of Welsh among learners and found that social media is used as a tool for language use in addition to offline contexts. In the analysis, based on 15 learners of

varying levels of experience, it was found that beginners tended to use social media and sharing platforms to access Welsh media whereas more experienced learners were more productive in the online sphere, for example, by contributing to fora and blogging about their experiences (Jones 2015: 8).

Williams and Cooper (2021) designed a questionnaire for learners of Welsh which was completed by 115 participants. Their focus was on pronunciation, although it is worth noting that they found that learners from Wales, and those who were higher level learners were more proud of their accent when speaking Welsh compared to those from outside of Wales and beginners and intermediate learners (Williams and Cooper 2021: 10). They also found that lower-level learners noted a greater lack of opportunities to speak Welsh than other groups as well as more obvious reactions from native speakers, such as speaking slower, switching to English, or correcting pronunciation (Williams and Cooper 2021: 14).

Research questions

Previous work on Welsh has shown that there are a number of barriers to the use of Welsh outside of formal tuition yet very little is known about patterns of use, particularly in different contexts, and the role of psychosocial factors thereon. Based on this gap in the research, and in order to inform Welsh-language policy, which explicitly states the need to examine language use among learners (Welsh Government 2017: 21), the following research questions were formed:

- RQ1: What are the patterns of self-reported language use among learners of Welsh outside of formal tuition?
- RQ2: To what extent do psychosocial factors affect the self-reported frequency of language use?

Methods

Survey design

The data discussed in this paper come from the results of an online survey designed for learners of Welsh. The survey contained 27 questions divided into six main sections: (1) demographic information, (2) proficiency and use of Welsh, (3) reasons for learning Welsh and motivation, (4) speaking confidence and anxiety, (5) personality, and (6) opinions of Welsh speakers. We provide more information on the sections of the questionnaire which are relevant to this analysis below. The questionnaire was presented using Qualtrics (Provo, UT) and permission to conduct the research was granted by the School of Social Sciences Research Ethics Committee at Cardiff University following an independent review (Reference: SREC/4293).³

Participants' language use was measured by asking how frequently they used Welsh with children, with a partner, with other family members, with friends, at work, and in other social situations (e.g. hobbies, sports clubs, volunteering). Each context was presented on a 5-item scale consisting of 'never', 'less than once a month', 'less than once a week', 'every week', and 'every day'. An additional option of 'not applicable' was included for each context. In Results below, we firstly present the results for language use among learners for each individual context. For the remainder of the analysis, a composite language use score is used based on the mode. The composite score is the dependent variable in the ordinal regression analyses presented in Psychosocial factors influencing the use of Welsh among learners.

Demographic information included the age and gender identity of participants as well as their place of birth and current place of residence. Following this, a series of questions were asked about their experiences of learning Welsh, mode of study, and their most recent course. For the purposes of the current analysis, and in order to avoid issues of multicollinearity (a high correlation between

³ The questionnaire, data, and R code for the analysis are available here: <https://doi.org/10.17035/cardiff.33726244>

two or more independent variables), we examine age, gender, and place of residence (inside of Wales or outside of Wales) as the main social variables.

We classified proficiency as a linguistic variable and included it as an independent variable in the analysis. Participants were asked their perceived Welsh level for speaking, reading, writing, and understanding spoken Welsh. Each skill was presented on a 4-item scale labelled 'beginner', 'intermediate', 'advanced', and 'proficient'. We decided to use the term 'beginner' rather than 'pre-entry', 'entry' and 'foundation' used by Learn Welsh ([National Centre for Learning Welsh 2026b](#)) as we thought that it may be confusing for those learning with other providers. A possible limitation is that no further instruction was provided on these levels, meaning that learners' self-reported their level with no specific criteria. The 'advanced' and 'proficient' categories were combined due to relatively low numbers of proficient participants (see [Survey distribution and sample](#)). The scores for self-reported proficiency in speaking, reading, writing and understanding were later combined into a single proficiency category for the analysis.

The psychological variables, which are (1) global measures of conscientiousness, extraversion, and neuroticism and (2) ratings of anxiety and confidence specifically related to speaking Welsh, were presented on 5-point Likert scales. The Likert items for (1) were taken from the Big Five Personality Inventory (e.g. [Rammstedt and John 2007](#)) and were presented on an agreement scale (from 'strongly disagree' to 'strongly agree'). The same scale was used for speaking confidence. Items for speaking anxiety were presented on a 5-point nervousness scale (from 'not at all nervous' to 'extremely nervous') although no participant chose 'very nervous'. More Likert items were presented for speaking confidence and speaking anxiety as we asked about these traits in particular speech contexts and with particular interlocutors (e.g. confidence when speaking to other learners in social situations, confidence when speaking to fluent Welsh speakers in other social situations).

A limitation of the research is that the variables depend on self-reported measures of Welsh language use outside of formal tuition and language ability, which may be subject to social desirability bias, meaning actual levels may be lower than those reported by participants. Conversely, the online nature of the research and physical absence of a researcher may have enabled participants to be more open and honest with their answers ([Dewaele 2018](#): 271).

Survey distribution and sample

The survey was distributed online through relevant mailing lists and social media groups and was available to answer in both Welsh and English. A volunteer sampling approach was taken in the absence of a complete sampling frame of Welsh learners, both in Wales and internationally, and this should be kept in mind when interpreting the results. Recruitment was advertised through mailing lists associated with NCLW as well as social media groups for Welsh learners on different types of courses. Two further considerations in the interpretation of the results are that the sample inevitably comprised frequent users of the internet, which most certainly is not true for all learners of Welsh (e.g. [Lehdonvirta et al. 2021](#)), and that the survey was anonymous which may have allowed individuals to complete the questionnaire multiple times.

The questionnaire was completed (either fully or in part) by 746 learners of Welsh. A composite use score could be derived for 690 learners (92.5 per cent) and the regression analyses include 557 learners (74.7 per cent; see [Statistical analysis](#) below). Of the 746 learners, 52.5 per cent lived in Wales ($n = 392$). A total of 73.1 per cent of participants were women ($n = 545$), 24.5 per cent were men ($n = 183$), 1.6 per cent were non-binary, agender, or gender nonconforming ($n = 12$), and 0.8 per cent preferred not to declare their gender ($n = 6$). The gender distribution of the sample is skewed towards women and this should be kept in mind when interpreting the results. Where gender is included in the analysis, we include only the data from women and men and not those who declared another gender identity due to low numbers.

[Table 1](#) shows the age distribution of the sample according to the age bands included in the original questionnaire.

Table 1 Age of participants included in the current study.

Age	<i>n</i>	%
18–29	61	8.2
30–39	103	13.8
40–49	137	18.4
50–59	181	24.3
60–69	195	26.1
70–79	64	8.6
80+	5	0.7
Total	746	100

In the subsequent analysis, we decreased the number of age categories to three: 18–39; 40–59; and 60 and above. In our previous work, we found that these broad age categories aligned with different life stages and motivations to learn Welsh. Specifically, learners aged 18–39 were significantly more likely to learn Welsh to improve their career prospects or to speak Welsh with their children (Morris et al. 2024: 35). We also wanted to distinguish between those who were still more likely to be active in the workforce (40–59) and those who were coming towards the end of their career or had retired (60+).

Reflecting the demographics of Welsh learners more generally (see [The Welsh context](#)), the majority were beginners (60.9 per cent, *n* = 441). Intermediate learners comprised 30 per cent of the sample (*n* = 217) and 9.1 per cent were advanced learners (*n* = 66). A total of 22 participants declined to give this information. It is worth noting that the majority of learners were primarily using Duolingo (40.3 per cent, *n* = 293), with slightly fewer attending Learn Welsh courses (36.6 per cent, *n* = 266) and SSiW (11.7 per cent, *n* = 85). The remaining 11.4 per cent were learning independently or attending other courses (*n* = 83).

The self-selecting nature of this research means that participants were more likely to be those with an interest in the topic (either positive or negative, see [Dewaele 2018: 273](#)). The predominance of females in the sample is consistent with previous research on the self-reporting of behaviours. Previous research has also shown that older adults are more likely than their younger counterparts to participate in online questionnaires relating to second language acquisition ([Dewaele 2018: 274](#)).

Statistical analysis

The regression analyses are based on the respondents for whom a composite use score could be derived and for whom there are data on every independent variable, restricted to those identifying either as a man or a woman due to low numbers of non-binary gender identity (*n* = 557). In order to ensure that the combined scores of individual items represented the same underlying variable, we examined the mean inter-item correlation and Cronbach's α . [Table 2](#) shows each of the variables, the mean inter-item correlation, number of items, Cronbach's α , and states whether the variable was included in the final analysis.

As can be seen from [Table 2](#), most of the Likert scales showed a high degree of inter-item correlation and internal consistency. The exception to this was the global personality rating for conscientiousness, which was subsequently excluded from the analysis. A high correlation was found between learners' speaking anxiety and their speaking confidence ($r = -0.719$), which suggests that they are inverse measures of a fear of using Welsh outside of formal tuition (or lack thereof). In order to avoid including two closely-related variables in the regression, only speaking anxiety was retained in the statistical modelling.

The statistical analysis of the use data was undertaken using a series of ordinal regressions using the `clm()` function from the ordinal package ([Christensen 2025](#)) in R ([R Core Team 2024](#)). A hierarchical approach to modelling was taken, whereby modelling was firstly undertaken on the social factors alone and then on both the social and psychological factors. The contribution of the

Table 2 Mean inter-item correlation, number of items, and Cronbach's alpha of the composite variables.

	Mean inter-item correlation	Number of items	Cronbach's α	Candidate for final analysis
Welsh proficiency	0.755	4	0.924	Y
Welsh use	0.310	6	0.727	Y
Conscientiousness	0.169	3	0.383	N
Extraversion	0.571	3	0.800	Y
Neuroticism	0.619	2	0.764	Y
Speaking confidence	0.643	9	0.942	Y
Speaking anxiety	0.705	9	0.955	Y

psychological factors was assessed with a likelihood-ratio test comparing each model. Multicollinearity was inspected by comparing VIF values for the independent variables (variables were retained when $VIF < 2$). The proportional odds assumption (the assumption that an independent variable's effect is constant across the ordinal scale) was assessed using likelihood-ratio tests and a non-significant result ($P > .05$) indicated that a predictor's effect was constant across the use thresholds (e.g. [Harrell 2015](#): Chapter 13).

Results

We firstly outline the results for the use of Welsh, in various contexts and overall, by learners (RQ1). Using the composite score, derived from the mode of the individual contexts, we then examine the extent to which social and psychological factors influence the use of Welsh by learners (RQ2).

Use of Welsh

We asked learners to state how frequently they used Welsh in different contexts outside of formal tuition. The number of responses to each domain differed due to missing cases or instances where the context under discussion was not applicable to the learner. [Figure 1](#) shows the percentage of use frequency with children ($n = 608$), partner ($n = 602$), other family members ($n = 636$), friends ($n = 673$), at work ($n = 580$), and at wider social events ($n = 605$).

Focusing on the regular use of Welsh, which we defined as daily or weekly use,⁴ 20.8 per cent of participants used Welsh regularly with friends ($n = 140$) compared to 19.9 per cent with both children ($n = 121$) and partner ($n = 120$) and 19.7 per cent at work ($n = 114$). The domains where Welsh was used least regularly were with other family members (13.7 per cent, $n = 87$) and wider social events (13.2 per cent, $n = 80$).

A Cochran's Q test was conducted to ascertain whether the proportion of regular use (every day or weekly) differed significantly across the six domains. The analysis was based on 432 participants with complete data across all six domains. The results showed significant differences ($Q(5, n = 432) = 37.16, P < .001$) with a small effect size (Kendall's $W = 0.017$). Regular Welsh use was highest with children (15.5 per cent) followed by both partner and work contexts (13.2 per cent). With friends, 10.9 per cent of learners reported regular use and the lowest rates of regular use were found in wider social contexts (6 per cent).

Post-hoc McNemar tests with Bonferroni correction ($P < .003$) revealed that learners regularly used Welsh more often with children than with other family members (15.5 per cent vs. 7.9 per cent, $P < .001$), and in wider social situations (15.5 per cent vs. 6 per cent, $P < .001$). Learners also used Welsh more regularly with partners than in wider social contexts (13.2 per cent vs. 6 per cent, $P < .001$). Similarly, Welsh was used more regularly at work than at social events (13.2 per cent vs. 6 per cent, $P < .001$). Welsh was also used more regularly with friends than at social events (10.9 per

⁴ The [Welsh Government's \(2017\)](#) language strategy aims to increase the daily use of Welsh. We operationalized regular use as daily or weekly due to low numbers of daily users in our data.

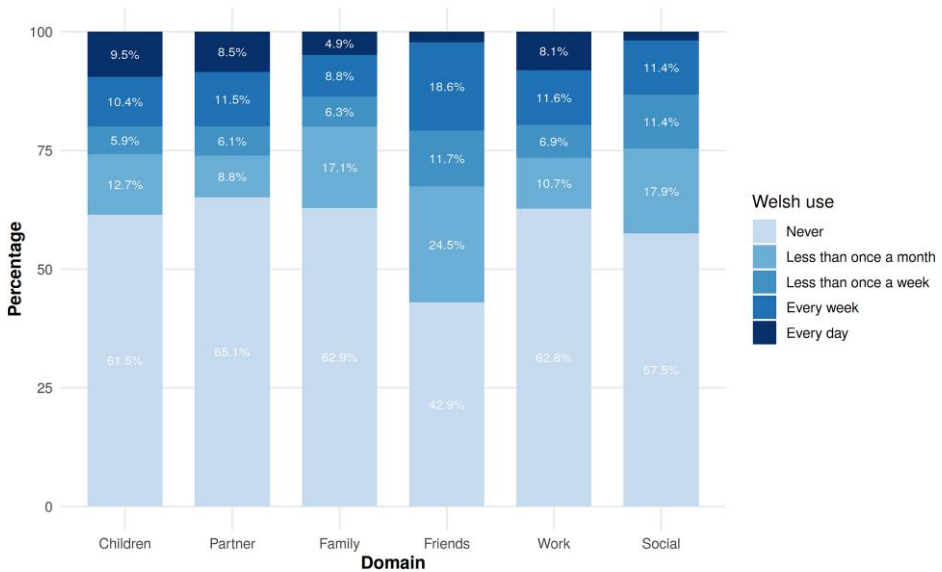


Figure 1 Frequency of Welsh use by learners in different contexts outside of formal tuition.

cent vs. 6 per cent, $P = .0029$). As shown in Table 2, the domains of use showed acceptable internal consistency between items ($r = 0.31$, $\alpha = 0.727$) and a composite use score was derived using these data.

Of the 690 learners for whom a composite use score could be derived, the largest group reported never using Welsh outside of lessons (60.1 per cent, $n = 415$). A further 11.9 per cent reported that they used the language less than once a month ($n = 82$) and 6.5 per cent said that they used Welsh less than once a week ($n = 45$). A total of 21.4 per cent were what we operationalize as ‘regular users’ of Welsh, comprising 12.6 per cent of learners who use Welsh weekly ($n = 87$) and 8.8 per cent who use Welsh daily ($n = 61$).

Psychosocial factors influencing the use of Welsh among learners

As stated in Statistical analysis, the composite use of Welsh variable was the dependent variable in the ordinal regression. First, a model was developed which included the social factors as independent variables (gender, living in Wales, age, and proficiency). The results of the final regression, which included social factors only, are included in Table A.1 in Supplementary Appendix 1.

Second, modelling was undertaken which included both the social and psychological variables. Table 3 shows the best-fitting model for the analysis of the social and psychological variables. The addition of the psychological variables significantly improved the model fit ($\chi^2(3) = 30.98$, $P < .001$). The full model accounted for a moderate proportion of variance in Welsh use (Nagelkerke pseudo- $R^2 = .28$) and no multicollinearity was detected between variables ($VIF < 2$). Likelihood-ratio tests indicated no violation of the proportional odds assumption for most independent variables, except for speaking anxiety (LRT = 9.97, $df = 3$, $P = .019$) and age group (LRT = 12.82, $df = 6$, $P = .046$). In order to investigate this further, partial proportional odds models were fitted to examine the effects of these variables across the frequency-of-use thresholds (cf. Peterson and Harrell 1990). The effect of speaking anxiety varied in size, being strongest at the threshold for weekly use ($\beta = -0.861$, $P < .001$) and weakest at the threshold for daily use ($\beta = -0.289$, $P = .200$). For age group, the contrast between the youngest and oldest learners was negative at every threshold while the 40–59 contrast remained non-significant throughout. In both cases the direction of the significant effects was constant across the thresholds, and the direction and significance of all other predictors were unchanged. For this reason, and following visual inspection (Harrell 2015: 337–8), the model including both social and psychological factors was retained.

Table 3 Regression coefficients with *z* and *P* values predicting the use of Welsh by learners (*n* = 557).

	Estimate	SE	<i>z</i>	<i>P</i>
Gender: Male	0.327	0.209	1.560	.119
Live in Wales: Yes	1.507	0.198	7.603	<.001
Age group: 40–59	–0.204	0.233	–0.875	.382
Age group: 60 and above	–0.655	0.248	–2.639	.008
Proficiency: Intermediate	0.507	0.190	2.669	.008
Proficiency: Advanced	1.455	0.318	4.571	<.001
Extraversion	–0.120	0.112	–1.074	.283
Neuroticism	–0.016	0.098	–0.159	.874
Speaking anxiety	–0.638	0.123	–5.167	<.001

Positive estimates indicate an increased likelihood of usage compared to the baseline. AIC = 1,265.53.

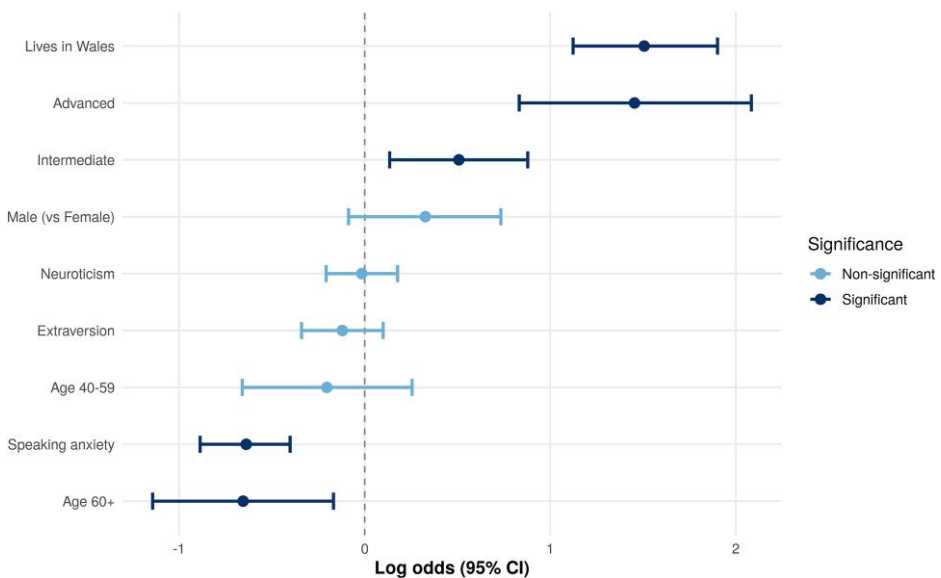


Figure 2 Log odds predicting the likelihood of using Welsh outside of formal tuition.

Living in Wales is the strongest predictor of more frequent use of Welsh among learners ($\beta = 1.507$, $z = 7.603$, $P < .001$), followed by being an advanced learner ($\beta = 1.455$, $z = 4.571$, $P < .001$). Similarly, being an intermediate learner increased the likelihood of using Welsh more frequently, albeit to a lesser degree than advanced learners ($\beta = 0.507$, $z = 2.669$, $P < .05$). Conversely, being over 60 impeded more frequent use of Welsh ($\beta = -0.655$, $z = -2.639$, $P < .05$), as did speaking anxiety ($\beta = -0.638$, $z = -5.167$, $P < .001$). Neither gender nor the more global psychological variables (extraversion and neuroticism) had a statistically significant influence on the use of Welsh among learners. [Figure 2](#) shows the log odds predicting the increased use of Welsh based on the model in [Table 3](#).

Discussion and conclusions

RQ1: The use of Welsh outside of formal tuition among learners

There has hitherto been little data on the use of Welsh outside of formal tuition among learners and this has been specified as an area in which there is a need for further research (Welsh Government

2017: 21). The current study therefore contributes to our understanding of language use patterns beyond formal instruction. From the point of view of language revitalization in Wales, language use among learners can be an indicator of the success of adult provision for learning Welsh and also a contribution to the aim of increasing the proportion of people who speak more than a few words of Welsh and who use Welsh daily from 10 per cent to 20 per cent (Welsh Government 2017: 11).

Regular use of Welsh was significantly higher with children and, to a similar extent, with partners and at work, than with other family members or wider social settings. We would argue that these findings reflect broader recent trends in Welsh, and other minority language contexts, that have emphasized both the creation of new speakers (e.g. Williams 2023) and the minority language as an economic resource (e.g. Heller and Duchêne 2012: 3; Bermingham and Higham 2018: 399).

The use of Welsh by learners with their children suggests that parents are learning and using Welsh to support the language development of younger new speakers. This reflects previous work that has found that among the most common reasons to learn Welsh are to help children with homework or to speak to children in Welsh (Baker et al. 2011: 51). Evas et al. (2017) found a similar pattern among Welsh-speaking parents, who had started to use more Welsh in the home when their child started Welsh-medium education, which reinforces the claim that there has generally been a change in the status of Welsh since the 1980s (Morris and Jones 2007: 491). On the one hand, many Welsh learners have a readily available opportunity to use Welsh by virtue of their own children (or, similarly, Welsh-speaking partners). This could be a positive development for their own language trajectories providing both the impetus to learn Welsh and the increased contact with the language that could improve confidence in the longer term (cf. Clément et al. 2001; Evas et al. 2017). More broadly, traditional accounts of minority-language revitalization and government policies emphasize the importance of intergenerational language transmission and early socialization in the home (Welsh Government 2017: 33). On the other hand, and despite the fact that Welsh-language use in the home correlates with use in other domains (e.g. Morris 2014), it would be fruitful to assess how learners use Welsh with their children and to what extent it leads to more favourable outcomes for confidence among both parents and children.

The use of Welsh in a work context reflects an increase in the promotion of Welsh in the workplace and in linguistic capital in employment contexts (Bermingham and Higham 2018; Tung 2025). There has been a clear effort to concentrate on workplace provision in recent years, mirroring language policy efforts that aim to create more opportunities for Welsh speakers to use the language across a broader number of domains (Pritchard Newcombe 2007: 102–106). The results from this study suggest that such efforts are beginning to produce successful outcomes, undoubtedly galvanized by the Welsh Language (Wales) Measure (2011) and the introduction of language standards to which a number of public-sector institutions are obliged to adhere. Increasingly, for learners, the workplace provides an additional domain in which they have contact with Welsh and opportunities to develop their language skills.

Welsh use with children and partners, and in the workplace, was significantly more frequent than with other people at social events. We have argued above that this is partly due to societal developments in the Welsh context such as the increased emphasis among employers to provide opportunities for people to learn the language. The results of studies on motivations to learn Welsh, however, often have integration into Welsh-speaking networks as the main reason learners want to learn (Baker et al. 2011; Morris et al. 2024). It would be incorrect to assume that there are not enough opportunities for learners to use the language in social settings but it would seem beneficial to review what provision is available by community and how opportunities are advertised to learners. Other societal factors might also be at play, such as the increased role of online content and communities in providing access to minority languages (Jones 2015; Ackermann-Boström and Glass 2024).

RQ2: The influence of psychosocial factors on Welsh use among learners

The strongest predictor of the use of Welsh by learners was living in Wales. This is perhaps unsurprising but it is noteworthy that Morris et al. (2024) found that international learners of Welsh

tended to learn the language more for identity reasons or personal interest, rather than for practical communication. The lack of use among those outside of Wales raises the question whether more should be done to create opportunities for Welsh use in online communities. It could be argued that creating opportunities for international learners is beyond the remit of the government-funded NCLW. In any case, a review of how opportunities for Welsh learners to use the language informally are offered, as suggested above, might lead to a more targeted approach to encouraging all learners to engage with the language informally.

More proficient speakers are more likely to use Welsh more frequently. This corresponds to the results of [Williams and Cooper \(2021\)](#) who found that more proficient learners were more likely to be proud of their accent when speaking Welsh and reported fewer instances of obvious reactions from native speakers. The fact that intermediate and advanced learners were more likely to use the language than beginners gives a clear indication that learning Welsh as an adult can be effective in turning language learners into language users (provided that learners make progress on courses), that communicative competence develops over time, and is a message that may help learners to persist in their endeavours.

The results also highlighted that the use of Welsh outside of formal tuition was less likely among learners aged 60 and over. Similar to international learners above, we have previously shown that those in the oldest age category are less likely to declare that they are learning Welsh to speak to their children or grandchildren or to improve career prospects ([Morris et al. 2024: 35](#)). The learning and use of languages in later life is gaining interest among researchers (e.g. [Pfenninger and Singleton 2019](#)), especially as the question arises of how learning and using a new language in older age contributes to social well-being and increased social interaction ([Pfenninger and Singleton 2019: 440](#)). Based on this result and the increased emphasis on language use within the family and in the workplace, policymakers, learning providers, and wider stakeholders should not underestimate the needs of all learners to engage with informal opportunities to use Welsh if they wish to do so, and the potential benefits that local community-based activities might provide to all learners at a time when loneliness is said to be increasing among all age groups (see, e.g. [McCarthy et al. 2026](#)).

The results of both quantitative and qualitative studies have pointed to a lack of confidence or anxiety around speaking Welsh as an explanatory factor as to why young people and parents (and particularly new speakers in both groups) might choose to speak English rather than Welsh in a given context (e.g. [Morris 2014](#); [Evas et al. 2017](#)). This study shows that this is also the case among learners and points to a need to take speaking anxiety more seriously, both among researchers who want to examine the sociolinguistic dynamics of bilingualism in contemporary Wales (and other minoritized language contexts) and policy makers who are working with the Welsh Government's strategy to increase language use ([Welsh Government 2017](#)).

We also need to understand how specific anxieties around speaking Welsh interplay with other psychological factors, such as attitudes, norms, and desire to speak Welsh (see [Perugini and Bagozzi 2001](#) on the role of desire in influencing behaviours). The fact that general personality traits were non-significant predictors (contra [Chen et al. 2022](#)), whereas speaking anxiety was found to be statistically significant, lends itself to the TPB model, which measures potential indicators in relation to the behaviour under discussion rather than more general personality traits. Speaking anxiety maps onto the measure of Perceived Behavioural Control in the TPB. As stated previously, other work on Welsh language policy and planning has started to consider the TPB model, and behavioural psychology more broadly, primarily as a way to investigate how factors that impede Welsh use might be mitigated (e.g. [Evas et al. 2017](#)). Given the clear correlation between learners' use of Welsh and speaking anxiety, it would seem fruitful to expand this programme further by ensuring that context-specific, robust measures are developed and that all aspects of the model are adequately captured, in order to fully assess the applicability of the TPB model to language use across different speaker groups (see also [Evas et al. 2017: 96](#)).

Limitations of the current study

As noted previously, the sample included in the analysis was a volunteer sample in the absence of a complete sampling frame for Welsh learners. This was decided in order to include learners using different methods of learning the language but it is acknowledged that focusing on Learn Welsh learners, for whom there are existing demographic data, might have allowed us to sample more carefully. Similarly, it should be remembered that the sample is comprised of learners who are active users of the internet which may skew the results. Moreover, the sample was heavily skewed towards female participants (73.1 per cent) and beginner level learners (60.9 per cent). This imbalance limits the findings and highlights the need for further research with different groups to identify whether the patterns observed hold true across all demographic groups.

More broadly, there are clear limitations regarding the level of detail. We appreciate that more detailed data on the contexts of language use including a comparison of levels of anxiety in different speech acts may have been fruitful. Additionally, the self-reported nature of the survey may have led to participants overstating their use of Welsh language outside of formal tuition or inaccurate self-assessment of their abilities in order to be portrayed in a positive light. Future questionnaire research supported by observational data could help in answering these questions.

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Supplementary data

Supplementary data are available at *Applied Linguistics* online.

Conflicts of interest

The authors declare none.

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